

EQUIPMENT CUT SHEETS
AND
PRODUCT DATA SHEETS

FOR

CITY OF MORGAN HILL

BUTTERFIELD FIRE STATION

MORGAN HILL, CALIFORNIA



03 23/2023

100% CONSTRUCTION DOCUMENT
PACKAGE SET

Prepared By:
COAR Design Group
200 'E' Street
Santa Rosa, CA 95404

coar
DESIGN GROUP



CITY OF MORGAN HILL

BUTTERFIELD FIRE STATION No.6

EQUIPMENT CUT SHEETS AND PRODUCT DATA SHEETS

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END OF SECTION



The Storage Solution Experts



Strategic Solutions
for Fire Storage



Mobile Hose Dryer

GearGrid's mobile hose drying system promotes faster hose drying within a limited amount of space. Constructed with durable steel tubing and a strong wire grid system, it dries up to 200' of 2-½" and 350' of 1-½" hose simultaneously (in 50' lengths). The optional hose winder, with removable handle, makes rolling hose a breeze.

Width 125"

Depth 36"

Height 65"

(Without hose winder)

Frame: Heavy-duty tubing 1-¼" steel tubing

Grids: High-strength 1-¼" steel wire, 3" x 3" square grid pattern

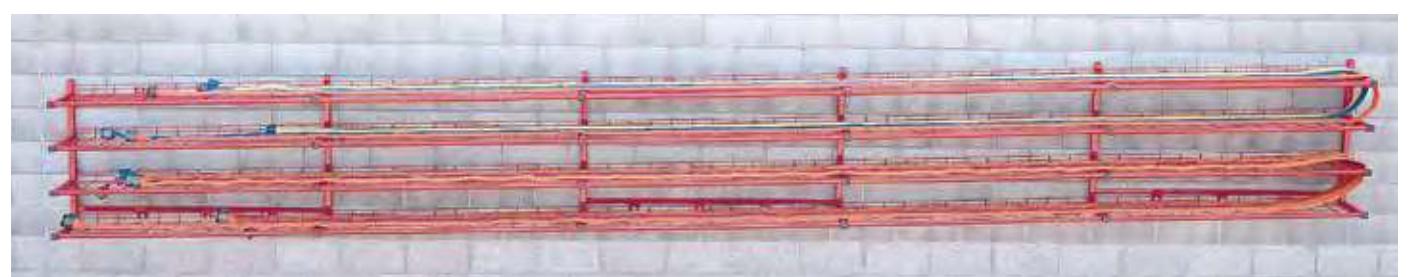
Casters: Locking casters handle up to 250 lbs. each

Finish: Super Durable TGIC powder coat, optional anti-corrosive primer available

Colors: 7 standard colors

Shipping: Ships knocked down for ease of handling and reduced shipping costs

Assembly: With simple tools it's fast and easy



Wall Mount Hose Dryer

For a permanent solution, our Wall Mount Hose Dryer can be mounted virtually anywhere. The open wire grid system promotes maximum air movement, providing one of the most economical hose drying options available.

Width 312"

Depth 12-½"

Height 36"



Locking Casters

Locking casters handle up to 250 lbs. each



Hose Winder

Allows for a quick and convenient winding process, length of hose winder is 31"



Note: Total unit length with the Hose Winder is 156"



Windsor Outdoor Hose Drying Rack

Developed for the Windsor, CA Fire Department, this unique system provides a convenient outdoor solution for drying hoses of all types and sizes. Great for warm climates, it's an ideal alternative to the high initial cost and liability implications of hose towers. Raised platform prevents hoses from getting soiled, as would happen when dried on the ground or pavement.

Width 5'

Length 48'

Height 3-½'

(With 12" slope)

Frame: Heavy-duty 1-½" steel tubing for supports and 1-¼" for frames

Grids: High-strength ¼" steel wire, 3" x 3" square grid pattern

Finish: Epoxy primer with TGIC powder topcoat for exterior corrosion protection

Colors: 7 standard colors

Shipping: Ships knocked down for ease of handling and reduced shipping costs

Assembly: Stainless steel hardware all included



GearCart

with Hose Dryer Attachment

Add the Hose Dryer Attachment to the GearCart for the ultimate hose drying solution. Loop hose through the attachment for a quick, convenient drying process. The heavy-duty design allows fire departments to dry hose within a limited amount of space.

Width 75"

Depth 26-½"

Height 82"

Frame: Heavy-duty 1-¼" steel tubing

Side & Back Grids: High-strength ¼" steel wire, 3" x 3" square grid pattern

Casters: Locking casters handle up to 950 lbs. each

Finish: Super Durable TGIC powder coat, optional anti-corrosive primer available

Colors: 7 standard colors

Shipping: Ships knocked down for ease of handling and reduced shipping costs

Assembly: With simple tools it's fast and easy

Heavy-Duty GRP Hose Winder

- Winds up to 5" diameter LDH hose
- Optional wall mount bracket available
- 2:1 gear ratio for winding ease
- Fits standard 2" receiver hitch



DESCRIPTION:

The Heavy-Duty mobile hose & cylinder system is designed to accommodate hose sizes ranging from 1-1/2" to 5" and a variety of SCBA and O2 cylinder sizes. Hose and cylinder shelves are adjustable in 3" increments and can be mixed and matched to create the perfect storage unit for your department needs.

DESIGN FEATURES:

Frame: Heavy-Duty 1-1/4" steel tubing, 24" openings

Side & Back Grids: High-strength 1/4" steel wire, 3" square pattern

Casters: Locking casters handle up to 950 lbs. each

UNIT DIMENSIONS:

75"W x 28-1/2"D x 82"H

OPTIONAL EQUIPMENT:

Shelves: flat, SCBA, O2



GEARGRID LLC

Toll Free: 888-643-6694

Local: 651-464-4468

Fax: 651-464-4780

Email: sales@GearGrid.com



DESCRIPTION:

GearGrid's Five-Shelf Mini Mobile Hose System with Winder accommodates up to 1000' of 2-1/2" hose while the winder accommodates hoses up to 3" in diameter. Each shelf has a unique, adjustable "book-end" ensuring hose is always stored upright. System stores hose sizes ranging from 1-1/2"-3" and a variety of cylinder sizes.

DESIGN FEATURES:

Frame: Heavy-Duty 1-1/4" steel tubing, 24" openings

Side & Back Grids: High-strength 1/4" steel wire, 3" square pattern

Casters: Locking casters handle up to 250 lbs. each

UNIT DIMENSIONS:

80"W x 28"D x 59"H

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DESCRIPTION:

The GearGrid Mini Mobile Hose & Cylinder System is designed to accommodate up to 24 SCBA cylinders, 800' of 2-1/2" hose or any combination of the two. Stores hose size ranging from 1-1/2" to 3" and a variety of SCBA cylinder sizes. The unit can also be used in conjunction with O2 cylinder and flat shelves.

DESIGN FEATURES:

Frame: Heavy-Duty 1-1/4" steel tubing, 24" openings

Side & Back Grids: High-strength 1/4" steel wire, 3" square pattern

Casters: Locking casters handle up to 250 lbs. each

UNIT DIMENSIONS:

50"W x 20"D x 59"H

GEARGRID LLC

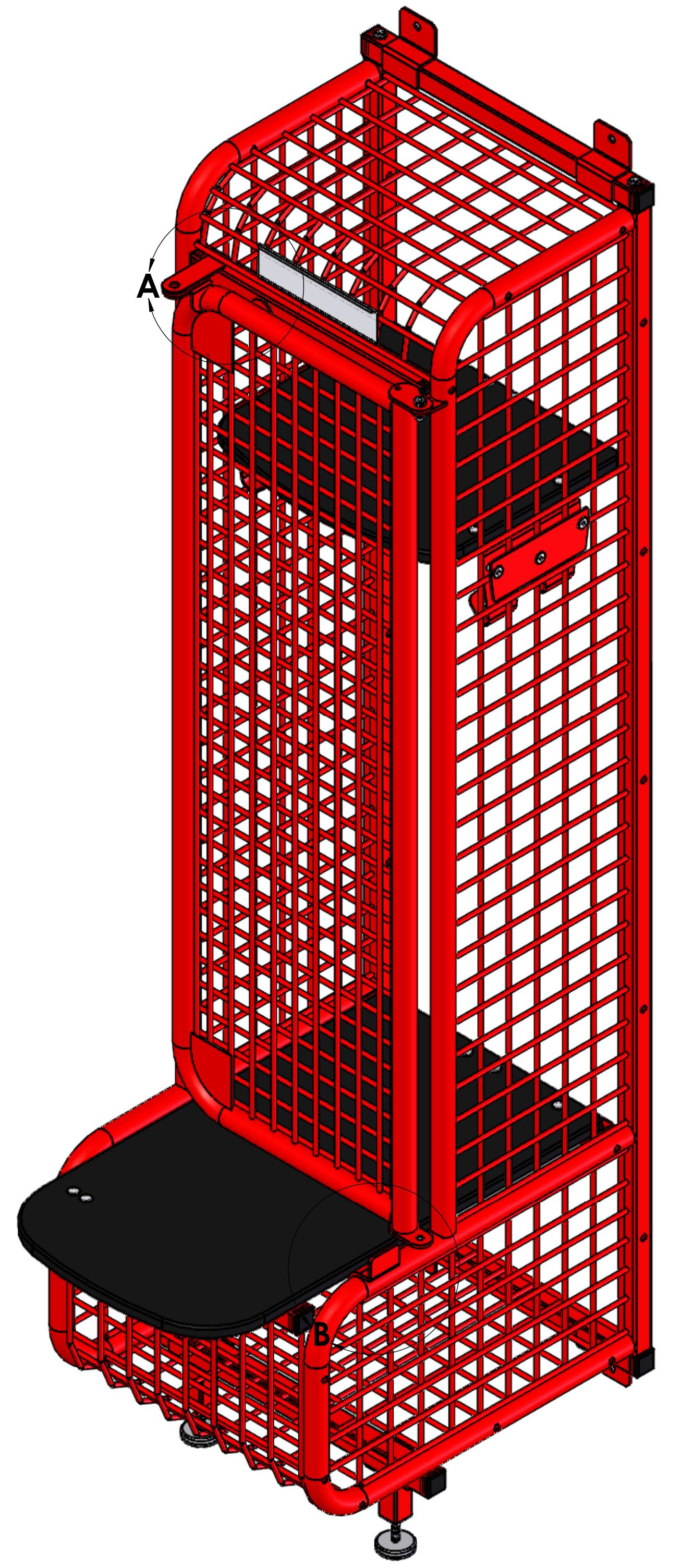
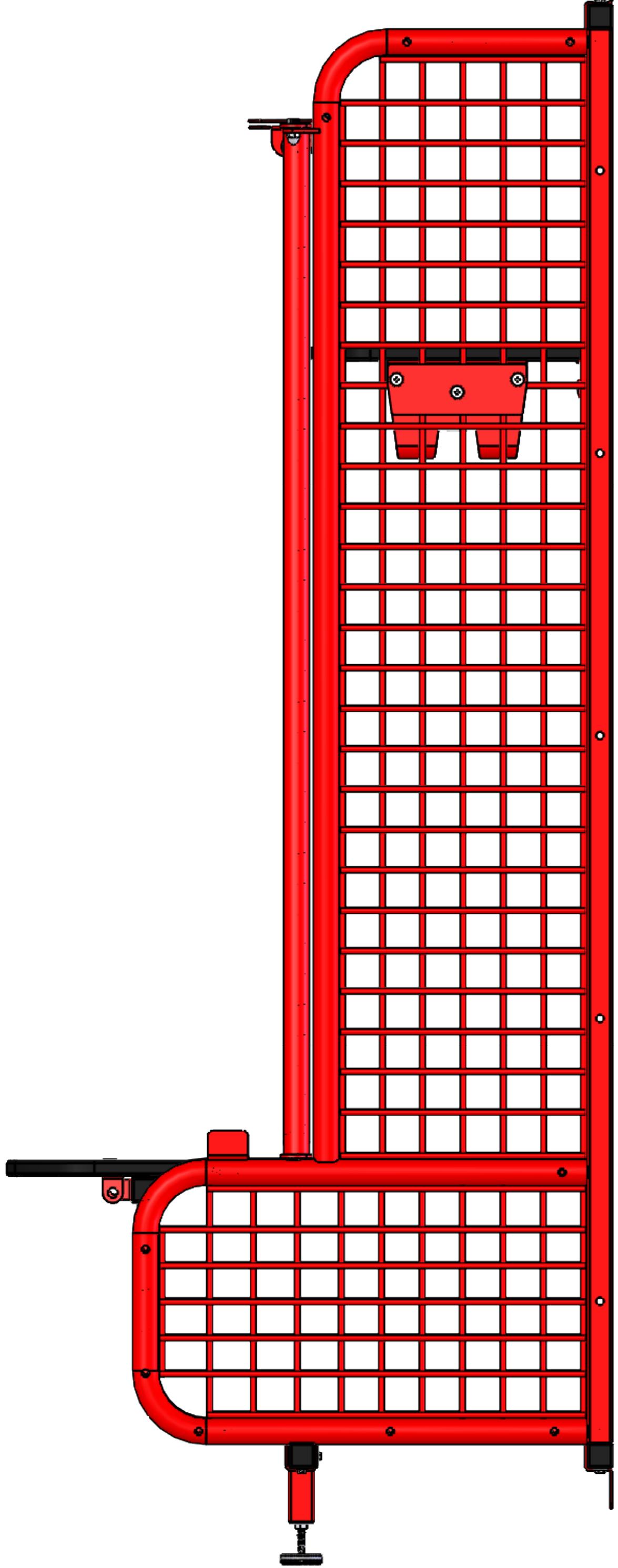
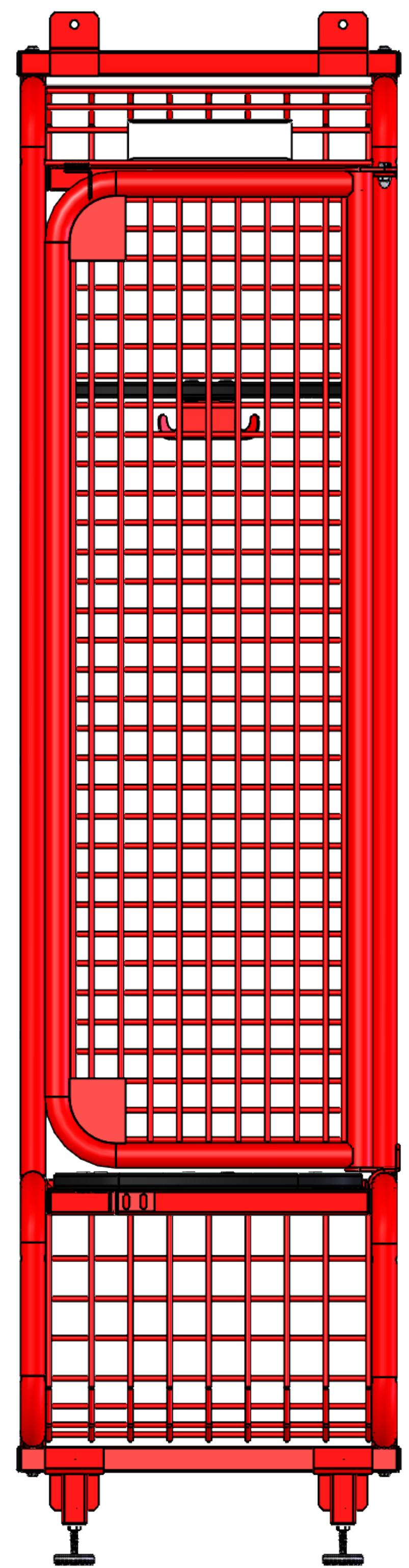
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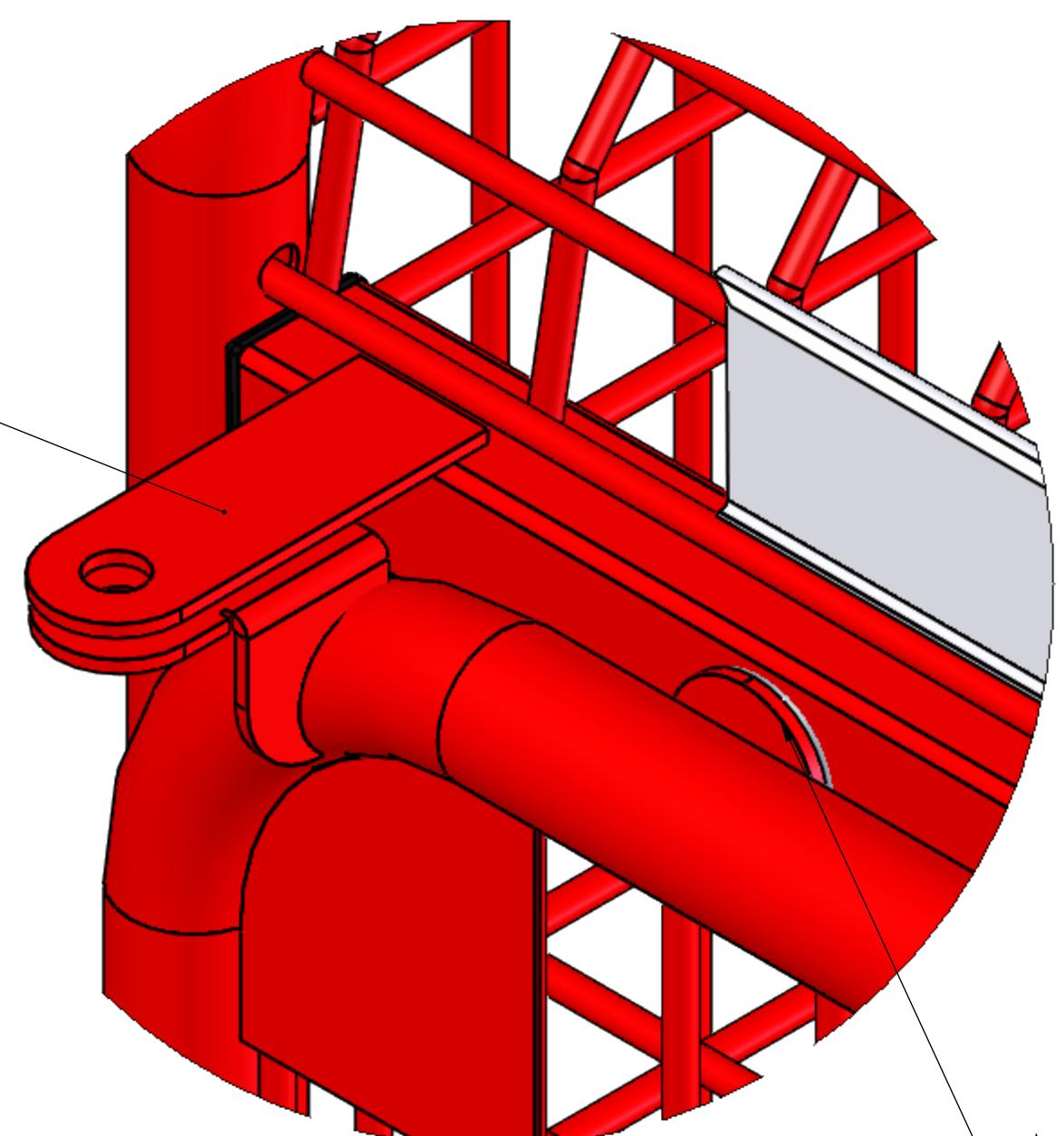
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01	INITIAL RELEASE	08/08/2022



Design Features:

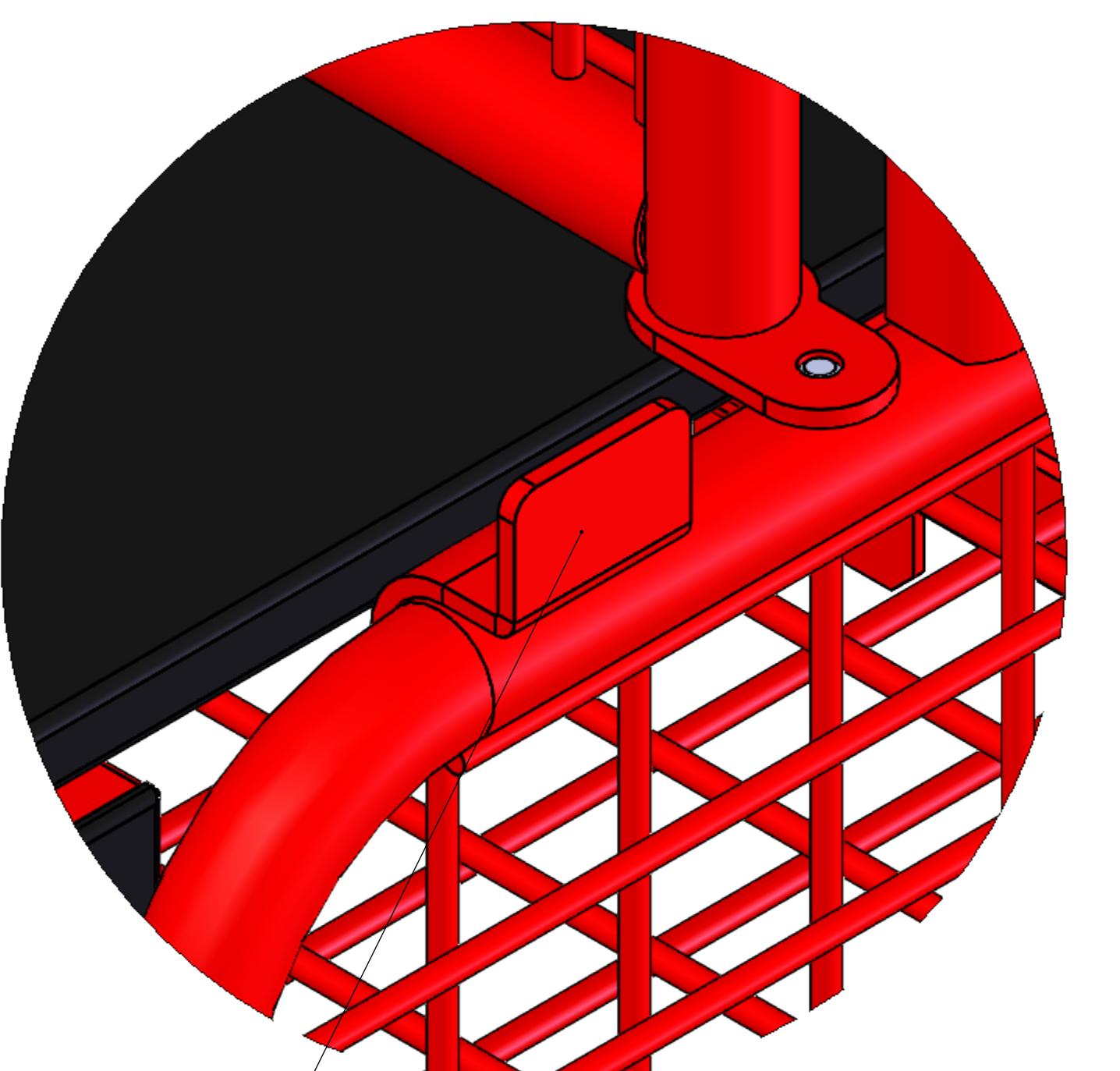
- **Frame:** Heavy-duty 1-1/4" OD, 16-gauge steel tube
- **Body Panels:** High-strength 1/4" steel wire, 2" x 2" square grid pattern
- **Back Grids (Optional):** High-strength 1/4" wire, 2" x 2" square grid pattern
- **Secure Doors (Optional):** Heavy-duty, welded 1-1/4" OD, 16-gauge steel tube with 1.5" x 1.5", 8-gauge welded wire panel or heavy-duty, welded 1-1/4" OD, 16-gauge steel tube with solid panel MDF core laminate
- **Shelves/Hooks:** Heavy-duty, full-width 1/4" MDF core laminate or HDPE mounted to side panels with heavy-duty hook mounts
- **Adjustability:** Shelves adjustable in 2" increments
- **Nameplate Holder:** 20-gauge sheet metal. 2" x 12-1/8" Nameplate Holder for 18", 24" & 30" lockers with Secure Doors and 24" & 30" lockers without Secure Doors. 2" x 8-1/8" Nameplate Holder for 18" lockers without Secure Doors. All Personnel Locker Nameplate Holders are placed on top of each locker opening. *Note: Custom printed nameplate sold separately.
- **Mounting:** Wall mount, floor mount or mobile (18" and 24" only)
- **Finish:** Super Durable TGIC powder coat
- **Colors:** 7 standard colors
- **Shipping:** Ships knocked down for ease of handling and reduced shipping costs
- **Assembly:** With simple tool it's fast and easy

ADLOCK
ASP



MAGNET
CATCH

DETAIL A
SCALE 1 : 1.2



DOOR STOP
SECURED BY
1/4-20 PAN HEAD
SCREWS

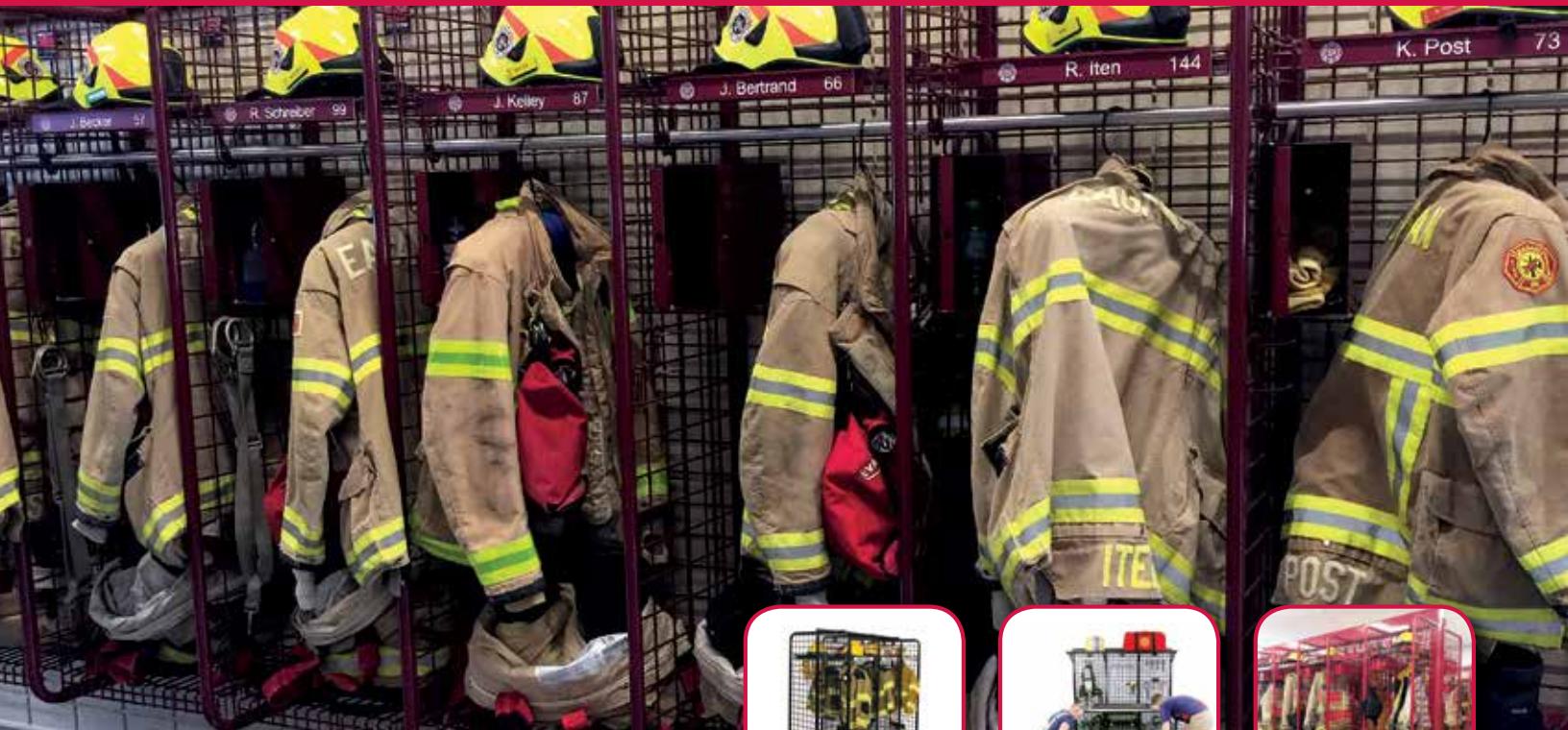
DETAIL B
SCALE 1 : 1.2

GEARGRID		NAME	DATE
DRAWN	LUKE B.	08-08-2022	
ENGINEER			
UNLESS OTHERWISE SPECIFIED: THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF GEARGRID CORPORATION. ANY REPRODUCTION IN PART OR WHOLE, IN WHOLE OR IN PART, BY ANYONE, IS PROHIBITED.			
DIMENSIONS ARE IN INCHES			
ANGLES MACHINED			
TOOL PLATE			
ANGLE FORMED			
ANGLE PLACE			
THREE PLACE			
HOLE Ø			
XX		±.010	±.005
INTERPRET DIM AND TOLERANCE PER			
ASME Y14.5M-1994			
THIRD ANGLE PROJECTION			
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DO NOT SCALE DRAWING			
SHEET 1 OF 1			

GRIDIRON
REVISION 2



The Storage Solution Experts



Strategic Solutions
for Fire Storage



Our Story

With nearly 100 years in manufacturing excellence, GearGrid prides itself on building all of its products with quality materials and labor in the USA. Our manufacturing facility has state-of-the-art technology, an in-house design team, an on-site powder coating department and a dedication to providing quality products and service comparable to none.

Since 1921, GearGrid, formerly known as Mid-Minnesota Wire, has focused on designing and building durable custom wire forms for retail display and Original Equipment Manufacturer (OEM) markets. In 1997, a new product was created at GearGrid. This product was a firefighting storage unit that became an internationally sold product. Eventually GearGrid expanded the division to additional firefighting storage solutions, athletic, equine and tactical storage solutions, in addition to providing custom retail displays and wire forms.

Today, GearGrid products can be found in national and international markets. As always, GearGrid products are made with the highest dedication to quality and will always be 100% made in the USA.

What We Do

We specialize in the design and fabrication of durable storage solutions for markets that require leading edge solutions. GearGrid is the market leader in the Public Safety, Athletic/Education and Automotive Industries.

GearGrid offers a full line of equipment handling and storage solutions to create a unified look, function and quality standard throughout the station. Factory direct distribution and no reseller network ensures consistent service and pricing across the US regardless of facility location.

SolidWorks is the CAD (Computer Aided Drawing) program GearGrid uses for drawing and documenting products.





Personnel Lockers

Our Wall Mount and Mobile Personnel Lockers include all the advantages of our Standard Wall Mount Lockers, while adding the flexibility of being either a mobile solution or back-to-back island configuration. Each bank of lockers is mounted to a heavy-duty welded frame and includes either four heavy-duty locking casters, levelers or floor mounts.

Width 18", 24" & 30"
Depth 30-1/2"
Height 70"

(77" to 80" overall height when mounted)

*Note: Mobile Lockers only available in 18" and 24" widths

Frame: Heavy-duty 1-1/4" OD, 16-gauge steel tube

Body Panels: High-strength 1/4" steel wire, 2" x 2" square grid pattern

Back Grids (Optional): High-strength 1/4" wire, 2" x 2" square grid pattern

Secure Door Options:

- Heavy-duty, welded 1-1/4" OD, 16-gauge steel tube with 1.5" x 1.5", 8 gauge welded wire panel
- Heavy-duty, welded 1-1/4" OD, 16-gauge steel tube with solid panel MDF core laminate

Shelves/Hooks: Heavy-duty, full-width, 3/4" MDF core laminate or HDPE mounted to side panels with heavy-duty hook mounts



Adjustability: Shelves adjustable in 2" increments

Seat: Integrated, lifting, full-width and depth seat (3/4" MDF core laminate or HDPE), mounted to heavy-duty, welded hinge

Name Plate: 20 GA. sheet metal, accepts custom printed name plate

Mounting: Wall mount, floor mount or mobile (18" and 24" only)

Finish: Super Durable TGIC powder coat

Colors: 7 standard colors

Shipping: Ships knocked down for ease of handling and reduced shipping costs

Assembly: With simple tools it's fast and easy



Personnel Seat



Padlock Hasp on Seat
(Lock not included)

GEARGRID® FIRE

PROUDLY Made in the USA



GearGrid's Color Options* Laminate Options



*Laminate chips available upon request.



GEARGRID® FIRE

670 SW 15th Street
Forest Lake, MN 55025

Toll Free: 888-643-6694
Local: 651-464-4468
Fax: 651-464-4780
www.GearGrid.com
E-mail to: sales@geargrid.com



GearGrid's Color Options**

Standard Colors



Custom Colors Also Available.

**Printed colors may vary from metal colors.

Metal color chips available upon request.

Work Surface Options



For more information about our complete line of GearGrid storage systems and accessories, visit us online or call.



www.GearGrid.com (888)643-6694



DESCRIPTION:

Its heavy-gauge construction includes eight gusseted corner brackets and reinforced base frame. The system includes a stainless steel hangbar and can be used in conjunction with GearGrid drying hangers.

DESIGN FEATURES:

Base & Frame: Heavy-duty 1-1/4" steel tubing

Grids: High-strength 1/4" steel wire, 3" x 3" square grid pattern

Casters: Locking casters handle up to 950 lbs. each

Finish: Super Durable TGIC powder coat

Colors: 7 standard colors

Shipping: Ships knocked down for ease of handling and reduced shipping costs

Assembly: With simple tools it's fast and easy

UNIT DIMENSIONS:

75" W x 20" D x 82" H

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Broom Center & Wash Center

GearGrid's Broom Center & Wash Center are made of durable steel with a resilient powder coat finish. This system helps organize and extend the life of your cleaning supplies.

Height 25-1/4 "

Length Available in 4' 5' & 6'

Broom Center Includes:

- 4' Unit: 3 Large Tool Hangers & 1 Four-Prong Rack
- 5' Unit: 4 Large Tool Hangers & 1 Four-Prong Rack
- 6' Unit: 5 Large Tool Hangers & 1 Four-Prong Rack

Wash Center Includes:

- 4' Unit: 3 Large Tool Hangers & 1 Four-Prong Rack
- 5' Unit: 3 Large Tool Hangers & 2 Four-Prong Racks
- 6' Unit: 4 Large Tool Hangers & 2 Four-Prong Racks

Frame: Heavy-duty 1-1/4" steel tubing

Grids: High-strength 1/4" steel wire,
3" x 3" square grid pattern

Finish: Super Durable TGIC powder coat

Colors: 7 standard colors

Assembly: With simple tools it's fast and easy

Broom Center



Wash Center



Ingersoll Rand

Reciprocating Single- and Two-stage Air Compressors
2-25 hp



Innovation

Reliability

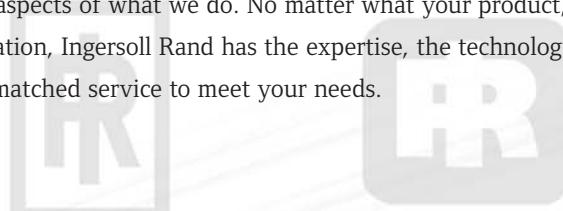
Efficiency

 **Ingersoll Rand**
Industrial Technologies

Legendary Performance

For more than a century, Ingersoll Rand has inspired progress by driving innovation through revolutionary technology and talented people.

It's a legacy of creating new standards for how the world gets work done. We're the technology leader in compressed air not only because we develop best-in-class products, but also because we stand behind our customers in all aspects of what we do. No matter what your product, process or location, Ingersoll Rand has the expertise, the technology and the unmatched service to meet your needs.



INGERSOLL-RAND

T-30 Legendary Performance > > >

1929

Initial production model of Type-30 design with vertical cooling fins; combination of concave and convex tank heads.



1950s

Updraft air cleaner added.



1970s

First units from Campbellsville, KY plant establish a new reputation for workmanship and service.



1872

Ingersoll Rand tradition begins with its first reciprocating air compressor.



1940s

Design enhanced with large U-frame motor and improved piping.



1960s

Modern Type-30 design emerges with horizontal cooling fans, smaller T-frame motor, convex tank heads, fully-welded construction and drive-belt guards.



Providing Customer-driven Compressor Solutions

When you've been delivering reliable reciprocating compressor results for more than 100 years, it's natural that your corporate culture supports a strong tradition of evolutionary enhancements. Every new generation of employees builds on the experience and insights of their mentors. Today's legendary Ingersoll Rand air compressors started with an original rock-solid design and have steadily improved with added control and performance upgrades over the years.

They are world-renowned for their impressive legacy of long-life performance, ease of service and evolutionary design enhancements.

Efficient. Reliable. Built to last.

Ingersoll Rand has sold millions of reciprocating compressors worldwide.



1990s

Fully packaged units with E-series starters and CSA package certification are introduced.



2002

Compact single-stage compressors introduced.



2006

Fully packaged model with aftercooler, automatic tank drain, and low-oil-level shutdown is top choice for round-the-clock applications.



1980s

First blue-colored units feature new enhancements.



2000

Premier Series packaging adds dual controls, deluxe starter, and liquid-filled pressure gauge.



2003

Pressure-lubricated model with industrial-grade two-stage air cleaner added.



Efficiency, Reliability, Built to Last

Time-tested design and enhancements establish Ingersoll Rand single and two-stage reciprocating compressors as the benchmark for:

Efficiency and Reliability

With a proven design and stellar track record, the Ingersoll Rand reciprocating compressor family has earned worldwide recognition for reliable, trustworthy performance that saves money and enhances business success through:

- Lower life-cycle costs
- An ability to thrive in punishing applications
- Optimum solutions for greater efficiency
- Configurations that meet varying needs

Built to Last

Due to the laws of physics, there are certain aspects of reciprocating compressor design, construction and performance that have never changed – like cast-iron durability, copper-finned cooling coils, reliable splash lubrication and easy maintenance. That's where Ingersoll Rand's design and operating experience really pays off in terms of long-term productivity and return on investment. Ask any one of the millions of active Ingersoll Rand reciprocating compressor users around the world.

Serviceability

Ingersoll Rand designed the reciprocating compressors to last a lifetime – thanks to quick, easy maintenance with renewable components. Easy access to the pump components allows for quick routine maintenance and replacement of parts like the stainless steel valve, individually cast cylinders, piston rings and gaskets, and long-life bearings. This key serviceability aspect extends the life of the compressor and lets you amortize your initial capital cost over a much longer equipment life span for a superior payback on your investment.



The Ideal Design for Applications Where Air is Taken for Granted

Innovation

For more than 100 years, Ingersoll Rand has maintained the delicate balance between known performance and new developments by keeping the best features and upgrading others as new technology becomes available. The result is higher efficiency for today's energy-conscious world and enhanced value for the extended life of your investment.

Customer-driven Solutions

Another residual benefit of compressor longevity is our cumulative experience with how different users prefer, need and operate their compressors. Years of experience in the reciprocating compressor business and servicing a variety of users have taught us what is most important to compressor users. And that means more choices for you to satisfy your specific needs.

Your choices range from the size of the units and the sophistication of the features to popular packaged solutions. There are even gas-powered packages perfect for field service, fleet maintenance, remote pneumatic applications or emergency back-up needs.



Ingersoll Rand single- and two-stage reciprocating air compressors are an ideal choice for applications that demand a reliable air supply for everyday use, but where running an air compressor ranks a distant second to running your business.

- **Automotive Shops**
- **Light Manufacturing**
- **Construction**
- **Commercial Applications**
- **Fabrication**
- **Pneumatic Equipment**
- **Processing Lines**

It's All About Choices

Better choices lead to better solutions for saving money and improving overall return on investment in your unique application.

That's why Ingersoll Rand single- and two-stage reciprocating compressors offer you more choices of compressor sizes and compressor features to suit your needs. If you define unsurpassed performance by maximum operating pressure, increased air flow and extended duty cycles, count on an Ingersoll Rand reciprocating air compressor to deliver it reliably.

Take advantage of Ingersoll Rand expertise, product selection, service and system solutions to help you identify the optimum compressor size, performance features and package options for your applications. And learn how you can strengthen your business through:

- Lower operating costs
- Increased productivity
- Improved quality
- A better working environment

Two-stage Electric-powered Air Compressors			
Feature	Value Package (5, 7.5, 10 & 15hp)	Value Pro Package (10 & 15hp)	Premium Package (5, 7.5, 10, 15 & 20hp)
100% Cast Iron Pump	✓	✓	✓
ASME Coded Receiver Tank	✓	✓	✓
NEMA 1 & ODP Motor	✓	✓	✓
Magnetic Motor Starter	✓ (Except 2340 packages with single-phase voltage)	✓	✓ (Except 2340 packages with single-phase voltage)
Automatic Start/Stop Control with Pressure Switch	✓	✓	✓ (5 & 7.5hp only)
Oil Sight Glass	✓ (10 & 15hp only)	✓	
Manual Drain	✓		
Electric Drain		✓	✓
Air-Cooled Aftercooler		✓	✓
Low Oil Level Switch			✓
Dual Control with Centrifugal Unloader			✓ (10 & 15hp only)

Value Package (5, 7.5, 10 & 15hp) An economical choice in a dependable compressed air source, the Value Package offers the perfect solution for commercial, automotive and light industrial applications with intermittent load demands.

Value Pro Package (10 & 15hp) For applications that demand a heavier-duty cycle. Step up to this enhanced version of our base package. It is ideal for light industry applications. The Value Pro Package comes factory-fitted with options shown above for unmatched reliability in most diversified applications.

Premium Package (5, 7.5, 10, 15 & 20hp) For applications that are the most demanding or require greater control over compressed air supply. Step up to our top-of-the-line Premium Package. These air compressors come standard with factory-fitted options shown above for unmatched reliability in 100% continuous-duty applications.

Single-stage Air Compressor

Configured in space-saving stationary and portable models, these durable compressors are a favorite with DIY homeowners and in the construction industry.

Key features include:

- Industry-leading 5,000-8,000 hour design life
- Industrial-quality cast iron construction
- Fully-balanced crankshaft that reduces vibration
- 135 psi max. discharge pressure
- Honda engine-driven wheel barrow compressor



Two-stage Gas-powered Air Compressors

Ingersoll Rand's two-stage gasoline engine driven air compressors are designed to provide compressed air where electric power is not readily available. They're used in fleet and field service applications, remote pneumatic applications and emergency production lines.

- Available with easy-starting Honda, or Kohler engines
- Fuel-efficient idle control
- Advanced safety features including low oil level shutdown for gas engines



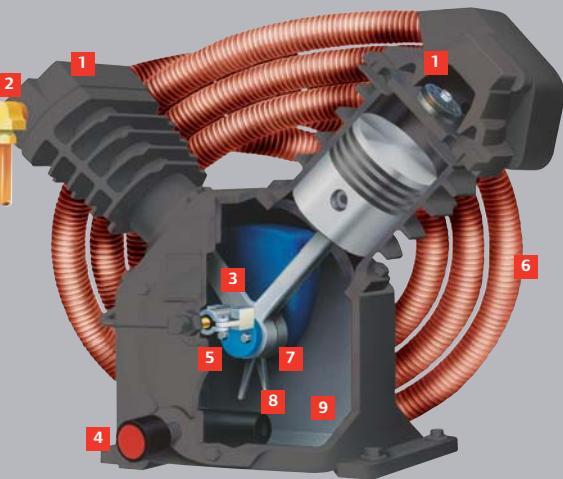
Electric-Driven Duplex Air Compressors

Ingersoll Rand duplex reciprocating air compressors offer two individual compressor pumps and two motors mounted on a single tank, providing 100% built-in backup or additional air power for those larger capacity jobs. Includes the legendary T30 pump with value added features in a space saving design ideally suited for tight spaces.

- Durable cast iron design for 100% continuous duty application
- Automatic duplexing or alternating of compressors
- Individually cast cylinders, overhung crankshaft and one piece connecting rod for ease of maintenance
- 175 psig maximum operating pressure



Why Ingersoll Rand Pumps Are Better... Excellence in Design!



1 Two-stage Design: Delivers pressures up to 175 psig

2 Radial Fins for Maximum Cooling: Even 360° cooling of barrel cylinders eliminates hot spots

3 One-piece Connecting Rod: Fewer wearing parts

4 Low Oil Level Switch: Provides constant protection

5 Centrifugal Unloader: Ensures loadless starts, for maximum starter protection

6 Integral Fan Blade/Finned Copper Intercooler: Runs cooler, even in the most demanding conditions

7 Overhung Crankshaft: Precision balanced to run smoothly and quietly; simplifies maintenance and wear-sleeve replacement

8 Splash Lubrication: Simple and reliable.

9 100% Cast Iron: Designed for a lifetime

Selection Guide for Electric-drive Stationary Air Compressors

1. Select Your Compressor

Stationary Compressors	
Applications	Recommended Package
Intermittent Duty	Two-stage Value
Medium Duty	Two-stage Value Pro
100% Continuous Duty	Two-stage Premium
DIY	Single-stage

Portable Compressors	
Applications	Recommended Package
Remote/Fleet/ Field Service	Two-stage Gas-driven
DIY/Construction	Single-stage



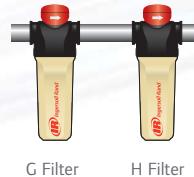
8 Reciprocating Compressors

2. Choose Your Air Quality

Ingersoll Rand compressed air treatment equipment is used to remove contaminants present in a compressed air system.

Shop Quality Air

General system protection removes bulk liquid and solid contaminates:



G Filter H Filter

- Light manufacturing
- Light auto service shop
- Pneumatic tools
- Dry cleaning

Dry, Clean Air

Complete system protection removes liquid and solid contaminates:

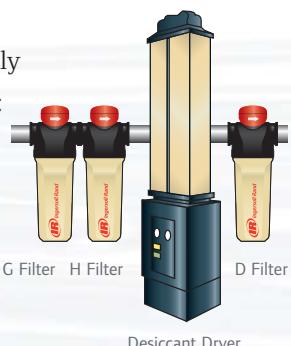


G Filter H Filter

- Medium-to-heavy manufacturing
- Large auto service shop
- Auto body shop
- Laundry
- Printing
- Instrumentation

Critical Quality Air

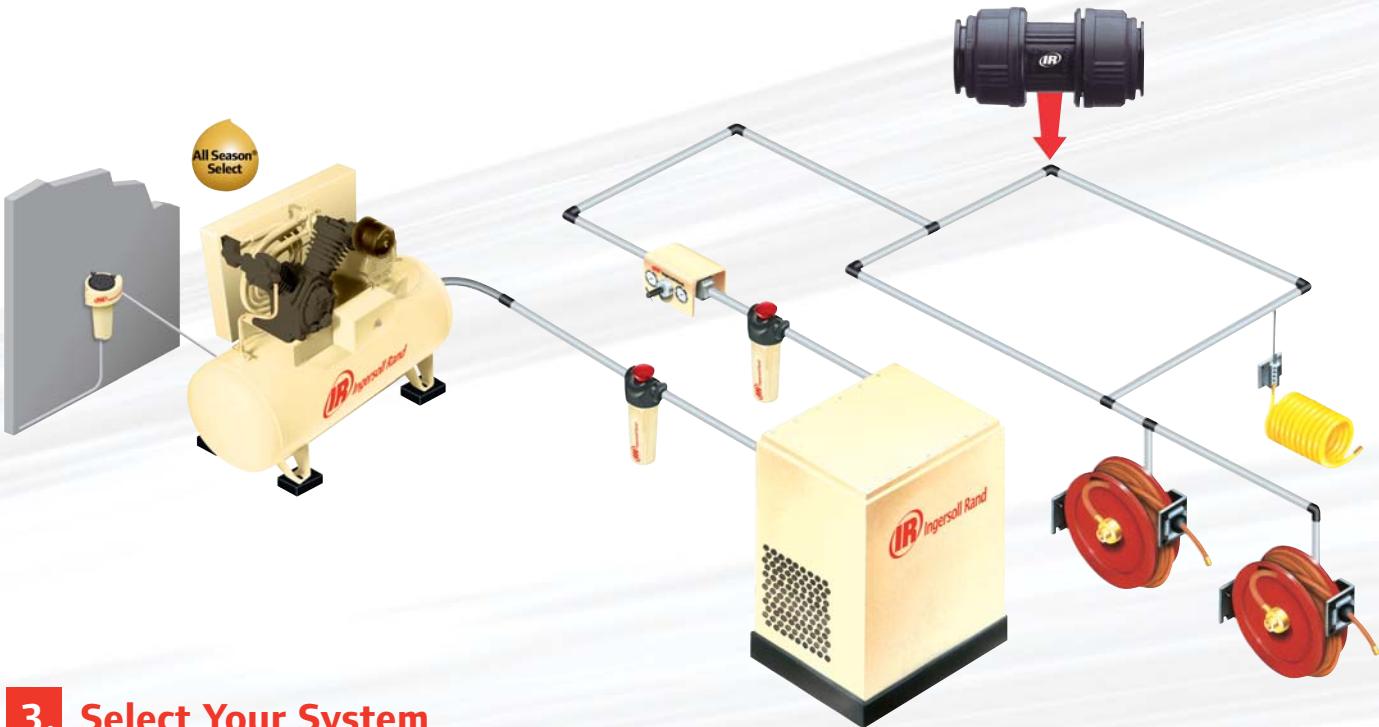
Applications that require virtually no water vapor or contaminates:



G Filter H Filter D Filter

- Advanced pneumatics and instrumentation
- Spray application booths
- Piping exposed to freezing temperatures

G - General Purpose H - High Efficiency D - Dust Protection



3. Select Your System Controls and Accessories

Ingersoll Rand accessories are available for all power sources.

IntelliFlow Pneumatic Flow Controller

- Energy savings
- Control pressure ff 1 psig (.07 bar g)
- Single point control system
- Reduce leak losses
- Increase system productivity
- Protect all downstream equipment



EZ-line SimplAir Compressed Air Piping

- High-quality anodized aluminum pipe
- Non-corrosive piping
- Reduced pressure loss
- Higher flow rates than other piping
- Easy and fast installation



EDV Electronic Drain Valve

- Automatically removes moisture from tanks, compressors, filters, drip legs



Filters, Regulators and Lubricators (FRLs)

FRLs provide point-of-use air conditioning to enhance tool longevity and process quality. Filters remove rust, scale and condensation that increase wear on tools regulators and provide constant pressure with varying upstream pressure. Lubricators provide lubricating oil to tools, cylinders, valves and other equipment.



Oil Water Separators

- Removes oil from drain condensate
- Allows for clean water discharge



Global Reach, Local Touch

No matter what the industry or location, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week.

Our worldwide network of distributors, engineers and certified, factory-trained technicians, are a phone call away —ready to support you with innovative and cost-effective service solutions that will keep you running at peak performance.



All Season Select® Start-up Kits



Ingersoll Rand offers All Season Select® start-up kits to provide improved protection. Each kit contains all the parts needed to start up and maintain your compressor for the first year. Kits provide everything you need for 2,000 hours of service between changes under normal operating conditions, along with the added protection of a two-year extended warranty.

All start-up kits include:

- All Season Select® lubricant, our synthetic, all-temperature blend designed to increase efficiency, reduce wear and prevent carbon build-up
- Replacement air filter elements

Specifications - Duplex Packages

Two-stage Electric-powered Value Packages

Model	hp	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 90 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
2-2475E5-V	5	120-Gal. Horizontal	S	34.2	175	82 x 33 x 48	1,250	0.5	32282881
2-2475E7.5-V	7.5	120-Gal. Horizontal	S	48.2	175	82 x 33 x 48	1,275	0.5	32282881
2-2545E10-V	10	120-Gal. Horizontal	S	70.4	175	87 x 33 x 52	1,530	0.5	32282899

Available voltages: 200/3/60, 230/3/60, 460/3/60 and 575/3/60

Two-stage Electric-powered Premium Packages

Model	hp	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 175 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
2-2475E5-P	5	120-Gal. Horizontal	S	34.2	175	84 x 35 x 48	1,265	0.5	32282881
2-2475E7.5-P	7.5	120-Gal. Horizontal	S	48.2	175	84 x 35 x 48	1,315	0.5	32282881
2-2545E10-P	10	120-Gal. Horizontal	S	70.4	175	88 x 35 x 52	1,545	0.5	32282899

Available voltages: 200/3/60, 230/3/60, 460/3/60 and 575/3/60

Specifications - Simplex Packages

Two-stage Electric-powered – Value Package

Model	hp	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 175 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
2340L5-V	5.0	60-Gal. Vertical	S	14.0	175	48 x 40 x 76	435	0.50	32305880
2340N5-V	5.0	80-Gal. Vertical	S	14.0	175	48 x 40 x 76	505	0.50	32305880
2475N5-V	5.0	80-Gal. Vertical	S	16.8	175	48 x 40 x 76	505	0.75	32305880
2475N7.5-V	7.5	80-Gal. Vertical	S	24.0	175	48 x 40 x 76	611	0.75	32305880
2545E10-V	10.0	120-Gal. Horizontal	S	35.0	175	83 x 36 x 65	920	0.75	32305898
2545K10-V	10.0	120-Gal. Vertical	S	35.0	175	51 x 46 x 83	1,104	1.00	32305898
7100E15-V	15.0	120-Gal. Horizontal	S	50.0	175	83 x 36 x 65	1,239	0.75	32305898

Available voltages: 230/1/60 (5-7.5 hp only), 200/3/60, 230/3/60, 460/3/60 and 575/3/60 voltages

Packages include magnetic starter (except 2340 models with single-phase voltage), manual drain, automatic start/stop control with pressure switch

Two-stage Electric-powered – Value Pro Package

Model	hp	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 175 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
2545E10-VP	10.0	120-Gal. Horizontal	S	35.0	175	83 x 36 x 65	1,104	0.75	32305898
2545K10-VP	10.0	120-Gal. Vertical	S	35.0	175	51 x 46 x 83	1,104	1.00	32305898
7100E15-VP	15.0	120-Gal. Horizontal	S	50.0	175	83 x 36 x 65	1,297	0.75	32305898

Available voltages: 200/3/60, 230/3/60, 460/3/60 and 575/3/60 voltages

Packages include magnetic starter, electric drain, Automatic start/stop control with pressure switch, air-cooled aftercooler

Two-stage Electric-powered – Premium Package

Model	hp	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 175 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
2475N5-P	5.0	80-Gal. Vertical	S	16.8	175	48 x 40 x 76	597	0.75	32305880
2475N7.5-P	7.5	80-Gal. Vertical	S	24.0	175	48 x 40 x 76	611	0.75	32305880
2545E10-P	10.0	120-Gal. Horizontal	S	35.0	175	83 x 36 x 65	1,104	0.75	32305898
2545K10-P	10.0	120-Gal. Vertical	S	35.0	175	51 x 46 x 83	1,104	1.00	32305898
7100E15-P	15.0	120-Gal. Horizontal	S	50.0	175	83 x 36 x 65	1,297	0.75	32305898

Available voltages: 230/1/60 (5-7.5 hp only), 200/3/60, 230/3/60, 460/3/60 and 575/3/60 voltages

Packages include magnetic starter, electric drain, automatic start/stop control with pressure switch (5 hp & 7.5hp), dual control with centrifugal unloader (10hp & 15hp), air-cooled aftercooler, low oil level switch

Single-stage Electric-powered

Model	hp	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 90 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
P1IU-A9	2.0	4-Gal. Twin	P	4.30	135	19 x 19 x 19	77	0.25	–
P1.5IU-A9	2.0	20-Gal. Vertical	P	5.20	135	22 x 23 x 43	200	0.25	–
SS3J2-WB	2.0	8-Gal. Twin	P	5.70	135	43 x 18 x 25	175	0.25	97338099
SS3J3-WB	3.0	8-Gal. Twin	P	11.3	135	43 x 18 x 25	175	0.25	97338099
SS3L3	3.0	60-Gal. Vertical	S	11.3	135	20 x 23 x 66	300	0.50	97338099
SS5L5	5.0	60-Gal. Vertical	S	18.1	135	20 x 30 x 71	310	0.50	20100251

Available voltages: 120/1/60 (P1IU-A9), 115/1/60 (P1.5IU-A9), and 230/1/60 (SS3, SS5) voltages

Two-stage Gas-powered

Model	hp	Engine	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 175 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
2475F13GH	13	Honda	30-Gal. Horizontal	P	25.0	175	51 x 33 x 44	469	0.50	32312936
2475X13GH	13	Honda	Baseplate Mounted	P	25.0	175	33 x 36 x 36	440	0.50	32312936
2475F12.5G	13	Kohler	30-Gal. Horizontal	P	24.0	175	51 x 33 x 44	469	0.50	32305872
2475X12.5G	13	Kohler	Baseplate Mounted	P	24.0	175	33 x 36 x 36	440	0.50	32305872

Single-stage Gas-powered

Model	hp	Engine	Tank Size/ Configuration	Stationary or Portable	Capacity (cfm) @ 90 psig	Max Pressure (psig)	Dimensions (L x W x H in)	Net Weight (lbs)	Tank Outlet (in)	Startup Kit
SS3J5.5GH-WB	5.5	Honda	8-Gal. Twin	P	11.8	135	43 x 18 x 26	175	0.25	97339501



Ingersoll Rand Industrial Technologies provides products, services and solutions that enhance our customers' energy efficiency, productivity and operations. Our diverse and innovative products range from complete compressed air systems, tools and pumps to material and fluid handling systems and environmentally friendly microturbines. We also enhance productivity through solutions created by Club Car®, the global leader in golf and utility vehicles for businesses and individuals.

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Non-Cycling Refrigerated Dryers

12-340 m³/min (7-200 cfm)



Designed for Worry-free Air Quality

Ingersoll Rand non-cycling refrigerated dryers make providing continuous dry air as easy as piping a self-contained unit into your compressed air supply line.

Corrosion-resistant heat exchangers, an enhanced control system and high-efficiency moisture-separation ensure a steady long-term supply of dry air. This virtually eliminates cost due to ruined product finishes, scrapped materials or replacement of pneumatic tools and manufacturing equipment destroyed by wet air.

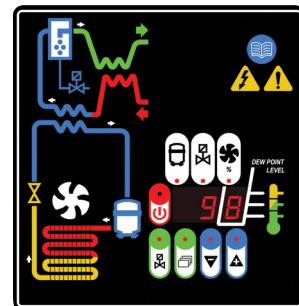
These small-footprint units provide complete, affordable solutions for applications ranging from dry cleaning to auto body shops, to light processing and manufacturing applications. And easy accessibility simplifies routine maintenance.

Minimize your lifecycle costs with efficient, reliable and environmentally sound non-cycling refrigerated dryers for cleaner, drier compressed air.

Designed for Optimum Efficiency

Our dryers offer multiple design features to ensure a constant dew point at all load levels, and to deliver continuous dry air performance that satisfies ISO7183 and CAGI ADF100 industry standards.

The dryer's full-function controller with enhanced system parameters, diagnostics and alarms is more sophisticated and powerful than similarly sized competitive products. We also test every unit to ensure leak-free operation and compliance with operating specifications.



Microprocessor controller with intuitive graphic interface

Standard and High Temperature Models

Standard units are rated for 46°C (115°F) ambient air conditions and are suited for most applications. High-temperature models accommodate inlet air temperatures up to 94°C (200°F) and are ideal for use with compressors that do not include built-in aftercoolers.

Lowest Cost of Ownership

Ingersoll Rand's refrigerated dryers offer design features that reduce energy consumption and improve reliability:

- ① Corrosion-resistant heat exchangers reduce air flow restrictions, providing more efficient throughput with less wasted energy, and a built-in stainless steel demister efficiently removes all moisture
- ② Air is cooled by cold outgoing air in the pre-cooler/re-heater
- ③ Microprocessor control with an easy-to-use graphic interface lets you adjust and manage system parameters easily and efficiently
- ④ Variable-speed fans reduce power consumption when units operate at less than maximum cooling capacity while ensuring a consistent dew point
- ⑤ Reliable, fully hermetic compressors use environmentally friendly R134A refrigerant
- ⑥ A fully adjustable programmable electronic drain valve helps minimize air loss



Ingersoll Rand Non-Cycling Refrigerated Dryers 60 Hz Performance

Model	Flow Rate m ³ /hr	Flow Rate cfm	Nominal Power Consumption kW	Voltage V/Ph/Hz	Air Connect NPT	Dimensions (Length x Width x Height) mm	Dimensions (Length x Width x Height) in	Max Inlet Temperature °C	Max Inlet Temperature °F	Weight kg	Weight lb
Standard											
D12IN	12	7	0.16	115/1/60	1/2"	390 x 305 x 408	16.0 x 12.0 x 16.0	60	140	18	40
D18IN	18	11	0.16	115/1/60	1/2"	390 x 305 x 408	16.0 x 12.0 x 16.0	60	140	18	40
D25IN	25	15	0.16	115/1/60	1/2"	390 x 305 x 408	16.0 x 12.0 x 16.0	60	140	18	40
D42IN	42	25	0.21	115/1/60	1/2"	452 x 390 x 453	18.0 x 16.0 x 18.0	60	140	27	60
D54IN	54	32	0.37	115/1/60	1/2"	452 x 390 x 453	18.0 x 16.0 x 18.0	60	140	28	62
D72IN	72	42	0.37	115/1/60	1/2"	452 x 390 x 453	18.0 x 16.0 x 18.0	60	140	28	62
D108IN	108	64	0.48	115/1/60	1/2"	541 x 420 x 563	21.5 x 16.5 x 22.5	60	140	35	77
DA127IN	127	75	0.66	115 or 230/1/60	3/4"	500 x 368 x 617	19.7 x 15.2 x 24.3	49	120	43	94
DA170IN	170	100	0.85	115 or 230/1/60	3/4"	500 x 368 x 617	19.7 x 15.2 x 24.3	49	120	50	110
DA255IN	255	150	0.88	115 or 230/1/60	1-1/2"	770 x 500 x 953	30.3 x 19.7 x 37.5	49	120	70	154
DA340IN	340	200	1.12	115 or 230/1/60	1-1/2"	770 x 500 x 953	30.3 x 19.7 x 37.5	49	120	77	170
High Temperature											
D25IT	25	15	0.21	115/1/60	1/2"	500 x 386 x 661	20.0 x 15.5 x 26.0	94	200	38	84
D42IT	42	25	0.37	115/1/60	1/2"	500 x 386 x 661	20.0 x 15.5 x 26.0	94	200	39	86
D60IT	60	35	0.37	115/1/60	1/2"	500 x 386 x 661	20.0 x 15.5 x 26.0	94	200	39	86
D102IT	102	60	0.48	115/1/60	3/4"	567 x 420 x 771	22.5 x 16.5 x 30.5	94	200	57	126
D140IT	140	82	0.57	115/1/60	3/4"	567 x 420 x 771	22.5 x 16.5 x 30.5	94	200	62	137
DA170IT	170	100	0.71	115/1/60	1"	567 x 420 x 771	22.5 x 16.5 x 30.5	94	200	67	148

Dryer is rated for a ISO Class 6 Dew Point in accordance with ISO8573-1.

Performance data presented in accordance with CAGI Standard ADF 100 using 100°F inlet temperature, 100°F ambient temperature and 100 psig conditions. (150°F inlet and 95°F ambient for High Temperature dryers)



IngersollRand.com

Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit www.IRCO.com.



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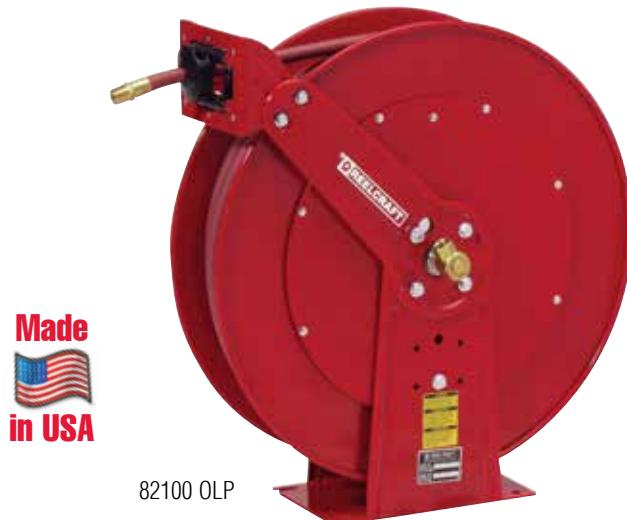
Heavy Duty Spring Retractable Reels

Air/Water/Oil/Grease - 3/8", 1/2", 3/4", 1" I.D.

Reelcraft's Series 80000 and D80000 spring retractable reels incorporate the most current design and manufacturing techniques to guarantee long life and trouble-free performance. The all-steel construction and a baked-on powder coat finish combine to produce a rugged, corrosion-resistant product suitable for a wide variety of heavy duty applications. Series D80000 reels are also supplied with Reelcraft's ball-bearing style swivel.

FEATURES

- ✓ Hose anti latch-out feature ensures hose retracts every time.
- ✓ Guide arm is field adjustable for wall, ceiling, or truck mounting positions.
- ✓ Dual pedestal base and guide arm design are structurally reinforced.
- ✓ Five-in-one, heat-treated aluminium casting incorporates main shaft, ratchet, spring arbor and inlet/outlet plumbing in one-piece casting.
- ✓ Containerized spring assembly provides safer and easier handling during maintenance.
- ✓ Two sealed ball bearings for smooth rotation of main shaft.



82100 OLP

		Dimensions - Size Index		
		1	2	3
		in mm	in mm	in mm
A	253/8 645	253/8 645	253/8 645	253/8 645
B	24 610	24 610	24 610	24 610
C	10 254	101/2 267	101/2 267	101/2 267
D	6 152	77/8 200	77/8 200	77/8 200
E	101/2 267	13 330	153/4 400	153/4 400
F	81/8 206	103/8 264	103/8 264	103/8 264

Model with Hose	Shipping Weight	Hose I.D.	Hose O.D.	Hose Length	**Max Pressure	(M)NPTF Hose Outlet	(F)NPTF Reel Inlet	Model without hose & bumper		Shipping Weight	Pressure	Size Index
								lbs	kg	in	mm	#
Low Pressure Air/Water Reels Maximum Temperature 150 °F (65 °C) w/hose / 210 °F (99 °C) w/o hose **Maximum working pressure at 70 °F (20 °C)												
81100 OLP	82	37	3/8 10	.600 15	100 30	300 21	3/8	1/2	81000 OLP	77	35	500 35 1
82075 OLP	87	39	1/2 13	.750 19	75 23	300 21	1/2	1/2	82000 OLP	82	37	500 35 1
82100 OLP	95	43	1/2 13	.750 19	100 30	300 21	1/2	1/2	82000 OLP	82	37	500 35 1
83050 OLP	88	40	3/4 19	1.075 27	50 15	250 17	3/4	3/4	83000 OLP	77	35	500 35 1
F83050 OLP*	89	41	3/4 19	1.075 27	50 15	50 3	3/4	3/4	F83000 OLP	74	34	500 35 1
D83075 OLP	102	46	3/4 19	1.075 27	75 23	250 17	3/4	3/4	D83000 OLP	83	38	500 35 2
D84050 OLP	103	47	1 25	1.375 35	50 15	250 17	3/4	1	D84000 OLP	91	41	500 35 3
Medium Pressure Oil Reels Maximum Temperature 210 °F (99 °C)												
82075 OMP	101	46	1/2 13	.850 22	75 23	2000 138	1/2	1/2	82000 OMP	82	37	2000 138 1
83050 OMP	98	44	3/4 19	1.188 30	50 15	1250 86	3/4	3/4	83000 OMP	84	38	1500 104 1
High Pressure Grease Reels Maximum Temperature 210 °F (99 °C)												
81075 OHP	111	50	3/8 10	.730 19	75 23	4800 331	3/8	3/8	81000 OHP	85	39	5000 345 1
81100 OHP	127	58	3/8 10	.730 19	100 30	4800 331	3/8	3/8	81000 OHP	85	39	5000 345 1

*Model F83050 OLP equipped with UL330 and ULC approved fuel grade hose. 250 psi (17 bar) minimum burst. For all metric thread connections over 1/2" add the suffix number 70 to indicate BSPT threads - example 83050 OLP70. Low pressure reels furnished standard with PVC hose. Medium pressure reels are furnished standard with S.A.E. 100 R1T one wire braid hose. High pressure reels furnished standard with SAE 100 R2T two wire braid hose. Modifications: Reels without hose can be modified to handle gasoline and diesel fuel. To order, place prefix "F" before model number (F83000 OLP). Reference page 4 for guide arm positions.

Available Options

Mounting Brackets

See page 47



Inlet Hose Assemblies

See page 49



Replacement Bumpers

See page 49



Replacement Hoses

See page 50



Models listed with an icon can ship same day upon request when the order is received by 11:30 AM Eastern Time for quantities of 5 or fewer.

Indiana Warehouse

Indiana & California Warehouses

California Warehouse

Canadian Warehouse

Customer Service: 1.855.634.9109
All Other Calls: 1.800.444.3134

 REELCRAFT®

Speaker Options



Model Number: 2400-808NSS
Size: 9-1/2" H x 7-1/2" W x 3" D
Back Box: 8" H x 6" W x 3" D
Style: Brushed Stainless Steel, Surface Mount, Interior
 Flush Mount, Interior

Model Number: 2400-805SS
Size: 7-1/4" H x 4-3/4" W x 1-7/8" D
Style: Stainless Steel, Surface Mount, Interior



Model Number: 2400-984RD
Size: 9-7/8" H x 6-5/8" W x 3-1/4" D
Style: Fiberglass, Surface Mount, NEMA 4 Rated, Interior/Exterior



Model Number: 2400-886DA
Size: 11-5/8" H x 9-3/8" W x 6-1/4" D
Style: Fiberglass, Surface Mount, Interior/Exterior

Handset Options



Model Numbers (Desk Mount):
 2300-710 (Coil Cord)
 2300-746 (Armor Cord)
Size: 9" H x 5-1/2" W x 5" D
Style: Interior
Options: Custom artwork/wording, standard or custom PMS colors

Model Numbers (Wall Mount):
 2300-610 (Coil Cord)
 2300-646 (Armor Cord)
Size: 8-1/2" H x 4" W x 4-1/2" D
Style: Interior
Options: Custom artwork/wording, standard or custom PMS colors



Model Numbers (Desk Mount):
 2300-730 (Coil Cord)
 2300-736 (Armor Cord)
Size: 9" H x 5-1/2" W x 5" D
Style: Interior with keypad

Model Numbers (Wall Mount):
 2300-630 (Coil Cord)
 2300-636 (Armor Cord)
Size: 8-1/2" H x 4" W x 4-1/2" D
Style: Interior with keypad

Features

- Telephone line powered
- Requires analog telephone line (POTS, PBX, or central office phone line with a standard WINK signal)
- Requires 48v @ 25mA
- Programmable with up to 2 emergency phone numbers (2400 Series phones only)
- 25 second recordable location message (2400 Series phones only)

- On-site programming
- Numeric programming keypad
- Temperature range -40F to 150F
- Automatic dialer (31 digit programmable memory)
- Automatic answer feature with audible ring
- Touch Tone operation only (Touch Tone is an AT&T registered trademark)
- 2 year warranty

2400-984RD Speaker Phone



The RATH® red, fiberglass Emergency Call Box is an excellent fit when you want to provide emergency communications in parking structures, building exteriors, mounted on poles or interior locations.

This interior/exterior hands-free speaker phone is easily noticed and compact size can fit almost anywhere.

Standard Construction Features

- One button Speaker Phone
- LED indicating call status
- Heavy duty and vandal resistant
- NEMA 4 watertight Call Box
- Exterior rated
- ADA compliant
- Dimensions 9-7/8"H 6-5/8"W x 3-1/4"D
- Wall mount
- Two year warranty
- Optional Discrete View™ camera

Phone Specifications

<ul style="list-style-type: none">• Requires analog telephone line (POTS, PBX or central office phone line)• Designed to be powered off of the telephone line power• Programmable with up to 2 emergency phone numbers• Recordable location message (25 seconds)• On-site programming	<ul style="list-style-type: none">• Numeric programming keypad• Temperature range -40°F to 150°F• Automatic dialer (31 digit programmable memory)• Fully automated operation• Automatic answer with audible ring• Touch Tone operation only
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2019 PRICE LIST



EFFECTIVE JANUARY 1, 2019. ALL PRICES IN US DOLLARS.

Prices and availability subject to change without notice.

Shipping and handling not included.

ECC Provided, Scott Fence Install

623.687.2300 • KNOXBOX.COM

KNOXVAULT® 4400

- Holds up to 50 keys and access cards
- Large capacity for additional storage of building entry items
- Knox Tamper Alert connects the KnoxVault to the building's alarm system for extra security
- Available in 3 colors (aluminum, black, dark bronze) and 2 mount types (surface, recess)



Ship Weight: 29lbs.

Lock Type	Mount Type	Tamper Alert	Color	Model #	Price
Single Lock	Surface	✓	Aluminum	4410	\$543.00
		✓	Black	4402	\$532.00
		✓	Dark Bronze	4414	\$543.00
		-	Aluminum	4409	\$533.00
		-	Black	4401	\$523.00
		-	Dark Bronze	4415	\$533.00
	Recess	✓	Aluminum	4440	\$595.00
		✓	Black	4431	\$585.00
		✓	Dark Bronze	4444	\$595.00
		-	Aluminum	4439	\$586.00
		-	Black	4430	\$575.00
		-	Dark Bronze	4443	\$586.00
Recess Mounting Kit (for new concrete or masonry construction)		4470	\$110.00		
Dual Lock	Surface	✓	Aluminum	4412	\$606.00
		✓	Black	4404	\$595.00
		✓	Dark Bronze	4416	\$606.00
		-	Aluminum	4411	\$596.00
		-	Black	4403	\$586.00
		-	Dark Bronze	4415	\$596.00
	Recess	✓	Aluminum	4442	\$658.00
		✓	Black	4433	\$648.00
		✓	Dark Bronze	4446	\$658.00
		-	Aluminum	4441	\$649.00
		-	Black	4432	\$638.00
		-	Dark Bronze	4445	\$649.00

KnoxVault Accessories and Options

Keywrench/Card Holder	4472	\$13.00
Multi-Purpose Electrical Switch	4471	\$28.00
Recess Mounting Kit (for new concrete or masonry construction)	4470	\$110.00

KNOX GATE & KEY SWITCH™

- Provides emergency access to electric gates in residential communities, parking garages and industrial gate areas
- Serves also as an electric override switch to open motorized doors, roll-up doors, and more



Ship Weight: 1lb.

Type (Includes stainless steel dust cover)	Model #	Price
Double Key Switch on Mounting Plate	3503	\$196.00
Key Switch on Mounting Plate	3502	\$121.00
Key Switch	3501	\$99.00

KNOXBOX® 3200

- Holds up to 10 keys and/or access cards
- Knox Tamper Alert connects the KnoxBox to the building's alarm system for extra security
- Available in 3 colors (aluminum, black, dark bronze) and 2 mount types (surface, recess)



Ship Weight: 10lbs.

Type	Mount Type	Tamper Alert	Color	Model #	Price	
Hinged	Surface	✓	Aluminum	3264	\$340.00	
		✓	Black	3262	\$330.00	
		✓	Dark Bronze	3266	\$340.00	
Recess	Surface	-	Aluminum	3263	\$334.00	
		-	Black	3261	\$323.00	
		-	Dark Bronze	3265	\$334.00	
	Recess	✓	Aluminum	3273	\$382.00	
		✓	Black	3271	\$372.00	
		✓	Dark Bronze	3275	\$382.00	
KnoxBox Accessories and Options						
Multi-Purpose Electrical Switch				3291	\$28.00	
Recess Mounting Kit (for new concrete or masonry construction)				3290	\$93.00	

KNOX PADLOCK™

- Provides rapid entry into multi-family residential, gated communities, vehicle and pedestrian gates, and fenced areas
- Shackles are thicker than most standard padlocks and built to resist pull attacks
- 3 padlock types available



Ship Weight: 2lbs.

Type	Model #	Price
Exterior Use, Shrouded - All Weather Conditions - 3/4" H shackle clearance, 7/16" diameter stainless steel shackle	3772	\$113.00
Exterior Use - All Weather Conditions - 1-13/16" H shackle clearance, 7/16" diameter stainless steel shackle	3770	\$99.00
Interior Use - Light Duty - 2-3/8" H shackle clearance 5/16" diameter hardened steel shackle	3771	\$75.00

KNOX DOCUMENT CABINET™

- Holds up to 231 keys and/or access cards plus critical emergency/response documents
- Maximum key capacity achieved by addition of optional key hook swing panels



Ship Weight: 67lbs.

Lock Type	Tamper Alert	Color	Model #	Price	
Dual Lock	✓	Light Gray	1308	\$1,108.00	
	-		1306	\$1,066.00	
Single Lock	✓	Light Gray	1304	\$1,045.00	
	-		1302	\$1,003.00	
Cabinet Options					
Swing Key Hook Panel & Mounting Assembly - 78 Keys				1352	
2nd Swing Key Hook Panel (must already have mounting assembly)				1353	
Rear Key Hook Panel - 48 Keys				1351	
Included Not Included					

**Model #:** T9F713159

EXCLUSIVE BRANDS DISCOUNTED

Global Industrial™ Galvanized Steel Safety Railing For 24" x 36" & 30" x 36" Roof Hatches

| Questions & Answers (0)

Purchase Information



PROMOTIONAL PRICE

\$533.00

was \$1020.00 Save \$487.00 (47.75%)

This telescopic safety railing mounts to both 24 " x 36" and 30" x 36" roof hatches (sold separately). It allows for easy mobility while providing a secure grip for fall prevention and personnel safety. The swing gate is equipped with a magnet to ensure the gate fully closes within close proximity to the vertical post. Constructed with galvanized steel for heavy duty strength and durability for years of reliable service. The yellow powder coat finish offers

[See more details](#)

Easy online or call-in returns. [Read return policy](#)

Product Information

This telescopic safety railing mounts to both 24 " x 36" and 30" x 36" roof hatches (sold separately). It allows for easy mobility while providing a secure grip for fall prevention and personnel safety. The swing gate is equipped with a magnet to ensure the gate fully closes within close proximity to the vertical post. Constructed with galvanized steel for heavy duty strength and durability for years of reliable service. The yellow powder coat finish offers high unit visibility while preventing weather related rust, oxidation, and corrosion. Meets OSHA 1910.28 requirement for safe egress and ingress through rooftop hatch openings and OSHA 1910.29 fall protection system requirements. 1 Year Limited Warranty.

This **Global Industrial Exclusive Brands™** product was made with you in mind. There were teams of associates behind how we designed, manufactured, and tested, this item. We always ask, "Can it be made better?" That led us to produce smarter, more reliable products, with greater attention to detail and no corners cut. Why choose Global Industrial? Because this product was Made for you. **MADE TO EXCEED.™**

User manuals/guides (1)

owners manual

**Specifications****Weights & Dimensions**

Weight	86 lbs
Height	33-2/3 in
Depth	2 in

Length	51-1/2 in
Width	46-1/3 in

Product Details

Type	Safety Railing
Color	Powder Coated Yellow
For Use With	24" x 36" & 30" x 36" Roof Hatches
Material	Galvanized Steel

Description	Roof Hatch Safety Railing
Manufacturers Part Number	713159
Brand	Global Industrial

Warranty

Warranty	1 yr
----------	------

Reviews**Review This Product**

Help us improve your experience with this product.

Write a Review**Questions & Answers**

Get to know about this product from customers who own it.

Ask a Question

Item #: 600MBR24 Project: _____

Qty: _____ Date: _____ Approval: _____



Regency Space Solutions

Regency 24" Stainless Steel Mop / Broom Rack with 3 Holders

Item #600MBR24



Technical Data

Length	24 Inches
Width	4 1/16 Inches
Height	5 Inches
Features	NSF Listed
Material	Stainless Steel
Number of Hangers	3 Hangers

Features

- Durable, 18 gauge type 304 stainless steel construction
- Features 3 spring-loaded rubber holders to keep mops and brooms securely in place
- Prevents damage to brush bristles and allows for mops to properly dry
- Helps increase organization while maximizing storage space
- Mounting hardware included

Certifications



Notes & Details

Keep your maintenance closet organized with this Regency 24" mop / broom rack with 3 holders! A convenient storage solution for any establishment, this mop and broom rack can be mounted to a wall with the included hardware to make storing and retrieving your janitorial supplies a quick, effortless task. Its 3 spring loaded rubber holders keep mops and brooms securely in place, preventing your closet floors from becoming cluttered and ensuring your supplies stay safely out of your way. Its hanging design also helps reduce stress on brush bristles and ensures that wet mops will dry properly, allowing you to extend the life of your equipment and save money on replacements.

Made of 18 gauge type 304 stainless steel, this rack is both durable and non-corrosive to ensure long-lasting reliability. Its sleek design is both discreet and professional, making it perfect for use in restaurants, hotels, office buildings, and a variety of other commercial environments. A simple way to increase organization and maximize storage space, this mop and broom rack is the perfect solution to increase your operation's efficiency!

⚠ WARNING: This product can expose you to chemicals including lead, which are known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to www.p65warnings.ca.gov.



Regency Space Solutions



INDESTRUCTO MAILERS



FILE FOLDERS



INDUSTRIAL TAPE

SH-1A, 1B, 1C & 1D
Storage Shelves

SPRING/SUMMER 2021

ULINE



THE BEST QUALITY AND SELECTION
IN STOCK IN 12 LOCATIONS FOR FAST DELIVERY



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BUBBLE MAILERS



KRAFT TUBES

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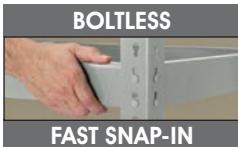
1-800-295-5510

uline.com

SH-1C

Highest capacity storage for motors, dies and heavy machine parts. Up to 2 tons per shelf!

- **Boltless assembly.** Shelves snap into place and adjust at 1½" increments.
- Four-way access for easy loading and unloading.
- 14-gauge steel posts; 16-gauge steel shelves.
- Tough, powder-coat finish.
- Made in the USA.
- Additional sizes, see uline.com



ADDITIONAL SHELVES

- Add extra shelves to maximize storage space.
- Boltless design for easy assembly.

72" HEIGHT

MODEL NO.	DIMENSIONS W x D x H	NO. OF SHELVES	SHELF SUPPORTS	SHELF CAP. (LBS.)	PRICE EACH		WT. (LBS.)
					1	2+	
H-3911	36 x 18 x 72"				\$315	\$303	143
H-4857	36 x 24 x 72"				378	361	172
H-3912	48 x 18 x 72"	5	5	4,000	383	366	178
H-3913	48 x 24 x 72"				441	423	212
H-4862	60 x 24 x 72"				538	515	263
H-5444	60 x 36 x 72"	5	5	3,250	664	642	327
H-5445	72 x 18 x 72"				550	527	265
H-3914	72 x 24 x 72"	5	10	2,750	584	561	295
H-3915	72 x 36 x 72"				784	756	337
H-7432	96 x 24 x 72"	5	15	2,600	975	945	472

84" HEIGHT

H-3120	36 x 18 x 84"				\$326	\$315	148
H-4858	36 x 24 x 84"				389	373	177
H-3121	48 x 18 x 84"	5	5	4,000	395	378	183
H-3122	48 x 24 x 84"				453	435	217
H-4863	60 x 24 x 84"	5	5	3,250	550	527	268
H-5446	60 x 36 x 84"				675	652	332
H-5447	72 x 18 x 84"				561	538	270
H-3123	72 x 24 x 84"	5	10	2,750	595	572	300
H-3916	72 x 36 x 84"				796	767	342
H-7433	96 x 24 x 84"	5	15	2,600	985	955	477

96" HEIGHT

H-4259	36 x 18 x 96"				\$338	\$326	153
H-4859	36 x 24 x 96"				401	383	182
H-4260	48 x 18 x 96"	5	5	4,000	406	389	188
H-4261	48 x 24 x 96"				463	446	223
H-4864	60 x 24 x 96"	5	5	3,250	561	538	272
H-5448	60 x 36 x 96"				687	664	335
H-5449	72 x 18 x 96"				572	550	275
H-4262	72 x 24 x 96"	5	10	2,750	607	584	305
H-4263	72 x 36 x 96"				807	779	347
H-7434	96 x 24 x 96"	5	15	2,600	995	965	480

SHIPS UNASSEMBLED VIA MOTOR FREIGHT

ADDITIONAL SHELVES

MODEL NO.	PRICE EACH		WT. (LBS.)
	1	2+	
H-3911-ADD	\$64	\$62	25
H-4857-ADD	75	72	34
H-3912-ADD	77	75	32
H-3913-ADD	89	86	40
H-4862-ADD	120	117	52
H-5444-ADD	147	144	67
H-5445-ADD	125	121	53
H-3914-ADD	132	129	57
H-3915-ADD	183	177	79
H-7432-ADD	220	215	95

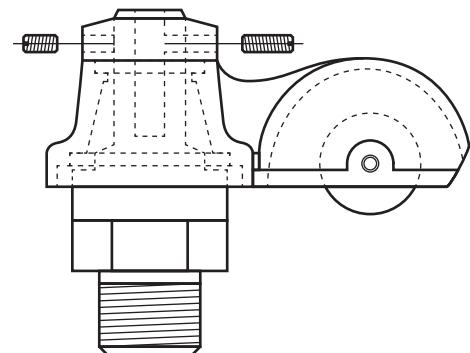
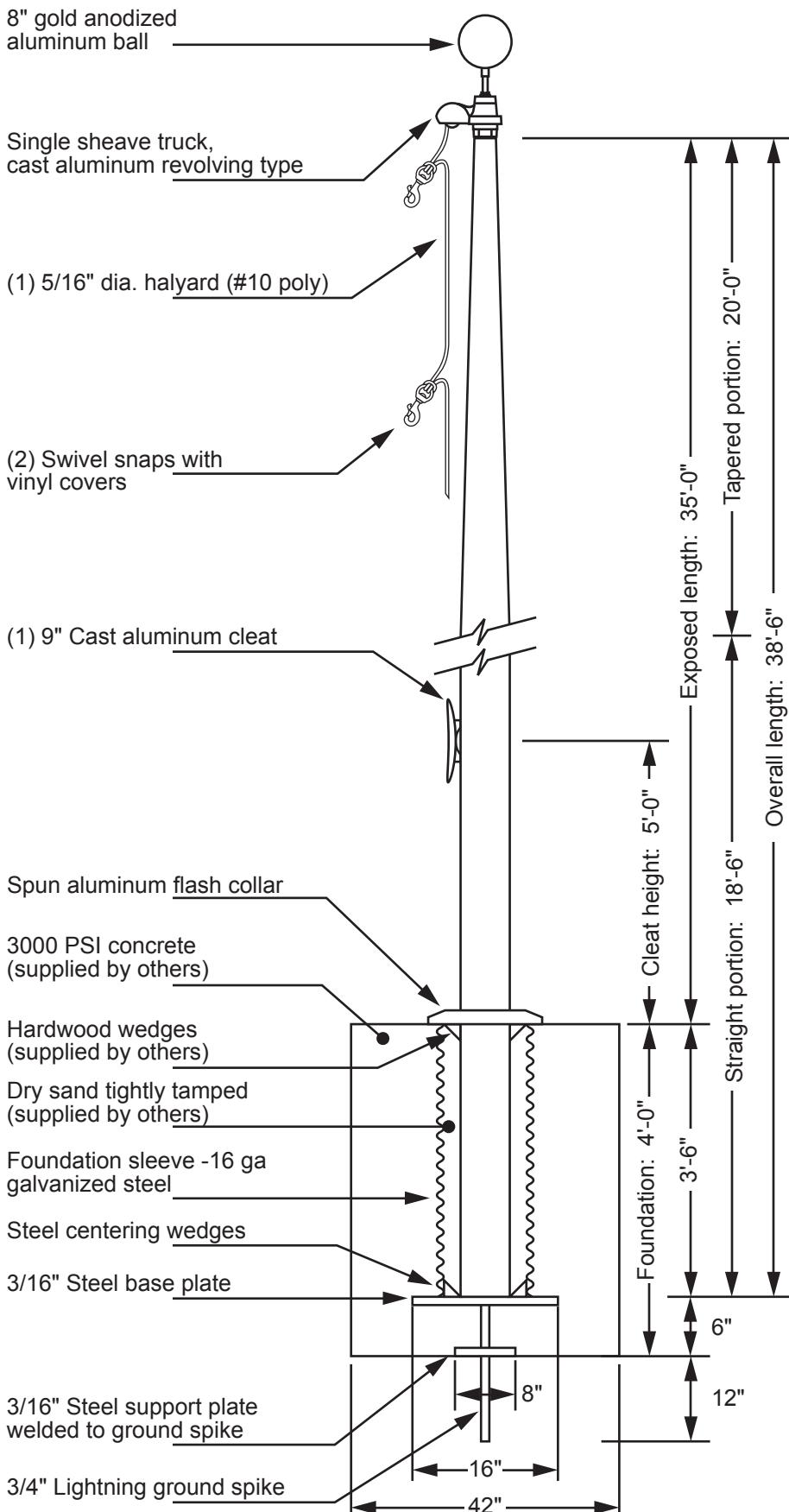
ADDITIONAL SHELVES

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H-5444-ADD	147	144	67
H-5445-ADD	125	121	53
H-3914-ADD	132	129	57
H-3915-ADD	183	177	79
H-7432-ADD	220	215	95

Model ECA35 - External Single Halyard



Project:	Date:	Exposed Height <u>35'-0"</u> Overall Height <u>38'-6"</u> Butt Diameter <u>7"</u> Top Diameter <u>3-1/2"</u> Wall Thickness <u>.156"</u> Ships in 1 section	Ground Set Tapered Aluminum Flagpole ALLOY 6063T6 80 grit polish	 LIBERTY FLAGPOLES
Location:	Job:	Revision:	FINISH:	
Contractor:				
Customer:				

Sola Collection
44 Inch Sola Fan MWH
330151MWH (Matte White)

Project Name: _____
Location: _____
Type: _____
Qty: _____
Comments: _____



Available Finishes

Finish	Fixture	Glass	Blade 1	Blade 2
Matte White	330151MWH	ETCHED CASED OPAL	MATTE WHITE	
Brushed Nickel	330151NI	ETCHED CASED OPAL	SILVER	
Olde Bronze	330151OZ	ETCHED CASED OPAL	BROWN	

Product Information

Product ID	330151MWH
Finish	Matte White
Blade Finish	Matte White
Collection	Sola Collection

Airflow, Power and Efficiency

Speed	RPM	CFM	CFM/ Watt	Amps	Watts
High	185	5000	76	.55	65
Med	121	3228	117	.36	28
Low	70	1654	162	.22	10

Specifications

Number of Blades	3
Blades Included	Yes
Blade Pitch	17 Degrees
Blade Sweep	44"
Blades Reversible	No
Blade Material	ABS
Optional Blades Available	No
Primary Control System	3 Speed Wall Control Full Function
Remote Included	No
Wall Control Included	Yes
Low Ceiling Adaptable	Yes, Low Ceiling Adaptable
Lead Wire Length	78.00"
Motor Size	172MM X 15MM
Motor Type	AC INDUCTION

Downlight

Downlight Included	Yes
Light Source	LED
Downlight Bulb Included	Included
Downlight Bulb Type	LED
Number of Lights/LEDs	1
Glass Description	Etched Cased Opal
Optional Light Kit Available	No
Efficacy (LMIW)	94
Kelvin Temperature	3000 K
Color Rendering Index	80

Safety Listings & Certifications

Notes:

1) Information provided is subject to change without notice.
All values are design or typical values when measured under laboratory conditions.
2) Incandescent Equivalent: The incandescent equivalent as presented is an approximate number and is for reference only.

Sola Collection
44 Inch Sola Fan MWH
330151MWH (Matte White)

Project Name: _____
Location: _____
Type: _____
Qty: _____
Comments: _____

Safety Rated	Wet
Warranty	www.kichler.com/warranty

Installation

Installation requirements	The electrical junction box and support structure must be securely mounted and capable of reliably supporting a minimum of 50 pounds. Use only ETL/UL listed electrical junction boxes marked ""For Fan Support""
Electrical Requirements	120V 60Hz AC
Hanging Weight	15.70 LBS

Minimum Distance Between Bottom Of Fan Blade To Floor 7 feet

Notes:

- 1) Information provided is subject to change without notice.
All values are design or typical values when measured under laboratory conditions.
- 2) Incandescent Equivalent: The incandescent equivalent as presented is an approximate number and is for reference only.

MOTOR FINISH



AIR PERFORMANCE

SPECIFICATIONS

Motor Specifications

Primary Material	Plastic		
Mounting/Installation			
Interior/Exterior	Interior	Location Rating	Accessory, Listing Not Required
Dimensions			
Weight	0.20 LBS	Height	4.50"
Width	2.75"		

Fixture Attributes

Product/Ordering Information

SKU	370038MULTR	Finish	Multiple
UPC	783927431934	Style	Other

Warranty

www.kichler.com/warranty

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Experience Big Ass Fans' groundbreaking engineering and cutting-edge technology in more spaces than ever with the es6 ceiling fan. An inspired blend of the award-winning design and functionality of our popular Essence and i6 ceiling fans, es6 transforms spaces of all sizes with powerful performance and an impressive suite of controls.



KEY FEATURES

- ▶ **Six aluminum airfoils** made from aircraft-grade aluminum in black or white finish
- ▶ **Permanent-magnet motor** provides smooth, quiet comfort with seven airflow speeds
- ▶ **Lightweight design** mounts to a standard junction box on ceilings as low as 9 feet (2.7 meters)
- ▶ **Convenient control** with SenseME Technology, mobile app, and voice integration
- ▶ Built for **indoor or outdoor use** with corrosion-resistant materials and reliable safety features
- ▶ **Available LED kit and Chromatic Uplight** offers 16 brightness levels, smart automation, night lite mode, and a full range of color options

DIAMETER

60, 72, AND 84 INCHES
(152, 183, AND 213 CM)

MOUNTING

UNIVERSAL

CONTROL

- BLUETOOTH REMOTE
- MOBILE APP
- VOICE INTEGRATION

WARRANTY

3 YEARS



BIG ASS FANS[®]

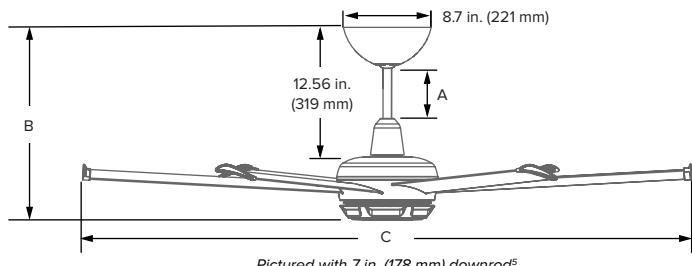
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COMMANDING PERFORMANCE**

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to get in touch with our airflow experts and bring
es6's comfort and convenience to your space.



CONTEMPORARY STYLE, COMMANDING PERFORMANCE



Downrod Lengths

Downrod (A)	7 in. (178 mm)	20 in. (508 mm)	32 in. (813 mm)	48 in. (1219 mm)	60 in. (1524 mm)
Fan Height (B)	18.9 in. (480 mm)	31.9 in. (810 mm)	43.9 in. (1115 mm)	60 in. (1521 mm)	72 in. (1826 mm)
Ceiling Height	9–11 ft (2.7–3.4 m)	11–13 ft (3.4–3.9 m)	13–14 ft (3.9–4.3 m)	14–16 ft (4.3–4.9 m)	16–18 ft (4.9–5.5 m)

Technical Specifications

Diameter (C)	CFM	Efficiency (CFM/W)	Max Watts	Max Speed	Input Power	Weight ¹	Light Kit	Chromatic Uplight™	Environment ²	Sound Level ³
60 in. (152 cm)	7,880	307	22	144 RPM	100–277 VAC, 50/60 Hz, 1Φ	25 lb (11.3 kg)	1,770 lm 72.6 lm/W	1,984 lm 94.8 lm/W	Indoor Covered outdoor (inland)	<35 dba at max speed
72 in. (183 cm)	9,959	365	26.6	115 RPM		27 lb (12.1 kg)				
84 in. (213 cm)	10,121	429	23	85 RPM		29 lb (13.2 kg)				

Construction Features

Airfoils	Motor and Hub	Controls	Onboard Sensors	Integrations ⁴	Mounting	Accessories
Made from aircraft-grade aluminum Tilted blade profile for maximum coverage area	High-efficiency, brushless DC/EC motor	Handheld remote Mobile app Voice control	Temperature, humidity, and motion sensors enable SenseME Technology	Voice control with Google Assistant or Amazon Alexa	Flat or sloped ceilings 9 ft (2.7 m) or taller Maximum slope: 34°	LED light Kit Chromatic Uplight

Ordering Information

Diameter	Finish	Downrod ⁵	LED Light	0–10 V
MK-ES62-052306: 60 in. (152 cm) MK-ES62-062306: 72 in. (183 cm) MK-ES62-072306: 84 in. (213 cm)	A786: Black A787: White	I07: 7 in. (178 mm) I20: 20 in. (305 mm) I32: 32 in. (610 mm) I00: 48, 60 in. (1219, 1524 mm)	Blank: No LED Light S2: LED Light S80: Chromatic Uplight S81: Chromatic Uplight with UV-C	Blank: No 0–10 V V54: 0–10 V

Finish Options



White



Black

LED Light Kit



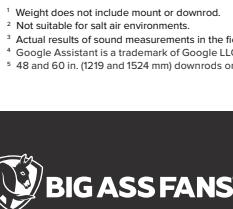
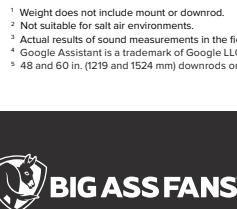
Remote



Magnetic Holder



Fixed Wall Mount



\$649.99

65UN7300PUF

LG UHD 73 Series 65 inch Class 4K Smart UHD TV with AI ThinQ® (64.5" Diag)**65"**
\$649.99**55"**
\$479.99**50"**
\$419.99**43"**
\$349.99[Find a Retailer](#)[Add to Wishlist](#) [Add to Compare](#)**KEY FEATURES**

Real 4K Display

webOS + LG ThinQ AI w/ Magic Remote



1/13

[OVERVIEW](#)[SPECS](#)[REVIEWS](#)[RELATED PRODUCTS](#)[SUPPORT](#)[WHERE TO BUY](#)**PICTURE(PANEL)**

Display Type

Real 4K Display

Display Resolution

4K Ultra HD (3,840 x 2,160)

Backlight Type

Direct

PICTURE(PROCESSING)

Picture Processor

Quad Core Processor 4K

Refresh Rate

TruMotion 120 (Native 60Hz)

HDR (High Dynamic Range)

Active HDR (HDR10, HLG), HDR Dynamic Tone Mapping

Clarity

Double Step Noise Reduction, Sharpness Enhancer

Color

Advanced Color Enhancer, True Color Accuracy

Resolution Upscaler

4K Upscaler

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Feedback

ALLM (Auto Low Latency Mode)	Yes	HGiG	Yes (available after software update)
-------------------------------------	-----	-------------	---------------------------------------

AI TV(ARTIFICIAL INTELLIGENCE)

LG ThinQ® AI	Yes	Google Assistant	Yes
Alexa Built-In	Yes	Apple	Apple Airplay 2, Apple Homekit
Intelligent Voice Recognition	Yes	Home Dashboard	Yes

SMART TV:

Operating System	webOS	Magic Remote Control	Yes (Point, Click, Scroll, Voice)
Universal Remote Control	Yes (Auto Device Detection)	LG Channels	Yes
LG Content Store (App Store)	Yes	Full Web Browser	Yes
Sports Alert	Yes		

AUDIO

Speaker System	2.0 Channel	Output Power	20W
Speaker Direction	Down Firing	AI Sound Pro / AI Sound	AI Sound
Surround Mode	Ultra Surround	Audio Codec	AC4, AC3 (Dolby Digital), EAC3, HE-AAC, AAC, MP2, MP3, PCM, WMA, apt-X (refer to manual)
Bluetooth Surround Ready	Yes	LG Sound Sync	Yes

CONNECTIVITY

Wi-Fi® Standard	Wi-Fi Certified 802.11ac	Bluetooth® Support	Version 5.0
IP Control	Yes	HDMI-CEC (Simplink)	Yes
TV Tuner	ATSC, Clear QAM	Smart Phone Connectivity	Yes
HDMI Input (HDCP 2.2)	1 (rear)/2 (side)	HDMI Audio Return Channel (ARC)	ARC (HDMI 2)
USB Ports (v 2.0)	1 (rear)/1 (side)	RF Connection Input (Antenna/Cable)	1 (Rear)
Composite Input (AV)	1 (rear)	Ethernet Input	1 (Rear)

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POWER

Power Supply (Voltage, Hz)	AC 120V, 50/60Hz	Standby Power Consumption	Under 0.5W
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DIMENSIONS/WEIGHTS

TV Dimensions with Stand (WxHxD)	57.6" x 35.8" x 10.0"	TV Dimensions without Stand (WxHxD)	57.6" x 33.5" x 3.5"
Packaging Dimensions (WxHxD)	65.4" x 38.2" x 7.5"	Stand Width	52.1"
TV Weight with Stand	47.4 lbs	TV Weight without Stand	47.0 lbs
Packaging Weight	65.0 lbs	VESA Mounting (W x H)	300 x 300

ACCESSORIES INCLUDED

Remote	Magic Remote	Remote Control Battery	Yes
Power Cable	Yes	User Manual	Yes
E-Manual	Yes		

GENERAL

2020 Model	Yes	Country of Origin	Mexico
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WARRANTY

Limited Warranty	Please see Support tab for full details on the limited warranty	UPC	719192639485
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OSUA771PU



Mounting Pattern
400 x 400mm
(15.75" x 15.75")



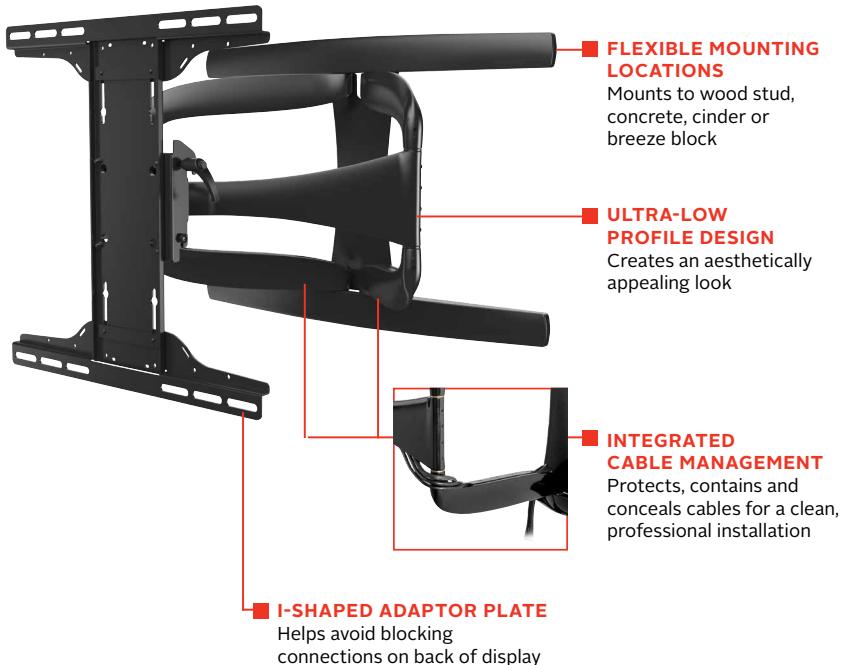
Max Load
125lb
(57kg)

DesignerSeries™ Universal Ultra Slim Articulating Wall Mount

FOR 55" TO 77" OLED/QLED DISPLAYS*

The DesignerSeries™ Universal OLED/QLED Articulating Mount was specifically designed for the unique features of the OLED and QLED televisions. The ultra thin glass, bottom biased VESA® pattern and bottom bump-out on the TVs require specialized features to safely mount and move your television. The ratcheting tilt head allows you to adjust the angle of your display without having to put excessive pressure on the thin OLED glass. The adaptor bracket included with the mount is sized properly so there is no interference with power inputs or HDMI connections. The contoured dual articulating arms operate smoothly to prevent unnecessary stress on your television. Internal cable management conceals your power and HDMI cabling for a clean professional look.

- Universal mount accommodates 200 x 100 to 400 x 400mm VESA® mounting patterns
- Dual-arm design enhances the stability of the articulating motion
- Arms retract to 2.87" (73mm) and extend up to 25.87" (657mm) from wall
- One-Touch™ tilt mechanism allows adjustment of +10°/-3° without the use of tools
- Up to ±72.5° of side-to-side swivel
- Added ±5° of roll for post-installation display leveling without the use of tools
- Optional roll lock keeps the display locked at 0°



Please visit peerless-av.com/en-us/patents for patent information.

*This display size range is simply a guideline for product selection. Displays larger than the screen size range may still be compatible as long as they fall within the VESA® pattern and max weight of the Peerless-AV® product.



Swivel, tilt, extend or retract the display for the perfect viewing angle.



Comes in color packaging with included installation hardware and easy to follow instructions.

OSUA771PU

DesignerSeries™ Universal Ultra Slim Articulating Wall Mount for 55" to 77" OLED/QLED Displays

Product Specifications

	DIMENSIONS (W x H x D)	PRODUCT WEIGHT	LOAD CAPACITY	FINISH	AVAILABLE COLORS
OSUA771PU	25.60" x 16.94" x 2.87"-25.87" (650 x 430 x 73-657mm)	22.2lb (10.0kg)	125lb (57kg)	Scratch Resistant Fused Epoxy	Gloss Black

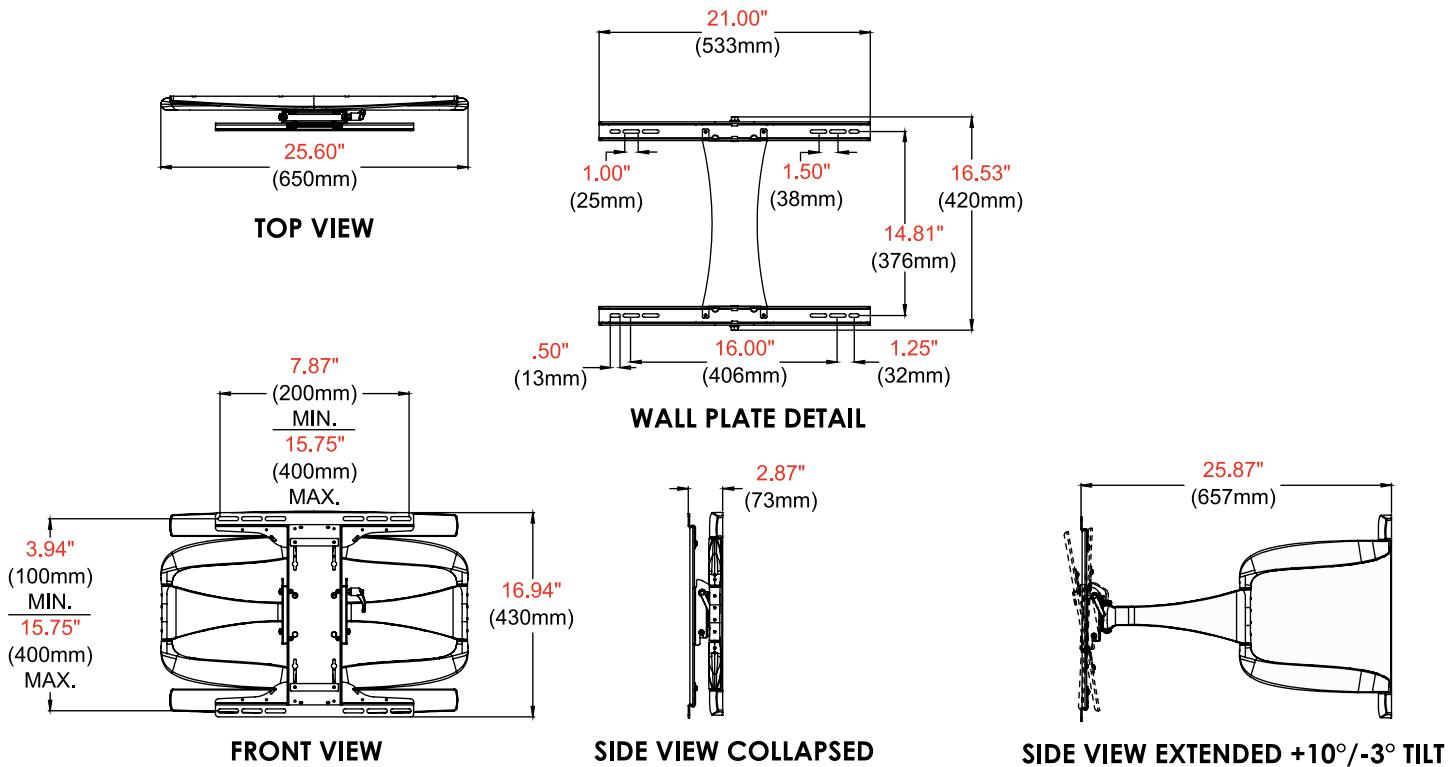
Package Specifications

	PACKAGE SIZE (W x H x D)	PACKAGE SHIP WEIGHT	PACKAGE UPC CODE	PACKAGE CONTENTS	UNITS IN PACKAGE
OSUA771PU	41.00" x 4.00" x 23.75" (1041 x 102 x 603mm)	30.8lb (14.0kg)	735029339915	Wall Mount, Wall and Display Installation Hardware, Installation Instructions	1

Accessories

ACC925:	Security Fasteners
ACC-UCM:	Universal AV Component Mount
ESHV models:	AV Wall Shelves
IBA2(-W), IBA2AC(-W), IBA3(-W), IBA3AC(-W):	Recessed Cable Management and Power Storage Accessory Box
IBA4-W:	Easy Mount Recessed Low Voltage Cable Plate
IBA5-W:	Recessed Low Voltage Media Plate with Duplex Surge Suppressor
WSP756:	Metal Stud Wall Plate

All dimensions = inch (mm)



Architect Specifications

The DesignerSeries™ Universal Ultra Slim Articulating Wall Mount shall be a Peerless-AV model OSUA771PU and shall be located where indicated on the plans. Assembly and installation shall be done according to instructions provided by the manufacturer.

Visit peerless-av.com to see the complete line of AV solutions from Peerless-AV, including outdoor displays, kiosks, display mounts, projector mounts, carts/stands, and a full assortment of accessories.

Peerless-AV
2300 White Oak Circle
Aurora, IL 60502 USA
(800) 865-2112
(630) 375-5100
Fax: (800) 359-6500

Peerless-AV EMEA
Unit 3 Watford Interchange
Colonial Way, Watford
Herts, WD24 4WP
United Kingdom
+44 (0) 1923 200100
Fax: +44 (0) 1923 200101

Peerless-AV Latin America
Av. de las Industrias 413
Parque Industrial Escobedo
General Escobedo, N.L.,
México, 66062
+52 (81) 8384-8300
Fax: +52 (81) 8384-8360

peerless-[®]AV
Driving Technology Through Innovation

SA740P



Mounting Pattern
100 x 100, 200 x 100,
or 200 x 200mm



Max Load
80lb
(36kg)

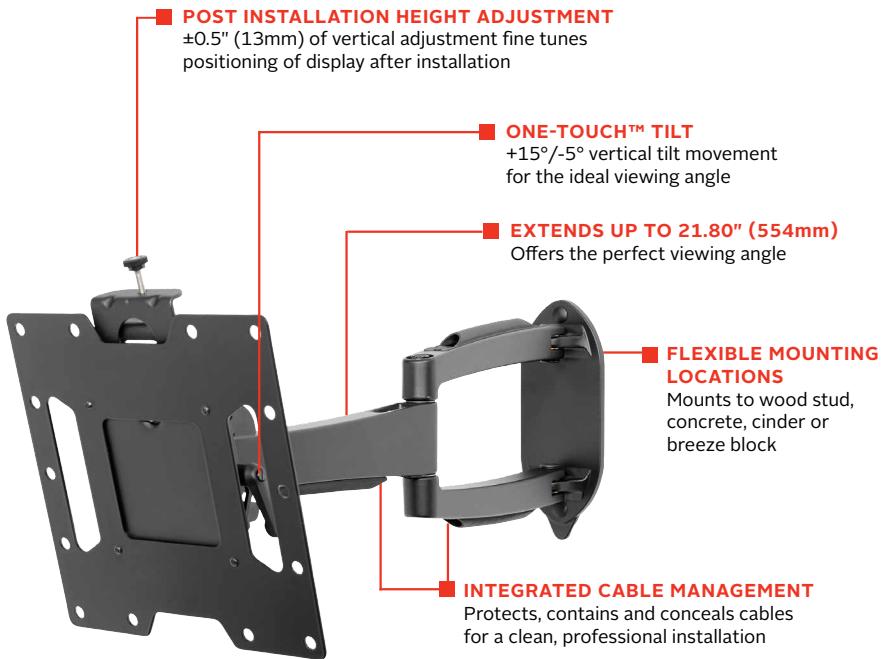
SMARTMOUNT®

Articulating Wall Mount

FOR 22" TO 43" DISPLAYS*

The SmartMount® Articulating Wall Mount series offers the most versatile installation features and mounting options. Vertical adjustment ability allows for post installation leveling, making it easier than ever to find the perfect display position. With SA740P, extend the display up to 21.80" (554mm) or fully-retract it to just 3.03" (77mm) from the wall for the perfect viewing position. The display can now simply be installed by a single person with the Hook-and-Hang™ system. One-Touch™ tilt technology offers +15°/-5° vertical tilt movement for the ideal viewing angle. Integrated cable management protects, contains and conceals cables for a clean installation.

- Accommodates 100 x 100, 200 x 100, or 200 x 200mm VESA® mounting patterns
- Retracts to hold display just 3.03" (77mm) from the wall
- ±90° of pivot allows for perfect display positioning
- Easy leveling ±5° after display installation
- Quick and easy, Hook-and-Hang™ one-person installation
- Landscape or portrait mounting options increases display versatility
- Includes all necessary wall and display attachment hardware
- Design is UL listed and tested to four times stated load capacity



Please visit peerless-av.com/en-us/patents for patent information.



Swivel, tilt, extend or
retract the display for the
perfect viewing angle.



Integrated cable
management keeps cords
and cables out of the way.



Comes in color packaging with
included installation hardware and
easy to follow instructions.

*This display size range is simply a guideline for product selection. Displays larger than the screen size range may still be compatible as long as they fall within the VESA® pattern and max weight of the Peerless-AV® product.

SA740P SmartMount® Articulating Wall Mount for 22" to 43" Displays

Product Specifications

	DIMENSIONS (W x H x D)	PRODUCT WEIGHT	LOAD CAPACITY	FINISH	AVAILABLE COLORS
SA740P	14.32" x 10.15" x 3.03"-21.80" (364 x 258 x 77-554mm)	7.27lb (3.30 kg)	80lb (36kg)	Scratch Resistant Fused Epoxy	Semi-Gloss Black

Package Specifications

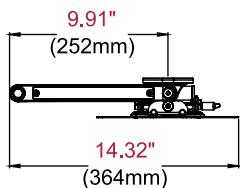
	PACKAGE SIZE (W x H x D)	PACKAGE SHIP WEIGHT	PACKAGE UPC CODE	PACKAGE CONTENTS	UNITS IN PACKAGE
SA740P	15.25" x 4.19" x 11.50" (387 x 106 x 292mm)	9.35lb (4.24 kg)	735029237327	Wall Mount, Wall and Display Installation Hardware, Installation Instructions	1

Accessories

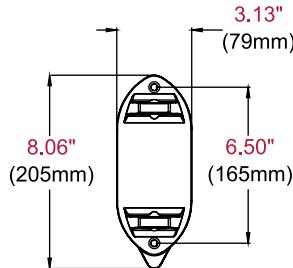
ACC4X4:	VESA® 400 x 400mm Adaptor Plate	IBA4-W:	Easy Mount Recessed Low Voltage Cable Plate
ACC-UCM:	Universal AV Component Mount	IBA5-W:	Recessed Low Voltage Media Plate with Duplex Surge Suppressor
ESHV models:	AV Wall Shelves	RMI2W:	Rotational Mount Interface

WSP700/WSP701: Metal Stud Wall Plates for 16"/24" Center Metal Studs

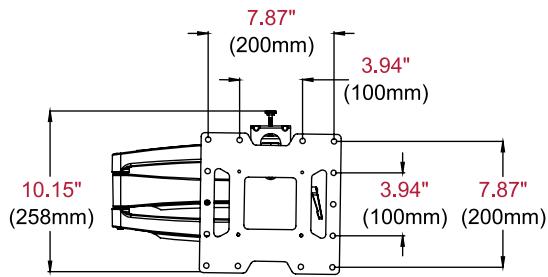
All dimensions = inch (mm)



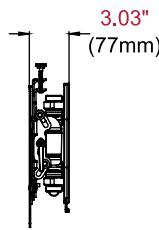
TOP VIEW



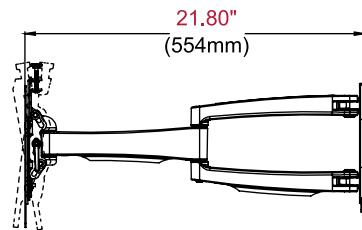
WALL PLATE DETAIL



FRONT VIEW



SIDE VIEW COLLAPSED

SIDE VIEW EXTENDED
+15°/-5° TILT

Architect Specifications

The SmartMount® Articulating Wall Mount shall be a Peerless-AV model SA740P and shall be located where indicated on the plans. Assembly and installation shall be done according to instructions provided by the manufacturer.

Visit peerless-av.com to see the complete line of AV solutions from Peerless-AV, including outdoor displays, wireless, kiosks, digital audio, display mounts, projector mounts, carts/stands, and a full assortment of accessories.

Peerless-AV
2300 White Oak Circle
Aurora, IL 60502 USA
(800) 865-2112
(630) 375-5100
Fax: (800) 359-6500

Peerless-AV EMEA
Unit 3 Watford Interchange
Colonial Way, Watford
Herts, WD24 4WP
United Kingdom
+44 (0) 1923 200100
Fax: +44 (0) 1923 200101

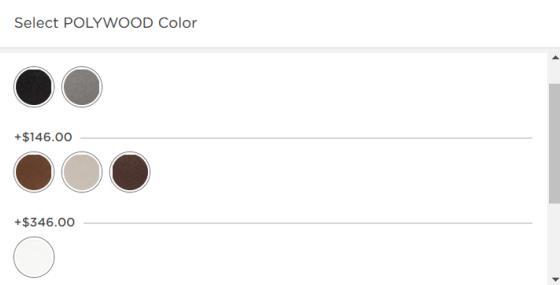
Peerless-AV Latin America
Ave de las Industrias 413
Parque Industrial Escobedo
Escobedo, N.L.,
Mexico 66062
+52 (81) 8384-8300
Fax: +52 (81) 8384-8360

peerless-av®
Driving Technology Through Innovation

POLYWOOD®

VINEYARD

Vineyard 7-Piece Dining Set



Create a relaxing outdoor dining space with the Vineyard 7-Piece Dining Set. This all-weather dining set seats up to six and features comfortably arched chairs great for relaxing in long after dessert has been served.

This set includes:

- 1 x Nautical Trestle 38" x 73" Dining Table (PL83-T2L1)
- 6 x Vineyard Dining Arm Chair (VND230)



FEATURES

- Includes (6) Vineyard Dining Arm Chairs and (1) Nautical Trestle 38" x 73" Dining Table
- Chairs feature a comfortably arched back and contoured seat
- Built to withstand a range of climates including hot sun, snowy winters, and strong coastal winds
- Constructed of genuine POLYWOOD® lumber that is not prone to splinter, crack, chip, peel, or rot
- 20-year residential warranty; 3-year commercial warranty
- Cleans easily with soap, water, and a soft bristle brush
- UV protectant and color continuously throughout the HDPE material; requires no painting or waterproofing
- Marine-grade quality hardware
- Made in the USA
- Table outfitted with 1.625" center hole for standard umbrella (sold separately); hole cover included
- Some assembly required

SET WEIGHT & DIMENSIONS

Overall Set Weight	276 lbs
Recommended Minimum Space <small>*Dimensions are based on pictured configurations</small>	139" W X 38.25" H X 90" D

INDIVIDUAL ITEM DIMENSIONS

Nautical Trestle 38" x 73" Dining Table	38.5" W x 29" H x 73" D
Vineyard Dining Arm Chair	24.88" W x 38.25" H x 25.5" D



#720-0896B

DELUXE 6-BURNER PROPANE GAS GRILL WITH CERAMIC SEARING SIDE BURNER & ROTISSERIE KIT

 23 REVIEWS

HEAR THAT? HERE COMES THE NEIGHBORHOOD

Boasting a massive 563.55 sq. in. primary grilling area with six stainless steel burners, it's outfitted with porcelain-enameled cast iron cooking grates that retain heat exceptionally well.

- 75,000 total BTUs
- 6 stainless steel main burners
- 563.55 sq. in. of primary cooking space
- Natural Gas Convertible
- 1 year grill warranty



#700-0709N

75 IN. GRILL COVER

★★★★★ 9 Reviews

Protect your grill with a Nexgrill grill cover. With it's full length design, this cover protects your grill against the elements and prevents corrosion. The tent style fit is optimal for exterior moisture removal and interior airflow.

- Fits grills up to 76"x 26" x 48" (assembled)
- Polyester and PVC blend cover
- Touch fasteners straps for customized fit

PROF304INMXE

PROFESSIONAL SERIES INDUCTION RANGE 30" 4 HEATING ZONES
ELECTRIC OVEN - STAINLESS STEEL FINISH



Counter-deep maintop for flush installation with kitchen countertops and cabinets

Maintop with 4 latest generation extra-large induction zones and bridging of right-side zones

4.7 cu.ft electric oven with dual horizontal convection fans for even baking and roasting on 7 shelf levels

6-pass electric broiler for broiling and grilling, with optional convection

Elegant electronic gauge for control of oven temperature during pre-heating and baking

Oven door with edge-to-edge tempered glass and soft-motion hinges

MAINTOP FEATURES

Maintop	4 induction heating zones Front Left ø 5 3/4" 1400W (2200W booster) Back Left ø 8 1/4" 2300W (3700W booster) Front Right Bridge 2100W (3700W booster) Back Right Bridge 2100W (3700W booster)
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Bridge function	Yes - Front Right + Back Right 7400W
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Knobs	Metal finish with ergonomic shape
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Included accessories	1" stainless steel island trim
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OVEN FEATURES

Oven type	Electric oven Bake: Bottom 1600W Bake: Top 1200W Broiler: 2700W Convection: 2 x 1200W
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Oven volume	4.7 cu.ft
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Convection	Dual horizontal fans
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Functions	Fast preheat - Bake - Bottom Bake Upper bake - Convection - Convection Bake - Broil - Convection Broil - Pizza
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Self clean	No
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Oven door	Tempered edge-to-edge triple glass
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Oven door hinges	Soft-motion
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Included accessories	2 wire shelves Baking tray with grill trivet
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TECHNICAL SPECIFICATIONS

Electrical supply	120/240V 60 Hz - 11000W 120/208V 60Hz - 10300W 40 Amp dedicated circuit
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Power connection	NEMA 14-50P plug with 59" cord
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Certification	CSA
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Warranty	2 years parts & labor
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OPTIONAL ACCESSORIES

TKP30X	Toe kick
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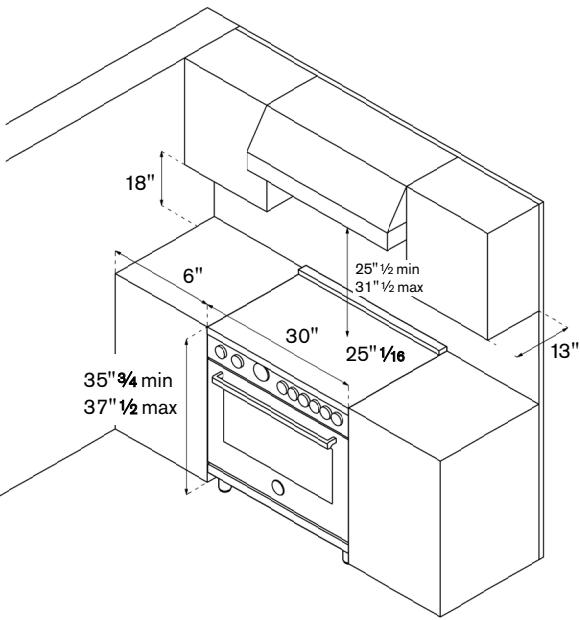
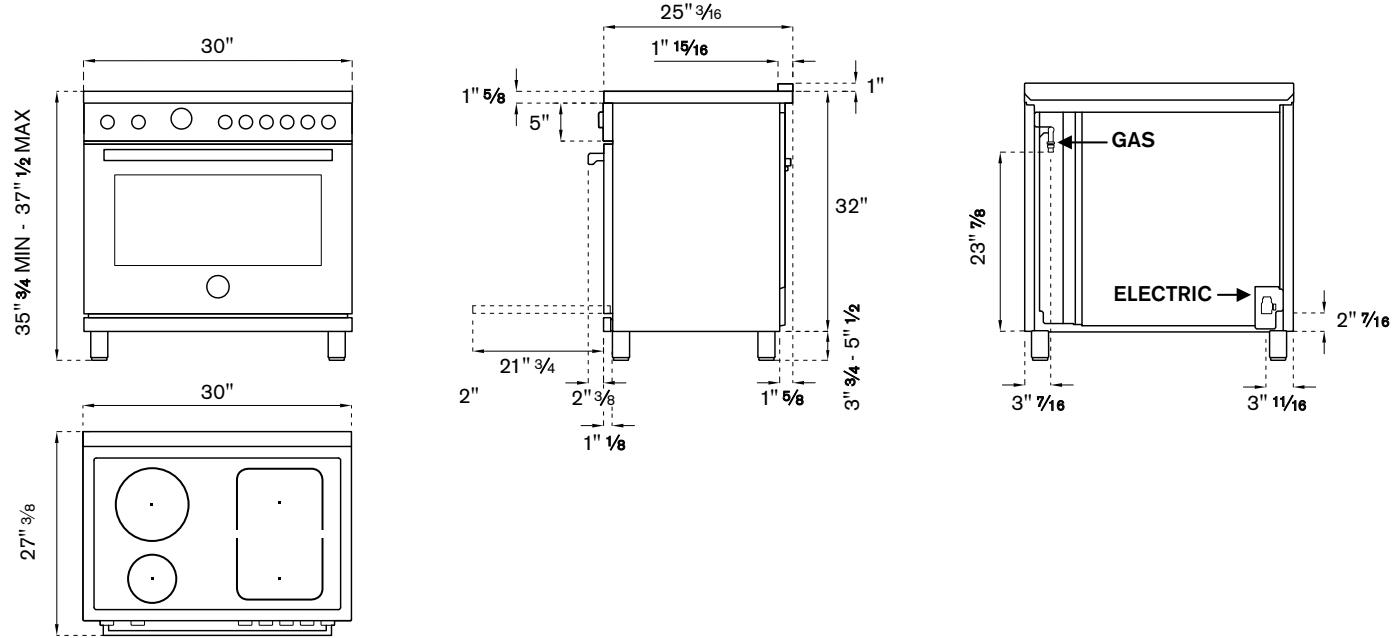
901471	Set of telescopic glides for oven rack
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901272	Bertazzoni white porcelain baking dish
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BGH30	4" backguard
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PROF304INMXE

PROFESSIONAL SERIES INDUCTION RANGE 30" 4 HEATING ZONES
ELECTRIC OVEN - STAINLESS STEEL FINISH



Side Clearance Requirements:

6" min clearance from edge of maintop.

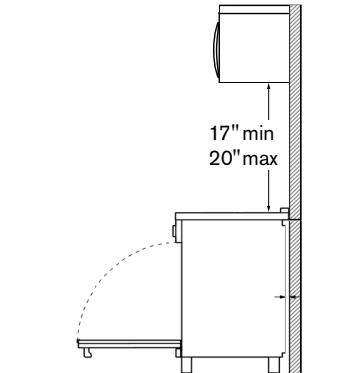
Overhead Cabinet: 18" min height above countertop

13" max depth.

Ventilation Hood Clearance:

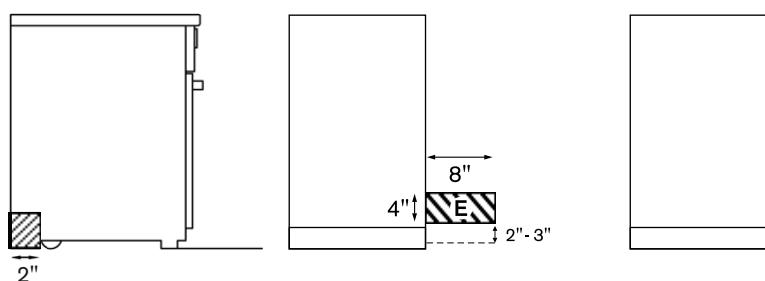
Ventilation Hood Clearance:
recommended height 25 1/2" – 31 1/2"
above cooking surface.

OTR: recommended height 17" – 20"
above cooking surface.



ELECTRICAL LINE

A properly-grounded horizontally-mounted electrical receptacle should be installed no higher than 3" (7.6 cm) above the floor, no less than 2" (5 cm) and no more than 8" (20.3 cm) from the left side (facing product). Check all local code requirements.



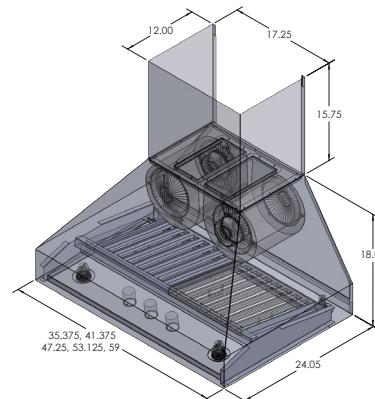
Installation clearance available behind range

Electrical Installation Location

Disclaimer: while every effort has been made to insure the accuracy of the information contained in this document, Fratelli Bertazzoni reserves the right to change any part of the information at any time without notice. For detailed installation specifications consult the installation manual. Fratelli Bertazzoni, Bertazzoni and the winged wheel brand icon are registered trademarks of Bertazzoni Spa.



The PLJW 104 If you're looking for the ultimate understated statement piece, check out our PLJW 104 wall mounted range hood. This sleek design is all about simplicity and beauty, manufactured with professional-grade 430 stainless steel. The 430 brushed stainless steel has been hand-welded and polished to create seamless edges. The hood design is incredibly sleek with the controls out of sight, conveniently underneath the front of this hood. The control panel features stylish knobs which are backlit with a soft blue light, creating a calming atmosphere for any kitchen. The 104 model features 1200 CFM with a dual blower for that added punch of power. Each blower has a separate set of knobs allowing them to run independently of each other – an exceptionally unique feature. This is especially useful if you're only cooking on one side of your stove but is ultimately convenient for any situation. Don't wait to make a bold statement in your kitchen with this industry-leading product.



Configuration and Dimensions

Hood Type	.....	Wall
Sizes Available	.....	36 | 42 | 48 | 54 | 60
36" Dimensions	.....	35.375" W x 18" H x 24" D
42" Dimensions	.....	41.375" W x 18" H x 24" D
48" Dimensions	.....	47.25" W x 18" H x 24" D
54" Dimensions	.....	53.125" W x 18" H x 24" D
60" Dimensions	.....	59" W x 18" H x 24" D

Features

Control Type	.....	Backlit Dial Knobs
Lighting	.....	Halogen

Ventilation System

Maximum Air Flow Capacity	.....	1200 CFM
Speed Levels	.....	4 Speeds
Airflow (Quiet/Low/Med/High)	.....	300/600/900/1200
Noise Level	.....	53.8 db or 6 Sones Max
Duct Type/Size	.....	Round 8
Voltage	.....	.110v
Motor	.....	Dual
Filter Type	.....	Stainless Steel Baffle (Dishwasher Safe)
Material	.....	High Quality 304 or 430 Stainless Steel
Warranty	.....	.3 Year Parts Warranty



ICEU150 - SELF CONTAINED CUBE ICE MAKER

Ice-O-Matic
Ice. Pure and Simple



ICEU150

Features

- Space-saving 24" (610 mm) wide undercounter design.
- Produces up to 238 lbs (107 kg) of ice per day.
- *Harvest Assist* provides consistent ice production for the life of the ice maker while reducing energy consumption and increasing capacity.
- *Pure Ice*® exclusively by Ice-O-Matic. Built-in antimicrobial protection for the life of the ice maker inhibits bacteria growth on ice maker surfaces. Ice-O-Matic's optional water filtration system provides protection against unpleasant tastes, odors and scale formation.
- Durable, electroless nickel plating on all evaporator plates ensures reliability.
- *Longest warranty in the industry.* Purchase an Ice-O-Matic water filter with your cube ice maker, replace the filter every six months, and the evaporator warranty is extended to 7 years parts and labor (available in the U.S. and Canada only).
- Constructed from corrosion-resistant stainless steel and fingerprint-proof plastic.

Options & Accessories

WATER FILTERS			
Ice Machine Model	Manifold		Inline
	System	Replacement	System
ICEU150	IFQ1	IOMQ (I)	IFI4C / IFI8C

Ice Form



CUBE

FULL CUBE DIMENSIONS	
W x D x H (in.)	7/8 x 7/8 x 7/8
W x D x H (mm)	22 x 22 x 22
HALF CUBE DIMENSIONS	
W x D x H (in.)	3/8 x 7/8 x 7/8
W x D x H (mm)	10 x 22 x 22

Space-Saving Solutions

- Front air discharge design for compact spaces.
- Low profile top saves counter space.
- Stores up to 74 lbs (33.5 kg) of ice.
- Easy front access to ice.
- Available with an air-cooled or water-cooled condenser.

ICEU150 SELF CONTAINED CUBE ICE MAKER



Nature's antimicrobial



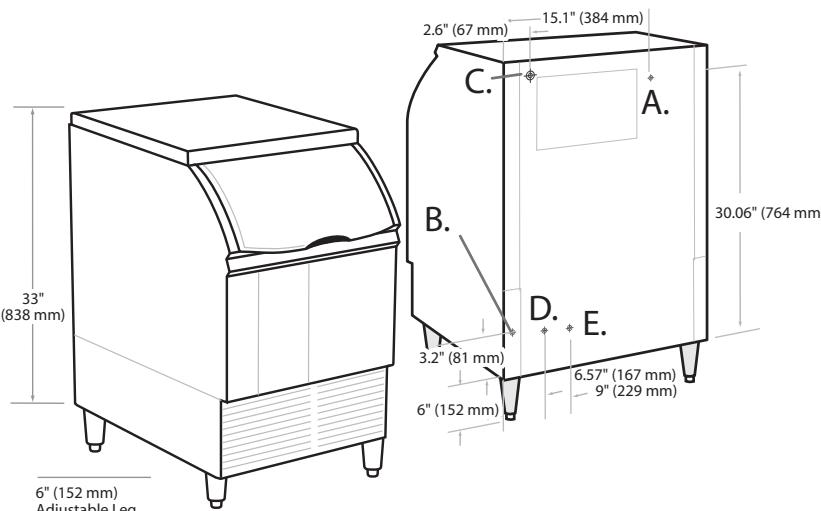
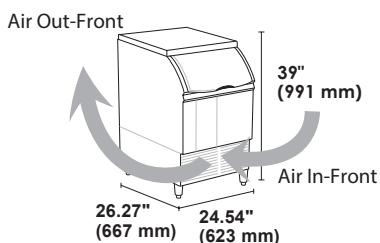
ICEU150 - SELF CONTAINED CUBE ICE MAKER

Ice-O-Matic
Ice. Pure and Simple

ICEU150 SELF CONTAINED CUBE ICE MAKER

Air and Water Cooled

- A. Ice maker water in 3/8" FPT.
- B. Bin and ice maker drain, 3/4" FPT.
- C. Electrical cord.
- D. Condenser water in, 3/8" FPT (water cooled units only).
- E. Condenser water out, 1/2" FPT (water cooled units only).



Front & Rear View

Operating Requirements

	MINIMUM	MAXIMUM
	60 Hz	
Ambient Temp. Range Air	50°F (10°C)	100°F (38°C)
Water Temp.	40°F (4.4°C)	
Water Pressure	20 PSIG (1.4 BAR)	60 PSIG (4.1 BAR)

Dimensions

ALL MODELS	
W x D x H (in.)	24.54 x 26.27 x 39
W x D x H (mm)	623 x 667 x 991

Specifications

Model Number	Cond. Unit	Ice Production per 24hrs		Water Usage		kW Used per 100 lbs of ice @ 90°F air/ 70°F water	Voltage Characteristics	Min. Circuit Ampacity	Max Breaker Size	Approx. BTUs per hour**
		70°F air/ 50°F water lbs (kg)	90°F air/ 70°F water lbs (kg)	Potable	Condenser					
ICEU150A	Air	238 (107)	165 (74)	25	-	7.4	115/60/1	11.9	15	3,572
ICEU150W	Water	251 (113)	193 (87)	25	193	5.4		8.9		3,569

**BTUH is calculated 0°F Evaporator, 100°F Condensing, and 33 PSIG.

NOTES:

Number of Wires:

3 (including ground)

Approx. Shipping Weight lbs (kg):

ICEU150A 160 (73) • ICEU150W 160 (73)

Refrigerant Type:

R404A

*Cordset included

30022 VRJ

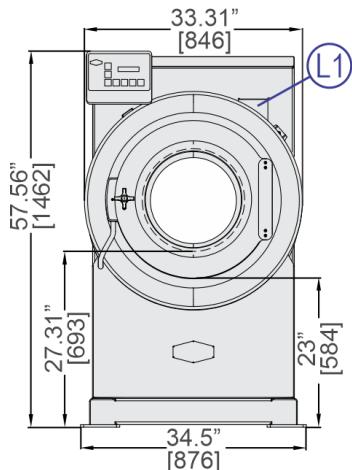
60 LB. (27KG) CAPACITY

RIGID-MOUNT WASHER-EXTRACTOR

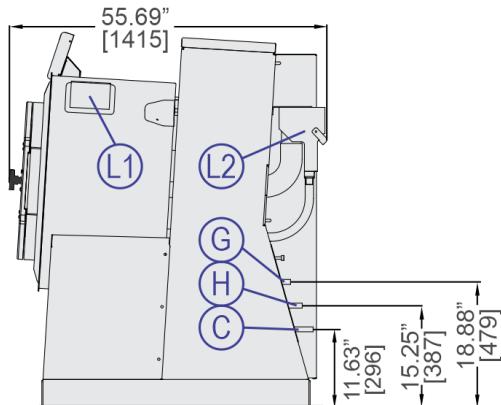
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SPECIFICATION SHEET

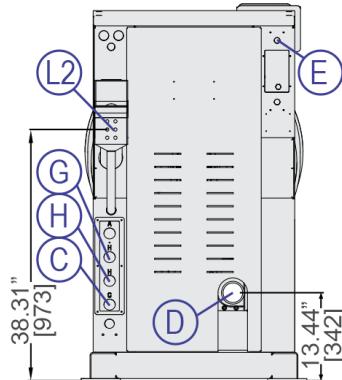
FRONT VIEW



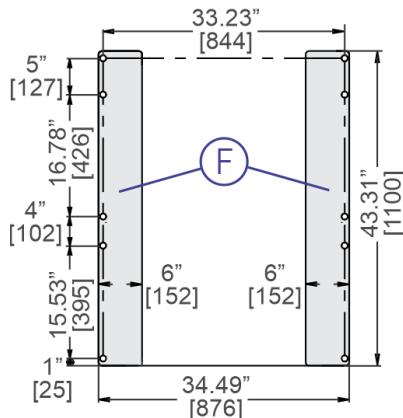
RIGHT SIDE VIEW



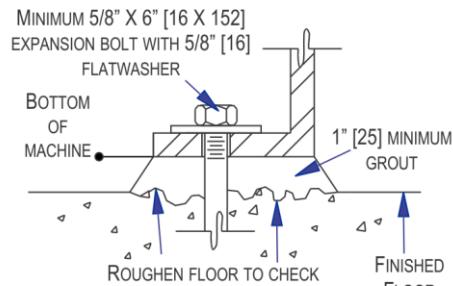
REAR VIEW



FOUNDATION



ANCHORING DETAIL



FLOOR REQUIREMENT 12" MINIMUM
RECOMMENDED ▼, ◇, ■

LEGEND

C	Cold water inlet, .75" (19 mm) GHT
D	Drain to rear, 3" (76 mm) pipe socket joint
E	Main electrical connection
F	Foundation pads, anchor bolt holes .8125" (21 mm) diameter
G	Hot water (chemical flushing), .75" (19 mm) GHT
H	Hot water, .75" (19 mm) GHT
L1	Standard soap chute
L2	Liquid supply inlets

MECHANICAL SPECIFICATIONS

Capacity – lb. (kg)	60 (27)
Cylinder Diameter x Depth – in. (mm)	30 x 22 (762 x 559)
Cylinder Volume – cu. ft. (L)	9 (255)
Door Opening – in. (mm)	15.5 (394)
Machine Dimensions (W x D x H) – in. (mm)	34.5 x 55.69 x 57.56 (876 x 1415 x 1462)
Shipping Dimensions (W x D x H) – in. (mm)	40 x 64 x 63 (1016x1625x1600)
Motor – HP (kW)	5 (3.72)
Wash Speeds – RPM	38-43
Distribution Speed – RPM	65
Extraction Speeds – RPM	542-685
Extraction G-Force	200
Static Weight – lb. (kg) ◇	1344 (610)
Max. Dynamic Load RMS – lb. (kg) ◇	2120 (961)
Frequency (Hz)	11.4
Water Pressure ^(Required) – psi (bar)	10-75 (.68-5.1)
Water Valve Cv Rating at 72°F (22°C)	5.8 (22)
Minimum Recommended Distance Between Machines – in. (mm)	6 (152)

ELECTRICAL SPECIFICATIONS

Voltage	Running Amps	Fuse (Amps)	Circuit Breaker (Amps)
220/3/50-60	7	FRN20	20
208,240/1/60	18, 16	FRN20	20
208,240/3/60	8, 7	FRN20	20
380/3/50-60	4.5	FRS15	15
415/3/50	4.5	FRS15	15
480/3/60	3.5	FRS15	15

See Fuse and Wire Size manual MAEFUSE 1BE for safety information. Contact factory for electrical specifications if equipped with Electric Heat option. Contact factory for single phase availability.

▼ See dimensional drawing for complete details.

It is the sole responsibility of the owner/user to assure that the floor and/or any other supporting structure exceeds not only all applicable building codes, but also that the floor and/or any other supporting structure for each washer-extractor or group of washer-extractors has sufficient strength and rigidity (i.e., a natural or resonant frequency many times greater than the rotational machine speed with a reasonable factory of safety) to support the weight of all the fully loaded machine(s) including the weight of the water and goods, and including the published 360° rotating sinusoidal RMS forces that are transmitted by the machine(s). Contact the factory for additional machine data for use by a structural engineer.

■ Machine bases made from concrete should either be part of a monolithic pour or should be tied into foundation and not isolated from existing floor.

30022 VRJ

60 LB. (27KG) CAPACITY

RIGID-MOUNT WASHER-EXTRACTOR

!Extractor needs to be left justified!

SPECIFICATION SHEET

Standard Features:

- RinSave® water saving technology
- 7 speeds (2 wash, 1 distribution, 1 RinSave, 3 extract)
- E-P PLUS® programmable controller
- Back-lit LCD display
- Single-motor inverter drive
- Tall, lifting ribs
- Tapered roller bearings
- High M.A.F. (Mechanical Action Factor)
- Large cylinder perforations
- Fresh-water flushing chemical manifold
- Auto tension V-belt drive
- Six (6) liquid chemical injection ports
- Control reads in English/second language
- 5-year limited warranty on frame, cylinder & shell



Why Purchase Milnor?

- Larger cylinder volume than most competitive similar sized washer-extractors provides *greater productivity*. More linen washed per day, or fewer hours required to process. **BENEFIT: Saves labor.**
- Greater cylinder perforated-area generates *better wash* quality, *better rinsing* and *better extraction*. **BENEFIT: Better extraction saves dryer fuel.**
- Faster process times reduce fabric wear, promoting *longer linen life!*
BENEFIT: Saves linen replacement costs.
- High perforated ribs provide excellent lifting.
BENEFIT: Greater mechanical action leads to better wash quality.
- 200-G high extract provides excellent moisture removal. Lower extract speeds are available for uniforms, delicate textiles and blended fabrics.
BENEFIT: Better extraction saves dryer fuel.
- E-P Plus Controller with back-lit LCD display allows operator to choose formulas from real words, not codes. Standard controller features English/Spanish (other languages optional). Controller also provides diagnostic and error messages. Shortens training time of new employees. **BENEFIT: Fewer operator errors.**
- Superior product support through local, highly-skilled dealers.
BENEFIT: Faster repairs mean less downtime.



Safe chemical injection



Superior cylinder design



Solid industrial frame

Contact Milnor for your local, authorized dealer:

Pellerin Milnor Corporation
P.O. Box 400 • Kenner, LA 70063
t: 504-467-9591 • f: 504-468-3094

WashTower™ with Center Control™

Ultra Large Capacity 5.0 cu. ft. Washer and 7.4 cu. ft. Dryer

Single Unit WashTower™ Design

Built-In Intelligence with AI DD/AI Fabric Sensor, Smart Learner, Smart Pairing™

Advanced Washing and Drying with TurboWash™ 360°, Allergiene™ wash cycle and TurboSteam® technology

Steam Technology / AAFA Certified

Proactive Customer Care/ThinQ® Technology

Includes Dryer Rack

Tempered Glass Door

NeveRust™ Stainless Steel Tub with Stainless Steel Lifters

LoDecibel™ Quiet Operation

Noble Steel Finish



ELECTRIC WASHER & DRYER
MODEL:WSEX200HNA



SUMMARY	Washer	Dryer	FABRIC CARE FEATURES	Washer	Dryer	MOTOR AND AGITATOR	Washer	Dryer
Type	Front Load Washer	Front Load Dryer	AI DD™	Yes	-	Motor Type	Inverter Direct Drive Motor	-
Capacity (cu.ft.)	5.0 cu. ft.	7.4 cu. ft.	TurboWash™ 360 Technology	Yes	-	Axis	Horizontal	-
Color	Noble Steel		Steam Technology	Yes	-	MATERIALS AND FINISHES		-
APPEARANCE	Washer	Dryer	Allergiene™ Cycle	Yes(Cloud cycle)	-	Washer	Dryer	-
Touch Buttons	Yes		Sanitary Cycle	Yes	-	NeveRust™ Stainless Steel Drum	Yes	-
Full Touch Electronic Control Panel with LED Display	Yes		SenseClean™ System	Yes	-	Cabinet	PCM	-
Unified Center Control	Yes		AI Sensor Dry™	-	Yes	Control Panel	Plastic	-
ENERGY	Washer	Dryer	Sensor Dry	-	Yes	Top Plate	Steel	-
ENERGY STAR® Qualified	Yes		Precise Temperature Control with Variable Heater	-	Yes	NeveRust™ Stainless Steel Drum	-	Yes
CEE Tier	Tier 3	-	Steam Technology	-	Yes (TurboSteam™)	Drum Rear	-	Stainless Steel
IMEF	3.1	-	CONVENIENCE FEATURES		Washer	Dryer	Door / Rim	Large Circle Chrome Rim
IWF	2.9	-	TrueBalance™ Anti-Vibration System	Yes	-	Door Cover	-	Tinted Round Tempered Glass
CEF	-	Electric: 3.94 Gas: 3.49	4 Tray Dispenser	Prewash, Main Wash (with liquid detergent cup), Bleach, Fabric Softener	-	CERTIFICATION		-
PROGRAMS	Washer	Dryer	LoDecibel™ Quiet Operation	Yes	-	AAFA	Yes	-
No. of Programs	6	6	End of Cycle Signal	Yes	-	Intertek	Yes(Sanitary cycle)	Yes(Antibacterial cycle)
	Normal, Bedding, Delicates, Heavy Duty, Speed Wash, Downloaded	Normal, Bedding, Delicates, Heavy Duty, Small Load, Downloaded	LoadSense	Yes	-	POWER SOURCE		-
OPTIONS	Washer	Dryer	Child Lock	Yes	-	Washer	Dryer	-
No. of Options	13	12	Auto Suds Removal	Yes	-	Ratings	CSA & UL Listed	-
	TurboWash®, Steam, Extra Rinse, Pre-wash, Sanitary, Tub Clean, Drum Light, Control Lock, Signal, Wi-Fi / Remote Start	Wrinkle Care, Steam, Reduce Static, Energy Saver, Steam Fresh, Drum Light, Control Lock, Signal, Wi-Fi / Remote Start	Leveling Legs	4 Adjustable Legs	-	Electrical Requirements	120V, 10 Amps	-
DETAILS	Washer	Dryer	Easy Loading TilTub™	Yes	-	Type	Electric	-
No. of Wash/Rinse Temps	5	-	Drum Light	Yes	-	Ratings	-	CSA & UL Listed
Wash/Rinse Temps	Hot, Warm/Hot, Warm, Cold/Warm, Cold	-	Remaining Time Display/Status Indicator(s)	Yes	-	Electrical Requirements	120V, 15 Amps (Gas)	240V, 30 Amps (Electric)
No. of Spin Speeds	5	-	3 Minute Installation Check	-	Yes	Type	-	Gas Electric
Spin Speeds	High, Medium/High, Medium, Low, No Spin	-	LoDecibel™ Quiet Operation	-	Yes	BTU Rating	-	20,000 Feet
Max RPM	1300	-	End of Cycle Signal	-	Yes	LP Conversion Kit	-	383EEL3002D
Water Levels	Load Sensing	-	Drum Light	-	Yes	Side Venting Kit	-	383EEL9001B
No. of Soil Levels	5	-	FlowSense™ Duct Clogging Indicator	-	Yes	Rack	-	Yes
Temperature Settings	-	High, Medium/High, Medium, Low/Medium, Low	Wrinkle Care Option	-	Yes	DIMENSIONS		-
Drying Levels	-	Very, More, Normal, Less, Damp	Child Lock	-	Yes	Product (WxHxD)	27" x 74 3/8" x 30 2/3" (700mm x 1890mm x 830mm)	-
Manual Dry Times	-	60 min., 50 min., 40 min., 30 min., 20 min.	Venting Option	-	Electric: 3 Way Venting / Gas: 2 Way Venting	Depth with Door Open	55" D with door open	-
THINQ® TECHNOLOGY	Washer	Dryer	4 Adjustable Legs	-	Yes	Carton (WxHxD)	30 1/16" x 79 11/32" x 33 23/32" (763*2015*856mm)	-
			Remaining Time Display/Status Indicator(s)	-	Yes	Weight (Product/Carton)	Electric: (333 lb / 368 lb) Gas: (336 lb / 371 lb)	-
LIMITED WARRANTY	Washer	Dryer	ThinQ® TECHNOLOGY	Washer	Dryer	UPC CODES		-
			SmartDiagnosis™ (v3.0)	Yes	-	WSEX200HNA (Noble Steel)	195174000595	-
			Wi-Fi	Yes	-	WSGX201HNA (Noble Steel)	195174000601	-
			Remote Start and Cycle Monitor	Yes	-	UPC CODES		-
			Energy Monitoring	Yes	-	WSEX200HNA (Noble Steel)	195174000595	-
			Smart Learner	Yes	-	WSGX201HNA (Noble Steel)	195174000601	-
			Smart Pairing	Yes	-	UPC CODES		-
			PCC	Yes	-	WSEX200HNA (Noble Steel)	195174000595	-
			Tub Clean Coach	Yes	-	WSGX201HNA (Noble Steel)	195174000601	-

24" Bar Handle Dishwasher

800 Series – Stainless Steel SHXM78Z55N



SHXM78Z55N
Stainless Steel

Also available in:

Black Stainless Steel	SHXM78Z54N
White	SHXM78Z52N
Black	SHXM78Z56N

Patented CrystalDry™ technology transforms moisture into heat to get dishes, including plastics, 60% drier.¹

Features & Benefits

42 dBA: dishwasher runs quietly so your kitchen conversations aren't interrupted.

The Flexible 3rd Rack with fold down sides adds 30% more² loading area, perfect for utensils and ramekins.

The AquaStop® leak protection system contains leaks through a precisely engineered system. If a leak occurs, the system contains it by shutting down operation and pumping out water. So you have the ultimate peace of mind whether you are away or at home.

General Properties

Number of wash cycles	6
Number of options	5
dBA	42
Drying system	CrystalDry™ option
Third rack	Flexible 3rd Rack
Rack adjustability	Rackmatic®
Tub material	Stainless Steel
Control type	Touch Control
Concealed water heating element	Yes
Leak protection system	24/7 AquaStop®
NSF®-certified ³ sanitize option	Yes
Water softener	No
Five-level wash	Yes
ChildLock	No
Special features	InfoLight®

Efficiency

Water usage per cycle	3.5
Energy efficiency class	Tier 1
ENERGY STAR® qualified	Yes
Total annual energy consumption (kWh)	269

Capacity

Number of place settings	16
--------------------------	----

Technical Details

Watts (W)	1440 W
Current (A)	12 Amps
Volts (V)	120 V
Frequency (Hz)	60 Hz
Power cord full length	67"
Power cord install length from edge of unit when facing the door (in) ⁴	Left – 45" Right – 56"
Minimum water pressure (lb/sin)	14
Length outlet hose (in)	79"

Dimensions & Weight

Overall appliance dimensions (HxWxD) (in)	33 7/8" x 23 9/16" x 23 3/4"
Required cutout size (HxWxD) (in)	33 7/8" x 23 5/8" x 24"
Adjustable feet	Yes
Net weight (lbs)	102 lbs

Accessories—Optional

Junction Box	SMZPCJB1UC
Bosch Dishwasher Water Supply Hose	SMZSH002UC
Drain Hose Extension Kit	SGZ1010UC
Dishwasher Accessory Kit	SMZ5000
Anti-Tarnish Silverware Cassette	SMZ5002UC
Edge Protector + Power Cord Clip Install Kit	SMZEPCC1UC



¹Based on aggregate average drying performance of Bosch Dishwashers with CrystalDry on combined household load including plastics, glass, steel, and porcelain as compared to Bosch Dishwashers with PureDry. Drying performance may vary by dish type.

²Compared to a Bosch dishwasher with 2 racks.

³Certification to NSF/ANSI Standard 184 for residential dishwashers.

⁴September 2020 running production change to remove adhesive routing clips for power cord. These clips and the edge protector are now included in the dishwasher accessory kit # SMZEPCC1UC.

Accessories: To purchase Bosch accessories, cleaners & parts please visit www.bosch-home.com/us/store or call 1-800-944-2904 (Mon to Fri 5 am to 6 pm PST, Sat 6 am to 3 pm PST).

Notes: All height, width and depth dimensions are shown in inches. BSH reserves the absolute and unrestricted right to change product materials and specifications, at any time, without notice. Consult the product's installation instructions for final dimensional data and other details prior to making cutout.

Warranties: Please see Use & Care manual or Bosch website for statement of limited warranty.

For more information on our entire line of products, go to www.bosch-home.com/us or call 1-800-944-2904

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24" Bar Handle Dishwasher

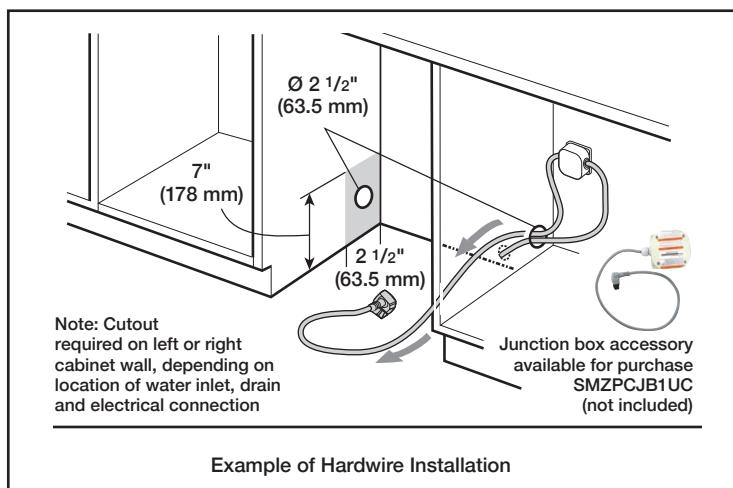
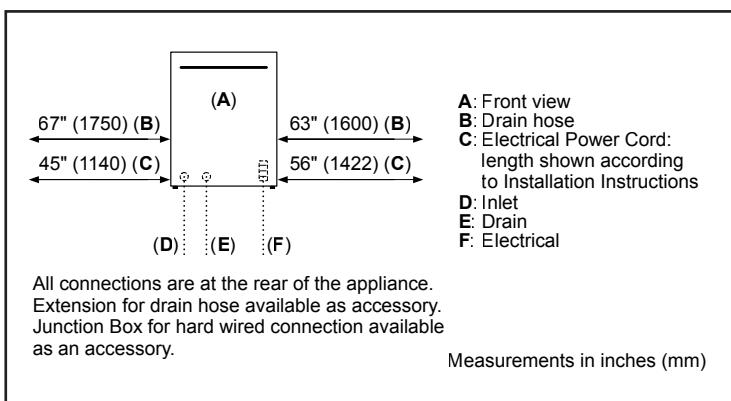
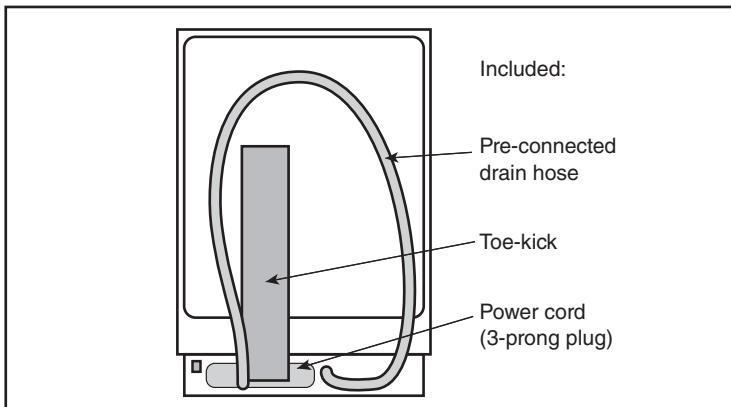
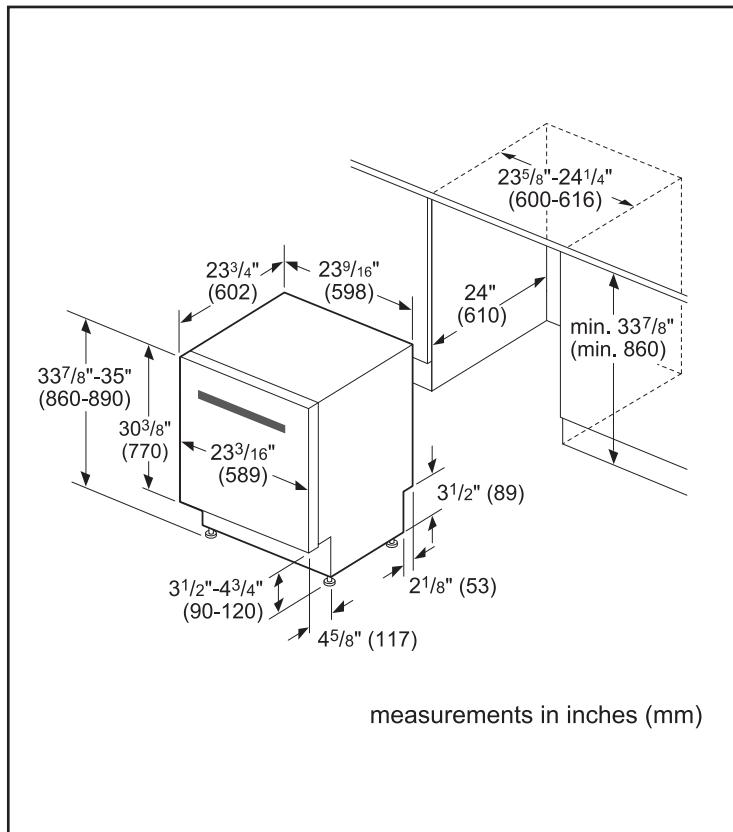
800 Series – Stainless Steel SHXM78Z55N



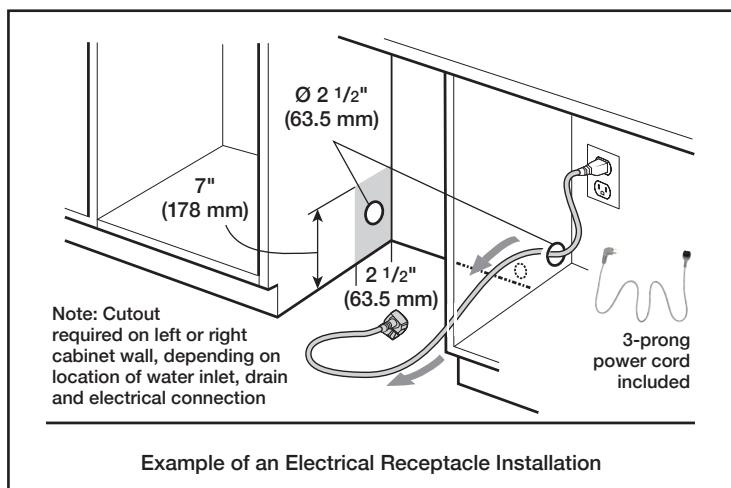
BOSCH

Invented for life

Installation Details



Example of Hardwire Installation



Example of an Electrical Receptacle Installation

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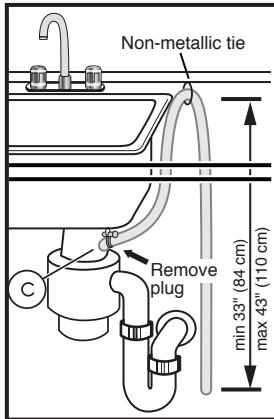
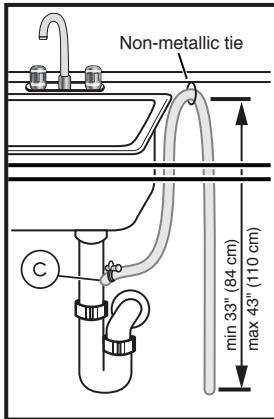
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24" Bar Handle Dishwasher

800 Series – Stainless Steel SHXM78Z55N

 **BOSCH**
Invented for life

Installation Details



Note: Plumbing installations will vary - refer to local codes. Drain hose included is 79" (201 cm) and can be extended to a maximum of 155 3/4" (396 cm).

Always use the approved drain hose extension kit (SGZ1010UC).

Ensure a portion of the drain hose is raised between min. 33" (84 cm) and max. 43" (110 cm) above the cabinet floor.

Accessories: To purchase Bosch accessories, cleaners & parts please visit www.bosch-home.com/us/store or call 1-800-944-2904 (Mon to Fri 5 am to 6 pm PST, Sat 6 am to 3 pm PST).

Notes: All height, width and depth dimensions are shown in inches. BSH reserves the absolute and unrestricted right to change product materials and specifications, at any time, without notice. Consult the product's installation instructions for final dimensional data and other details prior to making cutout.

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36" Standard-Depth 3-Door Refrigerator

500 Series – Stainless Steel B36FD50SNS



BOSCH

Invented for life



B36FD50SNS
Stainless Steel

Also available in:
Black Stainless Steel
B36FD50SNB

Introducing the QuickIcePro System™, industry's fastest refrigerator ice maker.¹ Enjoy freshly filtered ice that's replenished fast.

Features & Benefits

The Bosch QuickIcePro System offers rapid ice replenishment, producing up to 12 lbs of ice per day,² ensuring ample ice availability.

UltraClarityPro™ water filter reduces >99.9% of sediment that may be found in your water and ice, including harsh elements like chlorine and chloramine.

With Home Connect™, remotely control and monitor your appliance to efficiently manage your day.

General Properties		Capacity
Full 69" height and standard depth for additional capacity	Yes	Total capacity
Easy Clean Stainless Steel	Yes	Refrigerator capacity
Lighting	Recessed LED light bars	Freezer capacity
Number of evaporators	1	
Defrost process refrigerator section	Frost-free	Technical Details
Number of shelves – refrigerator	5	Current
Adjustable shelves – refrigerator	4 half-width	Volts
Shelf material – refrigerator	Tempered glass	Frequency
Type of shelves – refrigerator	Frameless split shelves with chromed trim	Power cord length
Ice maker	Yes	Plug type
Water filter	UltraClarityPro™	Dimensions & Weight
External water and ice dispenser	Yes	Appliance dimensions with hinges, handles and doors (HxWxD)
Gallon storage bins	2	Appliance dimensions without hinges and doors (HxWxD)
Humidity control compartments	2	Appliance dimensions with hinges and doors, no handles (HxWxD)
Full width drawer	1	Required cutout size (HxWxD)
Touch control panel	Yes	Net weight
AirFresh® filter	Yes	Efficiency
MultiAirFlow™	Yes	Energy consumption
Stainless steel back wall	Yes	ENERGY STAR® qualified
Defrost process freezer section	Automatic	Accessories
Number of drawers – freezer	2	UltraClarityPro™ Water Filter: BORPLFTR55 90 Degree Door Stopper: 10012733
Home Connect™ (Wi-Fi enabled)	Yes	



Home Connect



¹Based on single ice maker production rates during a 24-hour period, measured per IEC standard and manufacturer user's manuals, for brands identified in US and Canada TraQline as freestanding French door bottom mount refrigerators. Results may vary depending on operating conditions.

²Based on filling 8 oz glasses.

*When leveling legs are fully extended, add 5/8" to overall height, total 70 5/8".

36" Standard-Depth 3-Door Refrigerator

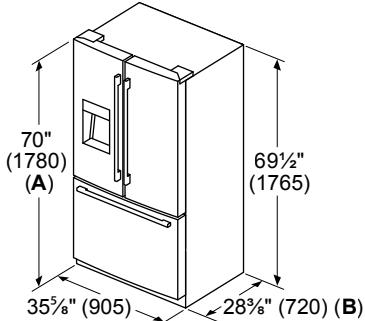
500 Series – Stainless Steel B36FD50SNS



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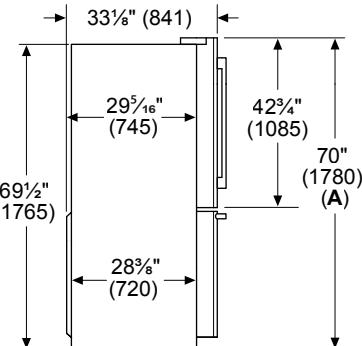
Installation Details

Measurements in inches (mm)



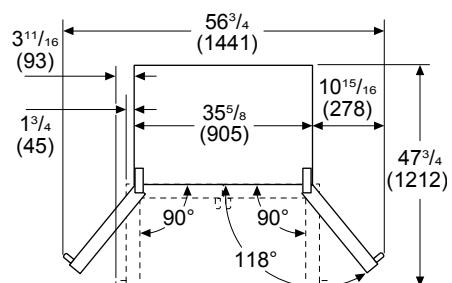
A: Add $\frac{5}{8}$ " (17) with front leveling feet fully extended
B: Add 1" (25) for fixed spacers on back

Measurements in inches (mm)



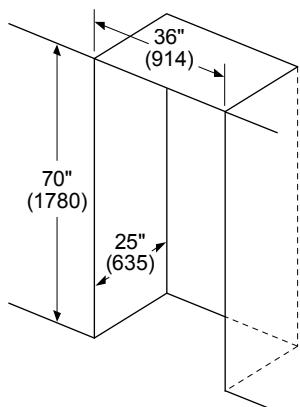
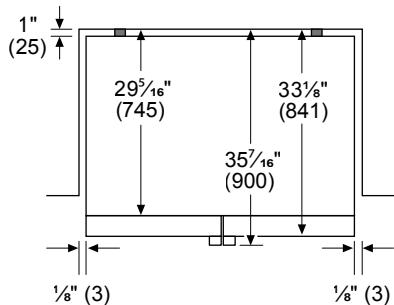
A: Add $\frac{5}{8}$ " (17) with front leveling feet fully extended

Measurements in inches (mm)



Drawers can be pulled out with door open to 90°
Drawers can be taken out with door completely opened

measurements in inches (mm)



Leave $\frac{1}{2}$ " (12.7) gap at the top and 1" (25.4) behind the refrigerator for proper ventilation.

It is recommended that you do not install the refrigerator near a heat source such as a stove or a range.

measurements in inches (mm)

Accessories: To purchase Bosch accessories, cleaners & parts please visit www.bosch-home.com/us/store or call 1-800-944-2904 (Mon to Fri 5 am to 6 pm PST, Sat 6 am to 3 pm PST).

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PRODUCT SPECIFICATIONS

Elkay ezH2O® In-Wall Bottle Filling Station with Mounting Frame, Filtered Non-Refrigerated Stainless. Features shall include Antimicrobial, Filtered, Green Ticker™, Hands Free, Laminar Flow, Real Drain, Visual Filter Monitor. Electronic Bottle Filler Sensor activation. Product shall be Wall Mount (Inwall Frame/Plate), for Indoor applications, serving 1 station(s). Unit shall be certified to UL 399 and CAN/CSA C22.2 No. 120. Unit shall be lead-free design which is certified to NSF/ANSI 61 & 372 (lead free) and meets Federal and State low-lead requirements.



Special Features:	Antimicrobial, Filtered, Green Ticker™, Hands Free, Laminar Flow, Real Drain, Visual Filter Monitor
Finish:	Stainless Steel
Power:	115V/60Hz
Bubbler Style:	No Bubbler
Activation by:	Electronic Bottle Filler Sensor
Mounting Type:	Wall Mount (Inwall Frame/Plate)
Chilling Capacity:	Non-refrigerated
Full Load Amps	1
Rated Watts:	15
Dimensions (L x W x H):	19-3/4" x 3-1/2" x 40-13/16"
Approx. Shipping Weight:	36 lbs.
Installation Location:	Indoor
No. of Stations Served:	1

Special Note: Refrigerated options available.

- Visual Filter Monitor: LED Filter Status Indicator for when filter change is necessary.
- Filter is certified to NSF 42 and 53 for lead, particulate, chlorine, taste and odor reduction. 3,000 gal. capacity.
- Green Ticker: Informs user of number of 20 oz. plastic water bottles saved from waste.
- Laminar flow provides clean fill with minimal splash.
- Silver Ion Antimicrobial protection on key plastic components to inhibit the growth of mold and mildew.
- Real Drain System eliminates standing water.

Included with Product: **Bottle Filler (LZWSMDC), Mounting Frame (MFWS100), Filter (EWF3000)**

▼ Ships in multiple boxes.

AMERICAN PRIDE. A LIFETIME TRADITION.

Like your family, the Elkay family has values and traditions that endure. For almost a century, Elkay has been a family-owned and operated company, providing thousands of jobs that support our families and communities.


PRODUCT COMPLIANCE

ADA & ICC A117.1

Buy American Act

CAN/CSA C22.2 No. 120

GreenSpec®

NSF/ANSI 42, 53, 61, & 372 (lead free)

UL 399



 Complies with ADA & ICC A117.1 accessibility requirements when installed according to the requirements outlined in these standards. Installation may require additional components and/or construction features to be fully compliant. Consult the local Authority Having Jurisdiction if necessary.

[Installation Instructions \(PDF\) - 98560C](#)

[Installation Instructions \(PDF\) - 98557C](#)

Electrical components and water system are warranted for 12 months from date of installation. **Warranty pertains to drinking water applications only. Non-drinking water applications are not covered under warranty.**

[Warranty \(PDF\)](#)

PART: _____ QTY: _____

PROJECT: _____

CONTACT: _____

DATE: _____

NOTES: _____

APPROVAL: _____

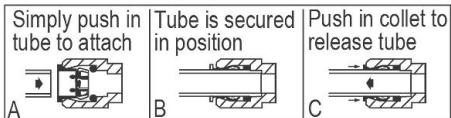
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Optional Accessories

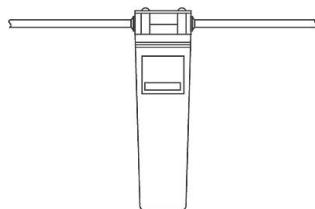
<u>51300C</u>	Elkay WaterSentry Plus Replacement Filter (Bottle Fillers) <u>Spec Sheet (PDF)</u>	
<u>WSF6000R-2PK</u>	WaterSentry Fresh 6000 CTO Replacement Filter (2pack) <u>Spec Sheet (PDF)</u>	

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OPERATION OF QUICK CONNECT FITTINGS

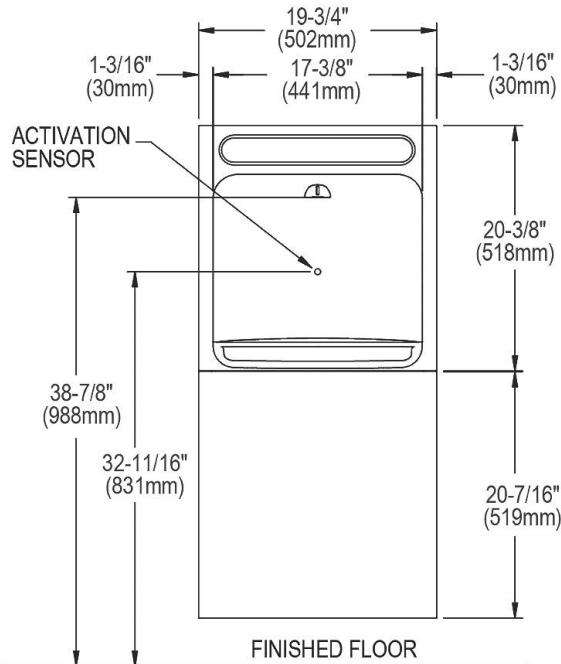


Pushing tube in before pulling it out helps to release tube



WaterSentry® Plus Filter System

BOTTLE FILLER SPECIFICATIONS

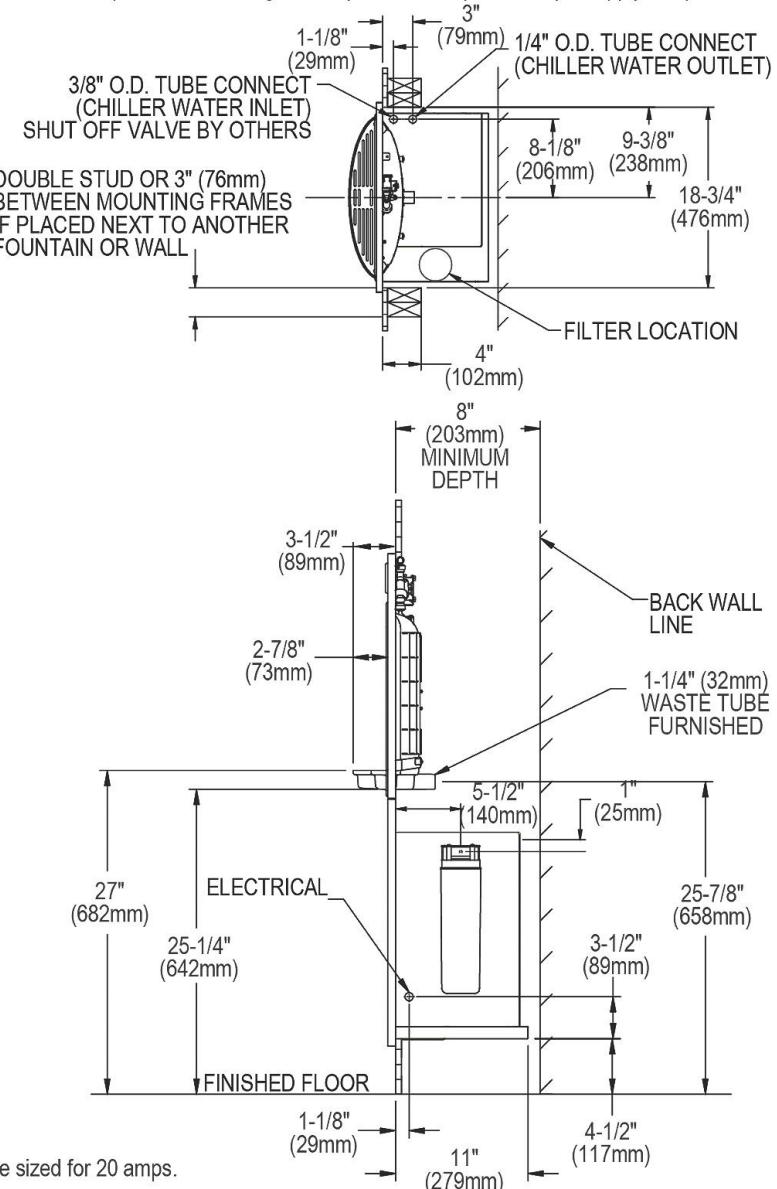


Note : New Installations Must Use Ground Fault Circuit Interrupter (GFCI).
It is highly recommended that the circuit be dedicated and the load protection be sized for 20 amps.

IMPORTANT!

INSTALLER PLEASE NOTE:

The grounding of electrical equipment such as telephone, computers, etc., to water lines is a common procedure. This grounding may be in the building or may occur away from the building. This grounding can cause electrical feedback into a water cooler, creating an electrolysis which causes a metallic taste or causes an increase in the metal content of the water. This condition is avoidable by using the proper materials as indicated below. The drain fittings which are provided by the installer should also be plastic to electrically isolate the cooler from the building plumbing system. These products are designed to operate on 20 psi to 105 psi supply line pressure.



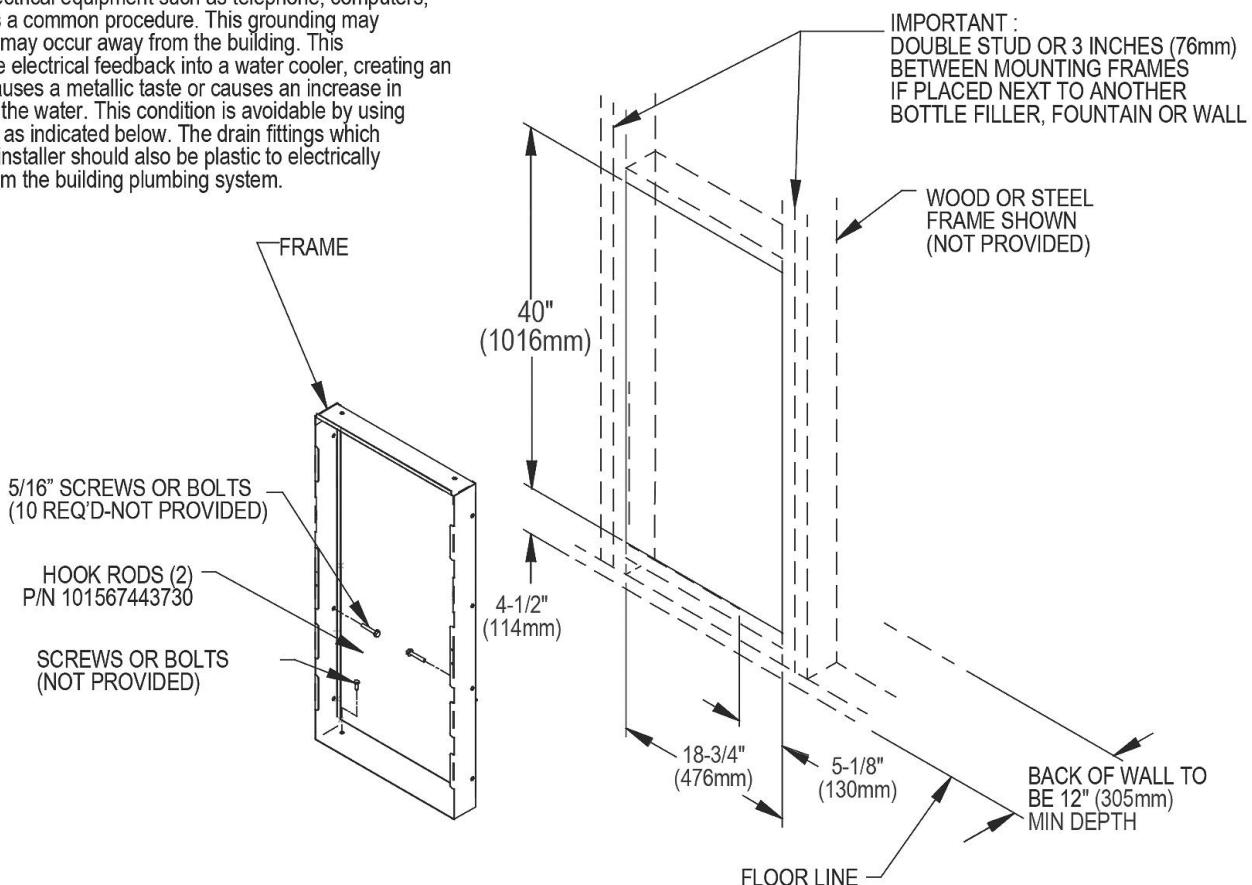
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MOUNTING FRAME MFWS100 WITHOUT CHILLER SHELF

IMPORTANT!

INSTALLER PLEASE NOTE:

The grounding of electrical equipment such as telephone, computers, etc., to water lines is a common procedure. This grounding may be in the building or may occur away from the building. This grounding can cause electrical feedback into a water cooler, creating an electrolysis which causes a metallic taste or causes an increase in the metal content of the water. This condition is avoidable by using the proper materials as indicated below. The drain fittings which are provided by the installer should also be plastic to electrically isolate the cooler from the building plumbing system.



In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

Product Data Sheet

Speed-Guardian™ 5000 CLP CV 42

Coiling Low-Profile High-Performance Door with Double-Pane Vision Panels



HÖRMANN

Features



The Speed-Guardian™ Low-Profile high speed, security line of doors provide energy efficient, attractive design, with springless side frames.

- Smart Start™ NXT, NEMA 4X programmable control box.
- Thermally isolated design for reduced heat transfer and optimal energy efficiency.
- Speed: Up to 60"/sec. open, 20"/sec. close.
- Exclusive non-contact guide technology reducing wear and noise.
- Space saving, springless low-profile galvanized steel guide tracks fit anywhere.
- Integral, non-contact light curtain entrapment protection feature ensures safety of equipment, people, and vehicles.
- Emergency operation via chain hoist.
- Light-weight and strong full aluminum curtain construction.
- Enhanced 10" high double-pane vision slats with Duratec® synthetic glazing.
- Optional tinted vision slats, Obscured White, Smoke Gray.
- Optional perforated metal slats for ventilation requirements.
- 5, 2, & 7 year warranty protection plan. 5 yrs. motor/gearbox and panels. 2 yrs. other mech./elec., 7 yrs. vision slats.

Technical Data		Remark
Speed-Guardian™ Low-Profile 5000 CLP CV 42		
Rigid, high performance overhead rapid coiling door with narrow side frames for springless, space saving technology.		
Application	Exterior or Interior	Hood required for exterior mounted doors
Speed	Opening Up to 60"/sec.	Closing Up to 20"/sec. Variable speed based on opening height
Control Panel	Smart Start™ NXT (11 5/8" W x 15 3/4" H x 8 3/16" D)	Standard, NEMA Type 4X / IP66
Roll-up Technology	Non-contact spiral guides with Non-contact lintel seal	Standard
Door Construction	Size Range 16'-0" wide, up-to 16'-0" high	Standard
	Guide Track Profile 8" x 10 3/8", chamfered corners (interior side)	Ideal for limited side room applications
	Spiral Size Configurations 1	--
	Solid Slat Height & Depth 9 7/8" H, 1 5/8" D	--
	Vision Slat Height (Glazing) 6 1/4"	--
Overhead Spiral	Mullions None up-to 120" wide One up-to 197" wide Two if $\geq 198"$ wide	+15% Enhanced visibility than SG 4000 U
Required Headroom	36 1/4" min. if door height $\leq 14'9"$ 37 5/8" min. if door height $> 14'9"$	Per spiral configuration size
Drive Mechanism	Direct-drive operator with chain lift mechanism	--
Counterbalance System	Not offered	--
Braking	Control box activated 24V DC brake	Built-in, anti-fallback safety brake device integrated with operator worm gear
Cycleability / Maintenance	High / inspect per ea. 50,000 cycles or 6 mo. Windows replacable independent of solid slats	Consult factory for details
Safety Features	Built-in light grid, chain hoist open/close	--
Resistance to Wind Load	DW \leq 16'-0", Class 5 max. 93mph (21psf; 115mph max.)	DW = Door Width Per standard EN 12424, DASMA 108 Exposure B
Fire Resistance Rating	Non-rated, Non-conforming exit	Per 2012 IBC Section 1008
Warranty	5, 2, & 7 years. Motor/gearbox and Panels (5), all other mech./elec. (2), vision slats (7)	Standard

Product Data Sheet (Continued)

Speed-Guardian™ 5000 CLP CV 42

Coiling Low-Profile High-Performance Door with Double-Pane Vision Panels

HÖRMANN

Materials and Finishes		
Guide Tracks & Covers	11-ga. HDG steel tracks, 16-ga. HDG steel covers	Zinc, Class G90 (0.9 oz. per SF)
Door Headers, Spiral Guides, Drive Shaft Support	11-ga. Hot-dipped galvanized steel	Zinc, Class G90 (Panel Wheel Guides, Aluminum)
Counterbalance Assemblies		
Weather Seals	Twin rubber, non-contact lintel	--
Vision Door Slats	1" Double-pane, acrylic, clear or tinted (Obscured White, Smoke Gray) and Duratec® abrasion-resistive coating	1 5/8" Thick Vision Panel frame, extruded anodized aluminum
Ventilation Door Slats	1" Double-walled, perforated clear anodized aluminum, 1/2" square press-punched grid pattern	1 5/8" Thick Ventilation Panel frame, extruded anodized aluminum Open area 56.3%
Bottom Profile Door Slat	30-ga. Interlocking flat-faced, hollow extruded aluminum panel, with weather seal loop	Only non-vision panel in door curtain
Electric Door Operator	Cast aluminum	--
Control Panel	Stainless steel, or baked-on polyester powder coat painted. Color RAL 7035 Light Gray	Powder Coat Painted, Standard
Hood and Motor Cover	16-ga. Hot-dipped galvanized steel	Zinc, Class G90 (0.9 oz. per SF)
Energy Analysis		
Air Permeability (leakage)	0.6 cfm/ft² (12 m³/h/m²), Class 2	Per test EN 12427, (ASTM E283, ANSI/NFRC 400)
Resistance to Water Penetration	Class 2, 15 min @ 55pa	Per test EN 12489 (ASTM E547)
Visible Transmittance (Tvis)	0.91%	Per calc ANSI/NFRC 200-2014 (Clear Vision Slats)
Solar Heat Gain Coefficient (SHGC)	0.75%	Per calc ANSI/NFRC 200-2014 (Clear Vision Slats)
Thermal Resistance (R-value)	0.23 W/(m² x K), 1.30 Btu/(hr x ft² x °F)	Per test EN 717-1, DASMA TDS-163 (With Visions)
Heat Transfer Coefficient (U-value)	4.41 W/(m² x K), 0.77 Btu/(hr x ft² x °F)	Per test EN 12667: 199997-11, DASMA TDS-105
Acoustic Insulation	STC 34, R _w 31 dB	Per test EN 717-2, ASTM E90 (With Visions)
LEED Credit (Potential)	EAc2, MRc1, MRC3, IEQc2, IEQc4, INc1, RPc1	USGBC® LEED v4
Electrical		
Electric Door Operator (Motor)	5.0 HP GfA Elektromaten F35	NEMA Type 3 / IP54
Operating Voltage	3 PH, 272 vAC	From Control Box to Motor
Control Panel	5 kW variable frequency drive rated for operating voltage	NEMA Type 4X / IP66, UL/CUL Listed
Standard Power Requirement	208vAC - 480vAC, 3 PH, 60 Hz	Transformer required for supply volt. < 460 vAC
Full Load Amps	12.4 A	Operator
Disconnect	Fuse: 20 Amp, Class K	Supplied by Others

Hörmann's Speed-Guardian™ Low-Profile, high speed, security line of doors fit into areas with limited side room clearance and require only 8-inches for guide tracks on each side of the door opening. Thanks to non-contact roll-up technology along with a standard built-in light grid, the Speed-Guardian™ is a proven industry leader for both safety and longevity. The versatility expressed in its range of applications includes retail automotive, emergency services, parking structures and other distinctive buildings.

The latest generation of Speed-Guardian™ high performance doors have once again succeeded by leading the industry with quality and innovations in state-of-the-art design.

The Speed-Guardian™ Coiling Low-Profile, high speed, security line of doors provide excellent space saving guides with pleasing aesthetic appeal.



AIA
Continuing
Provider

BOMA
International

DASMA
Door & Access Systems
Manufacturers Association
International

IDA
International Door Association



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1-800-365-3667 | 724-385-9150 | Fax: 724-385-9151 | www.hormann.us | Email: info2@hormann.us

Product Data Sheet

Speed-Guardian™ 5000 C U 42

Coiling High-Performance Door with Insulated Curtain Panels



HÖRMANN

Features



The Speed-Guardian™ High speed, security line of doors provide excellent thermal insulation and fast opening speeds.

- Smart Start™ NXT, NEMA 4X programmable control box.
- Thermally isolated design for reduced heat transfer and optimal energy efficiency.
- Speed: Up to 100"/sec. open, 20"/sec. close.
- Exclusive non-contact guide technology reducing wear and noise.
- Self-supporting hot-dipped galvanized steel guide tracks.
- Integral non-contact light grid protection feature.
- Emergency operation via chain hoist and counterbalance springs.
- 1 5/8" thick X 10" high insulated slats with R-13.6, U-1.04 thermal performance.
- Optional 10" high double-pane vision slats with Duratec® synthetic glazing.
- Optional tinted vision slats, Obscured White, Smoke Gray.
- Optional perforated metal slats for ventilation requirements.
- 5, 2, & 7 year warranty protection plan. 5 yrs. motor/gearbox and panels. 2 yrs. other mech./elec., 7 yrs. vision slats.

Technical Data		Remark
Speed-Guardian™ 5000 C U 42		
Rigid, high performance overhead rapid coiling door with non-contact spiral roll-up technology.		
Application	Exterior or Interior	Hood required for exterior mounted doors
Speed	Opening 60" up to 100"/sec.	Closing Up to 20"/sec. Variable speed based on opening height
Control Panel	Smart Start™ NXT (11 5/8"W x 15 3/4"H x 8 3/16"D)	
Roll-up Technology	Non-contact spiral guides with Non-contact lintel seal	
Door Construction	Size Range Guide Track Profile Spiral Size Configurations Solid Slat Height & Depth Vision Slat Height (Glazing)	Min. 6'-0" up-to 21'-4" wide Min. 8'-0" up-to 21'-4" high 12" x 12 1/2", chamfered corners (interior side) 3 9 7/8"H, 1 5/8"D 6 1/4" None up-to 120" wide One up-to 197" wide Two if \geq 198" wide
Overhead Spiral	Mullions	Standard -- Selected per door height -- -- +15% Enhanced visibility than SG 4000 U
Required Headroom	36 1/4" min. if door height \leq 14'-9" 37 5/8" min. if door height is 14'-9"- 18'-0" 41 1/2" min. if door height \geq 18'-0"	
Drive Mechanism	Direct-drive operator with chain lift mechanism	
Counterbalance System	Belt mechanism and springs	
Braking	Control box activated 24V DC brake	
Cycleability / Maintenance	High / inspect per ea. 50,000 cycles or 6 mo. Windows replacable independent of solid slats	
Safety Features	Built-in light grid, chain hoist open/close	
Resistance to Wind Load	DW \leq 16'-4", Class 5 max. 93mph (21psf; 115mph max.) DW >16'-4", \leq 19'-8", Class 4 max. 83mph (15psf; 100mph max.) DW > 19'-8", Class 2 max. 64mph (7psf; 70mph max.)	
Fire Resistance Rating	Non-rated, Non-conforming exit	
Warranty	5, 2, & 7 years. Motor/gearbox and Panels (5), all other mech./elec. (2), vision slats (7)	
DW = Door Width Per standard EN 12424, DASMA 108 Exposure B		

Product Data Sheet (Continued)

Speed-Guardian™ 5000 C U 42

Coiling High-Performance Door with Insulated Curtain Panels

HÖRMANN

Materials and Finishes		
Guide Tracks & Covers	11-ga. HDG steel tracks, 16-ga. HDG steel covers	Zinc, Class G90 (0.9 oz. per SF)
Door Headers, Spiral Guides, Drive Shaft Support	11-ga. Hot-dipped galvanized steel	Zinc, Class G90 (Panel Wheel Guides, Aluminum)
Counterbalance Assemblies	Oil temp. Steel helical extension springs	Available up-to 8 springs per door
Weather Seals	Twin rubber, non-contact lintel	--
Solid Door Slats	22-ga. Hot-dipped galvanized steel, with foamed-in-place polyurethane insulation core. MicroGrain™ texture exterior, Stucco texture interior. Color RAL 9006	Zinc, Class G40 (0.4 oz. per SF) Polyurethane foam density 11pcf
Vision Door Slats	1" Double-pane, acrylic, clear or tinted (Obscured White, Smoke Gray) and Duratec® abrasion-resistive coating	Vision panel frame, extruded anodized aluminum
Ventilation Door Slats	1" Double-walled, perforated clear anodized aluminum, 1/2" square press-punched grid pattern	Ventilation panel frame, extruded anod. aluminum Open area 56.3%
Electric Door Operator	Cast aluminum	--
Control Panel	Stainless steel, or baked-on polyester powder coat painted. Color RAL 7035 Light Gray	Powder Coat Painted, Standard
Hood and Motor Cover	16-ga. Hot-dipped galvanized steel	Zinc, Class G90 (0.9 oz. per SF)
Energy Analysis		
Air Permeability (leakage)	0.6 cfm/ft² (12 m³/h/m²), Class 2	Per test EN 12427, (ASTM E283, ANSI/NFRC 400)
Resistance to Water Penetration	Class 2, 15 min @ 55pa	Per test EN 12489 (ASTM E547)
Visible Transmittance (Tvis)	0.91%	Per calc ANSI/NFRC 200-2014 (Clear Vision Slats)
Solar Heat Gain Coefficient (SHGC)	0.75%	Per calc ANSI/NFRC 200-2014 (Clear Vision Slats)
Thermal Resistance (R-value)	R 13.6	Per test EN 717-1, DASMA TDS-163 (Without Visions)
Heat Transfer Coefficient (U-value)	U 1.04	Per test EN 12667: 199997-11, DASMA TDS-105
Acoustic Insulation	STC 30, R _w 26 dB	Per test EN 717-2, ASTM E90 (Without Visions)
LEED Credit (Potential)	EAc2, MRc1, MRc3, IEQc2, IEQc4, INc1, RPc1	USGBC® LEED v4
Electrical		
Electric Door Operator (Motor)	2.0 HP GfA Elektromaten F18	NEMA Type 3 / IP54
Operating Voltage (Motor)	3 PH, 132v or 230v	From Control Box to Motor
Control Panel	5 kW variable frequency drive rated for operating voltage	NEMA Type 4X / IP66, UL/CUL Listed
Standard Power Requirement (to Control Box)	208vAC - 480vAC, 3 PH, 60 Hz	Transformer may be required. Consult Factory Rep.
Full Load Amps	13.3 A	Operator
Disconnect	Fuse: 20 Amp, Class K	Supplied by Others

The Speed-Guardian™ high speed, security line of doors are characterized by an elegant Micrograin surface finish with hot-dipped galvanized, double-skinned steel panels providing excellent thermal insulation and fast opening speeds. Thanks to non-contact roll-up technology and a standard built-in light grid the Speed-Guardian™ is a proven industry leader for both safety and longevity. The versatility expressed in its range of applications includes retail automotive, emergency services, parking structures and others.

Hörmann's latest generation, the Speed-Guardian™ 5000 series has once again succeeded with what is to be expected of quality and innovation in high performance doors.

The Speed-Guardian™ High speed, security line of doors provide excellent thermal insulation and fast opening speeds.



AIA
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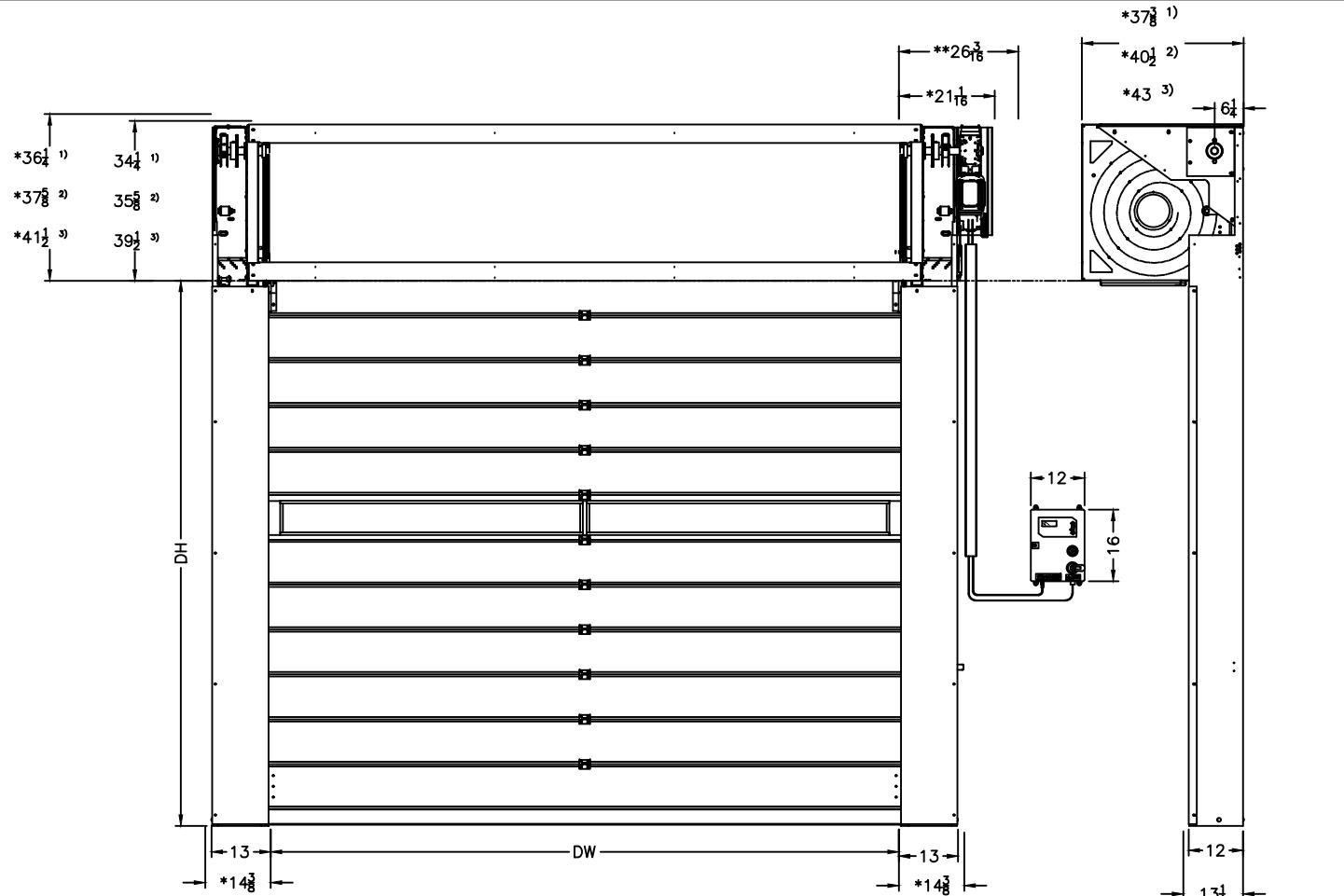
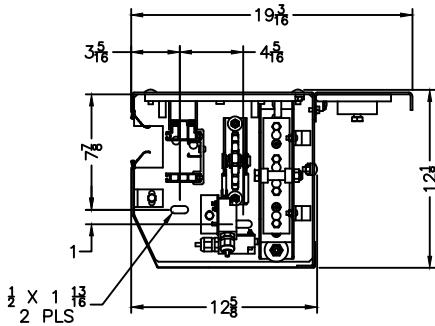
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1-800-365-3667 | 724-385-9150 | Fax: 724-385-9151 | www.hormann.us | Email: sales2@hormann.us

MODEL: SPEED GUARDIAN 5000U-42
CUSTOMER: -
ADDRESS: -
CITY & STATE: -
JOB: -
LOCATION: -
COMPANY: -
SIZE: DW= DH=
MOTOR LOCATION: <input checked="" type="checkbox"/> RIGHT <input type="checkbox"/> LEFT
CONTROL BOX LOCATION: <input checked="" type="checkbox"/> RIGHT <input type="checkbox"/> LEFT
VOLTAGE: 208V <input type="checkbox"/> 230-240V <input type="checkbox"/> 360-480V
VISION AREA:
OF VISION PANELS: - STARTING AT -"
OF PERFORATED PANELS: - STARTING AT -"
OPTIONS:
3 BUTTON PUSH STATION <input type="checkbox"/>
INDUCTION LOOP <input type="checkbox"/>
MOTION DETECTOR <input type="checkbox"/>
NOTES:



ALL DIMENSIONS ARE IN INCHES.

*FITTING CLEARANCE.

**SPACE REQUIRED TO FIT AND DISMANTLE THE OPERATOR.

CONTROL BOX PROJECTION IS 6 INCHES.

DRAWING SHOWN RIGHT HAND, LEFT HAND OPPOSITE.

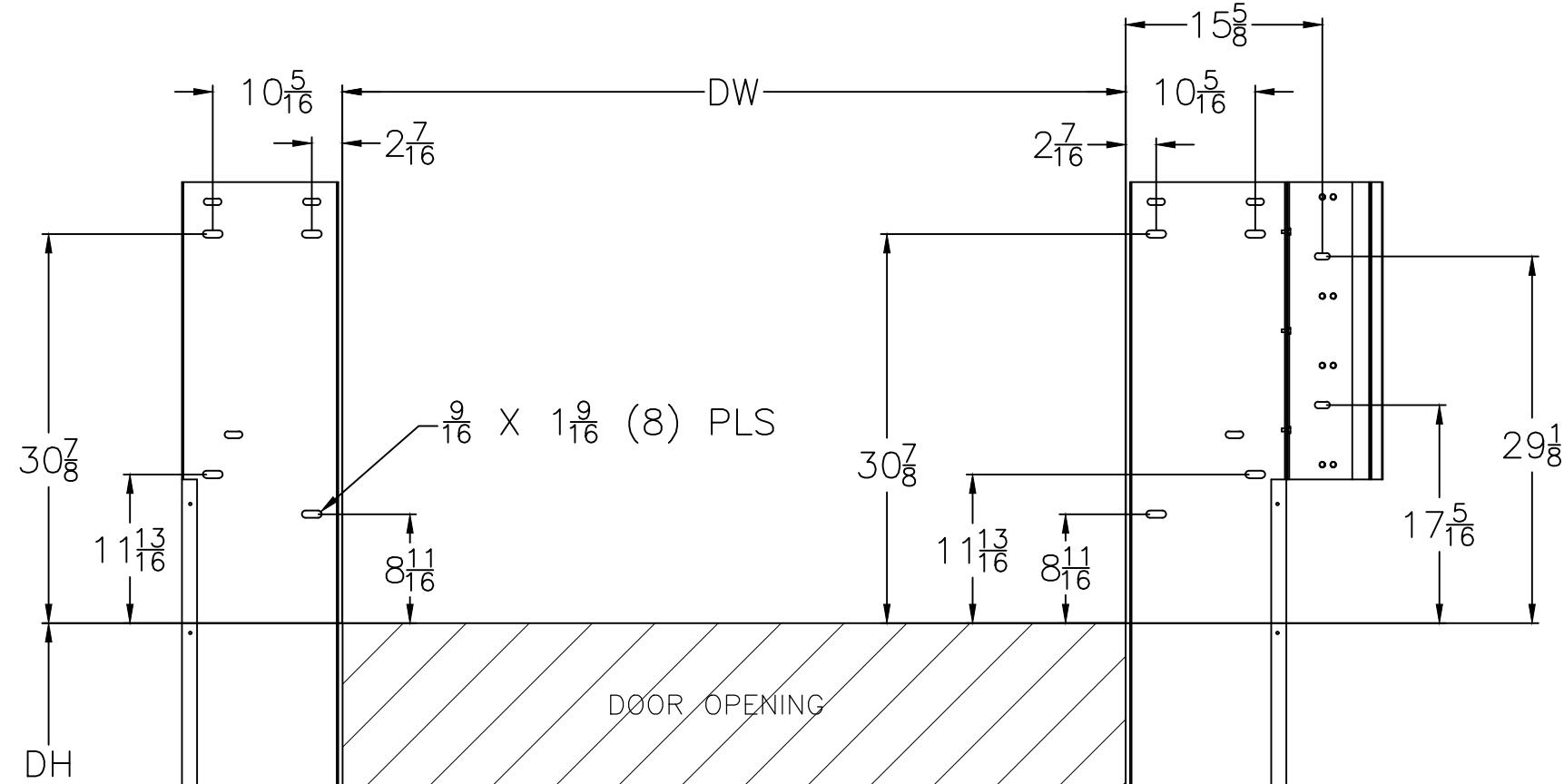
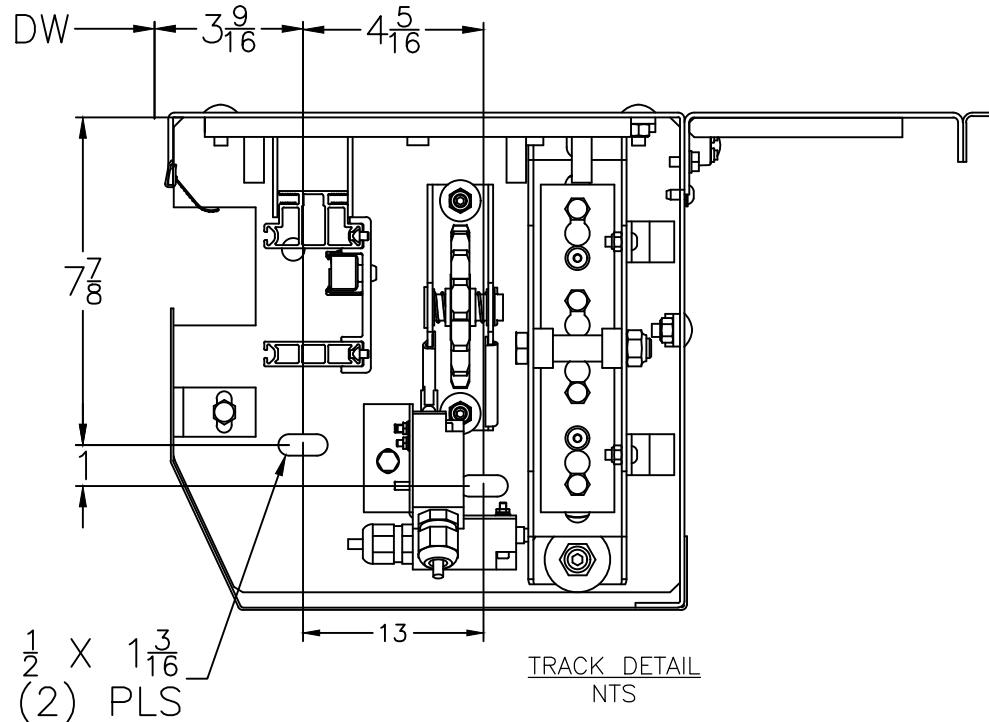
WE RESERVE THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE

- 1) DH ≤ 177"
- 2) DH > 177" - ≤ 216"
- 3) DH > 216" - ≤ 256"

HORMANN	
117 STARPOINTE BOULEVARD	
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PH: +1 (800) 365-3667 FAX: 724.385.9151	
www.hormann.us	
TITLE: HIGH PERFORMANCE DOOR SPECIFICATIONS	
MODEL: SG5000U-42	PART #:
DRAWING #:	PAPER SIZE: ANSI "B"
PAGE: 1 OF 1	SCALE: N/A
QTY: -	ENGINEER: GJB
DRAWN: 11/23/2016	

MODEL: SPEED GUARDIAN 5000 U	MATERIAL
CUSTOMER: -	-
ADDRESS: -	
CITY & STATE: -	
JOB: -	
LOCATION: -	
COMPANY: -	

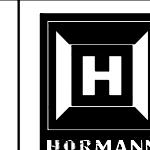
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MOTOR LOCATION: <input checked="" type="checkbox"/> RIGHT <input type="checkbox"/> LEFT	
CONTROL BOX LOCATION: <input checked="" type="checkbox"/> RIGHT <input type="checkbox"/> LEFT	
VOLTAGE: 200-240V <input type="checkbox"/> 360-480V <input checked="" type="checkbox"/>	
WIRING: HARD WIRED <input type="checkbox"/> SMART START <input checked="" type="checkbox"/>	
VISION AREA:	
# OF VISION PANELS: -	STARTING AT -"
# OF PERFORATED PANELS: -	STARTING AT -"
OPTIONS:	
3 BUTTON PUSH STATION	<input type="checkbox"/>
INDUCTION LOOP	<input type="checkbox"/>
MOTION DETECTOR	<input type="checkbox"/>
NOTES:	



NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. ONLY MOUNTING HOLES ARE DIMENSIONED.

GENERAL TOLERANCES ACC. TO DIN ISO 2768-mK
PLASTIC MOLDED PARTS ACC. TO DIN 16901-130
GEOMETRICAL TOLERANCES ACC. TO DIN ISO 1101



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 STARPOINTE BUSINESS PARK
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 BURGETTSTOWN, PA 15021-9506
 PH: 724.385.9150 FAX: 724.385.9151
www.hormann-flexon.com

TITLE: MOUNTING HOLE LOCATIONS

REV.	DESCRIPTION	DATE	BY	MODEL: SG 5000 U 42	PART #:	-
-	-	-	-	DRAWING #:	-	PAPER SIZE: ANSI "B"
-	-	-	-	PAGE: 1 OF 1	SCALE: N/A	
-	-	-	-	QTY: -	ENGINEER: GJB	DRAWN: 11/28/2016



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Vernon, CA 90058
323.329.8972

Thermal Aluminum | East

110 Viaduct Rd.
Stamford, CT 06907
203.316.8000

Thermal Steel & Wood

9280 East Old Vail Rd.
Tucson, AZ 85747
520.574.7374



March 2017

Product designs & specifications are subject to change. Consult your Arcadia Custom dealer or arcadiacustom.com for current information.

Casement Window

T200



T200 shown with Roto Crank & Multipoint Lock. Clear Anodize Finish. Hardware options see page 68.

Featuring narrow sight lines and excellent functionality, Casement Windows are the perfect choice for modern luxury homes. This venting window with thermally broken aluminum is available in casement, awning, hopper, and fixed configurations.



T200 Awning Windows with Roto Crank | Clear Anodize Finish

Features

Size Casement sash up to **3'** wide, **6'** high

Awning/Hopper sash up to **6'** wide, **3'** high

Thermally Broken Sashes and frames for improved energy performance

High Performance Glass 1" dual-glazed, Low-E glass, see NFRC Chart at arcadiacustom.com for glass specifications

Frame Depth **2"**

Hardware Roto crank with butt hinges and multipoint casement lock; awning uses a casement handle

Operation/Configuration Crank-out or push-out operation options; available as single, double, triple, or multiple operating sashes; matching transoms available

Options

Screens Removable fixed aluminum screen with clip available for roto-crank operation; hinged aluminum screen available for push-out operation; charcoal insect mesh or Invisivue screen mesh available

Jamb Type Block Frame or Nail Fin

Frame/Legs Long equal legs, short equal legs, or unequal legs available

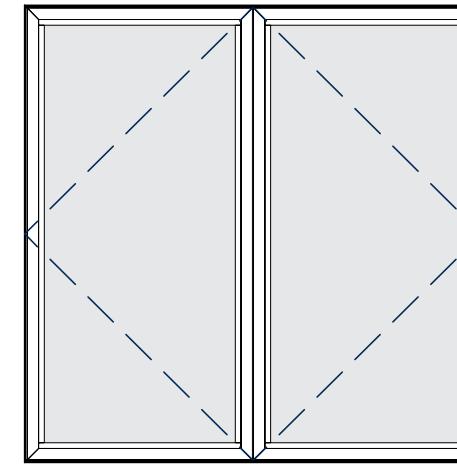
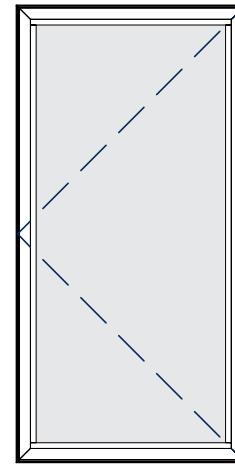
Impact Rating Can be made to meet impact rated hurricane codes

TDL/SDL Lite Grids See page 96 for details on true-divided-lite/ simulated-divided-lite grid options

Casement Window Configurations

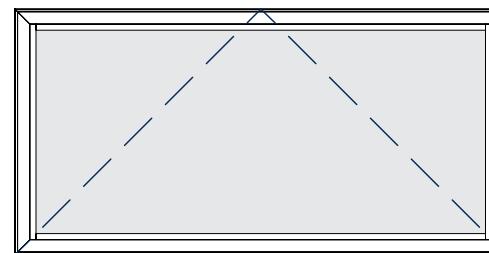
T200 | T325

Casement



Twin Casement

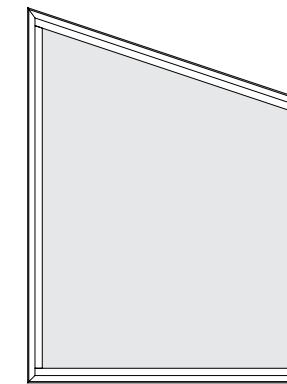
Awning



Hopper

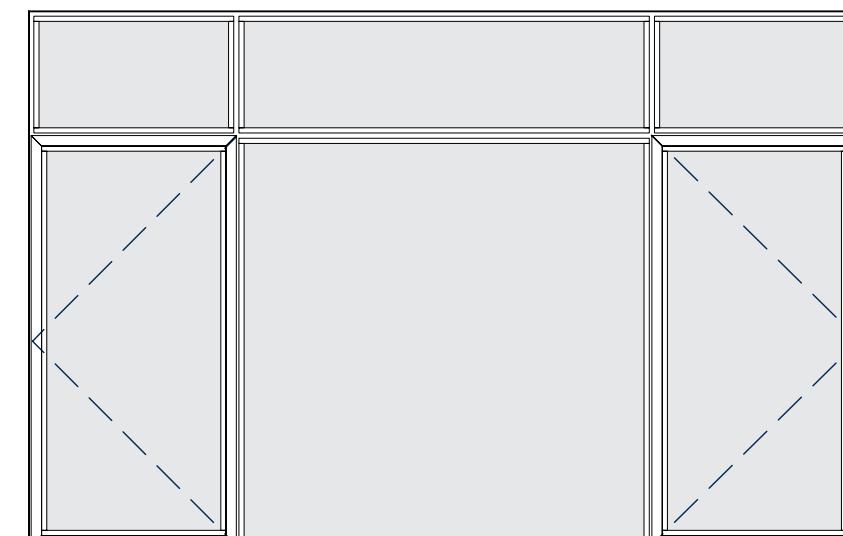
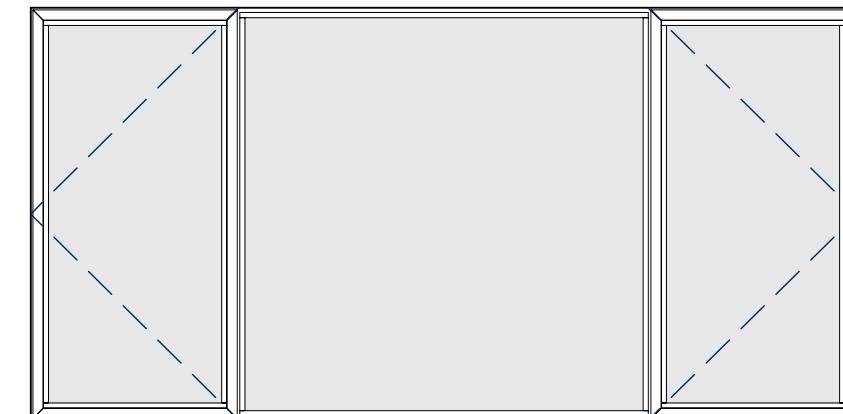


Fixed



Trapezoid

Combo



Transom

Casement Window

Roto Crank Operation



Roto Crank Handle | Standard
| Satin Nickel Finish



Multipoint Lock
| Satin Nickel Finish



Folding Roto Crank Handle | Optional
| Black Finish



Multipoint Lock
| Black Finish

Push-Out or Inswing Lock



Single Point Cam Handle*
| Satin Nickel Finish



Single Point Cam Handle*
| Black Finish

Hinges



Butt Hinge
| Black Finish



Butt Hinge
| Clear Anodize Finish

Push-Out Operation



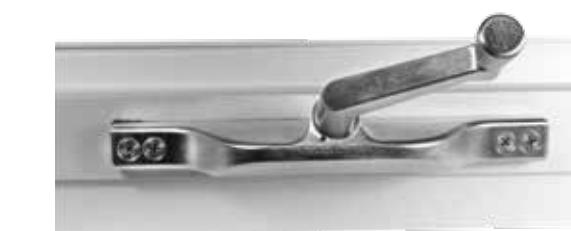
Concealed Friction Hinge*
| Stainless Steel Finish



p. 58, 60

Awning Window

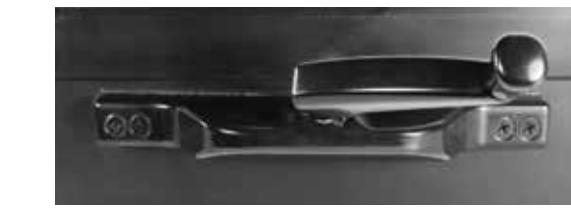
Roto Crank Operation



Roto Crank Handle | Standard
| Satin Nickel Finish



Casement Handle
| Satin Nickel Finish



Folding Roto Crank Handle | Optional
| Black Finish



Casement Handle
| Black Finish

Push-Out or Hopper Lock



Single Point Cam Handle*
| Satin Nickel Finish

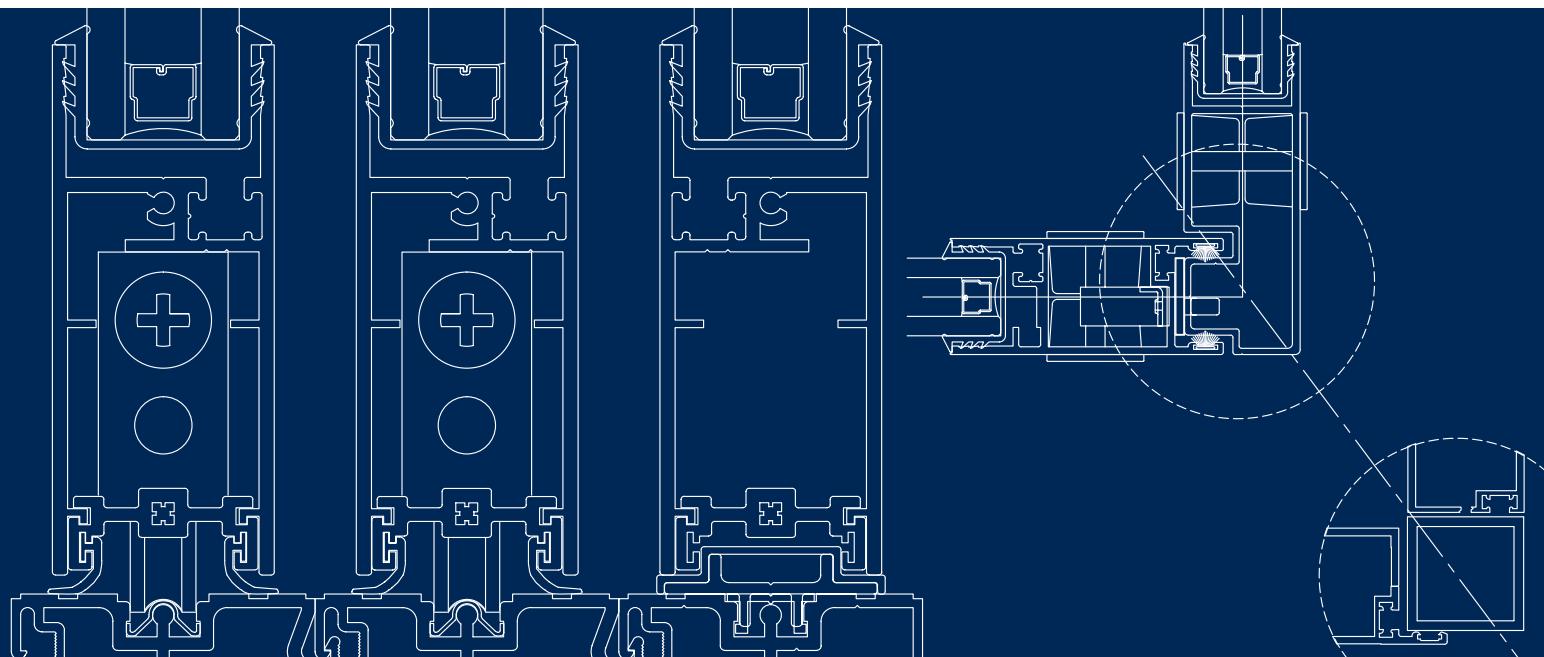


Single Point Cam Handle*
| Black Finish

*Multiple handles installed on windows over 46" tall.

*Sash weight not to exceed 100 pounds.

*Two handles installed on windows over 30" wide.



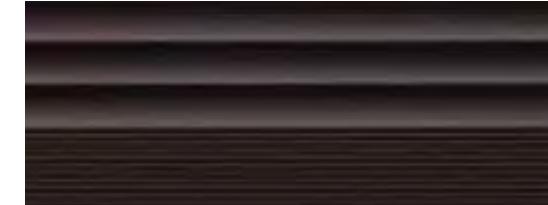
Arcadia Custom windows and doors can be personalized to fit your home. Choose your anodized or painted finish color, glass type and performance level, and select muntins to bring your home to life.

Down to the smallest details, window and door options abound for making your house a dream home.

Standard | Stock



Clear | AC-2



Standard Dark Bronze | AB-7

Premium



Light Champagne | AB-1



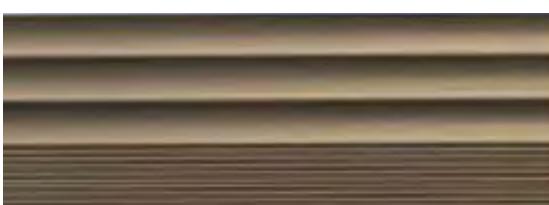
Dark Medium Bronze | AB-5



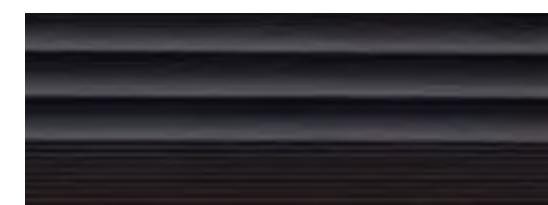
Champagne | AB-2



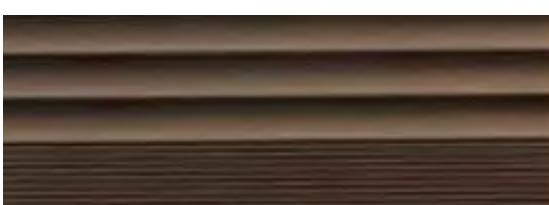
Dark Bronze | AB-6



Light Bronze | AB-3



Black | AB-8

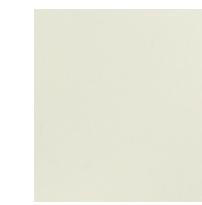


Light Medium Bronze | AB-4

Anodizing is a process where aluminum is submerged in electrically charged acid. This creates a chemical reaction that darkens the aluminum, giving it color and creating a very hard surface. The process and result is somewhat artistic and can create some color variation in the finish and from part to part. If exact color uniformity is desired, a painted finish is a better choice.

Actual finish colors shown may vary due to photography & printing. Ask your dealer for an actual anodize sample.

Kynar™ Paint



Bright White



Colonial White



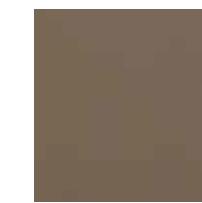
Sandstone



Bison Beige



Medium Bronze



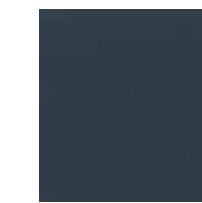
Sage Brown



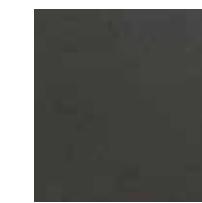
Brick Red



Slate Gray



Charcoal Gray



Statuary Bronze

Arcadia Custom's standard paint is a Kynar Fluoropolymer 2-coat system. The process consists of cleaning and pretreating the aluminum surface, a primer coat, then a baked-on color coat. Additional paint systems and custom colors are also available.

Actual finish colors shown may vary due to photography & printing. Ask your dealer for an actual paint sample.

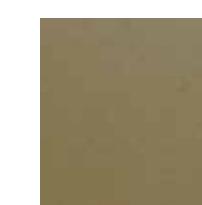
Anodize Paint



Clear Anodize | AC-2 Paint



Light Champagne | AB-1 Paint



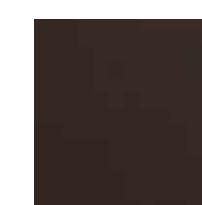
Champagne | AB-2 Paint



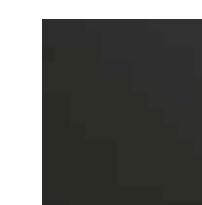
Light Bronze | AB-3 Paint



Light Medium Bronze | AB-4 Paint



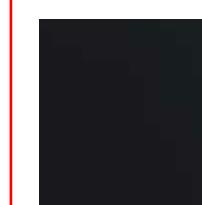
Dark Medium Bronze | AB-5 Paint



Dark Bronze | AB-6 Paint



Dark Bronze | AB-7 Paint



Black | AB-8 Paint

Actual finish colors shown may vary due to photography & printing. Ask your dealer for an actual paint sample.

Features

Glass Thicker, **1"** overall architectural-grade glass

Glass Makeup $\frac{1}{4}'' \times \frac{1}{2}'' \times \frac{1}{4}''$

Spacer High performance super spacer, Matte Black finish

Sound Improved sound absorption

Strength High windload resistance

Warranty 10-year limited warranty

High Performance Improved energy performance with latest Low-E technology and composite spacer

TDL/SDL Lite Grid Available in TDL [true-divided-lite] or SDL [simulated-divided-lite] options



Glass

Options Single-Glazed $\frac{1}{4}''$

Dual-Glazed **1"** OA

Triple-Glazed $1\frac{1}{2}''^* \text{ OA}$

Clear tempered

Clear laminated

Grey and Bronze tint

Low Iron – Ultra Clear

Guardian 62 | 27 Low-E

Guardian 70 | 36 Low-E

Guardian IS 20 [4th surface Low-E]

Other glass types available
upon request

Stainless steel spacer available

*Argon Glass

*High-Altitude Glass

*Impact Glass



Stainless Spacer | Optional



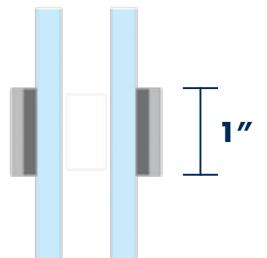
Triple-Glazed | Optional



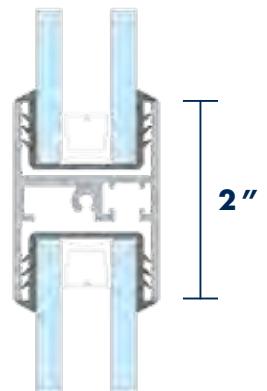
Triple **1 1/2"** overall glass thickness

Glass Makeup $\frac{1}{4}'' \times \frac{3}{8}'' \times \frac{1}{4}'' \times \frac{3}{8}'' \times \frac{1}{4}''$

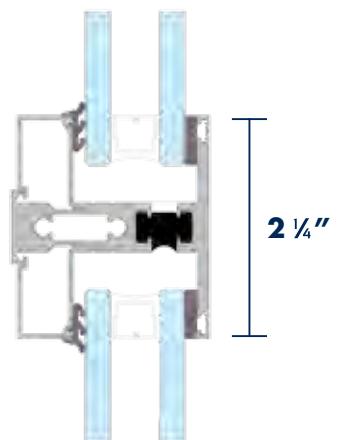
Use muntins to create interest or fit particular architectural designs. Arcadia Custom products can be ordered with custom grid patterns in either SDL or TDL options.

SDL | Simulated-Divided-Lite**SDL | Simulated-divided-lite**

Available in all products

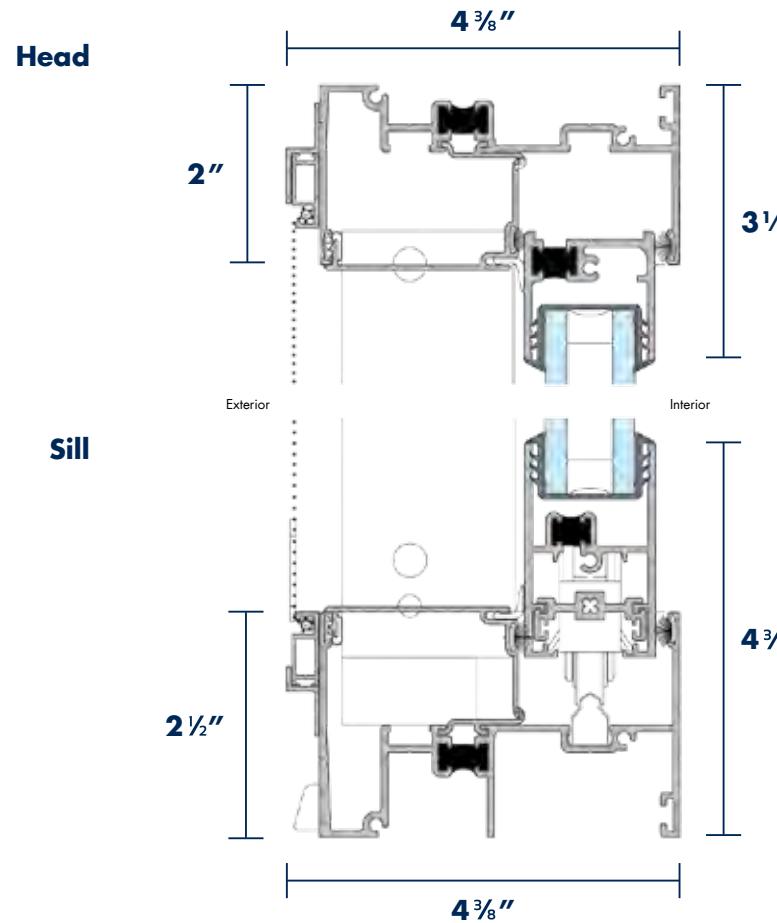
TDL | True-Divided-Lite**TDL | True-divided-lite****Sliding Door Detail**

Note: 2 3/4" width on ULT5500 and ULT5520

**TDL | True-divided-lite****Windows Detail**

ULT500 Thermal Sliding Window

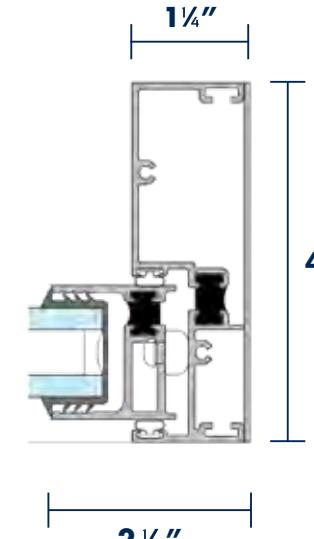
p. 64

Aluminum  Glass  Thermal Break 

Interlock

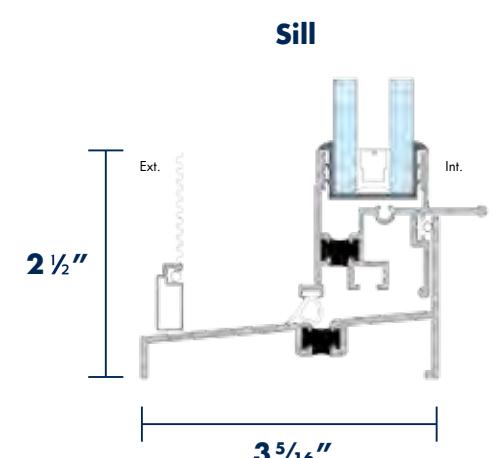
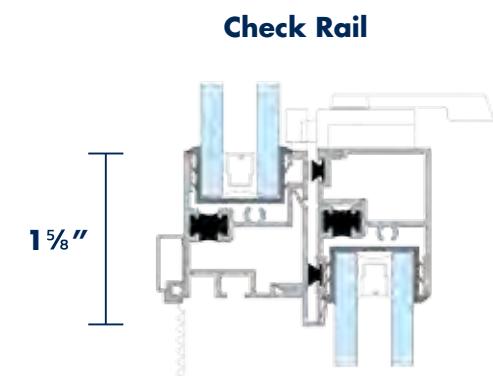
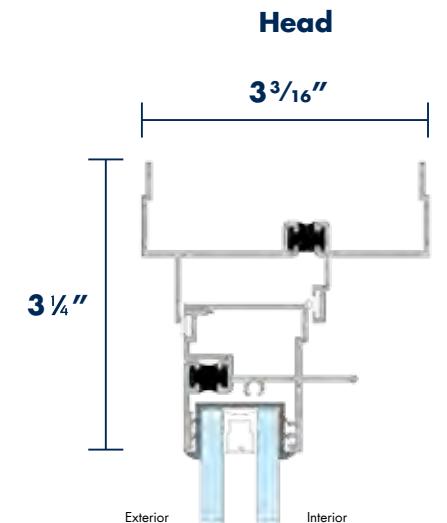


Fixed Sash Jamb

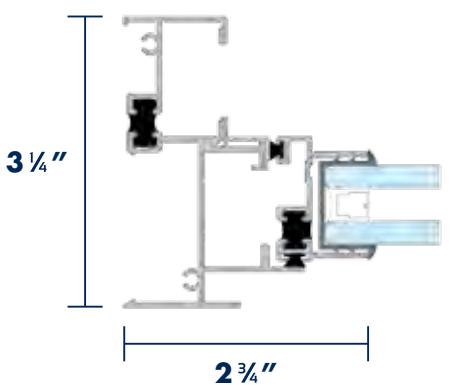


52 Thermal Single/Double Hung Window

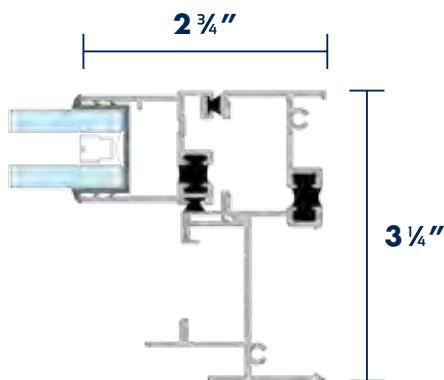
p. 66

Aluminum  Glass  Thermal Break 

Side Jamb



Side Jamb



For additional details or other configurations, see
arcadiacustom.com or contact your Arcadia Custom representative

For additional details or other configurations, see
arcadiacustom.com or contact your Arcadia Custom representative

SL3000UL SLIDE GATE OPERATOR

Section 32 31 00



DATA SHEET

Key Features

REMOTE CONTROL ACCESS

Security+ 2.0® 3-channel receiver will handle up to 50 remote controls (unlimited remotes with 811LM/813LM)

INTERNET CONNECTIVITY

myQ® technology monitors and controls the operator through the myQ app

MONITORED SAFETY INPUTS

6 inputs (main and expansion board)

DIAGNOSTIC DISPLAY

LED diagnostic display

WIRELESS DUAL-GATE COMMUNICATION

Eliminates expensive conduit costs and unsightly driveway scars

LIMIT SETTING

Mechanical

PROGRAMMABLE AUXILIARY RELAYS

Easily add additional features, such as warning lights/alarms

UNAUTHORIZED ACCESS PREVENTION

Can be programmed with anti-tailgate or quick close capabilities

HOMELINK® COMPATIBLE

Version 4 and higher

Specifications

OPERATOR SPEED

12 in. per second

POWER

120VAC single phase

ACCESSORY POWER

24VDC, 500mA output

OPERATOR WEIGHT

140 lbs.

WARRANTY

5 years commercial, 7 years residential

TEMPERATURE SPECIFICATIONS

Without heater: -4°F (-20°C) to 140°F (60°C); with optional heater: -40°F (-40°C) to 140°F (60°C)

UL USAGE CLASSIFICATION

UL 325 & UL 991 listed – class I, II, III and IV

Construction

MOTOR

High-temperature (1/2 HP or 1 HP) AC motor with class H insulation for high cycle, high-temperature applications

OPERATOR DUTY RATING

Continuous duty

CHASSIS/FRAME

Constructed with 1/4 in. gold zinc plated steel for rust prevention

GEAR REDUCTION

30:1 worm gear reducer in synthetic oil bath

CHAIN

#41 black oxide (50 ft. included)

COVER

High-density UV resistant one piece polyethylene plastic for excellent heat and corrosion resistance

RECOMMENDED CAPACITIES

1/2 HP rated for gates up to 50 ft. in length or weighing up to 1,000 lbs.
1 HP rated for gates up to 50 ft. in length or weighing up to 2,000 lbs.

Accessories

Important: Use only LiftMaster monitored entrapment protection devices itemized on the accessory page of the operators installation manual.



LiftMaster

POWERED BY myQ

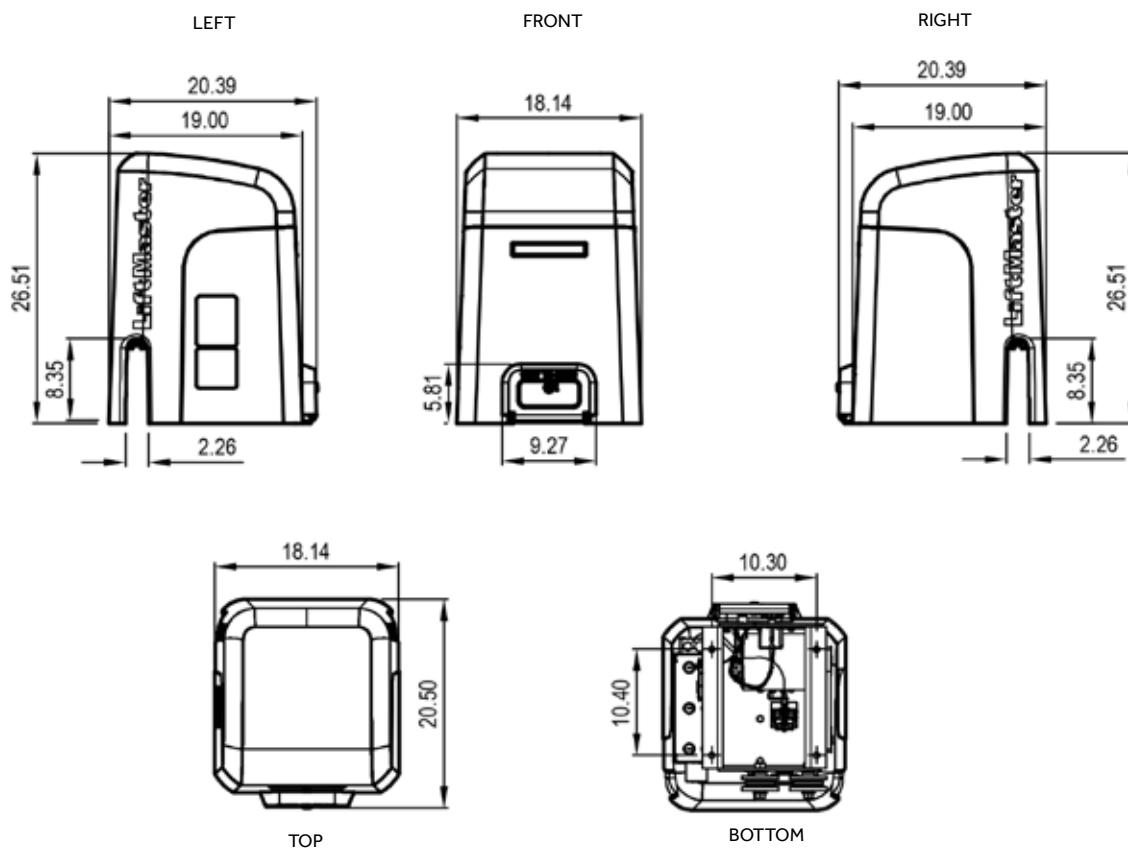
SL3000UL SLIDE GATE OPERATOR

Section 32 31 00

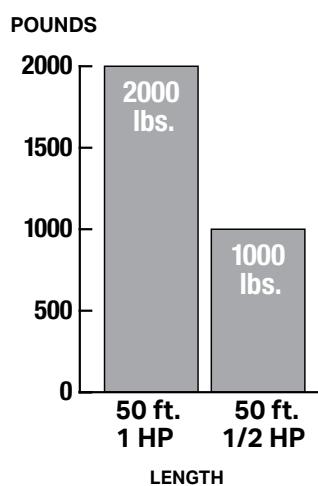


DATA SHEET

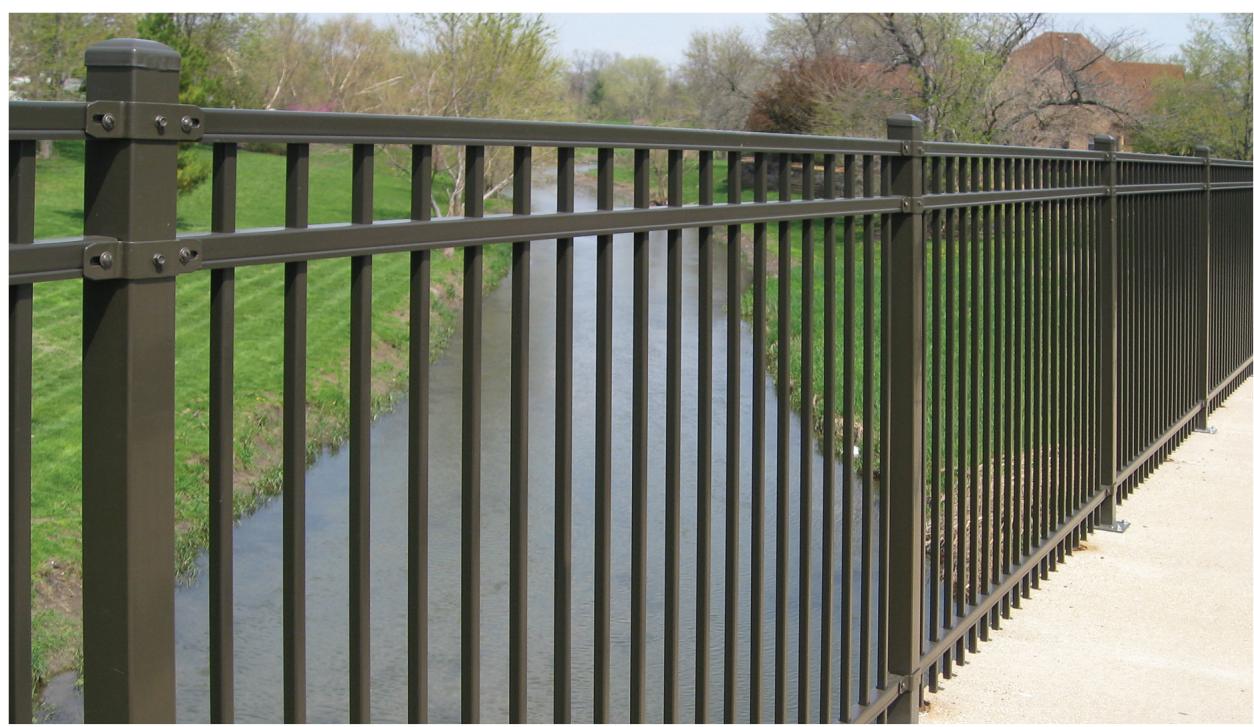
Dimensions



Capacity



MONTAGE PLUS®



ORNAMENTAL STEEL FENCE

Montage Plus ornamental steel fence has the *versatility to fit many different project applications*. With its ability to *traverse varying grades*, *variety of distinct product styles* and unmatched coating performance, Montage Plus is the *preferred choice for ornamental fence*.



PRIMARY APPLICATIONS

- *Commercial Developments*
- *Self Storage*
- *Apartments (Multi-Family)*
- *Parks & Recreation*
- *Schools & Universities*



AMERISTARFENCE.COM | 888-333-3422

ASSA ABLOY, the global leader in door opening solutions

AMERISTAR®

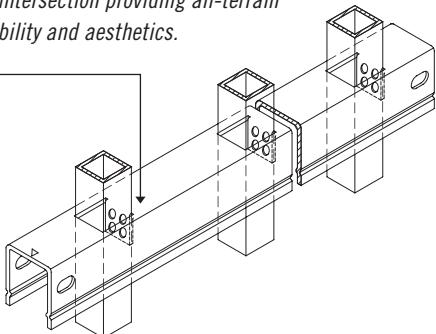
ASSA ABLOY

MONTAGE PLUS®

ORNAMENTAL STEEL FENCE

.75"sq x 18ga PICKETS | 1.4375" x 1.5" x 14ga RAILS | 2.5"sq x 16ga POSTS

Each picket is precisely welded at each rail intersection providing all-terrain flexibility and aesthetics.



STYLE OPTIONS



CLASSIC™



MAJESTIC™



GENESIS™



WARRIOR™

Also available in Pool, Pet & Play (3" air spacing) – styles vary

PROFUSION WELDED STEEL



PROFUSION WELDING

All Montage fence panels are fabricated using Ameristar's ProFusion welding process. This technique combines laser and fusion technology to create a virtually invisible structural connection at every picket to rail intersection. Unlike typical aluminum fence systems that are held together with unsightly screws, the ProFusion weld used with Montage promotes a "good neighbor" profile with sleek lines and no exposed picket to rail fasteners. When compared to aluminum fencing, Montage's welded steel construction is unmatched in strength and durability.



E-COAT™ PROTECTIVE FINISH

Montage galvanized steel framework is subjected to a multi-stage pre-treatment/wash (with zinc phosphate), followed by a duplex cathodic electrocoat system consisting of an epoxy primer, which significantly increases corrosion protection, and an acrylic topcoat, which provides the protection necessary to withstand adverse weathering effects. This process results in years of maintenance-free ownership.



20 YEAR LIMITED WARRANTY

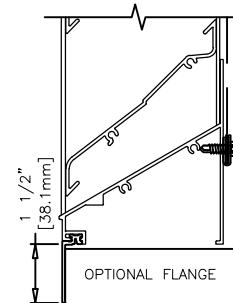
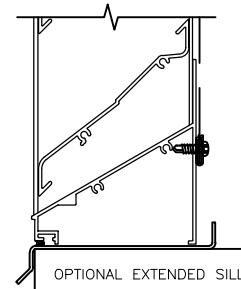
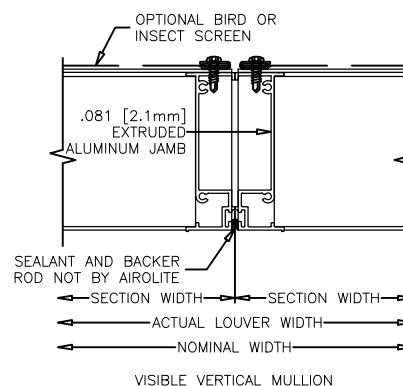
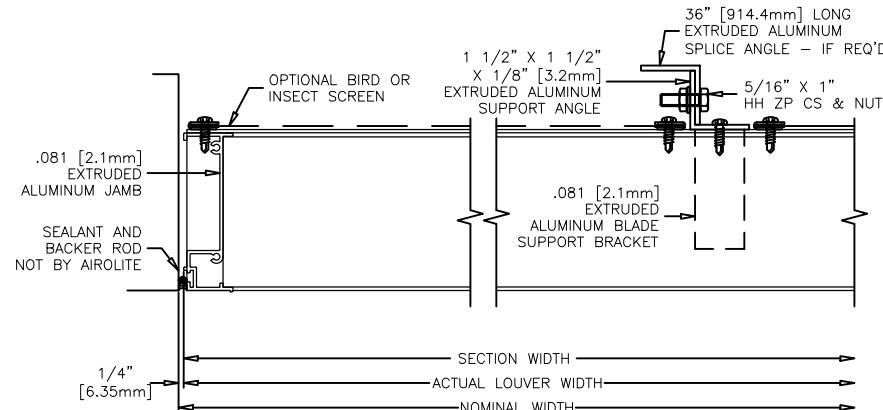
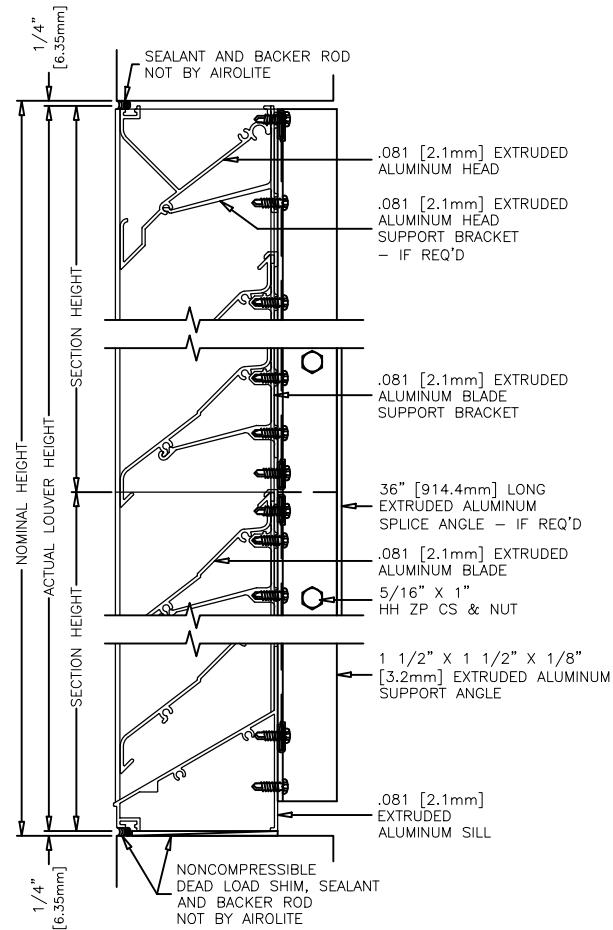
The Montage families of fencing products are manufactured from superior quality materials by skilled craftsmen with the highest standards of workmanship in the industry. Ameristar is confident in offering Montage with a 20 year limited warranty.



DOMESTIC MANUFACTURING

Ameristar is committed to providing products that are manufactured in the USA. We have made significant investments in technology, process improvement, and employee training in an effort to secure American jobs and combat inferior import products.





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SCALE: NTS

DATE: 6/20/2014 REV. NO: 03

FILE: K609HP

LOUVER TYPE
K609HP



Quality Access Doors- **FAST!**

DESCRIPTION

The Largest Fire-Rated Two Hour Ceiling Door Available With Double Doors and Removable Center Mullion. Double Leaf Allows Greater Accessibility and reduces the swing radius and clears objects which interfere with the opening of the door.

SPECIFICATION

MATERIALS: Satin finish galvannealed steel or 304 stainless steel

FRAME: 16 ga., up to and including 30" x 48". Larger sizes are 14 ga. Removable center mullion. Frame Depth "D" = 2 1/4" (57 mm).

FLANGE: 7/8" (22 mm) up to and including 36" x 36". Larger sizes are 1-1/4" (32mm).

DOOR PANEL: 18 ga. panel with 22 ga liner.

INSULATION: The door panel contains 1 1/2" of high temperature insulation material.

FINISHES: Rust-inhibitive off-white prime coat or # 4 polished stainless steel finish on exterior surface.

HINGES: Concealed continuous rod hinge. 48" or longer in wall position will be a continuous piano hinge. Stainless models have a stainless steel continuous piano hinge. Hinge is the (H) dimension.

PANEL CLOSER: The automatic panel closer will close & latch the door from an open position of approximately 90° as required by NFPA 80.

LATCH: The standard factory installed latch is a flush mount 1/4" allen key. All fire-rated locks are self-latching and include an interior latch release mechanism allowing the doors to be opened from the inside.

SIZES:

Minimum size 18" x 12"

Maximum size for walls is 48" x 60"

Maximum for ceilings is 60" x 48"

LATCH AND LOCK OPTIONS		
Standard (A) 1/4" Allen Key	Optional Knurled Knob (KK)	Optional Mortise Lock (MPI)

For a complete list of options visit
www.BestAccessDoors.com

Scan or Click



To view Pricing and
Additional Product Info.

SUBMITTAL/TECHNICAL DATA SHEET

SKU: **BA-FD2D**

FIRE-RATED ACCESS PANEL-DOUBLE DOOR

FOR WALLS AND CEILINGS



DIMENSIONS AND APPEARANCE

>> [CLICK TO VIEW ADDITIONAL DETAILS AND PRICING <<](#)

Rough Opening is Order Size W x H (H=Hinge Side)		No. of Latches/ Locks	Approx Weight Kgs	Approximate Weight Lbs.
Inches	Metric(mm)			
24 x 24	610 x 610	2	25	35
36 x 48	914 x 1219	2	39	85
40 x 40	1016 x 1016	2	38	84
40 x 48	1016 x 1219	4	43	94
48 x 36	1219 x 914	2	36	79
48 x 40	1219 x 1016	4	49	107
48 x 48	1219 x 1219	4	35	78
60 x 24	1524 x 610	2	41	90
60 x 30	1524 x 762	2	48	105
60 x 36	1524 x 914	4	42	93
60 x 40	1524 x 1016	4	52	114
60 x 48	1524 x 1219	4	61	135

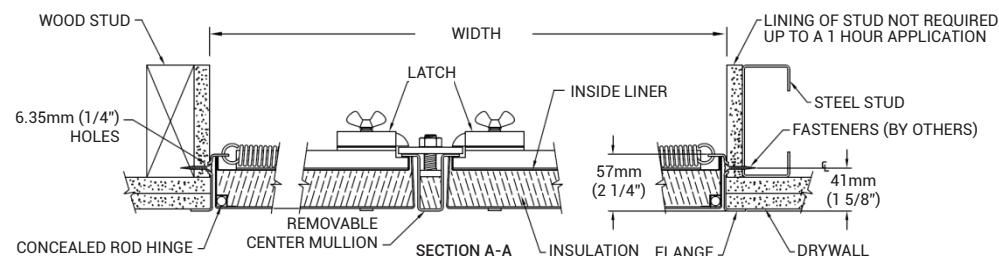
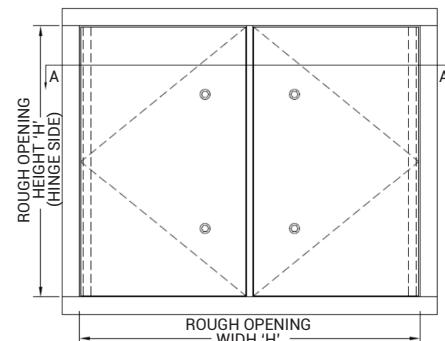
Net Opening = Width minus 6" (153mm)
Height minus 1-1/2" (39 mm)

Other sizes available upon request for all Models.
Second dimension given is the hinge side (shown in **Bold**) unless otherwise specified

Note:

Some Lock Options are not included in standard pricing.

Additional Sizes			
Rough Opening is Order Size W x H (H=Hinge Side)		No. of Latches/ Locks	Approx Weight Kgs
Inches	Metric(mm)		
24 x 60	610 x 1524	4	34
36 x 60	914 x 1524	4	51
40 x 60	1016 x 1524	4	54
48 x 60	1219 x 1524	4	64



PROJECT DATA

Custom Sizes Available - Fast!

PROJECT NAME :	QTY	W	H	OPTIONS
ARCHITECT :				
DEALER :				
CONTRACTOR :				
LOCATION :	SPECIAL INSTRUCTIONS :			
DATE :	SUBMITTAL APPROVAL : (signature or stamp)			
TAGGING INSTRUCTIONS :				

TELEPHONE:
1-800-483-0823
FAX:
1-888-828-6021

228 PARK AVE. S. #76520
NEW YORK, NY, 10003



WEBSITE:
www.BestAccessDoors.com
E-MAIL:
info@bestaccessdoors.com



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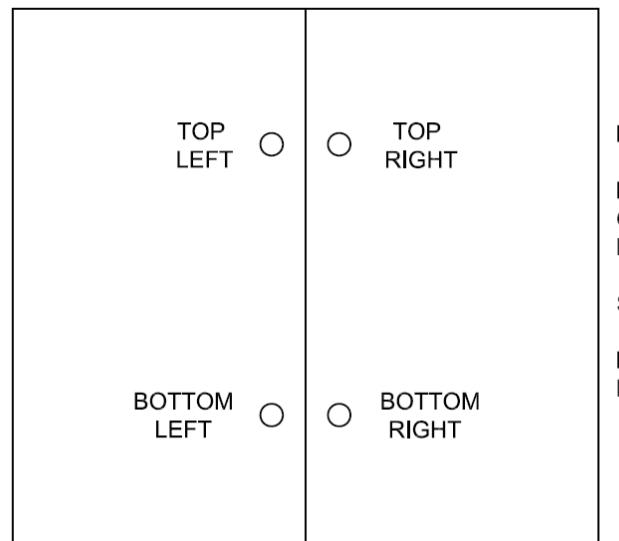
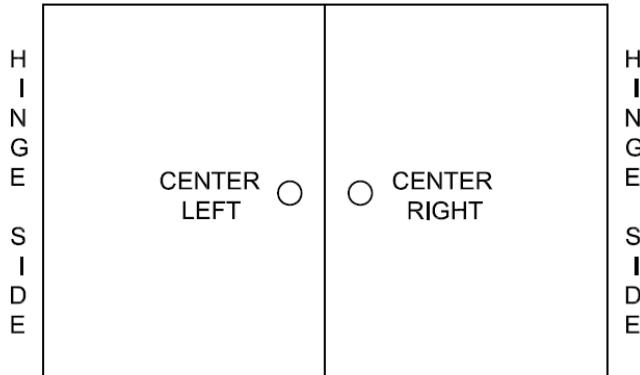
BA-FD2D

2 HOUR FIRE-RATED ACCESS PANEL - DOUBLE DOOR

SELECT LATCH AND LOCKS BELOW OR ON PAGE 3 :

FOUR LATCHES

TWO LATCHES



Center
Left



Latch and Lock Option For Centered Latches

- 1/4" Allen Key
- Raised Knurled Knob
- 1-1/8" Mortise Prep*
- 1-1/8" Mortise Prep with Cylinder*

Center
Right



Top Left



Latch and Lock Options For 4 Latches

- 1/4" Allen Key
- Raised Knurled Knob
- 1-1/8" Mortise Prep*
- 1-1/8" Mortise Prep with Cylinder*

Top Right



Bottom Left



- 1/4" Allen Key
- Raised Knurled Knob
- 1-1/8" Mortise Prep*
- 1-1/8" Mortise Prep with Cylinder*

Bottom Right



- Concealed Operator One Side Only - Select Operator for Other Side from Above Options

* Lock Option at Additional Cost

- Concealed Operator One Side Only - Select Operator for Other Side from Above Options

Example: If Concealed Operator is on Left Door, Select Top Right and Bottom Right Latch/Lock Options



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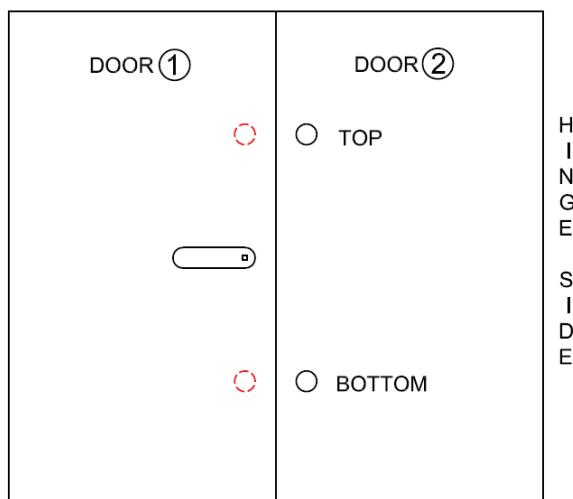
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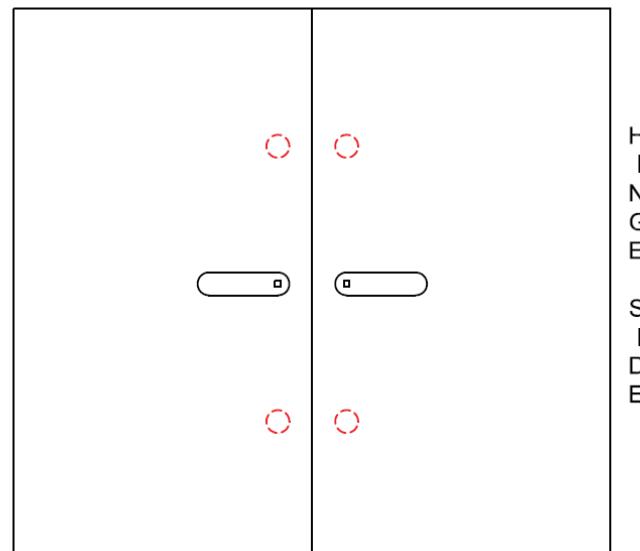
2 HOUR FIRE-RATED ACCESS PANEL - DOUBLE DOOR

SELECT LATCH AND LOCKS BELOW OR ON PAGE 2 :

ONE CENTRAL POINT HANDLE - FOUR LATCHES



TWO CENTRAL POINT HANDLES - FOUR LATCHES



DOOR 1: Central Point Handle Controls

Two Concealed Latches on Door (shown in Bold)

DOOR 2: Latch and Lock Options:

Latch and Lock Option	Top Right
Raised Knurled Knob	<input type="checkbox"/>
1-1/8" Mortise Prep*	<input type="checkbox"/>
1-1/8" Mortise Prep with Cylinder*	<input type="checkbox"/>

Latch and Lock Option	Bottom Right
Raised Knurled Knob	<input type="checkbox"/>
1-1/8" Mortise Prep*	<input type="checkbox"/>
1-1/8" Mortise Prep with Cylinder*	<input type="checkbox"/>



Central Point Handle Controls on Both Doors
Two Concealed Latches on Each Door

* Lock Option at Additional Cost



Quality Access Doors- **FAST!**

SUBMITTAL



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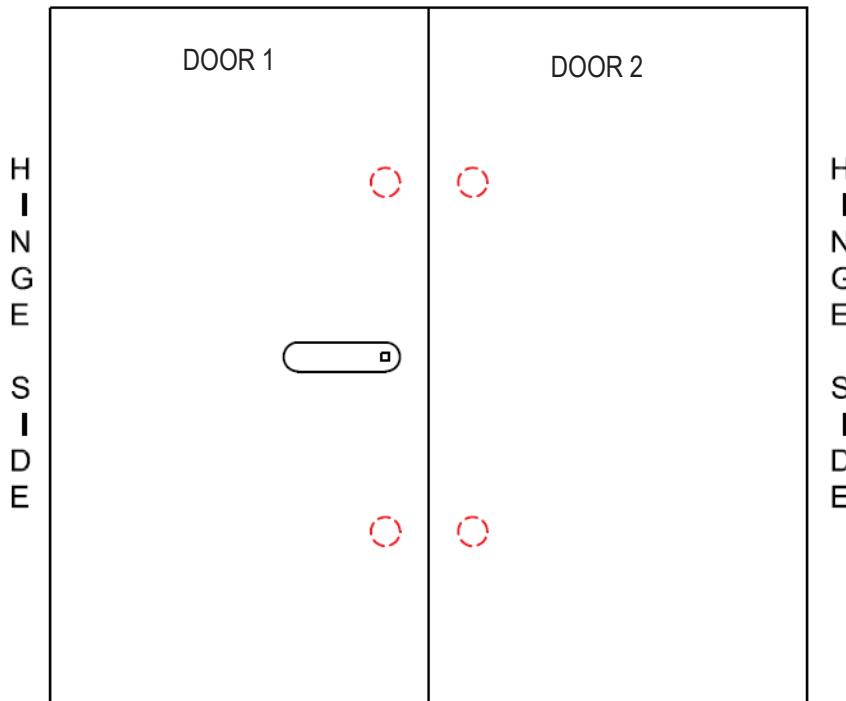


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E-MAIL:
info@bestaccessdoors.com

BA-FD2D

2 HOUR FIRE-RATED ACCESS PANEL - DOUBLE DOOR

ONE CENTRAL POINT HANDLE - FOUR LATCHES



DOOR 1

Central Point Handle Controls Two Concealed Latches on Door.



DOOR 2

Two Concealed Latches on Door, Operable from the Inside Only.



TruDefinition®
DURATION® COOL Plus

Asphalt Shingles with Patented SureNail® Technology



TruDefinition® Duration® Cool Plus Midnight™





A BOLD COMBINATION OF PERFORMANCE AND STYLE

TRUDEFINITION® DURATION® COOL Plus

TruDefinition® Duration® COOL Plus Shingles with patented SureNail® Technology offer exceptional performance combined with unique color options to enhance your home's curb appeal. They are specifically designed with solar-reflecting granules to help decrease the amount of heat transferred into your home while providing bold color contrast and added dimension. They also come with the advanced performance of patented SureNail® Technology—a technological breakthrough in roofing that offers excellent holding power over standard shingles.

- Meets the Green Building Standards Code of Los Angeles County and California Title 24, Part 6 Cool Roof Requirements
- Patented SureNail® Technology
- Limited Lifetime Warranty (for as long as you own your home*)^{†‡}
- 130-MPH Wind Resistance Limited Warranty*
- Coordinates with color-matched Owens Corning® Hip & Ridge shingles for a finished look

TRUDEFINITION® DURATION® COOL Plus



Options that Exceed 20+ SRI

Owens Corning offers a wide array of shingle choices that meet or exceed an aged SRI of 20 – the current aged Solar Reflectance Index minimum required for the Green Building Standards Code of Los Angeles County and Los Angeles City Cool Roofs Ordinance.

20+ SRI

TruDefinition® Duration® COOL Plus Shingles with SureNail® Technology



Cliffside Gray[†]



Copper Trail[†]



Golden Meadow[†]



Midnight[†]



Mystic Gray[†]



Prairie Wood[†]



Rolling Stone[†]

20+ SRI

TruDefinition® Duration® COOL Shingles with SureNail® Technology



Amber[†]



Oyster Shell[†]



Shasta White[†]



Sierra Gray[†]



COOL Roof Collection

	Colors	CRRC Product ID	Solar Reflectance	Thermal Emittance	Solar Reflectance Index (SRI)
TruDefinition® Duration® COOL Plus	Cliffside Gray ^{^^}	0890-0031	0.21◊	0.91◊◊	21††
	Copper Trail ^{^^}	0890-0030	0.21◊	0.92◊◊	21††
	Golden Meadow ^{^^}	0890-0033	0.21◊	0.94◊◊	22††
	Midnight ^{^^}	0890-0038	0.21◊	0.91◊◊	21††
	Mystic Gray ^{^^}	0890-0032	0.21◊	0.93◊◊	22††
	Prairie Wood ^{^^}	0890-0035	0.20◊	0.92◊◊	20††
	Rolling Stone ^{^^}	0890-0034	0.21◊	0.93◊◊	22††
TruDefinition® Duration® COOL	Amber ^{^^}	0890-0009	0.23	0.92	24
	Oyster Shell ^{^^}	0890-0012	0.23	0.93	24
	Shasta White ^{^^}	0890-0008	0.29	0.87	29
	Sierra Gray ^{^^}	0890-0013	0.20	0.92	20

Owens Corning® shingle products listed above are also found on the CRRC Rated Product Directory: <http://coolroofs.org/products/results>.



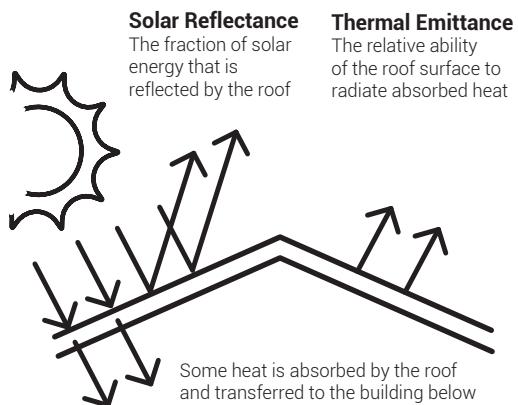
HELP SAVE ENERGY CONFIDENTLY MEET CODE

Cool Roof Requirements in California and Other Compliance Programs

- Meet the Green Building Standards Code of Los Angeles County
- Meet the prescriptive Cool Roof requirements of California Title 24, Part 6
- Are Cool Roof Rating Council (CRRC) rated
- Meet Property Assessed Clean Energy (PACE) financing program requirements
- May help lower household energy consumption by keeping the roof cooler; also may help decrease CO₂ emissions



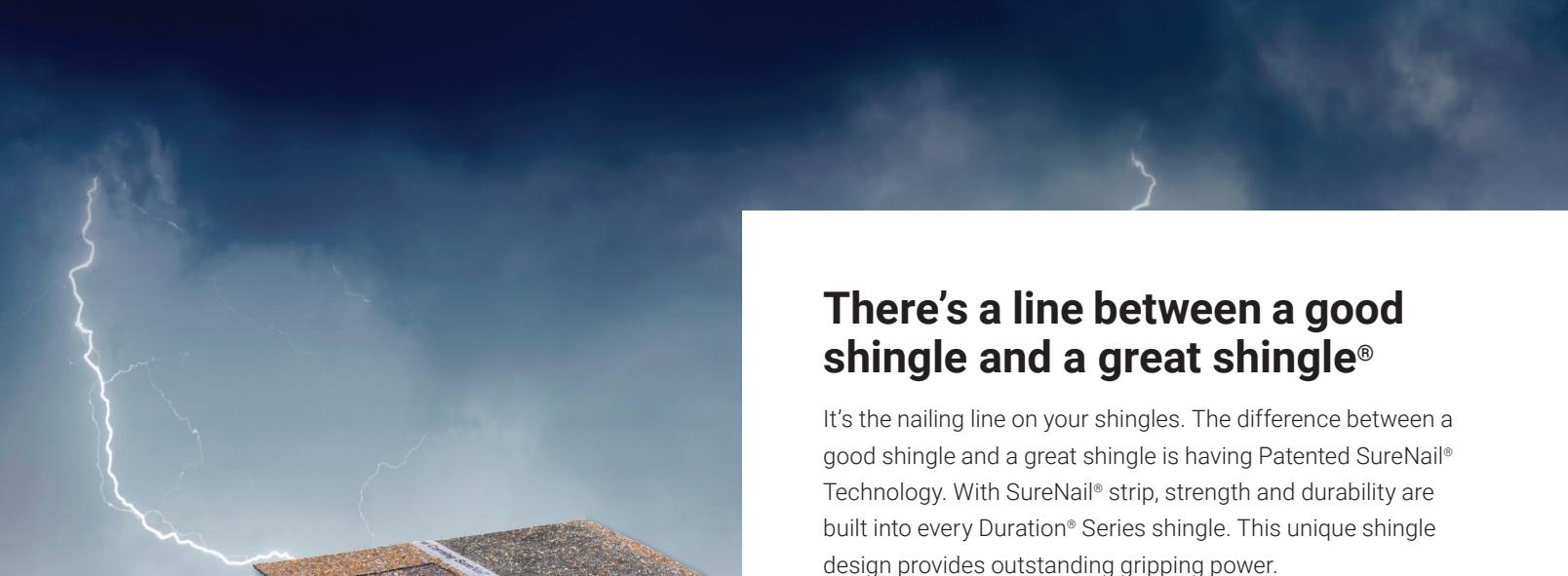
How a roof reacts to heat from the sun



Adapted from the Cool Roof Rating Council (coolroofs.org)

Contact your local contractor to learn more about code requirements in your area.

20+ SRI



There's a line between a good shingle and a great shingle®

It's the nailing line on your shingles. The difference between a good shingle and a great shingle is having Patented SureNail® Technology. With SureNail® strip, strength and durability are built into every Duration® Series shingle. This unique shingle design provides outstanding gripping power.



Excellent Adhesive Power

Helps keep the shingle layers laminated.

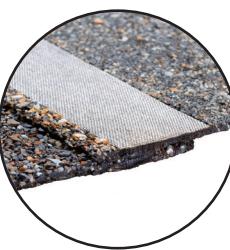
Outstanding Grip

The SureNail® strip enhances the already amazing grip of our proprietary Tru-Bond®[®]^{††} sealant for exceptional wind resistance of a 130-MPH wind warranty.*



Breakthrough Design

Patented SureNail® Technology is the first and only reinforced nailing zone on the face of the shingle.



Triple Layer Protection[®]^{††}

A unique "triple layer" of reinforcement occurs when the fabric overlays the two shingle layers, called the common bond area.

Double the Common Bond

SureNail® features up to a 200% wider common bond area in the nailing zone over standard shingles.

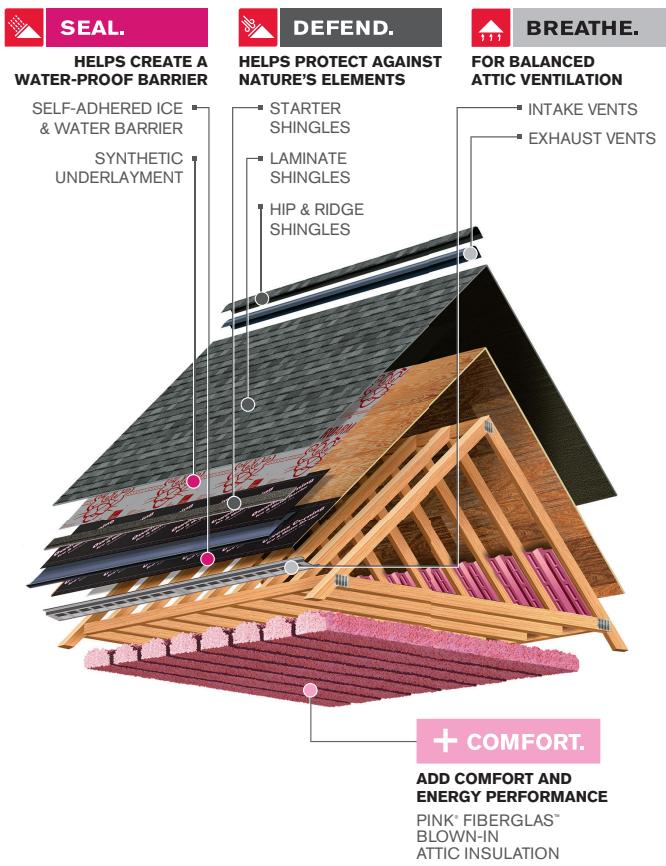
"No Guess" Wide Nailing Zone

This tough, engineered woven-fabric strip is embedded in the shingle to create an easy-to-see strong, durable fastener zone.

SEAL. DEFEND. BREATHE.[®]

TOTAL PROTECTION ROOFING SYSTEM[®]

It takes more than just shingles to protect a home. It takes an integrated system of components and layers designed to perform in three critical areas. The Owens Corning[®] Total Protection Roofing System[®][^] gives you the assurance that all of your Owens Corning[®] roofing components are working together to help increase the performance of your roof.



OWENS CORNING ROOFING AND ASPHALT, LLC
ONE OWENS CORNING PARKWAY
TOLEDO, OH 43659 USA

1-800-GET-PINK[®] | 1-800-438-7465
www.owenscorning.com

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All Rights Reserved.

Product Attributes	TruDefinition [®] COOL Duration [®] Plus Shingles	TruDefinition [®] COOL Shingles
Warranty Length*	Limited Lifetime ^{§‡}	Limited Lifetime ^{§‡}
Wind Resistance Limited Warranty*	130 MPH	130 MPH
TRU PROtection[®] Non-Prorated Limited Warranty* Period	10 Years	10 Years
Nominal Size	13 ¹ / ₄ x 39 ³ / ₈	13 ¹ / ₄ x 39 ³ / ₈
Application Exposure	5 ⁵ / ₈	5 ⁵ / ₈
Shingles per Square	64	64
Bundles per Square	3	3
Coverage per Square	98.4 sq. ft.	98.4 sq. ft.

Applicable Standards and Codes

ASTM D228

ASTM D3018 (Type 1)

ASTM D3161 (Class F Wind Resistance)

ASTM D3462

ASTM D7158 (Class H Wind Resistance)

ASTM E108/UL 790 (Class A Fire Resistance)

ICC-ES AC438[#]

PRI ER 1378E01

* See actual warranty for complete details, limitations and requirements.

† Owens Corning strives to accurately reproduce photographs of shingles. Due to manufacturing variances, the limitations of the printing process and the variations in natural lighting, actual shingle colors and granule blends may vary from the photo. The pitch of your roof can also impact how a shingle looks on your home. We suggest that you view a roofing display or several shingles to get a better idea of the actual color. To accurately judge your shingle and color choice, we recommend that you view it on an actual roof with a pitch similar to your own roof prior to making your final selection. Color availability subject to change without notice. Ask your professional roofing contractor for samples of colors available in your area.

‡ SRI calculation based on calculated aged solar reflectance and initial thermal emittance. SRI is calculated using California Energy Commission SRI calculator worksheet and it is calculated in accordance with ASTM E1980.

§ For as long as you own your home.

◊ Aged solar reflectance calculated based on equation provided in California Energy Code (Title 24, Part 6).

◊◊ Indicates initial thermal emittance.

^^ Features Patented SureNail[®] Technology.

‡ 40-year Limited Warranty on commercial projects.

International Code Council Evaluation Services Acceptance Criteria for Alternative Asphalt Shingles.

^ Excludes non-Owens Corning[®] roofing products such as flashing, fasteners, pipe boots and wood decking.

‡‡ Tru-Bond[®] is a proprietary premium weathering-grade asphalt sealant that is blended by Owens Corning.

For patent information, please visit www.owenscorning.com/patents.

SureNail[®] Technology is not a guarantee of performance in all weather conditions.

SureNail[®] Technology is available only on Owens Corning[®] Duration[®] Series Shingles.

++ The amount of Triple Layer Protection[®] may vary on shingle-to-shingle basis.

CIRRUS® High NRC CIRRUS® High CAC & CIRRUS®

Tegular
medium texture



TOTAL ACOUSTICS®
Sound Absorption (NRC)
+ Sound Blocking (CAC)



SUSTAIN®
High Performance
Sustainable
Ceiling Systems



24/7 DEFEND™
Solutions for Healthier,
Safer Spaces

CONTAIN CLEAN PROTECT

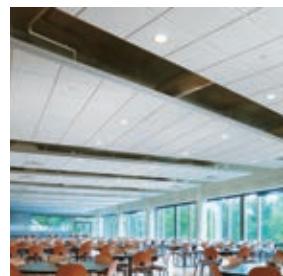


▲ Cirrus® Beveled Tegular panels with Suprafine® XL® 9/16" suspension system

CAD/Revit® drawings at:
armstrongceilings.com/cadrevit



DESIGNflex®
A New World of Choice
for Ceiling Systems



See more photos at:
armstrongceilings.com/photogallery
SEARCH: cirrus

Medium-texture panels offer both Sustain® and Total Acoustics® panel performance; Good noise reduction and sound blocking in one panel.

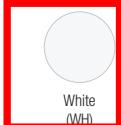
KEY SELECTION ATTRIBUTES

- DESIGNFlex® options include made-to-order sizes available to ship in 3 weeks
- Get total noise control and floor plan versatility with Total Acoustics® ceiling panels: NRC + CAC = Total Acoustics performance
- Cirrus® panels are part of the Sustain® portfolio, and meet the most stringent sustainability compliance standards today
- **new** CleanAssure™ family of products – includes disinfectable panels, suspension systems, and trim
- **new** New colors to complement interiors
- Excellent combination of acoustical performance: NRC up to 0.75 and CAC 35
- High NRC items feature Articulation Class 170 helpful to control sound over wall partitions
- Ceiling-2-Ceiling™ post-consumer recycled content options. Items 589HRC, 539HRC, 584HRC, 535HRC. 71% pre-consumer; 15% post-consumer
- Mold- and mildew-resistant surface
- USDA-Certified Biobased Product – 91%
- 10-Year replacement panel available for items 584, 589



COLORS

Due to printing limitations, shade may vary from actual product.



White
(WH)



Ivory
(IV)



Medium Taupe
(MT)



Light Grey
(LG)



Items 535, 539, 584 and 589 are available in colors. Colored ceilings are dye-lotted and should be segregated by dye lot. Do not mix.



DETAILS

(Other Suspension Systems compatible. Refer to listing on next page.)



1. Cirrus® Angled Tegular
2. Cirrus® Beveled Tegular
3. Cirrus® Angled Tegular with Prelude® XL® 15/16" suspension system
4. Cirrus® Beveled Tegular with Suprafine® XL® 9/16" suspension system

CIRRUS® High NRC

Regular
medium texture

USDA
CERTIFIED
BIOBASED
PRODUCT
PRODUCT 91%

Declare.

SUSTAIN®
High Performance
Sustainable Ceiling Systems

GREENGUARD
Gold Certified
(details below)

LEED®
WELL™
LBC

UP TO
73%
RECYCLED
CONTENT

LOCATION DEPENDENT

Calculate sustainability with GreenGenie™
armstrongceilings.com/green genie

VISUAL SELECTION

armstrongceilings.com/catdwgs	Susp. Dwg.	Item No.	Dimensions (Inches)	
CIRRUS® High NRC	13	556	24 x 24 x 7/8"	<input type="checkbox"/>
15/16" Angled Tegular		551	24 x 48 x 7/8"	<input type="checkbox"/>

PERFORMANCE SELECTION

UL Classified Acoustics	Total Acoustics ¹	Articulation Class	Fire Performance	Light Reflect	Bio-Block	Humi-Guard+ Certified Low VOC Emissions	CleanAssure™ Disinfectable Panels	Durability	Recycle Program	30-Yr Warranty
$\text{NRC} + \text{CAC}$ = 		170	Class A	0.85	•	•	•	Std	•	•
0.75 •	35 •	BETTER 	170 •	Class A	0.85 •	•	Std	•	•	10-Yr

9/16" Beveled Tegular	29, 44, 48, 52, 56	558	24 x 24 x 7/8"	<input type="checkbox"/>
		568	24 x 48 x 7/8"	<input type="checkbox"/>

0.75 •	35 •	BETTER 	170 •	Class A	0.85 •	•	•	•	Std	•
0.75 •	35 •	BETTER 	170 •	Class A	0.85 •	•	Std	•	•	10-Yr

7/8" Thick – 15/16" Angled Tegular & 9/16" Beveled Tegular

Made-to-Order Sizes
CIRRUS® High NRC

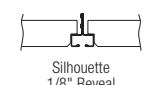
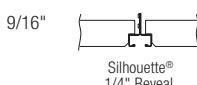
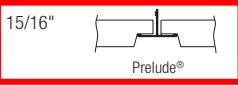
3-4
WEEKS
order to ship

Width	Length	N/A	N/A	N/A	N/A	Class A	0.85	•	Std	•	•	Std	•	10-Yr
4" - 24"	4" - 48"													

¹ Total Acoustics® ceiling panels have an ideal combination of sound absorption and sound blocking in one product.
GOOD (NRC 0.60-0.65; CAC 35+) BETTER (NRC 0.70-0.75; CAC 35+) BEST (NRC 0.80+; CAC 35+)

MORE ITEMS ►

SUSPENSION SYSTEMS



PHYSICAL DATA

Material

Wet-formed mineral fiber

Surface Finish

Factory-applied latex paint

Fire Performance

Class A: ASTM E84 and CAN/ULC S102 surface burning characteristics. Flame Spread Index of 25 or less. Smoke Developed Index of 50 or less (UL labeled).

ASTM E1264 Classification

Type III, Form 1, Pattern E I

Fire Class A

Humidity/Sag Resistance

HumiGuard® Plus ceiling panels are recommended for areas subject to high humidity, up to, but not including, standing water and outdoor applications.

Anti-Mold/Mildew

Ceiling tiles with BioBlock® performance resist the growth of mold and mildew on the tile surface.

VOC Emissions

GREENGUARD Gold Certified

Third-party certified compliant with California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017. This standard is the guideline for low emissions in LEED®, WELL Building Standard™, Living Building Challenge® (LBC), CalGreen Title 24, ANSI/ASHRAE/USGBC/IES Standard 189; ANSI/GBI Green Building Assessment Protocol.

Acoustic Performance

CAC testing conducted using Silhouette® suspension system.

Primary (Embodied) Energy

See all LCA information on our EPDs.

High Recycled Content

Contains greater than 50% total recycled content. Total recycled content based on product composition of post-consumer and pre-consumer (post-industrial) recycled content per FTC guidelines.



Insulation Value

R Factor – 1.9 (BTU units)

R Factor – 0.33 (Watts units)

Cleaning and Disinfecting

Cleaning and CDC recommended disinfecting options available on armstrongceilings.com/cleaning

30-Year Performance Guarantee & Warranty

When installed with Armstrong® Suspension System. Details at armstrongceilings.com/warranty

Weight; Square Feet/Carton

551 – 1.21 lbs/SF; 48 SF/ctn

556, 558 – 1.50 lbs/SF; 40 SF/ctn

568 – 1.25 lbs/SF; 48 SF/ctn

Metric Items Available

551M, 558M, 568M – Metric items are subject to extended lead times and minimum quantities. Contact your representative for more details.

MINERAL FIBER – Standard

CIRRUS® High CAC

Tequelar
medium texture

USDA
CERTIFIED
BIOBASED
PRODUCT
PRODUCT 91%

SUSTAIN®
High Performance
Sustainable Ceiling Systems

Declare.

GREENGUARD
Gold Certified
(details below)

LEED®
WELL™ LBC

UP TO
73%
RECYCLED
CONTENT

Calculate sustainability with GreenGenie™
armstrongceilings.com/greenenie

energy management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
construction waste mgmt													
regional materials													
design for flexibility													
EPD													
recyclable/ extended producer resp.													
biobased materials													
recycled content													
sourcing of raw materials													
material ingredient reporting													
low emitting/ low offgassing materials													
lighting quality													
acoustics													

LOCATION DEPENDENT

VISUAL SELECTION

armstrongceilings.com/catdwgs	Susp. Dwg.	Item No.	Dimensions (Inches)	
CIRRUS® High CAC	13	572	24 x 24 x 7/8"	<input type="checkbox"/>

15/16"
Angled Tegular

armstrongceilings.com/catdwgs	Susp. Dwg.	Item No.	Dimensions (Inches)	
		581	24 x 48 x 7/8"	<input type="checkbox"/>

armstrongceilings.com/catdwgs	Susp. Dwg.	Item No.	Dimensions (Inches)	
9/16" Beveled Tegular	29, 44, 48, 52, 56	576	24 x 24 x 7/8"	<input type="checkbox"/>

armstrongceilings.com/catdwgs	Susp. Dwg.	Item No.	Dimensions (Inches)	
		583	24 x 48 x 7/8"	<input type="checkbox"/>

PERFORMANCE SELECTION

UL Classified Acoustics $\text{NRC} + \text{CAC} = \text{Total Acoustics}$	Articulation Class	Fire Performance	Light Reflect	Anti-Mold/ Mildew	Bio-Block	Humi-Guard+ Certified Low VOC Emissions	CleanAssure™ Disinfectable Panels	Fog	Durability	Recycle Program	\$\$\$\$
0.70	40	BETTER	N/A	Class A	0.85	•	•	•	Std	•	•
0.70	40	BETTER	N/A	Class A	0.85	•	•	•	Std	•	10-Yr
0.70	40	BETTER	N/A	Class A	0.85	•	•	•	Std	•	•
0.70	40	BETTER	N/A	Class A	0.85	•	•	•	Std	•	10-Yr

3/4" Thick – 15/16" Angled Tegular & 9/16" Beveled Tegular

Made-to-Order Sizes

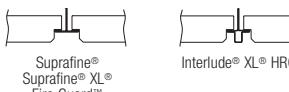
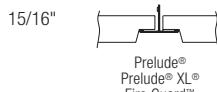
1 Ctn Min
FASTSIZE
3 WEEKS
order to ship

CIRRUS®
High CAC

Width	Length
12" - 24"	12" - 48"

N/A	N/A	N/A	N/A	Class A	0.85	•	Std	•	•	Std	•	10-Yr

SUSPENSION SYSTEMS



PHYSICAL DATA

Material

Wet-formed mineral fiber

Surface Finish

Factory-applied latex paint

Fire Performance

Class A ASTM E84 and CAN/ULC S102 surface burning characteristics. Flame Spread Index of 25 or less. Smoke Developed Index of 50 or less (UL labeled).

Fire Guard™: A fire-resistant ceiling when used in applicable UL assemblies (Class A)

ASTM E1264 Classification

Type III, Form 1, Pattern E I; Fire Class A

Humidity/Sag Resistance

HumiGuard® Plus ceiling panels are recommended for areas subject to high humidity, up to, but not including, standing water and outdoor applications.

Design Considerations

Color ceilings are dye-lotted and should be segregated by dye lot. Do not mix. Coordinating suspension system colors are available.

Anti-Mold/Mildew

Ceiling tiles with BioBlock® performance resist the growth of mold and mildew on the tile surface.

VOC Emissions

GREENGUARD Gold Certified

Third-party certified compliant with California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017. This standard is the guideline for low emissions in LEED®, WELL Building Standard™, Living Building Challenge® (LBC), CalGreen Title 24, ANSI/ASHRAE/USGBC/IES Standard 189; ANSI/GBC Green Building Assessment Protocol.

Acoustic Performance

CAC testing conducted using Silhouette® suspension system.

Primary (Embodied) Energy

See all LCA information on our EPDs.

High Recycled Content

Contains greater than 50% total recycled content. Total recycled content based on product composition of post-consumer and pre-consumer (post-industrial) recycled content per FTC guidelines. HRC items contain 15% or greater post-consumer recycled ceilings.



Insulation Value

R Factor – 1.9 (BTU units)

R Factor – 0.33 (Watts units)

Cleaning and Disinfecting

Cleaning and CDC recommended disinfecting options available on armstrongceilings.com/cleaning

30-Year Performance Guarantee & Warranty

When installed with Armstrong® Suspension System.

Details at armstrongceilings.com/warranty

Weight; Square Feet/Carton

572, 576 – 1.38 lbs/SF; 40 SF/ctn

581, 583 – 1.21 lbs/SF; 48 SF/ctn

Minimum Order Quantity

1 carton

Metric Items Available

572M, 581M, 583M – Metric items are subject to extended lead times and minimum quantities. Contact your representative for more details.

MINERAL FIBER – Standard

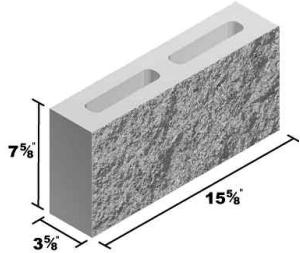
TechLine / 1 877 276-7876
armstrongceilings.com/cirrus

BPCS-3012-221

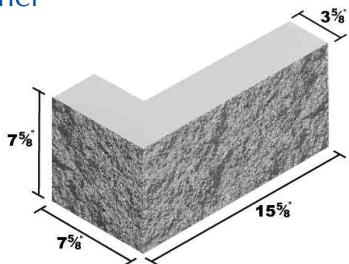
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Armstrong
CEILING & WALL SOLUTIONS

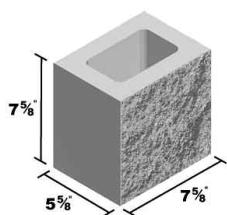
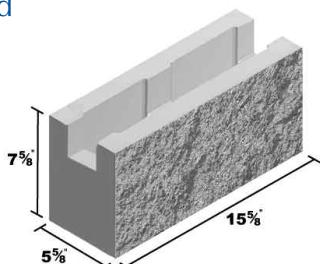
4x8x16 Standard



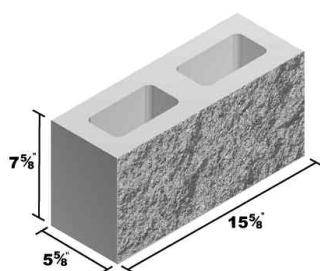
4x8x16x8 L Corner



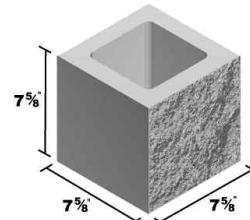
6x8x8 Half


 6x8x16 Closed End
 Bond Beam


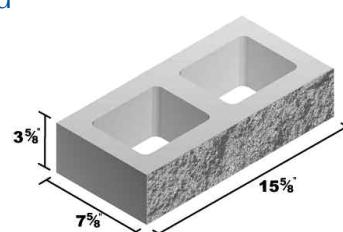
6x8x16 Standard



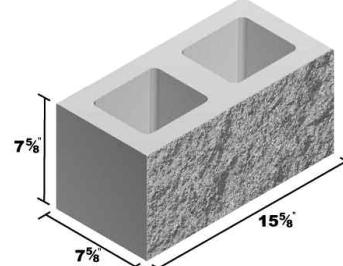
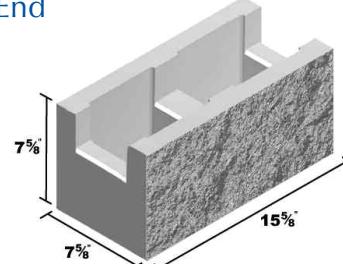
8x8x8 Half



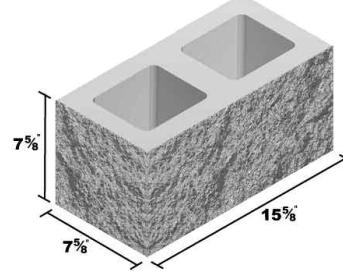
8x4x16 Standard



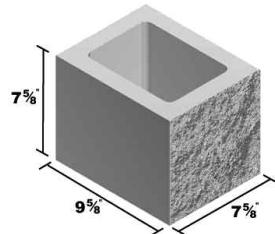
8x8x16 Standard


 8x8x16 Closed End
 Bond Beam


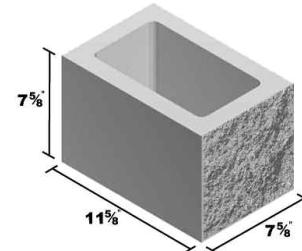
8x8x16 Corner



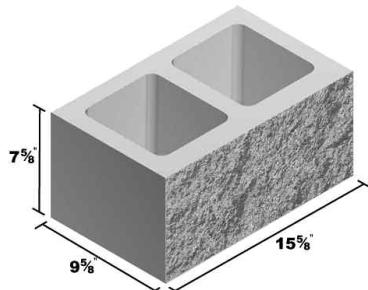
10x8x8 Half



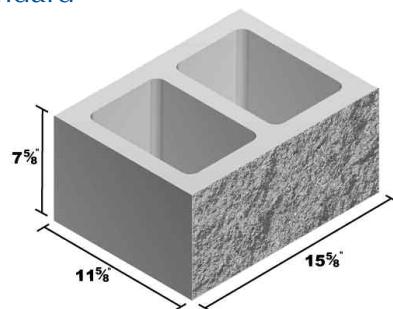
12x8x8 Half



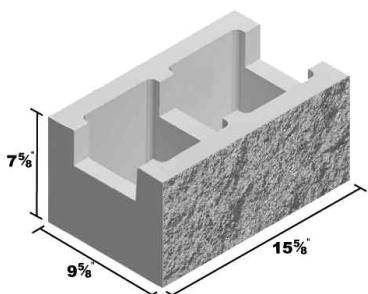
10x8x16 Standard



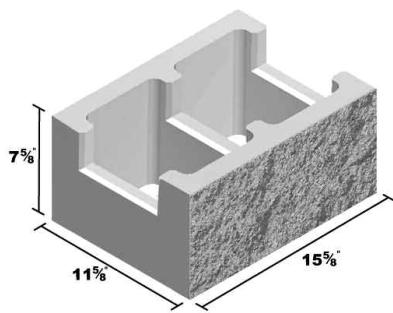
12x8x16 Standard



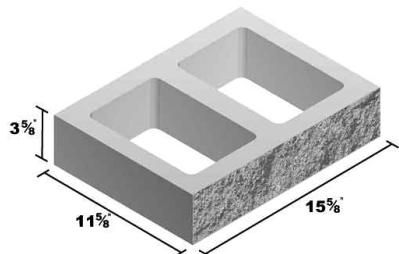
10x8x16 Closed End
Bond Beam



12x8x16 Closed End
Bond Beam



12x4x16 Standard



La Habra® Color Collection



PAREXUSA



COMPARISON OF CEMENTITIOUS AND ACRYLIC FINISHES

Feature	Cementitious	Acrylic
Application Thickness	1/8 inch (3 mm) Helps to compensate for wall irregularities.	1/16 inch (1.5 mm) Does not easily hide wall irregularities.
Ease of Application	More labor intensive than acrylic stucco finish. Usually requires mortar mixer.	Less labor intensive than cement stucco finish. No jobsite plaster mixer required.
Application Temperature Range	40°F (4.4°C) to 120°F (49°C).	40°F (4.4 °C) to 120°F (49°C).
Ease of Clean-Up	Less difficult than acrylic stucco finish.	More difficult than cementitious finish, since it can stain surrounding surfaces. Solvents may be required to remove dried finish from surrounding materials..
Vapor Permeability	Highly vapor permeable.	Vapor permeable, greater than 10. Perm rating will vary by the texture of the acrylic stucco finish.
Initial Color Consistency on Wall	Surface color may vary, due to substrate conditions, slightly creating a mottled look (can be made more consistent with Allegro II or Fog Coat).	Excellent initial color consistency on wall, more color uniformity than cementitious finish.
Assortment of Colors	Good range of colors, but limited in comparison to acrylic stucco finish. Custom and darker colors are more difficult to match with cementitious finishes.	Unlimited colors are possible. Colors are easily matched in acrylic finishes.
Finish Appearance	Good depth of color and texture. Mottling may appear, due to job and application conditions.	Very uniform.
Range of Textures	Numerous textures may be achieved depending on applicators skill. (Smooth hard trowel to heavy Spanish).	Range of textures are available depending on the skill of the applicator and aggregate gradation in acrylic finish. Heavy Spanish type of texture not easily achieved.
Color Permanency/Uniformity	More color permanency than acrylic finish. Colors typically darken with age. Good uniformity, but not as good as with an acrylic finish.	Colors are very uniform, but may fade over time. Some darker colors may fade faster than others.
Fire Resistance	Contributing to 1/8 inch (3 mm) to required 7/8 thickness of portland cement plaster for fire resistance.	Adds no resistance, rating achieved through increased 7/8" base coat.
Material Costs	Lower initial material costs than acrylic finish.	Higher initial material costs than cementitious finish
Hairline Cracking	Hairline cracking transferring from base coat is not uncommon.	Good crack resistance, transferred base coat cracks very low or much less than cementitious finish.
Color Matching	Good color matching.	Excellent color matching.
Regular Maintenance	Little maintenance required. Can be routinely washed.	Little maintenance required. Can be routinely washed.
Repair Maintenance	Less expensive to replace or upgrade. Lower refurbish/ repair/material costs than acrylic finish.	More expensive to replace or upgrade. Higher refurbishing/ repair costs in comparison to cementitious finish.
Crack Resistance	Finish is rigid because of the cementitious chemistry. Cementitious stucco finish is applied over a cementitious base coat.	Finish is flexible due to the acrylic chemistry. Acrylic Finish is applied over a cementitious base coat or as the topcoat of EIFS.
Underlayment		
Life Cycle	Jobs have performed for over 50 years without repair or recoating.	Jobs have performed for over 30 years without repair or recoating.

LaHabra®
www.lahabastucco.com

Corporate Office

Parex USA, Inc.
4125 E. La Palma Ave., Suite 250
Anaheim, CA 92807
(866) 516-0061
Tech Support: (800) 226-2424

Facilities

French Camp, CA
North Hollywood, CA
Riverside, CA
Colorado Springs, CO
Haines City, FL
Duluth, GA
Redan, GA
Albuquerque, NM
Allentown, PA
San Antonio, TX



PAREX USA
SUSTAINABILITY

ACRYLIC & ELASTOMERIC FINISHES

LaHabra, who is the pioneer of Base and Package Color Systems within the stucco industry, proudly offers Acrylic Finishes in a Base/Liquid Color System. LaHabra acrylic finish is a 100% acrylic-based material that provides a decorative and protective coating over above-grade vertical cementitious substrates. An acrylic finish is a product that is made-up of polymers, aggregates, mineral fillers and integral colorants. It is trowel or spray applied to provide the final coat for EIFS, stucco, masonry, concrete or other substrates. Finishes have aggregate that will provide both texture and gauge thickness.

LaHabra Acrylic Finishes

- Add beauty and durability to any project. With the latest acrylic technology, LaHabra Acrylic Finishes provide bright, uniform, enduring color that will last for many years with minimal maintenance. Acrylic Finishes are durable coatings that provide color and texture over LaHabra Fastwall Stucco Base, brown coat, cast-in-place concrete, and other approved substrates.
- Liquid color is available in 4 oz. and 8 oz. bottles.
- Available in over 30 standard colors and unlimited custom colors.
- 75 additional standard colors available on the Parex USA color chart.

Acrylic Finish Advantages:

✓ <i>Economical</i>	✓ <i>Vapor Permeable</i>
✓ <i>Easy Installation</i>	✓ <i>Integral, Fade Resistant Colors</i>
✓ <i>Weather-Resistant</i>	✓ <i>Strong bonding</i>

Perma-Flex Stucco Grade Acrylic Finish (Good)

Apply stucco grade acrylic finish over properly prepared stucco, masonry and concrete surfaces. For use over stucco bases. Not to be used on EIFS.



Perma-Finish EIFS & Stucco Finish (Better)

Premium highly durable, textured finish for EIFS, masonry, stucco, concrete or interior surfaces. Finishes offer remarkable resistance to dirt and stains.



Perma-Elastic Elastomeric Finish (Best)

Supreme, highly durable and elongating textured finishes for masonry, stucco, and concrete. Especially recommended for surfaces with existing hairline cracks. Elastomeric resist UV and weathering, are highly flexible, withstand thermal shock and provide final color and texture.



At LaHabra, quality is part of everything we do. Since 1926, we have made it a cornerstone of our company. Our products come from the best raw materials available. Our manufacturing standards lead the industry. Our commitment to color quality and precision is unparalleled. But even more important, we know our most valuable asset is our customer. We stand proudly behind the legendary LaHabra service: our hallmark for over 80 years. For more Acrylic and Elastomeric standard colors, please refer to the Parex USA color chart.

COLOR CHART APPLIES TO STUCCO COLOR COAT, ACRYLIC AND ELASTOMERIC FINISHES, ALLEGRO II AND FOG COAT.

Specify product when placing order.

X = Stucco Color Coat

A = Acrylic and Elastomeric Finishes

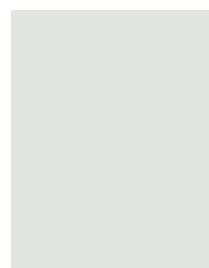
AL = Allegro II

DX = Fog Coat

STANDARD COLORS



12 CHABLIS (74) BASE 100



16 SILVER GREY (57) BASE 200



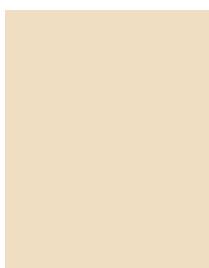
17 MISTY (48) BASE 200



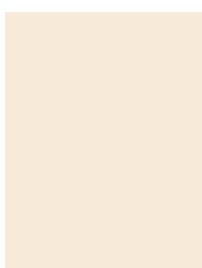
23 ASPEN (60) BASE 200



24 SANTA FE (50) BASE 200



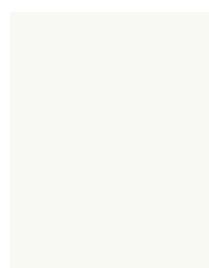
25 SADDLEBACK (52) BASE 200



28 MIRAGE (56) BASE 200



34 SAN SIMEON (61) BASE 200



40 DOVE GREY (66) BASE 200



48 MEADOWBROOK (73) BASE 100



50 CRYSTAL WHITE (79) BASE 100



53 PURE IVORY (74) BASE 100



55 FRENCH VANILLA (71) BASE 100



71 MIAMI PEACH (61) BASE 100



72 ADOBE (50) BASE 200



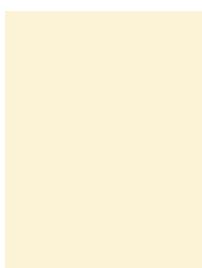
73 EGG SHELL (76) BASE 100



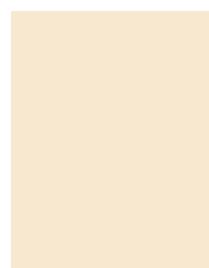
81 OATMEAL (68) BASE 200



82 HACIENDA (59) BASE 200



86 SANDSTONE (63) BASE 200



97 PACIFIC SAND (57) BASE 200



215 MESA VERDE (48) BASE 200



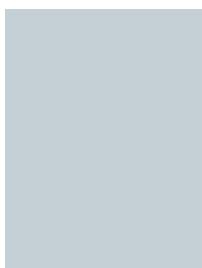
278 TRABUCO (42) BASE 200



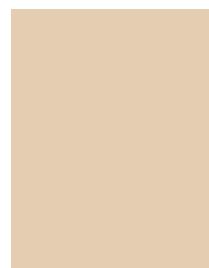
434 FALLBROOK (42) BASE 200



475 VIEJO (47) BASE 200



504 BLUE GREY (47) BASE 200



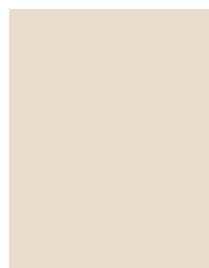
524 ALAMO (43) BASE 200



580 SIERRA TAN (44) BASE 200



696 SOUTHERN MOSS (42) BASE 200



820 SILVERADO (48) BASE 200

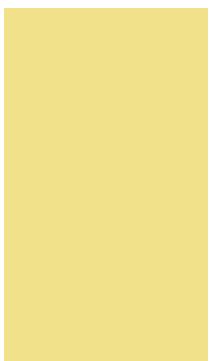


830 CLAY (40) BASE 200

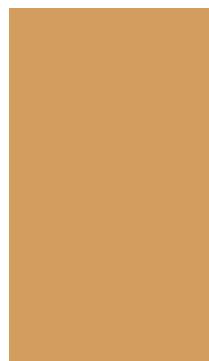
PREMIUM LIFESTYLE COLORS



14495 BEAUFORT (43) BASE 100



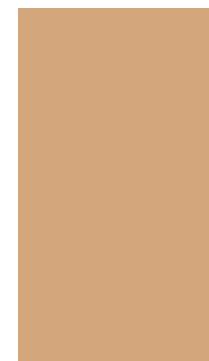
14496 BISCAYNE (39) BASE 100



63149 HATTERAS (24) BASE 100



63151 HANOVER (33) BASE 100



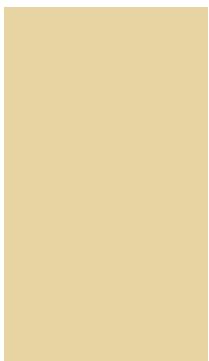
63152 ASHENVILLE (29) BASE 100



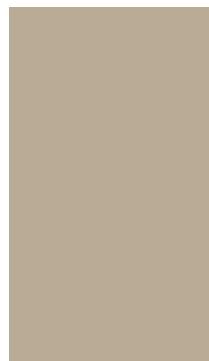
81582 CORAL GABLES (25) BASE 100



81583 BELLE GLADE (27) BASE 100



81584 SUFFOLK (34) BASE 100



81585 CHARLESTON (34) BASE 100



81586 HIALEAH (36) BASE 100



81588 MORNING SIDE (30) BASE 100



81593 BAY RIDGE (32) BASE 100

LIGHT REFLECTANCE VALUE: (xx) = Percent of light reflected from the surface. (100% = white, 0% = black). The higher the number, the less UV light the color absorbs and the greater the reflectance. Values are based off of stucco 16/20 float. Other textures and products may vary slightly.

NOTE: These colors are intended to show the approximate color of 16/20 float finish stucco. Color will vary depending on type of finish selected. Application by machine spray or texturing will increase the depth of color. Variation in color due to weather, job conditions and method of application should be expected. For color verification, request an actual sample in the color and texture prior to ordering material. Apply a sample of stucco to be used on actual substrate before proceeding with the application. LaHabra is not responsible for color correctness of applied finish. Color must be verified and approved by owner prior to application.

Premium Lifestyle Colors: special pricing applies.

CEMENTITIOUS STUCCO PRODUCTS

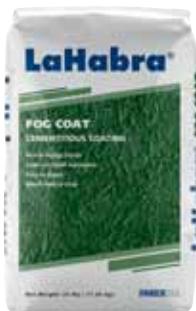


Exterior Stucco Color Coat

Stucco is a cementitious colored finish applied over a cement stucco base coat.

Color Pack

To color, mix with powder color pack



Fog Coat

Fog Coat is an economical, cement-based colored stucco coating used to repair or refresh the color of stucco.



Allegro II

Allegro II is a revolutionary polymer-modified, economical cement-based colored stucco coating that allows stucco to breathe. Allegro II can be used to change color or to refresh and recolor old stucco. Unlike paint, Allegro II can be applied over fresh stucco and won't blister or peel like paint.

Liquid Color

To color, mix with liquid color bottle.

CEMENTITIOUS EXTERIOR STUCCO COLOR COAT

Why Stucco

Stucco is the best value and the most efficient wall finish available. It is a tried and true finish with a proven long-term and well-documented history. Providing a variety of textures, beauty, durability, and fire-resistance properties, portland cement stucco is the obvious choice for your home.

Beautiful Integral Colors

Cement stucco uses iron oxide pigments to achieve its color. These inorganic minerals give the colors a rich and natural look. Integral colored exterior stucco is a mechanically blended compound of portland cement, hydrated lime, sand aggregates, and iron oxide pigments. Since the stucco is internally colored, it never needs to be painted.

Like many natural materials, cement stucco will appear slightly different during each season. With proper curing, age, and exposure to the elements, portland cement stucco may slightly darken over time enhancing the color. This is a unique characteristic of stucco not easily duplicated by other claddings.

Durable

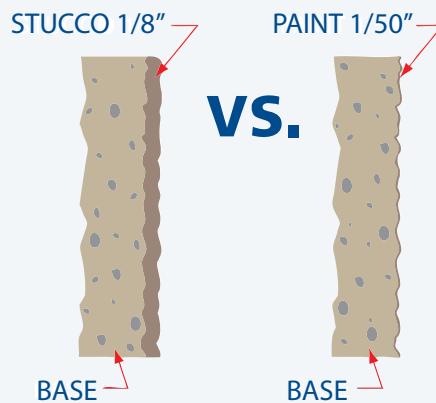
When applied correctly, cement stucco is a tough, fire-resistant material that will not fade or peel. Minimal care will keep portland cement stucco looking attractive for years and with simple maintenance it will last nearly a lifetime. The simple act of washing with water once every six months will keep the surface clean and the colors bright.

Moisture Protection

During construction, homes have a water-resistive barrier installed, in accordance with the building code. The water-resistive barrier and flashing provide the moisture protection on the exterior walls. Stucco is a cladding that covers the water-resistive barrier. Cement plaster assemblies are considered to be drainable claddings. Any incidental moisture that finds its way behind the stucco will stop at the water-resistive barrier and run down to a weep screed where it will drain from the wall. In addition, stucco is extremely breathable with a rating as high as 30 to 60 perms. Since stucco is vapor permeable, any moisture that gets in and does not drain, will in turn, escape from the system as vapor. Painting stucco will reduce the perm rating drastically.

Durable & Long-Lasting

The 1/8" finish coat of stucco covers a minimum 1/2" to 3/4" cement stucco base. These multiple layers provide a tough integrated shield for your home's exterior walls. The through-color finish does not need to be repainted after years of exposure to sun, wind or cold compared to ongoing maintenance required of other non-cement based exterior finishes. As a dense cement product, stucco assemblies (base & stucco) resist noise from nearby streets and can be a fire-resistant barrier component, providing up to a one-hour fire rating for your home's security.



WEST COAST ONLY

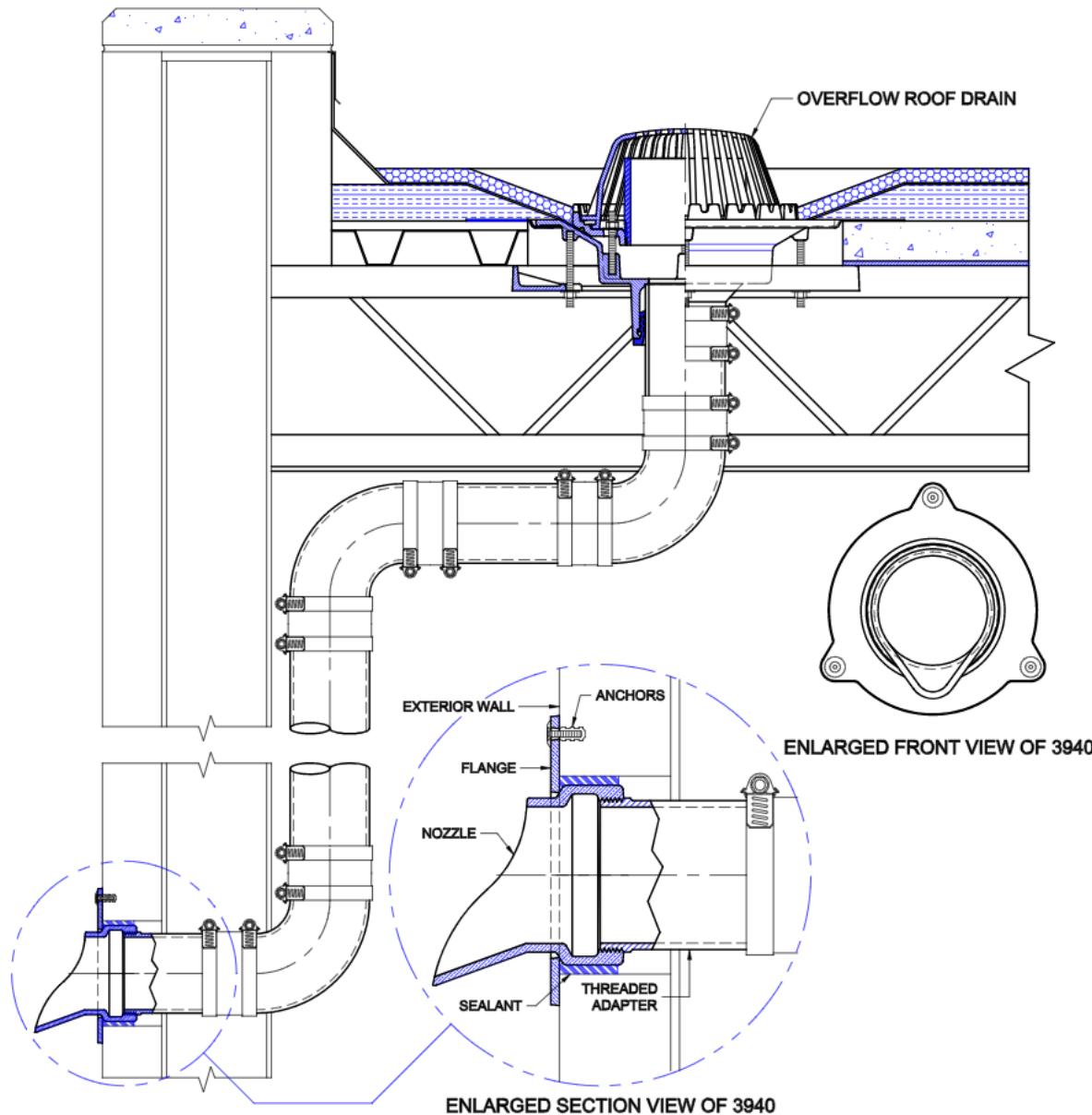
OVERFLOW DOWNSPOUT NOZZLE

WADE

3940

CAST BRONZE OVERFLOW DOWNSPOUT NOZZLE WITH THREADED OUTLET AND FLANGE TO SECURE NOZZLE TO WALL.

Approval Date	
Customer Approval	Wade Division / Tyler Pipe Assumes No Responsibility For Superseded or Voided Data
Job Location	Subject to Manufacturers Tolerance and Change Without Notice.
Dimensional Data (Inches/mm)	are Subject to Manufacturers Tolerance and Change Without Notice.



INSTALLATION

The Wade 3940 downspout nozzle is used in conjunction with overflow roof drains to convey storm water outside the building. The bronze construction provides excellent corrosion resistance as well as maintaining an attractive appearance.

1. The piping from the overflow is run to a predetermined location at a lower level in the building. The piping is connected to the nozzle with a threaded adapter through the exterior wall. The pipe must be supported to accept thrust loads and sealed at the wall opening.
2. Provide proper backing to secure the wall flange. Holes are provided for 1/4" anchors.



Triumph

Product Specification

1. PROPRIETARY PRODUCT/MANUFACTURER

1.1. **Proprietary Product:** Triumph Rubber Multi-functional and Sports Floor Tiles designed specifically for weight room, ice rinks, and other high impact applications. Skate-and-spike resistant product.

1.2. Manufacturer:

Tarkett North America
30000 Aurora Rd.
Solon, Ohio 44139
Web: www.tarkettna.com
E-mail: info@Tarkett.com

Phone: (800) 899-8916
(440) 543-8916

1.3. Proprietary Product Description:

1.3.1. **Construction:** Tarkett Triumph Rubber Multi-functional and Sports Floor Tiles are manufactured of dual durometer layers composed of 100% synthetic and natural rubber, high quality additives, and colorants.

All Tarkett Triumph Rubber Multi-functional and Sports Floor Tiles are designed for interior applications only and not recommended for environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials (e.g.: commercial kitchens).

1.3.2. Physical Characteristics:

Square Tiles (Glue down tiles): 24" x 24" (61 cm X 61 cm), .375" (9.5 mm) thickness, wear layer thickness of 0.090" (2.3 mm), 13.3 lbs (6.0 kgs) per tile, 40 lbs (18 kgs) per carton, 3 tiles per carton [12 ft² (1.1 m²)], 4 ft² per tile

Interlocking Tile (Loose lay): 24" x 24" (61 cm X 61 cm) net, .375" (9.5 mm) thickness, wear layer thickness of 0.090" (2.3 mm), 12.6 lbs. (5.7 kg) per tile, 38 lbs (17.2 kgs) per carton, 3 Interlocking tiles per carton [11 ft² (1.03 m²)], 3.67 ft² per tile

SlideLock™ Tile (studded back): 24" x 24" (61cm x 61cm) net, .375" (9.5 mm) thickness, wear layer thickness of 0.090" (2.3 mm), 12.8 lbs (5.8 kgs) per tile, 38 lbs (17.2 kgs) per carton, 3 SlideLock tiles per carton [12 ft² (1.1 m²)], 4 ft² per tile

1.3.3. Styles:

SMH - Triumph Hammered Surface Rubber Multi-functional and Sports Floor Square Edge Tiles

SMHI - Triumph Hammered Surface Rubber Multi-functional and Sports Floor Interlocking Tiles

SMHSL - Triumph Hammered Surface Rubber Multi-functional and Sports Floor SlideLock Tiles

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

- **Abrasion Resistance:** ASTM D 3389 – less than 1 gram weight loss.
- **Acoustical:** ASTM E 492 (Impact Insulation Class) - 59 IIC
- **Hardness:** ASTM D 2240 – 70 Shore A
- **Slip Resistance (ASTM D 2047):** ≥ 0.5 SCOF
- **Basketball Recovery:** DIN 18032 – 99%.
- **Static Load Limit:** ASTM F 970 – Passes at 250 PSI.
- **Fire Resistance:**
ASTM E 648/NFPA 253 (Critical Radiant Flux) Class 1
ASTM E 662/NFPA 258 (Smoke Density), less than 450
- **Chemical Resistance:** ASTM F 925 – Passes
5% Acetic Acid, 70% Isopropyl Alcohol, 5% Sodium Hydroxide, 5% Hydrochloric Acid, 5% Ammonia, Bleach, 5% Phenol, and Sulfuric Acid.

3. INSTALLATION

See Tarkett installation instructions for complete details.

3.1. Adhesives:

- **Important:** adhesives not recommended for SlideLock tiles.

3.2. Adhesives for Square Edge Tile Only:

- **Tarkett 965 Adhesive Coverage:**
Porous Substrate: 75-100 sq. ft. per gallon
Non-porous Substrate: 75-100 sq. ft. per gallon
- **Tarkett 975 Two-Part Polyurethane Adhesive Coverage:**
Porous & Non-porous Substrate: 150-175 sq. ft. per gallon
- **Tarkett 901 SpraySmart Adhesive Coverage:**
Porous & Non-porous Substrate: 80 sq. ft. per can (480 sq. ft. per carton)
- **Installation Manual:** Refer to Tarkett Triumph Rubber Multi-functional and Sports Floor Tiles Installation Instructions for complete installation details.

4. AVAILABILITY AND COST

Available through authorized Tarkett distributors nationwide.

5. WARRANTY

Limited 5 year warranty. For complete details, contact Tarkett or an authorized Tarkett distributor.

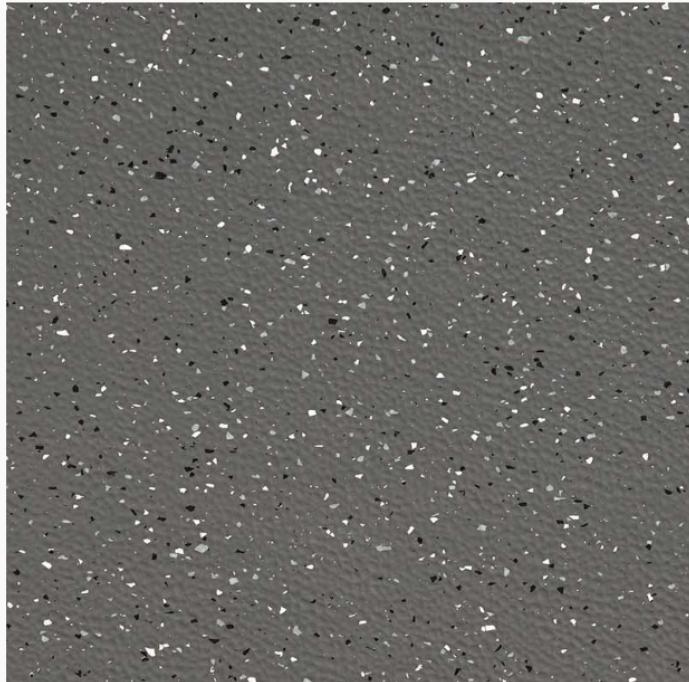
6. MAINTENANCE

72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer's requirements. Refer to Triumph maintenance instructions for complete maintenance details.

7. TECHNICAL SERVICES

Samples: Submittal samples for verification and approval available upon request from Tarkett. Samples shall be submitted in compliance with the requirements of the contract documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.tarkettna.com or contact Tarkett at 1-800-899-8916.

[Back to All Colorways](#)

Triumph Multi-Functional and Sports Rubber Tile

Rainstorm, LB9

Order Sample

< 1 >

[Add to Cart](#)

< 23 of 26 >

Tarkett North America

Technical Services Department
30000 Aurora Road
Solon, Ohio 44139
800.899.8916
info@tarkettna.com
www.tarkettna.com



EuroGutterUSA™ Product Guide

European Half-Round Gutter and Seamless-Weld Downspout System

1. Installation Guide
2. Technical Product Guide
3. Material Guide
4. Product Guide Specification

10/1/2011

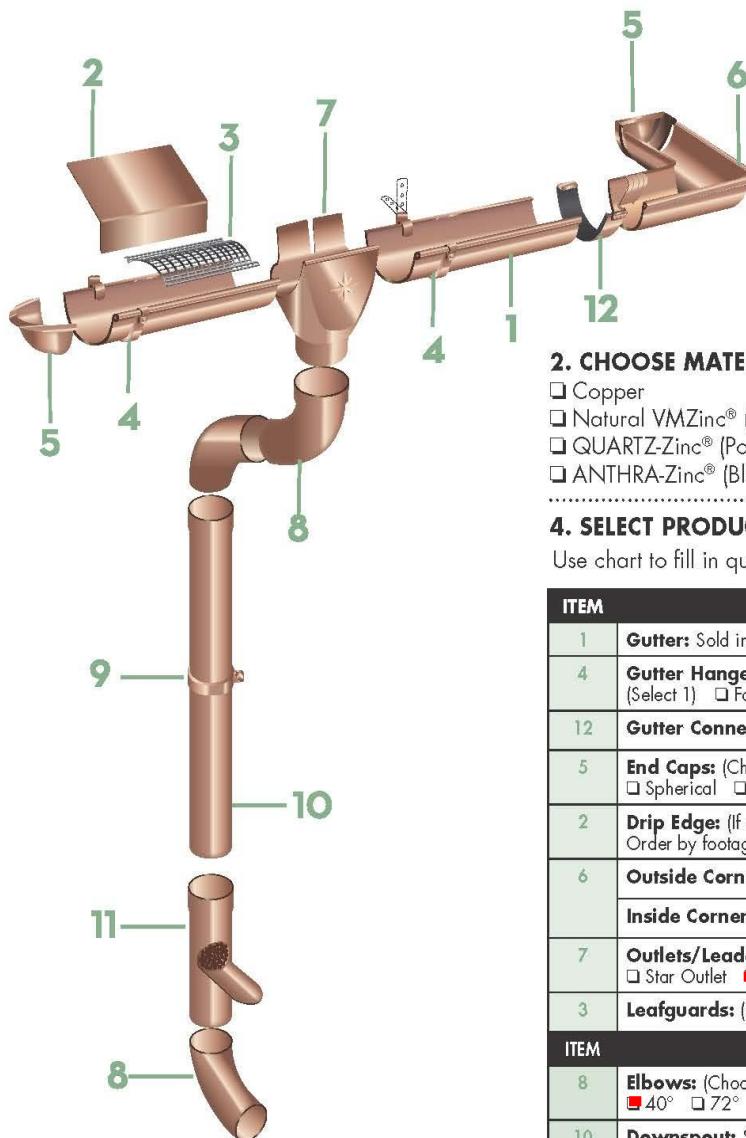
Ornametals Manufacturing, LLC

140 County Road 1311
Cullman, Alabama 35058
(256) 255-0190
Fax: (256) 255-0195
www.ornametals.com
info@ornametals.com

EuroGutterUSA™

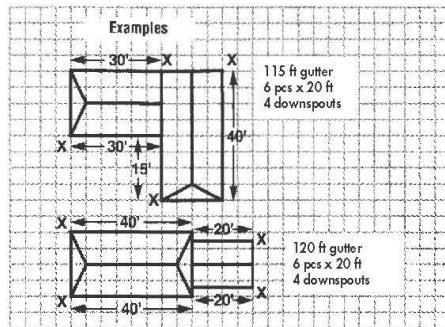
A complete rainwater system by Ornametals

INSTALLATION GUIDE



1. SKETCH YOUR ROOFLINE

- Measure roofline where gutter will be installed
- Mark "X" where downspout is located



2. CHOOSE MATERIAL

- Copper
- Natural VMZinc® (Gray)
- QUARTZ-Zinc® (Polished Gray)
- ANTHRA-Zinc® (Black)

3. CHOOSE SIZE

Gutter	Downspout
<input type="checkbox"/> 5"	<input type="checkbox"/> 3.1"
<input checked="" type="checkbox"/> 6"	<input type="checkbox"/> 4.7"
<input type="checkbox"/> 7.6"	

4. SELECT PRODUCTS

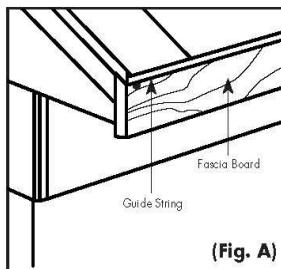
Use chart to fill in quantity of each item needed to complete your job.

ITEM	GUTTER	QTY
1	Gutter: Sold in 20 ft. sections.	
4	Gutter Hanger: 1 every 2 ft of gutter (Select 1) <input type="checkbox"/> Fascia <input checked="" type="checkbox"/> Roof Mount	
12	Gutter Connector: (as alternative to soldering gutter sections)	
5	End Caps: (Choose type) <input type="checkbox"/> Spherical <input type="checkbox"/> Soldered Right <input type="checkbox"/> Soldered Left <input type="checkbox"/> Box	
2	Drip Edge: (If needed) Order by footage	
6	Outside Corners/Miters	
	Inside Corners/Miters	
7	Outlets/Leaderheads: (Choose type) <input type="checkbox"/> Star Outlet <input checked="" type="checkbox"/> Basic Drop <input type="checkbox"/> Custom Order (Call for info)	
3	Leafguards: (Optional) 65.5 ft per box	
ITEM	DOWNSPOUT	QTY
8	Elbows: (Choose angle) <input checked="" type="checkbox"/> 40° <input type="checkbox"/> 72° <input type="checkbox"/> 85°	
10	Downspout: Sold in 10 ft sections	
9	Bracket: 1 at top / 1 at bottom / 1 every 10 ft (Choose type) <input type="checkbox"/> With pin <input checked="" type="checkbox"/> With bolt screw	
11	Inline Cleanout (Optional)	
ITEM	TOOLS	QTY
	Hanger Bending Tool	
	Setting Tool	

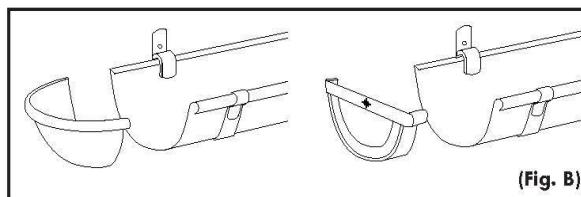
EuroGutterUSA™

INSTALLATION INSTRUCTIONS

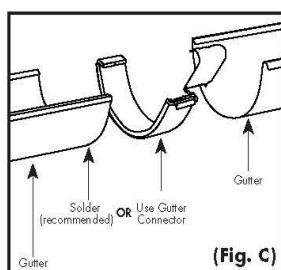
Step 1: REMOVE old gutters and inspect fascia board. REPLACE IF NEEDED. Tack a string to fascia board and level. Drop string about 1/4 in. per 20 ft. and retack string. This is sloped toward downspout. (Fig. A)



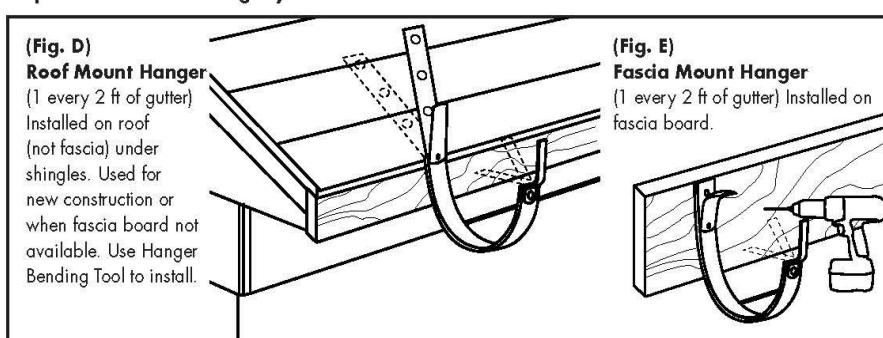
Step 2: Assemble gutter. Begin at opposite downspout side of gutter run. Snap end cap to gutter and solder. (Fig. B)



Step 3: Join two gutter sections. Rivet and solder (recommended) or use gutter connectors. (Fig. C)



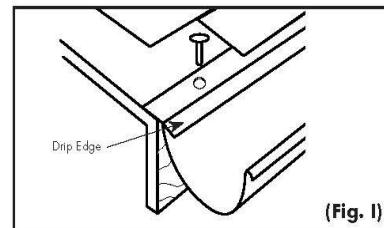
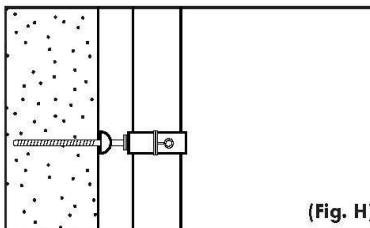
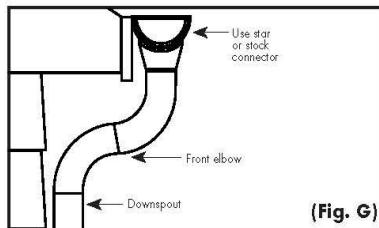
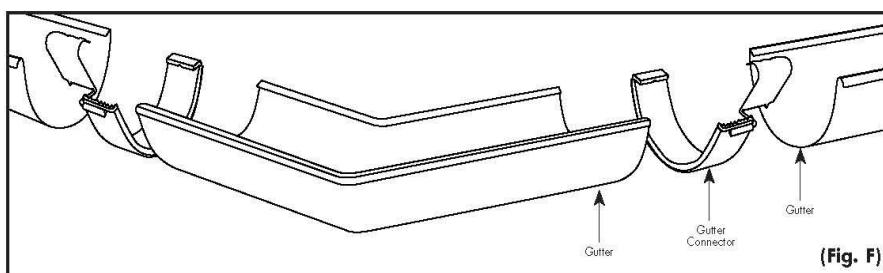
Step 4: Decide which hanger you will use.



Step 5:
Attaching Corners/Miters

If turning a corner with a gutter, use an inside or outside corner/mitter. (Fig. F)

Solder (recommended) to connect corners/miters to gutter OR use gutter connector. (For VMZinc®, solder only.)



Step 6:
Attaching Spout and/or Elbows

Each downspout and elbow has one end expanded. Parts are joined by fitting the larger end of one over the smaller end of the other, forcing them together tightly. (Fig. G)

Downspouts should be set approximately 1 inch from building. Attach a front or side elbow at the downspout's bottom to direct water away from foundation.

Step 7:
Attaching Downspout

Fasten downspouts against wall. (Fig. H)
Use 1 bracket at top; 1 bracket at bottom; and 1 every 10 ft.

Step 8:
Installing Drip Edge

Help direct roof run-off into gutters (optional). To install, lift shingles and insert drip edge under shingles. Push back until drip edge projects approx. 1/2 in. beyond fascia. Nail under shingles every 5 ft. (Fig. I)

A. Gutter and Downspout Installation – additional instructions

For more installation instructions, see EuroGutter USA Installation Video available by request (info@ornametals.com) or online at www.ornametals.com.

1. Gutters

- a. Hanging gutters -- Attach hanger at 24" O.C. maximum to solid substrate.
- b. Install and secure gutter with hangers. Minimum slope of 1/16:12.
 - i. Roof mount hangars: one every two feet of gutter; installed on roof under roof material (shingles).
 - ii. Fascia mount hangers: one every two feet of gutter; installed on fascia board.
- c. Snap end caps to gutter and solder.
- d. Junctions (joining two gutter sections).
 - i. Soldering with 2" overlap makes junctions between the different gutter elements. The welds must be barred and reinforced.
 - ii. In lieu of soldering (copper only), can use gutter connectors.
- e. Overflow -- Allow overflow to prevent ingress into the building.
- f. Install EuroGutterUSA star outlet at low point (can be used as expansion joint).
- g. Expansion Joint – Maximum length of gutters shall not exceed 40 feet from the fixed point. If the work includes internal and external angles, the maximum distance is then 20 feet. Solder expansion joint to adjacent gutters at the high point OR substitute outlet /downspout as expansion joint, as appropriate, without soldering.
- h. Attach corners/miters: solder (recommended) to connect corners/miters to gutter or use gutter connector (copper only).
 - i. Drip edge: Helps direct roof run-off into gutters (optional). Lift shingles and insert drip edge under shingles. Push back until drip edge projects approx. ½ inch beyond fascia. Nail under shingles every five feet.

2. Downspouts (10 ft sections).

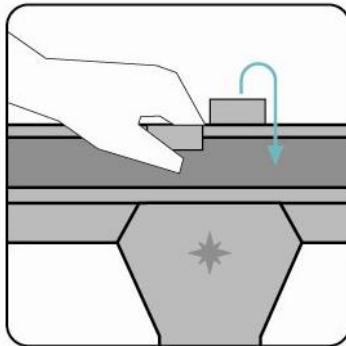
- a. Elbows: Seamless weld (no crimping); available in 40, 72 and 85 degrees.
- b. Hold the pipes on place using brackets (with pin or with bolt screw). Install one at the top; one at the bottom; and one every 10 feet. Install approx. 1-inch from building. Attach a front or side elbow at end of downspout to direct water away from foundation.
- c. Inline cleanout – optional.

B. Star Outlet Installation

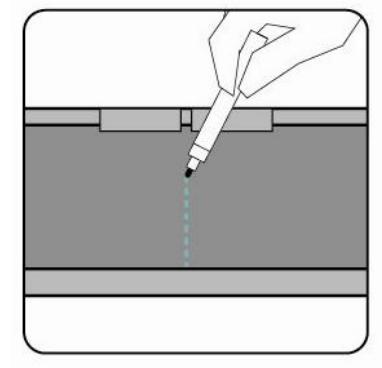
Step 1: Install the star outlet by hanging it on the gutter, which is already formed to fit with the outlet. Hang the front part of the outlet first, and then move to Step 2.



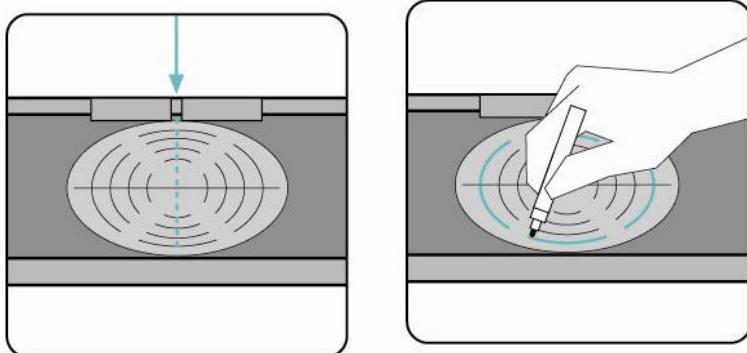
Step 2: Bend the clips (first the left, and then the right) to the top of the back flange of the gutter to fasten outlet, and move to Step 3.



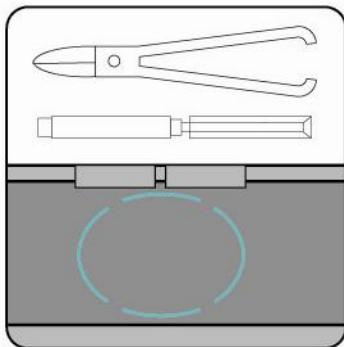
Step 3: Mark the mid-point of the gutter (the point between the outlet clips), and move to Step 4.



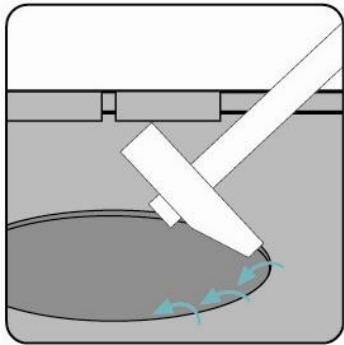
Step 4: Place the cutting template (available in this document on p. 8) at the mid-point (the point between the outlet clips). Using the template, trace the outline for the opening to be cut into the outlet, according to gutter size (5", 6" or 7.6").



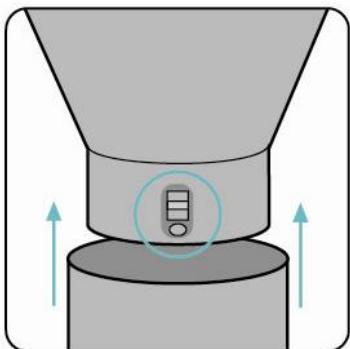
Step 5: Cut along the lines with metal-shears or chisel to create the opening.



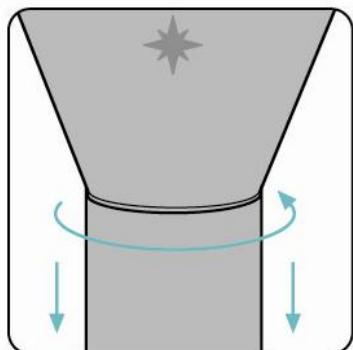
Step 6: Bend down the edges of the opening with a hammer, leaving an overhang of $\frac{1}{2}$ ".



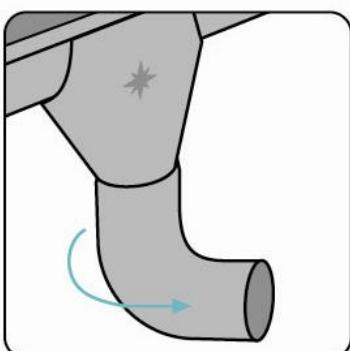
Step 7: The outlet connects to the downspout

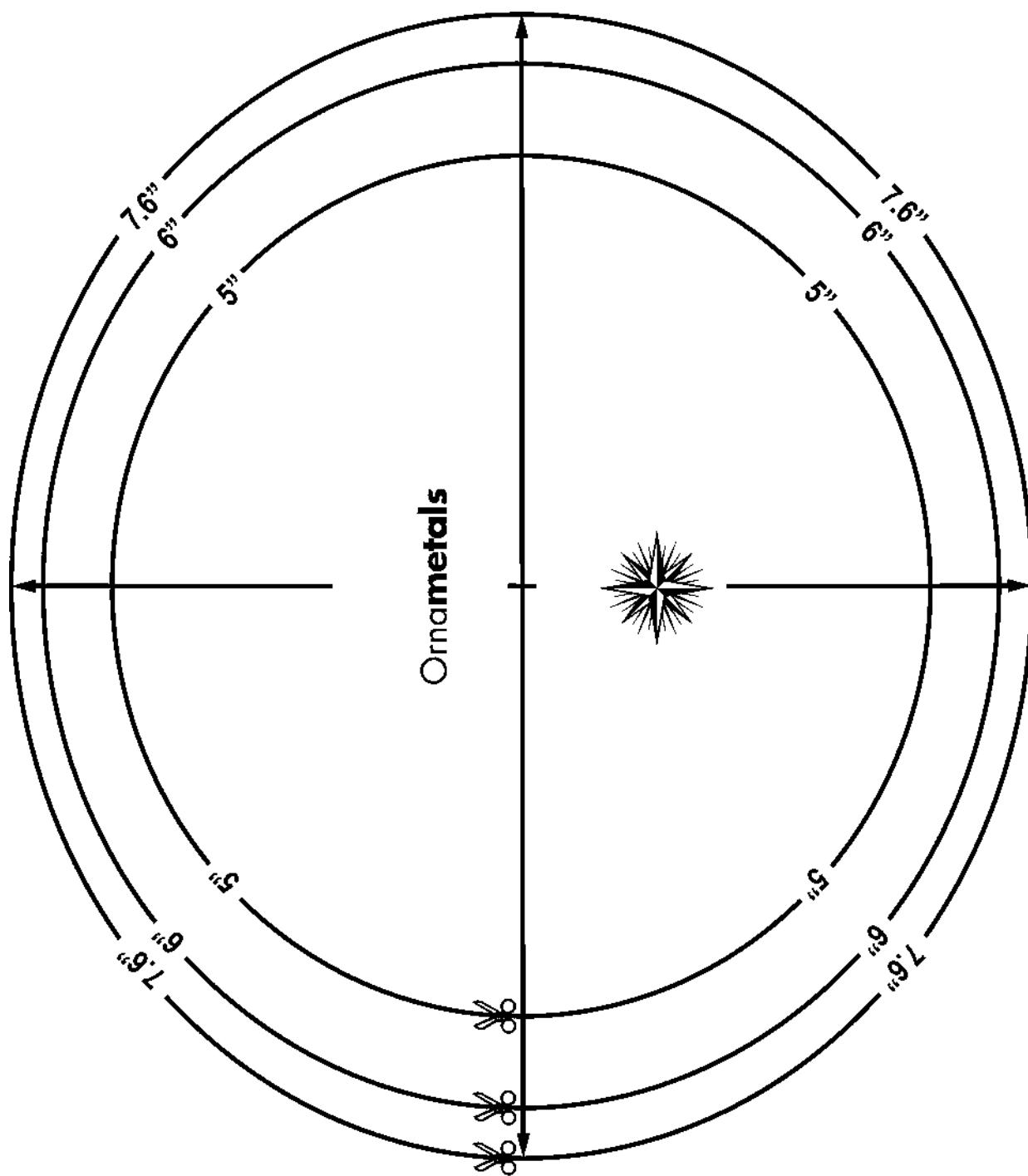


Step 8: To ensure the connection between outlet and downspout, just turn the downspout onto the outlet.



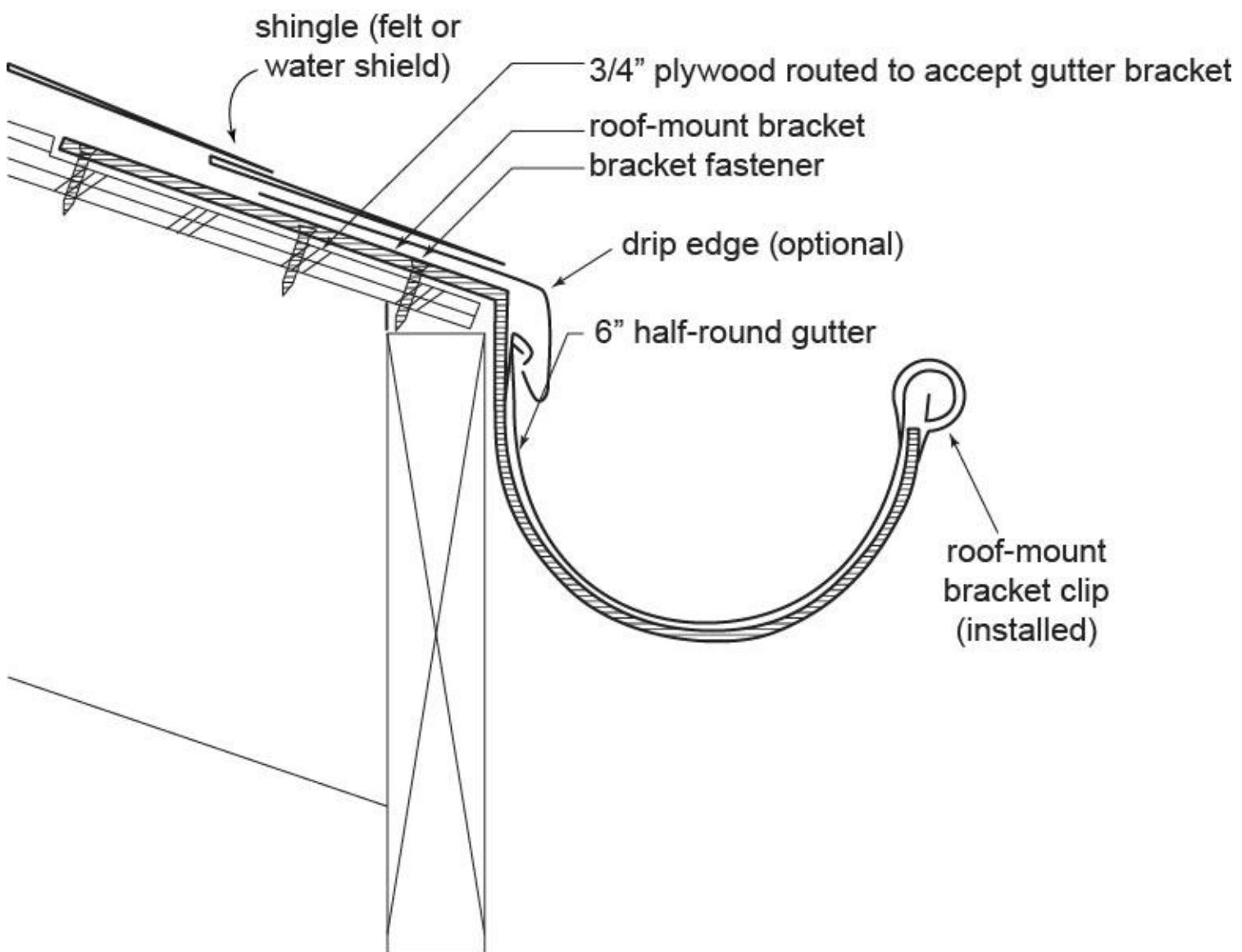
Step 9: If necessary, install an elbow to divert water away from structure before installing downspout.

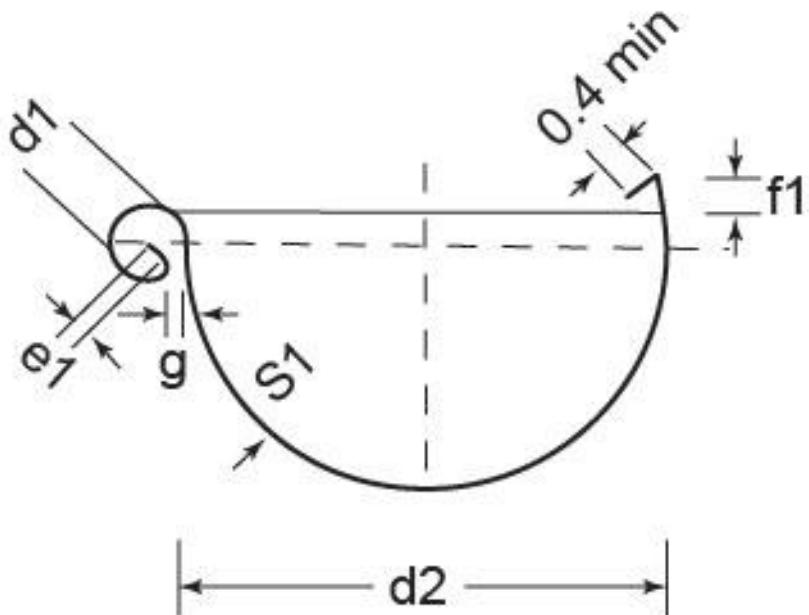


C. Cutting Template

2. Technical Product Guide

A. HALF-ROUND GUTTER ASSEMBLY



B. HALF-ROUND GUTTER DIMENSIONS

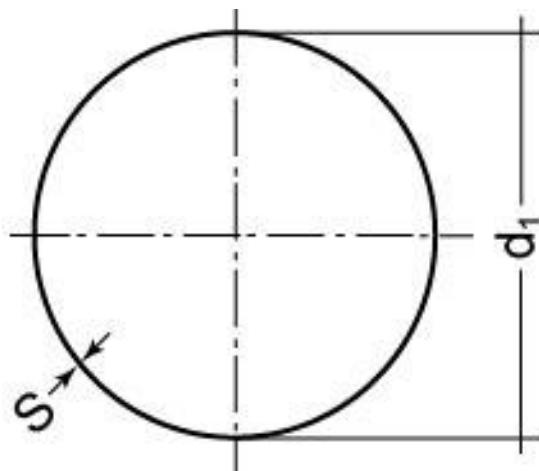
Size d2 (in inches)	5"	6"	7.6"
d 1	0.7	0.79	0.86
e 1	0.27	0.35	0.35
f 1	0.43	0.43	0.43
g	0.23	0.23	0.23
Cross-section (cm ²)	63	92	145

C. DOWNSPOUT DIMENSIONS – Seamless Weld**Natural Zinc (VMZINC®)**

d 1	Diameter	3.1"	4"	4.7"
S	Gauge: 20 to 26			
	Length: 10 ft			

Preweathered Zinc (QUARTZ-ZINC®; ANTHRA-ZINC®)

d 1	Diameter	3.1"	4"	4.7"
S	Gauge: 20 to 26			
	Length: 10 ft			





Welcome to StyroTrim!

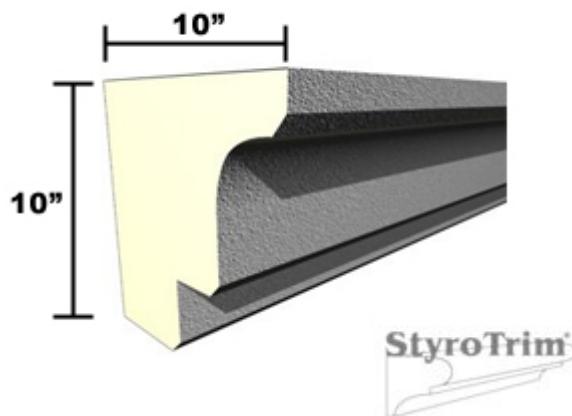
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Cornice 2017 - 10" x 10"



Order By the Piece

Roof Pitch

Top Finish

Coating Type [\(View Coatings\)](#)

Qty:

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Swanstone Single Threshold Shower Pans

With Fit-Flo™ Drain



Manufactured from Swanstone Solid Surface

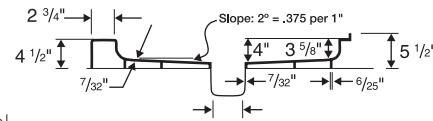
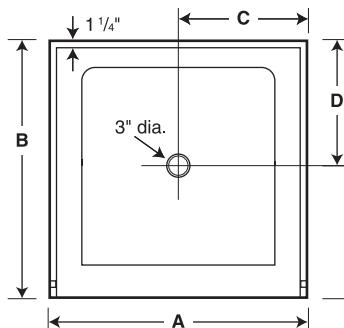
Recommended for high-use traffic areas and commercial surfaces.

FEATURES

- Reinforced solid surface means color and texture run all the way through and cannot wear away.
- Will not mold or mildew, no grout to clean.
- Coordinates with Swanstone shower and bath systems.
- Pebbled, slip-resistant surface.
- Warranty: Limited Lifetime – Residential Limited 30-year – Commercial

Model	Nominal Size	Rough-In Dimensions			
		A	B	C	D
SS-3232	32" x 32"	32 3/8"	32 3/16"	16 3/16"	16 3/16"
SS-3248	32" x 48"	48 3/8"	32 3/16"	24 3/16"	16 3/16"
SS-3260	32" x 60"	60 3/8"	32 3/16"	30 3/16"	16 3/16"
SS-3442	34" x 42"	42 3/8"	34 3/16"	21 3/16"	17 3/16"
SS-3448	34" x 48"	48 3/8"	34 3/16"	24 3/16"	17 3/16"
SS-3454	34" x 54"	54 3/8"	34 3/16"	27 3/16"	17 3/16"
SS-3460	34" x 60"	60 3/8"	34 3/16"	30 3/16"	17 3/16"
SS-3636	36" x 36"	36 3/8"	36 3/16"	18 3/16"	18 3/16"
SS-4236	42" x 36"	36 3/8"	42 3/16"	18 3/16"	20 3/16"
SS-4242	42" x 42"	42 3/8"	42 3/16"	21 3/16"	21 3/16"

Model	A	B	C	D
SS-3232	32"	32"	16"	16"
SS-3248	48"	32"	24"	16"
SS-3260	60"	32"	30"	16"
SS-3442	42"	34"	21"	17"
SS-3448	48"	34"	24"	17"
SS-3454	54"	34"	27"	17"
SS-3460	60"	34"	30"	17"
SS-3636	36"	36"	18"	18"
SS-4236	42"	42"	18"	21"
SS-4242	42"	42"	21"	21"



IMPORTANT: Rough-in dimensions are provided for reference only. You must measure the actual shower pan and check local building code requirements before construction of the stud wall.

SPECIFICATIONS

Model	Part	Ship Wt. Lb.	Carton Dims. In.	Cu. Ft.
SS-3232	SF03232MD	32	38 x 37 x 10	9
SS-3248	SF03248MD	49	54 x 38 x 10	12
SS-3260	SF03260MD	56	66 x 37 x 10	15
SS-3442	SF03442MD	37	48 x 40 x 10	12
SS-3448	SF03448MD	47	54 x 39 x 10	13
SS-3454	SF03454MD	55	60 x 40 x 10	14
SS-3460	SF03460MD	54	69 x 40 x 10	16
SS-3636	SF03636MD	40	42 x 41 x 10	10
SS-4236	SF04236MD	44	47 x 42 x 10	12
SS-4242	SF04242MD	53	48 x 48 x 10	14

Includes: One code-approved compression-molded Swanstone pan with molded-in Fit-Flo drain.

Packaging: Each pan packed in a rectangular carton.

COLORS

Solid Colors:

- White (010)
- Bisque (018)
- Bone (037)

Aggregate Colors:

- Bermuda Sand (040)
- Black Galaxy (015)
- Carrara (221)
- Concrete Ash Gray (203)
- Concrete Birch (226)
- Concrete Charcoal Gray (209)
- Concrete Clay (212)
- Concrete Limestone (218)
- Concrete Sandstone (215)
- Ice (130)
- Tahiti White (011)

STANDARDS AND RATINGS

American National Standard Institute—ANSI Z124.1.2

International Association of Plumbing and Mechanical Officials (IAPMO)—Listed

CSA Standard B45.5 by IAPMO

Uniform Plumbing Code (UPC)

For a complete list of tests and results see the Technical Data Sheet.

MAINTENANCE AND CLEANING INFORMATION

Clean regularly with common household liquid cleaners and a sponge or soft cloth. For hard water stains, scale removers can be used. If necessary, abrasive cleaners can be used with a nylon brush or pad to remove build up on the shower pan surface. **Do not** use a metal-scouring pad or a wire brush, as it will damage the surface. **Do not** use "leave on" cleaning products, such as automatic spray shower cleaners. Prolonged contact with harsh chemicals could have an adverse reaction over time and discolor surfaces. **Do not** use cleaning agents that caution use on acrylic, polyester or plastics.

SUPPORT DOCUMENTS

Installation instructions available at swanstone.com.

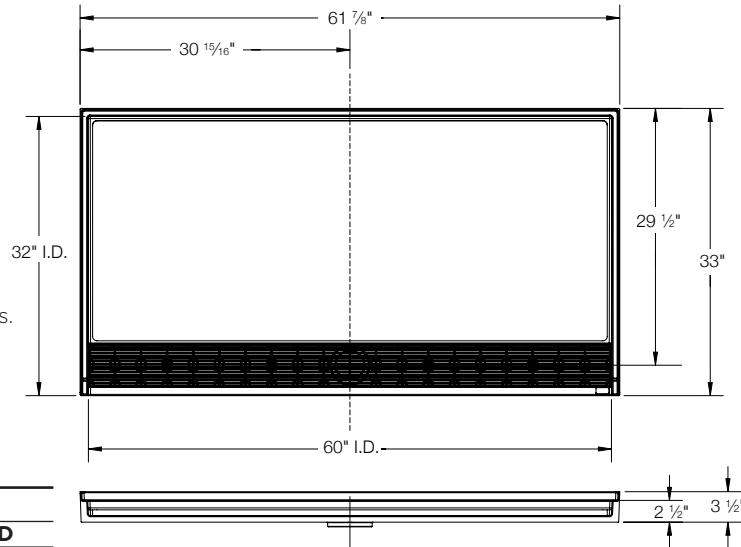


SBF-3462

Swanstane Performix Roll-In Trench Drain Shower Pan

**Manufactured from Swanstone Solid Surface****FEATURES**

- Compression-molded solid surface with glass reinforcement technology.
- 3/4" low threshold entry.
- Patented wall-to-wall trench system with attractive 304 stainless grate.
- No need to recess slab which provides a cost-saving, easy installation.
- Reinforced solid surface will not mold or mildew, no grout to clean.
- Engineered for strength with molded-in structure supports.
- Slip-resistant, textured bottom surface.
- Coordinates with Swanstone shower systems.
- Warranty: Limited Lifetime – Residential
Limited 30-year – Commercial



Model	Nominal Size	Rough-In Dimensions			
		A	B	C	D
SBF-3462	34" x 62" Roll-In Shower Pan	61 1/4"	33 3/16"	30 1/8"	29 9/16"

IMPORTANT: Rough-in dimensions are provided for reference only. You must measure the actual shower pan and check local building code requirements before construction of the stud wall. Meets ADA requirements for use in new construction or existing bathing facilities.

SPECIFICATIONS

Model	Part	Ship Wt. Lb.	Carton Dims. In.	Cu. Ft.
SBF-3462	SB03462	67	69 x 39 x 10	15.18

Includes: One code-approved compression-molded Swanstone trench drain shower pan. Standard 2" drain sold separately.

Packaging: Each pan packed in a rectangular carton.

Note: This product meets the dimensional requirements to allow for installation in ADA applications. For up-to-date ADA regulations, visit ADA.gov.

COLORS**Solid Colors:**

- White (010)
- Bisque (018)
- Bone (037)

Aggregate Colors:

• Bermuda Sand (040)	• Concrete Clay (212)
• Black Galaxy (015)	• Concrete Limestone (218)
• Carrara (221)	• Concrete Sandstone (215)
• Concrete Ash Gray (203)	• Ice (130)
• Concrete Birch (226)	• Tahiti White (011)
• Concrete Charcoal Gray (209)	

STANDARDS AND RATINGS

ADA

American National Standard Institute—ANSI Z124.1.2

International Association of Plumbing and Mechanical Officials (IAPMO)—Listed

CSA Standard B45.5 by IAPMO

Uniform Plumbing Code (UPC)

California Building Code (CBC)/Title 24

For a complete list of tests and results see the Technical Data Sheet.

MAINTENANCE AND CLEANING INFORMATION

Clean regularly with common household liquid cleaners and a sponge or soft cloth. For hard water stains, scale removers can be used. If necessary, abrasive cleaners can be used with a nylon brush or pad to remove build up on the shower pan surface. **Do not** use a metal-scouring pad or a wire brush, as it will damage the surface. **Do not** use "leave on" cleaning products, such as automatic spray shower cleaners. Prolonged contact with harsh chemicals could have an adverse reaction over time and discolor surfaces. **Do not** use cleaning agents that caution use on acrylic, polyester or plastics.

SUPPORT DOCUMENTS

Installation instructions available at swanstone.com.





SBF-3464 Swanstone Barrier-Free Shower Floors With Trough Drain

Manufactured from Swanstone solid surface
(See page 2 for detailed information.)

WARRANTY
Limited Lifetime – Residential
Limited 10-year – Commercial

Recommended for high-use traffic areas and commercial surfaces.

FEATURES

- Low threshold provides easy access; no ramp required.
- Wide trough drain eliminates need for additional water dam.
- Sturdy 16-gauge stainless steel grate extends full width of floor for maximum drainage.
- No need to notch concrete or raise subfloor which provides a cost-saving, easy installation.
- Engineered for strength with molded-in structure supports.
- Slip-resistant surface for added safety.
- Reinforced solid surface will not mold or mildew, no grout to clean.



Universal Design

Model	Nominal Size	Rough-In Dimensions			
		64	34	A	B
SBF-3464 Barrier-Free	34" x 64"	64-1/4"	34-1/8"	32-3/16"	29-13/16"

IMPORTANT: Rough-in dimensions are provided for reference only. You must measure the actual shower floor and check local building code requirements before construction of the stud wall. Meets ADA requirements for use in new construction or existing bathing facilities.

SPECIFICATIONS

SBF-3464 Swanstone Barrier-Free Shower Floor With Trough Drain

Model	Part	Nominal Size Dimensions	Ship Wt. Lb.	Ship FedEx	Carton Dims. In.	Cu. Ft.
SBF-3464	SB03464	34" D x 64" W (864 mm x 1626 mm)	70	–	69 x 39 x 10	15.18

Includes: One code-approved compression-molded Swanstone floor with trough drain.

Packaging: Each floor packed in a rectangular carton.

Note: This product meets the dimensional requirements to allow for installation in ADA applications. For up-to-date ADA regulations, visit ADA.gov.

ACCESSORIES

See page 72 for complete listing of all Universal Design accessories.

STANDARDS AND RATINGS

American National Standard Institute—ANSI Z124.1.2

International Association of Plumbing and Mechanical Officials (IAPMO)—Listed

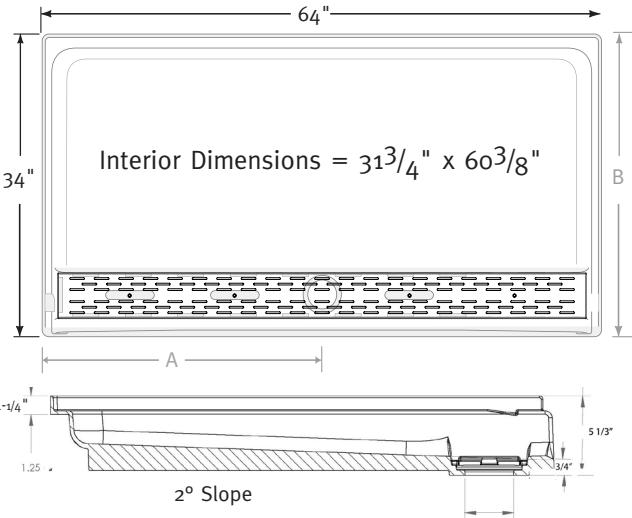
CSA Standard B45.5 by IAPMO

Uniform Plumbing Code (UPC)

For a complete list of tests and results see the Technical Data Sheet.

SUPPORT DOCUMENTS

Installation instructions available at swanstone.com.



Trough system drains into standard 2" drain pipe.

COLORS

Solid Colors:

- Ice (130)
- Mountain Haze (129)
- Night Sky (012)
- Pebble (072)
- Prairie (122)
- Tahiti Desert (050)
- Tahiti Gray (053)
- Tahiti Ivory (059)
- Tahiti Matrix (058)
- Tahiti Sand (051)
- Tahiti White (011)
- Tundra (131)

Aggregate Colors:

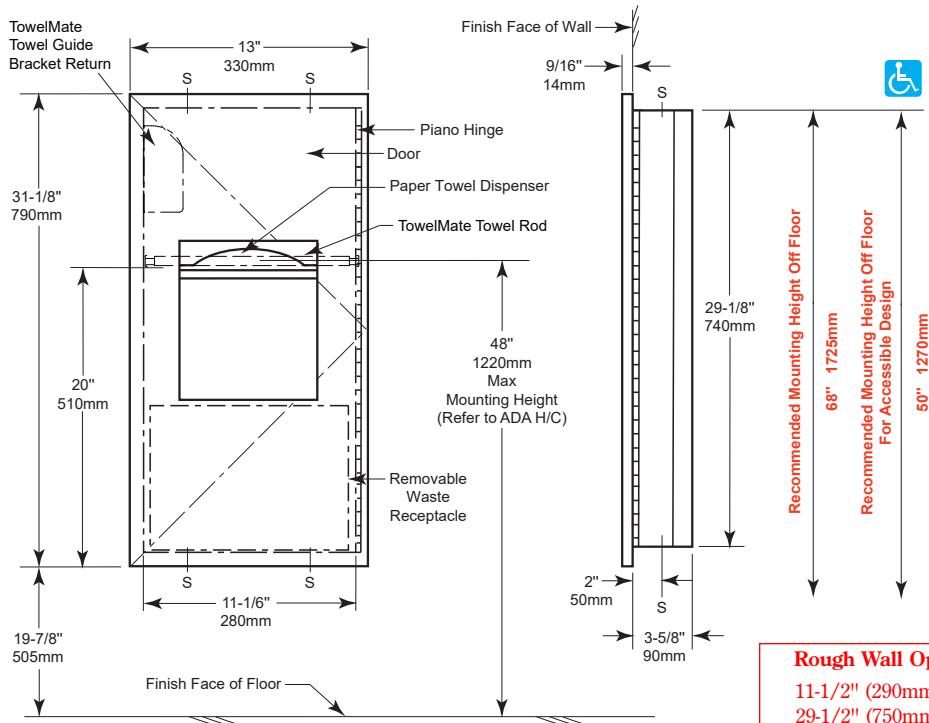
- Acorn (123)
- Arctic Granite (035)
- Baby's Breath (168)
- Barley (091)
- Bermuda Sand (040)
- Canyon (124)
- Caraway Seed (169)
- Cloud Bone (126)
- Cloud White (125)
- Glacier (121)
- Golden Steppe (128)
- Gray Granite (042)

Our Planet Colors

MAINTENANCE AND CLEANING INFORMATION

Clean regularly with common household liquid cleaners and a sponge or soft cloth. For hard water stains, scale removers can be used. If necessary, abrasive cleaners can be used with a nylon brush or pad to remove build up on the shower floor surface. **Do not** use a metal-scouring pad or a wire brush, as it will damage the surface. **Do not** use "leave on" cleaning products, such as automatic spray shower cleaners. Prolonged contact with harsh chemicals could have an adverse reaction over time and discolor surfaces. **Do not** use cleaning agents that caution use on acrylic, polyester or plastics.



BOBRICK**Technical Data****TrimLineSeries™
RECESSED
PAPER TOWEL DISPENSER
AND WASTE RECEPTACLE****B-36903****MATERIALS:**

Cabinet — 18-8, Type-304, heavy-gauge stainless steel. All-welded construction.

Door — 18-8, Type-304, 18-gauge (1.2mm) stainless steel. 9/16" (14mm) 90° return edges for maximum rigidity. Secured to cabinet with a concealed, full-length stainless steel piano-hinge. Equipped with a stainless steel cable door-swing limiter and friction catch.

Paper Towel Dispenser — 18-8, Type-304, 22-gauge (0.8mm) stainless steel. Capacity: 300 C-fold or 400 multifold paper towels. Unit equipped with TowelMate consisting of a 90° return towel guide angle inside cabinet to prevent paper towels from falling forward out when door is opened for servicing.

TowelMate® Towel Rod Assembly — Consisting of a round Nylon Rod and (2) stainless steel Rod Screws for attachment, is field replaceable. Stainless steel Stop Screws (2) lock TowelMate Rod assembly in place. To retrofit TowelMate into existing installed units manufactured prior to Feb. 2021, order TowelMate Accessory Bobrick Model No. 369-130.

Waste Container — Removable, leakproof, rigid molded plastic. Capacity: 1.6-gal. (6.1-L).

OPERATION:

Paper towel dispenser accommodates C-fold and multifold paper towels without adjustment or use of adapters. Waste receptacle is serviced by opening door and removing waste container. Door conceals flange from view. Cable door-swing limiter prevents damage to washroom accessories and walls.

INSTALLATION:

Provide framed rough wall opening 11-1/2" wide x 29-1/2" high (290 x 750mm). Minimum recessed depth required from finish face of wall is 3-3/4" (95mm). Allow clearance for construction features that may protrude into rough wall opening from opposite wall. Coordinate with mechanical engineer to avoid pipes, vents, and conduits. If unit projects above top of wainscot, provide aluminum channel or other filler to eliminate gap between flange and finish face of wall. Mount cabinet with shims between framing and cabinet at all points indicated by an S, then secure unit with #8 x 1-1/4" sheet-metal screws (not furnished).

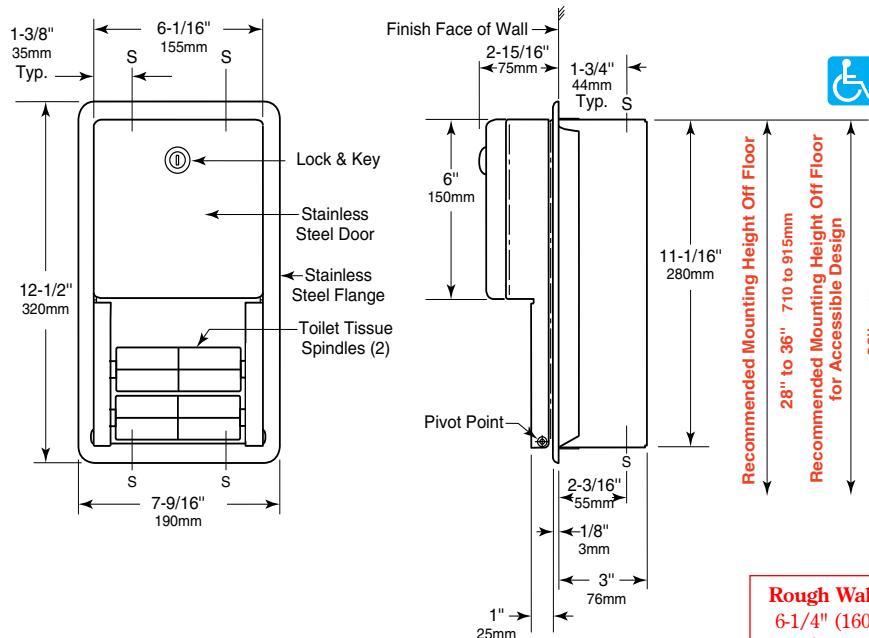
SPECIFICATION:

Recessed paper towel dispenser and waste receptacle shall be Type-304 stainless steel with all-welded construction. Exposed surfaces shall have satin finish. Unit equipped with TowelMate consisting of a 90° return towel guide angle inside cabinet to prevent paper towels from falling forward out when door is opened for servicing and a Nylon Rod across the center of the towel tray to dispense paper towels one at a time. Door shall be 18 gauge (1.2mm); have 9/16" (14mm) 90° return edges; be secured to cabinet with a concealed, full-length stainless steel piano-hinge; and equipped with a stainless steel cable door-swing limiter and friction catch. Door conceals flange from view. Paper towel dispenser shall be capable of dispensing 300 C-fold or 400 multifold paper towels without adjustment or use of adapters. Waste receptacle shall be furnished with a removable, leakproof, rigid molded plastic waste-container with a capacity of 1.6-gal. (6.1-L).

Recessed Paper Towel Dispenser And Waste Receptacle shall be Model B-36903 of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.

**Technical Data**

RECESSED MULTI-ROLL TOILET TISSUE DISPENSER

B-3888

Rough Wall Opening
6-1/4" (160mm) wide
11-1/4" (290mm) high
3-1/8" (80mm) minimum
recessed depth

MATERIALS:

Cabinet — 18-8, type-304, 22-gauge (0.8mm) stainless steel. Welded construction. Exposed surfaces have satin finish.

Flange — 18-8, type-304, 22-gauge (0.8mm) stainless steel with satin finish. Drawn, one-piece, seamless construction.

Door — 18-8, type-304, 22-gauge (0.8mm) stainless steel with 18-gauge (1.2mm) stainless steel door frame. Exposed surfaces have satin finish. Front of door is drawn, one-piece, seamless construction. Secured to cabinet with two rivets. Equipped with a tumbler lock keyed like other Bobrick washroom accessories.

Dispensing Mechanism, Inner Housing and Cam — 18-8, type-304, 18-gauge (1.2mm) stainless steel.

Spindles (2) — Heavy-duty, one-piece, molded ABS. Theft-resistant, spindles retained in dispensing mechanism when door is locked.

OPERATION:

Unit holds two standard-core toilet tissue rolls up to 5-1/4" (133mm) diameter (1800 sheets). Tissue rolls are loaded and locked into dispensing mechanism. Extra roll automatically drops in place when bottom roll is depleted. Depleted rolls can only be removed after unlocking door.

INSTALLATION:

Provide framed rough wall opening 6-1/4" wide x 11-1/4" high (160 x 290mm). Minimum recessed depth required to finish face of wall is 3-1/8" (80mm). Allow clearance for construction features that may protrude into opening from opposite wall. Coordinate with mechanical engineer to avoid pipes, vents, and conduits. Mount unit with shims between framing and cabinet at all points indicated by an S, then secure unit with sheet-metal screws (not furnished).

SPECIFICATION:

Recessed multi-roll toilet tissue dispenser shall be type-304 stainless steel with welded construction, including dispensing mechanism, inner housing and cam; exposed surfaces shall have satin finish. Front of toilet tissue dispenser door shall be drawn, one-piece, seamless construction. Door shall be secured to cabinet with two rivets and equipped with a tumbler lock keyed like other Bobrick washroom accessories. Flange shall be drawn, one-piece, seamless construction. Unit shall dispense two standard-core toilet tissue rolls up to 5-1/4" (133mm) diameter (1800 sheets). Extra roll shall automatically drop in place when bottom roll is depleted. Unit shall be equipped with two heavy-duty, one-piece, molded ABS spindles. Theft-resistant, spindles retained in dispensing mechanism when door is locked.

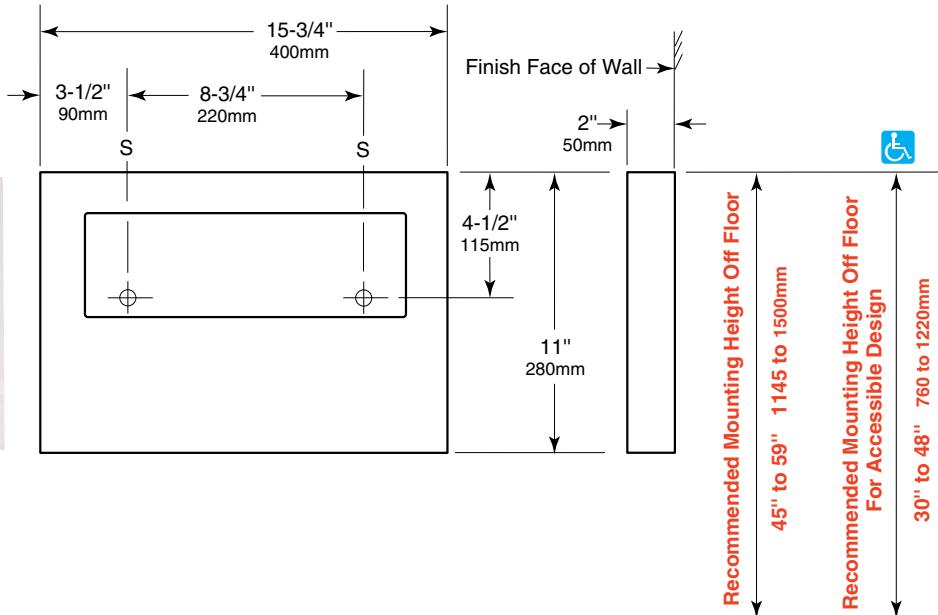
Recessed Multi-Roll Toilet Tissue Dispenser shall be Model B-3888 of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.



Technical Data

ClassicSeries® SURFACE-MOUNTED SEAT-COVER DISPENSER

B-221



MATERIALS:

18-8, type-304, 22-gauge (0.8mm) stainless steel with satin finish. All-welded construction with beveled opening.

OPERATION:

Dispenses single- or half-fold paper toilet seat covers from beveled opening. Dispenser fills from bottom through concealed opening. Capacity: 250 toilet seat covers or one box.

INSTALLATION:

Mount unit on wall or toilet partition with two flat-head screws, not furnished by manufacturer, at points indicated by an *S*. For plaster or dry wall construction, provide concealed backing that complies with local building codes, then secure unit with flat-head screws not furnished. For other wall surfaces, provide fiber plugs or expansion shields for use with screws, not furnished, or provide 1/8" (3mm) toggle bolts or expansion bolts.

Note: Provide a 5" (125mm) minimum clearance from bottom of dispenser to top of any horizontal projection to provide room for filling dispenser from bottom.

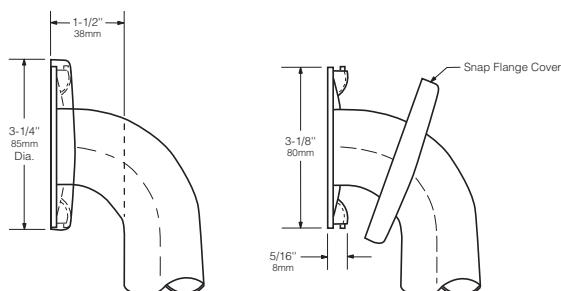
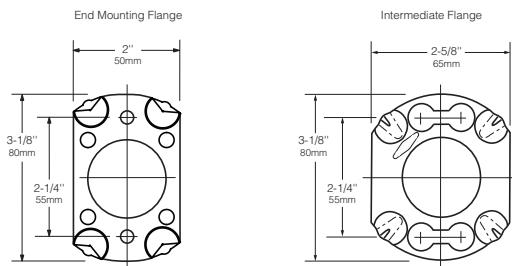
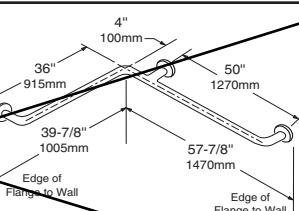
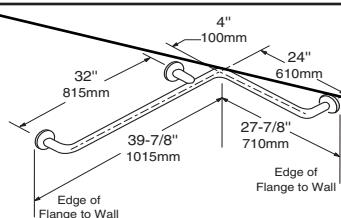
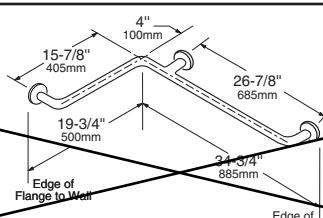
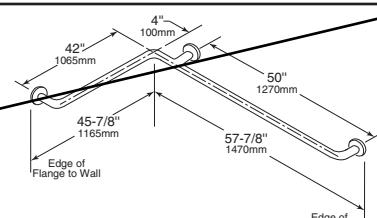
SPECIFICATION:

Surface-mounted toilet-seat-cover dispenser shall be type-304, 22-gauge (0.8mm) stainless steel with all-welded construction; exposed surfaces shall have satin finish. Dispenser shall have a concealed opening in bottom for filling. Capacity shall be 250 paper toilet seat covers or one box.

Surface-Mounted Seat-Cover Dispenser shall be Model B-221 of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.

BOBRICK**Technical Data****1½" (38mm) DIAMETER
STAINLESS STEEL GRAB
BARS WITH SNAP FLANGE****B-6806
SERIES****Specify Finish Required:**

Satin-finish, slip-resistant surface
 Peened surface; add suffix .99 to model number

**HORIZONTAL****VERTICAL****TWO-WALL WHEELCHAIR
COMPARTMENT****B-6806 x 12, 18, 24, 30, 36, 42, 48****B-68137****HORIZONTAL TUB / SHOWER
COMPARTMENT BAR 24 x 36****HORIZONTAL TWO-WALL BAR
for Shower Stall****TWO-WALL
TOILET COMPARTMENT BAR 42 x 54****B-68616****B-6861****B-6897**

continued...

MATERIALS:

Grab Bar — 18-8 S, type-304, 18-gauge (1.2mm) stainless steel tubing with satin-finish, slip-resistant surface. 1-1/2" (38mm) outside diameter. Ends are heliarc welded to flanges. Clearance between the grab bar and wall is 1-1/2" (38mm).

Concealed Mounting Flanges — 18-8 S, type-304, 11-gauge (3.2mm) thick, stainless steel plate; end flanges 2" x 3-1/8" (50 x 80mm) with holes for attachment to wall. Intermediate flanges 2-5/8" x 3-1/8" (65 x 80mm) wide x 3-1/8" (80mm) diameter.

Snap Flange Covers — 18-8 S, type-304, 22-gauge (0.8mm) drawn stainless steel with satin-finish. 3-1/4" (85mm) diameter x 1/2" (13mm) deep. Each cover snaps over mounting flange to conceal mounting screws.

STRENGTH:

Bobrick grab bars that provide 1-1/2" (38mm) clearance from wall can support loads in excess of 900 pounds (408kg) if properly installed. Other grab bar configurations can support loads in excess of 250 pounds (113kg) if properly installed, complying with accessible design (including ADAAG in the U.S.A.) for structural strength.

Safety Warning: Grab bars are no stronger than the anchors and walls to which they are attached and, therefore, must be firmly secured in order to support the loads for which they are intended. To avoid potential injury, the building owner or maintenance personnel should remove the grab bar from service if the grab bar is not adequately secured to wall or if there is any observed damage to the welds.

INSTALLATION:

Provide concealed anchor device or backing as specified or required in accordance with local building codes before wall is finished. Fasten concealed mounting flanges to anchor device or backing with at least two screws opposing each other in each flange. Snap flange covers over each mounting flange to conceal mounting screws. Concealed anchor devices and mounting screws are not included with Bobrick grab bars and must be specified as an accessory.

For Grab Bars with an Intermediate Flange(s), Pull Snap-Flange Covers away from mounting flanges. Place grab bar in desired mounting location. Use intermediate flange as a template to mark location of mounting screws at intermediate flange only. Mark screw locations at the center of the slot in the middle of the double-keyhole shaped mounting holes (2) in the intermediate flange. Remove grab bar from wall. Drive the intermediate flange mounting screws into wall at marked locations. **Note:** Make sure to leave a space of just over 1/8" (3.17mm) between the underside of the screw head and the wall. Install grab bar on the wall by placing the round ends of the intermediate flange double-keyhole shaped mounting holes over the mounting screws (2) are located in the middle of the flange slots. Install the mounting screws into the wall at the end flanges and secure tightly. Tighten the mounting screws at the intermediate flange. Press all snap-flange covers into place to conceal mounting flanges.

Note: Recommend use of 1/4" or #14 sheet metal or wood screws to install Intermediate Flange. #12 screws may also be used.

Important Notes:

1. **Mounting Kits** — Bobrick offers a mounting kit for installing grab bars; **one Bobrick mounting kit is required for each flange.**

Mounting Kit No.	Description
252-30	Consists of # (3) 14 x 2½" type-304 stainless steel, Phillips round-head, sheet-metal screws.

2. **Grab Bar Fastener** — Bobrick offers a grab bar fastening system that secures all Bobrick grab bar series; **one Bobrick fastener is required for each flange.** Install grab bar without backing in wall requires minimum 5/8" (16mm) thick painted or tiled drywall.

WingIt™ Fastener No.	Description
251-4	Consists of 10-32 x 5/16" round-head, Phillips 18/8 stainless steel screws. (1) WingIt grab bar fastener.

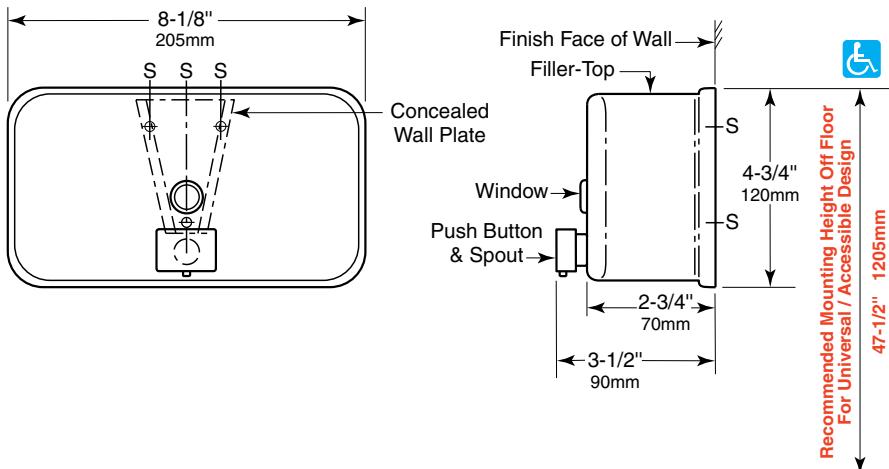
3. **Optional Anchor Device** — Bobrick grab bar anchor device includes stainless steel machine screws to be used for attaching grab bars to anchors. **one Bobrick concealed anchor device is required for each flange.**

Optional Anchor No.	Description
2583	Anchor for 3/4" to 1" (19-25mm) panel 1 anchor required for each flange.
2586	Anchor for 1/2" to 1" (13mm) panel 1 anchor required for each flange.

SPECIFICATION:

Grab bar shall be type-304 stainless steel with satin-finish, slip-resistant surface. Grab bar shall have 18-gauge (1.2mm) wall thickness and 1-1/2" (38mm) outside diameter. Clearance between the grab bar and wall shall be 1-1/2" (38mm). Concealed mounting flanges shall be 11-gauge (3.2mm) thick stainless steel plate, 2" x 3-1/8" (50 x 80mm), and equipped with at least two screw holes for attachment to wall. Flange covers shall be 22 gauge (0.8mm), 3-1/4" (85mm) diameter x 1/2" (13mm) deep, and shall snap over mounting flange to conceal mounting screws and/or WingIt fasteners. Ends of grab bar shall pass through concealed mounting flanges and be heliarc welded to form one structural unit. Grab bar shall comply with accessible design (including ADAAG in the U.S.A.) for structural strength.

Grab Bar shall be Model _____ (insert model number) of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.

**Technical Data****ClassicSeries®
SURFACE-MOUNTED
SOAP DISPENSER****B-2112****MATERIALS:**

Container — 18-8, Type-304, 22-gauge (0.8mm) stainless steel with satin-finish. Body is drawn, one-piece, seamless construction. Back plate has mounting bracket attached. Furnished with concealed wall plate. Equipped with a clear acrylic soap refill-indicator window and a locked, hinged stainless steel lid for top filling. Capacity: 40-fl oz (1.2-L).

Valve — Black molded plastic push button and spout. Soap head-holding mushroom valve. Stainless steel spring. U-packing seal and duckbill. Antibacterial-soap-resistant plastic cylinder.

OPERATION:

Corrosion-resistant valve dispenses commercially marketed all-purpose hand soaps. To prevent corrosion of the tank, use only chloride-free pH-neutral liquid soaps. Valve is operable with one hand, without tight grasping, pinching, or twisting of the wrist, and with less than 5 pounds of force (22.2 N) to comply with accessible design guidelines (including ADAAG in U.S.A.). Window indicates when refill is required. The locked, hinged lid opens for top filling only with special key provided. Concealed, vandal-resistant mounting.

INSTALLATION:

Secure wall plate to the wall with three sheet-metal screws, furnished by manufacturer, at points indicated by an S. Slide mounting bracket of container down onto wall plate and secure unit with furnished locking-screw. For plaster or dry wall construction, provide concealed backing to comply with local building codes and secure with sheet-metal screws furnished. For other wall surfaces, provide fiber plugs or expansion shields for use with sheet-metal screws furnished, or provide 1/8" (3mm) toggle bolts or expansion bolts.

Note: Surface-mount the dispenser plumb and true with valve 6" (150mm) to right or left of lavatory center. Provide 4" (100mm) minimum clearance from the lid to the underside of any horizontal projection. Push buttons should be located 44" (1120mm) maximum above the finish floor.

SPECIFICATION:

Surface-mounted soap dispenser shall be Type-304 stainless steel with satin-finish. Corrosion-resistant valve shall dispense commercially marketed all-purpose hand soaps, non-iodine based soaps and do not use alcohol based sensitizers. To prevent corrosion of the tank, use only chloride-free pH-neutral liquid soaps. Valve shall be operable with one hand and with less than 5 pounds of force (22.2 N) to comply with accessible design guidelines (including ADAAG in U.S.A.). Container shall be equipped with a clear acrylic soap refill-indicator window; a locked, hinged stainless steel lid for top filling; and shall have a capacity of 40-fl oz (1.2-L). Unit shall have concealed, vandal-resistant mounting.

Surface-Mounted Soap Dispenser shall be Model B-2112 of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.

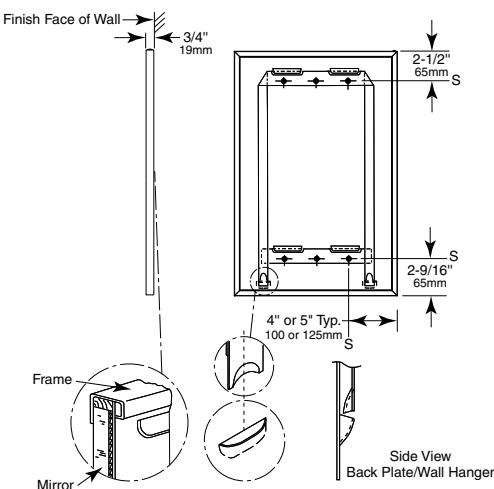


Designer's Notes:

- Special-order sizes available on request.
- Maximum size one-piece angle-frame mirror, 144" x 72" (366 x 183cm); minimum size, 12" x 12" (30 x 30cm).
- All Bobrick framed mirrors are manufactured to overall width and height dimensions. EXAMPLE: A 24" x 36" (61 x 91cm) mirror will be furnished 24" x 36" (61 x 91cm) outside-of-frame to outside-of-frame.
- To specify special sizes use Series Number followed by width then height in inches. EXAMPLE: B-290 2024.
- Bobrick framed mirrors are manufactured to a tolerance $\pm 1/8"$ (3.2mm).
- For sufficient space to lift mirror onto wall hanger(s), provide 3-1/4" (85mm) for Snap Locking Design; 5-3/8" (137mm) for Lock Tab Design minimum clearance above center line of mounting screw holes.
- Provide 1" (25mm) minimum clearance at bottom of mirror for unlocking mirror from wall and 1/2" (12.7mm) clearance on each side.

Snap Locking Design
(Rear View)

Figure: 1

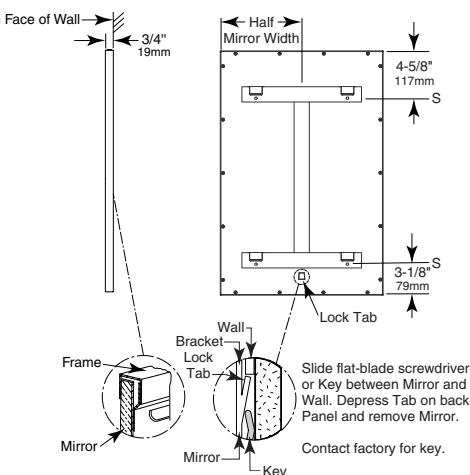


STANDARD B-290 SERIES MIRRORS

MODEL NO.	OVERALL SIZE	
	W	H
B-290 1830	18" (46cm)	30" (76cm)
B-290 1836	18" (46cm)	36" (91cm)
B-290 2430	24" (61cm)	30" (76cm)
B-290 2436	24" (61cm)	36" (91cm)

Lock Tab Design
(Rear View)

Figure: 2



STANDARD B-290 SERIES MIRRORS

MODEL NO.	OVERALL SIZE	
	W	H
B-290 2448	24" (61cm)	48" (122cm)
B-290 2460	24" (61cm)	60" (152cm)
B-290 2472	24" (61cm)	72" (183cm)

All Other Size Mirrors

Note: Mirrors greater than 30" in width will have multiple hanger brackets with a typical 8" off each edge.

Width	Hanger Pockets
Up to 30" (76cm)	1
Over 30" up to 72" (76 to 183cm)	2
Over 72" up to 108" (183 to 274cm)	3
Over 108" (274cm)	4

MATERIALS:

Frame — 18-8, heavy-gauge stainless steel, 3/4" x 3/4" (19 x 19mm) angle with satin finish. One-piece, roll-formed construction forms continuous integral stiffener on all sides. Bevel design on front of angle holds frame tightly against mirror. Corners of mirror frame are heliarc welded, ground and polish smooth. Galvanized steel back is fastened to frame with concealed screws and equipped with integral horizontal hanging brackets near the top and bottom of the mirror for hanging the mirror and to prevent the mirror from pulling away from the wall. Locking devices secure mirror to concealed wall hanger.

continued...

Mirror — No. 1 quality, 1/4" (6mm) select float glass (standard glass): selected for silvering, electrolytically copper-plated by the galvanic process, and guaranteed for 15 years against silver spoilage. All edges protected by plastic filler strips; back is protected by full-size, shock-absorbing, water-resistant, nonabrasive, 3/16" (5mm) thick polyethylene padding.

Concealed Wall Hanger — Galvanized steel construction. Incorporates upper and lower support members, which engage lower backplate louvers to keep bottom of mirror against wall

INSTALLATION:

Mount wall hanger on wall with screws (not furnished) at points indicated by an **S**. For plaster or dry wall construction, provide backing to comply with local building codes, then secure wall hanger with screws (not furnished). When providing a concealed backing, allow backing to cover range of mounting hole locations shown on drawing. For other wall surfaces, provide fiber plugs or expansion shields for use with screws (not furnished), or provide 1/8" (3mm) toggle bolts or expansion bolts. Hang mirror on wall hanger with all four backplate louvers engaged behind horizontal wall hanger members. To do this, mirror must be centered in front of the wall hanger horizontally, pressed flat against the wall approximately 1" (25mm) above final position and then lowered into final position.

Snap Locking Design — Locking devices automatically secure mirror to concealed wall hanger when it is lowered into final position (see figure 3). Locking devices may be unlocked by inserting two flat blade screwdrivers behind each side of mirror near the bottom or under the bottom of the mirror and pulling mirror bottom forward and then up.

Lock Tab Design — Locking devices automatically secure mirror to concealed wall hanger when it is lowered into final position (see figure 4). Locking device may be unlocked by sliding a flat-blade screwdriver or Key between mirror and wall at center of mirror and depressing tab on back panel. If key is required, please contact the factory.

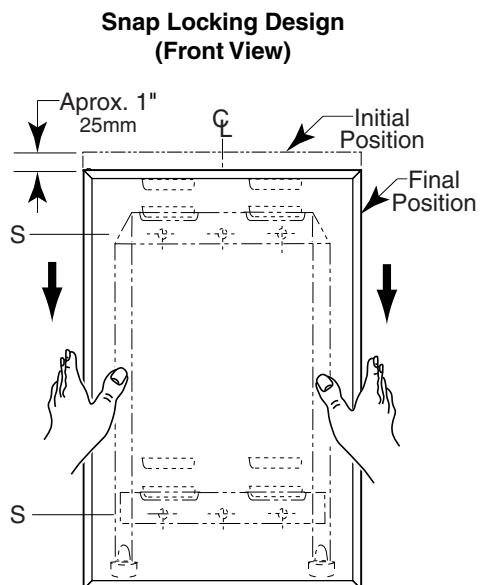


Figure: 3

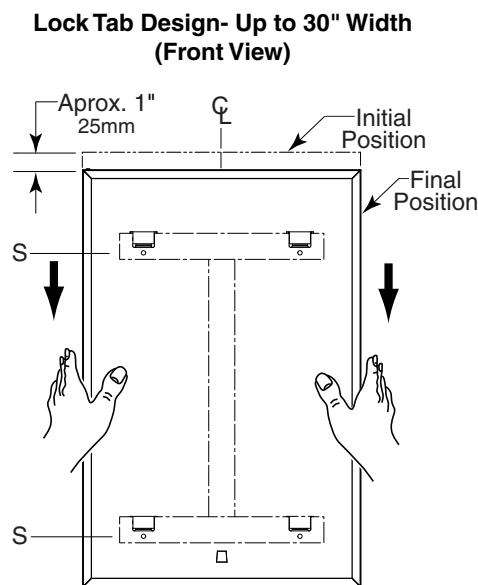


Figure: 4

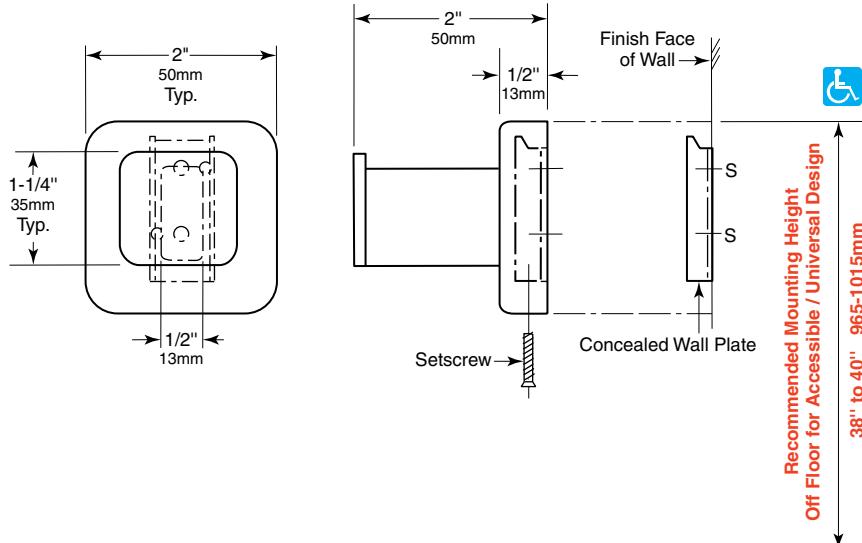
SPECIFICATION:

Mirror shall have a one-piece, stainless steel angle frame, 3/4" x 3/4" (19 x 19mm) with continuous integral stiffener on all sides and beveled front to hold frame tightly against mirror; corners shall be heliarc welded, ground, and polished smooth; all exposed surfaces shall have satin finish. Reflective surfaces shall be guaranteed for 15 years against silver spoilage. All edges shall be protected by plastic filler strips and the back shall be protected by full-size, shock-absorbing, water-resistant, nonabrasive, 3/16" (5mm) thick polyethylene padding. Galvanized steel back shall have integral horizontal hanging brackets located at top and bottom for mounting on concealed wall hanger and to prevent the mirror from pulling away from the wall. Locking devices secure mirror to concealed wall hanger. Mirror shall be removable from wall hanger for reglazing mirror.

Framed Mirror shall be Model B-290 _____ (insert width and height) of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.

BOBRICK**Technical Data****ClassicSeries®
SURFACE-MOUNTED
SINGLE ROBE HOOK****B-671
B-6717**

Specify Model Required: Model B-671 Bright polished stainless steel
 Model B-6717 Satin-finish stainless steel

**MATERIALS:**

Flange and Support Arm — 18-8, type-304, 22-gauge (0.8mm) stainless steel. Concealed, 16-gauge (1.6mm) stainless steel mounting bracket. All-welded construction. Secured to wall plate with stainless steel setscrew.

Concealed Wall Plate — 18-8, type-304, 16-gauge (1.6mm) stainless steel.

Cap — 18-8, type-304, 10-gauge (3.6mm) stainless steel. Welded to support arm.

INSTALLATION:

To remove concealed wall plate from back of flange and mounting bracket, loosen setscrew. Mount wall plate so prongs are at top; secure with two sheet-metal screws, furnished by manufacturer, at points indicated by an S. Engage mounting bracket onto prongs of wall plate, then secure into position by tightening setscrew at bottom of flange.

For partitions with particle-board or other solid core, secure with sheet-metal screws furnished, or provide through-bolts, nuts, and washers.

For hollow-core metal partitions, provide solid backing into which the furnished sheet-metal screws can be secured.

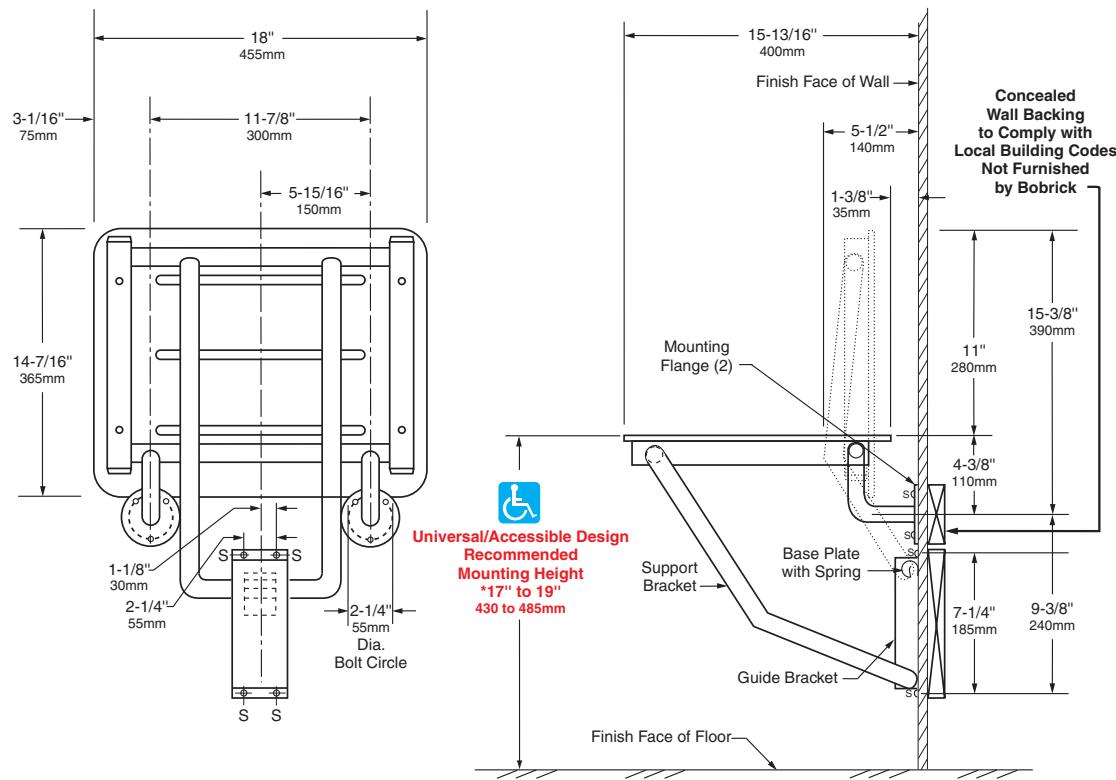
For masonry wall, provide fiber plugs or expansion shields for use with sheet-metal screws furnished, or provide 1/8" (3mm) toggle bolts or expansion bolts.

For plaster or dry wall construction, provide concealed backing to comply with local building codes, then secure unit with sheet-metal screws furnished.

SPECIFICATION:

Surface-mounted robe hook shall be type-304 stainless steel with _____ (insert one: bright polished, bright polished brass, or satin) finish. Flange shall be 22 gauge (0.8mm) and equipped with concealed, 16-gauge (1.6mm) mounting bracket that is secured to concealed, 16-gauge (1.6mm) wall plate with a stainless steel setscrew. Cap shall be 10 gauge (3.6mm), welded to support arm.

Surface-Mounted Robe Hook shall be Model _____ (insert model number) of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.

**Technical Data****SOLID PHENOLIC
FOLDING
SHOWER/DRESSING
AREA SEAT****B-5191****MATERIALS:**

Seat — One-piece, 5/16" (8mm) thick, solidly fused plastic laminate with matte-finish melamine surfaces, ivory-colored face sheets, and black phenolic-resin core that are integrally bonded — cannot delaminate. Integral slots for water drainage. Secured to frame with stainless steel carriage bolts and acorn nuts.

Frame — 18-8, type-304, stainless steel with satin finish. 16-gauge (1.6mm), 1-1/4" (30mm) square tubing and 18-gauge (1.2mm), 1" (25mm) diameter seamless tubing.

Mounting Flanges (2) — 18-8, type-304, 3/16" (5mm) thick stainless steel with satin finish. 3" (75mm) diameter with three mounting screw holes.

Baseplate — 18-8, type-304, heavy-gauge stainless steel.

Spring — 17-7, type-301, 24-gauge (0.6mm) stainless steel. Spot-welded to baseplate.

Guide Bracket — 18-8, type-304, 16-gauge (1.6mm) stainless steel with satin finish.

continued . . .

MATERIALS:

Blow-molded high-density polyethylene with Microban® antimicrobial embedded in the plastic and 18 gauge, type 304 brushed stainless steel finish flange. Reinforced full-length steel-on-steel hinge mechanism, with 11-gauge steel mounting plates and mounting hardware included. Molded-in graphics and safety messages in six languages. Contoured changing surface area is 442 sq in (2852 sq cm) and comes complete with nylon safety straps and bag hooks.

OPERATION:

Concealed pneumatic cylinder and hinge structure provides controlled, slow opening and closing of bed. High-density polyethylene is easy to clean and resists odors and bacterial growth. Complies with ASTM static load performance requirements when properly installed. Built-in liner dispenser holds approximately 25 KB150-99 sanitary liners.

Warning: To ensure that the unit supports the intended loads, baby changing stations must be properly installed according to the manufacturer's instructions.

SPECIFICATION:

Baby changing station body durable high-density polyethylene with Microban® antimicrobial with an 18 gauge, type 304 brushed stainless steel finish flange. Design of unit shall be recess-mounted. Unit shall be equipped with a pneumatic cylinder for controlled opening and closing of bed. Bed shall be secured to back plate with a concealed, full-length steel-on-steel hinge. No hinge structure shall be exposed on interior surfaces. Unit shall have 11-gauge steel mounting plates with mounting hardware included. Unit shall have Microban® antimicrobial embedded into plastic material. Unit shall conform to ASTM F 2285-04 Standard Consumer Safety Performance Specification for Diaper Changing Tables for Commercial Use, ANSI Z535.4 Product Safety Signs and Labels, and ASTM G21 Antifungal Standards or local code if more stringent installation requirements are applicable for barrier-free accessibility. Bed shall have smooth concave changing area with a nylon safety strap and two hooks for bags or purses. Unit shall have a built-in Liner Dispenser for use with 3-ply chemical free biodegradable sanitary liners, universal instruction graphics and safety messages in 6 languages. Unit shall be backed by manufacturer's 5-year limited warranty on materials and workmanship and include a provision for replacement caused by vandalism. Unit shall be manufactured in the U.S.A.

Brick Paving? McNear has the answers!

McNear manufactures an extensive range of brick paving products, ranging from Thin Pavers to Full Pavers, and including accent pieces such as Copings, Stair Treads, and Wall Caps. Our *Landscaping with Brick* brochure presents all these products plus color swatches from a dedicated paving perspective.



See Our Other Lines of McNear Products

Besides our full line of Face Brick, Thin Brick, and Brick Pavers, McNear Brick & Block is a leading regional manufacturer of Interlocking Pavers and VERSA-LOK® Retaining Walls.

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- Thin Brick
- Face Brick
- Interlocking Pavers
- VERSA-LOK® Retaining Walls
- Rumford Fireplaces



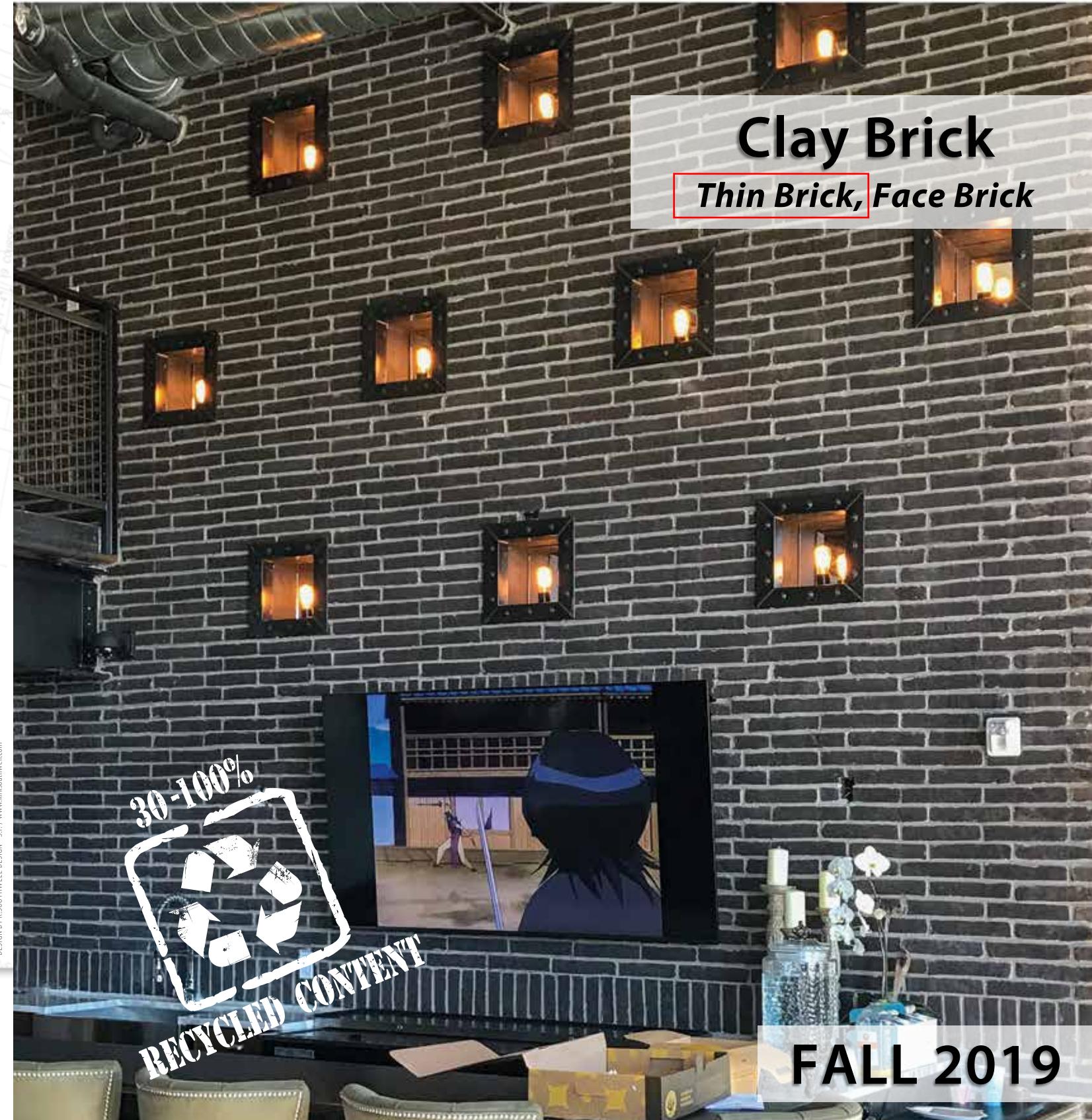
1 McNear Brickyard Rd., San Rafael, CA 94901

Phone: 888-442-6811
Fax: 415-257-6353
Email: sales@mcnear.com
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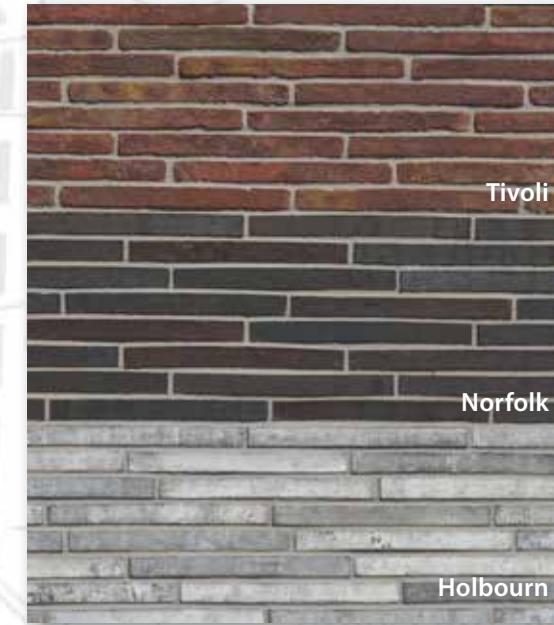
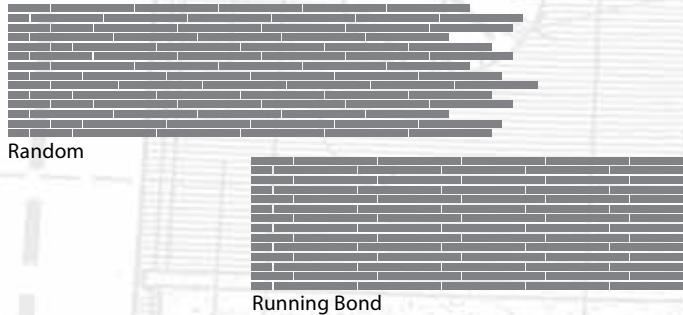


Manufacturers Since 1868



NEW Centurion Brick

Centurion is a new brick size which captures the beauty of historic Italian design. These long, slim bricks are available as both full-bed brick (3 5/8" thick), and as thin brick (3/4" thick). Most of our most popular colors and finishes will be available in Centurion shapes, including our Sandmolds.



Large Format Sandmolds

We now offer the beautiful, soft textures of our Sandmold Series in larger sizes for both full-depth brick and Thin Brick. The 12-inch lengths of the Utility and Norman sizes extend the design possibilities, and may be better suited for larger buildings.

Norman Sandmolds are similar in appearance to ancient brick found across Europe.

Both Norman and Utility Sandmolds benefit from faster, more efficient installation derived from their larger sizes.



BrickFast™ Type McN

The BrickFast™ Type McN panel system is an innovative way to quickly, accurately, and securely install Thin Brick veneers. The system incorporates a true mechanical attachment between each field brick and the galvanized metal panel, and does not rely on adhesives for its long-term strength and durability.



Pictured on front: Balmoral (Sandmold)



Clay Brick

Thin Brick, Face Brick

McNear Brick & Block's roots go back to 1868, making us one of the country's oldest brick manufacturers. We produce a broad selection of Face Brick, Thin Brick, and Brick Pavers in colors and textures ranging from the soft, handmade look of our Sandmold Series, to the "reclaimed" aesthetic of our Old California Series, to the vibrant, sharp colors and edges of our Commercial Series. In addition to the products shown within these pages, we have the capability of manufacturing custom blends, shapes, and colors. All the colors depicted herein are available as Face Brick, Thin Brick, and as Brick Pavers. McNear brick products meet the standards of ASTM C216 Grade SW and ASTM C1088 Grade Exterior, and are suitable for use in freeze/thaw environments.



McNear Clay Brick are manufactured with 30-100% Post-consumer, Recycled Content.

Thin Brick

McNear Brick & Block recognizes that Thin Brick is an important and growing sector of brick construction, and we offer many shapes and sizes of Thin Brick to be used either independently, or in conjunction with matching full-depth brickwork.

This newest generation of brick products has much to offer:

- No expensive footings or supports required
- Faster construction times
- Easier to insulate
- Thinner walls, creating more usable space
- New avenues for brick use (ie: ceilings)
- No seismic concerns
- Do-it-yourselfer friendly
- Great for remodels
- Applicable to any surface, interior or exterior
- Easier and cheaper shipping and handling
- Much lower embodied environmental costs
- Works with Panelization and Precast construction.

Thin Brick gives these benefits without sacrificing any of the durability, low maintenance, beauty, and value of traditional brick construction.



Genova



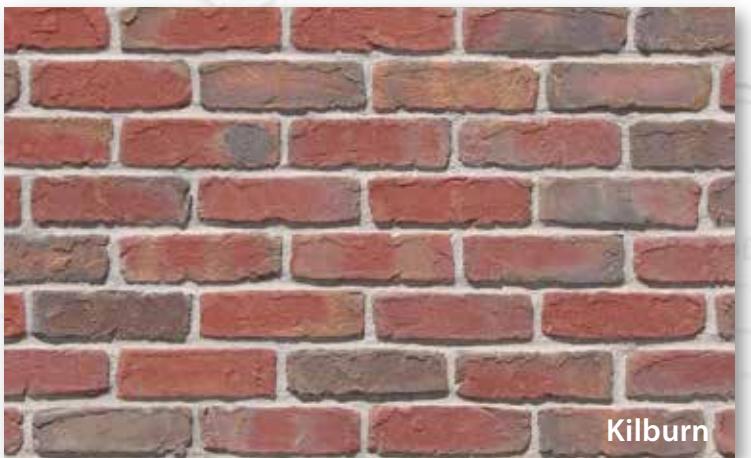
Greenwich



Salt House



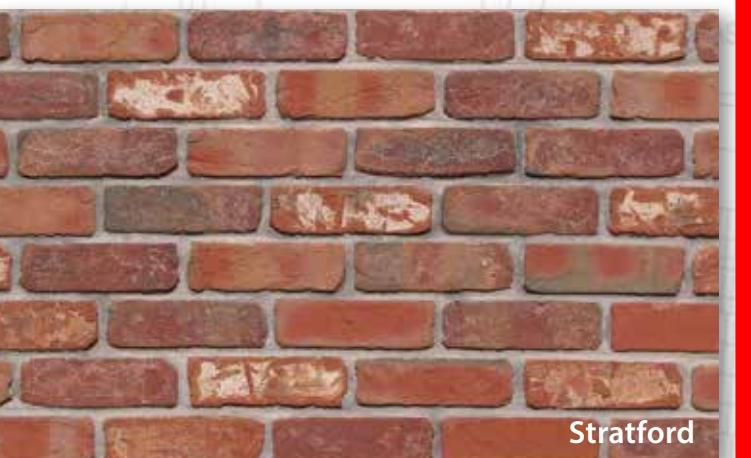
San Juan



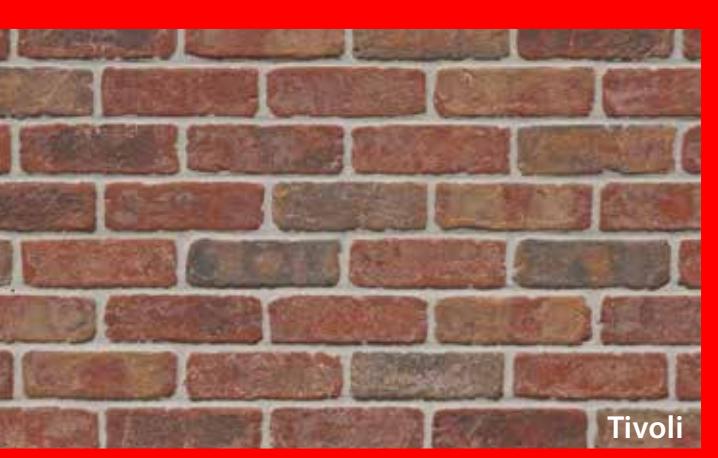
Kilburn



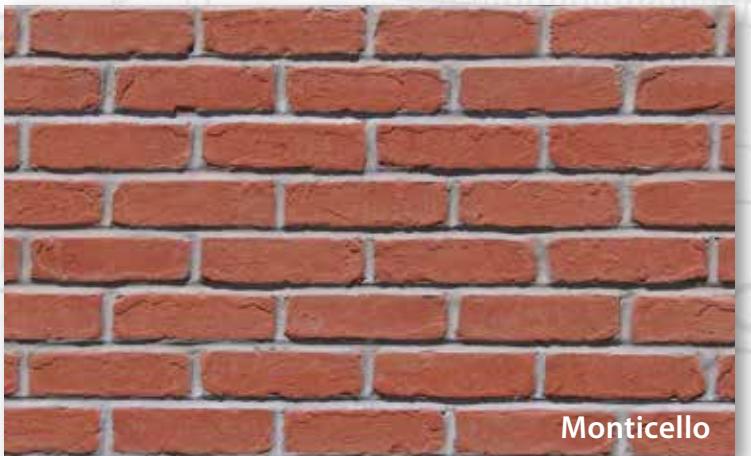
Limehouse



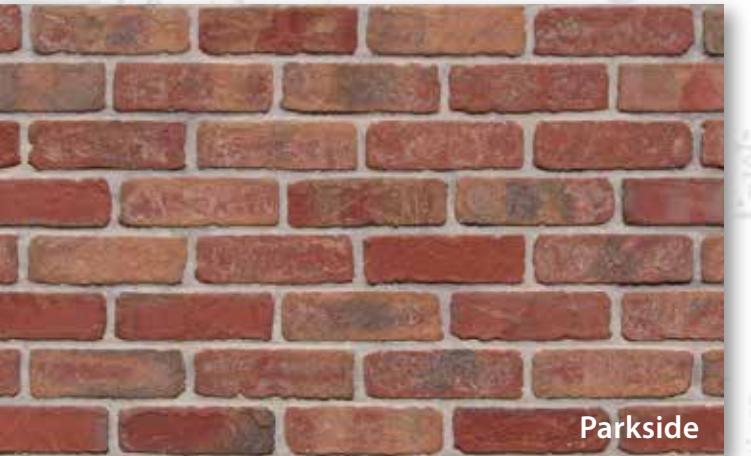
Stratford



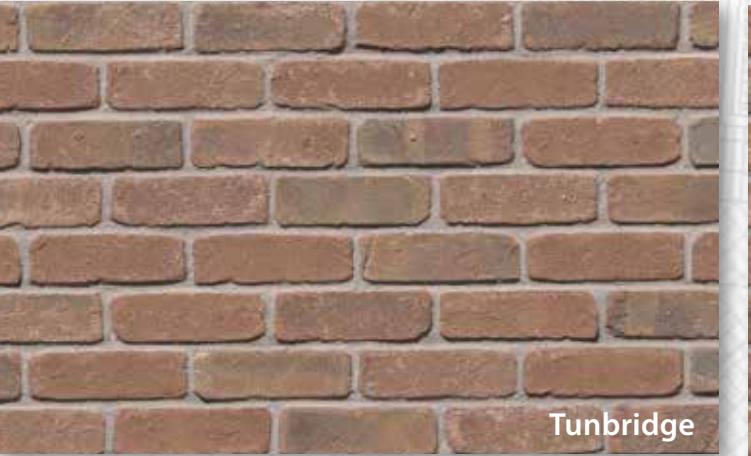
Tivoli



Monticello



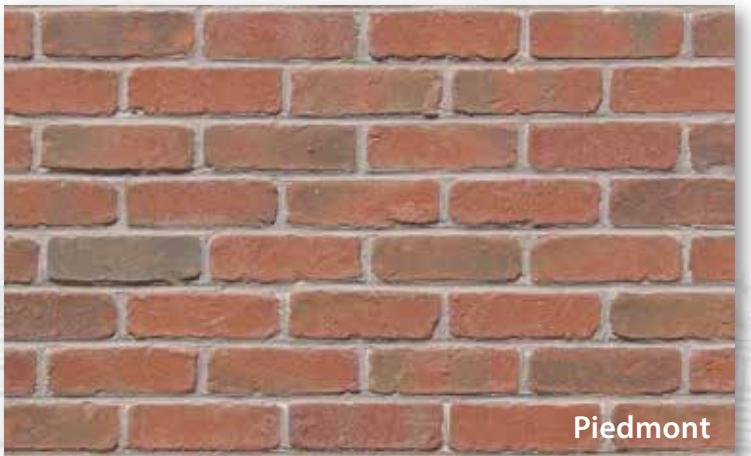
Parkside



Tunbridge



Verona



Piedmont



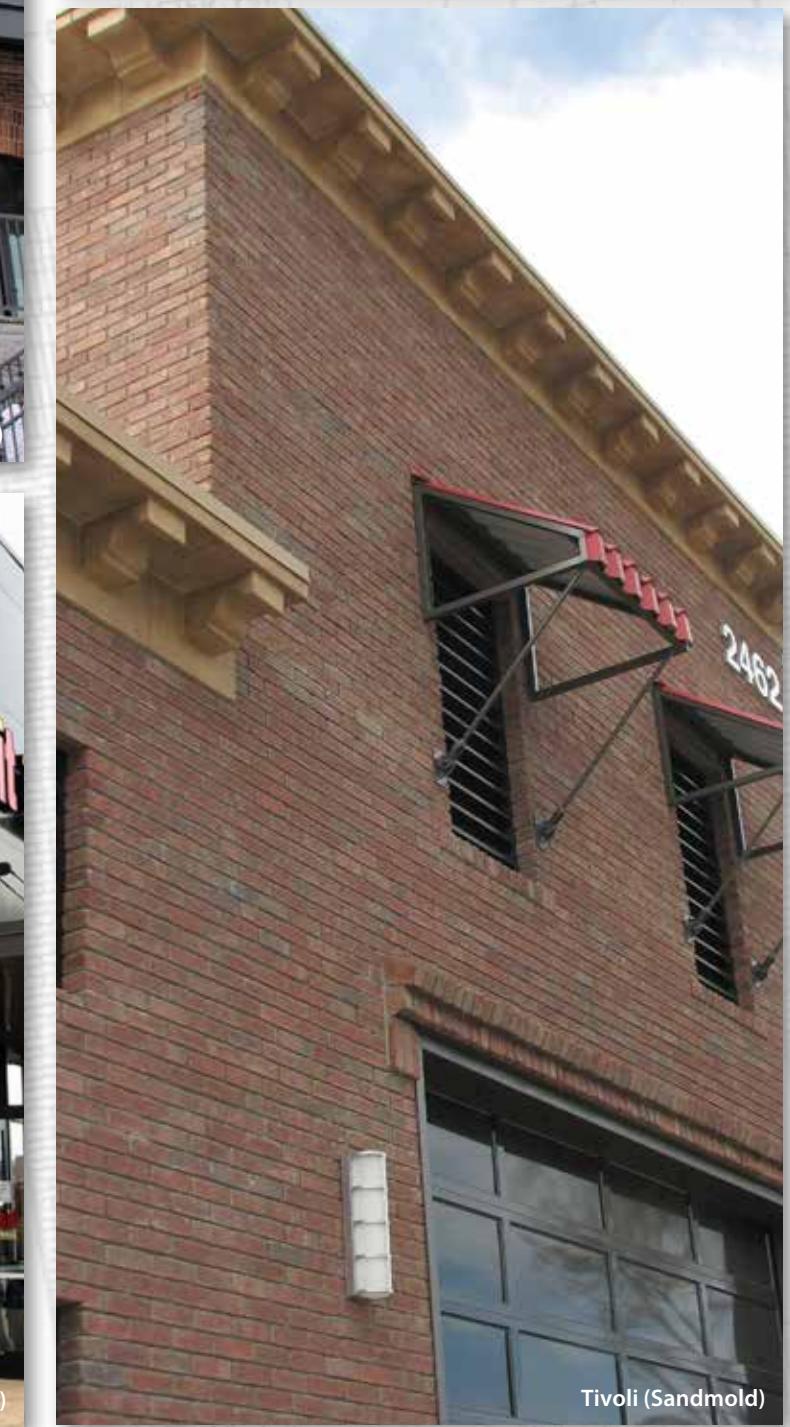
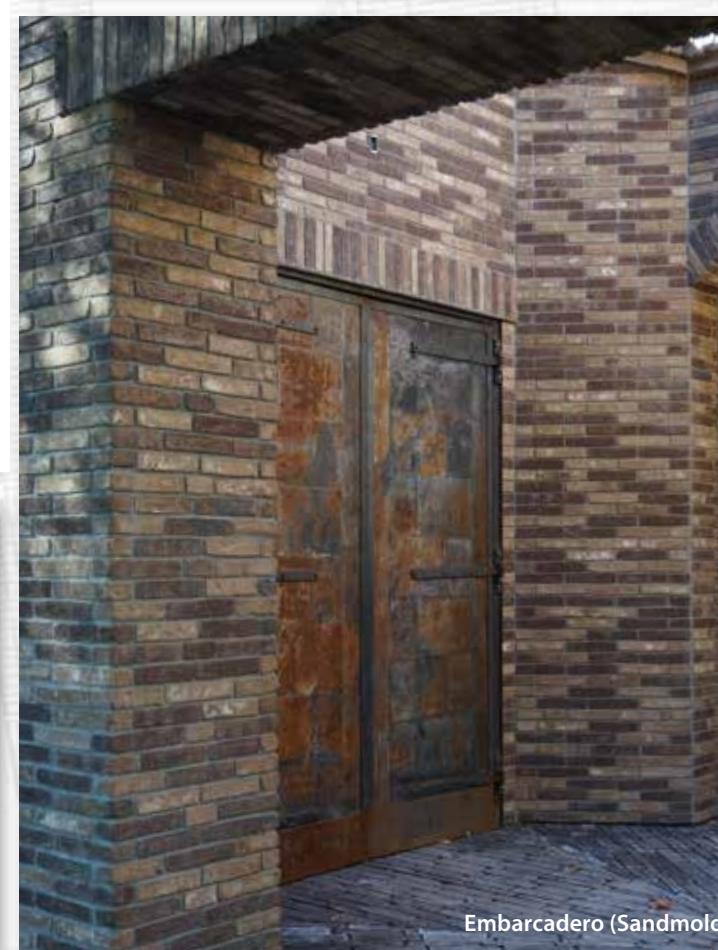
Portland



Red Hills (Old California)



Flagstaff (Sandmold)



Re-Skinning with McNear Thin Brick

CLAY BRICK • THIN BRICK • FACE BRICK



McNear Thin Brick were used to re-skin this building at the University of Dayton to bring it more into keeping with the other buildings on campus.

B.6

CCMENT PLASTER FIN
FIN
ATED CHANG
W



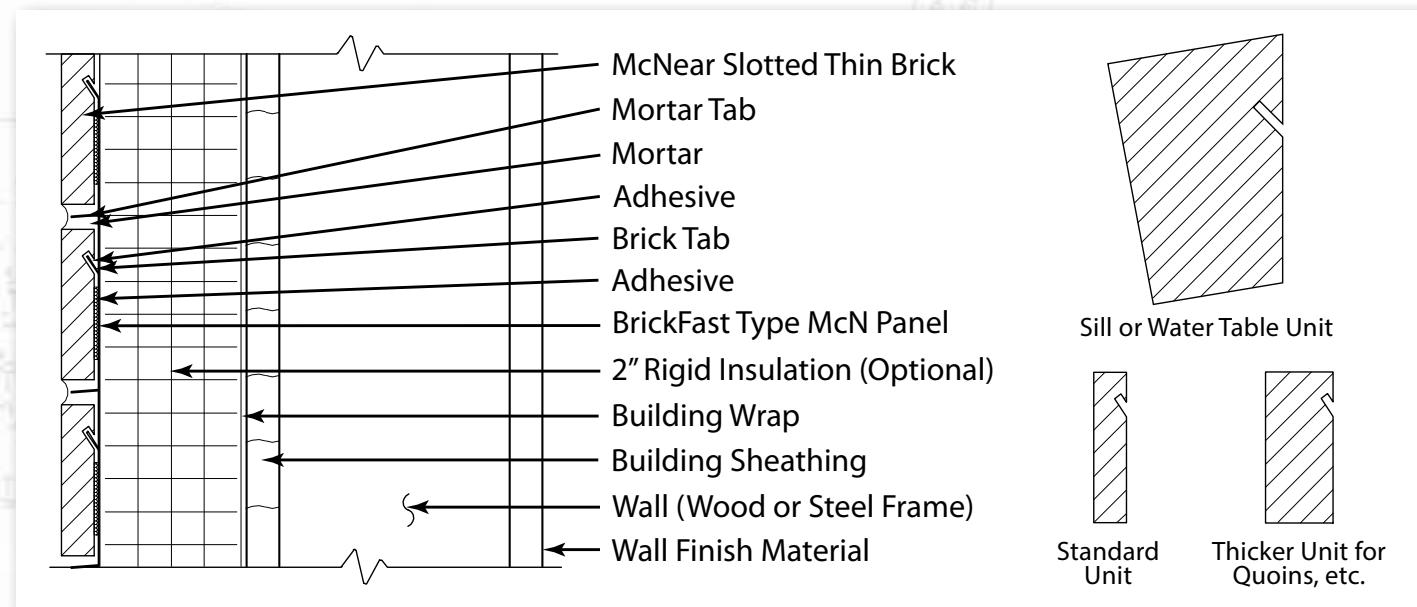
A. Tivoli (Sandmold)
B. Tivoli (Sandmold)

C. Genova/Piedmont Blend (Sandmold)
D. Embarcadero (Sandmold)

BrickFast™ Type McN Panel System

BrickFast™ Type McN panels stand out from other thin brick attachment methods, as an extremely fast, simple, and secure system. The 4' by 4' BrickFast Type McN galvanized steel panels have tabs that engage matching slots cut into the backs of the bricks, creating a strong mechanical bond. While adhesive is used during installation, the long-term strength of this system comes from the mechanical attachment of the bricks to the panels.

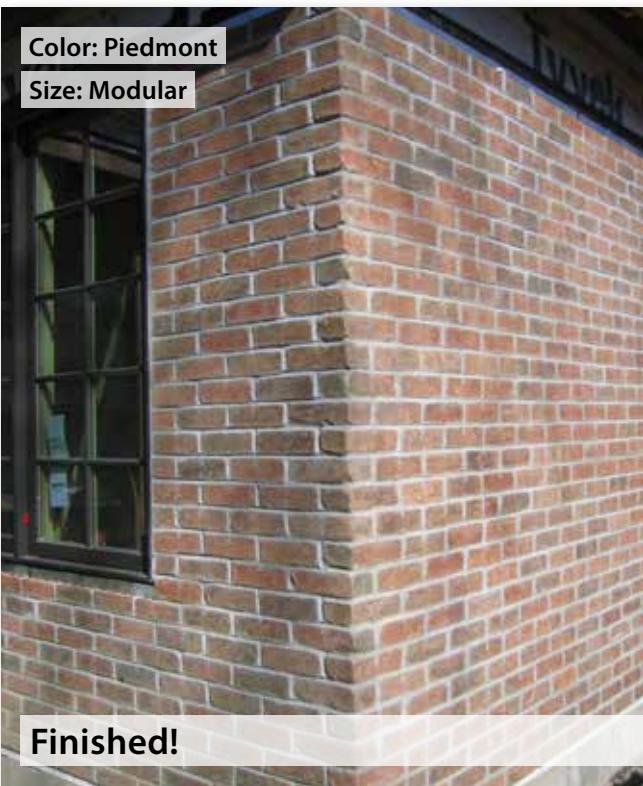
BrickFast Type McN is used in the same way as other cladding systems, with similar methods of moisture control and insulation. It can be installed directly over weather resistive barriers, drainage planes, rigid foam insulation, insulated concrete forms, structural insulated panels, or a combination of these substrates.



- BrickFast Type McN is suitable for both new construction and remodels. It can be used on both interiors and exteriors.
- BrickFast Type McN can incorporate special shapes, such as Sills and thicker bricks for Quoins, etc.
- BrickFast Type McN panels are available for a variety of brick sizes, including: Modular (2-1/4 x 7-5/8 x 5/8), Norman (2-1/4 x 11-5/8 x 5/8), Utility (3-5/8 x 11-5/8 x 5/8), King (2-5/8 x 9-5/8 x 5/8), and Standard (2-7/16 x 8-1/8 x 5/8).
- Special BrickFast Corner panels are used, which wrap around the corners.
- BrickFast Type McN panels are made from 28-gauge, galvanized (G60) steel. Other materials (ie: 26-gauge G90) are available as special order.
- BrickFast Panels meet or exceed the standards of ASTM A653 and E330.



4 Simple Steps





Introducing CENTURION – Thin Brick & Full Brick

FACE BRICK

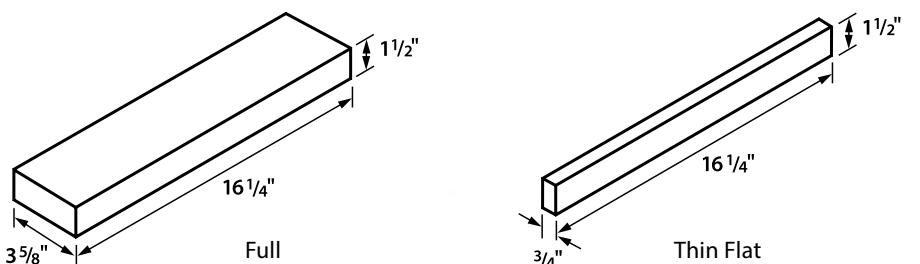
THIN BRICK

CLAY BRICK

FACE BRICK

THIN BRICK

CLAY BRICK



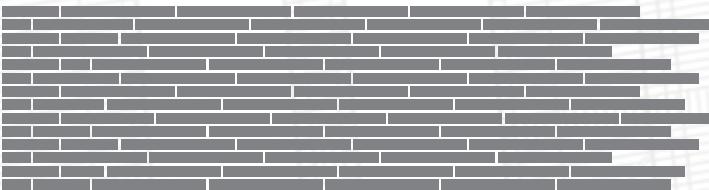
Tivoli



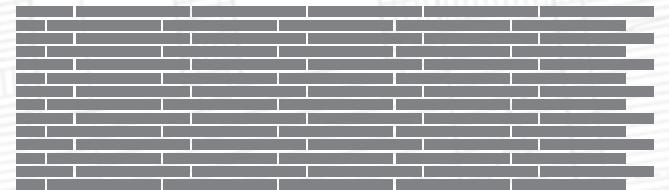
Norfolk



Holbourn



Random



Running Bond

The Textures of Brick with the Colors of Paint

Painted brick walls combine the nearly unlimited color choices of paint with the rich textures of brick. Bricks create a regular, but individualized pattern. To varying degrees depending on the brick type, each individual brick bears the unique marks and deformations produced during its creation.

These 6 photos show the range of textures possible from painting different McNear brick types.



Painted Camden



Painted Dieskin



Painted Firenze



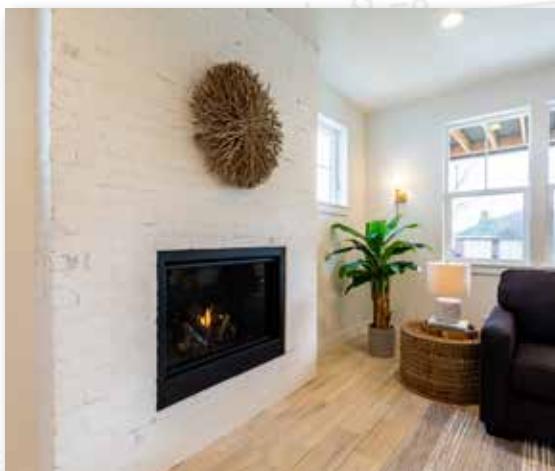
Painted Melrose



Painted Rustic



Painted Wirecut



Large Format Sandmolds

McNear Sandmolds are now available in Utility (11-5/8" x 3-5/8") and Norman (11-5/8" x 2-1/4") sizes, both in Full-Depth brick and in Thin Brick.

Bringing the historic, hand-made texture to larger bricks can be particularly useful for projects where the scale would benefit from larger bricks, but where a traditional character is still desired.

Norman Sandmolds are similar in appearance to ancient brick found across Europe.

Both Norman and Utility Sandmolds benefit from faster, more efficient installation derived from their larger sizes.



Kilburn-Utility (Sandmold)



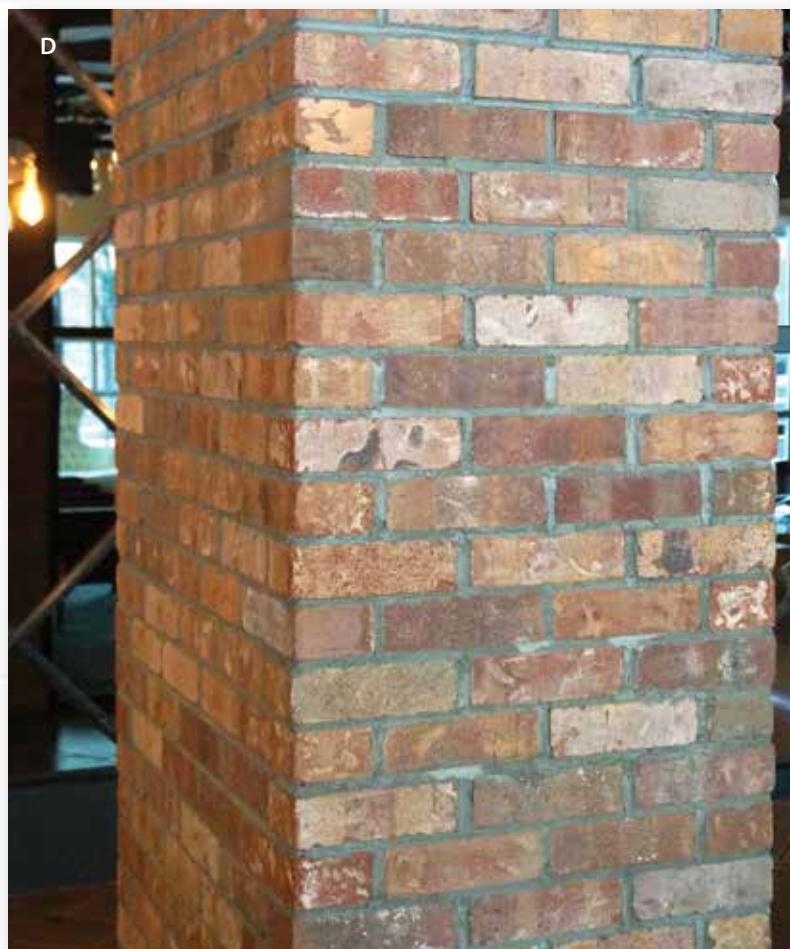
Balmoral/Embarcadero Blend-Utility (Sandmold)



Tivoli-Norman (Sandmold)



Kilburn-Utility (Sandmold)



A. Cotswold (Sandmold)
B. Cascada (Town)
C. Flagstaff (Sandmold)

D. Dorado (Old California)
E. Calaveras (Old California)



A. Rawhide (Town)
B. Calaveras (Old California)

C. Tuscan (Commercial)
D. Custom (Town)



BRICK SIZES & SHAPES

FACE BRICK

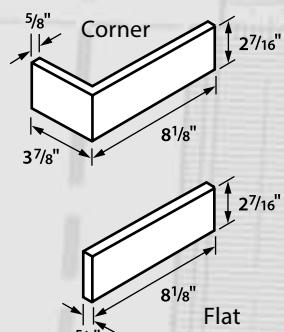
THIN BRICK

FACE BRICK

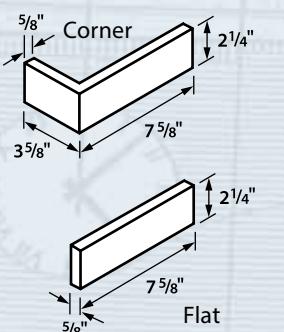
THIN BRICK

CLAY BRICK

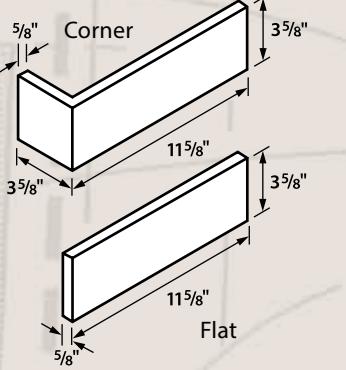
Standard Thin A



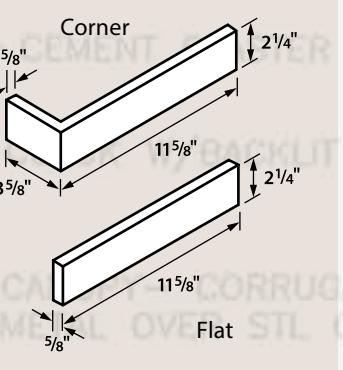
Modular Thin B



Utility Thin



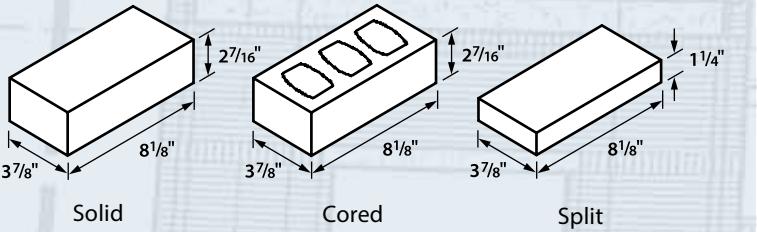
Norman Thin C



Other[†] D

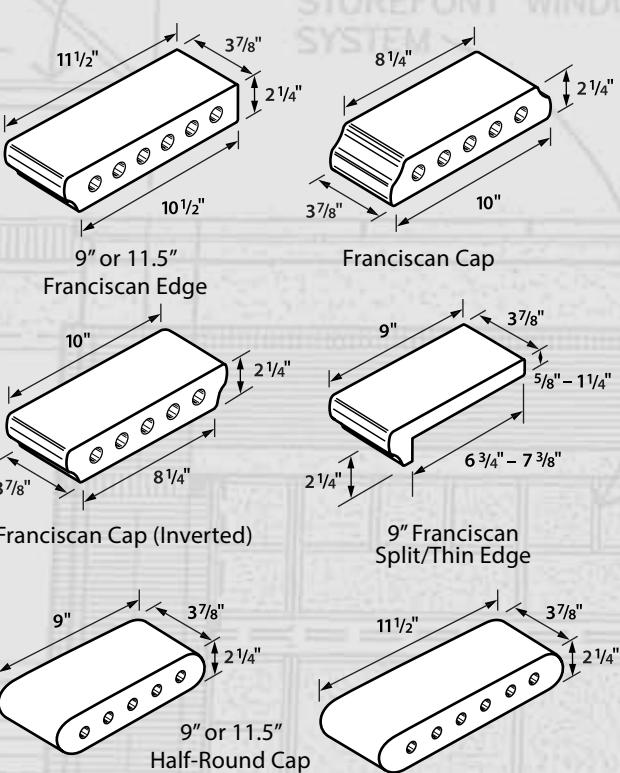


Standard

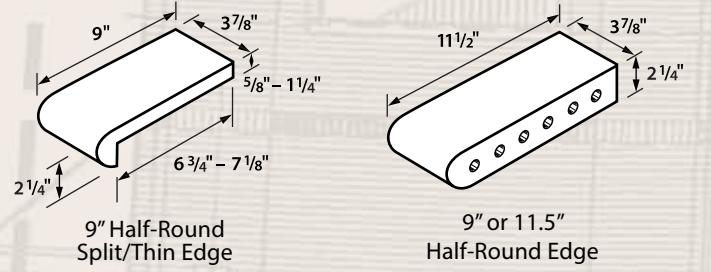


E

Copings, Caps & Treads G

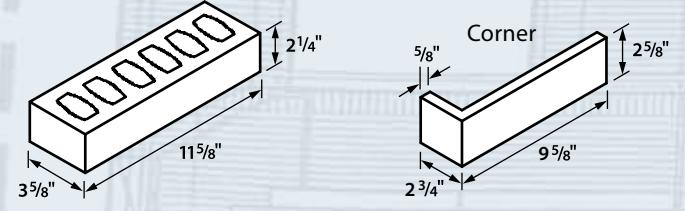


Half-Rounds



F

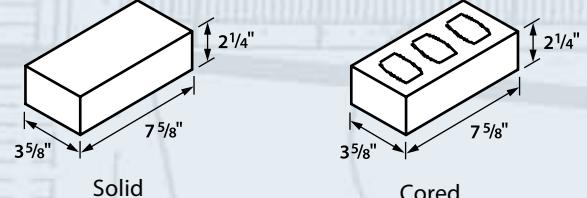
Norman



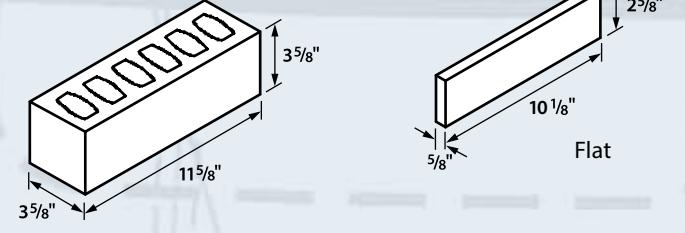
King Thin

H

Modular I



Utility



BRICK SERIES & COLORS

SANDMOLD	A	B	C	D	E	F	G	H	I
All Colors*									

* Balmoral, Berkshire, Camden, Charleston, Chatham, Chicago Common, Cotswold, Cumberland, Dover, Embarcadero, Farmingdale, Firenze, Flagstaff, Folsom, Folsom Buff, Genova, Greenwich, Kilburn, Limehouse, Monticello, Parkside, Piedmont, Portland, Salt House, San Juan, Stratford, Tivoli, Tunbridge, Verona

OLD CALIFORNIA	A	B	C	D	E [‡]	F	G	H	I
Dorado									
Melrose									
Old Myford									
Portsmouth									
Other Colors*									

* Arcadian, Balboa, Black Hills, Calaveras, Greenhill, Red Hills, Rustic, Sacramento Rustic, San Joaquin Rustic, Santa Fe Rustic, Whitehall

TOWN	A	B	C	D	E [‡]	F	G	H	I
Canterbury									
McNear Flash									
Newcastle									
Peacock									
Santa Cruz									
Tamarac									
Other Colors*									

* Cascada, Hacienda, Hampshire, Harmon, Kensington, Rawhide, Sahara, Santiago

COMMERCIAL	A	B	C	D	E	F	G	H	I
McNear Red Dieskin									
McNear Red Wirecut									
McNear Red Rug									
Sepia									
Sienna									
Tuscan									
Other Colors*									

* Cornwall Dieskin, Cornwall Wirecut, Dunsmuir Dieskin, Gayley Dieskin, Gayley Wirecut, Milano Wirecut, Sepia Dieskin, Sienna Dieskin, Somerset Dieskin, Somerset Wirecut, Tangiers Dieskin, Tangiers Wirecut, Tuscan Dieskin

Stock Item: Items which can normally ship within a few days.

Special Order: Items which typically require extra lead times, and may require minimum order quantities.

Not Available

McNear Clay Brick products meet the standards of ASTM C216 Grade SW, and ASTM C1088 Grade Exterior.

Butterfield Fire Station

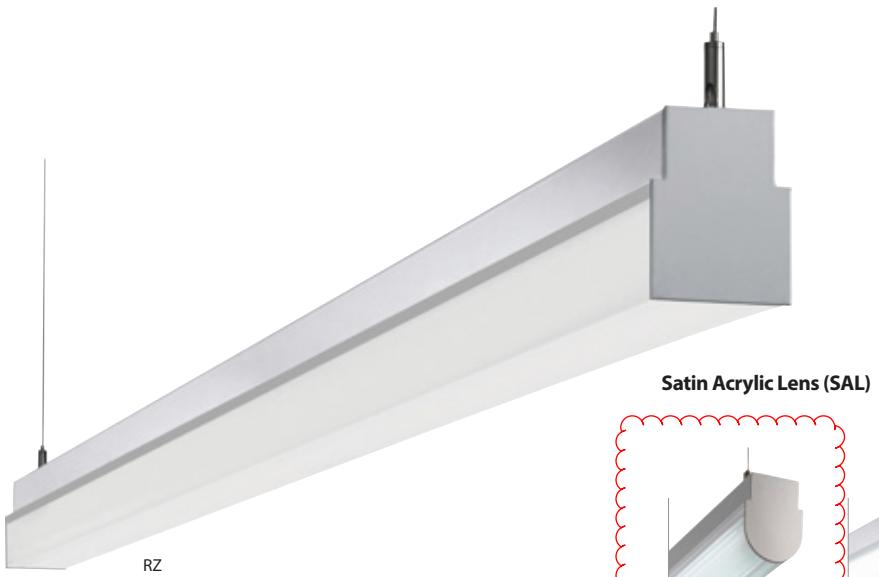
17285 Butterfield Blvd.
Morgan Hill, CA 95037

Luminaire Catalog Pages

95% CD Set
January 16, 2023

O'MAHONY & MYER
ELECTRICAL ENGINEERING & LIGHTING DESIGN

4340 Redwood Hwy., Suite 245, San Rafael CA 94903



Same great all-purpose Snap now with much higher lumen levels (and efficiencies).

Want to keep the older Snap lumen levels?

Specify: PROG500 = 500 lumens/ft

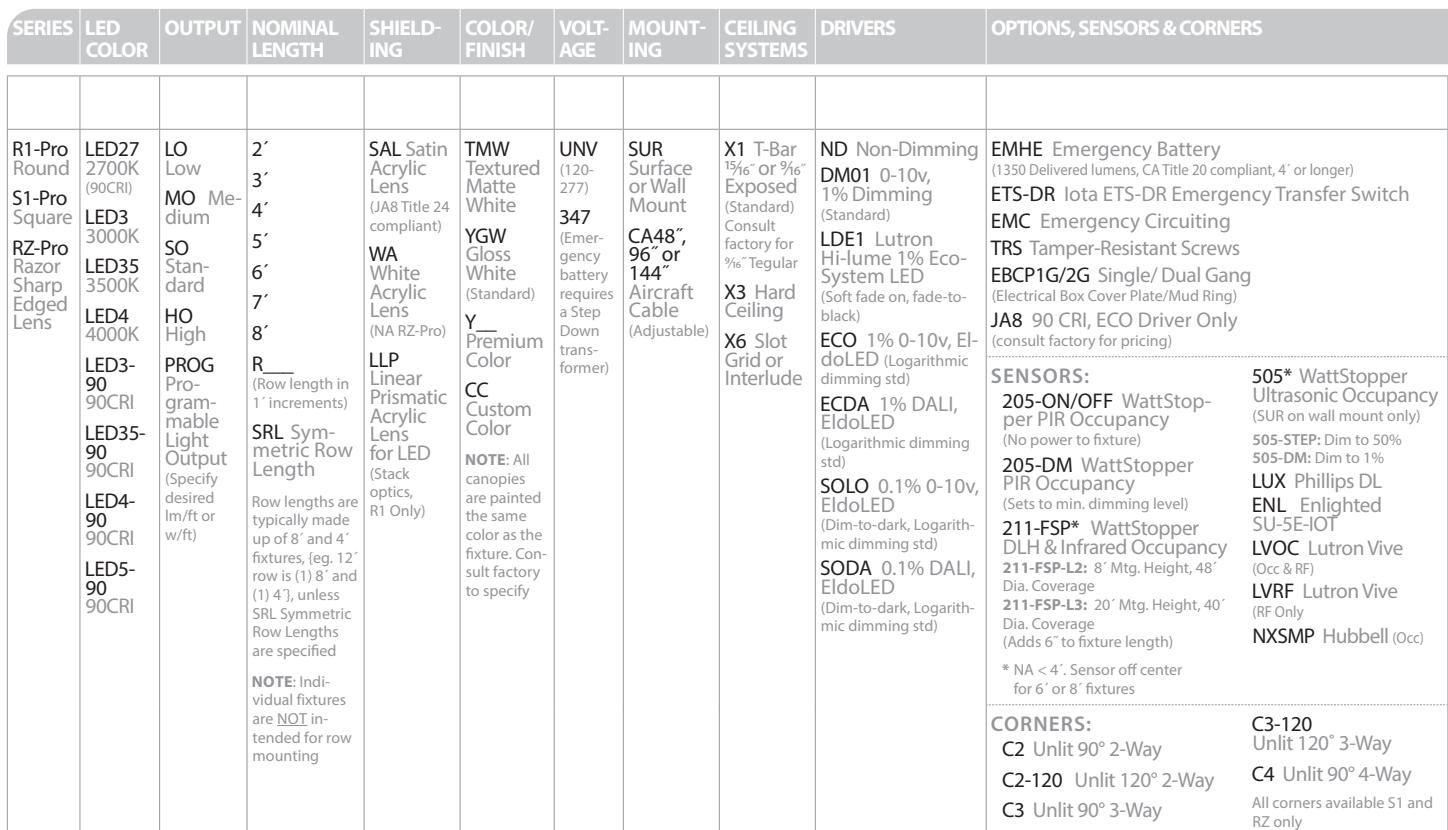
PROG7W = 7 watts/ft

[CLICK HERE FOR OLDER SNAP SPECS](#)



Made in the
USA

Light Loss Factor (LLF) for CCTs other than 3500K:
4000K +2%, 3000K -5%, 2700K -20%
90 CRI -15% (3K, 3500K, 4K & 5K)





DISTRIBUTIONS

Standard Output:

S1-LED35-MO-04-SAL

5100 Delivered Lumens

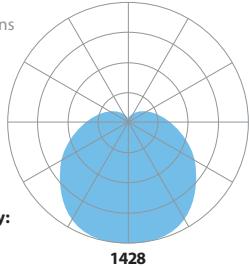
38 Watts

136 lm/w

3500 CCT

Test

#104160086LAX-003



Zonal Lumen Summary:

0-90 (Down) = 84%

90-180 (Up) = 16%

Vertical Angle	0°	25°	45°	65°	90°
0°	1428	1428	1428	1428	1428
5°	1424	1423	1419	1428	1428
15°	1347	1357	1364	1378	1383
25°	1208	1228	1249	1271	1276
35°	1015	1051	1089	1127	1143
45°	796	851	921	989	1018
55°	573	646	752	852	894
65°	355	330	282	225	172
75°	285	258	208	148	88
85°	47	152	286	381	410
90°	0	107	232	315	340
95°	0	150	110	57	0
105°	0	127	94	49	0
115°	0	59	140	186	198
125°	0	48	107	147	160
135°	0	38	83	114	124
145°	0	30	61	85	92
155°	0	22	42	58	62
165°	0	16	24	32	24
175°	0	13	14	14	10
180°	0	0	0	0	0

Standard Output:

R1-LED35-SO-LLP

5186 Delivered Lumens

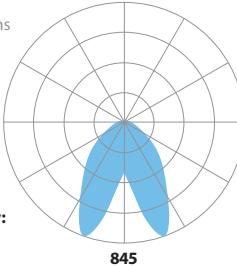
38 Watts

138 lm/w

3500 CCT

Test

#104160086LAX-009



Zonal Lumen Summary:

0-90 (Down) = 94%

90-180 (Up) = 6%

Vertical Angle	0°	25°	45°	65°	90°
0°	845	845	845	845	845
5°	850	878	943	1016	1040
15°	859	1134	1828	2449	995
25°	892	1638	2642	2392	2217
35°	952	1956	1911	1520	1459
45°	993	1631	1164	1014	995
55°	831	956	665	631	620
65°	437	454	368	362	357
75°	151	210	218	209	200
85°	28	103	150	146	138
90°	0	76	130	130	123
95°	0	60	114	117	112
105°	0	39	89	99	98
115°	0	26	65	82	84
125°	0	20	46	61	65
135°	0	16	34	44	47
145°	0	14	25	33	35
155°	0	12	18	23	24
165°	0	13	14	16	11
175°	0	15	15	14	10
180°	0	0	0	0	0

LUMEN MAINTENANCE

L70 — 200,000+ Hours

L90 — 100,000+ Hours (LO, MO & SO)

L90 — 60,000+ Hours (HO)

LED SYSTEM

LED modules and drivers are field replaceable.

PROG (OPTIONAL)

Programmable light output. Specify desired lumens or watts per linear foot. Min: 3.75 w/ft, Max 12.5 w/ft.

BINNING

Standard binning (all Prudential LED boards) includes testing at the chip level and board integration to provide consistent color temperature within a 3-step MacAdam ellipse, with +/- 5% lumen output range and +/- .004 Duv.

LABELS

CSA and ETL damp labeled and I.B.E.W. manufactured.

ELECTRICAL

Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM01 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h.

32v Forward Voltage (+/- 1 volt based on drive current)

Drive Currents: LO: 100mA, MO: 100mA, SO: 250mA, HO: 325mA

CONSTRUCTION

Housing Die-formed 20-gauge steel, >20% PC recycled, 100% recyclable.

End Caps Spring-fastened aluminum, >25% PC recycled, 100% recyclable.

Lens Single-piece (up to 8' lengths) extruded acrylic, 100% recyclable.

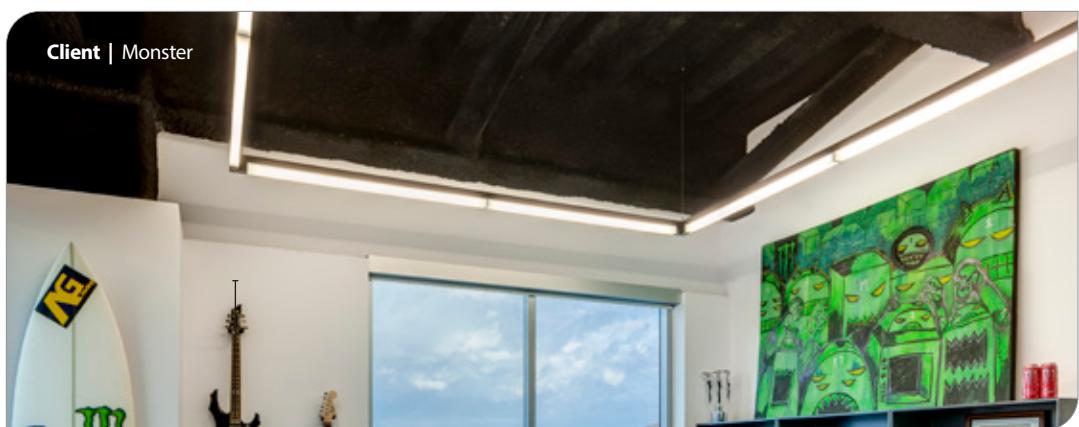
Weight 2 lbs/ft.

MOUNTING

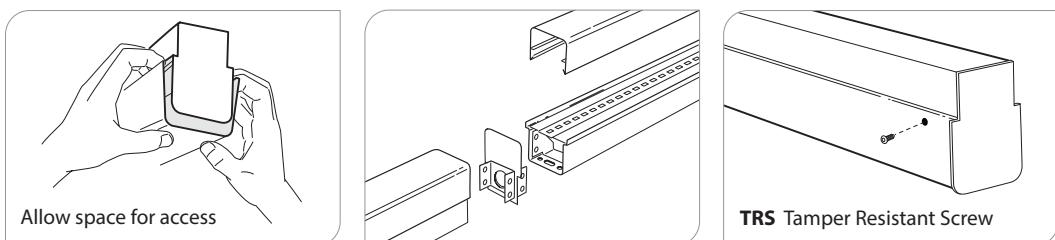
Surface mounted to walls or ceilings or suspended by cable.

WARRANTY

Single-source, 5 year limited warranty covers standard components and construction.



ADJOINING DETAIL

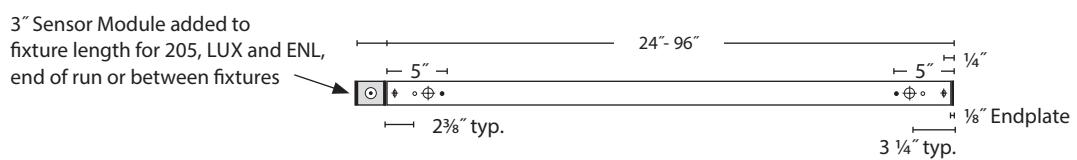


Choose from one of our Premium Colors with no set-up fee.

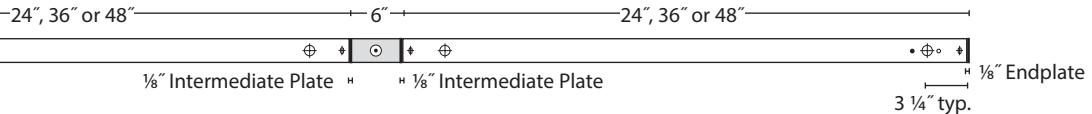
For paint chip samples, please email:
info@prulite.com

MOUNTING LOCATIONS

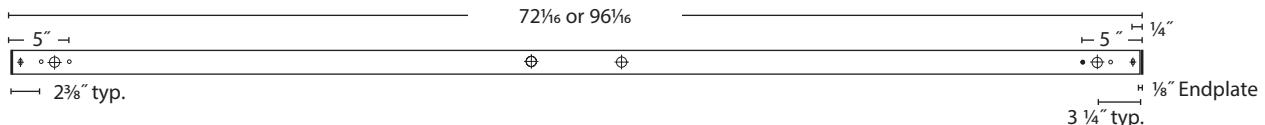
- ⊕ Cable Mount
- Surface Mount
- ⊕ 7/8" Diam. K.O.
- 1 1/16" K.O. / Stem & Powerfeed



TOP VIEW:

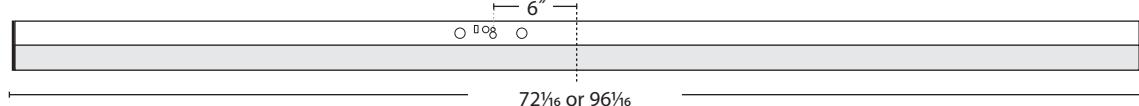


211 Sensor Module adds 6" to fixture length, in the center of a 4', 6' or 8' fixture



SIDE VIEW:

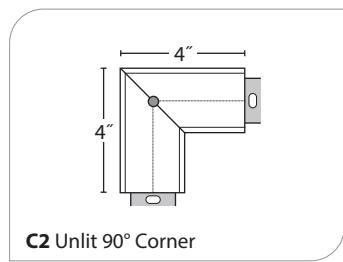
505 Sensor



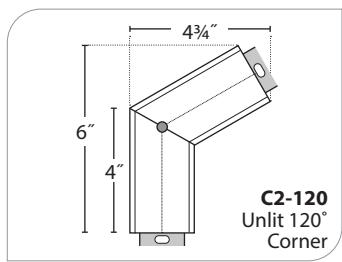
Sensor is centered on all fixtures except on 72" and 96" where it is 6" offset to the right



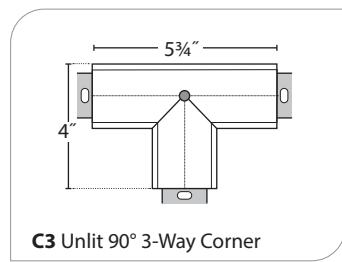
CORNERS



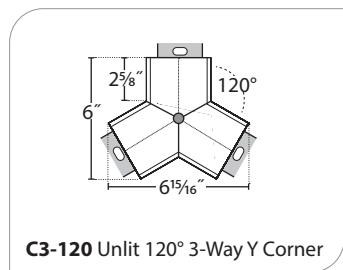
C2 Unlit 90° Corner



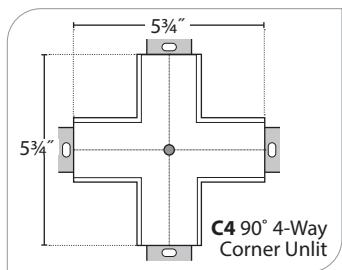
C2-120
Unlit 120°
Corner



C3 Unlit 90° 3-Way Corner



C3-120 Unlit 120° 3-Way Y Corner



C4 90° 4-Way
Corner Unlit

NOTE: All corners available S1 square only

CONTROL SENSORS



S1 SENSOR BOX —
205,ENL, LUX, LVOC,
LVRF, NXSMP, NLT1

NOTE: Adds 3" to length, ENL: enlightened control module required



R1 SENSOR BOX —
205,ENL, LUX, LVOC,
LVRF, NXSMP, NLT1

NOTE: Adds 3" to length, ENL: enlightened control module required



211 —
WattStopper High/Low Passive
Infrared Occupancy/DLH Sensor

NOTE: Adds 6" to fixture length in center of fixture,
FSP - L2 or L3 lens only



505 —
WattStopper Ultrasonic
Occupancy Sensor

NOTE: Small cut-out of lens around sensor,
Surface mount on walls only



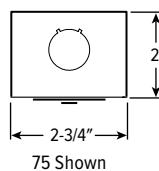
LM79 & TM30 DATA:

	MEASURED CCT	MEASURED LUMENS	CRI	R9	DuV	SPD	TM30 — COLOR VECTOR	TM30 — COLOR DISTORTION
LED27	2680	80%	93	58	0.001			89 Rf
LED3	3042	95%	82	6	0.001			97 Rg
LED3-90	3016	85%	93	61	0.000			81 Rf
LED35	3482	100%	82	3	0.002			92 Rg
LED35-90	3417	85%	93	67	0.000			88 Rf
LED4	3952	102%	82	4	0.003			92 Rg
LED4-90	3882	85%	92	67	0.003			87 Rf
LED5-90	4889	85%	94	84	0.002			95 Rg



SENSORS

					
205: Wattstopper	ENL: Enlighted Occupancy / Daylight	LUX Philips LUX Daylight Sensor	LVOC Lutron Occupancy / Daylight Sensor	LVRF Lutron Occupancy / Daylight Sensor	NXSMP Hubbell Occupancy / Daylight Sensor
Low voltage PIR fixture integrated occupancy sensor.	Enlighted Network Integrated/embedded networked lighting control, luminaire-level lighting control, LLC. When configured as an IoT Node, the sensor streams comprehensive live data for use with Enlighted's real-time location and analytics software applications. This option is available directly from the factory or as a remote upgrade. Wireless Internet.		Lutron VIVE Integrated/embedded networked lighting control, luminaire-level lighting control, LLC. Designed to operate as part of a Vive lighting control system. High-end trim, Wireless Internet.	Lutron VIVE Integrated/embedded networked lighting control, luminaire-level lighting control, LLC. Designed to operate as part of a Vive lighting control system. High-end trim, Wireless Internet.	Hubbell Integrated/embedded networked lighting control, luminaire-level lighting control, LLC.. PIR motion sensor for automatic On/Off control. Integrated daylight sensor for daylight harvesting and/or lumen maintenance. Bluetooth radio provides wireless control of luminaire. Simple plug-in connection to NX Fixture Modules. Wireless Internet.



CATAL


**Luminaire Type
AB1-4**

TYPE

PROJECT:

FEATURES

- Available with Avi-on wireless fixture controls
- Small fixture profile allows inconspicuous placement in coves or confined spaces
- Round and square lensed fixtures provide a clean look for architectural environments
- Row applications produce continuous light with minimal interruption between fixtures
- Diffuse acrylic lens on 75R and 75S enhances uniformity and minimizes glare
- Variety of mounting accessories for surface and suspended applications
- Special reflectors are available to provide precise light distribution (75 only)
- Maximize energy savings with efficacies as high as 164 lm/W
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – 22-gauge die-formed C.R.S.
- FINISH** – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High quality mid-power LED board. See fixture performance data for lumen maintenance. 25°C maximum ambient operating temperature. 40°C maximum ambient operating temperature with HA Option, lumen restrictions apply, consult Fixture Performance Data.
- MOUNTING** – Surface (ceiling or wall) or suspended (hanging hardware required).
- LISTINGS** –
 - cETLus conforms to UL STD 1598. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.


ORDERING EXAMPLE: 75 - 4 - L85/835 - OPTIONS - CONTROL - DIM - UNV

ORDERING INFO

SERIES	LENGTH ^[1]	LUMENS ^[2]				CRI	CCT
75	2 2'	2'	3'	4'	8'	8 80	27 2700K
75R	3 3'	L15 1,500lm	L40 4,000lm	L30 3,000lm	L60 6,000lm	9 90 ^[7]	30 3000K
75S	4 4'	L25 2,500lm	L64 6,400lm	L50 5,000lm	L100 10,000lm	35 3500K	
	8 8' ^[3]	L32 3,200lm	L42 4,200lm	L65 6,500lm	L130 13,000lm	40 4000K	
		L60 6,000lm ^[4]		L85 8,500lm	L170 17,000lm	50 5000K	
				L100 10,000lm	L200 20,000lm		
				L120 12,000lm ^[5]	L240 24,000lm ^[6]		

OPTIONS^[8]

EM/7WRM	Remote mount 7-watt emergency battery	45AMB (L__)	(2) 45° adjustable mounting brackets ^[13] Additional lower lumen packages available. ^[14] Example: 7,000 nominal lumens = 75-4-L85/835-(L70)-DIM-UNV
EM/10WLP	Low-profile 10-watt emergency battery ^[9]		
EM/10WRM	Remote mount 10-watt emergency battery	HA	High ambient operating temperature, 40°C ^[15]
QC__	Quick-connect wiring harness. ^[10]		
WG-75	11-gauge white powder coat wireguard		
315	1-1/2" ceiling spacer		
VBY	(2) Y-hangers		
VBY-2	(2) Y-hangers and (2) 2' chains		
RA-75	Row aligner ^[11]		
ZLS0R-RA1	Remote controller for Leviton sensor ZLS05 ^[12]		
AIRCRAFT CABLES (EXAMPLE: ACF/D48)^[16]			
Prefix	Type	Length	
ACF/	Feeder D 1" grid & hardpan	24 24"	
ACJ/	Joiner N 9/16" grid	48 48"	
	S Slot grid	96 96"	
CONTROL^[17]			
–	None		
AVI-LVFA	Avi-on wireless fixture control ^[19]		
AVI-LVFA-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor, bottom mount ^[20]		
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) ^[21]		
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) ^[22]		
LV-OSFHU-ITW-120-347	Leviton PIR motion sensor, 120-347V		
LV-ZLS05-ILW	Leviton PIR motion and daylight sensor ^[23]		
WS-FSP-311-L_-120/277	Wattstopper PIR motion and daylight sensor, 120/277. ^[24]		
DRIVER^[18]			
DIM	Driver with external dimming wires	120 120V	
DRV	Driver without external dimming wires	277 277V	
DA	Driver with 12V auxiliary power, without external dimming wires ^[25]	120-277V 347V ^[27]	
DSR	Sensor-ready driver without external dimming wires ^[26]		
VOLTAGE			

QUICKSHIP

4'	8'
75R-4-L50/835-QS-DIM-UNV	75S-4-L50/835-QS-DIM-UNV
75R-4-L50/840-QS-DIM-UNV	75S-4-L50/840-QS-DIM-UNV

NOTES

- For actual length, see page 6 for FIXTURE DETAILS
- Lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- 75R and 75S ships with (2) 4' lenses.
- 75 only.
- 75 only.
- 75 only.
- Extended lead times may apply. Consult factory for availability.
- See page 7 for FINISH OPTIONS. See page 6 for MOUNTING DETAILS. See page 7 for SPECIAL REFLECTORS.
- 4' and 8' only; Not available with 4' L120 and 8' L240 lumen packages.
- See page 7 for QUICK CONNECT OPTIONS.
- Required when row mounting with aircraft cables.
- Please specify quantity required per project, ordered separately.
- Cord recommended, ships separately. See page 6 for MOUNTING DETAILS. Field-adjustable up and down in 7-1/2° increments.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Not available with 2' L60, 4' L120 and 8' L240 lumen packages. Lumen restrictions apply. See page 2 for FIXTURE PERFORMANCE DATA.
- Units specified with aircraft cable require cord. See page 6 for MOUNTING DETAILS. Requires RA-75 row aligner. See page 6 for MOUNTING ACCESSORIES DETAILS.
- See page 4 for CONTROL DETAILS.
- See page 5 for ADDITIONAL DRIVER OPTIONS.
- DA Driver only. SDT required when specified with 347V or 480V.
- DA Driver only. SDT required when specified with 347V or 480V.
- DSR or LDE Drivers only. LDE drivers require driver interface.
- DSR or LDE Drivers only. LDE drivers require driver interface.
- DA Driver only. Adjustable via remote. Optional ZLS0R-RA1 remote controller available, ordered separately, see options.
- Must specify lens: L2 or L3. Factory installed.
- Avi-on and LV-ZLS05 Controls only.
- VDO and VRF Controls only.
- Not available with EM batteries.



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Strips

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75 LED Narrow Strip

Fixture Performance Data

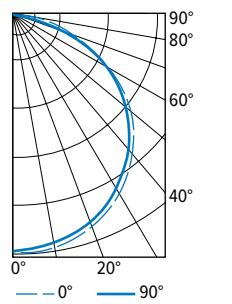
LED PACKAGE	WATTAGE	75 (NO LENS)		75R & 75S		LUMEN MAINTENANCE				AMBIENT TEMPERATURE ¹		
		DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	L70	L80	L85	L90	EM	NO EM	
2'	L15	10.8	1592	147.5	1511	140.1	>72000	>72000	>72000	50,000	40	40
	L25	18.2	2602	142.7	2470	135.5	>72000	>72000	>72000	50,000	40	40
	L32	21.3	3092	145.5	2936	138.1	>72000	>72000	58,000	36,000	40	40
	L42	31.4	4344	138.5	4124	131.5	>72000	>72000	58,000	36,000	35	40
	L60	43.6	6052	138.9	—	—	>72,000	53,000	38,000	24,000	—	—
3'	L40	28.2	4092	145.2	3885	137.9	>72000	>72000	58,000	36,000	35	40
	L64	48.2	6593	136.9	6259	130.0	>72,000	53,000	38,000	24,000	30	35
	L30	19.7	3071	155.8	2916	147.9	>72000	>72000	>72000	50,000	40	40
	L50	33.0	5126	155.5	4867	147.6	>72000	>72000	>72000	50,000	40	40
	L65	42.3	6313	149.3	5994	141.7	>72000	>72000	58,000	36,000	40	40
4'	L85	56.2	8530	151.7	8098	144.0	>72,000	53,000	38,000	24,000	35	40
	L100	68.3	10154	148.8	9640	141.2	>72000	>72000	58,000	36,000	30	30
	L120	85.9	12105	141.0	—	—	>72,000	53,000	38,000	24,000	—	—
	L60	35.3	5814	164.9	5520	156.6	>72000	>72000	>72000	50,000	40	40
	L100	65.9	10078	152.9	9568	145.1	>72000	>72000	>72000	50,000	35	35
8'	L130	87.9	13011	148.1	12353	140.6	>72000	>72000	58,000	36,000	35	35
	L170	112.4	17060	151.7	16197	144.0	>72,000	53,000	38,000	24,000	35	35
	L200	136.5	20309	148.8	19281	141.2	>72000	>72000	58,000	36,000	30	30
	L240	171.7	24209	141.0	—	—	>72,000	53,000	38,000	24,000	—	—

Multiplier Table

Color Temperature		
CCT	Conversion Factor	
80 CRI	2700K	0.97
	3000K	0.99
	3500K	1.00
	4000K	1.03
	5000K	1.06
90 CRI	2700K	0.80
	3000K	0.82
	3500K	0.83
	4000K	0.86
	5000K	0.89

Photometry

75-4-L85/835-DIM Total Luminaire Output: 8530 lumens; 56.2 Watts | Efficacy: 152 lm/W | 80 CRI; 3500K CCT



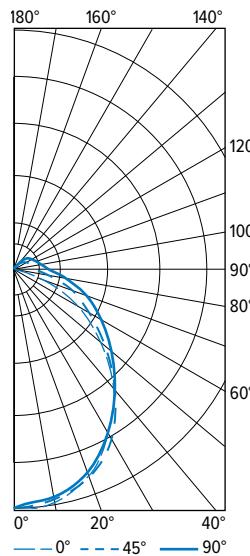
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	2896	2896	2896	
	5	2917	2887	2876	275
	15	2837	2799	2791	792
	25	2663	2624	2610	1213
	35	2415	2366	2338	1484
	45	2066	2006	1990	1552
	55	1634	1580	1560	1415
	65	1124	1069	1048	1070
	75	581	543	531	582
	85	104	116	101	144
	90	9	14	9	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2279	27
	0 - 40	3763	44
	0 - 60	6730	79
	0 - 90	8527	100
	0 - 180	8530	100

- ¹ Maximum ambient operating temperature (°C) when specified with HA option.
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Predicted lumen maintenance calculated from LED manufacturer IES LM-80 data and In situ temperature measurement.
- Predicted lumen maintenance calculated in accordance with IES TM-21 per Energy Star (R) TM-21 Calculator rev. 02.08.16.
- Use multiplier table to calculate additional options.

75 LED Narrow Strip

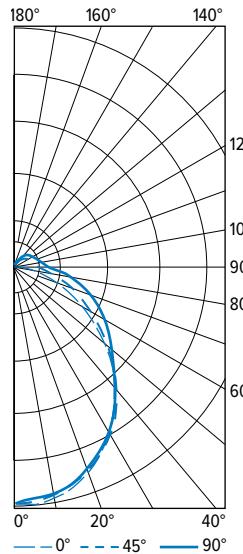
75R-4-L85/835 Total Luminaire Output: 8098 lumens; 56.2 Watts | Efficacy: 144 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2594	2594	2594	
5	2622	2585	2553	246
15	2503	2497	2480	703
25	2256	2306	2324	1059
35	1915	2042	2111	1264
45	1481	1673	1824	1281
55	1003	1296	1488	1135
65	620	942	1117	891
75	267	630	775	613
85	63	401	501	378
90	9	311	407	
95	1	249	329	225
105	0	150	219	136
115	0	94	149	83
125	0	53	102	47
135	0	28	63	24
145	0	12	35	10
155	0	6	16	3
165	0	0	4	0
175	0	0	0	0
180	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2008	25
0 - 40	3272	40	
0 - 60	5688	70	
0 - 90	7570	94	
90 - 120	443	6	
90 - 150	524	7	
90 - 180	527	7	
0 - 180	8098	100	

75S-4-L85/835 Total Luminaire Output: 8098 lumens; 56.2 Watts | Efficacy: 144 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2732	2732	2732	
5	2756	2720	2682	258
15	2633	2611	2579	734
25	2351	2362	2323	1083
35	1969	2010	1965	1247
45	1516	1554	1583	1209
55	1053	1160	1291	1051
65	618	840	1022	826
75	270	542	745	563
85	47	323	491	332
90	0	246	390	
95	0	230	344	223
105	0	200	291	185
115	0	171	256	149
125	0	139	216	110
135	0	96	166	71
145	0	58	113	38
155	0	36	63	16
165	0	17	31	4
175	0	0	0	0
180	0	0	0	

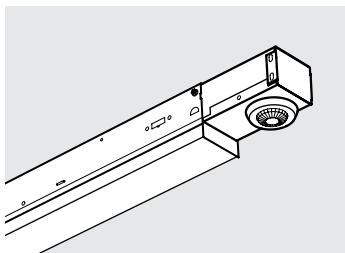
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2075	26
0 - 40	3321	41	
0 - 60	5581	69	
0 - 90	7301	90	
90 - 120	557	7	
90 - 150	777	10	
90 - 180	797	10	
0 - 180	8098	100	

75 LED Narrow Strip

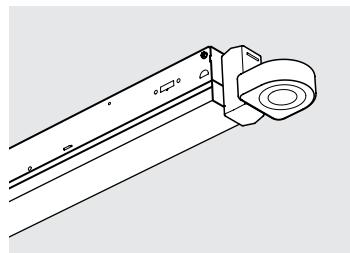
CONTROL DETAILS

SENSOR PLACEMENT

AVI-LVFA-PIR | LV-ZLS05 | WS-FSP | VDO



LV-OSFHU

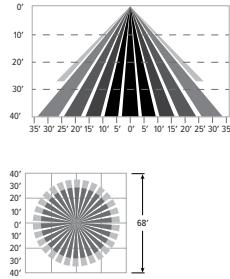


AVI-LVFA-PIR

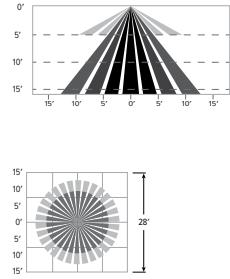
SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 45'
LENS	Single lens detects high and low bay motion.
DETECTION ANGLE	360°
TEMPERATURE RANGE	-30° to 70°C
RELATIVE HUMIDITY	90 to 95% at 30°C
COMMISSIONING	App (iOS or Android)
SYSTEM REQUIREMENTS	Avi-On wireless fixture controls plus desktop and mobile apps
MANUFACTURER	Avi-On
 Bluetooth® Lighting Controls	

SENSOR COVERAGE PATTERNS

Large motion
40' height: ø68' coverage



Small motion
15' height: ø28' coverage



SENSOR DETAIL

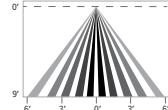


VDO

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 12'
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 55°C
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	App (iOS or Android)
MANUFACTURER	Lutron

SENSOR COVERAGE PATTERNS

9' height: ø12' coverage



MOTION SENSOR COVERAGE

CEILING HEIGHT	COVERAGE AREA (SQ FT)
8'	114
9'	144
10'	178
12'	256

SENSOR DETAIL



VIVE CONTROL OPTIONS

CATALOG NUMBER	DESCRIPTION
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), for use with sensor-ready driver
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), for use with sensor-ready driver
VDO/DBI	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver
VRF/DBI	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver



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Strips

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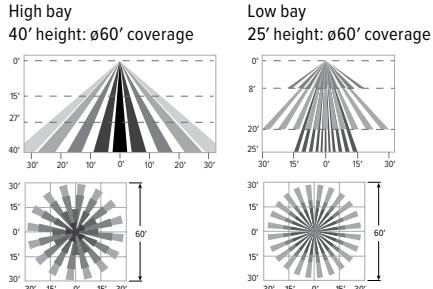
Information contained herein is subject to change without notice.

75 LED Narrow Strip

LV-OSFHU-ITW-120-347

SPECIFICATIONS	
TYPE	PIR Motion
MOUNTING HEIGHT	8' – 40'
LENS	Interchangeable high bay, low bay or aisle mask
DETECTION ANGLE	360°
TEMPERATURE RANGE	-10° to 71°C
RELATIVE HUMIDITY	20% to 90% non-condensing
MANUFACTURER	Leviton

SENSOR COVERAGE PATTERNS



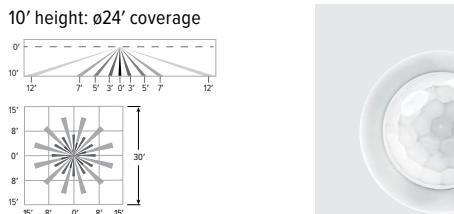
SENSOR DETAIL



LV-ZLS05-ILW

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 10'
DETECTION ANGLE	120°
TEMPERATURE RANGE	-20° to 70°C
COMMISSIONING	DIP switches or optional remote: ZLS0R-RA1
MANUFACTURER	Leviton

SENSOR COVERAGE PATTERNS



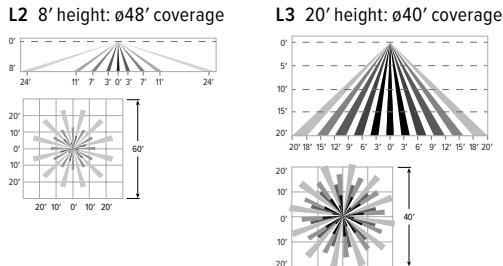
SENSOR DETAIL



WS-FSP-311-L3-120/277

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 20'
DETECTION ANGLE	360°
TEMPERATURE RANGE	-40° to 75°C
COMMISSIONING	App (iOS or Android)
MANUFACTURER	Wattstopper

SENSOR COVERAGE PATTERNS



SENSOR DETAIL



ADDITIONAL DRIVER OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
DA	Dimming driver with 12V auxiliary
DSR	Sensor-ready driver
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls



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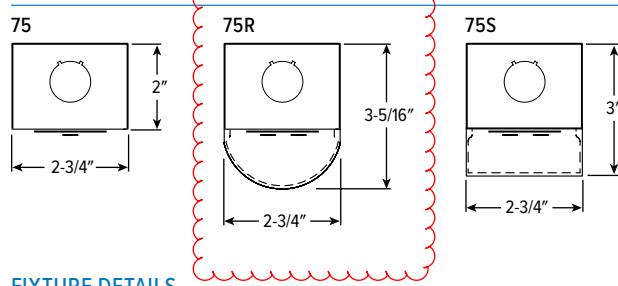
Strips

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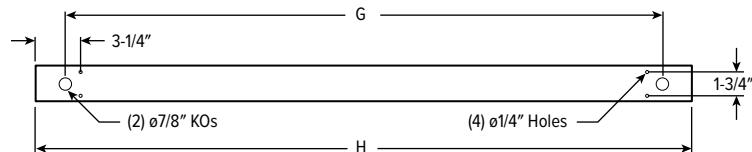
75 LED Narrow Strip

CROSS SECTIONS



Fixture Details

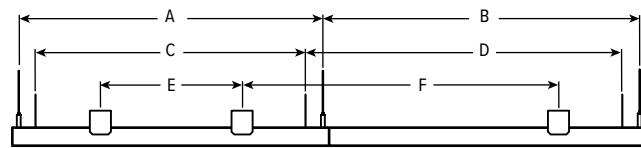
BACKVIEW



7/8" KOs (G)	ACTUAL FIXTURE LENGTH (H)
2'	18-3/8"
3'	29-1/2"
4'	40-1/2"
8'	85-1/8"
	22-1/2"
	33-9/16"
	44-5/8"
	89-1/4"

MOUNTING DETAILS

STAND ALONE

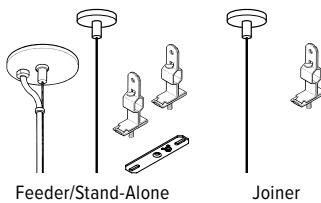


SUBSEQUENT

MOUNTING LENGTH

AIRCRAFT CABLE		VBY HANGER		315 SPACER	
A	B	C	D	E	F
2'	21-1/2"	22-1/2"	19"	22-1/2"	10"
3'	32-1/2"	33-9/16"	30-1/16"	33-9/16"	21"
4'	43-5/8"	44-5/8"	41-1/4"	44-5/8"	32"
8'	88-3/16"	89-1/4"	85"	89-1/4"	77"
					89-1/4"

STANDARD HARDWARE FOR SUSPENDED PRODUCT (Grid and Hardpan)



Notes:

- Fixtures are provided with adjustable length aircraft cables and mounting hardware, must specify.
- Electrical supply is brought into the feeder fixture, either as part of a row or as a stand-alone unit. Joiner fixtures complete the row.
- The feeder kits are standard with a 5" canopy to cover the junction box and a 2" canopy at the non-feed point. No J-box is required at non-feed points.

CORD FOR SUSPENDED PRODUCT

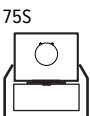
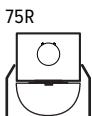
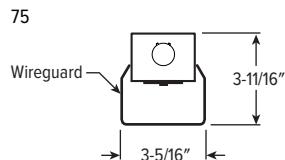
Units specified with aircraft cable require cord. Please specify cord type using ordering information below. Long fixture rows may require multiple feed points based on 18ga conductor size.

EXAMPLE: S2438D/W					
CORD TYPE	LENGTH	# OF COND. ^[1]	WIRE SIZE	COLOR	
S	24 24"	3			
	48 48"	4			
	96 96"	5	8D 18ga	/W White	
		6		/B Black	

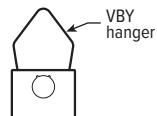
^[1] Includes (2) 22ga purple & pink dimming conductors

MOUNTING ACCESSORIES DETAILS

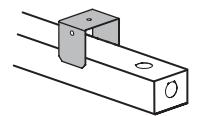
WG-75



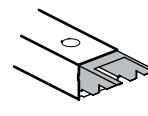
VBY



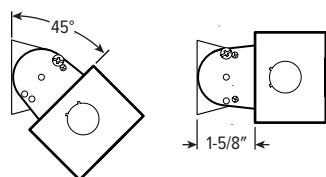
315



RA-75



45AMB



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Designed and Manufactured in the USA

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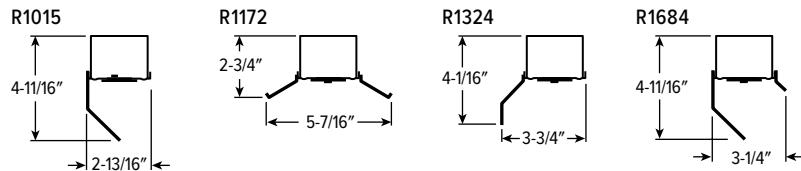
75 LED Narrow Strip

QUICK CONNECT OPTIONS

Note: Quick-connect wiring required for row mounting. All QC harnesses contain (5) 16ga conductors plus ground.

DESIGNATION	NUMBER OF 16GA WIRES (EXCLUDING GROUND)	WIRE COLOR/POWER SUPPLY FACTORY CONNECTIONS	TYPICAL USE
QCBW	2	Black, White	On/off switching (DRV) or line voltage dimming (DIM LINE)
QCRW	2	Red, White	Alternating circuits on/off switching (DRV) or line voltage dimming (DIM LINE)
QCBRW	3	Black, Red, White	On/off switching (DRV) or line voltage dimming when equipped with EM battery packs
QCBW/PK	4	Black, White, Purple, Pink	Single circuit with 0-10V 4-wire low voltage dimming (DIM)
QCRW/PK	4	Red, White, Purple, Pink	Alternating circuits on/off switching with 0-10V 4-wire low voltage dimming (DIM)
QCBRW/PK	5	Black, Red, White, Purple, Pink	On/off switching when equipped with EM battery packs and 0-10V 4-wire dimming (DIM)
QCBW/RPK	5	Black, White, Red, Purple, Pink	On/off switching and 0-10V 2-wire dimming (DIM) and 2-wire 0-10V tunable
QCUU	N/A	N/A	QC harness passes through fixture, but is not connected to it

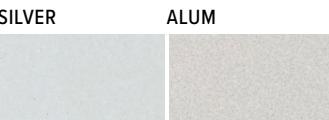
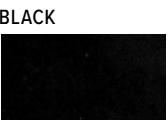
SPECIAL REFLECTORS



Reflectors are ordered separately, only available with 75, cannot be used with wireguard accessories.

Example: R1172-4-75LED REFL

FINISH OPTIONS



For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.



Submitted by:

Type:

Project:

Ordering Info:


FINELITE®
Better Lighting
[Home](#) [Order](#) [Specs](#) [Options](#) [Photometry](#) [Tunable White](#)

HPX Product Family

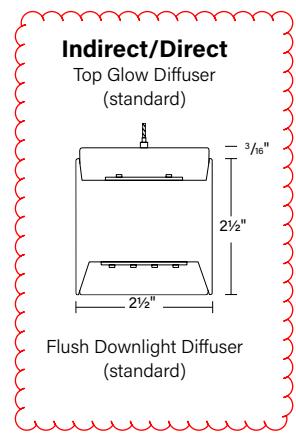


Signal White is standard finish

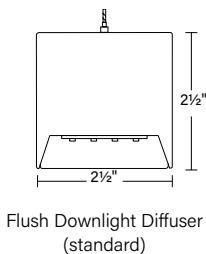
The High Performance 2.5" Aperture (HPX) is a patented LED linear luminaire with a square micro profile and internal driver design. This line of light luminaire delivers excellent performance, and is equipped with a unique LED configuration for superior illumination. Output can be enhanced with advanced optical options. Available in Pendant and Surface Mount, HPX can be tailored from 2' to 12' sections in 1' increments.

This product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Declared** status.

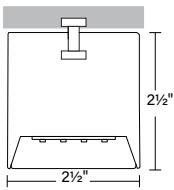
CROSS SECTIONS



Direct



Surface Mount



LUMEN OUTPUT PACKAGES



Standard



Boosted Standard



High



Very High

PERFORMANCE

Up to
2057
 Lumens per Foot

Up to
125
 Lumens per Watt


Declare.


Protected by one or more US Patents: 8915613; 9681516, B2; D702,390 Page 1

Submitted by:	Date:
Type:	Project:
Ordering Info:	

[Clear Form](#)

HPX Product Family

BODY TYPE				
Platform	Series Name	Luminaire Type	Luminaire Distribution	Total Run Length of Configuration
<input checked="" type="radio"/> HP - High Performance	<input checked="" type="radio"/> X - 2.5" Square	<input type="radio"/> P - Pendant <input type="radio"/> SM - Surface Mount	<input type="radio"/> D - Direct <input type="radio"/> ID - Indirect/Direct	Minimum 2' section length. Increments of 1'; 12' maximum section length 3' Minimum length for dual circuit applications.
OUTPUT and LED TYPE				
Uplight Output ID Only	Downlight Output	LED CRI/CCT	Uplight Option ID Only	Downlight Option
<input type="radio"/> S - Standard <input type="radio"/> B - Boosted Standard <input type="radio"/> H - High <input type="radio"/> V - Very High <input type="radio"/> TL - Tailored: lm/ft *	<input type="radio"/> S - Standard <input type="radio"/> B - Boosted Standard <input type="radio"/> H - High <input type="radio"/> V - Very High <input type="radio"/> TL - Tailored: lm/ft *	<input type="radio"/> 830 - 80 CRI min, 3000K <input type="radio"/> 835 - 80 CRI min, 3500K <input type="radio"/> 840 - 80 CRI min, 4000K <input type="radio"/> 930 - 90 CRI min, 3000K <input type="radio"/> 935 - 90 CRI min, 3500K <input type="radio"/> 940 - 90 CRI min, 4000K <input type="radio"/> 8TW - 80 CRI min, Tunable White <input type="radio"/> 9TW - 90 CRI min, Tunable White	<input type="radio"/> TG - Top Glow (Standard) <input type="radio"/> F - Flush Diffuser <input type="radio"/> WSO - Widespread Optic <input type="radio"/> WSOTG - Widespread Optic with Top Glow <input type="radio"/> ASYTG-L - Asymmetric Left Optic with Top Glow <input type="radio"/> ASYTG-R - Asymmetric Right Optic with Top Glow	<input checked="" type="radio"/> F - Flush
<small>* Specify lm/ft of outputs between Standard (S) and Very High (V). Consult factory for tailored lumen output outside of this range.</small>				
MECHANICAL/OPTICAL OPTIONS				
ELECTRICAL OPTIONS				
Voltage	Circuiting ¹	Driver Selection ²		
<input type="radio"/> 120 - 120 Voltage <input type="radio"/> 277 - 277 Voltage <input type="radio"/> 347 - 347 Voltage	<input type="radio"/> SC - Single Circuit* One single circuit in a run <input type="radio"/> DC - Dual Circuit* Independent control of up and down separately in an I/D style fixture <input type="radio"/> MC - Multi Circuit* More than one switch leg or zone (not 'DC' independent control of up and down separately for an I/D style fixture). Factory shop drawings required <small>*Battery, Night Light, and Emergency to Generator circuits are in addition to the normal luminaire circuit(s)</small>	0-10V Driver Options <input type="radio"/> FC-10% - 0-10V 10% (standard) ³ <input type="radio"/> FC-1% - 0-10V 1% ³ <input type="radio"/> OTI-10% - EldoLED OTi, 0-10V 10% ³ <input type="radio"/> OTI-1% - EldoLED OTi, 0-10V 1% ³ <input type="radio"/> ELD-10V - EldoLED SOLOdrive, 0-10V 0.1% <input type="radio"/> 10V-TW-10% - EldoLED OTi, 0-10V 10% (Tunable White) ³ DALI Driver Options <input type="radio"/> FC-DALI-1% - DALI 1% <input type="radio"/> DXL-DALI-1% - EldoLED Dexal, 1% <input type="radio"/> ELD-DALI-0% - EldoLED SOLOdrive, DALI 0.1% <input type="radio"/> ELDDALI-TW - EldoLED Dual Drive Light Shape, 1% (Tunable White)	DMX Driver Options <input type="radio"/> FIN-DMX - Finelite DMX 1% (Tunable White - FineTUNE Controls Only) ⁴ <input type="radio"/> DMX - EldoLED POWERdrive, 0.1% <input type="radio"/> DMX-TW - EldoLED POWERdrive, 0.1% (Tunable White) Lutron Driver Options <input type="radio"/> LUT-ES1 - Lutron, Ecosystem 1% <input type="radio"/> LUT-2W - Lutron, 2-wire (120v only) 1% <input type="radio"/> LUT-TW - Lutron T-Series, EcoSystem 0.1% (Tunable White)	
<small>See Page 3 for additional driver options and details</small>				
MOUNTING OPTIONS				
Mounting Method	Ceiling Hardware Type	Endcap Style	Finish	Emergency Style (Optional) <input type="checkbox"/> Clear Selection <input type="checkbox"/> Integrated Sensor (Optional) <input type="checkbox"/> Clear Selection
<input type="radio"/> FA50 - Fully Adjustable 50" <input type="radio"/> FA100 - Fully Adjustable 100" <input type="radio"/> FA150 - Fully Adjustable 150" <input type="radio"/> FA200 - Fully Adjustable 200" <input type="radio"/> FA250 - Fully Adjustable 250" <input type="radio"/> FA300 - Fully Adjustable 300" <input type="radio"/> FM - Flexible Mounting ⁵	<input type="radio"/> C1 - 1" T-Bar ⁶ <input type="radio"/> C2 - 9/16" T-Bar ⁶ <input type="radio"/> C3 - Screw Slot ⁶ <input type="radio"/> C4 - Hard Ceiling ⁶ <input type="radio"/> C1T - 1" Tegular ⁶ <input type="radio"/> C2T - 9/16" Tegular ⁶ <input type="radio"/> SMC4 - Surface Mount Hard Ceiling, no grid mount options. (Only available option for HPX-SM)	<input checked="" type="radio"/> FE - Flat Endcap	<input type="radio"/> SW - Signal White <input type="radio"/> FB - Finelite Black <input type="radio"/> SA - Satin Aluminum <input type="radio"/> #### - RAL Color Code ⁷	<input type="radio"/> LGD18W - Legrand 18W Brand Battery Back-up <input type="radio"/> LGD10W - Legrand 10W Brand Battery Back-up <input type="radio"/> EM/GEN - Emergency to Generator <input type="radio"/> NL - Night Light <input type="radio"/> BSL310LP - Bodine Battery Back up Low Profile ⁸ <input type="radio"/> GTD - Generator Transfer Device <input type="radio"/> ALCR - Automatic Load Control Relay
OTHER OPTIONS				
Special Options (Optional) <input type="checkbox"/> Clear Selection		<input type="radio"/> RLA - Red List Approved <input type="radio"/> RLD - Declare		

¹ Contact factory for switching options

² For Indirect/Direct lengths 3' and greater, separate dimming for uplight and downlight available

³ Add DTO to gain "Dim to Off" functionality (FC-10% - DTO)

⁴ B & V outputs only

⁵ Direct only

⁶ C1,C2,C3 T-bar mounting for Pendant Only.

⁷ 20 Business day lead time for color

⁸ BSL310LP work with HPX Direct 4ft without sensor only

⁹ LMFS-601 w/ 0-10V driver(s) and LMFI-11, up to 6 drivers may be connected.

¹⁰ LMFS-601 w/ DALI driver, only 1 driver can be connected.

¹¹ Enlightened components installed by Finelite; Provided by OTHER

¹¹ Lutron Vive Ingrated Sensors require a DALI driver

Submitted by:	Date:
Type:	Project:
Ordering Info:	

HPX Product Family

SUPPLEMENTARY DRIVER PAGE

0-10V Driver Options	
FC-10%	Factory Choice, 0-10V 10% Dimming (Linear)
FC-10%-DTO	Factory Choice, 0-10V 10% Dimming, Dim-to-Off (Linear)
FC-1%	Factory Choice, 0-10V 1% Dimming (Linear)
FC-1%-DTO	Factory Choice, 0-10V 1% Dimming, Dim-to-Off (Linear)
ELD-10V-0%	EldoLED SOLOdrive, 0-10V 0.1% Dimming (Linear)
ELD-10V-1%	EldoLED ECOdrive, 0-10V 1% Dimming (Linear)
10V-TW-10%	EldoLED OTi, 0-10V 10% Dimming, <i>Tunable White</i> (Linear)
10V-TW-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off, <i>Tunable White</i> (Linear)
OTi-10%	EldoLED OTi, 0-10V 10% Dimming (Linear)
OTi-10%-DTO	EldoLED OTi, 0-10V 10% Dimming, Dim-to-Off (Linear)
OTi-1%	EldoLED OTi, 0-10V 1% Dimming (Linear)
OTi-1%-DTO	EldoLED OTi, 0-10V 1% Dimming, Dim-to-Off (Linear)

DALI Driver Options	
FC-DALI-1%	Factory Choice, DALI 1% Dimming (Logarithmic)
DXL-DALI-1%	EldoLED Dexal, DALI 1% Dimming (Logarithmic)
ELD-DALI-0%	EldoLED SOLOdrive, DALI 0.1% Dimming (Logarithmic)
ELD-DALI-1%	EldoLED ECOdrive, DALI 1% Dimming (Logarithmic)
ELD-DALI-TW	EldoLED DUALdrive Light Shape, DALI 1% Dimming, <i>Tunable White</i> (Logarithmic Dimming, Linear CCT Control)

DMX Driver Options	
FIN-DMX	Finelite, DMX 1% Dimming, <i>Tunable White</i> - FineTUNE Controls Only (Linear)
ELD-DMX	EldoLED POWERdrive, DMX 0.1% Dimming (8 Bit, 1CH) (Linear)
ELD-DMX-16	EldoLED POWERdrive, DMX 0.1% Dimming (16 Bit, 2CH) (Linear)
ELD-DMX-TW	EldoLED POWERdrive, DMX 0.1% Dimming, <i>Tunable White</i> (8 Bit, 2CH - CH1 Warm / CH2 Cool) (Linear)
ELD-DMX-TW16	EldoLED POWERdrive, DMX 0.1% Dimming, <i>Tunable White</i> (16 Bit, 4CH - CH1, 2 Warm / CH3, 4 Cool) (Linear)

Lutron Driver Options	
LUT-ES1	Lutron, Ecosystem 1% Dimming
LUT-2W	Lutron, 2-wire (120v only) 1% Dimming
LUT-TW	Lutron T-Series, EcoSystem 1% Dimming, <i>Tunable White</i>

Submitted by:	Date:
Type:	Project:
Ordering Info:	

HPX Product Family

SPECIFICATIONS

BODY TYPE

CONSTRUCTION: Precision-cut 6061-T6 extruded aluminum body. Internal joiner system, plug-together wiring, standard.

LENGTHS: Any length, 2' minimum section length. Increments of 1', 12' maximum section length. For Indirect/Direct, select a minimum body length of 3' or greater when requiring dual circuiting or when uplight and downlight outputs differ.

ARRAY TYPE

LIGHT OUTPUT: Four lumen packages available, Standard (**S**), Boosted Standard (**B**), High (**H**), and Very High (**V**). A separate chart summarizes lumen distribution and wattage. For Tailored Outputs outside of range from Standard (**S**) to Very High (**V**), consult factory. Light engines are replaceable.

MECHANICAL FEATURES

UPLIGHT OPTION¹: Patented Top Glow Frost White Diffuser, standard. 12' maximum diffuser length. Optical distribution pattern options include Widespread Optic (**WSO**); WSO enables increased luminaire spacing with improved ceiling uniformity, and Asymmetric (**ASYTG-L** / **ASYTG-R**). Asymmetric optic directs light in a specific direction. ASYTG-L distributes light to the left, ASYTG-R distributes light to the right of the luminaire. Consult factory for more tailored lumen outputs.

DOWNLIGHT OPTION: 12' maximum diffuser length. Flush (**F**) frost white snap-in diffuser, standard; 73% transmissive, 99% diffusion. Internal secondary diffusers at corners ensure visually seamless, uniform, continuous illumination. Consult factory for more tailored lumen outputs.

LUMEN MAINTENANCE: 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

ELECTRICAL FEATURES

STATIC WHITE FEED: 18-gauge/5-conductor single-circuit feed, standard. 14-gauge feed used when luminaire current exceeds 5 amps.

TUNABLE WHITE FEED: Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when fixture current exceeds 5 amps. DMX and power feed at same location (standard). DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths.

STATIC WHITE DRIVER: Replaceable 120V, 277V, and 347V Constant Current Reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 10% - 100% Dimming to 1% available; Consult factory. Separate dimming for uplight and downlight available. Driver is fully accessible from below the ceiling.

- **Power Factor:** ≥ 0.9

- **Total Harmonic Distortion (THD):** $<20\%$

- **Expected driver lifetime:** 100,000 hours

LUTRON STATIC DRIVER OPTIONS:

- **LUT-ES (LDE1)** - (Hi-lume 1% EcoSystem with Soft-On, Fade-to-Black dimming (LDE1 series))
- **LUT-W2 (LTES2W)** - (Hi-lume 1% 2-wire, 120V forward phase dimming (LTEA series)).

TUNABLE WHITE DRIVER: Replaceable LED driver. Driver is accessible from below the ceiling. 120V/277V.

- **Power factor** ≥ 0.9
- **Total Harmonic Distortion (THD):** $<20\%$
- **Dimming Range:** 100 - 1%
- **Expected driver lifetime:** 100,000 hours

LUTRON TUNABLE WHITE DRIVER OPTION: LUTDTW 1% T-Series 2-Channel Digital Tunable White (PSQ Series).

MOUNTING TYPE

HANGING HARDWARE:

- **Pendant:** 50" Fully Adjustable (**FA**) plated steel aircraft cable with safety stop hardware standard. Contact factory for additional lengths up to 150". The Flexible Mounting Bracket (**FM**)² adjusts the suspension points to accomodate existing architecture. Suspension points adjust up to 2' in from the end of 8' to 12' fixture lengths and up to 1' in on shorter lengths.

- **Surface Mount:** Ceiling types: Drywall or concrete surfaces (walls or ceilings): 1/4"-20 stud and nut (provided by others).

OTHER FEATURES

ENDCAPS: Flat diecast aluminum endcaps add 1/4" to each end of luminaire.

EMERGENCY STYLE: Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery.

Backup Battery		
	Factory Choice	Bodine BSL310LP
HPX-P-D		
Min. Housing Length	8'*	4'
EM Lumen Output	2024	1202
EM Section Illuminated	2'	2' or 4'
HPX-SM-D		
Min. Housing Length	8'*	4'*
EM Lumen Output	2024	1202
EM Section Illuminated	2'	2' or 4'
HPX-P-ID		
Min. Housing Length	12'	8'
EM Lumen Output	2024	1202
EM Section Illuminated	2'	2' or 4'

* Minimum fixture housing length for battery pack approved without sensor

¹ Indirect/Direct (ID) only

² Direct only

Submitted by:	Date:
Type:	Project:
Ordering Info:	

HPX Product Family

SPECIFICATIONS

TUNABLE WHITE ELECTRICAL OPTIONS:

- **TW Driver Options 0-10V:** EM/GEN, GTD, or Battery Back-up
- **FineTune DMX:** EM/GEN or Battery Back-up
- **DMX:** Battery Back-up
- **DALI:** EM/GEN, GTD, or Battery Back-up
- **LUTRON:** EM/GEN, GTD, or Battery Back-up

INTEGRATED SENSORS: Integrated PIR (Passive Infrared) Occupancy (**OBO**) or Daylight Sensors (**OBD**) available with Flush and Bottom Glow downlight diffusers. PIR sensors not recommended for stairwell applications. Refer to Occupancy Sensor & Daylight Sensor tech sheet and the Embedded Intelligence landing page for more information and additional sensor options.

FINISHES: Finelite Signal White (**SW**) powder coat standard. Finelite Black (RAL 9005) with semi gloss fine texture (**FB**)³ and satin Aluminum (**SA**)³ are available. Optional Adders: 185 RAL colors.³

LABELS: Luminaire and electrical components are ETL-listed conforming to UL 1598 in the U.S.A. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.130 (G), this luminaire contains an internal driver disconnect. UL 924 and UL 2108 - PoE options available on request, contact factory for more details. These fixtures are rated for Damp Location. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2015/863. HPX can be used to comply with 2016 Title 24, Part 6 (JA8); high efficacy LED light source requirements. Finelite makes the specification process easy when putting healthier products on your projects. Simply add - **RLA** (Red List Approved) or - **RLD** (Declared Label) to your part number.

WEIGHT: 2.3 lb/ft.

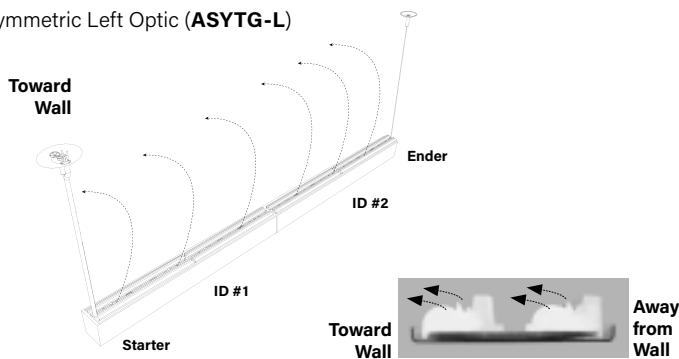
WARRANTY: 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

³ 20 Business day lead time for color

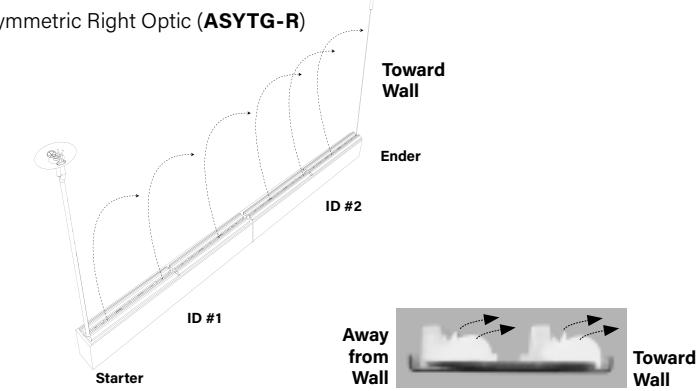
ASYMMETRIC OPTIC OPTIONS

Use this tool to understand how to specify Asymmetric for your project. The diagrams below show a linear run from power feed to ender. Specify, ASYTG-L distributes light to the left or ASYTG-R distributes light to the right.

Asymmetric Left Optic (ASYTG-L)



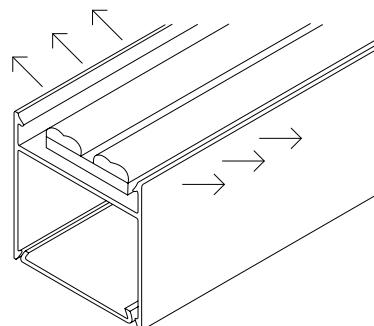
Asymmetric Right Optic (ASYTG-R)



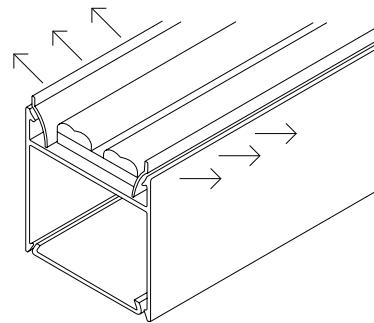
WIDESPREAD OPTIC OPTIONS

Wide Spread Optic (**WSO**) delivers a batwing distribution for improved performance.

Widespread Optic (WSO)



Widespread Optic Top Glow (WSOTG)



Submitted by:	Date:		
Type:	Project:		
Ordering Info:			

HPX Product Family

**Indirect/Direct with
Widespread Optic Photometry
4' Luminaire 3500K**

HPX-P-ID-V-V-835-WSO-F

Uplight: Widespread Optic / **Downlight:** Flush

Distribution: 51% Up (V) / 49% Down (V)

Efficacy: 119 lm/W

Uplight: 4223 lumens (1056 lumens/ft)

Downlight: 4005 lumens (1001 lumens/ft)

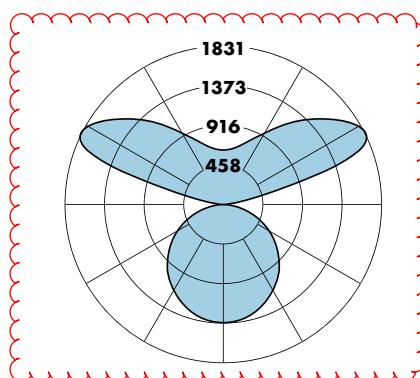
Total luminaire output: 8228 lumens

69.0 watts

Peak Candela Value: 1375 @ 0°

CRI: 80 / CCT: 3500K

ITL LM79 Report 92549



CANDLEPOWER SUMMARY

	0.0	22.5	45.0	67.5	90.0	Flux
0	1375	1375	1375	1375	1375	1375
5	1367	1368	1368	1368	1369	130
15	1322	1316	1322	1323	1320	373
25	1230	1218	1227	1228	1225	565
35	1094	1084	1092	1091	1087	681
45	922	915	922	918	915	708
55	723	718	723	719	716	643
65	507	504	507	505	505	500
75	286	286	290	291	291	306
85	85	86	90	92	91	99
90	0	0	0	0	0	0
95	37	83	214	99	78	141
105	145	218	811	923	651	625
115	259	334	763	1652	1820	926
125	364	438	777	1423	1681	820
135	436	502	775	1197	1390	656
145	503	552	735	981	1097	483
155	561	589	689	801	851	324
165	605	616	653	690	703	186
175	627	629	633	636	638	61
180	630	630	630	630	630	x

Sample Lumen Adjustment Calculation

Lumen Adjustment Factors 80 CRI

3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors 90 CRI

3000K	0.746
3500K	0.760
4000K	0.789

High Output (H) / Standard Output (S), 4000K, 90 CRI

Lumen Adjustment Factor: 0.789

Total Light Output: 4924 lm x 0.789 = 3885 lm

Total Light Output per Foot: 1231 lm x 0.789 = 971 lm

watts/foot: 10.0 W/ft.

$$\text{Efficacy} = \frac{971}{10.0} \frac{\text{lm}}{\text{W}} = 97 \text{ lm/W}$$

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire				
	↑S ¹	↑B ¹	↑H ¹	↑V ²
↓S ¹	3368 [↑51% | 49%↓]	3813 [↑57% | 43%↓]	4924 [↑67% | 33%↓]	5862 [↑72% | 28%↓]
↓B ¹	3790 [↑46% | 54%↓]	4234 [↑51% | 49%↓]	5346 [↑61% | 39%↓]	6284 [↑67% | 33%↓]
↓H ¹	4844 [↑36% | 64%↓]	5288 [↑41% | 59%↓]	6400 [↑51% | 49%↓]	7338 [↑58% | 42%↓]
↓V ¹	5734 [↑30% | 70%↓]	6179 [↑35% | 65%↓]	7290 [↑45% | 55%↓]	8228 [↑51% | 49%↓]

Light Output, 3500K, 80 CRI (Lumens Per Foot)				
	↑S ¹	↑B ¹	↑H ¹	↑V ²
↓S ¹	842	953	1231	1466
↓B ¹	947	1059	1336	1571
↓H ¹	1211	1322	1600	1835
↓V ¹	1433	1545	1822	2057

Power, 3500K, 80 CRI (Watts Per Foot)				
	↑S ¹	↑B ¹	↑H ¹	↑V ²
↓S ¹	6.8	7.7	10.0	12.0
↓B ¹	7.7	8.6	10.9	12.9
↓H ¹	10.0	10.9	13.2	15.2
↓V ¹	12.0	12.9	15.2	17.3

Efficacy, 3500K, 80 CRI (Lumens Per Watt)				
	↑S ¹	↑B ¹	↑H ¹	↑V ²
↓S ¹	125	124	123	122
↓B ¹	124	123	123	122
↓H ¹	121	121	121	120
↓V ¹	119	120	120	119

S - Standard Output, B - Boosted Standard Output, H - High Output, V - Very High Output

¹ Based on 4' luminaire 3500K Very High Output (V) test - 120V.

² Based on ITL report: 92549

Protected by one or more US Patents: 8915613; 9681516; B2; D702,390

Page 7



**Luminaire Type
AD1**

Contact/Phone: _____

PRODUCT DESCRIPTION

Sleek, ultra-low profile energy efficient LED surface mount downlights in multiple sizes from 5" to 13" • Provides economical installation by mounting directly over standard and fire-rated junction boxes • Optional finish trims available for custom, designer look similar to standard recessed downlights • Provides general illumination in residential and commercial applications including multi-family and hospitality • Ideal for use in corridors, living spaces, closets, hallways, pantries, stairways, outdoor covered areas with Emergency Option and much more.

PRODUCT SPECIFICATIONS

Construction Shallow, less than 1", solid ring with white finish • Non conductive fixture for shower light applications • Optional, field installable finish trims available for 5" and 7" versions to change the exterior finish of fixture

Optics Light guide technology combined with diffusing lens conceals the LEDs from direct view and provides uniform lens luminance.

LED Light Engine LEDs mounted directly to heatsink designed to provide superior thermal management and ensure long life • 2700K, 3000K, 3500K or 4000K LED color temperature • LEDs binned for 4-step MacAdam ellipse color consistency • 90 CRI minimum.

LED Driver Choice of dedicated 120 volt (120) driver or universal voltage (MVOLT) driver that accommodates input voltages from 120-277 volts AC at 50/60Hz • Power factor > 0.9 at 120V input • 120 volt driver is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage driver is dimmable with the use of most 0-10V wall box dimmers • External driver is only available on 5" and 7" models • For a list of compatible dimmers, see [JUNOSLIMFORM.DIM](#).

Emergency Battery Option Available on fixture sizes 11" and larger • Battery factory assembled to fixture with integral test switch • Drives LEDs for 90 minutes to meet Life Safety Code (NFPA-LSC), National Electrical Code (NEC), and UL requirements • Title 20 certified battery pack available when ordering E10WLCP option • EBX option provides back box without battery for consistent look when used in same space as fixtures with EL emergency option • Damp location only with emergency option.

Life Rated for 50,000 hours at >70% lumen maintenance.

Labels ENERGY STAR® certified • Certified to the high efficacy requirements of California T24 JA8-2016 • CSA listed for US and Canada • Suitable for wet locations (covered ceilings) • Damp location only with emergency option.

Testing All reports are based on published industry procedures; actual performance may differ as a result of the end-user environment and applications. All values are design or typical values, measured under laboratory conditions at 25 °C.

Warranty 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

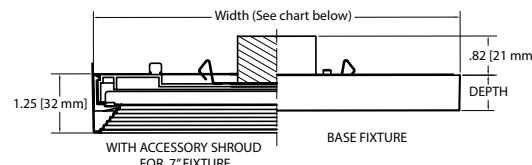
JUNO SLIMFORM™ LED SURFACE MOUNT DOWNLIGHTS

FOR J-BOX INSTALLATION

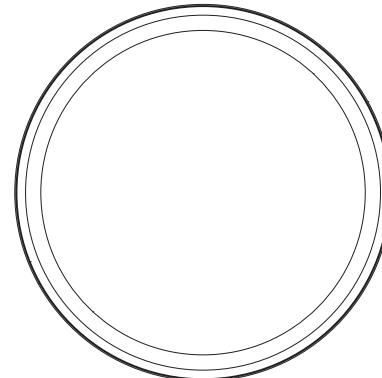
5", 7", 11", 13" ROUND JSF SERIES



DIMENSIONS



External driver available on 5" and 7" models only.



ROUND SPECIFICATIONS

	Width	Depth
JSF 5IN	5.25 (13.34)	0.75 (1.91)
JSF 7IN	7.77 (19.74)	0.75 (1.91)
JSF 11IN	11.08 (28.14)	0.9 (2.29)
JSF 13IN	13.05 (33.15)	0.9 (2.29)

All dimensions are in inches (centimeters) unless otherwise indicated.

INSTALLATION

Junction Box Mounting Fixture provided with leads for direct wire connection in j-box • Installs directly to industry standard junction boxes • Compatible boxes include 4" metal or plastic octagonal standard and fire-rated junction boxes (3 1/2" junction box screw-hole spacing required for installation) • Minimum 2 1/8" deep junction box required for 5" and 7" fixtures (no depth requirement for 11" and larger fixtures) • Quick mount bracket provides fast installation of fully assembled fixture to junction box • Suitable for ceiling mount • Suitable for use within closet storage spaces when installed per NEC requirements.

Junction box sizes vary - Verify compatibility with fixture prior to installation

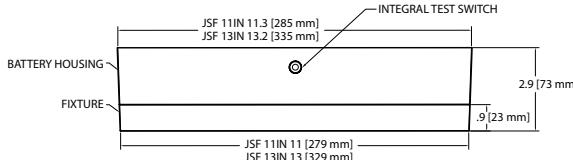
JUNO SLIMFORM™ LED SURFACE MOUNT DOWNLIGHTS

FOR J-BOX INSTALLATION

5", 7", 11", 13" ROUND

JSF SERIES

EMERGENCY BATTERY FOR 11" AND 13"



PERFORMANCE DATA

	JSF 5IN		JSF 7IN		JSF 11IN		JSF 13IN	
	120V	MVOLT	120V	MVOLT	120V	MVOLT	120V	MVOLT
Lumens	700	700	1000	1000	1300	1300	1800	1800
CRI	90CRI		90CRI		90CRI		90CRI	
CCT	27K, 30K, 35K, 40K		27K, 30K, 35K, 40K		27K, 30K, 35K, 40K		27K, 30K, 35K, 40K	
Voltage	120V	120V-277V	120V	120V-277V	120V	120V-277V	120V	120V-277V
Input Power	10W	10W	13W	13W	15W	15W	20W	20W
Input Current	110MA	50MA	150MA	60MA	180MA	80MA	240MA	110MA
Frequency	50/60Hz		50/60Hz		50/60Hz		50/60Hz	
Power Factor	>0.9		>0.9		>0.9		>0.9	

ORDERING INFORMATION

Example: JSF 5IN 07LM 27K 90CRI 120 FRPC WH

Series	Size/Lumens	Color Temperature	CRI	Voltage/Driver	Finish	Emergency Battery ^{1,2}
JSF SlimForm Surface Mount Downlight - Round	5IN 07LM 5", 700 Lumens 7IN 10LM 7", 1000 Lumens 11IN 13LM 11", 1300 Lumens 13IN 18LM 13", 1800 Lumens	27K 2700K 30K 3000K 35K 3500K 40K 4000K	90CRI 90+ CRI	120 FRPC Dedicated 120V, Forward Reverse Phase Dimming MVOLT ZT Universal Voltage 120V-277V, 0-10V Dimming	WH White	EL ^{3†} Battery Back-up Option EBX Empty Back Box for Aesthetics E10WLCP ^{4†} EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS.

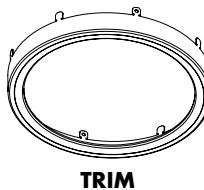
†: EL Battery Back-up option is not Energy Star certified

ACCESSORIES

TRIM – Optional, field installable finish trim rings available to change the exterior finish of fixture.

Example: JSFTRIM 5IN BZ

Series	Size	Finish
JSFTRIM SlimForm Accessory-Trim	5IN 5 inches	BL Black
	7IN 7 inches	BZ Bronze SN Satin Nickel



Notes:

- 1 Emergency battery available with 11IN and 13IN only.
- 2 Emergency battery is only available with MVOLT ZT.
- 3 EL battery option not available in California due to Title 20 restrictions.
- 4 E10WLCP ordering option is Title 20 certified for shipments to California.

JUNO SLIMFORM™ LED SURFACE MOUNT DOWNLIGHTS

FOR J-BOX INSTALLATION

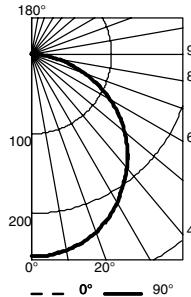
5", 7", 11", 13" ROUND

JSF SERIES

PHOTOMETRICS

Distribution Curve	Distribution Data	Coefficient of Utilization	Illuminance Data at 30" Above Floor for a Single Luminaire
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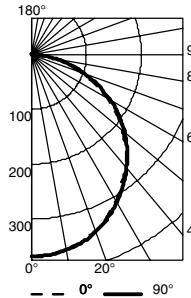
JSF 5IN 27K, 2700K LEDs, input watts: 9.72, delivered lumens: 727, LM/W = 74.8, test no. ISF 33599, tested in accordance to IESNA LM-79.



Coefficients of Utilization											
CP Summary	pf	20%			20%			20%			
		pc	80%	70%	50%	pc	70% 50% 30%	50% 30% 10%	pc	70% 50% 30%	50% 30% 10%
0° 90	0	119	119	119	116	116	116	111	111	111	111
0° 253 253	1	109	104	99	101	98	94	97	94	91	
5° 253 253	2	99	90	83	88	82	77	85	79	75	
15° 245 245	3	90	79	71	78	70	64	75	68	63	
25° 228 227	4	82	70	61	69	60	54	66	59	53	
35° 201 200	5	76	63	53	61	53	47	59	52	46	
45° 171 170	6	70	56	47	55	47	41	54	46	40	
55° 134 134	7	65	51	42	50	42	36	49	41	36	
65° 93 92	8	60	47	38	46	38	32	45	37	32	
75° 51 51	9	56	43	34	42	34	29	41	34	29	
85° 14 14	10	53	39	31	39	31	26	38	31	26	
90 1 1											

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0°- 30°	197	27.1	27.1
0°- 40°	322	44.3	44.3
0°- 60°	570	78.5	78.5
0°- 90°	727	100.0	100.0
90°- 120°	0	0.0	0.0
90°- 130°	0	0.0	0.0
90°- 150°	0	0.0	0.0
90°- 180°	0	0.0	0.0
0°- 180°	727	100.0	100.0

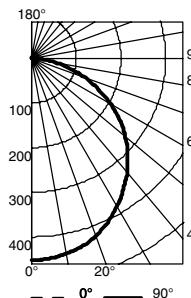
JSF 7IN 27K, 2700K LEDs, input watts: 12.8, delivered lumens: 1060, LM/W = 82.8, test no. ISF 33600, tested in accordance to IESNA LM-79.



Coefficients of Utilization											
CP Summary	pf	20%			20%			20%			
		pc	80%	70%	50%	pc	70% 50% 30%	50% 30% 10%	pc	70% 50% 30%	50% 30% 10%
0° 90	0	119	119	119	116	116	116	111	111	111	111
0° 368 368	1	109	104	99	101	97	94	97	94	91	
5° 366 367	2	99	90	83	88	82	76	85	79	75	
15° 353 355	3	90	79	71	77	70	64	74	68	62	
25° 326 329	4	82	70	61	69	60	54	66	59	53	
35° 286 291	5	76	62	53	61	53	46	59	52	46	
45° 243 247	6	70	56	47	55	47	41	53	46	40	
55° 189 194	7	65	51	42	50	42	36	49	41	35	
65° 128 134	8	60	46	38	46	38	32	44	37	32	
75° 68 74	9	56	43	34	42	34	29	41	34	29	
85° 16 21	10	53	39	31	39	31	26	38	31	26	
90 0 1											

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0°- 30°	286	27.0	27.0
0°- 40°	468	44.1	44.1
0°- 60°	830	78.3	78.3
0°- 90°	1060	100.0	100.0
90°- 120°	0	0.0	0.0
90°- 130°	0	0.0	0.0
90°- 150°	0	0.0	0.0
90°- 180°	0	0.0	0.0
0°- 180°	1060	100.0	100.0

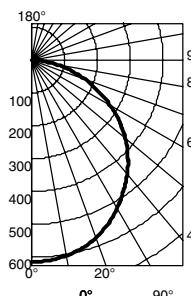
JSF 11IN 27K, 2700K LEDs, input watts: 15.2, delivered lumens: 1305, LM/W = 85.9, test no. ISF 33661, tested in accordance to IESNA LM-79.



Coefficients of Utilization											
CP Summary	pf	20%			20%			20%			
		pc	80%	70%	50%	pc	70% 50% 30%	50% 30% 10%	pc	70% 50% 30%	50% 30% 10%
0° 90	0	119	119	119	116	116	116	111	111	111	111
0° 451 451	1	109	104	99	101	97	94	97	94	91	
5° 450 450	2	99	90	83	88	82	77	85	79	75	
15° 435 436	3	90	79	71	77	70	64	74	68	62	
25° 404 405	4	82	70	61	69	60	54	66	59	53	
35° 357 358	5	75	62	53	61	53	46	59	52	46	
45° 305 304	6	70	56	47	55	47	40	53	46	40	
55° 239 241	7	65	51	42	50	42	36	49	41	35	
65° 164 165	8	60	46	38	46	38	32	44	37	32	
75° 90 89	9	56	43	34	42	34	29	41	34	28	
85° 25 25	10	53	39	31	39	31	26	38	31	26	
90 1 1											

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0°- 30°	352	26.9	26.9
0°- 40°	575	44.1	44.1
0°- 60°	1021	78.3	78.3
0°- 90°	1305	100.0	100.0
90°- 120°	0	0.0	0.0
90°- 130°	0	0.0	0.0
90°- 150°	0	0.0	0.0
90°- 180°	0	0.0	0.0
0°- 180°	1305	100.0	100.0

JSF 13IN 27K, 2700K LEDs, input watts: 20.2, delivered lumens: 1779, LM/W = 88, test no. ISF 33663, tested in accordance to IESNA LM-79.



Coefficients of Utilization											
CP Summary	pf	20%			20%			20%			
		pc	80%	70%	50%	pc	70% 50% 30%	50% 30% 10%	pc	70% 50% 30%	50% 30% 10%
0° 90	0	119	119	119	116	116	116	111	111	111	111
0° 613 613	1	109	104	99	101	97	94	97	94	91	
5° 611 612	2	99	90	83	88	82	76	85	79	75	
15° 592 593	3	90	79	71	77	70	64	74	68	62	
25° 550 550	4	82	70	61	69	60	54	66	59	53	
35° 486 486	5	75	62	53	61	53	46	59	52	46	
45° 413 414	6	70	56	47	55	47	40	53	46	40	
55° 327 327	7	65	51	42	50	42	36	48	41	35	
65° 225 225	8	60	46	38	46	37	32	44	37	32	
75° 122 122	9	56	43	34	42	34	29	41	34	28	
85° 34 34	10	53	39	31	39	31	26	38	31	26	
90 1 1											

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0°- 30°	478	26.9	26.9
0°- 40°	782	44.0	44.0
0°- 60°	1390	78.2	78.2
0°- 90°	1778	100.0	100.0
90°- 120°	0	0.0	0.0
90°- 130°	0	0.0	0.0



Luminaire Type AE1

Contact/Phone:

PRODUCT DESCRIPTION

The Pro-Series LED modular series with integral electronic driver operates 3000K LEDs for maintenance free 50,000 hour life using 1/6 the energy of halogen and virtually no heat. Pro-Series LED fixtures are optimized for fast permanent installation, mounting either flush to the rear backsplash or to the front lip of cabinetry to suit project conditions and homeowner preference. Pro-Series SoftTask™ undercabinet luminaires mimic fluorescent and provide an even wash of light, free of hot spots and surface shadows. 5-year limited warranty.

PRODUCT SPECIFICATIONS

LEDs Utilizes warm-white 3000K LEDs tightly binned to within a 3-step MacAdam ellipse for superb color consistency • Light output equivalent to Pro-Series Fluorescent fixtures • Provides 50,000 hour service life • 90 CRI minimum.

Driver Integral electronic 120-volt constant current driver is accessible without having to remove fixture • Dimmable with most incandescent, magnetic low voltage or electronic low voltage wall box dimmers • For a list of compatible dimmers, refer to the following pages.

Housing Slim 1" profile • Modular plug-together design • Extruded Aluminum • Designer white, brushed bronze, or brushed silver.

Diffuser PC diffuser (Poly Carbonate). Provides uniform illumination without hot spots.

Switch Available with or without convenient integral On/Off rocker switch.

Optional Integral Occupancy Sensor 2" is available with Passive Infrared (PIR) Occupancy Sensor. The PIR sensor has a field adjustable time delay that can be set from 30 sec. to 30 min. All additional luminaires connected to the luminaire with occupancy sensor will be controlled by the single sensor.

Labels cULus listed for damp locations • Certified to the high efficacy requirements of California T24 JA-8.

INSTALLATION

UPS Series fixtures offer several convenient methods for installation and can be installed as direct wire or portable luminaires. Fixtures may be mounted flush to the backsplash or up against the front lip of the cabinetry using captive mounting screws.

Direct Wire The UPS14 and UPS22 are optimized with a center rear wiring access compartment and push-in electrical connectors for quick electrical connection using non-metallic or armored cable • The UPS14 and UPS22 also feature multiple off-center knockouts and are supplied with die cast fittings for 3/8" flexible metal conduit • Optional direct-wire modules sold separately supplied with a jumper cord to bring power to the fixture, is also available to facilitate code compliant installation of fixture at the front end of cabinetry • Please note that if direct wiring is required for the UPLED09, a direct wire module must be utilized.

Electrically Connecting Multiple Fixtures Connect multiple fixtures for up to 5 amps maximum combined operating current • Fixtures may be electrically joined together using either the straight joiner connector supplied with each fixture or the optional JC3 jumper cords • See accessories table for lengths and colors. See engineering data table for input current draw of each fixture size.

ENGINEERING DATA

	UPS09	UPS14	UPS22
Total input power (watts)	4.6	6.5	10.6
Total Operating AMPS	.04	.06	.09
Lumens	304	422	731
Lumens/watt	65	64	68

Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

UNDERCABINET LIGHTING

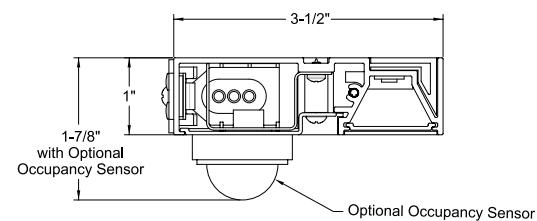
Pro - Series SoftTask™ LED

3000K, DIMMABLE

UPS09, UPS14, UPS22



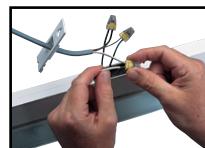
DIMENSIONS



PRO-SERIES LED 5 MINUTE DIRECT-WIRE INSTALLATION FOR UPS14, UPS22 AND UPS30



Step 1 Attach supply wires to rear access cover.



Step 2 Connect supply wires to fixture leads using push-in connectors.



Step 3 Mount fixture to cabinet bottom using captive mounting screws.

UNDERCABINET LIGHTING

Pro - Series SoftTask™ LED
3000K, DIMMABLE
UPS09, UPS14, UPS22

ORDERING INFORMATION

PRODUCT CODES

Series	CCT	CRI	Finish
UPS09	Pro-Series SoftTask LED Undercabinet, 09"	30K 3000K	90CRI 90 CRI
UPS14	Pro-Series SoftTask LED Undercabinet, 14"		
UPS22	Pro-Series SoftTask LED Undercabinet, 22"		WH White

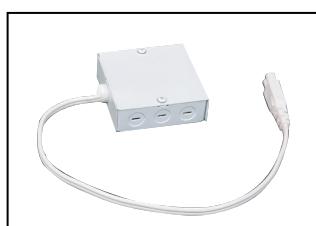
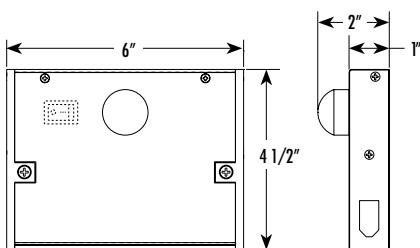
Occupancy Sensor is available on UPS22.

ACCESSORIES

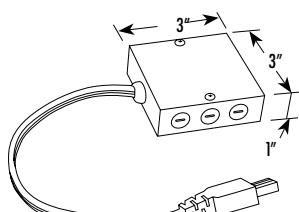
Catalog No.	Description
UDWM WH	Direct Wire Module



UDWMOC XX RS
UDWMOC



UDWM



UNDERCABINET LIGHTING

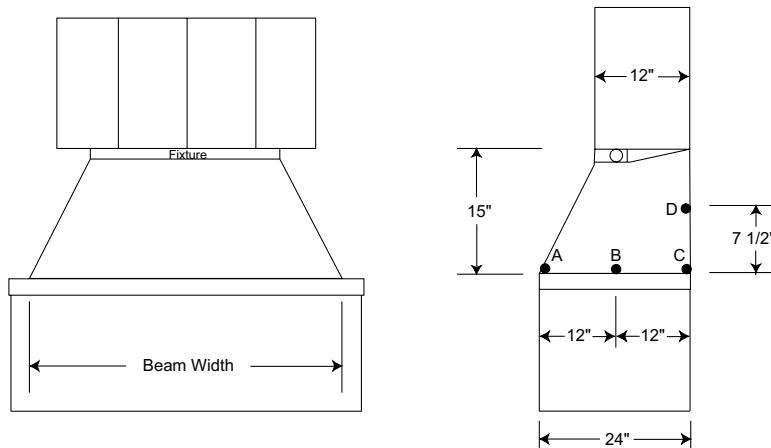
Pro - Series SoftTask™ LED

3000K, DIMMABLE

UPS09, UPS14, UPS22

LIGHTING APPLICATION DATA

FOOTCANDLES ON HORIZONTAL WORK SURFACE



Catalog #	Height	*Beam Width	Footcandles			
			A	B	C	D
UPS09	15"	20.5	17.7	78.3	57.6	58.4
UPS14	15"	22.0	27.4	113.8	85.9	84.6
UPS22	15"	27.5	35.0	143.8	113.0	104.6

* Beam width defined as 50% of maximum footcandles

Fixture mounted at front lip of cabinet

Rear wall reflectance 50%

Counter Surface Reflectance 20%

UNDERCABINET LIGHTING

Pro - Series SoftTask™ LED

3000K, DIMMABLE

UPS09, UPS14, UPS22

DIMMER COMPATIBILITY

Dimmable with the use of most forward and reverse phase dimmers. Dimming range of 100% down to 5% or lower with a minimum load of one fixture; both dimming range and maximum rated load may vary depending on dimmer model.

See maximum load calculations below to identify max number of luminaires per dimmer.

Forward Phase (Incandescent and Magnetic Low Voltage)

Example: Fixture Rating = 13W
Dimmer Rating = 600W
Equivalent Incandescent Load (EIL) = 50%
(600W / 13W) x 0.5 = 23 Fixtures per Dimmer

Reverse Phase (Electronic Low Voltage)

Example: Fixture Rating = 13W
Dimmer Rating = 600W
Equivalent Incandescent Load (EIL) = 75%
(600W / 13W) x 0.75 = 34 Fixtures per Dimmer

Forward Phase				
Manuf.	Product Family	Series	Type	Min. Light (%)
Lutron	Glyder	GLV	MLV	15
Lutron	Nova T	NTLV	MLV	15
Lutron	Diva	DVLV	MLV	20
Lutron	Ceana	CNLV	MLV	20
Lutron	Skylark	SLV	MLV	16
Lutron	Diva	DVCL	INC	5
Lutron	Ariadni	AYCL	INC	5
Lutron	Toggler	TGCL	INC	5
Lutron	Lumea	LGCL	INC	5
Lutron	Skylark			
Lutron	Contour	CTCL	INC	5
Lutron	RadioRA 2	RRD-10ND	INC	6
Leviton	SureSlide	6633*	INC	5
Leviton	SureSkide	6613*	MLV	10

* Recommended dimmers

Reverse Phase				
Manuf.	Product Family	Series	Type	Min. Light (%)
Lutron	Maestro	MAELV*	ELV	20
Lutron	Faedra	FAELV	ELV	20
Lutron	Spacer	SPSELV	ELV	20
Lutron	Nova T	NTELV*	ELV	20
Lutron	Diva	DVELV*	ELV	15
Lutron	Skylark	SELV	ELV	15

Integrated Control Systems				
Manuf.	Product Family	Series	Type	Min. Light (%)
Lutron	HomeWorks QS	HW-RPM-4U	PHA	20
Lutron	LCP128	LP-RPM-4U*	PHA	20
Lutron	LP	LP-RPM-4U	PHA	20
Sensor Switch®	nLight	nSP5PCD-ELV*	ELV	10
Sensor Switch®	nLight	nSP5PCD-2W	INC	15

Flip

LED Swing Arm

Model & Size	Color Temp & CRI	Finish	Watt	LED Lumens	Delivered Lumens
<input type="radio"/> BL-1021L Left	3000K 85	<input type="radio"/> BK Black	8.5W	489	315
<input type="radio"/> BL-1021R Right		<input type="radio"/> BZ Bronze <input type="radio"/> TT Titanium			

Example: **BL-1021L-BK**

DESCRIPTION

A clever LED swing arm reading light that folds in completely to neatly and orderly fit within modern design elements. Integral memory touch dimmer conveniently located for fingertip control.

FEATURES

- Integral universal driver
- Bauhaus-style geometry in a left and right paired design
- Two 12 inch cord covers included
- Fingertip touch dimming on head
- 8 foot cord included for hard-wired and portable installation
- Driver concealed within the fixture
- 5 year warranty

SPECIFICATIONS

Construction:	Aluminum hardware with polycarbonate diffuser
Power:	8.5W
Input:	100-240 VAC, 50/60Hz
Rated Life:	50000 Hours
Finish:	Titanium, Bronze, Black
Operating Temp:	-4°F to 104°F (-20°C to 40°C)
Standards:	ETL, cETL, Damp Location Listed



Luminaire Type

AF1

Fixture Ty

Catalog N

Project:

Location:

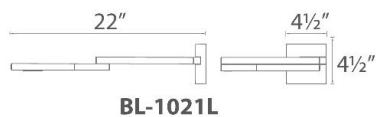


FINISHES:

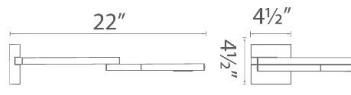


Titanium Bronze Black

LINE DRAWING:



BL-1021L



BL-1021R



Gaze | Pendant & Surface Round



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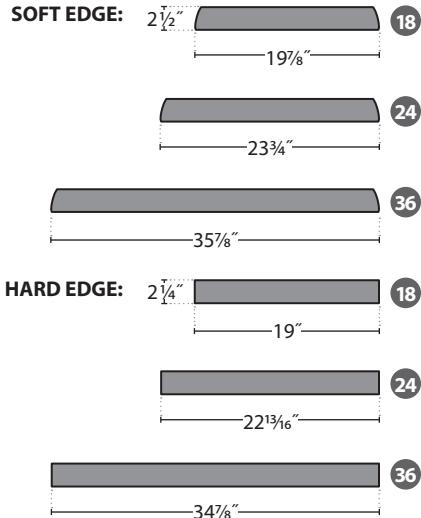
36" Soft Edge



36" Hard Edge

Introducing Gaze, an exercise in reductionism.

Gaze promises smooth, even diffusion of light, and is available in a clean Hard Edge or a distinctively curved Soft Edge with an elegant recess and is undeniably refined. Power over Aircraft Cable (PAC) eliminates power cord clutter. Mix with Gaze acoustics for improved sound absorption.



LUMEN OUTPUT:

D1 DIRECT	LO	MO	SO	HO
18: Im w	1250 11	2300 19	3375 28	4450 38
24: Im w	1700 15	3125 27	4525 41	5700 53
36: Im w	4150 35	7450 65	10625 100	13425 133
D9 INDIRECT	LO	MO	SO	HO
Im	550	1425	2200	2825
w	7.5	18	30	41

NOTE: Combine D1 and D9 IES files for D9 Semi-Direct

Lumen output may vary +/- 5%

3500K used for Im/ft estimates above
4000K +2% If, 3000K -2%, 2700K -4%
-10% LLF for 90 CRI (4K, 3500K and 3K)

See LED Details PDF for more info

Declare.



SERIES	SIZE	LED COLOR	OUTPUT	Fixture Color	DISTRIBUTION	CIRCUITING	VOLTAGE	MOUNTING	CEILING SYSTEMS	DRIVERS	OPTIONS
			—								
GazeRDS Round Soft Edge	18	LED27 2700K (90CRI)	LO Low MO Medium SO Standard HO High (Static White Only)	TMW Textured Matte White (Standard) YGW Gloss White Y Premium Color CC Custom Color NOTE: All canopies are painted the same color as the fixture. Consult factory to specify different canopy color (eg. White)	D1 Direct D9 Semi-Direct	SC Single Circuit DC Dual Circuit	UNV (120-277) 347	CA48", 96" or 144" Aircraft Cable (Adjustable) RPM 48", 96" or 144" Round Cast Aluminum Canopy SPM 48", 96" or 144" Square Cast Aluminum Canopy SURF Surface Flush (D1 only) SURS Surface Stand-off PAC-R/S 96" Powered Aircraft Round/Square Canopy, Direct canopy mount, X3 only, See pages 6-7 24-HO/LO-MO-D9: Osram DM01 only PAC NA, RPAC only: 24-HO/SO-HO-D9, 36-SO-HO-D1, 36-MO-SO-HO-D9, ALL EMHE RPAC-R/S Remote Powered Aircraft Cable Round/Square Canopy (See pages 6-7) 36-SO/HO & 36-all HO-D9: TWO Remote Boxes needed, consult factory	X1 T-Bar (PAC - NA) X3 Hard Ceiling	ND Non-Dimming, Osram DM01 0-10v, 1% Dimming (Standard) LDE1 Lutron Hi-lume 1% EcoSystem LED (Soft fade on, fade-to-black dimming) ECO 1% 0-10v, EldoLED (Logarithmic dimming std) ECDA 1% DALI, EldoLED (Logarithmic dimming std) SOLO 0.1% 0-10v, EldoLED (Dim-to-dark, Logarithmic dimming std) SODA 0.1% DALI, EldoLED (Dim-to-dark, Logarithmic dimming std)	EMHE CAT20 Emergency Battery (800 delivered lumens) 18: Remote Only 24-D9 pendant: Remote Only RPAC-EMHE often requires TWO Remote boxes, consult factory (See pages 6-7) EMHE Test Light Integral EMHE except SURF EMHE Remote Test Kit (RTK) SURF, PAC, RPAC and all other Remote EMHE ETS-DR Iota ETS-DR Emergency Transfer Switch SENSORS: FM-105 Wattstopper H164 Hidden Frequency Occupancy Sensor
GazeRDH Round Hard Edge	24	LED3 3000K									
	36	LED35 3500K									
		LED4 4000K									
		LED3-90 90CRI									
		LED35-90 90CRI									
		LED4-90 90CRI									
		LED5-90 90CRI									

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Pendant

1

05-17-2022



Gaze | Pendant & Surface Round



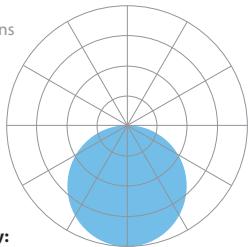
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D1 — DIRECT

GAZERD-24-LED35-MO

3126 Delivered Lumens
27 Watts
115 lm/w



Zonal Lumen Summary:
0-90 (Down) = 100%

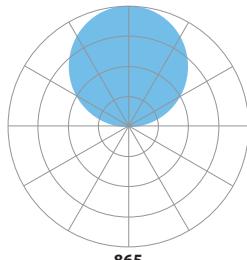
1101

Vertical Angle	0°	25°	45°	65°	90°
0°	1101	1101	1101	1101	1101
5°	1095	1095	1095	1095	1095
15°	1055	1055	1055	1055	1055
25°	979	979	979	979	979
35°	867	867	867	867	867
45°	728	728	728	728	728
55°	566	567	567	566	566
65°	389	389	390	389	389
75°	206	206	206	206	206
85°	51	51	52	52	52
90°	0	0	0	0	0

D9 — INDIRECT

GAZERD-24-LED35-SO-D9

2200 Delivered Lumens
30 Watts
75 lm/w



Zonal Lumen Summary:
0-90 (Down) = 67%
90-180 (Up) = 33%

865

Vertical Angle	0°	25°	45°	65°	90°
90°	0	0	0	0	0
95°	25	24	23	21	21
115°	230	229	235	246	248
125°	375	377	379	392	396
135°	519	524	524	529	535
145°	653	655	656	654	656
155°	757	759	760	757	756
165°	825	829	830	828	827
175°	860	862	862	861	861
180°	865	865	865	865	865

LUMEN MAINTENANCE

L70 — 200,000+ Hours

L90 — 100,000+ Hours (LO, MO & SO)

L90 — 60,000+ Hours (HO)

LED SYSTEM Drivers are field replaceable.

PROG (OPTIONAL) Programmable light output. Specify desired lumens or watts per fixture.

BINNING Standard binning (all Prudential LED boards) includes testing at the chip level and board integration to provide consistent color temperature within a 3-step MacAdams ellipse, with +/- 5% lumen output range and +/- .003 Duv.

LABELS CSA and ETL damp labeled and I.B.E.W. manufactured.

ELECTRICAL Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM01 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h.

CONSTRUCTION

Housing Extruded aluminum, rolled and welded, >25% PC recycled, 100% recyclable.

Lens Edge Lit Wave Guide with Secondary Acrylic Diffuser.

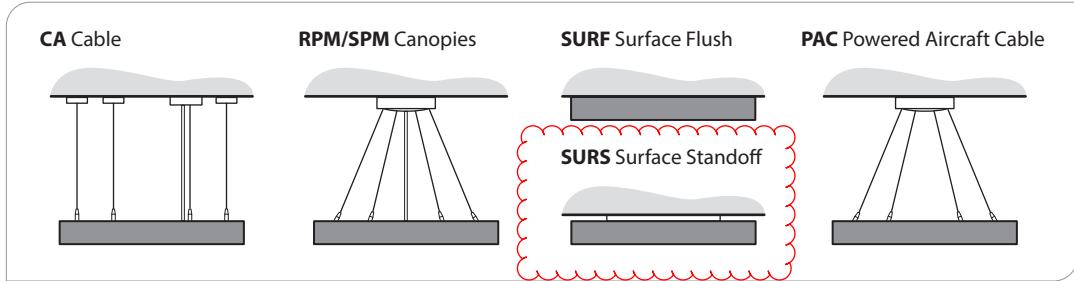
Weight 18: 17lbs 24: 23lbs 36: 44lbs

MOUNTING Surface or suspended by aircraft cables or cast aluminum canopy.

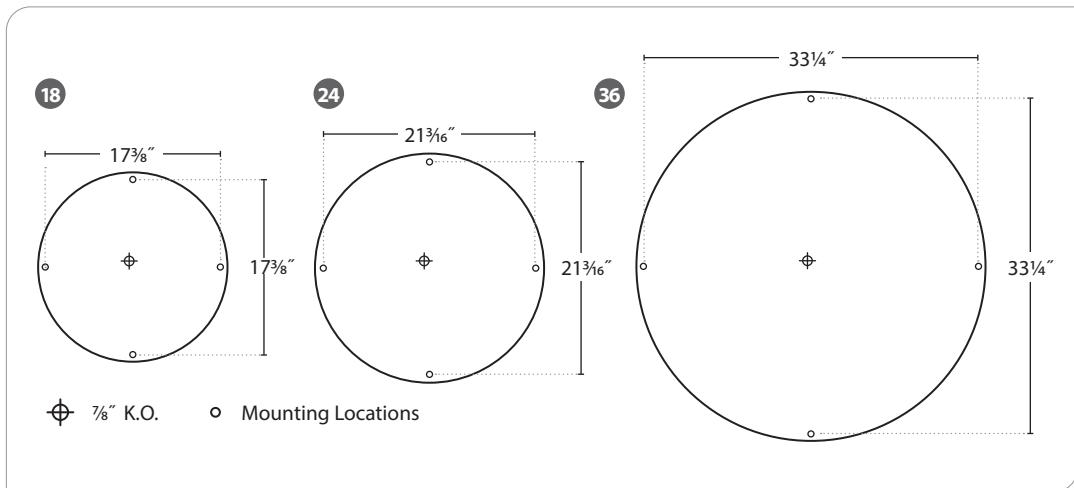
WARRANTY Single-source, 5 year limited warranty covers standard components and construction.



MOUNTING OPTIONS



CA CABLE MOUNTING DIMENSIONS

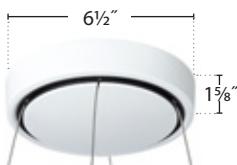


Choose from one of our Premium Colors with no set-up fee.

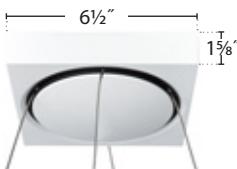
For paint chip samples, please email:
info@prulite.com

CAST ALUMINUM CANOPIES

RPM48", 96" or 144":
Round Cast Aluminum Canopy

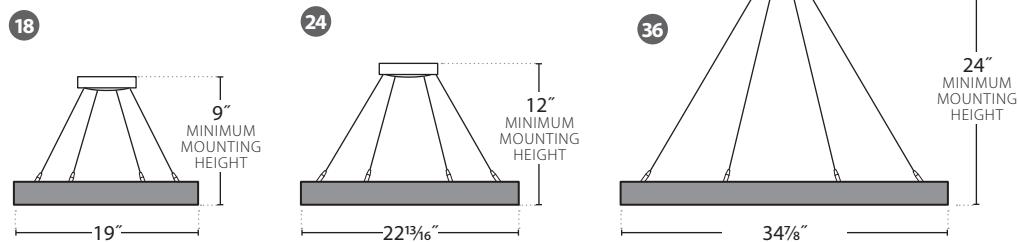


SPM48", 96" or 144":
Square Cast Aluminum Canopy

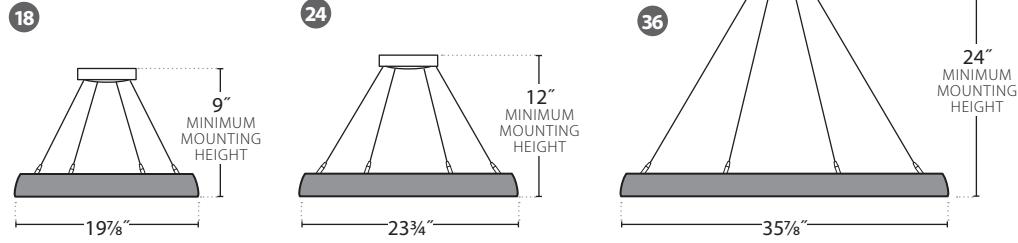


RPM/SPM CANOPY MINIMUM MOUNTING HEIGHT

HARD EDGE



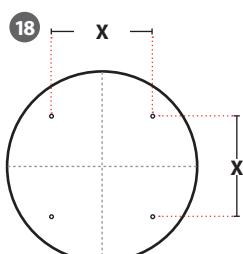
SOFT EDGE



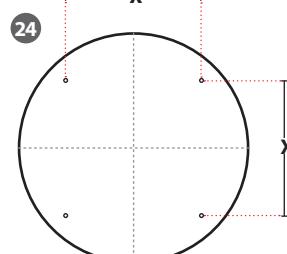


SURFACE (CEILING OR WALL) MOUNTING DIMENSIONS

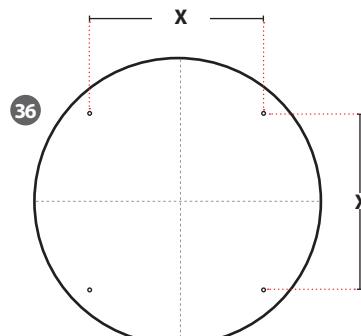
SURFACE FLUSH



X1	X3
X = 10 ¹¹ / ₁₆ "	9 ⁵ / ₁₆ "

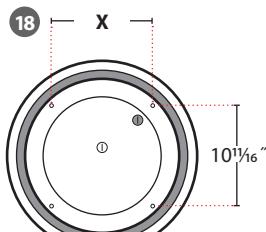


X1	X3
X = 13 ³ / ₈ "	12 ⁵ / ₈ "

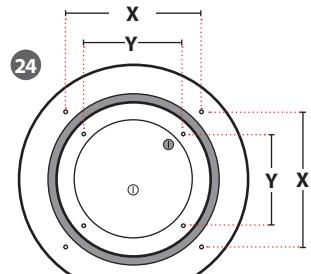


X1	X3
X = 21 ¹⁵ / ₁₆ "	21 ³ / ₁₆ "

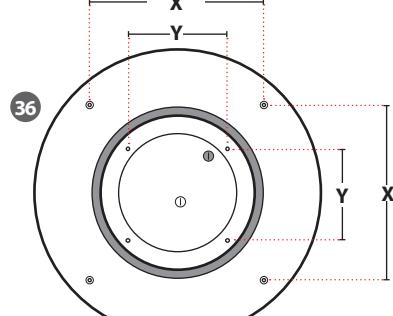
SURFACE STAND-OFF



X1	X3
X = 10 ¹¹ / ₁₆ "	9 ⁵ / ₁₆ "



X1	X3
X = 13 ³ / ₈ "	—



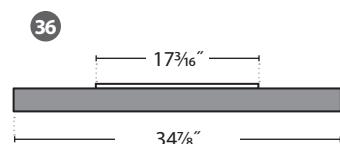
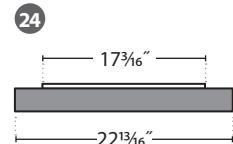
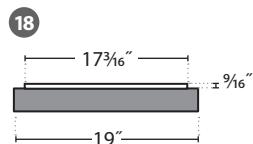
X1	X3
X = 21 ¹⁵ / ₁₆ "	21 ³ / ₁₆ "

○ Mounting Locations

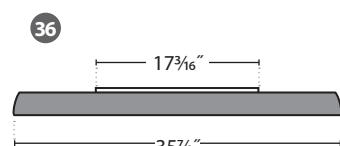
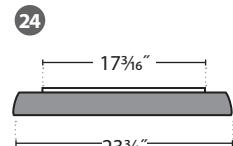
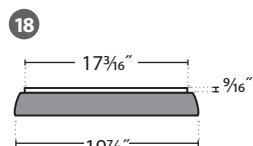
◎ Mounting Locations with Spacer

SURFACE STANDOFF DIMENSIONS

HARD EDGE



SOFT EDGE





Gaze | Pendant & Surface Round

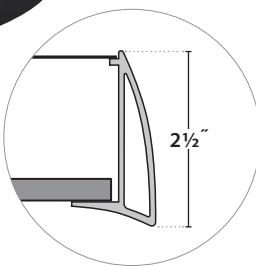


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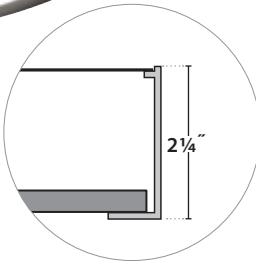
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SOFT EDGE

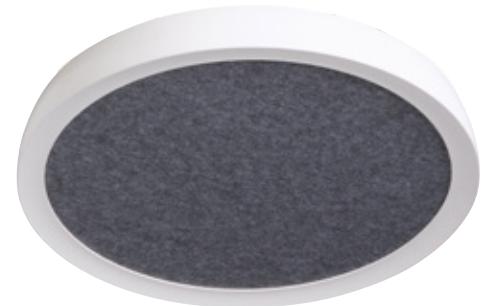
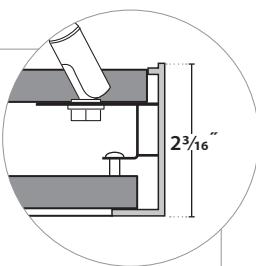


HARD EDGE



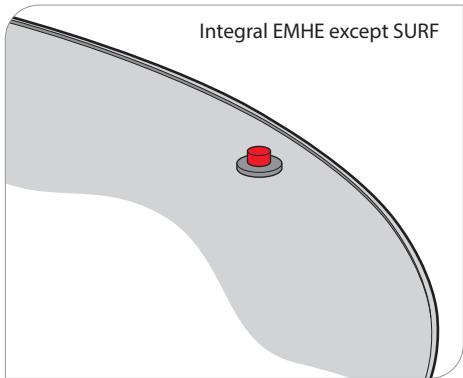
Gaze Acoustic

Gaze Acoustic fixtures offer effective noise reduction with an intentional approach to design. Alternate with coordinating light fixtures for maximum visual appeal in open spaces.

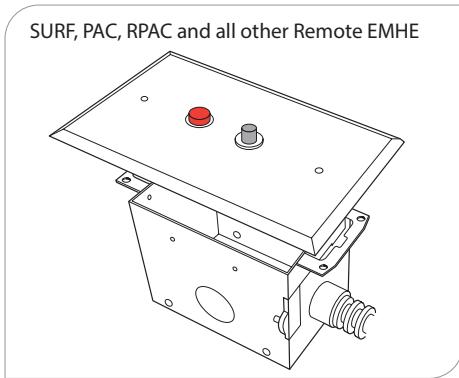




EMHE TEST LIGHT

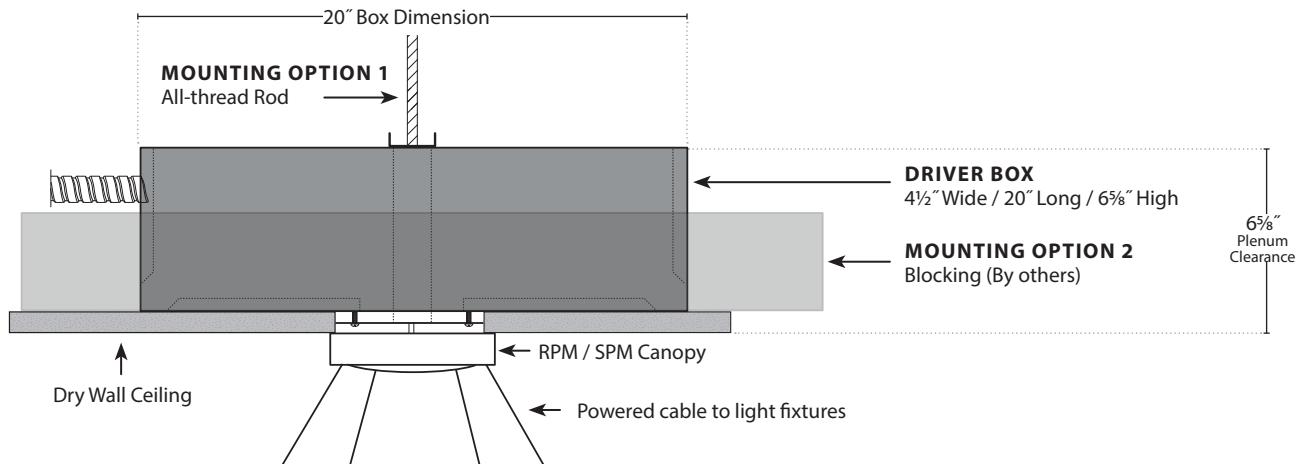


RTK: REMOTE TEST KIT

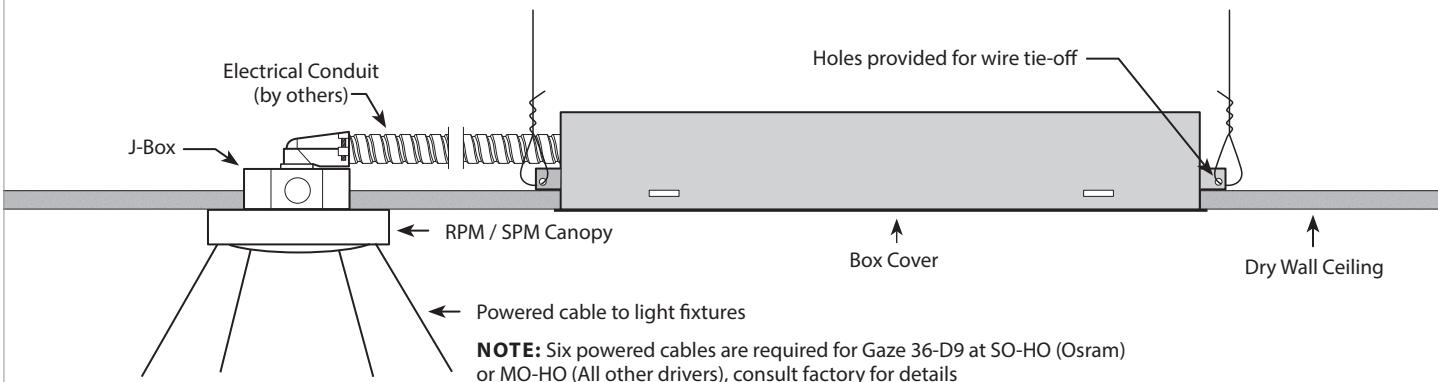


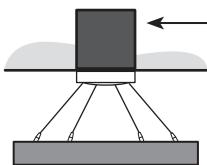
PACS AND RPACR CROSS SECTIONS

DIRECT CANOPY MOUNT: Canopy Driver Box — Driver access behind canopy



REMOTE: Remote Driver Box — Remote access required



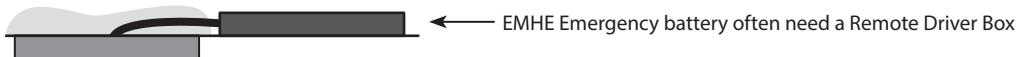


Drivers hidden in Direct Canopy Box

PACS: POWER VIA AIRCRAFT CABLE (NO POWER CORD)

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18																			
24																O	O	NA	NA
36				NA	NA							O	NA	NA	NA	NA	NA	NA	NA

O: Osram DM01 Drivers Only, RPAC (Remote) needed for all other drivers **NA:** Not Available, RPAC (Remote) needed



EMHE Emergency battery often need a Remote Driver Box

REMOTE BOX QUANTITIES NEEDED:

EMHE: SURFACE MOUNT (SURF & SURS)

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

EMHE: PENDANT (CA/RPM/SPM)

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

RPAC

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	

RPAC + EMHE

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
36	1	1	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	

1: 1 Remote Box needed

2: 2 Remote Box needed

—: Not Applicable, no remote box needed



Gaze | Pendant & Surface Square



**Luminaire Type
AH1**



24" Soft Edge



24" Hard Edge

Introducing Gaze, an exercise in reductionism.

Gaze promises smooth, even diffusion of light, and is available in a clean Hard Edge or a distinctively curved Soft Edge with an elegant recess and is undeniably refined. Power over Aircraft Cable (PAC) eliminates power cord clutter. Mix with Gaze acoustics for improved sound absorption.

Declare



Made in the
USA

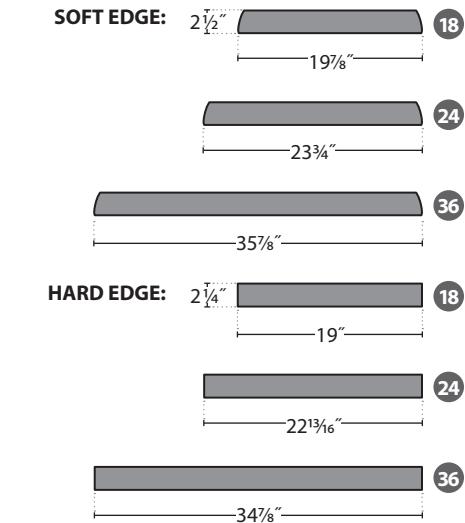
NOTE: Combine D1 and D9 IES files for D9 Semi-Direct

Lumen output may vary +/- 5%
3500K used for lm/ft estimates above
4000K +2% llf, 3000K -2%, 2700K -4%
-10% LLF for 90 CRI (4K, 3500K and 3K)

See LED Details PDF for more info



CLICK
HERE



LUMEN OUTPUT:

	D1 DIRECT	LO	MO	SO	HO
18:	Im w	1550 13	2900 24	4225 35	5550 48
24:	Im w	2200 19	4050 35	5875 52	7675 69
36:	Im w	5000 43	9050 81	13100 121	16725 165
D9 INDIRECT	LO	MO	SO	HO	
	Im w	550 7.5	1425 18	2200 30	2825 41

SERIES	SIZE	LED COLOR	OUTPUT	Fixture Color	DISTRIBUTION	CIRCUITING	VOLTAGE	MOUNTING	CEILING SYSTEMS	DRIVERS	OPTIONS
			—								
GazeSQS Square Soft Edge	18	LED27 2700K (90CRI)	LO Low MO Medium	TMW Textured Matte White (Standard)	D1 Direct	SC Single Circuit	UNV (120- 277)	CA48", 96" or 144" Aircraft Cable (Adjustable)	X1 T-Bar (PAC - NA)	ND Non-Dimming, Osram	EMHE CA T20 Emergency Battery (800 delivered lumens)
GazeSQH Square Hard Edge	24	LED3 3000K	SO Standard	YGW Gloss White	D9 Semi-Direct	DC Dual Circuit	347	RPM 48", 96" or 144" Round Cast Aluminum Canopy	X3 Hard Ceiling	DM01 0-10v, 1% Dimming (Standard)	18: Remote Only TWO Remote boxes: 18-HO/HO-D9-SUR, 24-SO/HO-D9, 24-HO/MO-SO-HO-D9 pendant
	36	LED35 3500K	HO High (Static White Only)	Y Premium Color				SPM 48", 96" or 144" Square Cast Aluminum Canopy		LDE1* Lutron Hi-Lume 1% EcoSystem LED (Soft fade on, fade-to-black dimming)	RPAC-EMHE often requires TWO Remote boxes, consult factory (See pages 6-7)
		LED4 4000K	PROG Programmable Light Output (Specify desired lm or w/ fixture)	CC Custom Color				SURF Surface Flush (D1 only)	ECO* 1% 0-10v, EldoLED (Logarithmic dimming std)	EMHE Test Light Integral EMHE except SURF	
		LED3- 90 90CRI	LED35- 90 90CRI	NOTE: All canopies are painted the same color as the fixture. Con- sult factory to specify different canopy color (eg. White)				SURS Surface Stand-off	ECDA* 1% DALI, EldoLED (Logarithmic dimming std)	EMHE Remote Test Kit (RTK) SURF, PAC, RPAC and all other Remote EMHE	
		LED4- 90 90CRI	NOTE: Spec- ify separate output Down/ Up if desired eg. LO/HO (Low Down, High Up)					PAC-R/S 96" Powered Air- craft Cable Round/Square Canopy, Direct canopy mount, X3 only, See pages 6-7	SOLO* 0.1% 0-10v, EldoLED (Dim-to-dark, Logarithmic dimming std)	ETS-DR Iota ETS-DR Emergency Transfer Switch	
		LED5- 90 90CRI						24-HO/LO-MO-D9: Osram DM01 only PAC NA, RPAC only: 24-HO/SO-HO-D9, 36-SO-HO-D1, 36-MO-SO-HO-D9, ALL EMHE	SODA* 0.1% DALI, EldoLED (Dim-to-dark, Logarithmic dimming std)	SENSORS: FM-105 Wattstopper H164 Hidden Frequency Occupancy Sensor	
								RPAC-R/S Remote Powered Aircraft Cable Round/ Square Canopy (See pages 6-7)	*HO NA		

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Pendant

1

05-17-2022



Gaze | Pendant & Surface Square



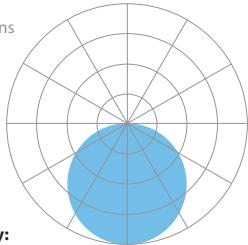
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D1 — DIRECT

GAZESQ-24-LED35-MO

4058 Delivered Lumens
35 Watts
118 lm/w



Zonal Lumen Summary:
0-90 (Down) = 100%

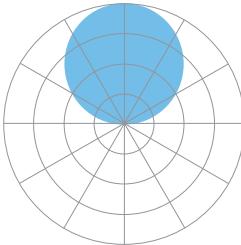
1430

Vertical Angle	0°	25°	45°	65°	90°
0°	1430	1430	1430	1430	1430
5°	1423	1423	1422	1423	1422
15°	1372	1372	1371	1372	1371
25°	1271	1272	1271	1271	1270
35°	1126	1127	1126	1126	1125
45°	947	947	946	946	946
55°	736	736	735	735	736
65°	389	389	390	389	389
75°	206	206	206	206	206
85°	51	51	52	52	52
90°	0	0	0	0	0

D9 — INDIRECT

GAZESQ-24-LED35-SO-D9

2200 Delivered Lumens
30 Watts
75 lm/w



Zonal Lumen Summary:
0-90 (Down) = 67%
90-180 (Up) = 33%

865

Vertical Angle	0°	25°	45°	65°	90°
90°	0	0	0	0	0
95°	25	24	23	21	21
115°	230	229	235	246	248
125°	375	377	379	392	396
135°	519	524	524	529	535
145°	653	655	656	654	656
155°	757	759	760	757	756
165°	825	829	830	828	827
175°	860	862	862	861	861
180°	865	865	865	865	865

LUMEN MAINTENANCE

L70 — 200,000+ Hours

L90 — 100,000+ Hours (LO, MO & SO)

L90 — 60,000+ Hours (HO)

LED SYSTEM Drivers are field replaceable.

PROG (OPTIONAL) Programmable light output. Specify desired lumens or watts per fixture.

BINNING Standard binning (all Prudential LED boards) includes testing at the chip level and board integration to provide consistent color temperature within a 3-step MacAdams ellipse, with +/- 5% lumen output range and +/- .003 Duv.

LABELS CSA and ETL damp labeled and I.B.E.W. manufactured.

ELECTRICAL

Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM01 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65" w x 1.25" h.

CONSTRUCTION

Housing Extruded aluminum, rolled and welded, >25% PC recycled, 100% recyclable.

Lens Edge Lit Wave Guide with Secondary Acrylic Diffuser.

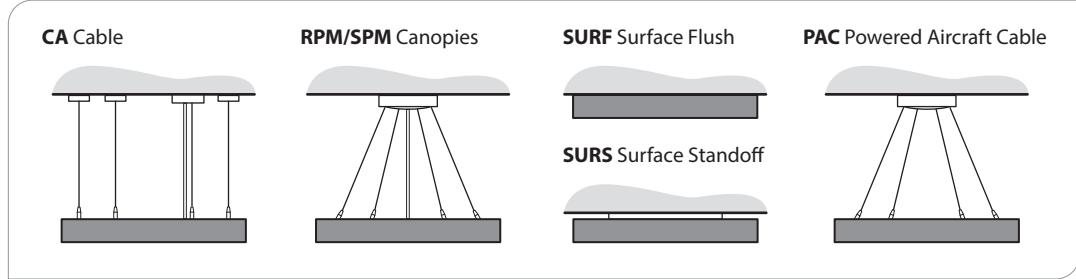
Weight 18: 21lbs 24: 28lbs 36: 54lbs

MOUNTING Surface or suspended by aircraft cables or cast aluminum canopy.

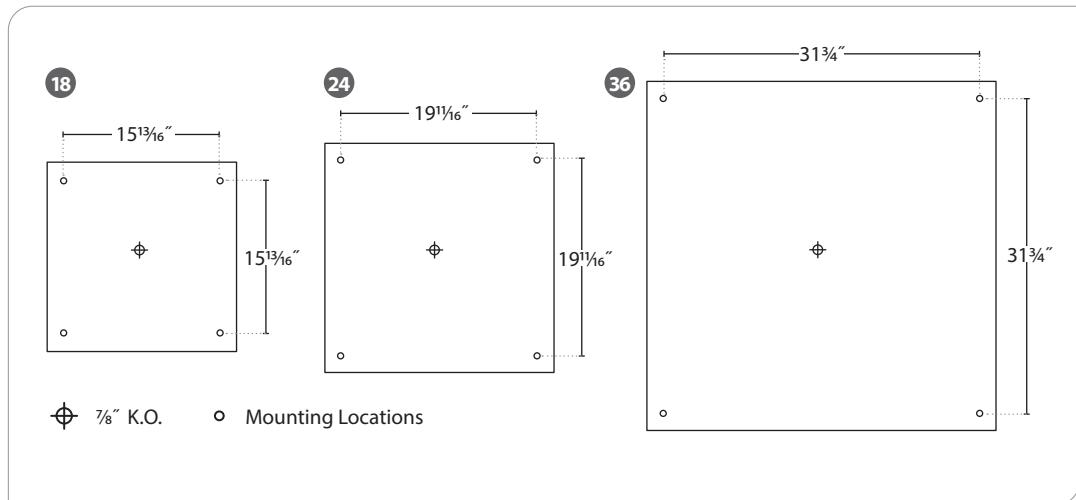
WARRANTY Single-source, 5 year limited warranty covers standard components and construction.



MOUNTING OPTIONS



CA CABLE MOUNTING DIMENSIONS

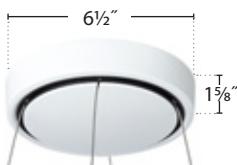


Choose from one of our Premium Colors with no set-up fee.

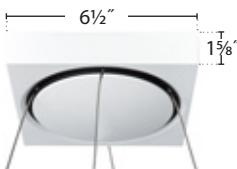
For paint chip samples, please email:
info@prulite.com

CAST ALUMINUM CANOPIES

RPM48", 96" or 144":
Round Cast Aluminum Canopy

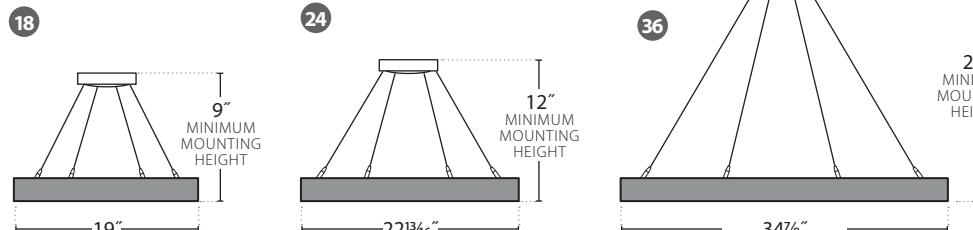


SPM48", 96" or 144":
Square Cast Aluminum Canopy

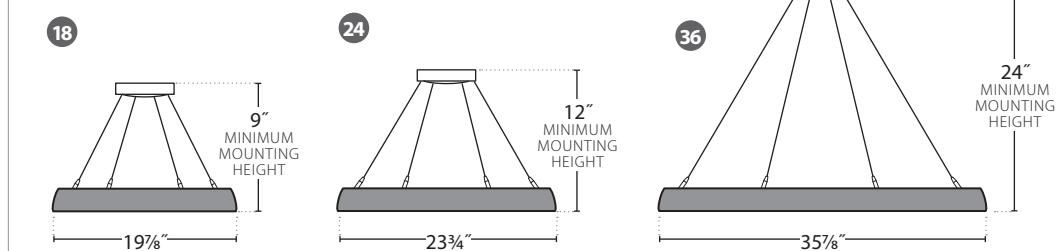


RPM/SPM CANOPY MINIMUM MOUNTING HEIGHT

HARD EDGE



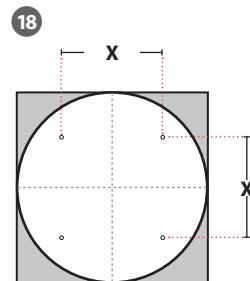
SOFT EDGE



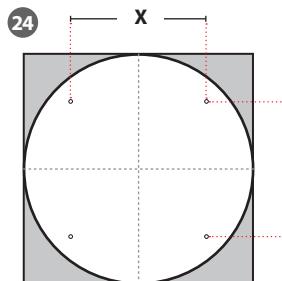


SURFACE (CEILING OR WALL) MOUNTING DIMENSIONS

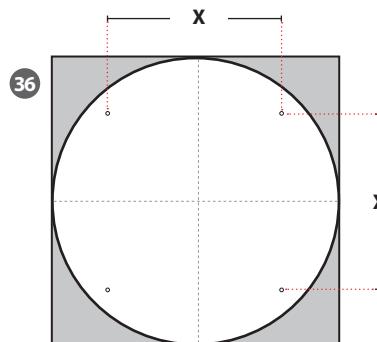
SURFACE FLUSH



X1	X3
X = 10 ¹¹ / ₁₆ "	9 ⁵ / ₁₆ "

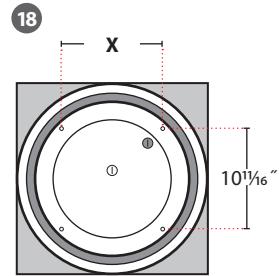


X1	X3
X = 13 ³ / ₈ "	12 ⁵ / ₈ "

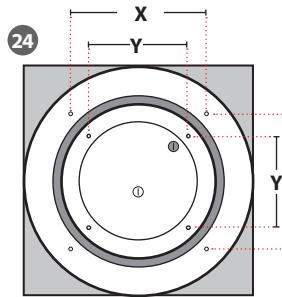


X1	X3
X = 21 ¹⁵ / ₁₆ "	21 ³ / ₁₆ "

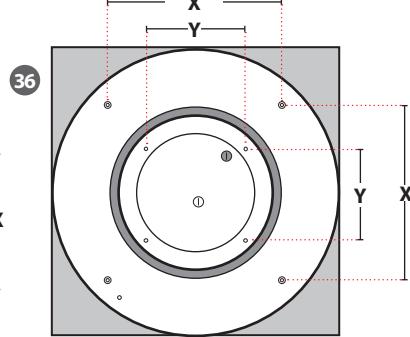
SURFACE STAND-OFF



X1	X3
X = 10 ¹¹ / ₁₆ "	9 ⁵ / ₁₆ "



X1	X3
X = 13 ³ / ₈ "	—



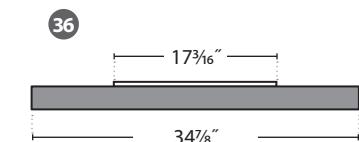
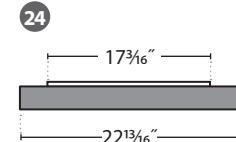
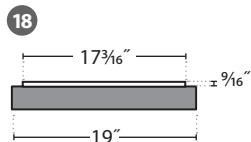
X1	X3
X = 21 ¹⁵ / ₁₆ "	21 ³ / ₁₆ "

○ Mounting Locations

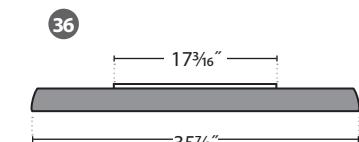
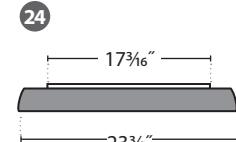
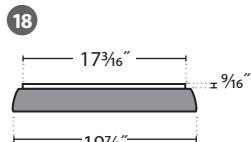
◎ Mounting Locations with Spacer

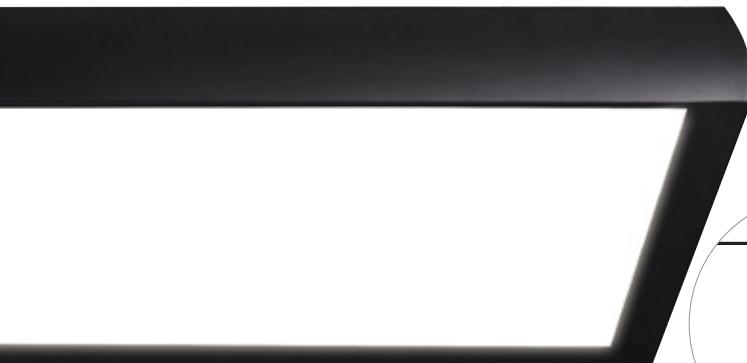
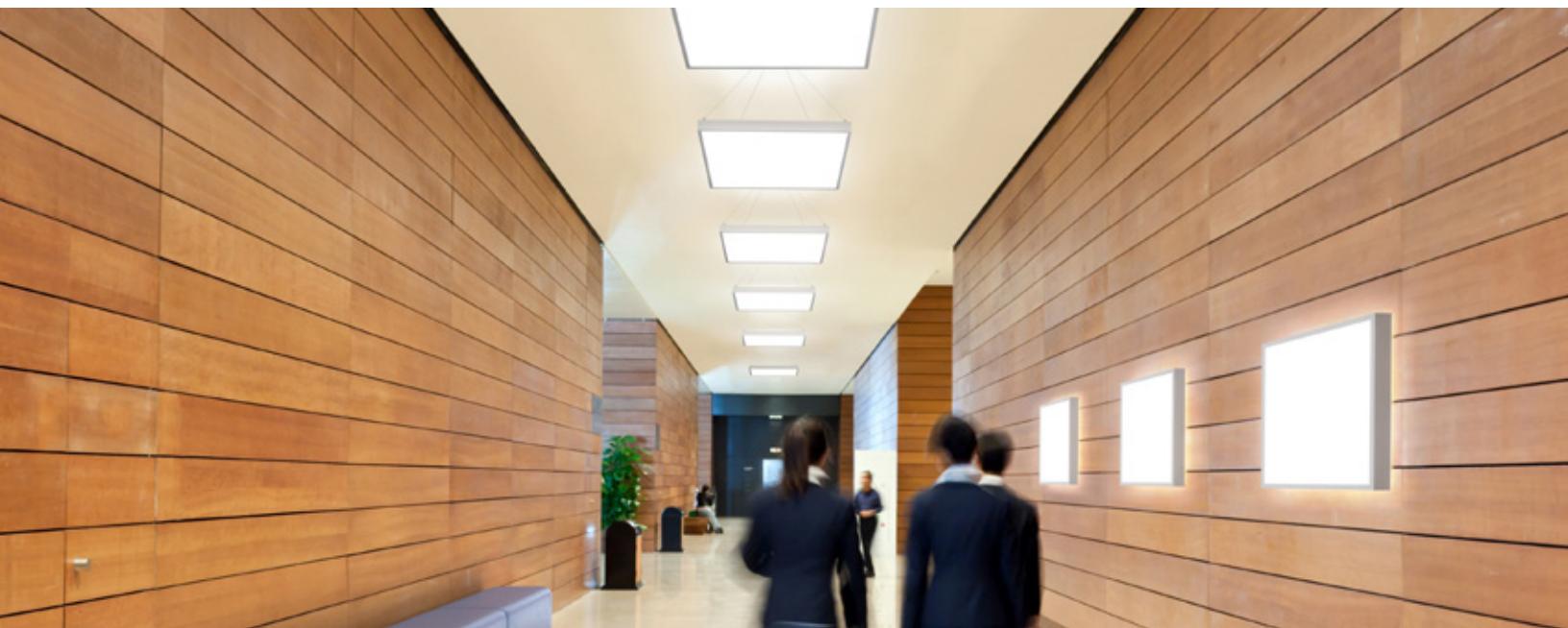
SURFACE STANDOFF DIMENSIONS

HARD EDGE

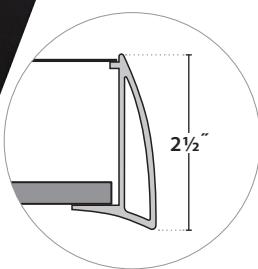


SOFT EDGE



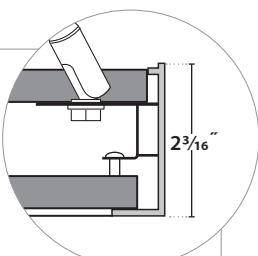


SOFT EDGE

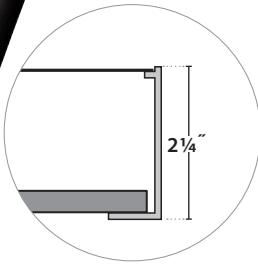


Gaze Acoustic

Gaze Acoustic fixtures offer effective noise reduction with an intentional approach to design. Alternate with coordinating light fixtures for maximum visual appeal in open spaces.

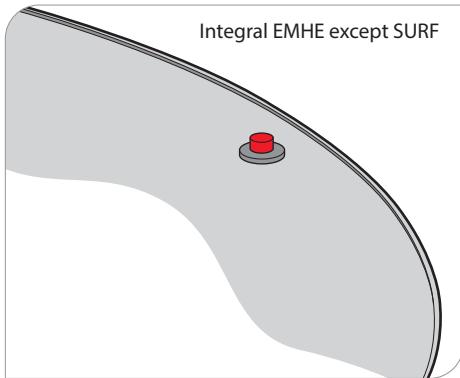


HARD EDGE

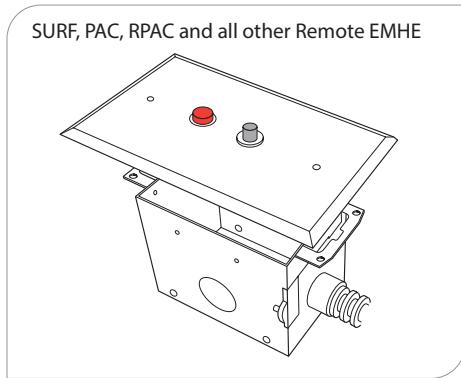




EMHE TEST LIGHT

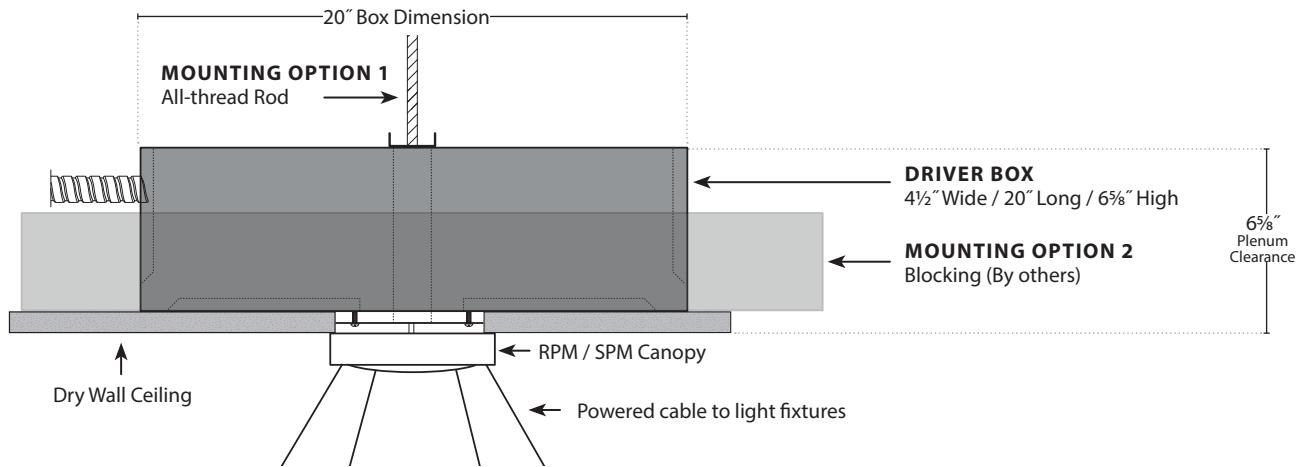


RTK: REMOTE TEST KIT

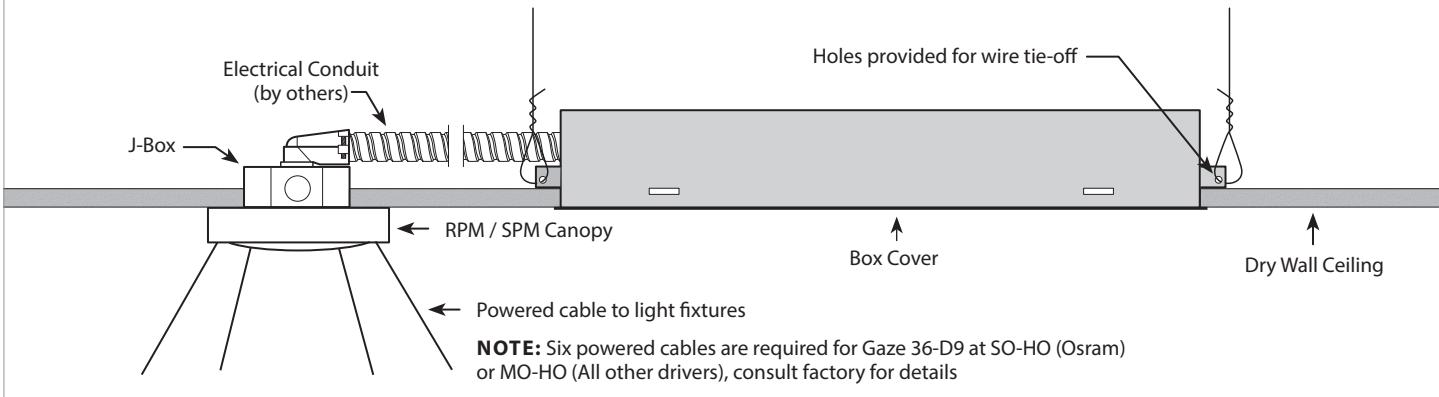


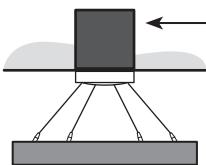
PACS AND RPACR CROSS SECTIONS

DIRECT CANOPY MOUNT: Canopy Driver Box — Driver access behind canopy



REMOTE: Remote Driver Box — Remote access required





Drivers hidden in Direct Canopy Box

PACS: POWER VIA AIRCRAFT CABLE (NO POWER CORD)

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18																	O	O	O
24																NA	O	NA	NA
36				NA	NA					O	NA	NA	NA	NA	NA	NA	NA	NA	NA

O: Osram DM01 Drivers Only, RPAC (Remote) needed for all other drivers

NA: Not Available, RPAC (Remote) needed



EMHE Emergency battery often need a Remote Driver Box

REMOTE BOX QUANTITIES NEEDED:
EMHE: SURFACE MOUNT (SURF & SURS)

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

EMHE: PENDANT (CA/RPM/SPM)

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
24	—	—	—	—	1	1	1	1	1	1	1	1	1	1	2	1	2	2	
36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

RPAC

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
36	1	1	1	2	1	1	1	1	1	1	1	1	2	2	2	2	2	2	

RPAC + EMHE

D1 DIRECT ONLY				D9: DIRECT/INDIRECT															
LO	MO	SO	HO	LO/LO	LO/MO	LO/SO	LO/HO	MO/LO	MO/MO	MO/SO	MO/HO	SO/LO	SO/MO	SO/SO	SO/HO	HO/LO	HO/MO	HO/SO	HO/HO
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	
36	1	1	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	

1: 1 Remote Box needed

2: 2 Remote Box needed

—: Not Applicable, no remote box needed

VICTORY NARROW SERIES

VIC1N/VIC2N/VIC3N/VIC4N

FEATURES:

- Intended for Vandal Resistant applications when "TH" is specified, Public Areas, Corridors, Stairways, Underpasses, Parking Garages, Restrooms, Lobbies, Schools, and more
- Architectural linear luminaire that melds aesthetics, function and vandal resistance
- Extruded aluminum housing with cast aluminum endcaps for durability
- Wet Location (under covered ceiling) rating standard
- Available with decorative endcaps
- This product complies with the Buy American Act requirements



VIC4N



RELATED PRODUCTS:

- [Victory Narrow \(VICN\) Quick Ship Ordering Options](#)
- [Victory Wide \(VICW\)](#)
- [Stairwell Tres Series \(STWL\)](#)

SPECIFICATIONS

CONSTRUCTION: Marine grade extruded aluminum frame with cast aluminum end caps. Includes knockouts for surface conduit and tandem mounting (field installation, hardware by others).

LENS: Linear ribbed clear and white polycarbonate lens available in two thicknesses. Unique swing rail design for ease of lens removal for maintenance.

LED: Available in three color temperatures 3500°K, 4000°K and 5000°K with maximum 3-step MacAdam variation allowance. Other color temperatures available, consult factory. Minimum 80 CRI standard with optional minimum 90 CRI available.

ELECTRICAL: 0-10V dimming available with 10-100% range and 1-100% range. Must specify dimming under options.

REFLECTOR: Faceted 22 gauge specular aluminum for maximum rigidity and controlled light distribution.

FASTENERS: Phillips flat head screws (3 screws on each side). Optional Torx Head screws for tamper resistance.

FINISH: White powder coat finish following multistage iron phosphate pretreatment.

GASKET: EPDM gasketing to prevent water and dust infiltration.

OPTIONS: Fixtures with SD2 and OC sensor operate at 50% when area is unoccupied, increases to 100% after motion is detected, and reverts to 50%. Fixtures with SD3 and OC sensor are set at lowest dimming level unless otherwise specified. Fixture operates at 30% when area is unoccupied, increases to 100% after motion is detected and reverts to 30% after time delay. Time delay set by user. Consult factory for different configurations.

INSTALLATION: Surface wall mount installation. Hardware by others.

WARRANTY: [New Star Promise](#). Limited five (5) year warranty.

LABEL: Fixture is certified to UL standards by Intertek Testing Laboratories for Wet Location (under covered ceiling). DLC Approved Configuration: VIC-4N-L3401-RC-UN-WH

This product complies with the Buy American Act requirements. Specifications and dimensions are subject to change without notice. For additional options and dimensional details, please consult your New Star Lighting representative.

VICTORY NARROW SERIES

VIC1N/VIC2N/VIC3N/VIC4N

ORDERING INFORMATION

EXAMPLE: VIC2N-L2351C-RW-UN-WH

SIZE*	STYLE	LUMEN OUTPUT*	COLOR TEMP.	CIRCUITS	LENS
VIC	N				

1 = 1ft. N = Narrow L1 = Low 35 = 3500°K 1C = 1 Circuit RW = .09 Ribbed White Poly.

2 = 2ft. L2 = Standard 40 = 4000°K 2C = 2 Circuits* RC = .09 Ribbed Clear Poly.

3 = 3ft. L3 = High** 50 = 5000°K RWC = .15 Ribbed White Poly.

4 = 4ft.

*Subject to change.

Performance Data on page 3.

**Cannot be used with Occupancy Sensor.

*Allows for inboard/ RCC = .15 Ribbed Clear Poly. outboard control.

*Nominal Size.
 Dimensional Data
 on Page 4.

VOLTAGE	FINISH	OPTIONS	ACCESSORY
---------	--------	---------	-----------

12 = 120V WH = White DM = 0-10V dimming with 10-100% range CM = Corner Mount Bracket

27 = 277V CC = Custom Color* DM1 = 0-10V dimming with 1-100% range

34 = 347V PC = Photocell (N/A decorative end cap)*

UN = Universal (120V-277V) *Must specify RAL number at time of order and if antimicrobial finish is needed. Subject to set-up fees.

OC = Occupancy Sensor (N/A with L3-High Output)*

TM = Tandem Mount**

EL1 = Emerg. Bat. LED Low (10W)***

EL2 = Emerg. Bat. LED High (20W)***

SD2 = Step. Dimming Module (50-100%)

SD3 = Step. Dimming Module (30-70-100%)

LN = LED Night Light****

FZ1 = Fuse (120V)

FZ2 = Fuse (277V)

DE = Decorative End Caps

TH = Torx Head Screws

NAT = Natatorium Finish

90C = 90 CRI

* Provided on an additional independent circuit. Refer to Specification Features if ordering with SD2 or SD3 option.

** Kit includes joining hardware for field installation. If decorative end caps are specified, only end units will have decorative end cap. Consult factory for details.

*** Consult factory for VIC1 emergency options. Provided on additional independent circuit.

**** 3500°K Night Light with integrated switch allows light levels at 100%, 70%, 40% and 10%. Provided on additional independent circuit.

This product complies with the Buy American Act requirements. Specifications and dimensions are subject to change without notice. For additional options and dimensional details, please consult your New Star Lighting representative.

VICTORY NARROW SERIES

VIC1N/VIC2N/VIC3N/VIC4N



PERFORMANCE DATA*

*Data is with 80 CRI chip. LEDs are frequently updated therefore values may change without notice.

		(RC) Clear Polycarbonate Lens				(RW) White Polycarbonate Lens		
MODEL	OUTPUT	COLOR TEMP.	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)	LUMENS DELIVERED	EFFICACY (lm/W)	INPUT POWER (W)
VIC1N	Low (L1)	3500°K	700	100	7	600	86	7
		4000°K	750	107	7	650	93	7
		5000°K	800	114	7	700	100	7
	Standard (L2)	3500°K	1400	108	13	1100	85	13
		4000°K	1500	115	13	1200	92	13
		5000°K	1600	123	13	1300	100	13
	High (L3)	3500°K	2050	108	19	1600	84	19
		4000°K	2200	116	19	1750	92	19
		5000°K	2350	124	19	1900	100	19
VIC2N	Low (L1)	3500°K	1400	108	13	1100	85	13
		4000°K	1500	115	13	1200	92	13
		5000°K	1600	123	13	1300	100	13
	Standard (L2)	3500°K	2800	112	25	2100	84	25
		4000°K	3000	120	25	2300	92	25
		5000°K	3200	128	25	2500	100	25
	High (L3)	3500°K	4200	111	38	3200	84	38
		4000°K	4500	118	38	3700	97	38
		5000°K	4800	126	38	4000	105	38
VIC3N	Low (L1)	3500°K	2050	108	19	2050	108	19
		4000°K	2200	116	19	2100	111	19
		5000°K	2350	124	19	2200	116	19
	Standard (L2)	3500°K	4100	108	38	4100	108	38
		4000°K	4400	116	38	4200	111	38
		5000°K	4700	124	38	4400	116	38
	High (L3)	3500°K	6150	108	57	6150	108	57
		4000°K	6600	116	57	6300	111	57
		5000°K	7050	124	57	6600	116	57
VIC4N	Low (L1)	3500°K	2700	108	25	2700	108	25
		4000°K	2900	116	25	2800	112	25
		5000°K	3100	124	25	2900	116	25
	Standard (L2)	3500°K	5500	110	50	5400	108	50
		4000°K	5900	118	50	5600	112	50
		5000°K	6300	126	50	5800	116	50
	High (L3)	3500°K	8300	111	75	7200	96	75
		4000°K	8800	117	75	8100	108	75
		5000°K	9400	125	75	8600	115	75

This product complies with the Buy American Act requirements. Specifications and dimensions are subject to change without notice. For additional options and dimensional details, please consult your New Star Lighting representative.

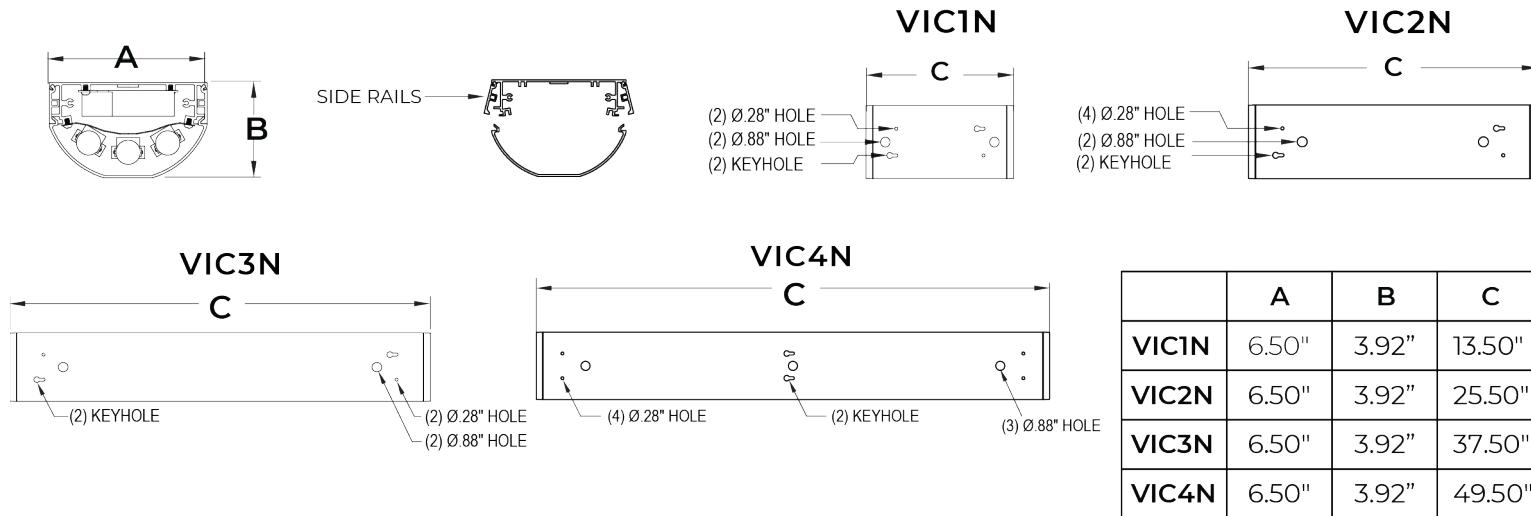
VICTORY NARROW SERIES

VIC1N/VIC2N/VIC3N/VIC4N

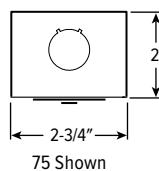


DIMENSIONAL DATA

Fixture weight varies and is dependent upon chosen specifications. Consult factory for additional information. Average weight of the VIC1N is 7lb. Average weight of the VIC2N is 10lb. Average weight of the VIC3N is 12lb. Average weight of the VIC4N is 15lb.



This product complies with the Buy American Act requirements. Specifications and dimensions are subject to change without notice. For additional options and dimensional details, please consult your New Star Lighting representative.



CATALOG


**Luminaire Type
AK1-2**

PROJECT:

FEATURES

- Available with Avi-on wireless fixture controls
- Small fixture profile allows inconspicuous placement in coves or confined spaces
- Round and square lensed fixtures provide a clean look for architectural environments
- Row applications produce continuous light with minimal interruption between fixtures
- Diffuse acrylic lens on 75R and 75S enhances uniformity and minimizes glare
- Variety of mounting accessories for surface and suspended applications
- Special reflectors are available to provide precise light distribution (75 only)
- Maximize energy savings with efficacies as high as 164 lm/W
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – 22-gauge die-formed C.R.S.
- FINISH** – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High quality mid-power LED board. See fixture performance data for lumen maintenance. 25°C maximum ambient operating temperature. 40°C maximum ambient operating temperature with HA Option, lumen restrictions apply, consult Fixture Performance Data.
- MOUNTING** – Surface (ceiling or wall) or suspended (hanging hardware required).
- LISTINGS** –
 - cETLus conforms to UL STD 1598. Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for damp locations
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.


ORDERING EXAMPLE: 75 - 4 - L85/835 - OPTIONS - CONTROL - DIM - UNV

ORDERING INFO

SERIES	LENGTH ^[1]	LUMENS ^[2]				CRI	CCT
75	2 2'	2'	3'	4'	8'	8 80	27 2700K
75R	3 3'	L15 1,500lm	L40 4,000lm	L30 3,000lm	L60 6,000lm	9 90 ^[7]	30 3000K
75S	4 4'	L25 2,500lm	L64 6,400lm	L50 5,000lm	L100 10,000lm	35 3500K	
	8 8' ^[3]	L32 3,200lm	L42 4,200lm	L65 6,500lm	L130 13,000lm	40 4000K	
		L60 6,000lm ^[4]		L85 8,500lm	L170 17,000lm	50 5000K	
				L100 10,000lm	L200 20,000lm		
				L120 12,000lm ^[5]	L240 24,000lm ^[6]		

OPTIONS^[8]

EM/7WRM	Remote mount 7-watt emergency battery	45AMB (L__)	(2) 45° adjustable mounting brackets ^[13] Additional lower lumen packages available. ^[14] Example: 7,000 nominal lumens = 75-4-L85/835-(L70)-DIM-UNV
EM/10WLP	Low-profile 10-watt emergency battery ^[9]	HA	High ambient operating temperature, 40°C ^[15]
EM/10WRM	Remote mount 10-watt emergency battery		
QC__	Quick-connect wiring harness. ^[10]		
WG-75	11-gauge white powder coat wireguard		
315	1-1/2" ceiling spacer		
VBY	(2) Y-hangers		
VBY-2	(2) Y-hangers and (2) 2' chains		
RA-75	Row aligner ^[11]		
ZLS0R-RA1	Remote controller for Leviton sensor ZLS05 ^[12]		
AIRCRAFT CABLES (EXAMPLE: ACF/D48)^[16]			
Prefix	Type	Length	
ACF/	Feeder	D 1" grid & hardpan	24 24"
ACJ/	Joiner	N 9/16" grid	48 48"
		S Slot grid	96 96"
CONTROL^[17]			
–	None		
AVI-LVFA	Avi-on wireless fixture control ^[19]		
AVI-LVFA-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor, bottom mount ^[20]		
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) ^[21]		
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) ^[22]		
LV-OSFHU-ITW-120-347	Leviton PIR motion sensor, 120-347V		
LV-ZLS05-ILW	Leviton PIR motion and daylight sensor ^[23]		
WS-FSP-311-L_-120/277	Wattstopper PIR motion and daylight sensor, 120/277 ^[24]		
DRIVER^[18]			
DIM	Driver with external dimming wires	120	120V
DRV	Driver without external dimming wires	277	277V
DA	Driver with 12V auxiliary power, without external dimming wires ^[25]	120-277V	347V ^[27]
DSR	Sensor-ready driver without external dimming wires ^[26]		
VOLTAGE			

QUICKSHIP

4'	8'
75R-4-L50/835-QS-DIM-UNV	75S-4-L50/835-QS-DIM-UNV
75R-4-L50/840-QS-DIM-UNV	75S-4-L50/840-QS-DIM-UNV

NOTES

- 1 For actual length, see page 6 for FIXTURE DETAILS
- 2 Lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- 3 75R and 75S ships with (2) 4' lenses.
- 4 75 only.
- 5 75 only.
- 6 75 only.
- 7 Extended lead times may apply. Consult factory for availability.
- 8 See page 7 for FINISH OPTIONS. See page 6 for MOUNTING DETAILS. See page 7 for SPECIAL REFLECTORS.
- 9 4' and 8' only; Not available with 4' L120 and 8' L240 lumen packages.
- 10 See page 7 for QUICK CONNECT OPTIONS.
- 11 Required when row mounting with aircraft cables.
- 12 Please specify quantity required per project, ordered separately.
- 13 Cord recommended, ships separately. See page 6 for MOUNTING DETAILS. Field-adjustable up and down in 7-1/2° increments.
- 14 Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- 15 Not available with 2' L60, 4' L120 and 8' L240 lumen packages. Lumen restrictions apply. See page 2 for FIXTURE PERFORMANCE DATA.
- 16 Units specified with aircraft cable require cord. See page 6 for MOUNTING DETAILS. Requires RA-75 row aligner. See page 6 for MOUNTING ACCESSORIES DETAILS.
- 17 See page 4 for CONTROL DETAILS.
- 18 See page 5 for ADDITIONAL DRIVER OPTIONS.
- 19 DA Driver only. SDT required when specified with 347V or 480V.
- 20 DA Driver only. SDT required when specified with 347V or 480V.
- 21 DSR or LDE Drivers only. LDE drivers require driver interface.
- 22 DSR or LDE Drivers only. LDE drivers require driver interface.
- 23 DA Driver only. Adjustable via remote. Optional ZLS0R-RA1 remote controller available, ordered separately, see options.
- 24 Must specify lens: L2 or L3. Factory installed.
- 25 Avi-on and LV-ZLS05 Controls only.
- 26 VDO and VRF Controls only.
- 27 Not available with EM batteries.



75 LED Narrow Strip

Fixture Performance Data

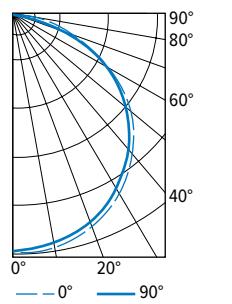
LED PACKAGE	WATTAGE	75 (NO LENS)		75R & 75S		LUMEN MAINTENANCE				AMBIENT TEMPERATURE ¹		
		DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)	L70	L80	L85	L90	EM	NO EM	
2'	L15	10.8	1592	147.5	1511	140.1	>72000	>72000	>72000	50,000	40	40
	L25	18.2	2602	142.7	2470	135.5	>72000	>72000	>72000	50,000	40	40
	L32	21.3	3092	145.5	2936	138.1	>72000	>72000	58,000	36,000	40	40
	L42	31.4	4344	138.5	4124	131.5	>72000	>72000	58,000	36,000	35	40
	L60	43.6	6052	138.9	—	—	>72,000	53,000	38,000	24,000	—	—
3'	L40	28.2	4092	145.2	3885	137.9	>72000	>72000	58,000	36,000	35	40
	L64	48.2	6593	136.9	6259	130.0	>72,000	53,000	38,000	24,000	30	35
	L30	19.7	3071	155.8	2916	147.9	>72000	>72000	>72000	50,000	40	40
	L50	33.0	5126	155.5	4867	147.6	>72000	>72000	>72000	50,000	40	40
	L65	42.3	6313	149.3	5994	141.7	>72000	>72000	58,000	36,000	40	40
4'	L85	56.2	8530	151.7	8098	144.0	>72,000	53,000	38,000	24,000	35	40
	L100	68.3	10154	148.8	9640	141.2	>72000	>72000	58,000	36,000	30	30
	L120	85.9	12105	141.0	—	—	>72,000	53,000	38,000	24,000	—	—
	L60	35.3	5814	164.9	5520	156.6	>72000	>72000	>72000	50,000	40	40
	L100	65.9	10078	152.9	9568	145.1	>72000	>72000	>72000	50,000	35	35
8'	L130	87.9	13011	148.1	12353	140.6	>72000	>72000	58,000	36,000	35	35
	L170	112.4	17060	151.7	16197	144.0	>72,000	53,000	38,000	24,000	35	35
	L200	136.5	20309	148.8	19281	141.2	>72000	>72000	58,000	36,000	30	30
	L240	171.7	24209	141.0	—	—	>72,000	53,000	38,000	24,000	—	—

Multiplier Table

Color Temperature		
CCT	Conversion Factor	
80 CRI	2700K	0.97
	3000K	0.99
	3500K	1.00
	4000K	1.03
	5000K	1.06
90 CRI	2700K	0.80
	3000K	0.82
	3500K	0.83
	4000K	0.86
	5000K	0.89

PHOTOMETRY

75-4-L85/835-DIM Total Luminaire Output: 8530 lumens; 56.2 Watts | Efficacy: 152 lm/W | 80 CRI; 3500K CCT



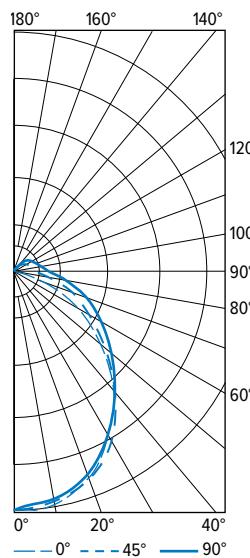
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	2896	2896	2896	
	5	2917	2887	2876	275
	15	2837	2799	2791	792
	25	2663	2624	2610	1213
	35	2415	2366	2338	1484
	45	2066	2006	1990	1552
	55	1634	1580	1560	1415
	65	1124	1069	1048	1070
	75	581	543	531	582
	85	104	116	101	144
	90	9	14	9	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2279	27
	0 - 40	3763	44
	0 - 60	6730	79
	0 - 90	8527	100
	0 - 180	8530	100

- ¹ Maximum ambient operating temperature (°C) when specified with HA option.
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Predicted lumen maintenance calculated from LED manufacturer IES LM-80 data and In situ temperature measurement.
- Predicted lumen maintenance calculated in accordance with IES TM-21 per Energy Star (R) TM-21 Calculator rev. 02.08.16.
- Use multiplier table to calculate additional options.

75 LED Narrow Strip

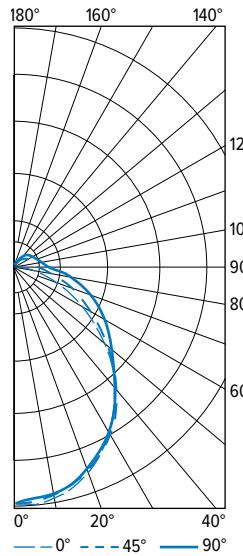
75R-4-L85/835 Total Luminaire Output: 8098 lumens; 56.2 Watts | Efficacy: 144 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2594	2594	2594	
5	2622	2585	2553	246
15	2503	2497	2480	703
25	2256	2306	2324	1059
35	1915	2042	2111	1264
45	1481	1673	1824	1281
55	1003	1296	1488	1135
65	620	942	1117	891
75	267	630	775	613
85	63	401	501	378
90	9	311	407	
95	1	249	329	225
105	0	150	219	136
115	0	94	149	83
125	0	53	102	47
135	0	28	63	24
145	0	12	35	10
155	0	6	16	3
165	0	0	4	0
175	0	0	0	0
180	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2008	25
0 - 40	3272	40	
0 - 60	5688	70	
0 - 90	7570	94	
90 - 120	443	6	
90 - 150	524	7	
90 - 180	527	7	
0 - 180	8098	100	

75S-4-L85/835 Total Luminaire Output: 8098 lumens; 56.2 Watts | Efficacy: 144 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2732	2732	2732	
5	2756	2720	2682	258
15	2633	2611	2579	734
25	2351	2362	2323	1083
35	1969	2010	1965	1247
45	1516	1554	1583	1209
55	1053	1160	1291	1051
65	618	840	1022	826
75	270	542	745	563
85	47	323	491	332
90	0	246	390	
95	0	230	344	223
105	0	200	291	185
115	0	171	256	149
125	0	139	216	110
135	0	96	166	71
145	0	58	113	38
155	0	36	63	16
165	0	17	31	4
175	0	0	0	0
180	0	0	0	

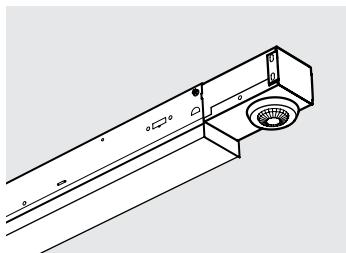
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2075	26
0 - 40	3321	41	
0 - 60	5581	69	
0 - 90	7301	90	
90 - 120	557	7	
90 - 150	777	10	
90 - 180	797	10	
0 - 180	8098	100	

75 LED Narrow Strip

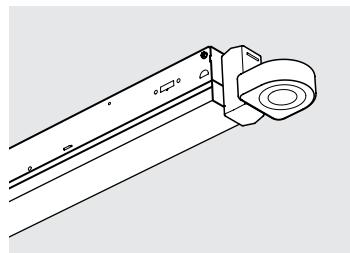
CONTROL DETAILS

SENSOR PLACEMENT

AVI-LVFA-PIR | LV-ZLS05 | WS-FSP | VDO



LV-OSFHU

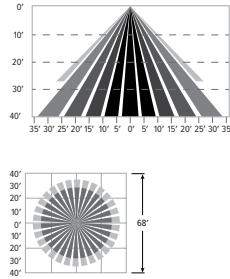


AVI-LVFA-PIR

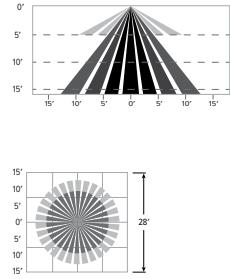
SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 45'
LENS	Single lens detects high and low bay motion.
DETECTION ANGLE	360°
TEMPERATURE RANGE	-30° to 70°C
RELATIVE HUMIDITY	90 to 95% at 30°C
COMMISSIONING	App (iOS or Android)
SYSTEM REQUIREMENTS	Avi-On wireless fixture controls plus desktop and mobile apps
MANUFACTURER	Avi-On
 Bluetooth® Lighting Controls	

SENSOR COVERAGE PATTERNS

Large motion
40' height: ø68' coverage



Small motion
15' height: ø28' coverage



SENSOR DETAIL

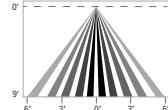


VDO

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 12'
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 55°C
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	App (iOS or Android)
MANUFACTURER	Lutron

SENSOR COVERAGE PATTERNS

9' height: ø12' coverage



MOTION SENSOR COVERAGE

CEILING HEIGHT	COVERAGE AREA (SQ FT)
8'	114
9'	144
10'	178
12'	256

SENSOR DETAIL



VIVE CONTROL OPTIONS

CATALOG NUMBER	DESCRIPTION
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), for use with sensor-ready driver
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), for use with sensor-ready driver
VDO/DBI	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver
VRF/DBI	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver



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Carthage, Missouri

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Strips

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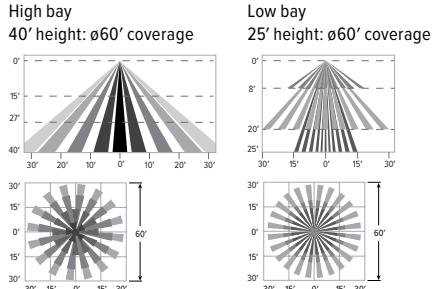
Information contained herein is subject to change without notice.

75 LED Narrow Strip

LV-OSFHU-ITW-120-347

SPECIFICATIONS	
TYPE	PIR Motion
MOUNTING HEIGHT	8' – 40'
LENS	Interchangeable high bay, low bay or aisle mask
DETECTION ANGLE	360°
TEMPERATURE RANGE	-10° to 71°C
RELATIVE HUMIDITY	20% to 90% non-condensing
MANUFACTURER	Leviton

SENSOR COVERAGE PATTERNS



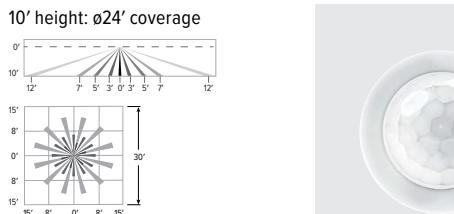
SENSOR DETAIL



LV-ZLS05-ILW

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 10'
DETECTION ANGLE	120°
TEMPERATURE RANGE	-20° to 70°C
COMMISSIONING	DIP switches or optional remote: ZLS0R-RA1
MANUFACTURER	Leviton

SENSOR COVERAGE PATTERNS



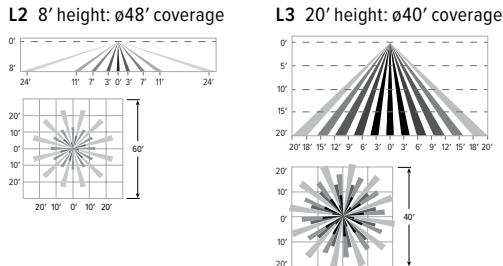
SENSOR DETAIL



WS-FSP-311-L3-120/277

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 20'
DETECTION ANGLE	360°
TEMPERATURE RANGE	-40° to 75°C
COMMISSIONING	App (iOS or Android)
MANUFACTURER	Wattstopper

SENSOR COVERAGE PATTERNS



SENSOR DETAIL



ADDITIONAL DRIVER OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
DA	Dimming driver with 12V auxiliary
DSR	Sensor-ready driver
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls



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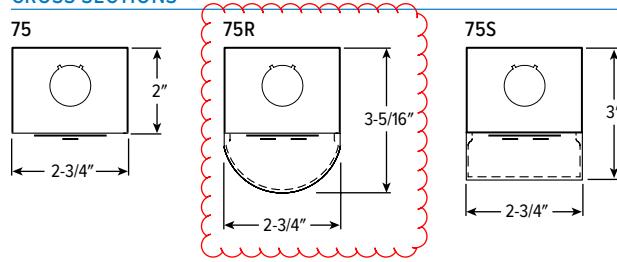
Strips

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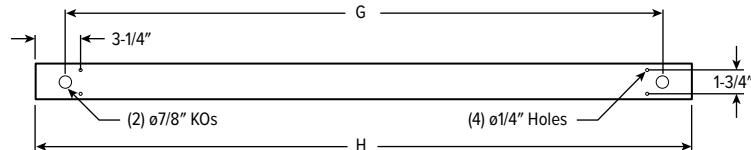
75 LED Narrow Strip

CROSS SECTIONS



Fixture Details

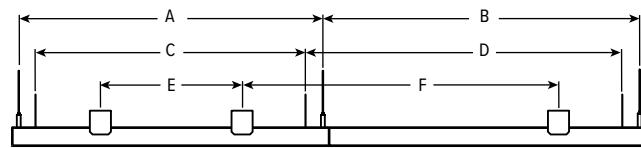
BACKVIEW



7/8" KOs (G)	ACTUAL FIXTURE LENGTH (H)
2'	18-3/8"
3'	29-1/2"
4'	40-1/2"
8'	85-1/8"
	22-1/2"
	33-9/16"
	44-5/8"
	89-1/4"

MOUNTING DETAILS

STAND ALONE

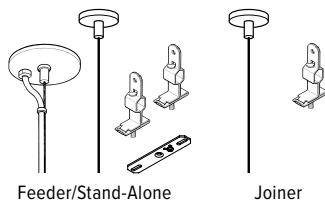


SUBSEQUENT

MOUNTING LENGTH

AIRCRAFT CABLE		VBY HANGER		315 SPACER	
A	B	C	D	E	F
2'	21-1/2"	22-1/2"	19"	22-1/2"	10"
3'	32-1/2"	33-9/16"	30-1/16"	33-9/16"	21"
4'	43-5/8"	44-5/8"	41-1/4"	44-5/8"	32"
8'	88-3/16"	89-1/4"	85"	89-1/4"	77"
					89-1/4"

STANDARD HARDWARE FOR SUSPENDED PRODUCT (Grid and Hardpan)



Notes:

- Fixtures are provided with adjustable length aircraft cables and mounting hardware, must specify.
- Electrical supply is brought into the feeder fixture, either as part of a row or as a stand-alone unit. Joiner fixtures complete the row.
- The feeder kits are standard with a 5" canopy to cover the junction box and a 2" canopy at the non-feed point. No J-box is required at non-feed points.

CORD FOR SUSPENDED PRODUCT

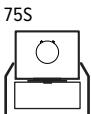
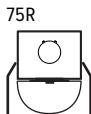
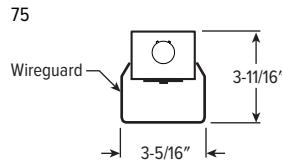
Units specified with aircraft cable require cord. Please specify cord type using ordering information below. Long fixture rows may require multiple feed points based on 18ga conductor size.

EXAMPLE: S2438D/W					
CORD TYPE	LENGTH	# OF COND. ^[1]	WIRE SIZE	COLOR	
S	24 24"	3			
	48 48"	4			
	96 96"	5	8D 18ga	/W White	
		6		/B Black	

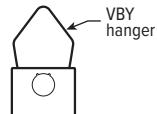
^[1] Includes (2) 22ga purple & pink dimming conductors

MOUNTING ACCESSORIES DETAILS

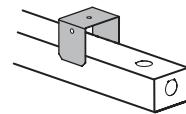
WG-75



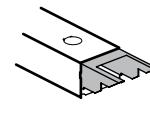
VBY



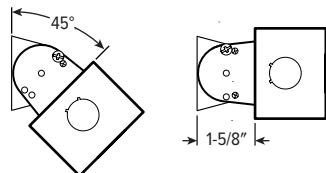
315



RA-75



45AMB



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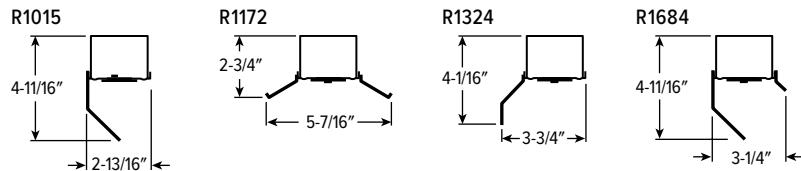
75 LED Narrow Strip

QUICK CONNECT OPTIONS

Note: Quick-connect wiring required for row mounting. All QC harnesses contain (5) 16ga conductors plus ground.

DESIGNATION	NUMBER OF 16GA WIRES (EXCLUDING GROUND)	WIRE COLOR/POWER SUPPLY FACTORY CONNECTIONS	TYPICAL USE
QCBW	2	Black, White	On/off switching (DRV) or line voltage dimming (DIM LINE)
QCRW	2	Red, White	Alternating circuits on/off switching (DRV) or line voltage dimming (DIM LINE)
QCBRW	3	Black, Red, White	On/off switching (DRV) or line voltage dimming when equipped with EM battery packs
QCBW/PK	4	Black, White, Purple, Pink	Single circuit with 0-10V 4-wire low voltage dimming (DIM)
QCRW/PK	4	Red, White, Purple, Pink	Alternating circuits on/off switching with 0-10V 4-wire low voltage dimming (DIM)
QCBRW/PK	5	Black, Red, White, Purple, Pink	On/off switching when equipped with EM battery packs and 0-10V 4-wire dimming (DIM)
QCBW/RPK	5	Black, White, Red, Purple, Pink	On/off switching and 0-10V 2-wire dimming (DIM) and 2-wire 0-10V tunable
QCUU	N/A	N/A	QC harness passes through fixture, but is not connected to it

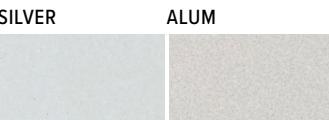
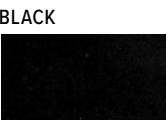
SPECIAL REFLECTORS



Reflectors are ordered separately, only available with 75, cannot be used with wireguard accessories.

Example: R1172-4-75LED REFL

FINISH OPTIONS



For custom color, please specify RAL code or a manufacturer code with description. All custom colors other than RAL require two sample swatches, minimum 1" square.





Calculite LED 4" generation 3 provides excellent performance coupled with optimized installation flexibility via UniFrame. Industry leading visual comfort and uniform illumination make it an ideal choice for open office, institution, healthcare, and retail applications.



**Luminaire Type
AL1**

Qty:

Notes:

Frame

standard example: 4RN | BAC example: 4RN-BAC

Series	Installation	Voltage/Options			
4R	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RADIO	Integral Interact Pro RF sensor (requires above ceiling access and enables wireless connected lighting control)
	N New construction		3 347V (for non-0-10v configurations) ²		
4R 4" Non-IC Round	EM6 Emergency, 6W Self-Test/Self-Diagnostic ³	<input type="checkbox"/>	BAC	Meets the requirements of the Buy American Act of 1933 (BAA)**	Buy American Act of 1933 (BAA)**
	LC Chicago Plenum ⁴				
R Remodeler	3 347V (for non-0-10v configurations) ²	<input type="checkbox"/>	BAC	Meets the requirements of the Buy American Act of 1933 (BAA)**	Buy American Act of 1933 (BAA)**
	— Universal 120/277/347V ¹				

Engine

standard example: C4L15835NZ10U | BAC example: C4L15835NZ10U-BAC

Series	Lumens	CRI	CCT	Beam	Dimming	Voltage	Options
C4L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C4L Calculite LED 4" gen 3	05 500lm 10 1000lm 15 1500lm 20 2000lm 25 2500lm ⁵ 30 3000lm ⁵	8 80 CRI 9 90 CRI	27 2700 K 30 3000 K 35 3500 K 40 4000 K	N Narrow (43°) M Medium (56°) W Wide (76°)	Z10 0-10V 1% SOL EldoLED Solo 0-10V 0.1% D Dali 0.1% L Lutron LDE1 EcoSystem (fade-to-black) DMX Digital Multiplexing	U 120/277V 3 347V ^{6,7} (0-10v only) U 120/277/347V	R Retrofit RH Retrofit for tall collar frame BAC Meets the requirements of the Buy American Act of 1933 (BAA)**
					E ELV (for up to 2000lm only) P Power over Ethernet (PoE)	1 120 V E Ethernet 48V DC Only compatible with 1000 (10) to 2500 (25) lumen configurations.	

Trim

standard example: C4RDLCCP | BAC example: C4RDLCCP-BAC

Series	Aperture	Style	Finish	Flange	Options	
C4	R	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C4 Calculite LED 4" gen 3	R Round	DL Downlight	BK Black (anodized) CL Specular clear	CC Comfort clear CD Comfort clear diffuse CZ Champagne bronze	— White (matte) P Polished (matches aperture) F Flangeless (requires CA4RFT)	IEM6 Trim mounted EM test switch
			WH White (matte)		— White (matches finish) F Flangeless (requires CA4RFT)	RH Retrofit for tall collar frame
			WHAMF White (gloss antimicrobial)		— White (matches finish)	BAC Meets the requisites of the Buy American Act of 1933 (BAA)**
		SL Shower light ⁶	WH White (matte) WHAMF White (gloss antimicrobial)		— White (matches finish)	

Accessories

(Not currently BAA-compliant) learn more on page 2

SBA	Interact Ready System Bridge Accessory (refer to Philips System Bridge Accessory spec sheet for options and details)
AMS	ActiLume multi-sensor (optional accessory for PoE configurations)
7920	Sloped ceiling 4" adapter for 4RN and 4RA frames
CA4RFT	Mud-in ring for use in 4" round flangeless trim installations (ordered with a flangeless trim)
CAEM6	Field-installable Bodine BSL6 6W battery pack with self-test/self-diagnostic (for new construction frames, 120-277V)
C4RVPWH	IP65 Rated vandal proof matte white accessory mounts onto flangeless trims (C4RDL*) and new construction frame only

- Specify standard Universal frame for use with 347V light engines.
- Not compatible with electronic low voltage light engine dimming option (E).
- Emergency (EM6) frame is compatible with reflector mounted test switch when light engine is ordered with IEM6 option code (not compatible with 347V or Power over Ethernet configurations).
- Chicago Plenum (LC) frame is not available for Buy American Compliant (BAC) configurations.
- The 2500lm (25) and 3000lm (30) packages have marked spacing requirements (see page 6).
- The 347V light engine voltage option available only with Z10 dimming option. For other dimming protocols order UNV (U) light engine and 347V (3) frame.

CalculiteLEDgen3_4in_Downlight_C4RDL 02/22 page 1 of 9

- Universal 120-347V for 0-10v (Z10) dimming only. For 347V non-Z10 dimming, order 347V (3) frame with (U) light engine.

** Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.



interact ready.

C4RDL Calculite LED 4" gen 3

Round Downlight

Frame-in-kits

New Construction:

Galvanized stamped steel for dry or plaster ceilings. Preinstalled telescoping mounting bars from 13" to 24". For 4' distances, use 1/2" EMT, 1-1/2" x 1/2" U or C channel.

Max ceiling thickness is 2" (51 mm) including PoE frame 4.88" (124 mm) plenum depth for installation.

Patented install Mounting frame:

- Pre-installed mounting bars for fast and tool-less installs into T-grid & hat channel ceilings.
- Close-cut aperture design eliminates possibility of gap between ceiling opening and reflector flange.
- Separate wiring compartment for wiring frame to building allows inspection prior to light engine install.
- Simple plug-and-play connection between frame and light engine from below ceiling.

Retrofit

- Easily updates legacy Calculite downlights to the latest LED technology. Includes light engine, trim, and driver mounted on cover plate that mounts to junction box of previous Calculite generations. Order with R or RH option code at end of light engine catalog number (see details on page 6).

Compatibility:

Frames	Engines
With CFL S4118_series	Use Retrofit configuration C4R_Trim + C4L_Engine
With INC AS400_series	Use Retrofit configuration C4R_Trim + C4L_Engine
With LED C4L_N series C4X4L_N series P4RD_N series	Use Retrofit configuration C4R_Trim + C4L_Engine C4S_Trim + C4L_Engine C4R_Trim + C4L_Engine

* Not available for retrofitting luminaires with integral emergency battery.

Emergency

Bodine BSL6 6W battery pack with self-test/diagnostic functionality. Factory or field mounted to frame.

- For trim with integral emergency test switch, order trim with IEM6 option (ex: C4RDLCCIEM6).
- For remote ceiling mounted test switch, order standard trim (ex: C4RDLCC). Optional accessory ceiling mounting plate available (CAEM6TSCP) for remote mounted test switch.
- Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

Dimming

- Advance 0-10V 1% dimming
- Lutron Hi-lume EcoSystem H Series 1% dimming
- EldoLED ECOdrive Dali 1% dimming
- EldoLED SOLOdrive 0-10V 0.1% dimming
- EldoLED DMX POWERdrive

Power over Ethernet

Powered via Lightolier PoE lighting controller: Complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

Optical systems

Comfort throughout the space:

True 50° physical cutoff and 45° reflected cutoff.

Quality of light:

2 SDCM ensures color consistency from fixture to fixture and over the luminaire's long lifetime.

Light engine

Quick connect power pack allow for easy installation and replacement from below ceiling with no need for additional wiring. This allows for:

- Frame and ceiling installation to be performed while still finalizing details such as lumen packages, CCT and control type.
- Easy replacement of electronics at end of life with minimal wasted material and labor required.
- Ease and upgradability of technology.
- 347V light engines are 0-10v dimming only and include dedicated 347V driver for use with universal 120/277/347V (U) frames. For 347V and non-0-10v dimming, order (U) light engine and 347V (3) frame (includes step down transformer).

Options and Accessories

Flangeless mud-in ring:

Use CA4RFT For use with flangeless plaster installations.

Sloped ceilings: Compatible with sloped ceiling adapters (see SCA spec sheet).

C4RVPWH: includes machined aluminum ring painted white, gasketed for IP65 protection, and impact resistant polycarbonate lens (IK10). Locks in place with discrete setscrew (key included). Available also with antimicrobial finish (C4RVPWHMF).

CAEM6TSCP: Ceiling cover plate for remote mounted EM6 test switch. 1/2" (25mm) hole, 4 3/8" (109mm) x 2 3/4" (69mm) rectangular. Includes two mounting screws.

Field Installed Emergency: Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

CAEM6: Field install EM6 kit with Bodine BSL6 6W battery pack with self-test/self-diagnostic, mounts to new construction frames. Includes remote ceiling plate for test switch. To mount test switch to trim for new construction frame, order trim with IEM6 option code (e.g. C4RDLCCIEM6).

SBA: Interact Ready System Bridge Accessory. Requires IRT9015 IR remote and Interact Pro App for commissioning.

ENERGY STAR® exceptions

- 500lm & 90 CRI configurations
- Champagne Bronze & Black finishes
- 347V & Emergency voltage/options
- Dali, EldoLED Solo & PoE drivers

Title 24 exceptions

- 1000lm configurations
- Champagne Bronze & Black finishes

Labels and Listings

- cULus listed for wet locations
- ENERGY STAR® certified
- RoHS certified
- CEC Title 24 JA8 certified
- CCEA (frames with *LC suffix)
- IP65 rated with vandal proof accessory

Warranty



5 year limited warranty
Visit Signify.com/warranties
for more information on Signify's
standard 5-year limited warranty
on complete luminaire systems.

C4RDL Calculite LED 4" gen 3

Round Downlight

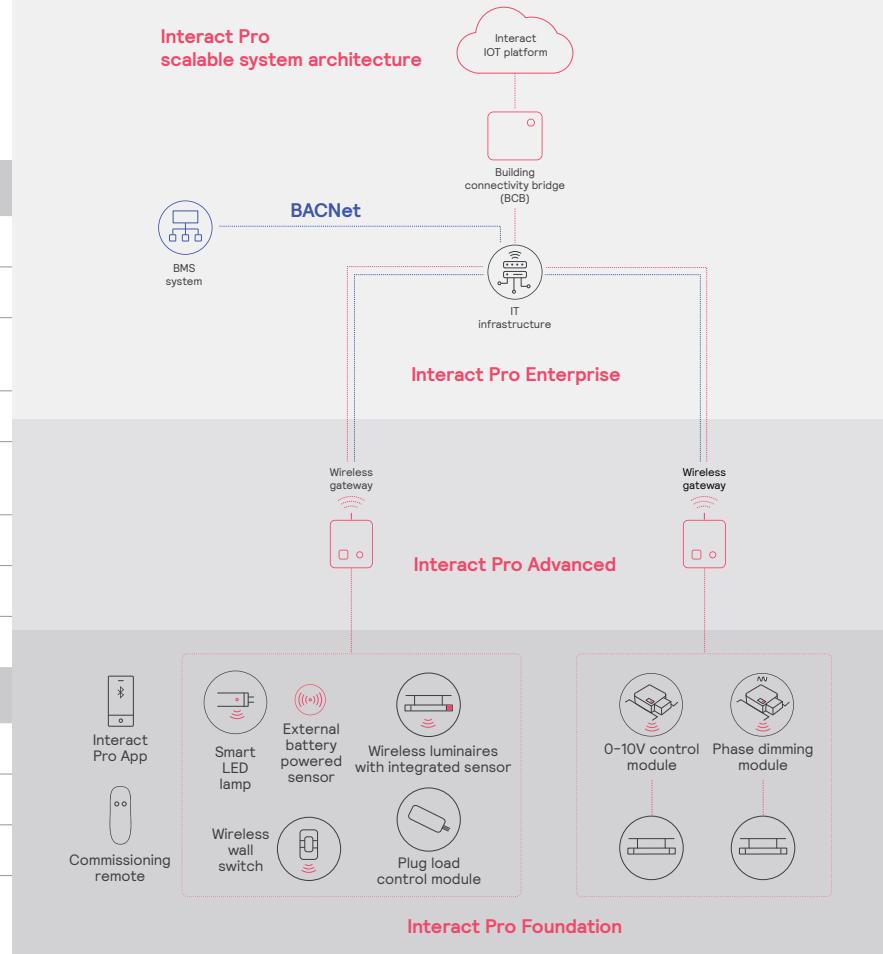
interact

Interact Pro scalable system			
	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
• luminaires with integrated sensors	150
• smart TLEDS	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



C4RDL Calculite LED 4" gen 3

Round Downlight

Wireless Controls Options

Interact Pro scalable sensor

(System Bridge Accessory with -CS option):

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.
- Interact Pro includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote onsite to identify and group devices together.
- Compatible with:
 - UID8451/10 wireless dimmer switch
 - SWS200 wireless scene switch
 - Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
 - Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
 - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
 - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH
- For more information on Interact Pro visit:
www.interact-lighting.com/
interactproscalablesystem.

Interact Pro Enterprise

(System Bridge Accessory with -SB option):

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with UID8451/10 wireless dimmer switch, SWS200 wireless scene switch, wireless Occupancy sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- SB option in addition to occupancy and daylight sensing supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit:
www.interact-lighting.com/office or
www.usa.lighting.philips.com/systems/system-areas/offices.

Emergency Options (ER100)

(System Bridge Accessory with -ER100 option):

- Power Sensing (Factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output
- Power Interruption Detection (Field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output

Radio only sensor (RADIO):

- Integral RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.

Wired Controls Options

Interact Office Wired (PoE):

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.

- Optional integral emergency controller and battery pack provides 600lm nominal output.

- Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

Interact Office Wired (PoE), Static White:

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.

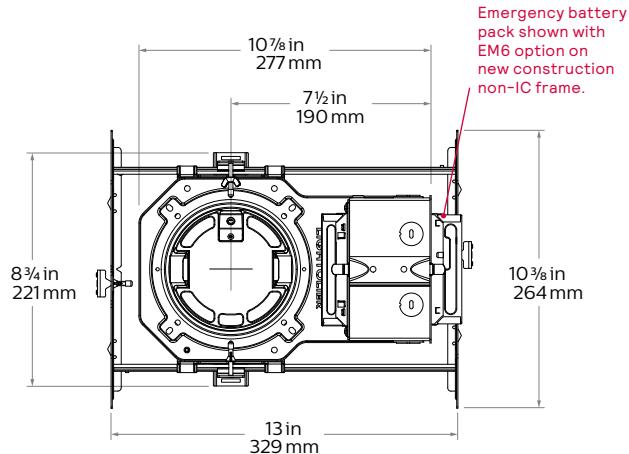
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.

- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

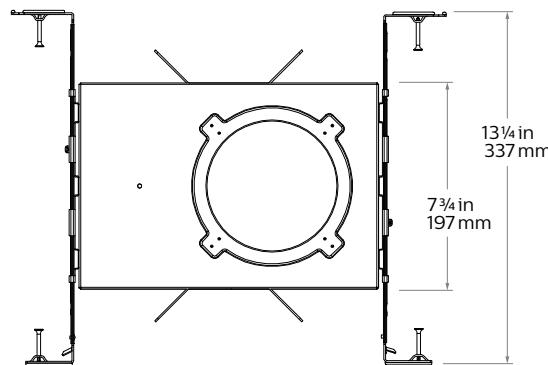
C4RDL Calculite LED 4" gen 3

Round Downlight

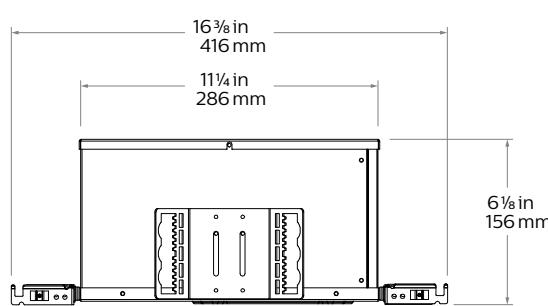
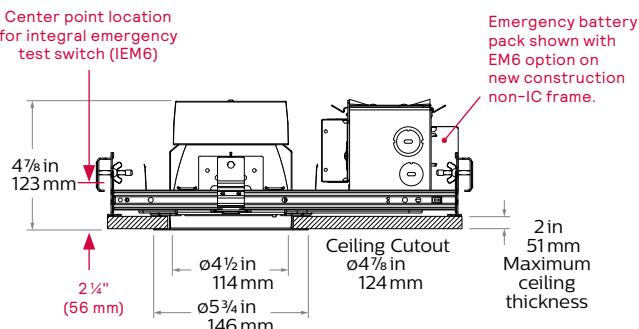
New Construction (N)



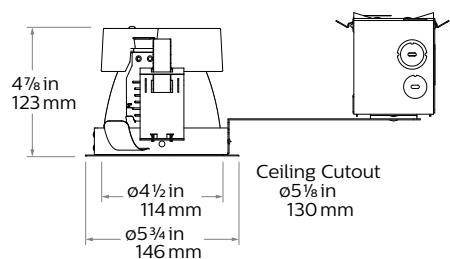
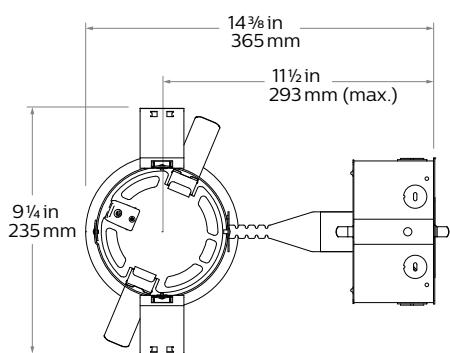
Chicago Plenum (LC)



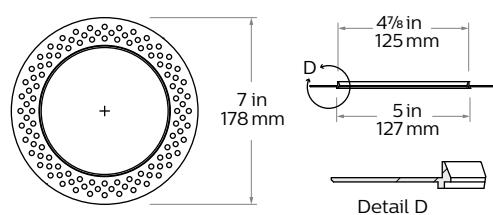
Center point location
for integral emergency
test switch (IEM6)



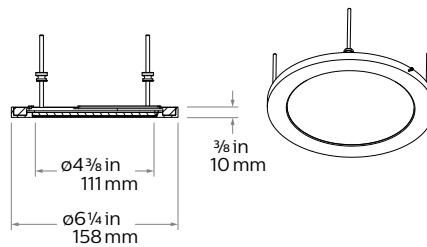
Remodeler (R)



Flangeless mud-in ring (CA4RFT) accessory



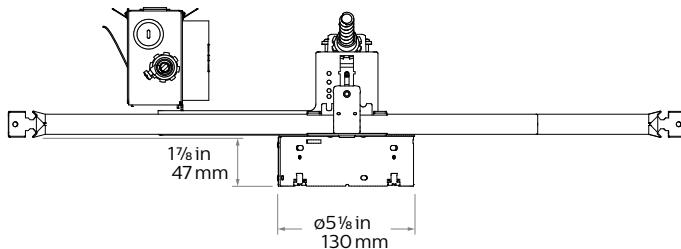
Vandal Proof (VP) accessory



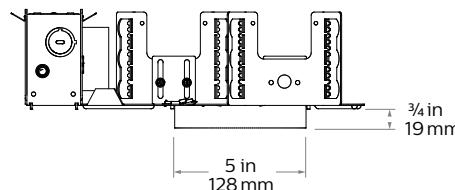
C4RDL Calculite LED 4" gen 3

Round Downlight

Round tall collar frame (RH type light engine required)



Round standard steel frame (R type light engine required)



Narrow

Light engine	Input volts	Input freq	Input current	Drive current	Input power	THD power	Power factor
C4L05_NZ10U/3	120V	50/60Hz	0.05	110 mA	6W	<20%	>0.95
	277V		0.03			<20%	>0.90
C4L10_NZ10U/3	120V	50/60Hz	0.08	230 mA	11W	<15%	>0.95
	277V		0.04			<20%	>0.95
C4L15_NZ10U/3	120V	50/60Hz	0.12	360 mA	16W	<10%	>0.95
	277V		0.06			<15%	>0.95
C4L20_NZ10U/3	120V	50/60Hz	0.17	490 mA	21W	<10%	>0.95
	277V		0.08			<15%	>0.95
C4L25_NZ10U/3	120V	50/60Hz	0.22	640 mA	27W	<10%	>0.95
	277V		0.10			<15%	>0.95
C4L30_NZ10U/3	120V	50/60Hz	0.27	790 mA	33W	<10%	>0.95
	277V		0.13			<15%	>0.95

Narrow (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C4L10___NPE	53V	51-54V	DC	160 mA	8.9 W
C4L15___NPE	53V	51-54V	DC	250 mA	13.6 W
C4L20___NPE	53V	51-54V	DC	340 mA	18.5 W
C4L25___NPE	53V	51-54V	DC	460 mA	24.6 W

1. Nominal input volts.

2. Preferred volt range.

Medium (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C4L10___MPE	53V	51-54V	DC	160 mA	8.8 W
C4L15___MPE	53V	51-54V	DC	250 mA	13.4 W
C4L20___MPE	53V	51-54V	DC	320 mA	17.6 W
C4L25___MPE	53V	51-54V	DC	430 mA	23.2 W

Wide (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C4L10___WPE	53V	51-54V	DC	160 mA	8.8 W
C4L15___WPE	53V	51-54V	DC	250 mA	13.4 W
C4L20___WPE	53V	51-54V	DC	320 mA	17.6 W
C4L25___WPE	53V	51-54V	DC	430 mA	23.2 W

Marked spacing applications

Light engine	2500 lm	3000 lm
C4L_Z10 series	—	X
C4L_L series	X	X
C4L_D series	—	X
C4L_DMX series	—	X

Modules marked with an X require marked spacing:

- Center-to-center of adjacent luminaires: 24" (610mm)
- Luminaire center to side building member: 12" (305mm)

Lifetime (TM-21) data

Lumens	Narrow beam	Medium/Wide beam*
500lm		
1000lm	L90 @ 60,000hrs.	L90 @ 60,000hrs.
1500lm		
2000lm		
2500lm		
3000lm*	L90 @ 60,000hrs.	L85 @ 60,000hrs.

* Lutron 3000lm with Medium/Wide beam is L80 @ 60,000hrs.

In accordance with CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

C4RDL Calculite LED 4" gen 3

Round Downlight

Polished Reflectors



Specular clear (CL): Most specular and most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



Champagne bronze (CZ): Semi-specular finish that softens light at the source of the reflector while providing a warmer reflector appearance (slightly warmer).



Comfort clear (CC): Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



White (WH): (matte) Brightest illuminated aperture and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



Comfort clear diffuse (CD): Slightly diffuse clear finish, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.



Black (BK): (anodized) Specular finish that provides the lowest aperture brightness possible and significantly reduces source identification in a ceiling.



Vandal proof (VP): Provides an elegant solution for vandal resistant needs. One piece machined aluminum ring with impact resistant clear lens. Flangeless (F) flange must be ordered. Provides the luminaire with an IK10 impact and IP65 rating.



Shower light (SL): Wet location rated shower light applicable in any installation requiring dead front trims, interior or exterior non-corrosive applications, or where a diffused lens at the ceiling is required (non-conductive).

Flanges



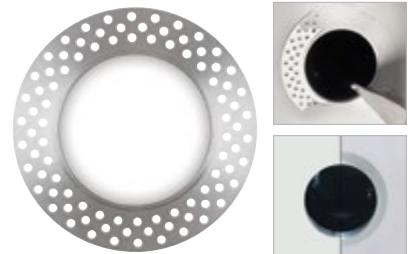
White (-): (matte) Provides the smoothest transition to ceilings when off.



Polished (P): (matches aperture) Produces a continuous look throughout the reflector (aperture matching).



Flangeless (F): (flush-mount)Creates a flush, virtually seamless transition from aperture to ceiling.



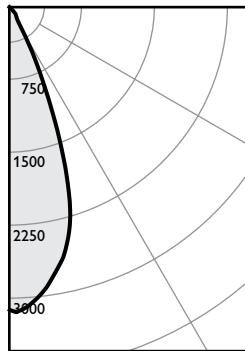
Mud-in ring (FT): Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

C4RDL Calculite LED 4" gen 3

Round Downlight

Narrow beam, 1500lm Engine, 103.8 lm/W at 14.7W or 112.2 lm/W at 13.6W (Power over Ethernet)

Candela Curve



Frame: **C4RN or 4RN**

Engine: **C4L15835NZ10U**

Trim: **C4RDLC**

Output lumens: 1526 lms

Input watts: 14.7 W

CRI: 80 min

CCT¹: 3500K

Spacing Crit.: 0.6

Beam Angle: 43°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1354	88.7%
0-40	1469	96.3%
0-60	1526	100.0%
0-90	1526	100.0%

Angle	Mean CP	Lumens
0	3112	
5	3044	282
10	2785	
15	2410	652
20	1672	
25	837	420
30	324	
35	163	115
40	128	
45	77	57
50	0	
55	0	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	124	3.0'
6'	86	3.6'
7'	64	4.2'
8'	49	4.8'
9'	38	5.4'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	71.3	0.65
6'	46.8	0.43
7'	33.4	0.31
8'	27.8	0.25
9'	22.3	0.20

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 103.8 lm/w

Report²: T20161390

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 107%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 99%	2000lm = 133%
CZ = 63%	80CRI 2700K = 93%	1500lm = 100%
WH = 87%	90CRI 3000K = 87%	1000lm = 67%
BK = 57%	90CRI 2700K = 81%	500lm = 33%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%	
Wall	70	50	30	10	50	10	50	10	50	10	50	10	0	0	0	0	0	
RCR Zonal cavity method - Effective floor reflectance = 20%																		
0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	
1	114	112	110	108	110	106	106	103	102	100	95	95	94	91	91	91	91	
2	110	106	102	99	104	98	101	96	98	94	89	86	86	86	86	86	86	
3	105	100	96	92	99	92	96	90	94	90	89	86	86	86	86	86	86	
4	101	95	90	87	94	86	92	85	90	84	82	82	82	82	82	82	82	
5	97	90	85	82	89	81	88	81	86	80	78	78	76	76	76	76	76	
6	93	86	81	77	85	77	84	77	83	76	74	74	72	72	72	72	72	
7	90	82	77	74	81	73	80	73	79	73	71	71	71	71	71	71	71	
8	86	79	74	70	78	70	77	70	76	69	68	68	68	68	68	68	68	
9	83	75	70	67	75	67	74	67	73	66	65	65	65	65	65	65	65	
10	80	72	67	64	72	64	71	64	70	64	62	62	62	62	62	62	62	

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%	
Wall	70	50	30	10	50	10	50	10	50	10	50	10	0	0	0	0	0	
RCR Zonal cavity method - Effective floor reflectance = 20%																		
0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	100	
1	114	111	109	107	109	105	105	102	101	99	94	96	92	88	88	88	88	
2	108	104	100	97	102	96	99	94	96	92	89	86	84	82	82	82	82	
3	103	97	93	89	96	88	93	87	91	85	82	80	78	76	76	76	76	
4	98	91	86	82	90	81	88	81	86	80	78	75	72	70	70	70	70	
5	94	86	80	76	85	76	83	75	81	74	72	70	68	66	66	66	66	
6	89	81	75	71	80	71	79	70	77	70	68	66	64	62	62	62	62	
7	85	76	70	66	76	66	74	66	72	70	62	60	59	57	57	57	57	
8	81	72	66	62	71	62	70	62	69	60	58	56	54	52	52	52	52	
9	77	68	63	59	68	59	67	58	66	55	53	51	49	47	47	47	47	
10	74	65	59	55	64	55	63	55	63	55	53	51	49	47	47	47	47	

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

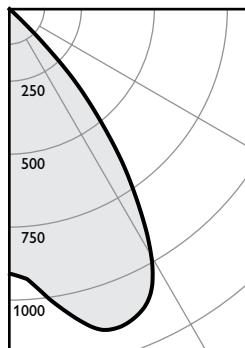
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C4RDL Calculite LED 4" gen 3

Round Downlight

Wide beam, 1500lm Engine, 106.6 lm/W at 14.2W or 113.2 lm/W at 13.4W (Power over Ethernet)

Candela Curve



Frame: **C4RN or 4RN**

Engine: **C4L15835WZ10U**

Trim: **C4RDLC**

Output lumens: 1517 lms

Input watts: 14.2 W

CRI: 80 min

CCT¹: 3500K

Spacing Crit.: 1.2

Beam Angle: 76°

Zonal summary

Zone	Lumens	%Luminaire
0-30	918	60.5%
0-40	1368	90.2%
0-60	1517	100.0%
0-90	1517	100.0%

Angle	Mean CP	Lumens
0	906	
5	945	93
10	1040	
15	1128	318
20	1153	
25	1114	506
30	978	
35	732	450
40	460	
45	175	148
50	18	
55	0	2
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	36	6.0'
6'	25	7.2'
7'	18	8.4'
8'	14	9.6'
9'	11	10.8'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	68.5	0.63
6'	45.0	0.41
7'	32.1	0.30
8'	26.8	0.25
9'	21.4	0.20

Efficacy: 106.6 lm/w

Report²: T20161406

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%	
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0	
RCR Zonal cavity method - Effective floor reflectance = 20%																		
0	119	119	119	119	116	116	111	111	106	106	106	106	100	100	100	100	100	
1	113	110	108	105	108	104	104	100	97	91	94	89	93	93	88	81	79	
2	107	102	98	94	100	93	97	91	84	80	83	88	85	85	81	77	74	
3	101	94	89	85	93	84	90	83	77	74	76	82	75	72	70	67	64	
4	96	87	82	77	86	77	84	76	72	69	77	72	66	66	63	61	59	
5	90	81	75	70	80	70	78	69	77	72	63	61	61	61	58	56	56	
6	85	75	69	64	75	64	73	64	72	67	63	61	61	61	58	56	56	
7	80	70	64	59	69	59	68	59	67	64	63	61	61	61	58	56	56	
8	76	65	59	55	65	54	64	54	63	54	52	52	52	52	50	48	48	
9	72	61	55	50	61	50	60	50	59	50	48	48	48	48	46	45	45	
10	68	57	51	47	57	47	56	47	55	46	45	45	45	45	44	44	44	

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.



Calculite LED 4" generation 3 provides excellent performance coupled with optimized installation flexibility via UniFrame. Industry leading visual comfort and uniform illumination make it an ideal choice for open office, institution, healthcare, and retail applications.

Standard luminaire: Complete luminaire = Frame + Engine + Trim + Accessories (optional)

Buy American Act of 1933 (BAA) Compliant luminaire:** Complete luminaire = Frame-BAC + Engine-BAC + Trim-BAC

* BAA compliance requires that BAC option be selected for each of frame, engine, and trim. Frame and engine will be ordered/shipped together; trim will be ordered/shipped separately. Accessories (optional) are not currently BAA-compliant.

Frame

standard example: 4RN | BAC example: 4RN-BAC

Series	Installation	Voltage/Options	
4R			
4R 4" Non-IC Round	N New construction	— Universal 120/277/347V ¹ 3 347V (for non-0-10v configurations) ² EM6 Emergency, 6W Self-Test/Self-Diagnostic ³ LC Chicago Plenum ⁴	RADIO Integral Interact Pro RF sensor (requires above ceiling access and enables wireless connected lighting control) BAC Meets the requirements of the Buy American Act of 1933 (BAA)**
	R Remodeler	— Universal 120/277/347V ¹ 3 347V (for non-0-10v configurations) ²	BAC Meets the requirements of the Buy American Act of 1933 (BAA)**

Engine

standard example: C4L15835NZ10U | BAC example: C4L15835NZ10U-BAC

Series	Lumens	CRI	CCT	Beam	Dimming	Voltage	Options
C4L							
C4L Calculite LED 4" gen 3	05 500lm 10 1000lm 15 1500lm 20 2000lm 25 2500lm ⁵ 30 3000lm ⁵	8 80 CRI 9 90 CRI	27 2700K 30 3000K 35 3500K 40 4000K	M Medium (56°) W Wide (76°)	Z10 0-10V 1% SOL EldoLED Solo 0-10V 0.1% D Dali 0.1% L Lutron LDE1 EcoSystem (fade-to-black) DMX Digital Multiplexing	U 120/277V 3 347V ^{6,7} (0-10v only) U 120/277/347V	R Retrofit RH Retrofit for tall collar frame BAC Meets the requisites of the Buy American Act of 1933 (BAA)**
					E ELV (for up to 2000lm only) P Power over Ethernet (PoE)	1 120V E Ethernet 48V DC	
							Only compatible with 1000 (10) to 2500 (25) lumen configurations.

Trim

standard example: C4RWWCCP | BAC example: C4RWWCCP-BAC

Series	Aperture	Style	Finish	Flange	Options
C4	R				
C4 Calculite LED 4" gen 3	R Round	WW Open Wall Wash LW Lensed Wall Wash ⁸ CW Corner Wall Wash ⁹ DW Double Wall Wash ⁹	BK Black (anodized) CL Specular clear WH White (matte) WHAMF White (gloss antimicrobial)	CC Comfort clear CD Comfort clear diffuse CZ Champagne bronze — White (matte) — White (matches finish)	IEM6 Trim mounted EM test switch BAC Meets the requisites of the Buy American Act of 1933 (BAA)**

Accessories (Not currently BAA-compliant) learn more on page 2

SBA Interact Ready System Bridge Accessory (refer to Philips System Bridge Accessory spec sheet for options and details)

AMS ActiLume multi-sensor (optional accessory for PoE configurations)

7920 Sloped ceiling 4" adapter for 4RN and 4RA frames

CA4RFT Mud-in ring for use in 4" round flangeless trim installations (ordered with a flangeless trim)

CAEM6 Field-installable Bodine BSL6 6W battery pack with self-test/self-diagnostic (for new construction frames, 120-277V)

C4RPWPH IP65 Rated vandal proof matte white accessory mounts onto flangeless trims (C4RDL*F) and new construction frame only

1. Specify standard Universal frame for use with 347V light engines.

2. Not compatible with electronic low voltage light engine dimming option (E).

3. Emergency (EM6) frame is compatible with reflector mounted test switch when light engine is ordered with IEM6 option code (not compatible with 347V or Power over Ethernet configurations).

4. Chicago Plenum (LC) frame is not available for Buy American Compliant (BAC) configurations.

5. The 2500lm (25) and 3000lm (30) packages have marked spacing requirements (see page 6).

6. The 347V light engine voltage option available only with Z10 dimming option.

For other dimming protocols order UNV (U) light engine and 347V (3) frame.

7. Universal 120-347V for 0-10v (Z10) dimming only.

For 347V non-Z10 dimming, order 347V (3) frame with (U) light engine.

8. Lensed Wall Wash (LW) not available with IEM6 integral emergency test switch (remote only).

CalculiteLEDgen3_4in_WallWash_C4RWW 02/22 page 1 of 8

9. Corner (CW) and Double (DW) are not compatible with flangeless (F) option.

** Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.



interact
ready.

C4RWW Calculite LED 4" gen 3

Round Wall Wash

Frame-in-kits

New Construction:

Galvanized stamped steel for dry or plaster ceilings. Preinstalled telescoping mounting bars from 13" to 24". For 4' distances, use 1/2" EMT, 1-1/2" x 1/2" U or C channel.

Max ceiling thickness for Lensed Wall Wash (LW) is 1-1/2" and for Open, Corner, Double Wall Wash (WW, CW, DW) is 2".

Patented install Mounting frame:

- Pre-installed mounting bars for fast and tool-less installs into T-grid & hat channel ceilings.
- Close-cut aperture design eliminates possibility of gap between ceiling opening and reflector flange.
- Separate wiring compartment for wiring frame to building allows inspection prior to light engine install.
- Simple plug-and-play connection between frame and light engine from below ceiling.

Retrofit

- Easily updates legacy Calculite downlights to the latest LED technology. Includes light engine, trim, and driver mounted on cover plate that mounts to junction box of previous Calculite generations. Order with R or RH option code at end of light engine catalog number (see details on page 6).

Compatibility:

Frames	Engines
With CFL S4118_series	Use Retrofit configuration C4R_Trim + C4L_Engine
With INC AS400_series	Use Retrofit configuration C4R_Trim + C4L_Engine
With LED C4L_N series C4X4L_N series P4RD_N_series	Use Retrofit configuration C4R_Trim + C4L_Engine C4S_Trim + C4L_Engine C4R_Trim + C4L_Engine

* Not available for retrofitting luminaires with integral emergency battery.

Emergency

Bodine BSL6 6W battery pack with self-test/diagnostic functionality. Factory or field mounted to frame.

- For trim with integral emergency test switch, order trim with IEM6 option (ex: C4RWWCC1EM6).
- For remote ceiling mounted test switch, order standard trim (ex: C4RWWCC). Optional accessory ceiling mounting plate available (CAEM6TSCP) for remote mounted test switch.
- Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

Dimming

- Advance 0-10V 1% dimming
- Lutron Hi-lume EcoSystem H Series 1% dimming
- EldoLED ECOdrive Dali 1% dimming
- EldoLED SOLOdrive 0-10V 0.1% dimming
- EldoLED DMX POWERdrive

Power over Ethernet

Powered via Lightolier PoE lighting controller: Complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

Optical systems

Comfort throughout the space: True 50° physical cutoff and 45° reflected cutoff.

Quality of light: 2 SDCM ensures color consistency from fixture to fixture and over the luminaire's long lifetime.

Light Engine

Quick connect power pack allow for easy installation and replacement from below ceiling with no need for additional wiring. This allows for:

- Frame and ceiling installation to be performed while still finalizing details such as lumen packages, CCT and control type.
- Easy replacement of electronics at end of life with minimal wasted material and labor required.
- Ease and upgradability of technology.
- 347V light engines are 0-10v dimming only and include dedicated 347V driver for use with universal 120/277/347V (U) frames. For 347V and non-0-10v dimming, order (U) light engine and 347V (3) frame (includes step down transformer).

Options and Accessories

Flangeless mud-in ring: Use CA4RFT for use with flangeless plaster installations.

Sloped ceilings: Compatible with sloped ceiling adapters (see SCA spec sheet).

Vandal Proof: C4RVPWH includes machined aluminum ring painted white, gasketed for IP65 protection, and impact resistant polycarbonate lens (IK10). Locks in place with discrete setscrew (key included). Available also with antimicrobial finish (C4RVPWHAMF).

CAEM6TSCP: Ceiling cover plate for remote mounted EM6 test switch. 1/2" (25mm) hole, 4 3/8" (109mm) x 2 3/4" (69mm) rectangular. Includes two mounting screws.

Field Installed Emergency: Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

CAEM6: Field install EM6 kit with Bodine BSL6 6W battery pack with self-test/self-diagnostic, mounts to new construction frames. Includes remote ceiling plate for test switch. To mount test switch to trim for new construction frame, order trim with IEM6 option code (e.g. C4RWWCC1EM6).

SBA: Interact Ready System Bridge Accessory. Requires IRT9015 IR remote and Interact Pro App for commissioning.

ENERGY STAR® exceptions

- 500lm & 90 CRI configurations
- Champagne Bronze & Black finishes
- 347V & Emergency voltage/options
- Dali, EldoLED Solo & PoE drivers

Title 24 exceptions

- 1000lm configurations
- Champagne Bronze & Black finishes

Labels and Listings

- cULUS listed for wet locations
- ENERGY STAR® certified
- RoHS certified
- CEC Title 24 JA8 certified
- CCEA (frames with *LC suffix)

Warranty



5 year limited warranty
Visit Signify.com/warranties
for more information on Signify's
standard 5-year limited warranty
on complete luminaire systems.

C4RWW Calculite LED 4" gen 3

Round Wall Wash

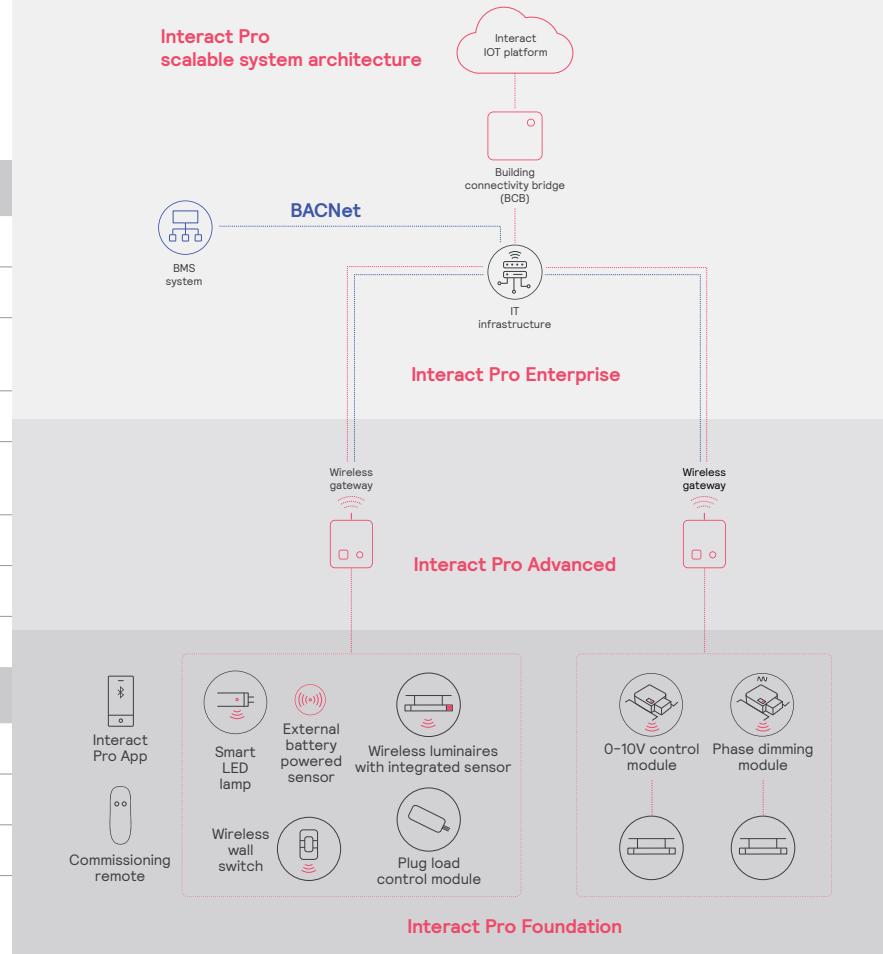
interact

Interact Pro scalable system			
	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
• luminaires with integrated sensors	150
• smart TLEDS	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



C4RWW Calculite LED 4" gen 3

Round Wall Wash

Wireless Controls Options

Interact Pro scalable sensor

(System Bridge Accessory with -CS option):

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.
- Interact Pro includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote onsite to identify and group devices together.
- Compatible with:
 - UID8451/10 wireless dimmer switch
 - SWS200 wireless scene switch
 - Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
 - Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
 - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
 - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH
- For more information on Interact Pro visit:
www.interact-lighting.com/
interactproscalablesystem.

Interact Pro Enterprise

(System Bridge Accessory with -SB option):

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with UID8451/10 wireless dimmer switch, SWS200 wireless scene switch, wireless Occupancy sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- SB option in addition to occupancy and daylight sensing supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit:
www.interact-lighting.com/office or
www.usa.lighting.philips.com/systems/system-areas/offices.

Emergency Options (ER100)

(System Bridge Accessory with -ER100 option):

- Power Sensing (Factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output
- Power Interruption Detection (Field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output

Radio only sensor (RADIO):

- Integral RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.

Wired Controls Options

Interact Office Wired (PoE):

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.

- Optional integral emergency controller and battery pack provides 600lm nominal output.

- Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

Interact Office Wired (PoE), Static White:

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.

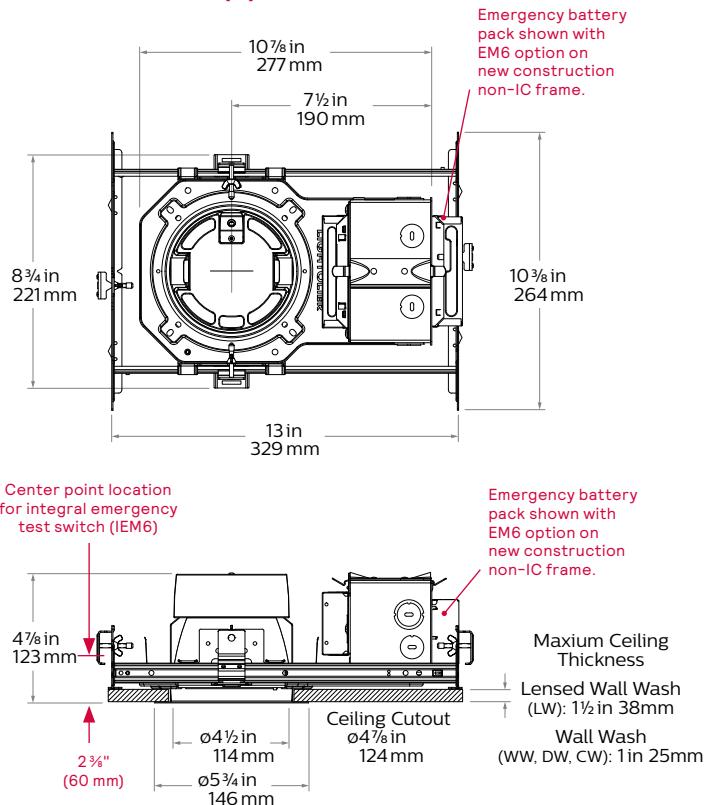
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.

- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

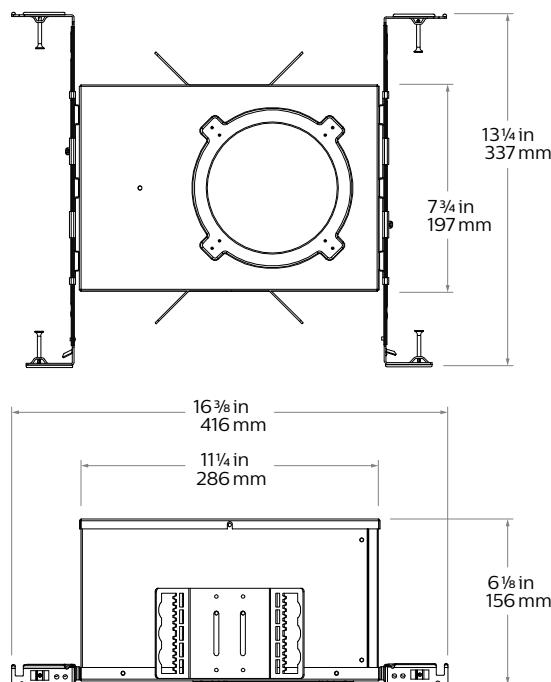
C4RWW Calculite LED 4" gen 3

Round Wall Wash

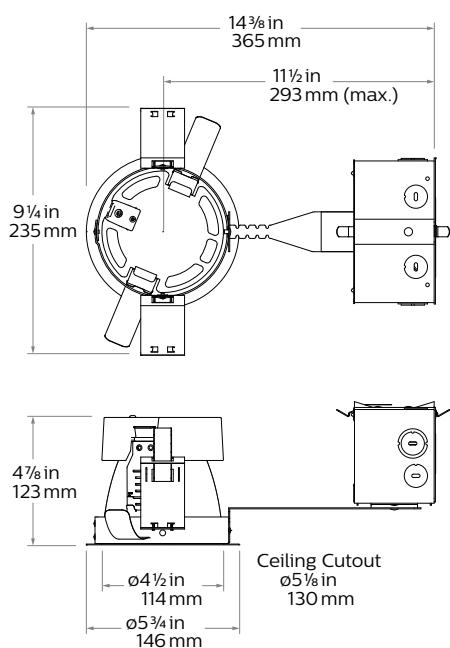
New Construction (N)



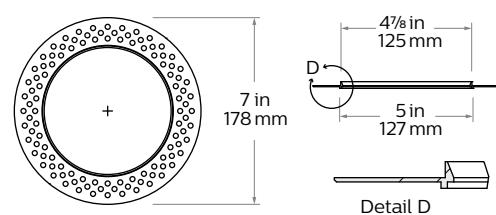
Chicago Plenum (LC)



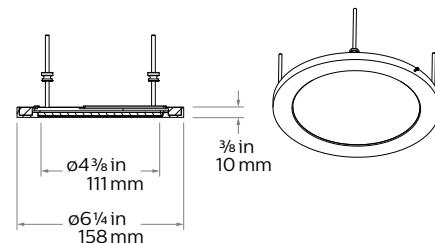
Remodeler (R)



Flangeless mud-in ring (CA4RFT) accessory



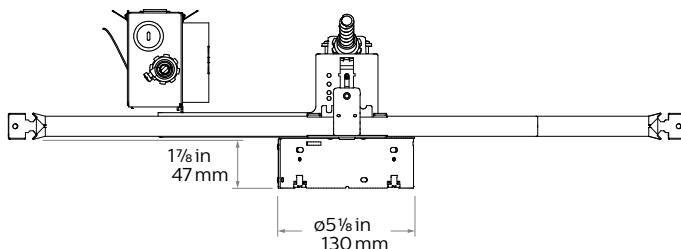
Vandal Proof (VP) accessory



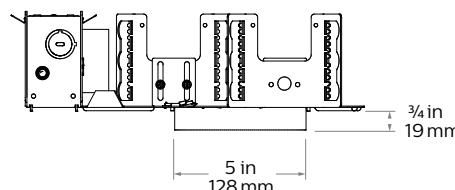
C4RWW Calculite LED 4" gen 3

Round Wall Wash

Round tall collar frame (RH type light engine required)



Round standard steel frame (R type light engine required)



Narrow

Light engine	Input volts	Input freq	Input current	Drive current	Input power	THD power	Power factor
C4L05_NZ10U/3	120V	50/60Hz	0.05	110 mA	6W	<20%	>0.95
	277V		0.03			<20%	>0.90
C4L10_NZ10U/3	120V	50/60Hz	0.08	230 mA	11W	<15%	>0.95
	277V		0.04			<20%	>0.95
C4L15_NZ10U/3	120V	50/60Hz	0.12	360 mA	16W	<10%	>0.95
	277V		0.06			<15%	>0.95
C4L20_NZ10U/3	120V	50/60Hz	0.17	490 mA	21W	<10%	>0.95
	277V		0.08			<15%	>0.95
C4L25_NZ10U/3	120V	50/60Hz	0.22	640 mA	27W	<10%	>0.95
	277V		0.10			<15%	>0.95
C4L30_NZ10U/3	120V	50/60Hz	0.27	790 mA	33W	<10%	>0.95
	277V		0.13			<15%	>0.95

Narrow (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C4L10___NPE	53V	51-54V	DC	160 mA	8.9 W
C4L15___NPE	53V	51-54V	DC	250 mA	13.6 W
C4L20___NPE	53V	51-54V	DC	340 mA	18.5 W
C4L25___NPE	53V	51-54V	DC	460 mA	24.6 W

1. Nominal input volts.

2. Preferred volt range.

Medium (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C4L10___MPE	53V	51-54V	DC	160 mA	8.8 W
C4L15___MPE	53V	51-54V	DC	250 mA	13.4 W
C4L20___MPE	53V	51-54V	DC	320 mA	17.6 W
C4L25___MPE	53V	51-54V	DC	430 mA	23.2 W

Wide (Power over Ethernet)

Light engine	Input				
	Volts ¹	Voltage ²	Freq	Current	Power
C4L10___WPE	53V	51-54V	DC	160 mA	8.8 W
C4L15___WPE	53V	51-54V	DC	250 mA	13.4 W
C4L20___WPE	53V	51-54V	DC	320 mA	17.6 W
C4L25___WPE	53V	51-54V	DC	430 mA	23.2 W

Marked spacing applications

Light engine	2500 lm	3000 lm
C4L_Z10 series	—	X
C4L_L series	X	X
C4L_D series	—	X
C4L_DMX series	—	X

Modules marked with an X require marked spacing:

- Center-to-center of adjacent luminaires: 24" (610mm)
- Luminaire center to side building member: 12" (305mm)

Lifetime (TM-21) data

Lumens	Narrow beam	Medium/Wide beam*
500lm		
1000lm	L90 @ 60,000 hrs.	L90 @ 60,000hrs.
1500lm		
2000lm		
2500lm	L90 @ 60,000 hrs.	L85 @ 60,000hrs.
3000lm*		

* Lutron 3000lm with Medium/Wide beam is L80 @ 60,000hrs.

In accordance with CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

C4RWW Calculite LED 4" gen 3

Round Wall Wash

Reflector



Specular clear (CL): Most specular and most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



Champagne bronze (CZ): Semi-specular finish that softens light at the source of the reflector while providing a warmer reflector appearance (slightly warmer).



Comfort clear (CC): Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



White (WH): (matte) Brightest illuminated aperture and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



Comfort clear diffuse (CD): Slightly diffuse clear finish, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.



Black (BK): (anodized) Specular finish that provides the lowest aperture brightness possible and significantly reduces source identification in a ceiling.



Vandal proof (VP): Provides an elegant solution for vandal resistant needs. One piece machined aluminum ring with impact resistant clear lens. Flangeless (F) flange must be ordered. Provides the luminaire with an IK10 impact and IP65 rating.

Flange



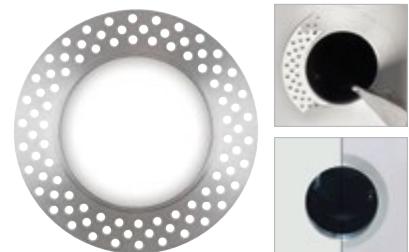
White (-): (matte) Provides the smoothest transition to ceilings when off.



Polished (P): (matches aperture) Produces a continuous look throughout the reflector (aperture matching).



Flangeless (F): (flush-mount)Creates a flush, virtually seamless transition from aperture to ceiling.

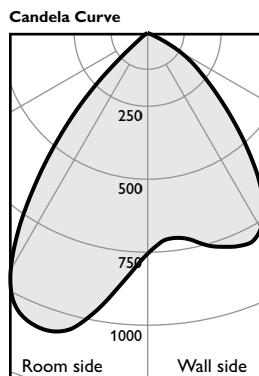


Mud-in ring (FT): Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

C4RWW Calculite LED 4" gen 3

Round Wall Wash

Wall Wash, 1500lm Engine, 102.8 lm/W or 109.3 lm/W at 13.4W (Power over Ethernet)



Frame: **C4RN or 4RN**
Engine: **C4L15835WZ10U**
Trim: **C4RWWCL**

Output lumens: 1465 lms
Input watts: 14.3 W
CRI: 80 min
CCT¹: 3500K

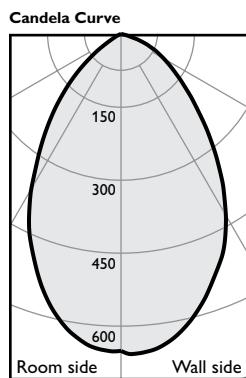
Efficacy: 102.8 lm/w
Report²: T20170304

Multiple unit data				
Footcandles on wall				
	2' from wall			
	3' on ctr.			
Distance from ceiling in feet	1	22	16	22
	2	44	33	44
	3	37	40	37
	4	29	31	29
	5	22	23	22
	6	17	17	17
	7	14	14	14
	8	12	12	12
	9	10	10	10
	10	9	9	9
	12	7	7	7
	14	6	6	6

Multiple unit data				
Footcandles on wall				
	3' from wall			
	3' on ctr.			
Distance from ceiling in feet	1	9	9	9
	2	19	18	19
	3	27	26	27
	4	27	28	27
	5	24	24	24
	6	20	21	20
	7	17	17	17
	8	15	14	15
	9	12	12	12
	10	11	11	11
	12	9	9	9
	14	8	8	8

Multiple unit data				
Footcandles on wall				
	3' from wall			
	4' on ctr.			
Distance from ceiling in feet	1	8	7	8
	2	16	13	16
	3	22	19	22
	4	21	21	21
	5	18	19	18
	6	16	16	16
	7	13	13	13
	8	11	11	11
	9	10	10	10
	10	9	9	9
	12	7	7	7
	14	6	6	6

Lensed Wall Wash, 1500lm Engine, 71.1 lm/W or 75.5 lm/W at 13.4W (Power over Ethernet)



Frame: **C4RN or 4RN**
Engine: **C4L15835WZ10U**
Trim: **C4RLWCL**

Output lumens: 1012 lms
Input watts: 14.2 W
CRI: 80 min
CCT¹: 3500K

Efficacy: 71.1 lm/w
Report²: T20170310

Multiple unit data				
Footcandles on wall				
	2' from wall			
	3' on ctr.			
Distance from ceiling in feet	1	27	17	27
	2	35	28	35
	3	30	28	30
	4	22	22	22
	5	17	17	17
	6	13	13	13
	7	11	11	11
	8	9	9	9
	9	7	7	7
	10	6	6	6
	12	5	5	5
	14	5	5	5

Multiple unit data				
Footcandles on wall				
	3' from wall			
	3' on ctr.			
Distance from ceiling in feet	1	10	9	10
	2	19	18	19
	3	22	21	22
	4	21	21	21
	5	18	18	18
	6	15	15	15
	7	13	13	13
	8	11	11	11
	9	9	9	9
	10	8	8	8
	12	7	6	7
	14	6	6	6

Multiple unit data				
Footcandles on wall				
	3' from wall			
	4' on ctr.			
Distance from ceiling in feet	1	8	6	8
	2	16	13	16
	3	17	15	17
	4	16	15	16
	5	14	14	14
	6	12	12	12
	7	10	10	10
	8	8	8	8
	9	7	7	7
	10	6	6	6
	12	5	5	5
	14	4	4	4

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

Decorative

D4A Vetro Accessory



Add detail and style to any space with the Vetro accents and Calculite 4" LED downlights.

Complete luminaire = Frame + Trim or Micro Vetro (optional) + Installation Accessories (if required)



**Luminaire Type
AL3**

Lamps:

Qty:

Notes:

Decorative Element

example: D4A01 + C4RDL + 4RN

Series	Model	Use with trim kit*	Use with frame-in kits
D4A Decorative Element - 4" Calculite LED - 4" Calculite CFL	01 Round acrylic with aluminum insert 02 Round acrylic 03 Round angled double opal glass 04 Round opal glass	LED: C4RDL	LED: 4RN

* Trim kit must be ordered separately. All combinations required the appropriate Calculite frame-in kit.

Specify Reflector separately. Flangeless trim required for Decorative element. Use specular clear (CL) finish for best performance.

Features

1. Decorative element:

- (01) Solid high temp, UV resistant composite with open aperture, frosted interior diameter and polished exterior. Satin aluminum ring is mechanically inserted in composite to create drama and intrigue in the element.
- (02) Solid high temp, UV resistant composite with open aperture, frosted interior diameter and polished exterior. Machined facet along bottom edge.
- (03) Angled hand blown triplex glass carefully proportioned to each aperture size. Glass is gently and evenly illuminated for clean brightness recognition.
- (04) Cylindrical hand blown triplex glass carefully proportioned to each aperture size. Glass is gently and evenly illuminated for clean brightness recognition.

2. Die cast construction ring:

Exterior edge of construction ring is visible, satin aluminum finish matches diameter of decorative element for a flangeless appearance. Aluminum die cast finish ring with crisp 90° edges conceals all fasteners for a clean finished appearance.

3. Integral reflector:

16 ga. aluminum, 50° visual cutoff to lamp and lamp image. Decorative Element is mechanically attached to reflector via die cast ring. Reflector is specular clear for best performance and aesthetics.

4. Reflector:

Specified separately. Flangeless trim required.

Use specular clear (CL) finish for best performance and aesthetics.

5. Frame-in kit:

Specified separately. See frame-in kit specification sheet for details.

Mechanical

Decorative element are mechanically secured to the die cast construction ring and the integral reflector from the factory.

Stamped aluminum cover ring provided on top of decorative element to cover construction ring fasteners.

Four #8-32 screws and 4 knurled die-cast thumb screws secure construction ring to frame in kit.

Labels

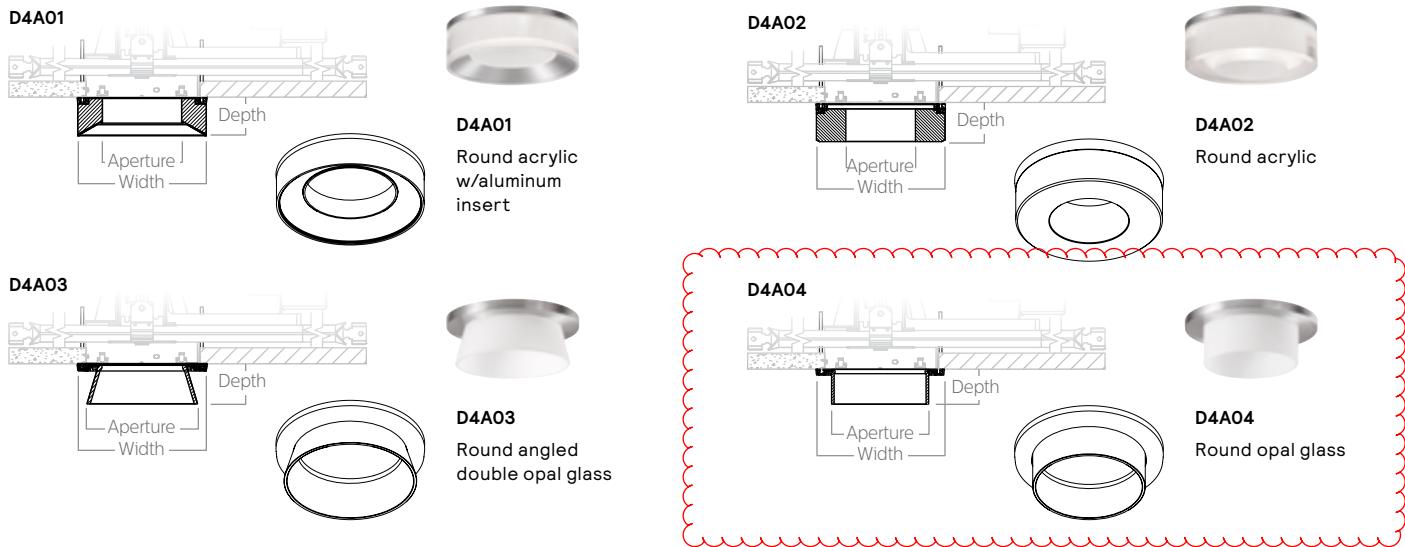
cULus Listed.

Suitable for damp locations.

D4A Vetro Accessory

Round decorative elements for Calculite LED 4"

Dimensions



Cat. No.	Size	Aperture	Width	Depth
D4A01	4"	3 3/4" (95 mm)	6" (152 mm)	1 3/4" (44 mm)
D4A02	4"	3 1/2" (89 mm)	6" (152 mm)	1 3/4" (44 mm)
D4A03	4"	5 1/8" (130 mm)	6 1/4" (159 mm)	2" (51mm)
D4A04	4"	4 1/8" (105 mm)	6 1/4" (159 mm)	2" (51mm)

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 **signify**

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Signify North America Corporation
200 Franklin Square Drive,
Somerset, NJ 08873
Telephone 855-486-2216

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON, Canada L6C 2S3
Telephone 800-668-9008

STELLA 4272

PROJECT PRO



Luminaire Type AM1

SPEC TYPE

NOTES

[QUICKSHIP](#), [CLICK HERE](#) / [CLIQUEZ ICI](#)

CODE

MODEL MODÈLE

4272DI-9	STELLA 9" (DIRECT+INDIRECT)
4272DI-16	STELLA 16" (DIRECT+INDIRECT)
4272D-9	STELLA 9" (DIRECT ONLY)
4272D-16	STELLA 16" (DIRECT ONLY)

LIGHT SOURCE SOURCE LUMINEUSE

LED	REGULAR OUTPUT
LED.HO	HIGH OUTPUT

COLOR TEMPERATURE TEMPÉRATURE DE COULEUR

27*	2700K
30	3000K
35	3500K
40	4000K

*LONGER LEAD TIME MAY APPLY, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE

COLOR RENDERING INDEX (CRI) INDICE DE RENDU DE COULEUR (IRC)

80	80+ CRI
90*	90+ CRI

*LONGER LEAD TIME MAY APPLY, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE

VOLTAGE VOLTAGE

120V	120 VOLT
277V	277 VOLT
347V*	347 VOLT

*347V COMES WITH A Ø9.3" X 1.75" CANOPY

CONTROL OPTION OPTION DE CONTRÔLE*

DV	0-10V DIMMING (120V-277V & 347V)
DP	PHASE DIMMING (120V ONLY)
NLTAIR2	NLIGHT AIR CONTROL GEN 2 ^(A)
NLIGHT	NLIGHT WIRED CONTROL ^(B)

^(A)NLIGHT AIR INTEGRATED INSIDE PRODUCT

^(B)REQUIRES REMOTE POWER PACK (39NLWA)

*EMERGENCY BATTERY NOT AVAILABLE WITH NLIGHT

*REFER TO NLIGHT GUIDE AND INSTALLATION SHEET FOR ALL REQUIREMENTS.

EMERGENCY BATTERY BATTERIE D'URGENCE

AVAILABLE WITH LED SOURCES 120-227V. EM DRIVER BOX INCLUDED. INSTALLED REMOTELY. SEE EM GUIDE FOR DETAILS. WITH DV DIMMING OPTION, AN ADDITIONAL POWER CABLE WILL DROP FROM CEILING NEXT TO MAIN CABLE.

EMB*	EMERGENCY BATTERY FOR REMOTE BOX *3981EA ACCESSORY IS REQUIRED; ONLY AVAILABLE WITH CABLE
------	--

STEM OR CABLE TIGE OU CABLE

S10	3/8" (10MM) STEM, NOT FIELD ADJUSTABLE
C	CABLE, FIELD ADJUSTABLE (FOR 4272-9 & 4272D-9)
AC	AIRCRAFT MOUNTING & CABLE, FIELD ADJUSTABLE (FOR 4272-16 & 4272D-16)

STEM OR CABLE LENGTH LONGEUR DE TIGE OU CABLE

36	36" STEM (STD LENGTH)
60	60" CABLE (STD LENGTH)
**	CUSTOM STEM LENGTH (PLEASE SPECIFY)
**	CUSTOM CABLE LENGTH (PLEASE SPECIFY)

FOR OVERALL LENGTH, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE.

CANOPY FINISH FINI PAVILLON

BLKE	BLACK FINE TEXTURE
WHE	WHITE FINE TEXTURE

POWER CORD OR STEM FINISH FINI CABLE D'ALIMENTATION OU TIGE

BLK	BLACK POWER CORD OR STEM
WH	WHITE POWER CORD OR STEM

SHADE FINISH FINI ABAT-JOUR^(A)

BLKE	BLACK FINE TEXTURE
WHE	WHITE FINE TEXTURE
RAL ^(B)	PLEASE SPECIFY RAL CODE

^(A)SHADE INTERIOR IS ALWAYS WHITE

^(B)LONGER LEAD TIME MAY APPLY, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE

DIFFUSER FINISH FINI DIFFUSEUR

WH	WHITE
----	-------

ACCESSORY ACCESSOIRE

39NLWA*	NLIGHT WIRED REMOTE CONTROLLER
3981EA	ELECTRICAL BOX FOR EMB EMERGENCY BATTERY

*FOR CHICAGO PLENUM INSTALLATION, PLEASE CONTACT YOUR EUREKA REPRESENTATIVE.



FINISH FINI



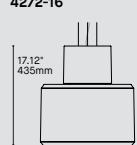
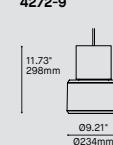
FAMILY FAMILLE



4272-9

4272-16

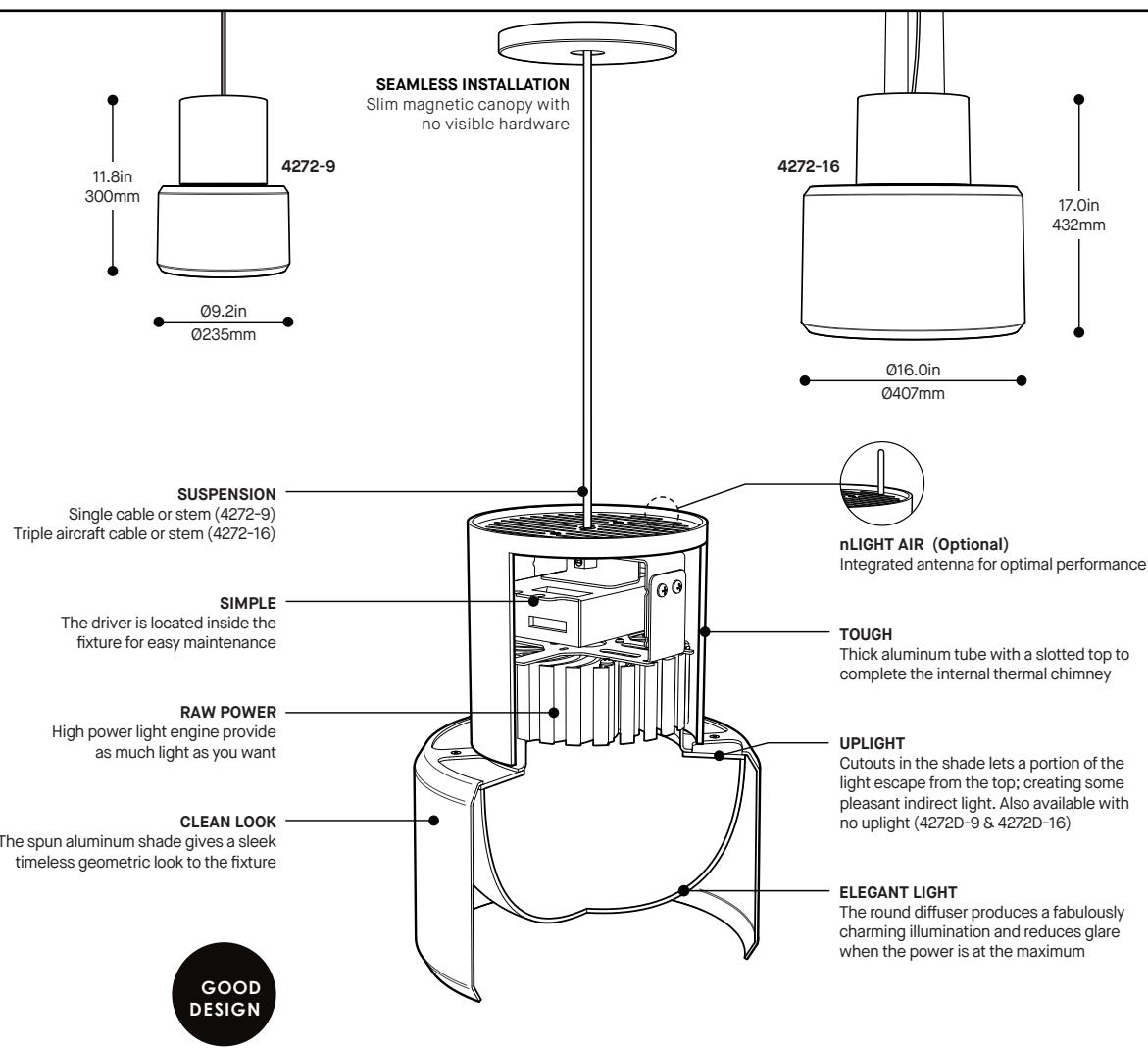
4273-23



EUREKA

SPECIFICATION

STELLA 4272-XX



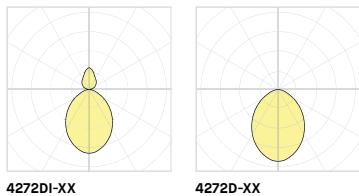
PRODUCT SPECIFICATION

	4272DI-9 REG — HO	4272DI-16 REG — HO	4272D-9 REG — HO	4272D-16 REG — HO
PERFORMANCE				
SYSTEM WATTAGE	28.6W — 51W	34.8W — 68.9W	28.6W — 51W	34.8W — 68.9W
DELIVERED DIRECT LUMENS (4000K)	1750LM — 3060LM	2230LM — 3860LM	2050LM — 3560LM	2620LM — 4550LM
DELIVERED INDIRECT LUMENS (4000K)	500LM — 860LM	770LM — 1340LM	—	—
EFFICACY	78.8LM/W	86.2LM/W	71.7LM/W	75.3LM/W
OTHER INFORMATIONS				
WEIGHT	7.3LBS / 3.3KG	9.8LBS / 4.4KG	7.3LBS / 3.3KG	9.8LBS / 4.4KG
L70 (LUMEN MA INTENANCE)	> 63 600 HRS	> 55 000 HRS	> 63 600 HRS	> 55 000 HRS
WELL & LEED STANDARD REQUIREMENTS				
MAX. LUMINANCE 45°-90° OF NADIR	5401(REG) CD/M ²	4398(HO) CD/M ²	5401(REG) CD/M ²	4398(HO) CD/M ²
LIGHT QUALITY	R9 > 50 (90 CRI OPTION)			
FLICKERING TOLERANCE	LOW FLICKER, COMPLIANT TO CALIFORNIA TITLE 24			

EFFICACY MULTIPLIERS

CRI	CCT	FACTOR
80+	4000K	1.00
80+	3500K	0.99
80+	3000K	0.97
80+	2700K	0.94
90+	4000K	0.89
90+	3500K	0.86
90+	3000K	0.84
90+	2700K	0.80

LIGHT DISTRIBUTION



Visit our website for warranty terms and conditions.



EUREKA

TECHNICAL DATA

JUNCTION BOX 3981E

PROJECT PROJET

SPEC TYPE

NOTES

ORDERING SPECIFICATION SPÉCIFICATION DE COMMANDE

CODE

MODEL MODÈLE

3981EA APPROX. 10W MAX EMERGENCY BACKUP POWER
3981EB APPROX. 5W MAX EMERGENCY BACKUP POWER

PRODUCT CHARACTERISTICS CARACTÉRISTIQUES DU PRODUIT

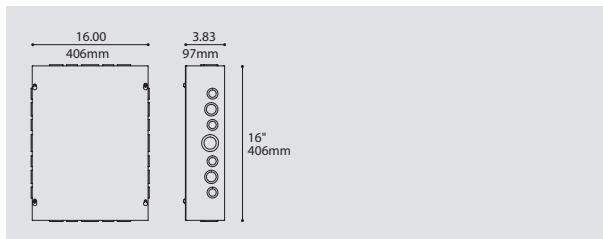
DESIGN: Remote junction box and cover with an emergency backup driver. Features matching wires and labelling to simplify installation. Is required to complete luminaires ordered with EMB remote emergency box option (selected models, refer to specification sheets. Other models possible upon request). Available in several power outputs, selected according to the luminaire power.

STRUCTURE: Die-stamped 16 gauge grey painted steel. Knockouts on all 4 sides from 1/2" to 1-1/4".

CERTIFIED: c-CSA-us, UL, RoHS, NEMA Type 1, FCC

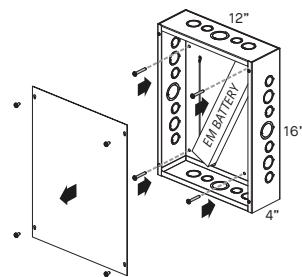
CONCEPTION: Boîte de jonction à distance avec couvercle avec batterie d'urgence intégré. Contient des fils avec couleurs et étiquetage pour simplifier l'installation. Requis pour compléter un luminaire commandée avec l'option EMB (voir pages de spécification pour produits avec l'option EMB. Autres produits possibles sur demande).

STRUCTURE: Disponible en plusieurs puissances, sélectionnées en fonction du luminaire. Acier plié de 16 jauge peinture gris avec coins soudés. Débouchures sur 4 côtés 1/2" à 1-1/4".
CERTIFIÉ: c-CSA-us, UL, RoHS, NEMA Type 1, FCC



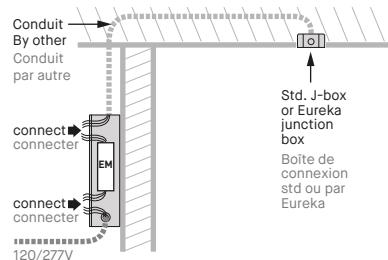
INSTALLATION SUMMARY SOMMAIRE D'INSTALLATION

STEP 1 ÉTAPE 1



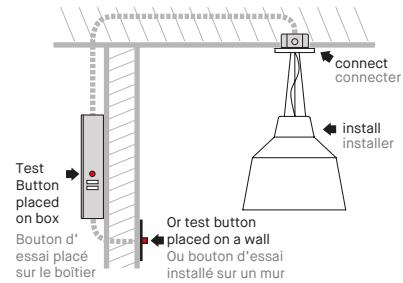
Remove cover and fasten box remotely to a wall or a ceiling.
Enlever le couvercle et fixer la boîte à distance sur un mur ou un plafond.

STEP 2 ÉTAPE 2



Run conduit from box to junction box of luminaire.
Conduit must have a minimum of 5 wires with wire gauge and maximum distance as per EM driver distance chart.
Connect EM driver to conduit wires and ac branch circuit.
Faites passer le conduit de la boîte EM à la boîte de connexion du luminaire. Consulter le tableau de "distance maximale" disponible dans la feuille d'installation. Branchez la batterie EM avec les fils du conduit ainsi que la ligne 120V ou 277V.

STEP 3 ÉTAPE 3



Install luminaire & connect its wires to conduit. Install test button on wall or box (wall plate not supplied).
Installer le luminaire & connecter les fils au conduit. Installer le bouton d'essai sur le mur ou boîtier (plaqué murale non fournie).

REFER ALSO TO INSTALLATION DRAWING AND EM GUIDE FOR MORE INFORMATION.
CONSULTEZ LE DESSIN D'INSTALLATION ET LE GUIDE EM POUR PLUS D'INFORMATIONS.



3981E REMOTE EMERGENCY BOX KIT - IOTA EM DRIVER

SAFETY GUIDELINES :

- > Follow safety instructions and guidelines of EM battery/driver manufacturer for the specific model.
- > Install by qualified personnel in accordance with the National Electrical Code and local regulations.
- > Turn off power supply before installation or servicing the fixture.

EMB LOCATION :

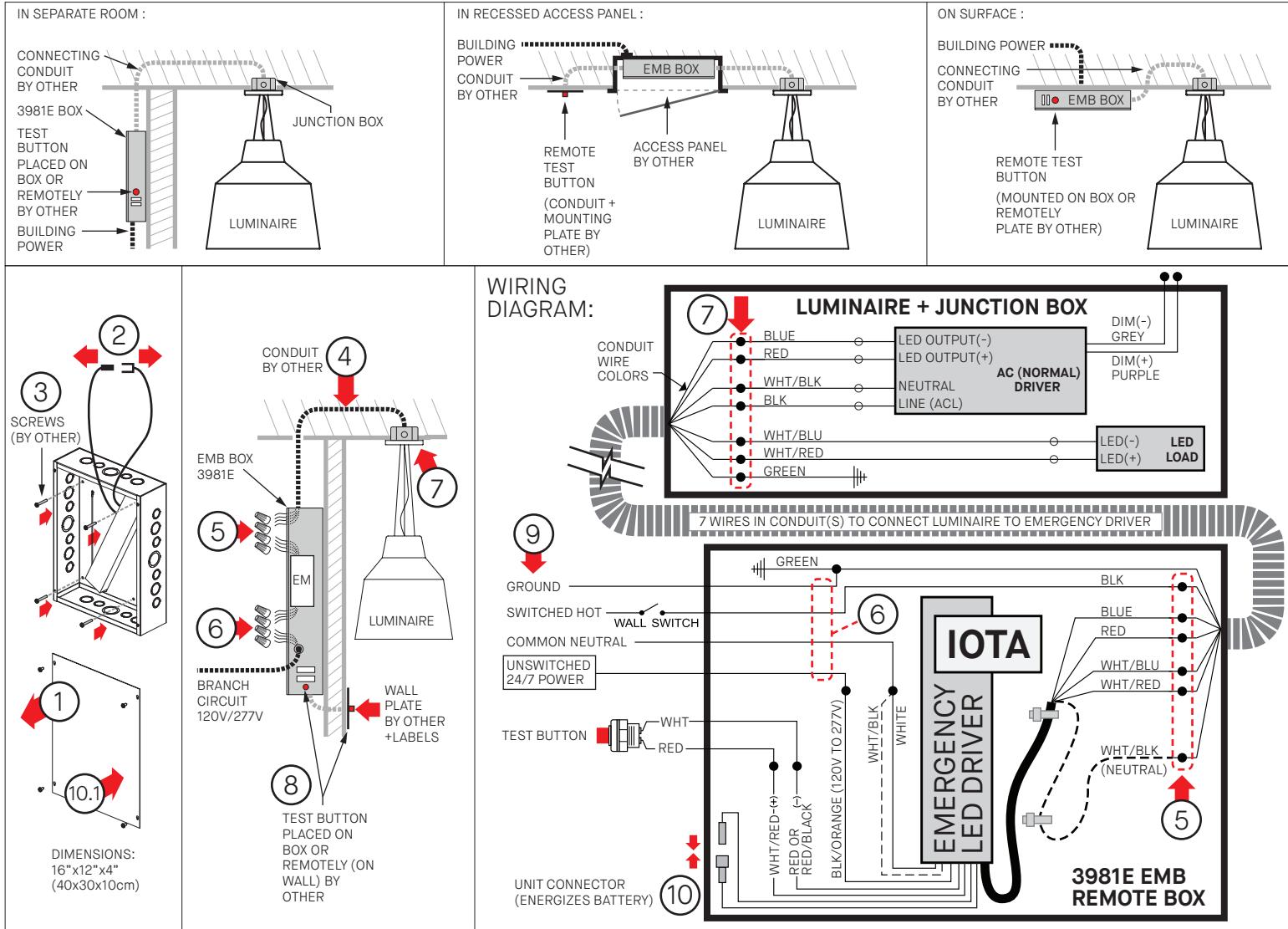
- > The 3981E box connects to a luminaire ordered with an EMB option (which has specific EM WIRING).
- > Consult our chart for maximum remote distance of EM battery to luminaire leds.
- > Establish desired location for EMB box & EM test button on box or on a wall.

EM Remote Distance Chart

Maximum distance EM battery to Luminaire LEDs (Ft)

MAX EM BOX DISTANCE (Ft)	CONDUIT WIRE GAUGE (AWG)						
	10	12	14	16	18	20	22
200mA	1043'	651'	413'	259'	163'	103'	65'
LUMINAIRE	350mA	596'	372'	236'	148'	93'	59'
DRIVER	500mA	417'	261'	165'	104'	65'	41'
OUTPUT	700mA	298'	186'	118'	74'	47'	29'
CURRENT*	1000mA	209'	130'	83'	52'	33'	21'
(Amps)	1400mA	149'	93'	59'	37'	23'	15'
*Contact	2000mA	104'	65'	41'	26'	16'	10'
Eureka	3000mA	70'	43'	28'	17'	11'	7'
							4'

EMB PLACEMENT EXAMPLES :



INSTALLATION

- 1 - REMOVE BOX COVER.
- 2 - IF CONNECTED, DISCONNECT THE EM BATTERY 'UNIT CONNECTOR' (WHITE).
- 3 - SCREW BOX TO MOUNTING SURFACE (SCREWS NOT SUPPLIED)
- 4 - RUN CONDUIT FROM EMB BOX TO ELECTRICAL JUNCTION BOX OF LUMINAIRE. CONDUIT MUST HAVE MIN. 7 WIRES AND WIRE GAUGE AS PER DISTANCE CHART.
- 5 - CONNECT CONDUIT WIRES TO EM BATTERY AS PER WIRING DIAGRAM.
- *CAREFULLY NOTE* WHICH WIRE COLORS ARE CONNECTED TOGETHER ON EACH END.
- 6 - CONNECT BATTERY TO AC BRANCH CIRCUIT : GROUND, NEUTRAL, 24/7 UNSWITCHED LINE (HOT) AND SWITCHED LINE (ON SAME CIRCUIT AS LUMINAIRE ON/OFF CONTROL).
- 7 - INSTALL SPECIFIC EM LUMINAIRE, CONNECT WIRES TO CONDUIT USING THE SAME CORRESPONDING COLORS NOTED AT THE EM BATTERY-CONDUIT CONNECTION.
- 8 - INSTALL EM BATTERY TEST BUTTON IN DESIRED LOCATION. WALL PLATE BY OTHER. ADD LABELS "PUSH TO TEST" & CHARGING INDICATOR LIGHT".

- 9 - SWITCH ON AC POWER.
- 10 - JOIN THE EM BATTERY CONVERTOR CONNECTOR.
- 10.1 - INSTALL BOX COVER.
- 11 - IF EMB IS FAR FROM THE LUMINAIRE, IDENTIFY TO WHICH LUMINAIRE IT IS CONNECTED.

AT THIS POINT POWER SHOULD BE CONNECTED TO BOTH THE AC DRIVER AND THE EMERGENCY DRIVER & TEST/CHARGE LIGHT SHOULD ILLUMINATE, INDICATING BATTERY IS CHARGING.

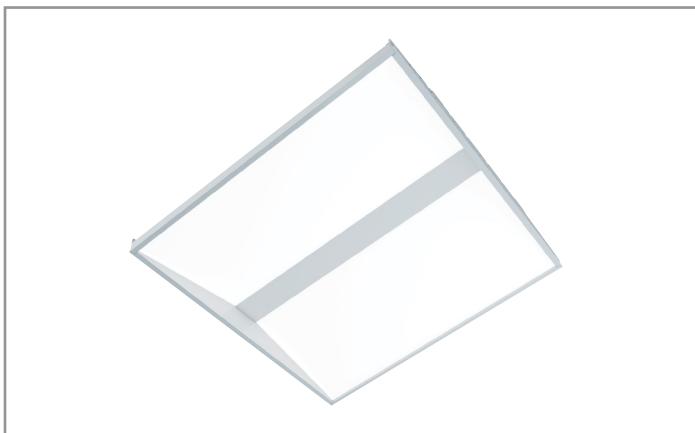
TESTING & EM DRIVER/BATTERY MAINTENANCE:
CONDUCT A SHORT-TERM DISCHARGE TEST AFTER THE EMERGENCY DRIVER HAS BEEN CHARGED FOR MINIMUM ONE HOUR. CHARGE FOR 24 HOURS BEFORE CONDUCTING A LONG-TERM DISCHARGE TEST.

FOLLOW GUIDELINES FROM THE EM DRIVER/BATTERY MANUFACTURER INSTRUCTIONS FOR THE REQUIRED PERIODIC TESTING AND MAINTENANCE GUIDELINES.



EUREKA

Project		Catalog #			Luminaire Type AN1
Prepared by		Notes			Date



Metalux Encounter 22EN LED

2' x 2' Troffer LED Module
Specification Grade Troffer

Typical Applications

- Commercial Office Spaces • Schools • Hospitals • Retail
- Other Indoor Ambient Applications

Interactive Menu

- Order Information [page 2](#)
- Photometric Data [page 3](#)
- Control Solutions [page 4](#)
- Connected Systems [page 4](#)
- Product Warranty

Top Product Features

- Available in 1' x 2', 1' x 4', 2' x 2' and 2' x 4' recessed versions
- Leverages our patented WaveStream Technology with AccuAim™ optics
- Four CCT options: 3000K, 3500K, 4000K, and 5000K at 80CRI or 90 CRI
- White tuning solutions available, either 3000K - 5000K or 2700K - 6500K
- Efficacy up to 143 lumens per watt
- Options to meet Buy American and other domestic preference requirements

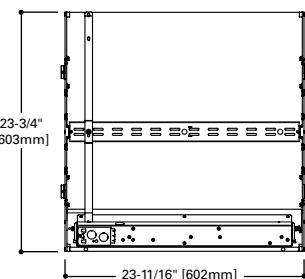
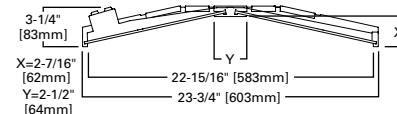
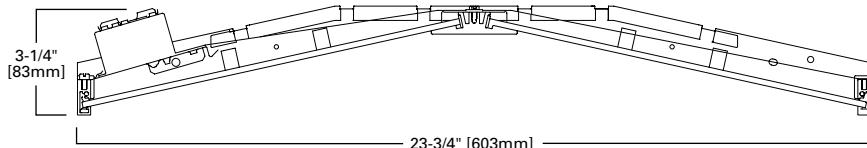
Product Certification



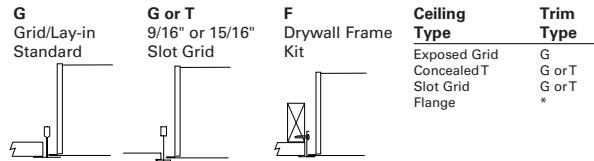
Product Features



Dimensional and Mounting Details



Ceiling Compatibility



Notes:

*See Drywall Frame Kit Accessory in Ordering Information section.

**Fixture construction is suitable for use in Air-handling and plenum rated spaces in accordance with Section 300.22 (C) of the National Electrical Code, Section 4.3.11.2.6.5 of NFPA 90A and Section 602.2.1.4 of ICC.

Order Information

SAMPLE ORDER NUMBER: 22EN-LD2-34-UNV-L835-CD1-SVPPD1-U

Domestic Preferences	Rating	Series	Air	Lamp Type	Lumen Outputs	Voltage
Domestic Preferences ⁽²¹⁾	Rating	Series ⁽²⁾	Air	Lamp Type	Lumen Outputs	Voltage ⁽⁸⁾
[Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act	[Blank]=Standard ATW-SW4= Chicago Rated ⁽¹⁾	22EN=2' x 2' Encounter Series	[Blank]=Standard A=Air (Vented) ⁽³⁾	LD2=LED 2.0	Stock 25=2500 Lumens ^{(4), (5), (6)} 34=3400 Lumens ^{(4), (5)} MTQ 19=1900 Lumens ^{(4), (5), (6), (7)} 30=3000 Lumens ^{(4), (5)} 39=3900 Lumens 43=4300 Lumens	UNV=Universal Voltage 120-277 347V=347 Volt ⁽⁹⁾ 48V=48 Volt Low-voltage (Class 2) ^(C) 120V=120 Volt ⁽¹⁰⁾ 277V=277 Volt ⁽¹⁰⁾
Notes (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	Notes (1) Chicago rated version does not allow for row mounting.	Notes (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.	Notes (3) Air version is vented but does not meet air handling requirements.		Notes (4) 1900, 2500, 3000 and 3400 lumen option are not available with a Fifth Light DALI (SLTD) driver. (5) Step-dim driver not available with 1900, 2500, 3000 and 3400 lumen option. (6) Not compatible with WN driver. (7) White tuning not available with 1900 lumen option.	Notes (8) Products also available in non-US voltages and frequencies for international markets. (9) 347V emergency option not available. (10) Must specify voltage as 120V or 277V when ordering GTR2 option. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility.

Emergency Options	CCT	Flex	Driver Type
Emergency Options	CCT	Flex	Driver Type
EL7W =7-watt 120V-277V emergency battery pack ⁽¹¹⁾ EL10W =10-watt 120V-277V emergency battery pack ⁽¹¹⁾ EL14W =14-watt 120V-277V emergency battery pack ⁽¹¹⁾ EL10WSD =10W emergency battery pack with self-diagnostic installed ^{(11), (23)} EL14WSD =14W emergency battery pack with self-diagnostic installed ^{(11), (23)} ELV7W =Low-voltage system, 7-watt emergency battery pack ^(C) ELV14W =Low-voltage system, 14-watt emergency battery pack ^(C) GTR2 =Bodine Generator Transfer Relay ^{(12), (13)} ETRD =Emergency Transfer Relay with dimming control ⁽¹²⁾	L830 =3000K L835 =3500K L840 =4000K L850 =5000K L930 =3000K L935 =3500K L940 =4000K L950 =5000K L83050 =80CRI 3000K-5000K White Tuning ⁽¹⁴⁾ L93050 =90CRI 3000K-5000K White Tuning ⁽¹⁴⁾ L82765 =80CRI 2700K-6500K White Tuning ⁽¹⁴⁾ L92765 =90CRI 2700K-6500K White Tuning ⁽¹⁴⁾	A3/8-4/18GDIM =3/8" Flex with 0-10V Dimming Leads Multiple other configurations available. See below for details. A3/8-5/18GDIM =Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.	CD =0-10V Driver (1%-100% Dimming) SLTD =DALI Driver (5%-100% Dimming) ⁽¹⁵⁾ SLTHD =DALI Driver (1%-100% Dimming) LV =Low-voltage System Driver (0%-100% Dimming) ^(C) SD =Step Dimming Driver (50% or 100% Dimming) ⁽¹⁶⁾ LH =Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming ^(F) W2A =White Tuning, 2ch, Intensity and CCT Control ⁽¹⁷⁾ SR =Sensor-ready Driver (1%-100% Dimming)
Notes (11) Factory installed with integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens). IES-formatted photometry for luminaire under emergency operation available. Battery option increases total height by 1 inch. (12) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 option includes 2 relays on fixtures with dimming drivers. ETRD option only requires one relay when used on a dimming fixture. (13) Must specify voltage as 120V or 277V when ordering GTR2 option. (23) EL10WSD and EL14WSD not available with 347V. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility.	Notes (14) White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity.	Flexible Metal Conduit Options Flex options available for 0-10V dimming control, DALI dimming control, emergency and night light functions. 72-inch factory-installed and pre-wired to driver, fitted to luminaire housing access plate with 90° enclosed FMC connector. Not all options may be combined and installation ratings vary by type. A3/8-4/18GDIM series notes: Factory installed dimming option 3/8" flexible metal conduit with 2#18 power and ground wires and 2#18 UL-listed jacketed 0-10V +/- control wires. Meets UL 66, 83, 1479, 1569, 1581, 2556, NEC0 250.118, 300.22(C), 392, 396, 330, 501, 502, 503, 530, 504, 505, 518, 520, 530, 645, 72; Federal Specification A-A-59544 (formerly J-1309); all applicable OSHA and HUD Requirements. UL Classified 1-, 2-, and 3-hour through penetration with applicable fire stop product (not included). May be surface mounted, fished and/or embedded in plaster. Cable tray and approved raceway rated, install per NEC®, Environmental Air-Handling Space Installation per NEC® 300.22(C).	Notes (15) 1900, 2500, 3000 and 3400 lumen options not available with DALI (SLTD) driver. (16) Step-dim (SD) driver not available with 1900, 2500, 3000 and 3400 lumen option. (17) White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. (F) Consult Marketplace Options - Lutron system pages for additional details and compatibility. Compatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at www.lutron.com .

Number of Drivers	Integrated Sensing Systems	Packaging	Accessories
Number of Drivers	Integrated Sensing Systems	Packaging	Accessories (order separately) ⁽²²⁾
1=1 Driver	[Blank]=No Sensor WAA =WaveLinx Wireless Integrated Sensor ^{(18), (A)} WAB =WaveLinx Lite Wireless Integrated Sensor ^{(19), (B)} WLA =Low-voltage Integrated Sensor ^{(20), (C)} SVPPD1 =0-10V Stand-alone Integrated Sensor ^{(19), (D)}	U =Unit Pack PALC =Job Pack, in carton	T3A END E.O. BRACKET PARTS BAG (Standard with fixture) DF-22W-U =2' x 2' Drywall Frame Kit SK-22-WS =2' x 2' Shallow Surface Mount Kit SK-22-WT =2' x 2' Tall Surface Mount Kit ISHH-01 =Programming Remote for Integrated Sensor ^(D) ISHH-02 =Personal Control Remote for Integrated Sensor ^(D)
	Notes (18) WAA sensor to be used with CD or W2A driver. (19) WAB and SVPPD1 sensor to be used with CD driver. (20) WLA sensor to be used with LV driver. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (A) Consult WaveLinx system pages for additional details and compatibility. (B) WaveLinx Lite devices are not currently compatible with the WaveLinx Wireless Area Controller. Consult WaveLinx Lite system pages for additional details and compatibility. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. (D) Consult SVPPD series system pages for additional details and compatibility.		Notes (22) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (D) For use with SVPPD sensor only. Consult SVPPD series system pages for additional details and compatibility.

Product Specifications

Construction

- Shallow 3-1/16" deep housing extruded aluminum frame
- Injected molded composite end plates
- End plates screws for strength, rigidity and gap eliminations
- End plates accessory grid-lock feature adds safety
- Four auxiliary fixture end suspension points
- Large access plate for supply connection

Controls

- 0-10V dimming to 1% standard
- WaveLinx wireless sensor compatible for standalone, controlled, connected, and IoT capability
- SVPD sensor compatible for standalone functionality
- Low-voltage sensor and driver compatible for WaveLinx Low-Voltage and DLVP applications
- DALI 2.0, Lutron, and step-dimming available

Electrical

- LED's available in 3000K, 3500K, or 4000K at 80 CRI or 90 CRI minimum
- Color accuracy ≤ 3 -Step MacAdam ellipse (SDCM)
- TM21 life at 60,000 hours up to L92 and calculated L70 exceeds 288,000 hrs
- Drivers available in 120-277V and 347V
- Tunable white options available with Cooper Lighting's Vividtune

Emergency Battery Pack Options

- 120V-277V integral emergency battery pack comes in 7-watts, 10-watt, or 14-watts
- Self-diagnostic emergency battery available in 10 or 14-watts (NFPA 101® Life Safety Code®)
- Constant power to the LED system for controlled, predictable discharge
- Integrated test switch/indicator light visible from floor
- Min. 90-minute backup period for code compliance
- Integral emergency transfer relay available for generator equipped power systems

Finish

- High reflectance baked matte white enamel finish

Optics

- Precision formed optical assembly
- Positively retained high optical grade acrylic lenses
- WaveStream technology provides a visually comfortable fully luminous surface

Compliance

- Components are UL recognized
- cULus Damp Location listed for 25C ambient indoor environments
- Complies with IESNA LM-79 and LM-80 standards
- DesignLights Consortium® Qualified and classified for DLC Standard and DLC Premium (refer to www.designlights.org)

Warranty

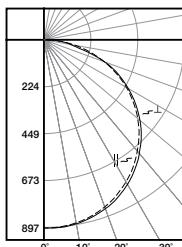
- Five year warranty standard. Optional ten year warranty available

Driver Access

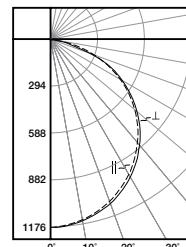
- Drivers can be accessed via plenum

Photometric Data

 [View IES files](#)



22EN-LD2-25-UNV-L835-CD1-U
 Electronic Driver
 Linear LED 3500K
 Spacing criterion: (II) 1.27 x mounting height,
 (L) 1.29 x mounting height
 Lumens: 2648
 Input Watts: 20W
 Efficacy: 132.4 lm/W
 Test Report: 22EN-LD2-25-UNV-L835-CD1-U.IES



22EN-LD2-34-UNV-L835-CD1-U
 Electronic Driver
 Linear LED 3500K
 Spacing criterion: (II) 1.27 x mounting height,
 (L) 1.29 x mounting height
 Lumens: 3471
 Input Watts: 28.5W
 Efficacy: 121.8 lm/W
 Test Report: 22EN-LD2-34-UNV-L835-CD1-U.IES

Energy and Performance Data

Stock or MTO	Catalog Logic	Delivered Lumens	Watts	Efficacy (LPW)
MTO	22EN-LD2-19-UNV-L835-CD1-U	2091	16.5	127
STOCK	22EN-LD2-25-UNV-L835-CD1-U	2648	20	132
STOCK	22EN-LD2-25-UNV-L840-CD1-U	2701	20	135
MTO	22EN-LD2-30-UNV-L835-CD1-U	3078	24.9	124
STOCK	22EN-LD2-34-UNV-L835-CD1-U	3471	28.5	122
STOCK	22EN-LD2-34-UNV-L840-CD1-U	3540	28.5	124
MTO	22EN-LD2-39-UNV-L835-CD1-U	3979	33.3	119
MTO	22EN-LD2-43-UNV-L835-CD1-U	4478	38.3	117

Shipping Data

Catalog No.	Weight (lbs)	Units per Pallet 49" L x 52" W x 55" H
22EN-LD2	14	40

Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours) ⁽¹⁾	Theoretical L70 (Hours) ⁽²⁾
25°C	> 92%	> 288,000

Notes: (1) Supported by IES TM-21 standards. (2) Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

Lumen Calculator

CCT Multiplier	80 CRI	90 CRI
3000K	0.970	0.835
3500K	1.000	0.864
4000K	1.020	0.901
5000K	1.110	0.955

Example of Lumen Adjustment Calculation

22EN-LD2-25-UNV-L835-CD1-U

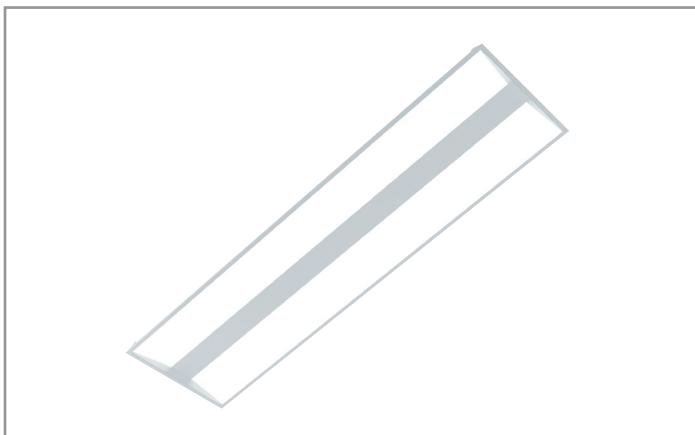
at 90CRI at 3500K

Lumen Adjustment Factor = 0.864

Total Light Output = 2,648 lm x 0.864 = 2,287 lm

Efficacy = $\frac{2,287 \text{ lm}}{20 \text{ W}} = 114.3 \text{ lm/W}$

Project		Catalog #	Luminaire Type AN2
Prepared by		Notes	Date



Metalux Encounter 14EN LED

1' x 4' Troffer LED Module Specification Grade Troffer

Typical Applications

- Commercial Office Spaces • Schools • Hospitals • Retail
- Other Indoor Ambient Applications

Interactive Menu

- Order Information page 2
- Photometric Data page 3
- Control Solutions page 4
- Connected Systems page 4
- Product Warranty

Top Product Features

- Available in 1' x 2', 1' x 4', 2' x 2' and 2' x 4' recessed versions
- Leverages our patented WaveStream Technology with AccuAim™ optics
- Four CCT options: 3000K, 3500K, 4000K, and 5000K at 80CRI or 90 CRI
- White tuning solutions available, either 3000K - 5000K or 2700K - 6500K
- Efficacy up to 143 lumens per watt
- Options to meet Buy American and other domestic preference requirements

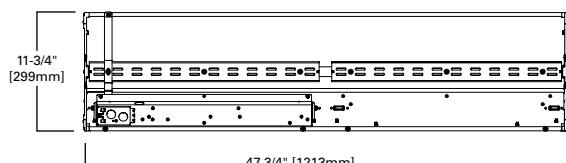
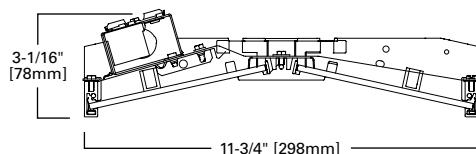
Product Certification



Product Features



Dimensional and Mounting Details



Ceiling Compatibility

G	G or T	F	Ceiling Type	Trim Type
Grid/Lay-in Standard	9/16" or 15/16" Slot Grid	Drywall Frame Kit	Exposed Grid	G
			Concealed T	G or T
			Slot Grid	G or T
			Flange	*

Notes:

*See Drywall Frame Kit Accessory in Ordering Information section.

**Fixture construction is suitable for use in Air-handling and plenum rated spaces in accordance with Section 300.22 (C) of the National Electrical Code, Section 4.3.11.2.6.5 of NFPA 90A and Section 602.1.4 of ICC.

Order Information

SAMPLE ORDER NUMBER: 14EN-LD2-33-UNV-L835-CD1-SVPD1-U

Domestic Preferences		Rating	Series	Air	Lamp Type	MTO Lumen Output	Emergency Options
Domestic Preferences ⁽¹⁹⁾	Rating	Series ⁽²⁾	Air	Lamp Type	MTO Lumen Output	Voltage ⁽⁶⁾	Emergency Options
[Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act	[Blank]=Standard ATW-SW4= Chicago Rated ⁽¹⁾	14EN=1' x 4' Encounter Series	[Blank]=Standard A=Air (Vented) ^{(3), (4)}	LD2=LED 2.0	18=1800 Lumens ⁽⁵⁾ 25=2500 Lumens ⁽⁵⁾ 28=2800 Lumens 33=3300 Lumens 38=3800 Lumens 43=4300 Lumens 47=4700 Lumens 51=5100 Lumens	UNV=Universal Voltage 120-277 347V=347 Volt ⁽⁷⁾ 48V=48 Volt Low- voltage (Class 2) ^(C) 120V=120 Volt ⁽⁸⁾ 277V=277 Volt ⁽⁸⁾	EL7W=7-watt 120V-277V emergency battery pack ⁽⁹⁾ EL10W=10-watt 120V-277V emergency battery pack ⁽⁹⁾ EL14W=14-watt 120V-277V emergency battery pack ⁽⁹⁾ EL10WSD=10W emergency battery pack with self-diagnostic installed ^{(9), (21)} EL14WSD=14W emergency battery pack with self-diagnostic installed ^{(9), (21)} ELV7W= Low-voltage system, 7-watt emergency battery pack ^(C) ELV14W= Low-voltage system, 14-watt emergency battery pack ^(C) GTR2=Bedine Generator Transfer Relay ^{(10), (11)} ETRD=Emergency Transfer Relay with dimming control ⁽¹⁰⁾
Notes (1) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	Notes (1) Chicago rated version does not allow for row mounting.	Notes (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.	Notes (3) Air version is vented but does not meet air handling requirements. (4) Integrated sensor options not available with Air version.		Notes (5) Not compatible with WN driver.	Notes (6) Products also available in non-US voltages and frequencies for international markets. (7) 347V emergency option not available. (8) Must specify voltage as 120V or 277V when ordering GTR2 option. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility.	Notes (9) Factory installed with integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7-700 lumens). IES-format photometry for luminaire under emergency operation available. Battery option increases total height by 1 inch. (10) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). GTR2 option includes 2 relays on fixtures with dimming drivers. ET RD option only requires one relay when used on a dimming fixture. (11) Must specify voltage as 120V or 277V when ordering GTR2 option. (21) EL10WSD and EL14WSD not available with 347V. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility.

CCT	Flex	Driver Type	Number of Drivers
CCT	Flex	Driver Type	Number of Drivers
L830=3000K L835=3500K L840=4000K L850=5000K L930=3000K L935=3500K L940=4000K L950=5000K L83050=80CRI 3000K-5000K White Tuning ⁽¹²⁾ L93050=90CRI 3000K-5000K White Tuning ⁽¹²⁾ L82765=80CRI 2700K-6500K White Tuning ⁽¹²⁾ L92765=90CRI 2700K-6500K White Tuning ⁽¹²⁾	A3/8-4/18GDIM=3/8" Flex with 0-10V Dimming Leads Multiple other configurations available. See below for details. A3/8-5/18GDIM=Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.	CD=0-10V Driver (1%-100% Dimming) 5LTD=DALI Driver (5%-100% Dimming) 5LTHD=DALI Driver (1%-100% Dimming) LV=Low-voltage System Driver (0%-100% Dimming) ^(C) SD=Step Dimming Driver (50% or 100% Dimming) LH=Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming ^(F) W2A=White Tuning, 2ch, Intensity and CCT Control ⁽¹⁴⁾ SR=Sensor-ready Driver (1%-100% Dimming)	1=1 Driver
Notes (12) White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity.	Flexible Metal Conduit Options Flex options available for 0-10V dimming control, DALI dimming control, emergency and night light functions. 72-inch factory-installed and pre-wired to driver, fitted to luminaire housing access plate with 90° enclosed FMC connector. Not all options may be combined and installation ratings vary by type. A3/8-4/18GDIM series notes: Factory installed dimming option 3/8" flexible metal conduit with 2#18 power and ground wires and 2#18 UL-listed jacketed 0-10V +/- control wires. Meets UL 66, 83, 1479, 1569, 1581, 2556, NEC® 250.118, 300.22(C), 392, 396, 330, 501, 502, 503, 530, 504, 505, 518, 520, 530, 645, 72; Federal Specification A-A-5954A (formerly J-C-308); all applicable OSHA and HUD Requirements. UL Classified 1-, 2-, and 3-hour through penetration with applicable fire stop product (not included). May be surface mounted, fished and/or embedded in plaster. Cable tray and approved raceway rated, install per NEC®; Environmental Air-Handling Space Installation per NEC® 300.22(C).	Notes (13) 1800, 2500, 2800 and 3300 lumen packages not available with Step-Dim (SD) and DALI (5LTD) driver option. (14) White tuning provides correlated color temperatures (CCT) between 3000K (warm) to 5000K (cool) or 2700K (warm) to 6500K (cool). Must be used in conjunction with W2A driver only. Must be used with two (2) 10V dimming control channels, 1 color, 1 intensity. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. (F) Consult Marketplace Options - Lutron system pages for additional details and compatibility. Compatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at www.lutron.com .	

Integrated Sensing Systems	Packaging	Accessories
Integrated Sensing Systems ⁽¹⁵⁾	Packaging	Accessories (order separately) ⁽²⁰⁾
[Blank]=No Sensor WAA=WaveLinx Wireless Integrated Sensor ^{(16), (A)} WAB=WaveLinx Lite Wireless Integrated Sensor ^{(17), (B)} WLA=Low-voltage Integrated Sensor ^{(18), (C)} SVPD1=0-10V Stand-alone Integrated Sensor ^{(17), (D)}	U=Unit Pack PALC=Job Pack, in carton	T3A END E.Q. BRACKET PARTS BAG (Standard with fixture) DF-14W-U=1' x 4' Drywall Frame Kit SK-14-WT=1' x 4' Tall Surface Mount Kit ISHH-01=Programming Remote for Integrated Sensor ^(D) ISHH-02=Personal Control Remote for Integrated Sensor ^(D)
Notes (15) Integrated sensor options not available with Air version. (16) WAA sensor to be used with CD or W2A driver. (17) WAB and SVPD1 sensor to be used with CD driver. (18) WLA sensor to be used with LV driver. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (A) Consult WaveLinx system pages for additional details and compatibility. (B) WaveLinx Lite devices are not currently compatible with the WaveLinx Wireless Area Controller. Consult WaveLinx Lite system pages for additional details and compatibility. (C) Consult WaveLinx Low-Voltage or DLVP system pages for additional details and compatibility. (D) Consult SVPD series system pages for additional details and compatibility.		Notes (20) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (D) For use with SVPD sensor only. Consult SVPD series system pages for additional details and compatibility.

Product Specifications

Construction

- Shallow 3-1/16" deep housing extruded aluminum frame
- Injected molded composite end plates
- End plates screws for strength, rigidity and gap eliminations
- End plates accessory grid-lock feature adds safety
- Four auxiliary fixture end suspension points
- Large access plate for supply connection

Controls

- 0-10V dimming to 1% standard
- WaveLinx wireless sensor compatible for standalone, controlled, connected, and IoT capability
- SVPD sensor compatible for standalone functionality
- Low-voltage sensor and driver compatible for WaveLinx Low-Voltage and DLVP applications
- DALI 2.0, Lutron, and step-dimming available

Electrical

- LED's available in 3000K, 3500K, or 4000K at 80 CRI or 90 CRI minimum
- Color accuracy ≤ 3 -Step MacAdam ellipse (SDCM)
- TM21 life at 60,000 hours up to L92 and calculated L70 exceeds 288,000 hrs
- Drivers available in 120-277V and 347V
- Tunable white options available with Cooper Lighting's Vividtune

Emergency Battery Pack Options

- 120V-277V integral emergency battery pack comes in 7-watts, 10-watt, or 14-watts
- Self-diagnostic emergency battery available in 10 or 14-watts (NFPA 101® Life Safety Code®)
- Constant power to the LED system for controlled, predictable discharge
- Integrated test switch/indicator light visible from floor
- Min. 90-minute backup period for code compliance
- Integral emergency transfer relay available for generator equipped power systems

Finish

- High reflectance baked matte white enamel finish

Optics

- Precision formed optical assembly
- Positively retained high optical grade acrylic lenses
- WaveStream technology provides a visually comfortable fully luminous surface

Compliance

- Components are UL recognized
- cULus Damp Location listed for 25C ambient indoor environments
- Complies with IESNA LM-79 and LM-80 standards
- DesignLights Consortium® Qualified and classified for DLC Standard and DLC Premium (refer to www.designlights.org)

Warranty

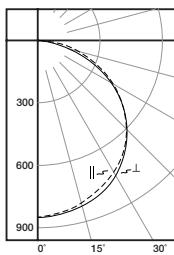
- Five year warranty standard. Optional ten year warranty available

Driver Access

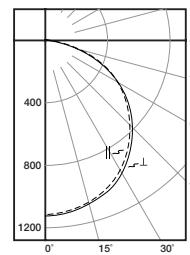
- Drivers can be accessed via plenum

Photometric Data

 View IES files



14EN-LD2-25-UNV-L835-CD1-U
 Electronic Driver
 Linear LED 3500K
 Spacing criterion: (II) 1.3 x mounting height,
 (L) 1.3 x mounting height
 Lumens: 2507
 Input Watts: 20.9W
 Efficacy: 120.0 lm/W
 Test Report: 14EN-LD2-25-UNV-L835-CD1-U.IES



14EN-LD2-33-UNV-L835-CD1-U
 Electronic Driver
 Linear LED 3500K
 Spacing criterion: (II) 1.3 x mounting height,
 (L) 1.3 x mounting height
 Lumens: 3329
 Input Watts: 28.1W
 Efficacy: 118.5 lm/W
 Test Report: 14EN-LD2-33-UNV-L835-CD1-U.IES

Energy and Performance Data

Stock or MTO	Catalog Logic	Delivered Lumens	Watts	Efficacy (LPW)
MTO	14EN-LD2-18-UNV-L835-CD1-U	1856	16.0	116
MTO	14EN-LD2-25-UNV-L835-CD1-U	2507	20.9	120
MTO	14EN-LD2-28-UNV-L835-CD1-U	2813	23.6	119
MTO	14EN-LD2-33-UNV-L835-CD1-U	3329	28.1	118
MTO	14EN-LD2-38-UNV-L835-CD1-U	3838	32.8	117
MTO	14EN-LD2-43-UNV-L835-CD1-U	4335	37.6	115
MTO	14EN-LD2-47-UNV-L835-CD1-U	4728	41.5	114
MTO	14EN-LD2-51-UNV-L835-CD1-U	5117	44.7	114

Shipping Data

Catalog No.	Weight (lbs)	Units per Pallet
14EN-LD2-33	15	27

Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours) ⁽¹⁾	Theoretical L70 (Hours) ⁽²⁾
25°C	> 92%	> 448,000

Notes: (1) Supported by IES TM-21 standards. (2) Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

Lumen Calculator

CCT Multiplier	80 CRI	90 CRI
3000K	0.970	0.835
3500K	1.000	0.864
4000K	1.020	0.901
5000K	1.110	0.955

Example of Lumen Adjustment Calculation

14EN-LD2-25-UNV-L835-CD1-U
 at 90CRI at 3500K

Lumen Adjustment Factor = 0.864

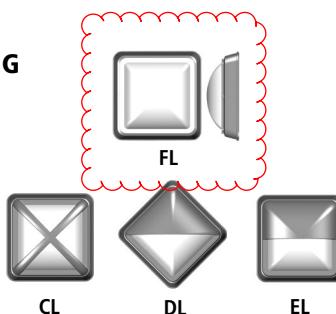
Total Light Output = 2,507 lm x 0.864 = 2,166 lm

Efficacy = $\frac{2,166 \text{ lm}}{20.9 \text{ W}} = 103.6 \text{ lm/W}$

MILLENIUM™ SQUARE MS15 SERIES – LOW PROFILE HOUSING

PRODUCT FEATURES:

- » Surface mount – ceiling (FL & CL only) or wall mount;
- 16"Wx16"Wx6"D (CL, EL, FL)
- 21"Wx21"Wx6"D (DL)
- » Peace of Mind Guarantee®
- » Dust and water protected to IP64 standards



SPECIFICATIONS

BASEPLATE: Marine grade die-cast aluminum. Integral heat sinks. Baseplate flange interlocks and wraps around lens base producing maximum moisture deflection and resistance to prying. Baseplate provided with four-point mounting holes and one wireway hole. Standard matte black, dark bronze or matte white exterior TGIC polyester powder coat – 5-step pre-treatment. See Ordering Information for optional finishes.

REFLECTOR: Full reflector/wire cover – 92% reflectivity.

LENS: UV-stabilized, high impact resistant, virgin injection molded polycarbonate. High efficiency blondel fluted lens maximizes uniformity. Lens secured with four concealed captive Torx® with center pin fasteners. Exclusive water channeling lens design provides 360° ingress protection.

LENS BASE/EYELID/GRILLE: High impact resistant, injection molded matte black, dark bronze or matte white polycarbonate. Optional Light Gray, Silver, Forest Green or Custom Color (see Ordering Information below) are chemically bonded, impact resistant finishes.

GASKETING: Die-cut, closed cell EPDM self adhesive gasket seals baseplate to mounting surface. Closed cell, silicone "O" ring gaskets positioned and friction secured in gasket channels of lens base, baseplate and optional surface adapter.

HARDWARE: Four stainless steel Torx® with center pin fasteners.

ELECTRICAL: Available in 3500K, 4000K, and 5000K color temperatures, 80 CRI. 120-277VAC, 50/60Hz electrical input with high power factor electronic, constant-current driver (>.90 PF). Standard 0-10V dimming with 1-100% range; maximum driver source of 200 µA.

SENSOR & CONTROLS: Optional sensor available with compatible third party controls. To see the full list of compatible controls, [click here](#).

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For additional photometric information, go to [www.kenall.com](#).

WARRANTY: Limited five (5) year LED warranty. [Peace of Mind Guarantee against breakage](#).

LISTINGS: Luminaire is certified to UL Standards by either Underwriters Laboratory or Intertek Testing Laboratory for Wet Location. (listing includes Emergency Battery Pack "LEL" option). UL certified IP64 per IEC 60598.



ORDERING INFORMATION (Ex: MS15CL-PP-MB-25L40K-DV)

Model	Lens Type	Finish	Lamp Type	Voltage	Options	Accessories
	PP					
Model			Lamp Type		Options	
MS15FL	Full Face		15L35K	15 Watt 3500K LED	LEL-SA	LED Emergency Battery Backup with Die-cast Surface Adapter (SA) - Non ADA (n/a with 347V)
MS15CL	Crossbar		15L40K	15 Watt 4000K LED	BPC-SA	Photo Control – Shielded Button Type with Die-cast Surface Adapter (SA) - Non ADA (120V or 277V only)
MS15DL	Diamond Eyelid		15L50K	15 Watt 5000K LED	FS	Single Fuse & Holder
MS15EL	Eyelid		25L35K	25 Watt 3500K LED	NAT	Natatorium Environment Option
Lens Type			25L40K	25 Watt 4000K LED		
PP	Pearlescent Polycarbonate		25L50K	25 Watt 5000K LED		
Finish			Voltage		Accessories	
DB	Dark Bronze		120	120 Volts	SA	Die-Cast Surface Adapter
FG	Forest Green		277	277 Volts	9500	Torx® Screwdriver
LG	Light Gray		347†	347 Volts		
MB	Matte Black		DV†	120-277 Volts		
MW	Matte White					
SL	Silver					
CC	Custom Color (Consult factory)					
					†	n/a with BPC



**Luminaire Type
BA1**

Catalog Number:

Approved by _____



www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA

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MS15_L-012622

MILLENIUM™ SQUARE

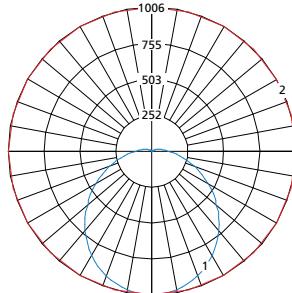
MS15 SERIES – LOW PROFILE HOUSING

PERFORMANCE

		Initial Delivered Lumens				
Model	Lamp Type	@ 25°C (lm)	Efficacy (lm/W)	Input Power (W)	Drive Current (mA)	Estd. L ₇₀ LED Life (hrs)
MS15FL	15L35K	2,222	113	20	75	130,000
	15L40K	2,222	113	20	75	130,000
	15L50K	2,422	124	20	75	130,000
	25L35K	3,258	111	30	63	130,000
	25L40K	3,258	111	30	63	130,000
	25L50K	3,551	121	30	63	130,000
MS15CL	15L35K	1,784	91	20	75	130,000
	15L40K	1,784	91	20	75	130,000
	15L50K	1,945	99	20	75	130,000
	25L35K	2,616	89	30	63	130,000
	25L40K	2,616	89	30	63	130,000
	25L50K	2,851	97	30	63	130,000
MS15DL	15L35K	1,823	95	20	75	130,000
	15L40K	1,823	95	20	75	130,000
	15L50K	1,988	104	20	75	130,000
	25L35K	2,674	91	30	63	130,000
	25L40K	2,674	91	30	63	130,000
	25L50K	2,914	99	30	63	130,000
MS15EL	15L35K	1,860	97	20	75	130,000
	15L40K	1,860	97	20	75	130,000
	15L50K	2,028	106	20	75	130,000
	25L35K	2,727	93	30	63	130,000
	25L40K	2,727	93	30	63	130,000
	25L50K	2,973	101	30	63	130,000

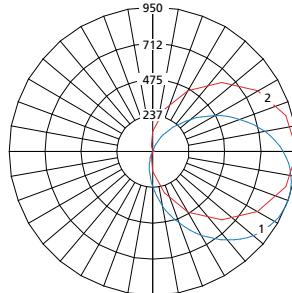
Info subject to change. Visit www.kenall.com for IES files and additional information.

Model: MS15FL-PP-MW-25L40K-DCC-DV



Max Candela = 1006 Located At Horizontal Angle = 0, Vertical Angle = 0
 1 - Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

Model: MS15EL-PP-MW-25L40K-DCC-DV



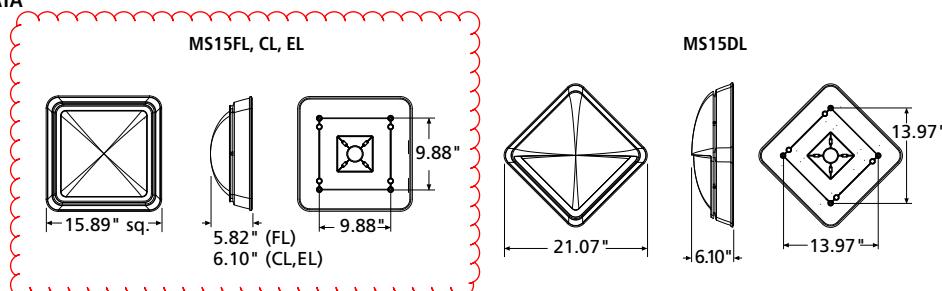
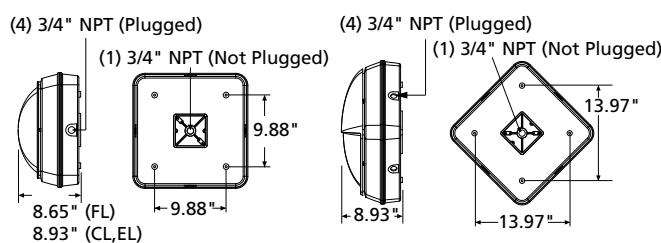
Max Candela = 950 Located At Horizontal Angle = 0, Vertical Angle = 65
 1 - Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)



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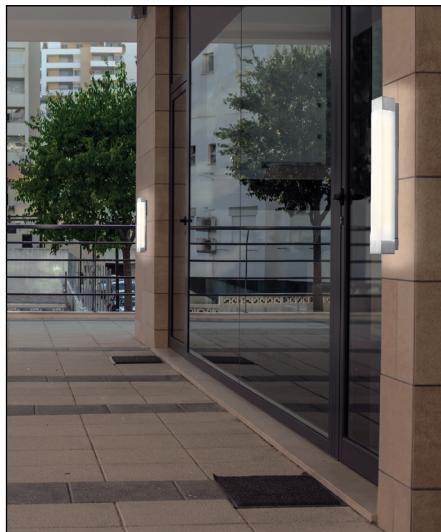
MILLENIUM™ SQUARE**MS15 SERIES – LOW PROFILE HOUSING****DIMENSIONAL DATA****SURFACE ADAPTER SIDE & BACK VIEW****MS15FL, CL, EL****MS15DL**

0W5524 SHINE™

18" Outdoor

 VISA LIGHTINGVisalighting.com/products/ShineType: Project:

Loca

**Luminaire Type
BB1****DIMENSIONS**

Depth is measured from wall to front of fixture

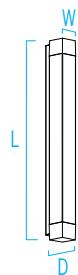
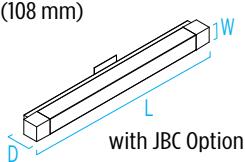
W = Width L = Length D = Depth

L 19" (483 mm)

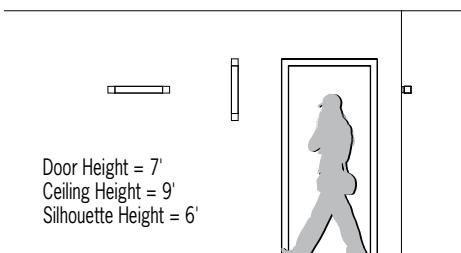
W 3" (76 mm)

D 4" (102 mm)

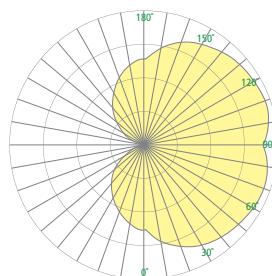
D with JBC option 4-1/4" (108 mm)

**FEATURES**

- Integral high power factor electronic driver
- Modular design for replacement of LED source and driver
- IP55 rated
- Vertical or horizontal mounting
- Surface mount to 2x4 junction box. Optional junction box cover (JBC option) available for 4" junction box
- Tamper resistant fasteners
- Cast and extruded aluminum construction
- Frosted 1/8" high impact grade acrylic
- No VOC powder coat paint finish
- ETL listed for wet location

RELATIVE SCALE DRAWING

Door Height = 7'
Ceiling Height = 9'
Silhouette Height = 6'

PHOTOMETRICS

XPS



ADA Compliant



ETL Listed



5 Year Warranty

OW5524 SHINE (cont.)

18" Outdoor



Fill in shaded boxes using information listed below

OW5524		-	MVOLT		
MODEL	SOURCE ¹		VOLTAGE MVOLT	FINISH	OPTION(S) ²

SOURCE¹ (Select one)
Dimmable 0-10V to 1%, Minimum 80CRI, within 3-step MacAdam

VOLTAGE
MVOLT 120-277V, 50/60 Hz

FINISH
See last page for finish order codes

OPTION(S)²
JBC
XPS

SOURCE¹ (Select one)

Dimmable 0-10V to 1%, Minimum 80CRI, within 3-step MacAdam

SOURCE	CCT	Delivered Lumens	Power (Watts)
• L30K	3000K	1000	11
L35K	3500K	1000	11
• L40K	4000K	1000	11

OPTIONS² (Multiple Selections Allowed)

⚠ Option availability may be interdependent with Other Options

JBC	Junction box cover (4-1/2" square) for use with an existion 4" octagonal junction box. Painted to match finish
XPS	Express 10 day shipping. Items marked with a bullet (•) are not available with XPS

OW5524 SHINE (cont.)

18" Outdoor



SHINE PRODUCT FAMILY

- CB5513 – 28" Indoor
- CB5515 – 43" Indoor
- CB5517 – 53" Indoor
- CB5524 – 19" Indoor
- OW5513 – 28" Outdoor
- OW5515 – 43" Outdoor
- OW5517 – 53" Outdoor
- OW5524 – 19" Outdoor

SUGGESTED VARIATIONS

- 2700K
- Custom colors

See Visalighting.com/products/Shine for more information

FINISHES

Specify color code when ordering. For accurate color matching, individual paint and finish samples are [available upon request](#). For more information about our finishes visit visalighting.com/finishes

Powder Coat Paint Finishes (Standard)

AGGY	Agate Grey	ALGN	Alpine Green	BJBG	Baja Beige	BMAT	Bronze Matte	BRNZ	Bronze	BSIL	Blade Silver	CVBL	Cove Blue
DEOR	Deoro Gold	GLWT	Glacier White	GSIL	Graphite Silver	HRGR	Harbor Grey	JTBK	Jet Black	OCBL	Ocean Blue	SHGR	Shoreline Grey
SBGN	Sagebrush Green	SLGR	Slate Grey	SSTP	Sierra Taupe	TRCN	Terracotta Canyon	TRWT	Traffic White	VBLK	Velvet Black	VNRD	Vineyard Red

PROJECT				DATE	
QUANTITY		TYPE		NOTE	

ORDERING EXAMPLE || ULEW - 30021 - 20w - T2 - W30 - 02 - 120/277v - Options

ULEW-30021					
	LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE
20w LED 2422 Lumens	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution	W27 - 2700K W30 - 3000K W35 - 3500K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL		120/277v Other - Specify
28w LED 3200 Lumens	T4 - Type IV Distribution M - Medium 30° W - Wide 56° EW - Extra Wide 99°x102°				

INSPIRED BY NATURE FINISHES

- SW01 - OAK FINISH
- SW02 - WALNUT FINISH
- SW03 - PINE FINISH
- DF - DOUGLAS FIR FINISH
- CW - CHERRY WOOD FINISH
- NW - NATIONAL WALNUT FINISH
- SU01 - CONCRETE FINISH
- SU02 - SOFTSCAPE FINISH
- SU03 - STONE FINISH
- SU04 - CORTEEN FINISH

THERE IS AN ADDITIONAL COST FOR THESE FINISHES

ADDITIONAL OPTIONS

NAT - Natatorium Rated

4MP - 4" Octagonal J-Box Mounting Plate

SCE - Surface Conduit Decorative Trim

AMB - Turtle Friendly Amber LED

F - Frosted Lens

BPC - Button Photocell

More Custom Finishes Available Upon Request

Consult factory for pricing and lead times



Oak



Cherry



Beech



Carbon



Walnut



Chestnut



Bamboo



Galvanized



Pine



Mahogany



Birch



Steel



Example: Inspired by Nature Finish

Leeds Product Family



Leeds 1 - Up/Down

• ULEE-30031-2x5.5w-2x570lm

Leeds 2 - Down

• ULEE-30001-5.5w-570lm

Leeds 3 - Up/Down

• ULEE-30041-2x14w-2x1660lm

Leeds 4 - Down

• ULEE-30011-14w-1660lm

Leeds 5 - Up/Down

• ULD-30051-2x20w-2x2422lm



Leeds 6 - Down

• ULEE-30021-20w-2422lm

Leeds Wedge Product Family



Leeds Wedge 1

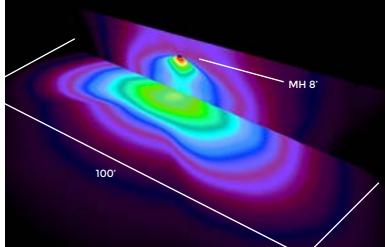
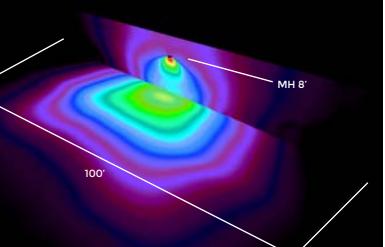
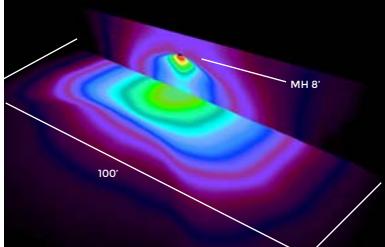
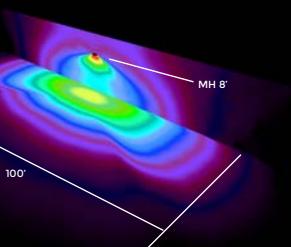
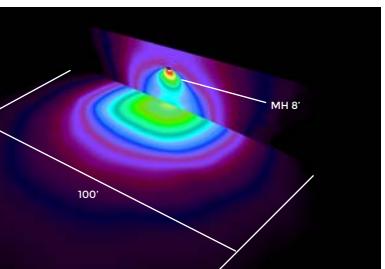
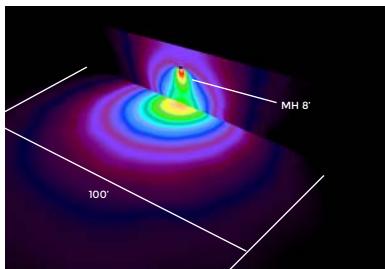
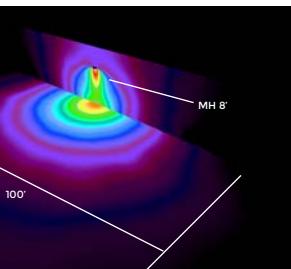
• ULEW-30001-5.5w-570lm

Leeds Wedge 2

• ULEW-30011-14w-1660lm

Leeds Wedge 3

• ULEW-30021-20w-2422lm

Type II Distribution**Type III Distribution****Type IV Distribution****Type ME Distribution****Medium Beam - 30°****Wide Beam - 56°****Extra Wide Beam - 99° x 102°**



14w LED 1660 Lumens
IP65 • Suitable For Wet Locations
IK07 • Impact Resistant
Weight 12 lbs



Construction

Aluminum

Less than 0.1% copper content - Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket

Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management

LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

BUG Rating

Contact Factory

Finishing.

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes

The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process

After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits

- Resistance to salt-acid room, accelerated aging
- Boiling water, lime and condensed water resistant
- Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
- Super durable (UV resistant)
- • IIGC free (non-toxic)

Hardware

Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes

Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED

Precise optic design provides exceptional light control and precise distribution of light. LED CRI > 80

Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Clean, beautiful, surface wall fixtures with class leading performance. Minimalist form, yet the most powerful and flexible lighting tool of its type, offering packages up to 2,400 lumens and microVos technology.

A range of small, square and rectangular, ADA compliant wall mounted luminaires with options of upward or downward light distributions. Ideally suited to illuminate the wall and surfaces in front of wall and for light accents on vertical surfaces using high efficiency LED's. The Leeds is suitable for indoor and outdoor applications and provides a clean, visually appealing solution for small, unobtrusive wall mounted luminaires.

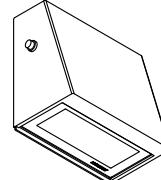
This luminaire is available in 3 different sizes and in combinations of down, up or up/down light distributions.

This fixture utilizes microVos technology, meaning the ability to do Type I,II,III,IV & V distributions as well as hybrid distributions to suit the designer's requirements.

Using the microVos optics allows for very wide spacing to mounting height ratios, while still providing perfect uniformity and code compliant light levels.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected and luminaire fix mounted (+/- 15° allowable to permit leveling).

Additional Options (Consult Factory For Pricing)

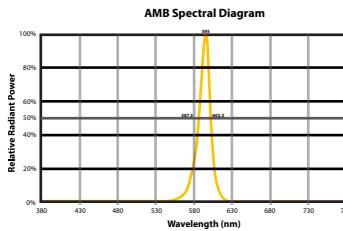


BPC
Button Photocell



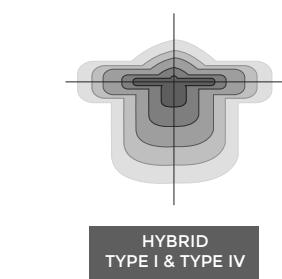
Luminaire Type
BC2

CITY OF FLAGSTAFF & TURTLE FRIENDLY COMPLIANT

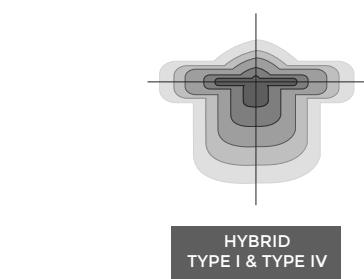


Narrow-Spectrum Amber LEDs

Peak wavelength between 585 & 595 nanometers and a full width of 50% power no greater than 15 nanometers.



The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



PROJECT				DATE	
QUANTITY		TYPE		NOTE	

ORDERING EXAMPLE || ULEW - 30011 - 14w - T2 - W30 - 02 - 120/277v - Options

ULEW-30011					
	LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE
14w LED 1660 Lumens	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution M - Medium 30° W - Wide 56° EW - Extra Wide 99°x102°	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL		120/277v Other - Specify

INSPIRED BY NATURE FINISHES

SW01 - OAK FINISH	
SW02 - WALNUT FINISH	
SW03 - PINE FINISH	
DF - DOUGLAS FIR FINISH	
CW - CHERRY WOOD FINISH	
NW - NATIONAL WALNUT FINISH	
SU01 - CONCRETE FINISH	
SU02 - SOFTSCAPE FINISH	
SU03 - STONE FINISH	
SU04 - CORTEN FINISH	

THERE IS AN ADDITIONAL COST FOR THESE FINISHES

ADDITIONAL OPTIONS

NAT - Natatorium Rated	4MP - 4" Octagonal J-Box Mounting Plate
SCE - Surface Conduit Decorative Trim	AMB - Turtle Friendly Amber LED
F - Frosted Lens	BPC - Button Photocell

More Custom Finishes Available Upon Request

Consult factory for pricing and lead times



Leeds Product Family



Leeds 1 - Up/Down

• ULEE-30031-2x5.5w-2x570lm

Leeds 2 - Down

• ULEE-30001-5.5w-570lm

Leeds 3 - Up/Down

• ULEE-30041-2x14w-2x1660lm

Leeds 4 - Down

• ULEE-30011-14w-1660lm

Leeds 5 - Up/Down

• ULD-30051-2x20w-2x2422lm



Leeds 6 - Down

• ULEE-30021-20w-2422lm

Leeds Wedge Product Family



Leeds Wedge 1

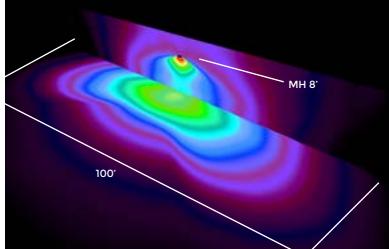
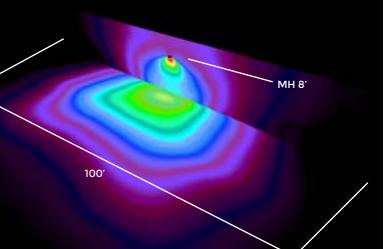
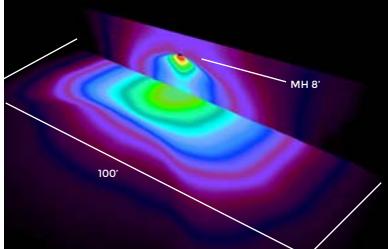
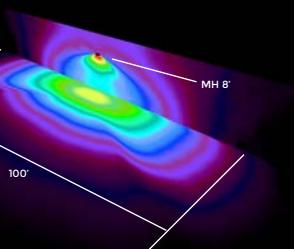
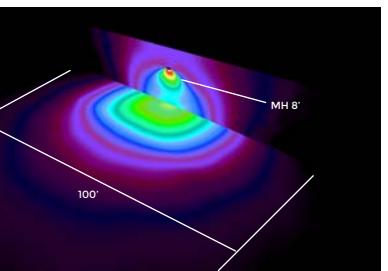
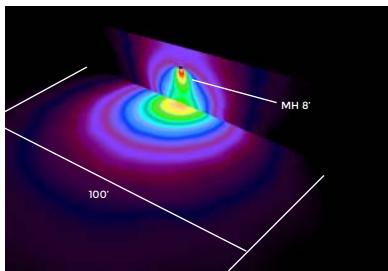
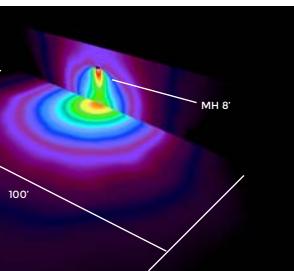
• ULEW-30001-5.5w-570lm

Leeds Wedge 2

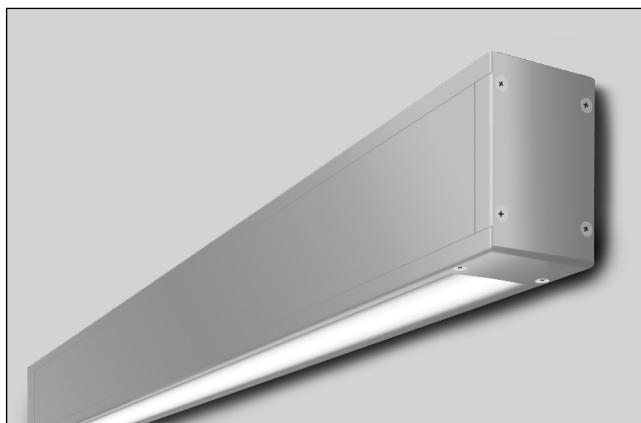
• ULEW-30011-14w-1660lm

Leeds Wedge 3

• ULEW-30021-20w-2422lm

Type II Distribution**Type III Distribution****Type IV Distribution****Type ME Distribution****Medium Beam - 30°****Wide Beam - 56°****Extra Wide Beam - 99° x 102°**

Wet Beam DI LED | Wall mount

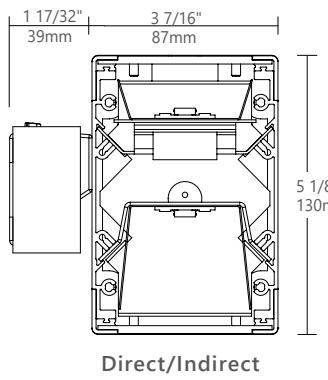


Project _____

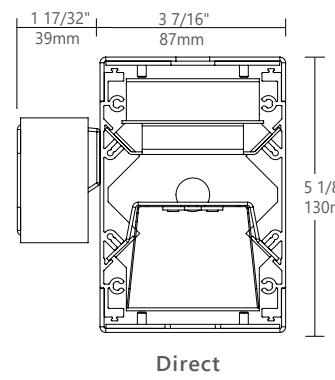


**Luminaire Type
BD1**

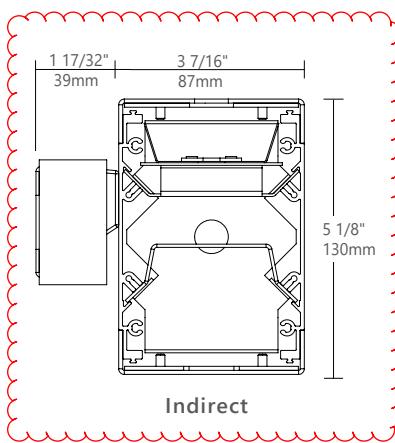
Type _____
Notes _____



Direct/Indirect



Direct



Indirect



PERFORMANCE PER LINEAR FOOT AT 3500K

NOMINAL LUMEN OUTPUT		INPUT WATTS*	EFFICACY
UPLIGHT	DOWNLIGHT		
450 lm/ft	500 lm/ft	13.55 W/ft	70 lm/W

Please consult factory for custom lumen output and wattage.

Ordering Guide

PRODUCT ID		NOM.LUMENS/FT UP		NOM.LUMENS/FT DOWN		CRI		COLOR TEMP.		SO	
WBDIWLED	Wall Direct/Indirect LED	500	500 lm/ft up - Minimum	500	500 lm/ft down - Minimum	80	80 CRI	27	2700 K	SO	spotless lens
WBDWLED	Wall Direct LED	1000	1000 lm/ft down - Maximum	1000	1000 lm/ft down - Maximum	90	90 CRI	30	3000 K		
WBIWLED	Wall Indirect LED					35	3500 K	35	3500 K		
		Outputs between listed min and max are available. Consult factory for outputs outside of the listed range.		Outputs between listed min and max are available. Consult factory for outputs outside of the listed range.						Extruded Polycarbonate	

SO		LENGTH (FT)		FINISH		VOLTAGE		DRIVER		CIRCUITS	
SO	spotless lens	2	2'	AP	aluminum paint	120	120 V	DP	dimming (0-10V) 1%	1	1 circuit
		3	3'	W	white	277	277 V	LT(#)	Lutron *	2	2 circuits
		4	4'	BLK	black	347	347 V	BI	bi-level dimming	2A/B	2 alternating
		6	6'	C	custom	UNV	universal	O(#)	other **	+E(#)	emergency section *
		8	8'			DC	low voltage*	POE(#)	POE drivers*	+NL(#)	night light section *
		12	12'							+GTD(#)	generator transfer device *
S(L) system run											
Extruded Polycarbonate		Minimum Length is 2ft Only available in full foot increments				* Only available with POE drivers.		* Operating up to -20°C; Specify system ** Please consult factory; see page 2		* Specify quantity	

BATTERY (OPTIONAL)		OTHER (OPTIONAL)		IC CONTROLS (OPTIONAL)		CUSTOM (OPTIONAL)	
B(#)	battery pack	F	fuse	OS(#)	occupancy sensor	C	custom
		BF	Back feed*	EN(#)	Enlighted integral	N	natatorium finish
				WC(#)	wireless control dimming		

Minimum 5ft; Not available with 347V

Only available in full foot increments
*See page 3 for more details.

[See integrated controls guide for more details.](#)

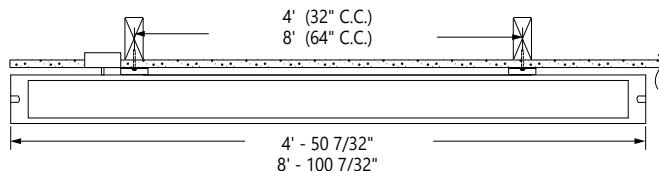
Please consult factory

Please specify

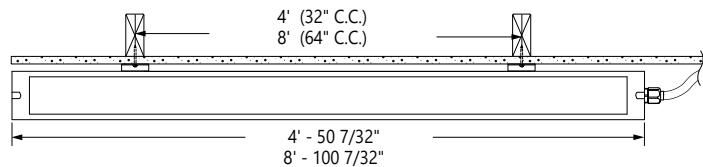
Wet Beam DI LED | Wall mount

● MOUNTING OPTIONS

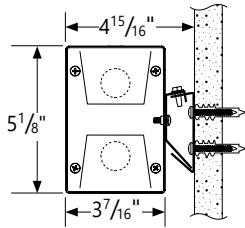
TOP VIEW



TOP VIEW - END FEED STANDARD (EF)



END VIEW



i Row configuration, specification sheets and mounting spacing guides are available for download at: www.axislighting.com

● OTHER MOUNTING OPTIONS

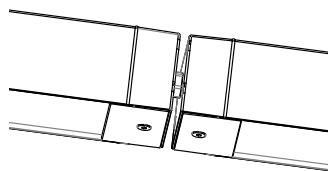
WET BEAM DI LED is also available in a pendant mount.

● WEIGHT

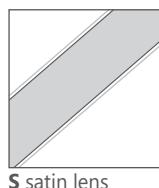
Wall LED 4ft	15 lbs / 6.8 Kg
Wall LED 8ft	30 lbs / 13.6 Kg

● GASKETTED FIXTURE

With its gasketed end cap and lens the WET BEAM DI LED is made for wet locations, and is ideal for exterior soffits and canopies of malls, hospitals and other institutions.



● OPTICS



SATIN LENS
Extruded Polycarbonate

● CONSTRUCTION

Housing

Extruded aluminum (0.062" nominal)
Up to 70% recycled content

End Cap

Die cast zinc (0.070" nominal)

Interior Brackets

Die formed sheet steel (16 gauge)

Gaskets

Moulded elastomer (0.100" nominal)

Lens Gaskets

Extruded elastomer (0.045" nominal)

Lens

Extruded polycarbonate (0.125" nominal)

Fasteners

All external fasteners are tamper proof
TORX T15H

● ELECTRICAL

Lutron driver*

LDE1 - Hi-lume 1% EcoSystem with Soft-on, Fade-to-Black
LTEA - Hi-lume 1% 2-wire (120V forward phase only)

*Consult factory

Other drivers**

DALI - Digital Addressable Lighting Interface
DMX - Digital Multiplex
Xitanium SR - For wireless sensor

Power over Ethernet

POE drivers*

MOLEX
IGOR
SMARTENGINE

O - Other (Consult factory)

Emergency

Integral emergency battery pack
or emergency circuit optional.

Input Voltage

120V, 277V, 347V, UNV.

i Incorporating these components may have limitations or affect the length of the luminaire. Please contact factory for more details.

● LED SYSTEM

CRI

Minimum 80 or 90 color rendering index.

CCT

Choice of 2700K, 3000K, 3500K and 4000K color temperature with a great color consistency (within 3-step MacAdam ellipse). Both within fixture and fixture to fixture.

LED life

Minimum 50,000h with 85% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal Management

Aluminum housing acting as the heat sink to maximize life.

Wet Beam DI LED | Wall mount

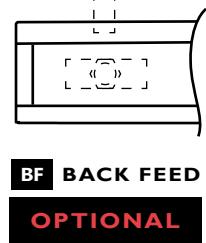
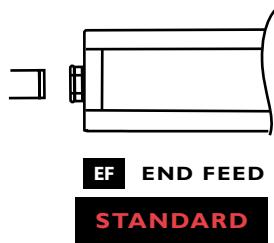
● WARRANTY

Axis Lighting will warrant defective LEDs, boards, and drivers for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specifications. If defective, Axis will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Axis.

● FINISH

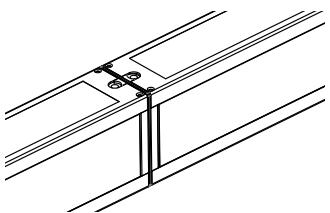
Powder coated and custom finishes are also available.

● POWER FEED



● JOINER SYSTEM

WET BEAM DI LED modular system consists of smaller modules joined and gasketed together allowing for system runs in lengths of 4' and 8' as well as custom lengths up to 12'.



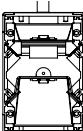
* For continuous rows allow 2" for connectors between each fixture.

● APPROVALS

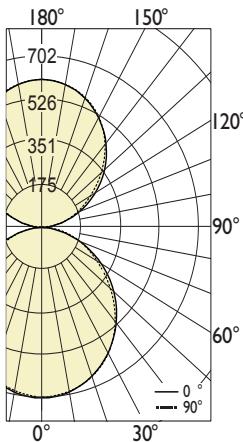
Certified wet locations to UL and CSA standards 

● PHOTOMETRIC DATA

Uplight 45%
450 lm/ft
Downlight 55%
500 lm/ft



PHOTOMETRIC CURVE



Luminaire Lumens: 450 lm/ft up
500 lm/ft down

Input Watts: 13.55W/ft

Efficacy: 70 lm/W

IES FILE: WBDILED-450-500-80-35-SO.IES
TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	702	702	702	702	702
5	699	699	699	699	699
15	675	674	676	675	676
25	627	627	628	629	629
35	560	560	560	561	562
45	474	474	474	475	476
55	372	372	373	373	374
65	258	258	258	259	259
75	138	139	139	139	139
85	37	37	38	37	37
90	5	4	4	4	4
95	29	30	30	31	31
105	117	118	119	120	120
115	222	222	223	224	225
125	322	322	323	324	325
135	410	411	412	413	414
145	485	485	486	488	488
155	544	545	545	546	547
165	586	586	586	587	587
175	607	607	607	607	607
180	610	610	610	610	610

ZONAL LUMENS

Zone	Lumens
0	
0-10	66
10-20	190
20-30	289
30-40	350
40-50	365
50-60	332
60-70	255
70-80	147
80-90	42
90-100	35
100-110	125
110-120	220
120-130	288
130-140	317
140-150	304
150-160	251
160-170	165
170-180	57
180	

LUMINANCE DATA (cd/m²)

Vertical Angle	0	45	90
45	9306	9306	9345
55	9003	9028	9052
65	8475	8475	8508
75	7402	7455	7455
85	5893	6053	5893

GL1960 GALLERY SERIES

LED



EPA
.50 (ft²)
WEIGHT
28 LBS

7 YEAR
WARRANTY

LUMEN
RANGE
2,710 to
11,435
@4000K

LUMEN
MAINTENANCE
L70 MINIMUM
100,000
HOURS

CLICK
FOR FAQ's

RATED
IP66



Luminaire Type
BE1-3

BUILD A PART NUMBER																
ORDERING EXAMPLE: 2A-GL1960-S-SRS-24L40T5-MDLO14-CA-R7-PE-HSHN/CA6/5218P5/UBKT																
Mounting Config.	Luminaire	Shade Style	Housing	LED	CCT	Type	Driver	Lens	Optional Control Receptacle	Optional Control	Option Fuse	Option Hang-straight	Option House Side Shield	Arm See Arm Spec Sheets	Pole See Pole Spec Sheets	Finish

Mounting Configuration

[\(Click here to link to mounting configuration specification page\)](#)

- W •2A90 •4A •SH44¹
- 1A •3A •1AM •CH44¹
- 2A •3A90 •2AM •CAT

W = Wall Mount A = Arm Mount AM = Arm Mid-Mount
SH = Stem Hung CH = Chain Hung CAT = Catenary

¹ Include overall drop length in inches after designation for Stem/Chain application (IE: CH44-48").

Luminaire

- GL1960

Shade Style

- S (Straight Edge)
- F (Flared Edge)
- B (Bell Edge)
- RR (Round with Round Rim)
- RF (Round with Flared Rim)
- RS (Round with Square Rim)

Housing

- BFR (Base Fixture Round)
- BFS (Base Fixture Stepped)
- GRR (Glow Rings Round)
- GRS (Glow Rings Stepped)
- SRR (Solid Rings Round)
- SRS (Solid Rings Stepped)
- GWR (Glow Window Round)
- GWS (Glow Window Stepped)

LED

- 12L² •16L³ •24L⁴

² Only available with MD_006, MD_008 and MD_012.

³ Only available with MD_012.

⁴ Only available with MD_010 and MD_014.

CCT - Color Temperature (K)

- 27(00) •30(00) •35(00)
- 40(00) •50(00)

Type

- T2 •T3 •T4 •T5

Driver

- MDL006 (120V-277V, 60mA)
- MDH006 (347V-480V, 60mA)
- MDL008 (120V-277V, 80mA)

- MDH008 (347V-480V, 80mA)
- MDL010 (120V-277V, 100mA)
- MDH010 (347V-480V, 100mA)
- MDL012 (120V-277V, 120mA)
- MDH012 (347V-480V, 120mA)
- MDL014 (120V-277V, 140mA)
- MDH014 (347V-480V, 140mA)

Lens

- CA (Clear Acrylic)
- SA (Sag Acrylic)
- SV1 (Flat Soft Vue Light Diffused Acrylic Lens)
- SV2 (Flat Soft Vue Moderate Diffused Acrylic Lens)
- SV4 (Flat Soft Vue Maximum Diffused Acrylic)
- SVISA (Soft Vue Light Diffused Sag Acrylic)
- SV2SA (Soft Vue Moderate Diffused Sag Acrylic)
- SV4SA (Soft Vue Maximum Diffused Sag Acrylic)

Options

- R7⁵ 7-Pin control receptacle only
- PE⁶ Twist-Lock Photocontrol (120V-277V)
- PE3⁶ Twist-Lock Photocontrol (347V)
- PE4⁶ Twist-Lock Photocontrol (480V)
- SC⁶ Shorting Cap
- PEC Electronic Button Photocontrol (120V-277V)
- PEC4 Electronic Button Photocontrol (480V)
- FHD⁷ Double Fuse and Holder
- HSHS Standard Horizontal Hangstraight, Spike Finial
- HSHN Standard Horizontal Hangstraight, No Finial
- HSHB Standard Horizontal Hangstraight, Ball Finial
- EZ Vertical Hangstraight, "EZ" Mount
- HSS 120° House Side Shield
- BLOC⁸ Back Light Optical Control

⁵ Only available with HSH...

⁶ Requires R7 control receptacle.

⁷ Ships loose for installation in base.

⁸ Only available with T2, T3 and T4.

Arm

[\(Click here to link to arm specification page\)](#)

See Arms & Wall Brackets specification sheets.

- CA •CSA •FFA •R2⁹
- DAG •RA •CAS •R3⁹

⁹ Luminaires above grade height to be 2' higher than pole height, REQUIRES "EZ" hangstraight.

Pole

[\(Click here to link to pole specification page\)](#)

See Pole specification sheets.

Finish

[Standard Urban Finishes](#) [\(Click here to view paint finish sheet\)](#)

- UGMT Urban Gun Metal Textured
- UGM Urban Gun Metal Matte
- UBT Urban Bronze Textured
- UB Urban Bronze Matte
- USLT Urban Silver Textured
- USL Urban Silver Matte
- UWHT Urban White Textured
- UWH Urban White Matte
- BKT Black Textured

Custom Urban Finishes¹⁰

- CM Custom Match

¹⁰ Smooth finishes are available upon request.

Specifications

Luminaire

The Gallery GL1960 series is a medium scale, decorative pendant luminaire with a cast aluminum driver housing and spun aluminum shades. The housing is available in two styles (Stepped and Round), each with 4 variations (BF_, GR_, SR_ and GW_). The shades are available in six styles: Straight (S), Flared (F), Bell (B), Round with Round rim (RR), Round with Flared rim (RF), and Round with Square rim (RS). The luminaire dimensions vary depending on shade/housing options selected (see page 3 of specification sheet for details). The Luminaire shall be UL listed in US and Canada.

LEDs

The luminaire shall use high output, high brightness LEDs. The LEDs are mounted to maximize thermal transfer to the heat sink surface. The LEDs shall be 100% recyclable; not contain lead, mercury or any other hazardous substances and shall be RoHS compliant. Lumen maintenance shall be determined in accordance with IESNA TM-21, based on LED manufacturer LM-80 test data of no less than 6,000 hours and in-situ testing of the luminaire by an NVLAP accredited Energy Efficient Lighting Products lab. The high-performance white LEDs will have a predicted lumen depreciation of approximately 100,000 hours with

See next page



SternbergLighting

ESTABLISHED 1923

800-621-3376

555 Lawrence Ave., Roselle, IL 60172

contactus@sternberglighting.com

www.sternberglighting.com

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GL1960 GALLERY SERIES

LED

greater than 70% of initial output at 25°C. The high-brightness, high-output white LEDs shall be 4000K nominal (2700K, 3000K, 3500K or 5000K optional) correlated color temperature (CCT) with a 70 (minimum) color rendering index (CRI). Consult factory for custom CCT or CRI. The luminaire shall have a minimum _____ (see table) delivered initial lumens when operated at steady state with an average ambient temperature of 25°C (77°F).

Optics

The luminaire shall be provided with individual, refractor type optics applied to each LED. The luminaire shall provide Type _____ (2, 3, 4 or 5) light distribution per the IESNA classifications. Testing shall be done in accordance with IESNA LM-79.

Electronic Drivers

The LED driver shall be U.L. Recognized. It shall be securely mounted inside the fixture, for optimized performance and longevity. It shall be supplied with a quick-disconnect electrical connector on the power supply, providing easy power connections and fixture installation. It shall have overload, overheat and short circuit protection, and have a DC voltage output, constant current design, 50/60HZ. It shall be supplied with line-ground, line-neutral and neutral-ground electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines. It shall be a high efficiency driver with a THD less than 20% and a high power factor greater than .9. It shall be dimming capable using a 0-10V signal, consult factory for more information.

instant on with a 5-10 second turn off, and shall turn on at 1.5 footcandles with a turn-off at 2-3 footcandles. See pole spec sheet for pole mounted version.

Twist-Lock Style: The photocontrol shall be mounted externally on the hangstraight and pre-wired to driver. The twist lock type photocontrol is instant on with a 3-6 second turn off, and shall turn on at 1.5 footcandles with a turn-off at 2-3 footcandles.

Warranty

Seven-year limited warranty. See product and finish warranty guide for details.

Finish

Refer to website for details.

Performance

MODEL #	T2 LUMENS	BUG	EFFICACY (LPW)	T3 LUMENS	BUG	EFFICACY (LPW)	T4 LUMENS	BUG	EFFICACY (LPW)	T5 LUMENS	BUG	EFFICACY (LPW)	WATTS
24L40T_MDL014	11325	B2U0G2	128.7	11060	B2U0G2	125.7	11075	B2U0G2	125.9	11435	B3U0G1	129.9	88
24L30T_MDL014	10800	B2U0G2	122.7	10545	B2U0G2	119.8	10560	B2U0G2	120.0	10905	B3U0G1	123.9	88
24L27T_MDL014	9765	B2U0G2	111.0	9535	B2U0G2	108.4	9545	B2U0G2	108.5	9860	B3U0G1	112.0	88
24L40T_MDL010	8520	B2U0G2	137.4	8350	B2U0G2	134.7	8335	B1U0G2	134.4	8590	B3U0G1	138.5	62
24L30T_MDL010	8125	B2U0G2	131.0	7960	B2U0G2	128.4	7945	B1U0G2	128.1	8190	B3U0G1	132.1	62
24L27T_MDL010	7345	B2U0G2	118.5	7200	B2U0G2	116.1	7185	B1U0G2	115.9	7405	B3U0G1	119.4	62
16L40T_MDL012	6825	B1U0G1	133.8	6610	B2U0G2	129.6	6660	B1U0G2	130.6	6875	B3U0G1	134.8	51
16L30T_MDL012	6505	B1U0G1	127.5	6300	B2U0G2	123.5	6350	B1U0G2	124.5	6555	B3U0G1	128.5	51
16L27T_MDL012	5885	B1U0G1	115.4	5700	B2U0G2	111.8	5740	B1U0G1	112.5	5925	B3U0G1	116.2	51
12L40T_MDL012	5045	B1U0G1	129.4	4925	B1U0G1	126.3	4935	B1U0G1	126.5	5105	B2U0G1	130.9	39
12L30T_MDL012	4810	B1U0G1	123.3	4695	B1U0G1	120.4	4705	B1U0G1	120.6	4865	B2U0G1	124.7	39
12L27T_MDL012	4350	B1U0G1	111.5	4245	B1U0G1	108.8	4255	B1U0G1	109.1	4400	B2U0G1	112.8	39
12L40T_MDL008	3570	B1U0G1	137.3	3485	B1U0G1	134.0	3475	B1U0G1	133.7	3590	B2U0G0	138.1	26
12L30T_MDL008	3405	B1U0G1	131.0	3325	B1U0G1	127.9	3315	B1U0G1	127.5	3425	B2U0G0	131.7	26
12L27T_MDL008	3080	B1U0G1	118.5	3005	B1U0G1	115.6	2995	B1U0G1	115.2	3095	B2U0G0	119.0	26
12L40T_MDL006	2780	B1U0G1	139.0	2715	B1U0G1	135.8	2710	B1U0G1	135.5	2815	B1U0G0	140.8	20
12L30T_MDL006	2650	B1U0G1	132.5	2590	B1U0G1	129.5	2585	B1U0G1	129.3	2685	B1U0G0	134.3	20
12L27T_MDL006	2395	B1U0G1	119.8	2340	B1U0G1	117.0	2335	B1U0G1	116.8	2425	B1U0G0	121.3	20

GL1960 GALLERY SERIES

LED

Shade Style



Straight Edge (S)



Flared Edge (F)



Bell Edge (B)



Round with Round Rim (RR)



Round with Flared Rim (RF)



Round with Square Rim (RS)

Dimensions

GL1960	SHADE	S	F	B	RF	RR	RS
HOUSING	Diameter	17.9"	18"	19.5"	18.7"	18.4"	19.2"
BF_	Height	13.5"	12.6"	13.7"	14.8"	14.4"	14.1"
GR_	Height	13.5"	12.6"	13.7"	14.8"	14.4"	14.1"
GW_	Height	13.5"	12.6"	13.7"	14.8"	14.4"	14.1"
SR_	Height	13.5"	12.6"	13.7"	14.8"	14.4"	14.1"



SternbergLighting

ESTABLISHED 1923

800-621-3376
555 Lawrence Ave., Roselle, IL 60172
contactus@sternberglighting.com
www.sternberglighting.com

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GL1960 GALLERY SERIES

LED

Housing - Round



Base Fixture Round (BFR)



Glow Window Round (GWR)



Solid Rings Round (SRR)



Glow Rings Round (GRR)



SternbergLighting

ESTABLISHED 1923

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 CONCEPTUAL ASSEMBLY DRAWING, SUBJECT TO ENGINEERING VERIFICATION BY THE FACTORY

Catalog Number: 1A-GL1960-S-BFR-12L30T4-MDL012-CA-EZ-BLOC / TAHPM / 550T5-316-125 / RCC / BK

ARM NUMBER OF ARMS: 1

Number of Arms: One Arm (1)

ARM MOUNTED FIXTURE: GL1960

The GL1960 Gallery Series is a large scale, decorative downlight fixture with a spun aluminum shade. The dome is available with six types of shades: straight (S), flared (F), bell (B), round rim (RR), round with flared rim (RF), and round with square rim (RS) styles. The luminaire measures 17-1/2" in diameter and 13-1/2" overall height. The Luminaire shall be UL listed in US and Canada.

GL1960 Type: Straight Edge Shade, Base Fixture, Round Top (S-BFR)

ARM FIXTURE LIGHT SOURCE: -12L30T4-MDL012-CA

Array: 12 LEDS, 20W for MD_006, 26W for MD_008, 39W for MD_012 (12L)
 Color Temp: 3000K (30)
 Distribution: Type 4 (T4)
 Driver: Multi-Volt Dimmable Low-Range Driver, 120-277V (MDL012)
 Lens: Clear Acrylic (CA)

ARM FIXTURE OPTIONS: -EZ-BLOC

Hangstraight: EZ Vertical (EZ)
 House Side: BLOC Back Light Optical Control (BLOC)
 Shield:

ARM: TAHPM

This bracket for downlights measures 16-1/2" from the outer surface of the pole to the center of the fixture.

POLE: 550T5-316-.125

The 12" diameter cast 356 aluminum alloy base and aluminum shaft shall be a one-piece construction. For fixtures using remote ballasts or drivers, the servicing of these components requires pulling the pole. The pole shall be U.L. or E.T.L. listed in U.S. and Canada. All pole heights to have a tolerance of $\pm 2"$

Model: 550 Concord (550)
 Shaft Type: Smooth Tapered 5-3 Inch, 6063-T6 Aluminum Alloy (T5-3)
 Height: 16 Ft (16)
 Gauge: 0.125" (.125)

POLE CAP: RCC

RCC Pole Cap, Hemispherical Dome.

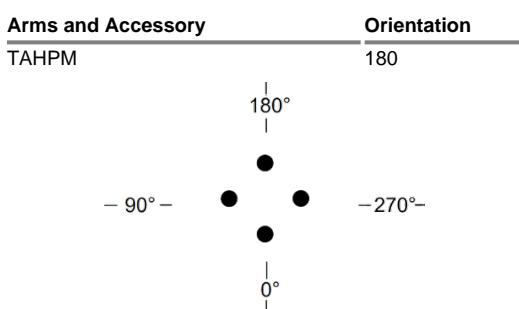
FINISH: BK

Assembly shall be powder coated to Black Smooth finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

Wind Load Evaluation

This assembly, as configured, MEETS AASHTO requirements for wind loading

Wind Speed: 100 mph
 Gust Factor: 1.14



(4) 3/4" x 18" Anchor Bolts, 8-5/16" Bolt Circle, Diamond Pattern

Access Door Orientation: 0°
 Street Side Orientation: 180°

Job Name:

Customer Signature:

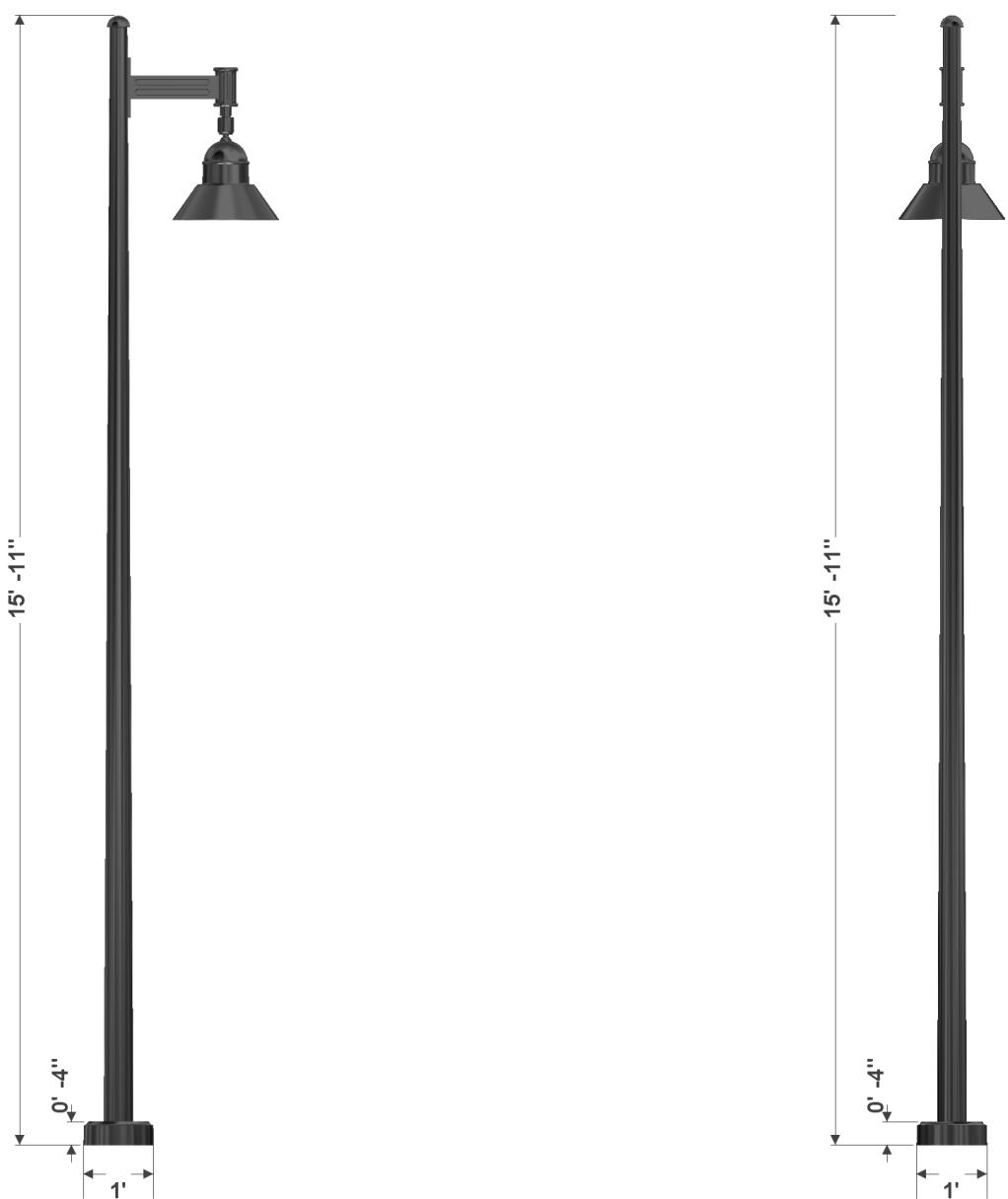
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Job Location:

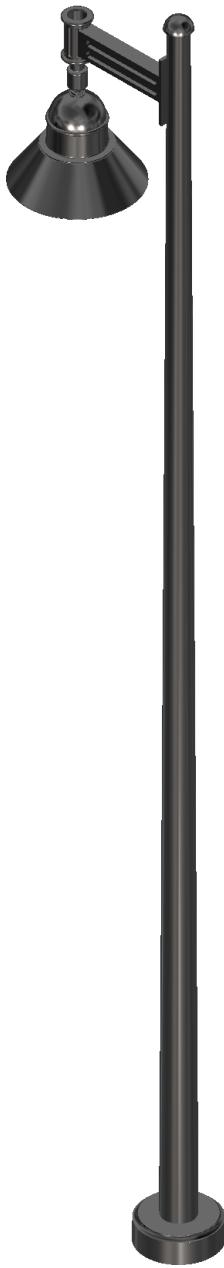
Date:

2022/11/18

1 of 2



Catalog Number: 1A-GL1960-S-BFR-12L30T4-MDL012-CA-EZ-BLOC / TAHPM / 550T5-316-125 / RCC / BK



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 CONCEPTUAL ASSEMBLY DRAWING, SUBJECT TO ENGINEERING VERIFICATION BY THE FACTORY

Catalog Number: 1A-GL1960-S-BFR-12L30T5-MDL012-CA-EZ / TAHPM / 550T5-316-125 / RCC / BK

ARM NUMBER OF ARMS: 1

Number of Arms: One Arm (1)

ARM MOUNTED FIXTURE: GL1960

The GL1960 Gallery Series is a large scale, decorative downlight fixture with a spun aluminum shade. The dome is available with six types of shades: straight (S), flared (F), bell (B), round rim (RR), round with flared rim (RF), and round with square rim (RS) styles. The luminaire measures 17-1/2" in diameter and 13-1/2" overall height. The Luminaire shall be UL listed in US and Canada.

GL1960 Type: Straight Edge Shade, Base Fixture, Round Top (S-BFR)

ARM FIXTURE LIGHT SOURCE: -12L30T5-MDL012-CA

Array: 12 LEDS, 20W for MD_006, 26W for MD_008, 39W for MD_012 (12L)
 Color Temp: 3000K (30)
 Distribution: Type 5 (T5)
 Driver: Multi-Volt Dimmable Low-Range Driver, 120-277V (MDL012)
 Lens: Clear Acrylic (CA)

ARM FIXTURE OPTIONS: -EZ

Hangstraight: EZ Vertical (EZ)

ARM: TAHPM

This bracket for downlights measures 16-1/2" from the outer surface of the pole to the center of the fixture.

POLE: 550T5-316-125

The 12" diameter cast 356 aluminum alloy base and aluminum shaft shall be a one-piece construction. For fixtures using remote ballasts or drivers, the servicing of these components requires pulling the pole. The pole shall be U.L. or E.T.L. listed in U.S. and Canada. All pole heights to have a tolerance of $\pm 2"$

Model: 550 Concord (550)
 Shaft Type: Smooth Tapered 5-3 Inch, 6063-T6 Aluminum Alloy (T5-3)
 Height: 16 Ft (16)
 Gauge: 0.125" (.125)

POLE CAP: RCC

RCC Pole Cap, Hemispherical Dome.

FINISH: BK

Assembly shall be powder coated to Black Smooth finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

Wind Load Evaluation

This assembly, as configured, MEETS AASHTO requirements for wind loading

Wind Speed: 100 mph
 Gust Factor: 1.14



Arms and Accessory	Orientation
TAHPM	180
	180°
	— 90° —
	— 0° —
	— 270° —

(4) 3/4" x 18" Anchor Bolts, 8-5/16" Bolt Circle, Diamond Pattern

Access Door Orientation: 0°
 Street Side Orientation: 180°

Job Name:

Customer Signature:

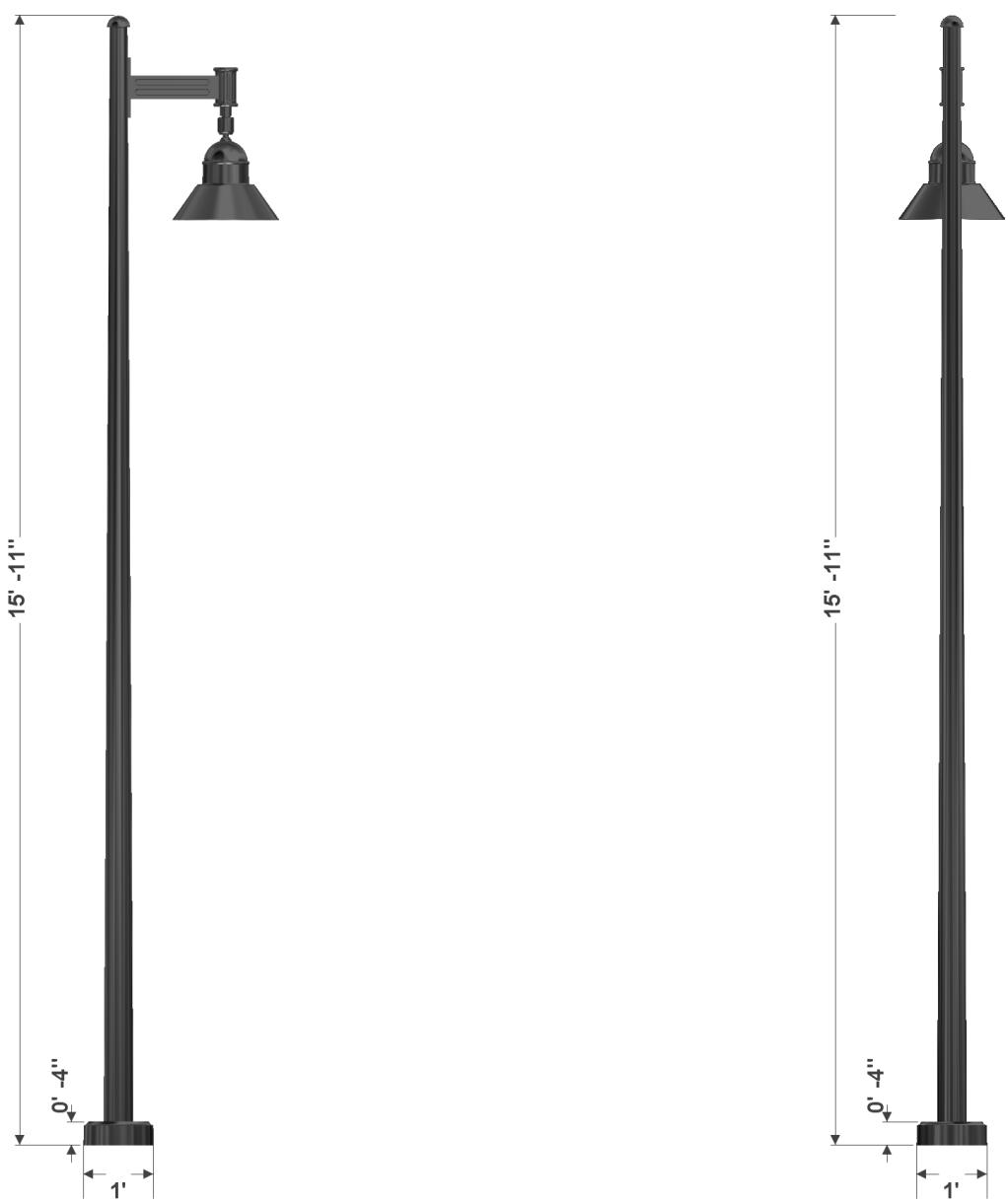
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Job Location:

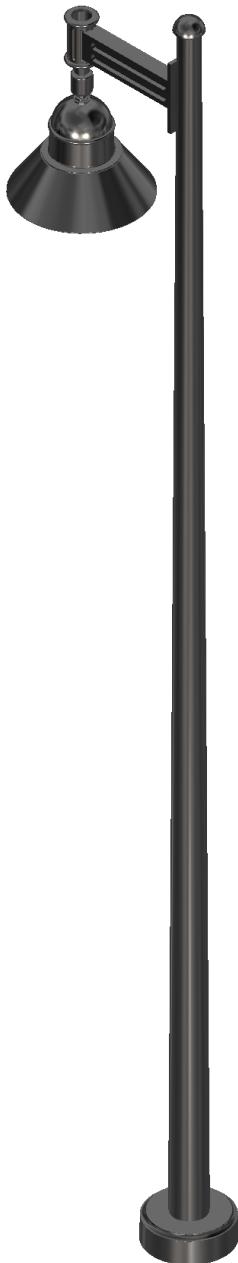
Date:

2022/11/18

1 of 2



Catalog Number: 1A-GL1960-S-BFR-12L30T5-MDL012-CA-EZ / TAHPM / 550T5-316-125 / RCC / BK



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 CONCEPTUAL ASSEMBLY DRAWING, SUBJECT TO ENGINEERING VERIFICATION BY THE FACTORY

Catalog Number: 1A-GL1960-S-BFR-12L30T2-MDL006-SV1-EZ-BLOC / TAHPM / 550T5-315-125 / RCC / BK

ARM NUMBER OF ARMS: 1

Number of Arms: One Arm (1)

ARM MOUNTED FIXTURE: GL1960

The GL1960 Gallery Series is a large scale, decorative downlight fixture with a spun aluminum shade. The dome is available with six types of shades: straight (S), flared (F), bell (B), round rim (RR), round with flared rim (RF), and round with square rim (RS) styles. The luminaire measures 17-1/2" in diameter and 13-1/2" overall height. The Luminaire shall be UL listed in US and Canada.

GL1960 Type: Straight Edge Shade, Base Fixture, Round Top (S-BFR)

ARM FIXTURE LIGHT SOURCE: -12L30T2-MDL006-SV1

Array: 12 LEDS, 20W for MD_006, 26W for MD_008, 39W for MD_012 (12L)
 Color Temp: 3000K (30)
 Distribution: Type 2 (T2)
 Driver: Multi-Volt Dimmable Low-Range Driver, 120-277V (MDL006)
 Lens: Flat Soft Vue Medium Diffused Acrylic Lens (SV1)

ARM FIXTURE OPTIONS: -EZ-BLOC

Hangstraight: EZ Vertical (EZ)
 House Side: BLOC Back Light Optical Control (BLOC)
 Shield:

ARM: TAHPM

This bracket for downlights measures 16-1/2" from the outer surface of the pole to the center of the fixture.

POLE: 550T5-315-125

The 12" diameter cast 356 aluminum alloy base and aluminum shaft shall be a one-piece construction. For fixtures using remote ballasts or drivers, the servicing of these components requires pulling the pole. The pole shall be U.L. or E.T.L. listed in U.S. and Canada. All pole heights to have a tolerance of $\pm 2"$

Model: 550 Concord (550)
 Shaft Type: Smooth Tapered 5-3 Inch, 6063-T6 Aluminum Alloy (T5-3)
 Height: 15 Ft (15)
 Gauge: 0.125" (.125)

POLE CAP: RCC

RCC Pole Cap, Hemispherical Dome.

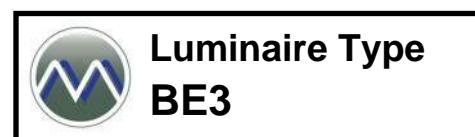
FINISH: BK

Assembly shall be powder coated to Black Smooth finish. Prior to coating, the assembly shall be chemically cleaned and etched in a 5-stage washing system which includes alkaline cleaning, rinsing, phosphoric etching, reverse osmosis water rinsing, and non-chrome sealing to ensure corrosion resistance.

Wind Load Evaluation

This assembly, as configured, MEETS AASHTO requirements for wind loading

Wind Speed: 100 mph
 Gust Factor: 1.14



Arms and Accessory	Orientation
TAHPM	180
	180°
	— 90° —
	— 0° —
	— 270° —

(4) 3/4" x 18" Anchor Bolts, 8-5/16" Bolt Circle,
 Diamond Pattern

Access Door Orientation: 0°
 Street Side Orientation: 180°

Job Name:

Customer Signature:

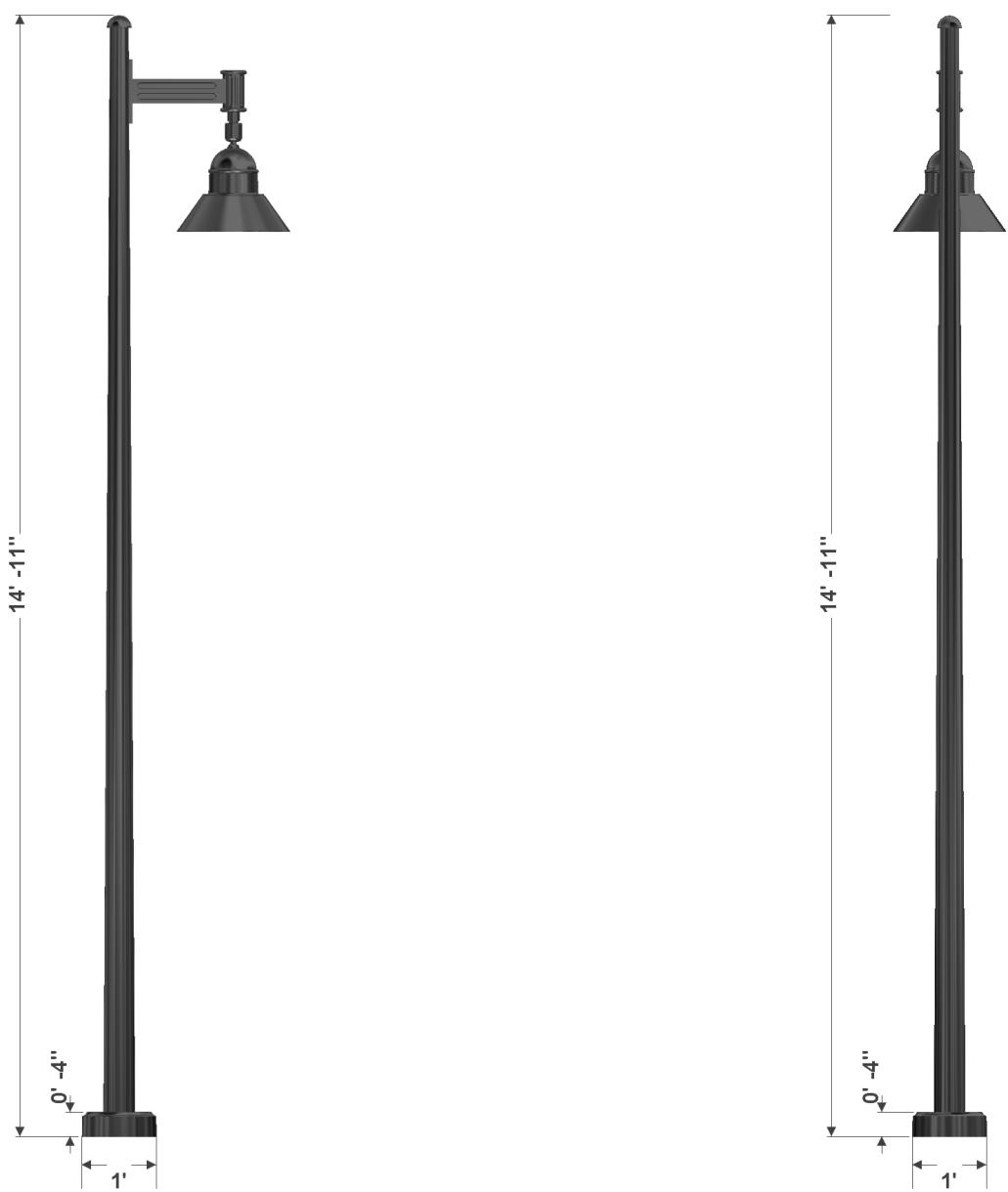
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Job Location:

Date:

2022/11/18

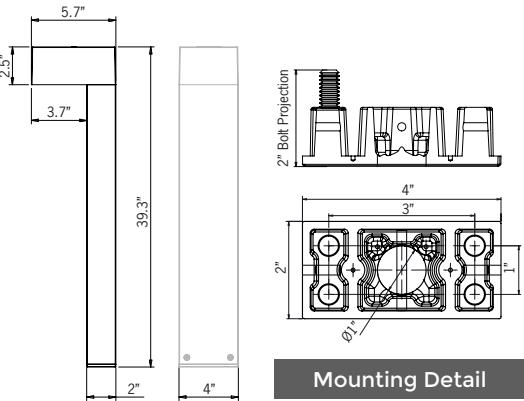
1 of 2



Catalog Number: 1A-GL1960-S-BFR-12L30T2-MDL006-SV1-EZ-BLOC / TAHPM / 550T5-315-125 / RCC / BK

8w LED
855 LumensIP65
Suitable for wet locationsIK08
Impact Resistant | Vandal Resistant

Weight - 10.3 lbs

**Construction****Aluminum**

Less than 0.1% copper content - Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket

Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management

LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

BUG Rating

B0 - U0 - G0

Finishing

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes

The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process

After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits

- Resistance to salt-acid room, accelerated aging
- Boiling water, lime and condensed water resistant
- Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
- Super durable (UV resistant)
- TGIC free (non-toxic)

Hardware

Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes

Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED

Precise optic design provides exceptional light control and precise distribution of light. LED CRI > 80

Lumen - Maintenance Life

L80 / B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

A new contemporary bollard design family, meeting Dark Sky requirements, utilizing MicroVos Technology to get maximum spacing and excellent uniformity.

Small, medium and large size LED bollards incorporates optional symmetrical and asymmetrical light distributions, in a variety of different heights. Clean architectural design with no visible hardware, at the top of the luminaire are the further characteristics of this bollard. Ideal for lighting pathways, entrances, square, and terraces.

Color temperature from 2700K, 3000K, 3500K and 4000K, LED CRI >80. Aluminum housing and extruded aluminium column with high corrosion resistance. Stainless steel fasteners in grade 316. Durable silicone rubber gasket and clear toughened glass. Powder coating with high corrosion resistance and chemical chromatized protection.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected.



**Luminaire Type
BF1**

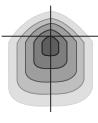
micro  TECHNOLOGY

Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

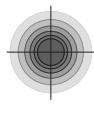


Type II

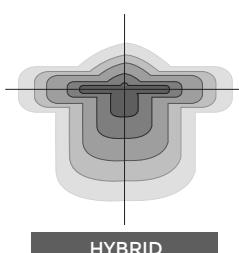
Type III



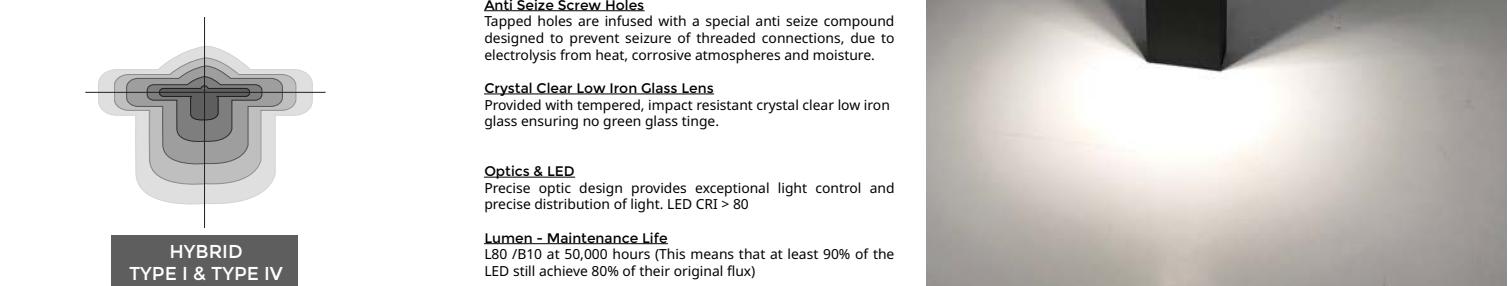
Type IV



Type V

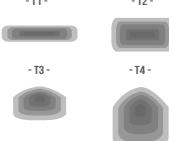


The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



PROJECT				DATE	
QUANTITY		TYPE		NOTE	

ORDERING EXAMPLE || UPRA - 10002 - 8w - T2 - W30 - 02 - 120/277v - Options

UPRA-10002					
	LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE
8w LED 855 Lumens	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution M - Medium 32° W - Wide 52° VW - Very Wide 65° EW - Extra Wide 108°	T1 - Type I Distribution T2 - Type II Distribution T3 - Type III Distribution T4 - Type IV Distribution M - Medium 32° W - Wide 52° VW - Very Wide 65° EW - Extra Wide 108°	W27 - 2700K  W30 - 3000K  W35 - 3500K W40 - 4000K	01 - BLACK RAL 9011 02 - DARK GREY RAL 7043 03 - WHITE RAL 9003 04 - METALLIC SILVER RAL 9006 05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE 07 - CUSTOM RAL	120/277v Other - Specify
	-T1- 	-T2- 			
	-T3- 	-T4- 			

INSPIRED BY NATURE FINISHES

- SW01 - OAK FINISH
- SW02 - WALNUT FINISH
- SW03 - PINE FINISH
- DF - DOUGLAS FIR FINISH
- CW - CHERRY WOOD FINISH
- NW - NATIONAL WALNUT FINISH
- SU01 - CONCRETE FINISH
- SU02 - SOFTSCAPE FINISH
- SU03 - STONE FINISH
- SU04 - CORTEN FINISH



THERE IS AN ADDITIONAL COST FOR THESE FINISHES

ADDITIONAL OPTIONS

NAT - Natatorium Rated

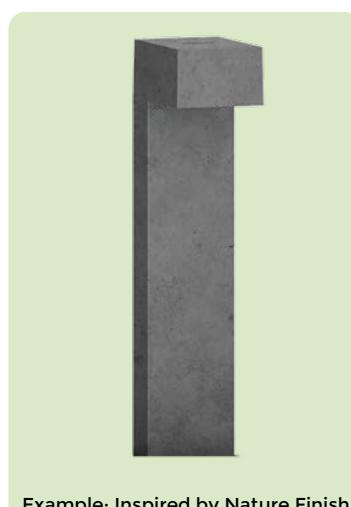
HGT - Custom Bollard Height

AMB - Turtle Friendly Amber LED

INR - Internal Nature Finish Reflector

Custom Finishes Available Upon Request

Consult factory for pricing and lead times

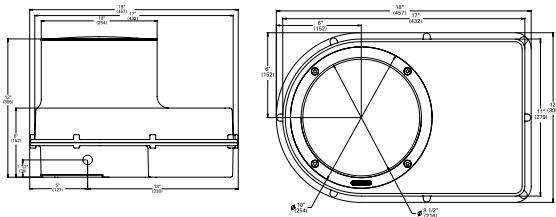




Specifications

Length:	18"
	457 mm
Width:	12"
	305 mm
Height	12"
	305 mm
Weight:	11lbs

DIMENSIONS



PARADOX 10

19W LED

10" Architectural In-Grade

HIGHLIGHTS

- Adjustable LED module for in-field aiming up to 15° tilt and 360° rotation
- Integral junction box for wire splicing
- Available with 0-10V low voltage dimming
- U.V. stabilized, impact and corrosion resistant housing
- Integral driver



IP67



LUMEN PACKAGES

	NSP	MFL	FL	WFL	HSP	HFL	VWFL
Delivered Lumens	1700	1700	1500	1700	1900	1600	1400
Watts	19	19	19	19	19	19	19
LPW	90	91	79	90	96	80	77

Note: Based on 41K

ORDERING INFORMATION

EXAMPLE: PDX10 B 18LED WHT30K MVOLT NSP FLC 34S

Model*	Door Material*	LED Type*	LED Color*	Voltage*	Light Distribution*
PDX10	SS Stainless Steel BSS Brushed Stainless Steel B Bronze	18LED 18 Chip LED array	WHT30K 3000K CCT WHT41K 4100K CCT WHT53K 5300K CCT AMBPC Phosphor Converted Amber BLU Blue GRN Green RED Red	MVOLT (120 - 277V)	NSP Narrow Spot MFL Medium Flood FL Flood WFL Wide Flood VWFL² Very Wide Flood (no optics) HSP Horizontal Spot HFL Horizontal Flood
					<i>Note: FRF filter required with VWFL distribution</i>
Lens*	Conduit Entries*	Accessories	Options	Listing	
FLC Flat Lens Clear FLCAS Flat Lens Clear, Anti-Slip FLCSR Flat Lens Frosted, Slip Resistant	34S Two 3/4" NPT Side (Standard) 25S Two 25mm Side	Internal IHL Internal Honeycomb Louver FRF Frosted Filter	LDIM 0-10V Dimming	IEC International Electrotechnical Commission <i>Note: Only for use with 50hz applications</i>	

ELECTRICAL LOAD

Current (A)							
Light Engines	Drive Current (mA)	System Watts	120	208	240	277	347
18 LED	350	19	0.16	0.09	0.08	0.07	0.05
							0.04

PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the **Fixture** platform in a 25°C ambient, based on 8400 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	0.99	0.98	0.96

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C	32°F
10°C	50°F
20°C	68°F
25°C	77°F
30°C	86°F
40°C	104°F

SLIP RESISTANCE AND LOAD RATING

PDX4
MAXIMUM LOAD RATING
Peak compression force of 4,944 lbs.
LENS STATIC COEFFICIENT OF FRICTION
PDX7 Anti-Slip Lens (FLCAS): Dry = 0.76; Wet = 0.20
PDX7 Slip Resistant Lens (FLSR): Dry = 0.84; Wet = 0.65

PERFORMANCE DATA

LUMEN OUTPUT

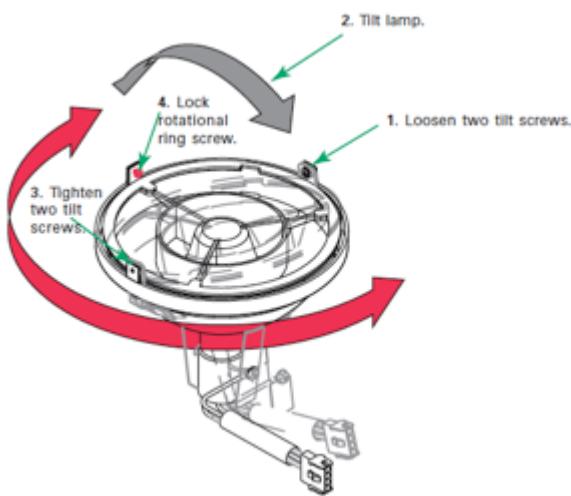
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

	Distribution	Nema Type	Beam Angle (50%) H x V	Field Angle (10%) H x V	Watts	LPW	Delivered Lumens
3000K 80CRI	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	19	53	1,000
	MFL	6 x 6	35.7 x 35.7	109 x 109	19	54	1,000
	FL	5 x 5	75.8 x 56.2	95.7 x 83.4	19	48	900
	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	19	54	1,000
	HSP	3 x 3	20.8 x 20.8	38.9 x 38.9	20	57	1,100
	HFL	4 x 3	40.5 x 15.6	60.8 x 30.4	20	48	950
	VWFL	7 x 7	110.2 x 110.2	141 x 141	18	45	800
4100K 70CRI	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	19	90	1,700
	MFL	6 x 6	35.7 x 35.7	109 x 109	19	91	1,700
	FL	5 x 5	75.8 x 56.2	95.7 x 83.4	19	79	1,500
	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	19	90	1,700
	HSP	3 x 3	20.8 x 20.8	38.9 x 38.9	20	96	1,900
	HFL	4 x 3	40.5 x 15.6	60.8 x 30.4	20	80	1,600
	VWFL	7 x 7	110.2 x 110.2	141 x 141	18	77	1,400
5300K 70CRI	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	19	90	1,700
	MFL	6 x 6	35.7 x 35.7	109 x 109	19	91	1,700
	FL	5 x 5	75.8 x 56.2	95.7 x 83.4	19	79	1,500
	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	19	90	1,700
	HSP	3 x 3	20.8 x 20.8	38.9 x 38.9	20	96	1,900
	HFL	4 x 3	40.5 x 15.6	60.8 x 30.4	20	80	1,600
	VWFL	7 x 7	110.2 x 110.2	141 x 141	18	77	1,400

LED LIFE: L70/60,000 hours

OPERATING TEMPERATURE: -30°C Through 40°C

LAMP ADJUSTMENT DETAIL



SPECIFICATIONS AND FEATURES

DOOR MATERIAL: Die cast bronze or stainless steel.

HOUSING: Compression molded polyester with patent pending internal direct access junction box for through-branch wiring. Internal junction box provides 44in³ volume to ensure proper seal during installation. The housing is U.V. stabilized, impact and corrosion resistant for use in all types of environments. The housing has a side-car configuration and houses the lamp and power module components as well as the lens/ door finishing section.

LED TYPE: Monochromatic and White LEDs, 19W, 18 chip arrays. All within 3MacAdam ellipses

VOLTAGE: MVOLT.

LIGHT DISTRIBUTION: See Ordering Guide. LED module has 15° of internal tilt and 360° of rotation.

LENS/SEAL: Tempered clear flat borosilicate glass. The patent pending door / lens seal uses proprietary knife edge technology to secure the assembly to the housing. Three captive screws hold the assembly in place. The lens is notched to provide maximum aperture opening.

CONDUIT ENTRIES: Two molded ¾" NPT side entries standard, bottom hubs are molded with a ¾" NPT membrane knockout.

ACCESSORIES: See Ordering Guide.

POWER MODULE: Integrally mounted modular encapsulated LED driver.

FINISH: Natural bronze, stainless steel, or stainless steel with a brushed finish.

LISTING: cCSAus, suitable for wet locations, laboratory tests conducted by CSA to UL Standard UL-1598 and UL-8750.

BUY AMERICAN: This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY: 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Consult factory for details.

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Architura® 1400

Linear Wallwash LED

120-277VAC

Project	
Date	

LS 3.5W/ft	Delivered Output	Watts
2ft	546lm	7w
3ft	819lm	10.5w
4ft	1092lm	14w
8ft	2184lm	28w

LH 4.5W/ft	Delivered Output	Watts
2ft	702lm	9w
3ft	1053lm	13.5w
4ft	1404lm	18w
8ft	2808lm	36w

*based on 30° optics

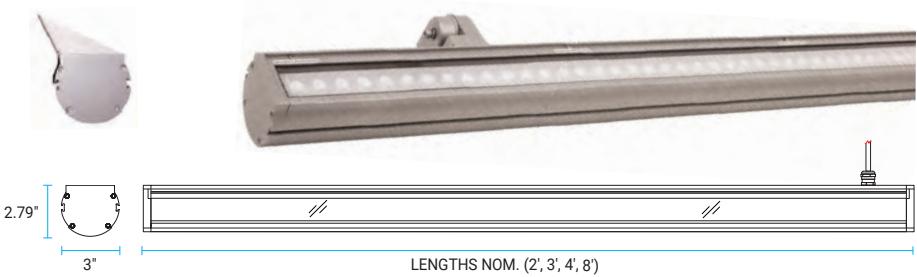


ORDERING GUIDE Make selections by filling out the top row or highlighting options.

1400									
SERIES	LENGTH	OUTPUT	CCT	VOLTAGE	CONTROL	OPTICS	MOUNTING	FINISH	ACCESSORY
1400	2 2'nom 3 3'nom 4 4'nom 8 8'nom Rx ROWx (x=length)	LS STANDARD LH HIGH	27 2700K 30 3000K 35 3500K 40 4000K 50 5000K	U 120-277V	ND NON DIMMING D1 0-10V DIMMING TRI FORWARD PHASE ELV REVERSE PHASE	15 15° 30 30° 45 45° 120 120°	SW SWIVEL MOUNT SB SLIDING BRACKET HBx HUB BRACKET (x=length)	WH WHITE BL BLACK BZ BRONZE SO SILVER CU CUSTOM	B BLADE LOUVER G GLARE SHIELD M MARINE GRADE FINISH P PERMAPOST Ax EXTENDED ARM (x=length) N NONE

Specifications sheets are subject to change without notification.

Orgatech® | 12203 Magnolia Ave Suite 1, Riverside, CA 92503 | 626.969.6820 | orgatech.com | 09/2022 V28



DESCRIPTION

High performance linear wallwash luminaire. Stand alone or connectable in runs up to 295ft with thru-wiring. Lens options enable grazing or long throw, and increase peak lumen output up to five times for high illuminance and improved energy efficiency. Select 30° or 45° lensing for optimum performance and aiming when installing 6in to 4ft off the illuminated surface. Cool running fixtures endure extreme climates. Perfect for facade and landscape applications, with unparalleled uniformity. A new feature of Architura® 1400 are their maintainable field replaceable lensed LEDs.

FEATURES

Construction	Powder coated aluminum fixtures. Polycarbonate lenses.
Length (nom.)	2ft , 3ft , 4ft , 8ft
White CCT	2700K, 3000K, 3500K, 4000K, 5000K
Dimming	Non-dimming, 0-10V Dimming, Forward Phase(TRIAC), Reverse Phase(ELV)
Optics	15°, 30°, 45°, 120°
Mounting	Swivel Mount, Extended Arm, Sliding Bracket, Hub Bracket, & Permapost
Finish	Powder Coated White, Black, Bronze, Silver, Custom

PERFORMANCE

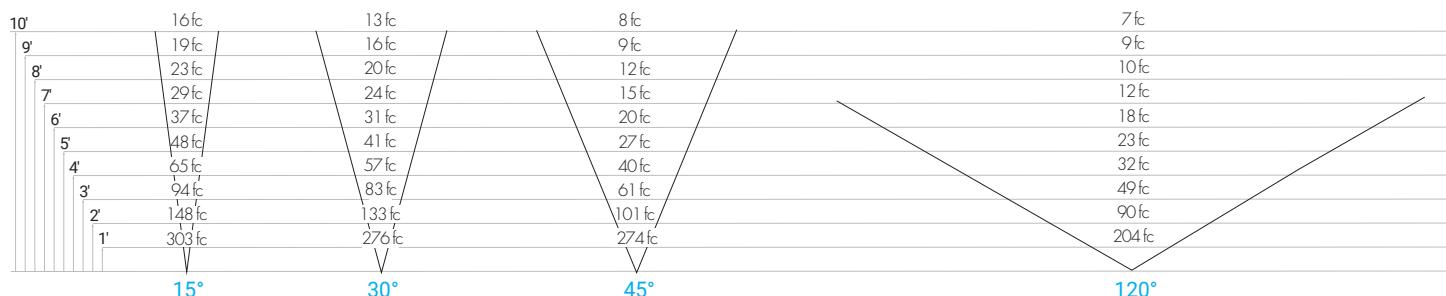
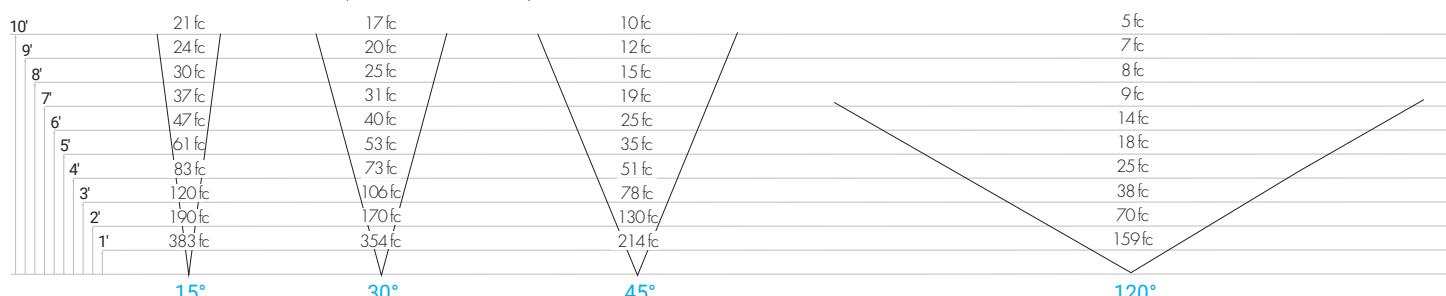
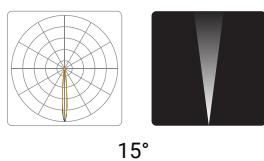
Electrical	120-277V AC, Row Interconnection or Daisy Chain with input/output IP67 Jumper Cables.
LED Wattage	LS 3.5W/ft (273lm/ft) - Standard / LH 4.5W/ft (351lm/ft)- High
Max Run	295ft
Environment	Wet Location - IP65. Operating Temperature - 22°F to 122°F
Warranty	5 yr / 50,000 hour limited warranty
CRI	93+
Certifications	UL Listed



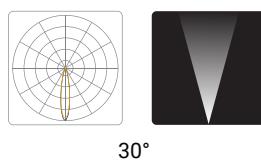
Made in USA

Page 1 of 6

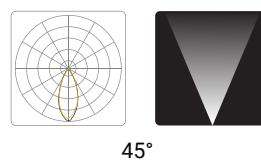
Aiming fixtures with the lens options shown enable perfect asymmetric performances to meet the needs of any wallwashing project. Combining easy specification with easy aiming for long throw with even, shadowless distribution.

PHOTOMETRIC DATA - LS 3.5W/ft (based off 4ft fixture)

PHOTOMETRIC DATA - LH 4.5W/ft (based off 4ft fixture)

OPTICS


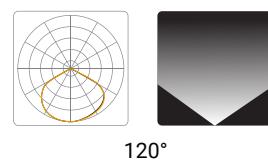
15°



30°



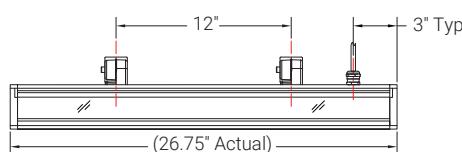
45°



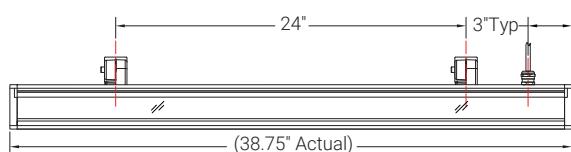
120°

Fixture Sizes

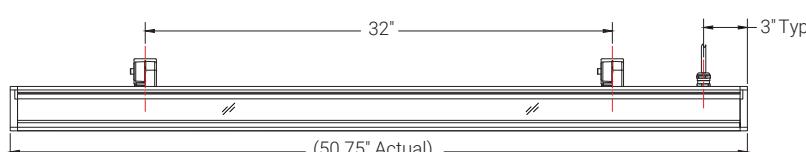
2ft nom.



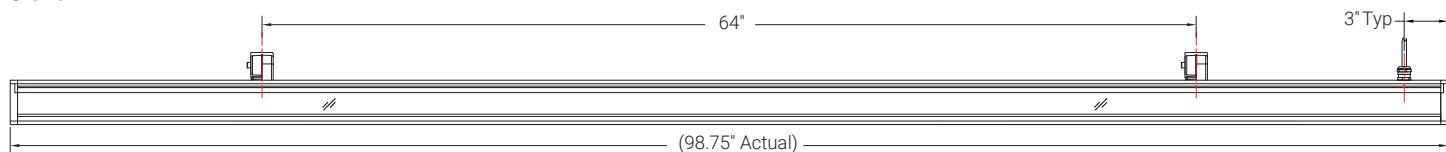
3ft nom.


FINISHES (POWDER COATED)


4ft nom.



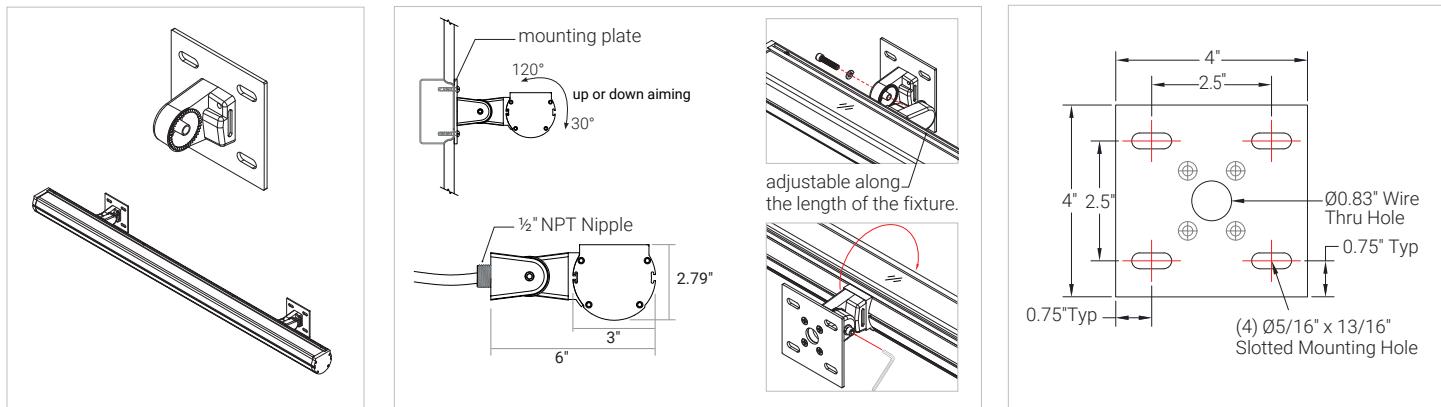
8ft nom.



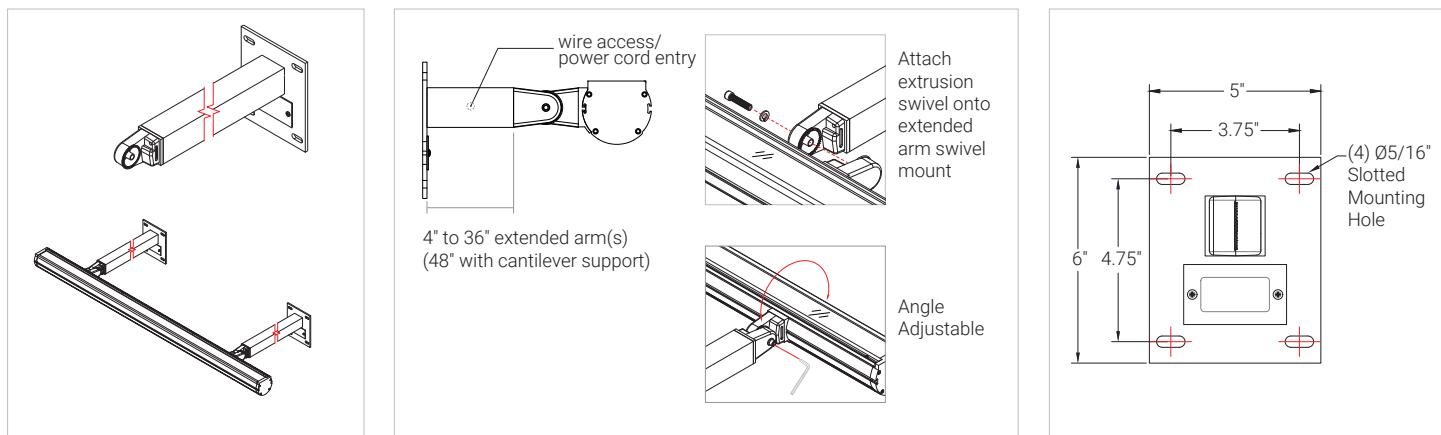
Specifications sheets are subject to change without notification.

SW Swivel Mount

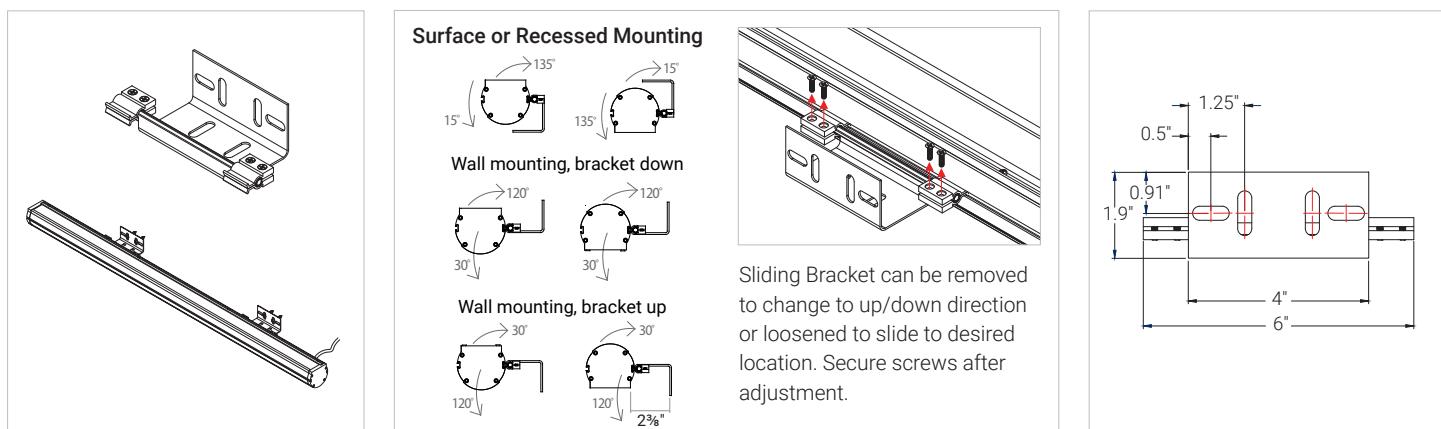
A heavy duty adjustable swivel mount with mounting plate. Weatherproof cord exits 3" from the back right end of individual fixtures with the lens in the up position. 1/2" nipple (can be specified) mounts directly to weatherproof canopies.

**Ax Extended Arm**

With swivel mount, extended arm is available in 4"-36" lengths. Power cords can be routed through arms, exiting close to the wall to connect to an adjacent j-box or other power outlet, providing a tidy installation.

**SB Sliding Bracket**

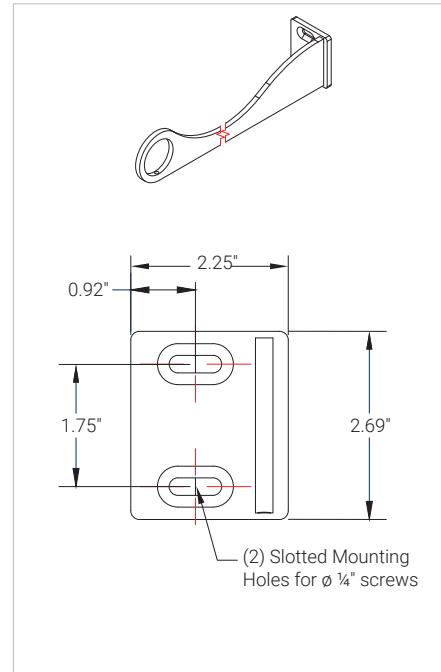
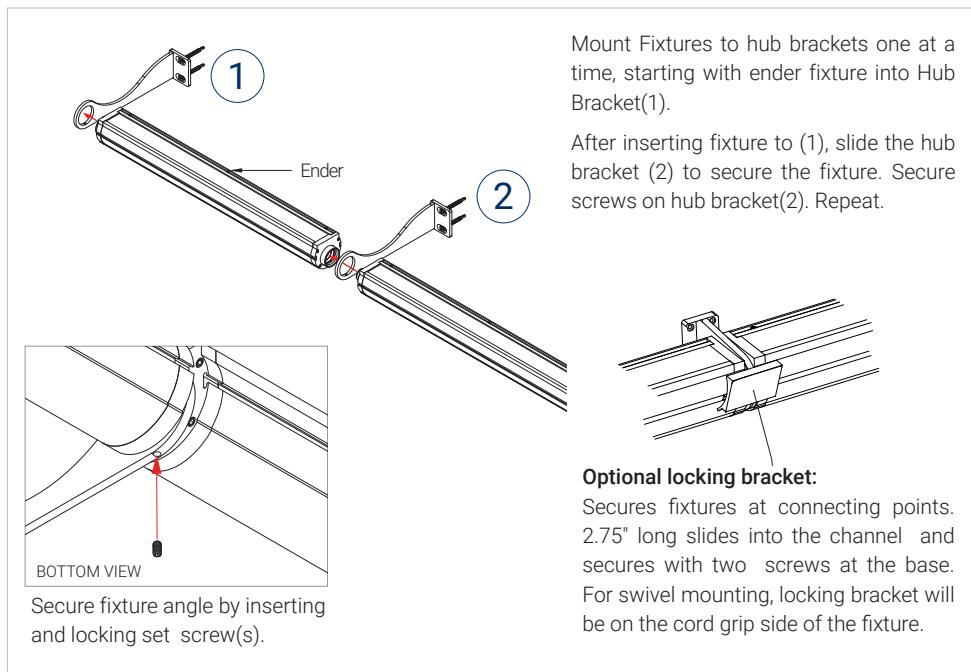
Surface mounts in position with 1/4" screws (not supplied). Fixtures 4ft + require two brackets. (Rows with Hubs - one bracket per fixture.)



Specifications sheets are subject to change without notification.

HB Hub Bracket

Heavy duty mounting arm with a choice of 4"-36" length used for row mounting of multiple fixtures. Locking set screws and fixture alignment brackets to secure fixtures after aiming included.

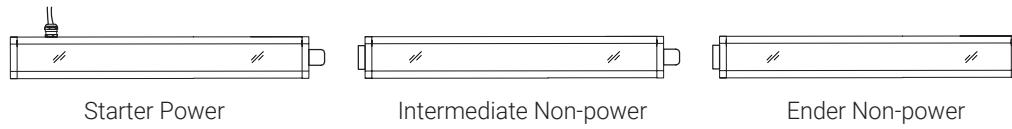
**ROW MOUNTING**

Row mounting available with swivel mount, sliding brackets, hub brackets, permaposts or extended arms. Mounted fixtures include patented tool-less, IP67 wire through connection system. Rotating waterproof Hubs solve the problem of aiming connected rows. 18" weatherproof cord exits 3" from the right end back of a fixture row with the lens in the upright position. When fixtures are inverted aiming down, the cord will be on the left.

Row Mounting
shown as **uplight**



Row Mounting
shown as **downlight**

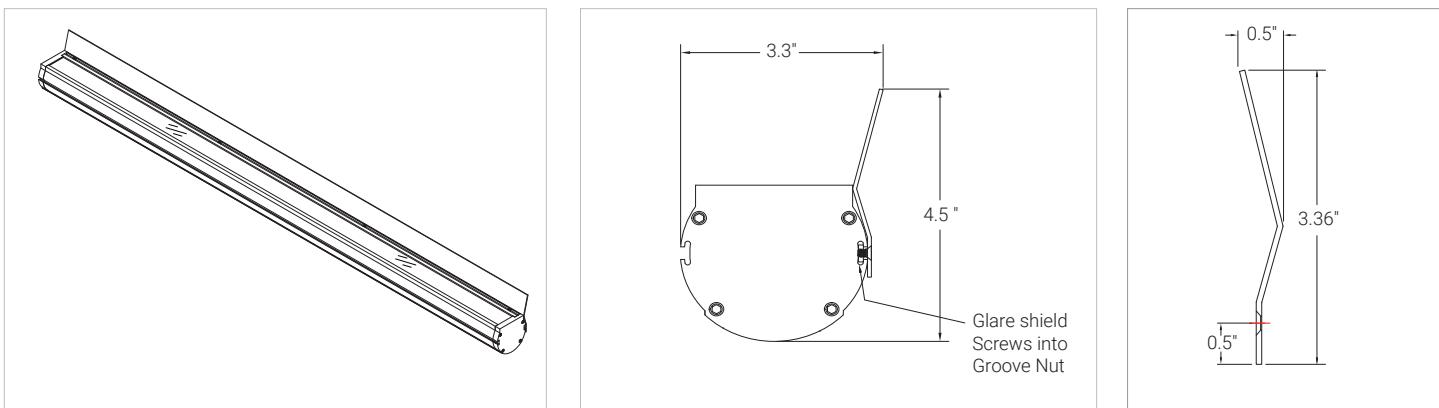


NOTE: Add 1/2" to each fixture length when interconnecting fixture rows.

Specifications sheets are subject to change without notification.

G Glare Shield

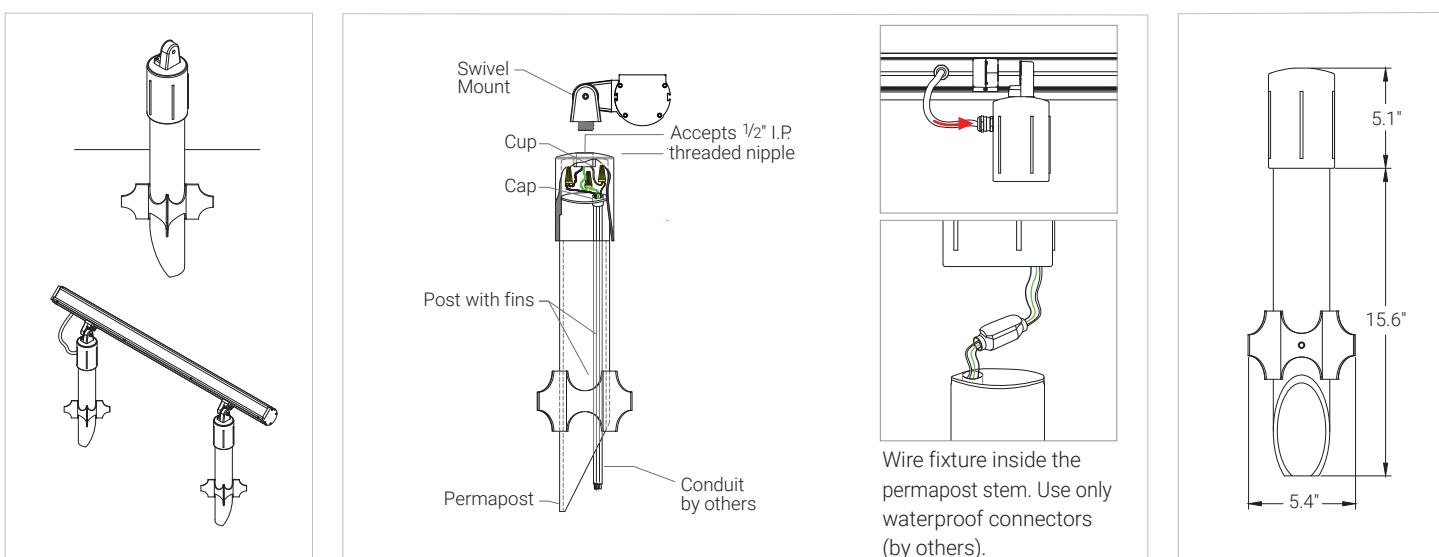
Minimizes a direct glare, while maintaining the LED output.

**B Blade Louver**

Minimizes a horizontal glare, while maintaining the LED output.

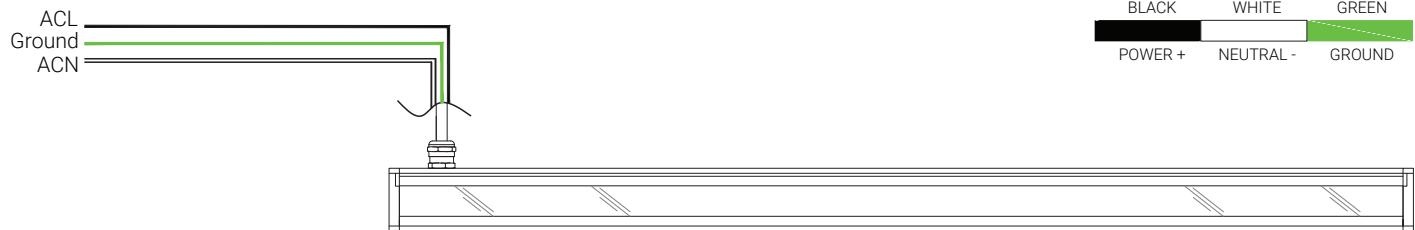
**P Permapost**

Provides easy at-grade installation. Includes swivel mount with 1/2" nipple. Fixture must be mounted at least 4" above ground level to avoid water accumulation.

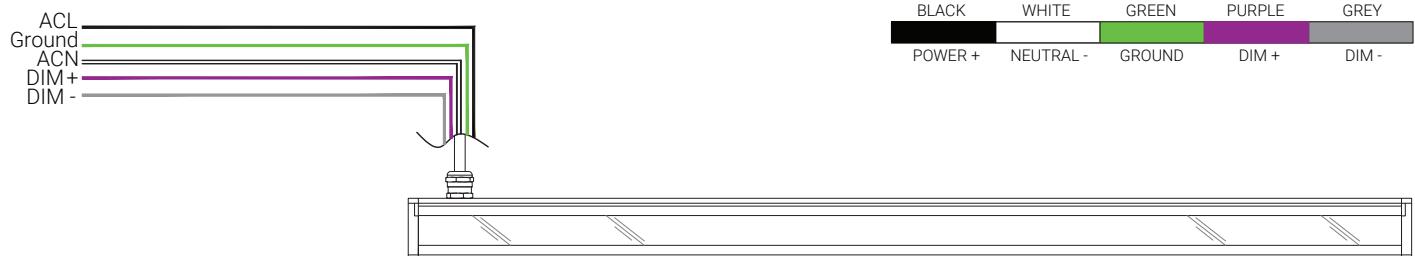


Specifications sheets are subject to change without notification.

Non-Dimming | 3 Wire

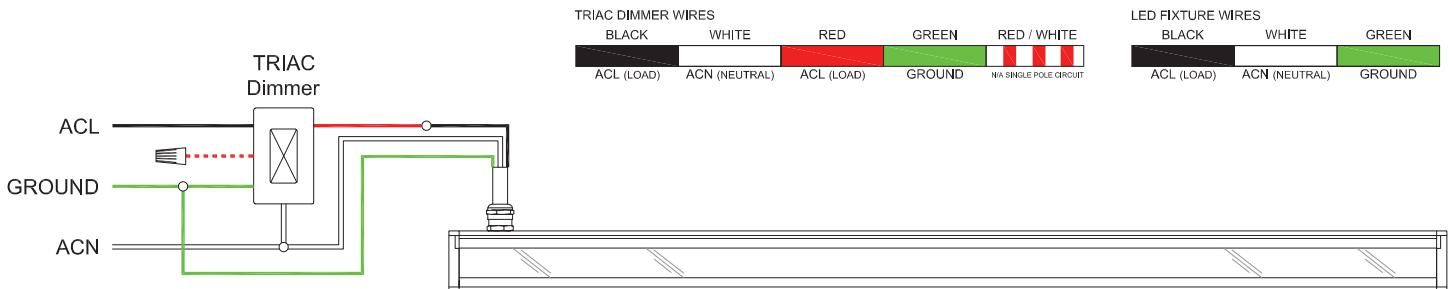


0-10V Dimming | 5 Wire



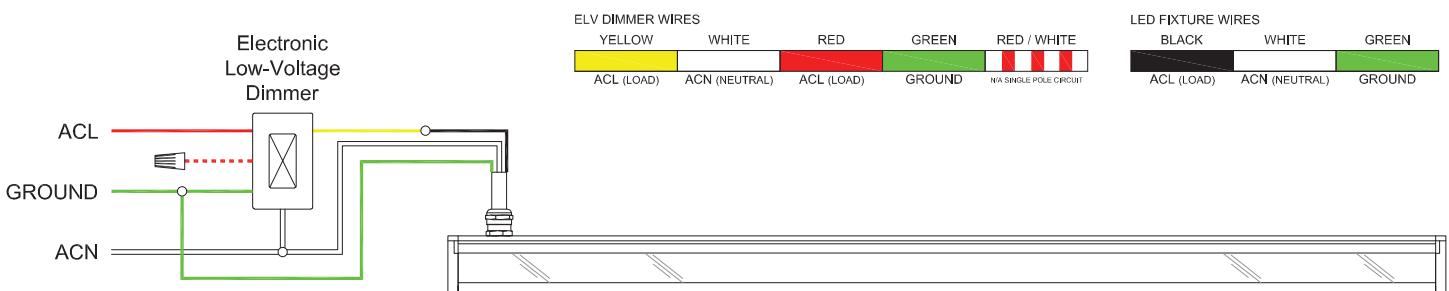
TRIAC | Forward Phase | 3 Wire

Based on Lutron DIVA C-L DVCL-253P 250W



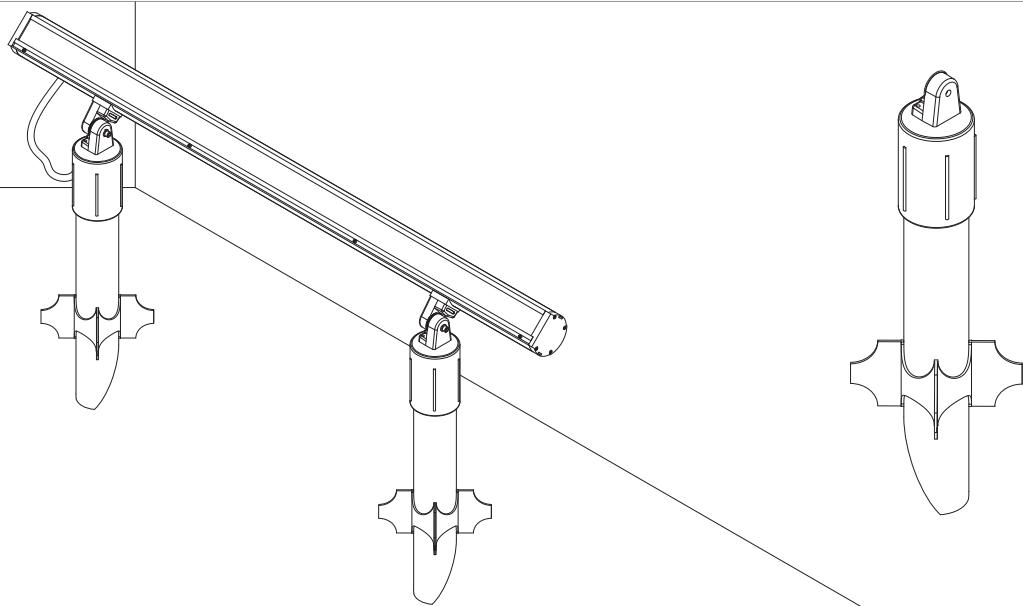
ELV | Reverse Phase | 3 Wire

Based on Lutron DIVA DPR-253P 250W & Lutron DIVA DVELV-303P-WH 300W

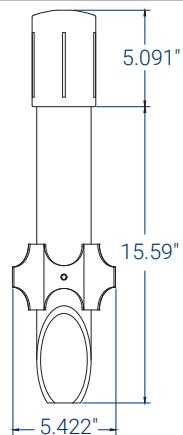




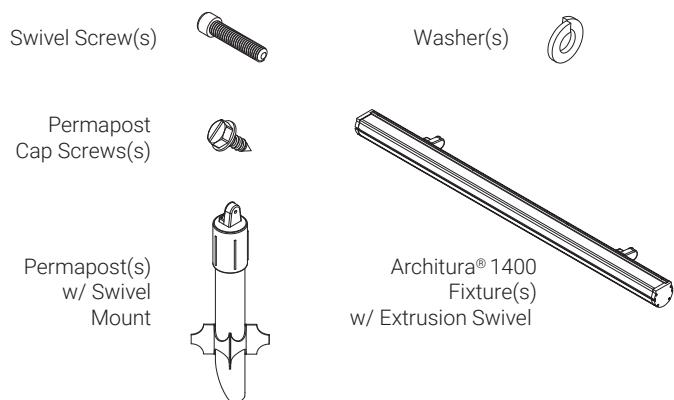
- READ THE PROVIDED INSTRUCTIONS PRIOR TO INSTALLING.
- INSTALLATION SHOULD BE CARRIED OUT BY QUALIFIED INSTALLERS.
- THE INSTALLER HAS THE FINAL RESPONSIBILITY FOR THE STRENGTH AND RIGIDITY OF THE WALL/CEILING STRUCTURE.
- A MINIMUM OF 2 PEOPLE REQUIRED WHEN INSTALLING LONG LENGTH FIXTURES.



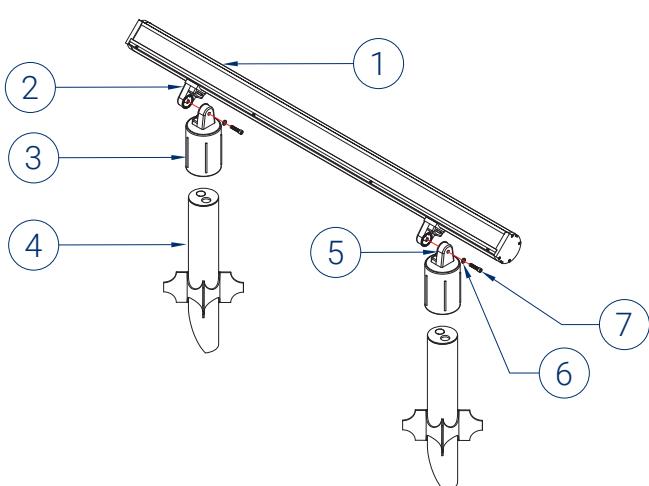
MOUNT DIMENSIONS



PACKAGE INCLUDES

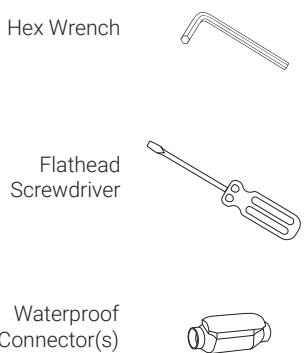


ISOMETRIC / EXPLODED VIEW



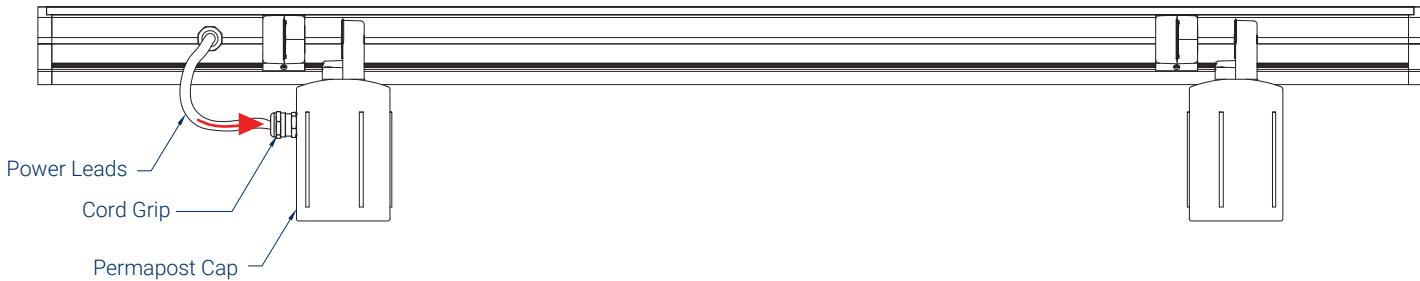
- (1) Architura® 1400 Fixture
- (2) Extrusion Swivel
- (3) Permapost Cap
- (4) Permapost Stem
- (5) Permapost Swivel Mount
- (6) Washer
- (7) Swivel Screw

ITEMS NEEDED (BY OTHERS)

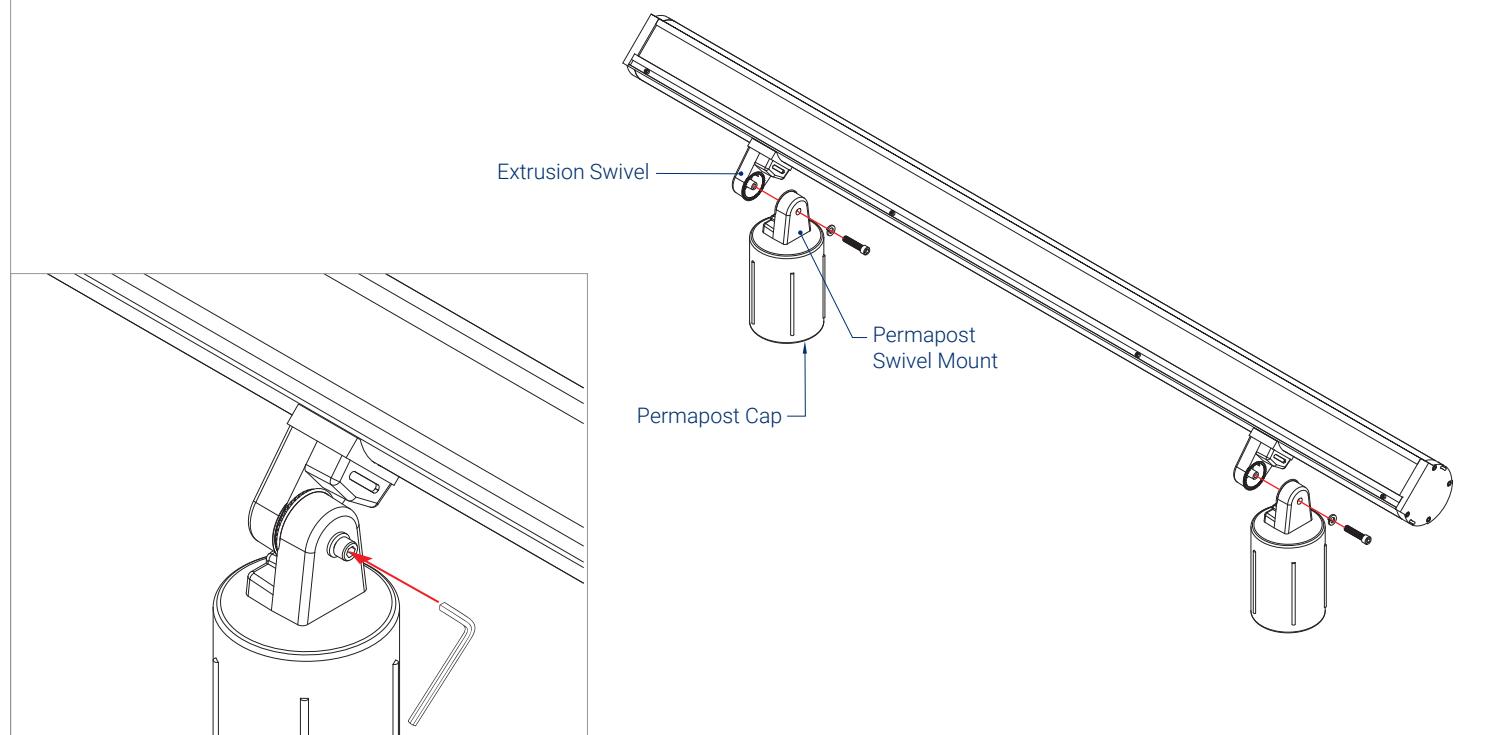


1 **INSERT POWER LEADS**

- INSERT FIXTURE POWER LEADS INTO PERMAPOST CAP WITH CORD GRIP.

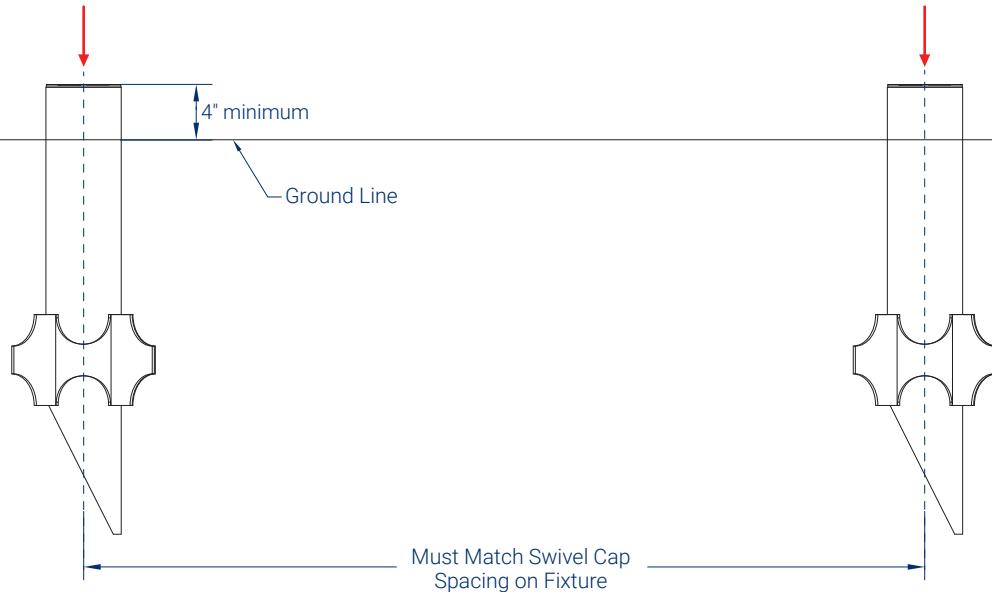
**2** **MOUNT FIXTURE TO PERMAPOST CAP(S)**

- ATTACH EXTRUSION SWIVEL TO PERMAPOST SWIVEL MOUNT ON PERMAPOST CAPS.
- USE THE SWIVEL SCREWS AND WASHERS TO LOOSELY ATTACH THE SWIVEL MOUNTS TOGETHER. THE WASHER PRECEDES THE SCREW. (SEE ILLUSTRATION).

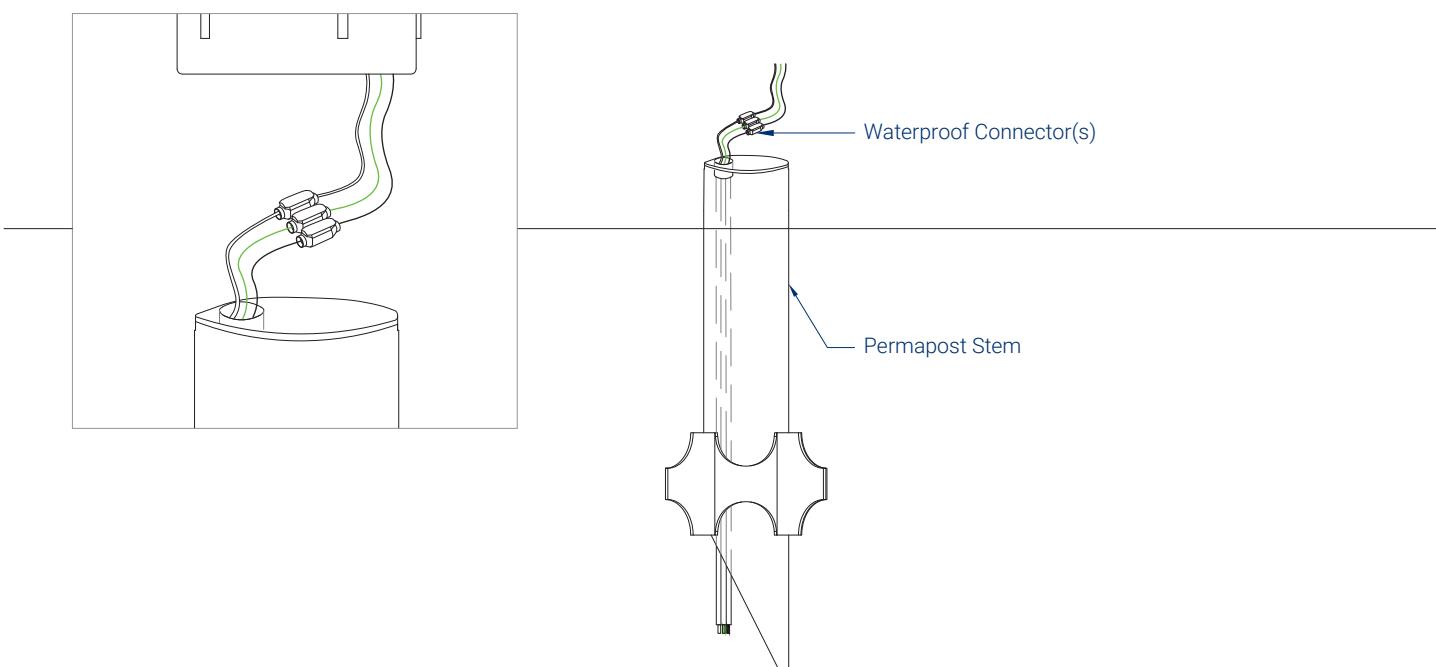


3 INSERT PERMAPOST STEM(S)

- INSERT PERMAPOST STEM(S) INTO THE GROUND TO THE SAME DISTANCE THE AS THE CAPS ON THE FIXTURE.
- IT IS RECOMMENDED THAT FIXTURE IS MOUNTED AT LEAST 4" ABOVE GROUND LEVEL TO ENSURE WATER RUNOFF.

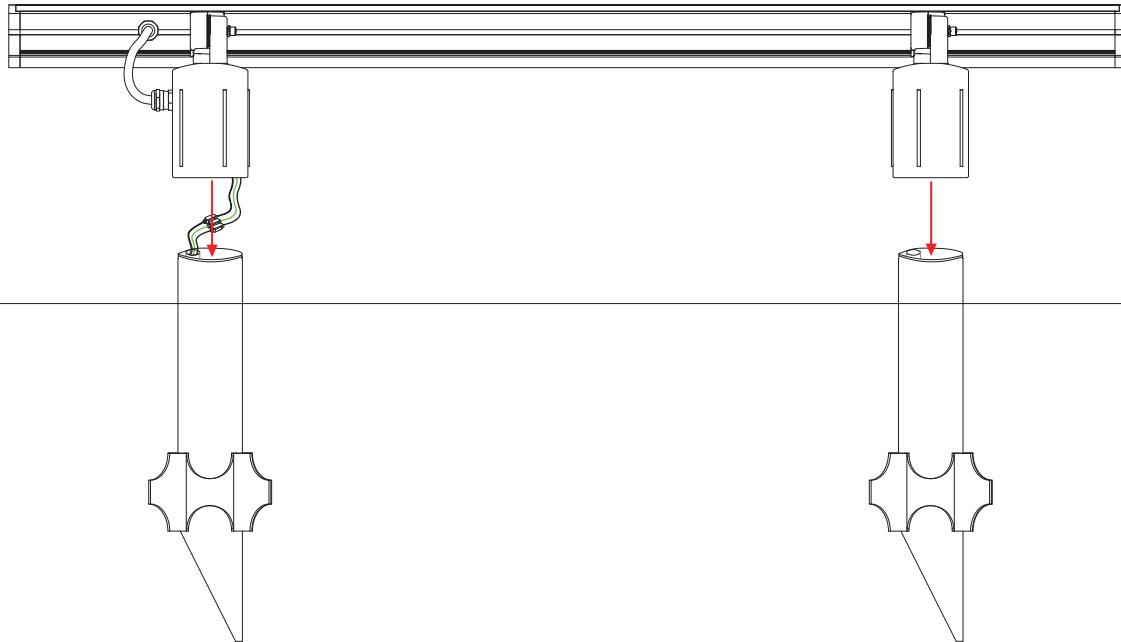
**4** COMPLETE WIRING

- WIRE FIXTURE INSIDE THE PERMAPOST STEM. USE ONLY WATERPROOF CONNECTORS.



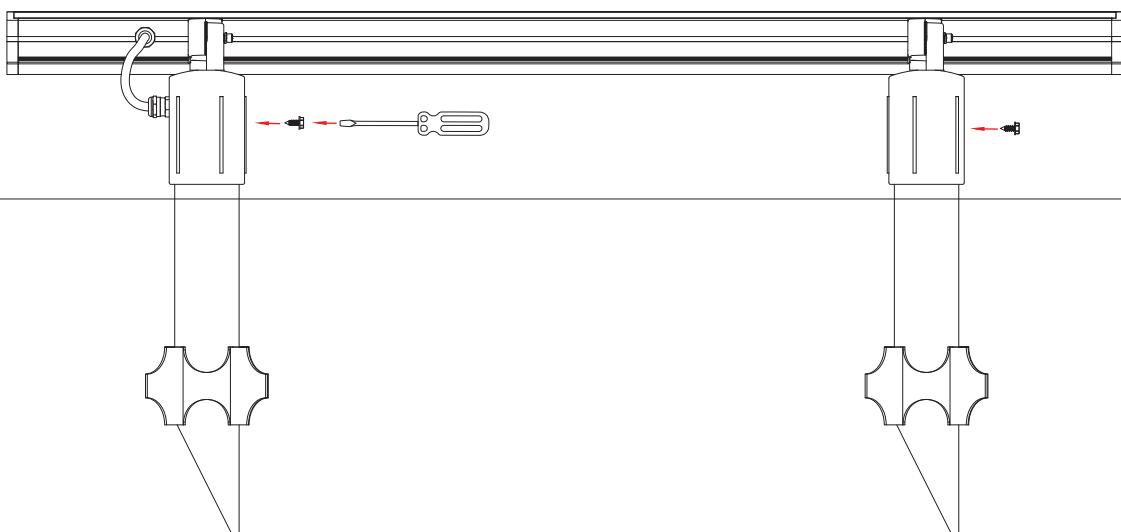
5 POSITION PERMAPOST CAPS ONTO PERMAPOST STEMS

- POSITION AND PLACE FIXTURE WITH ATTACHED PERMAPOST CAPS ONTO THE PERMAPOST STEMS. (IF NEEDED, EXTRUSION SWIVEL IS SLIDABLE FOR EASIER SPACING ADJUSTMENTS).



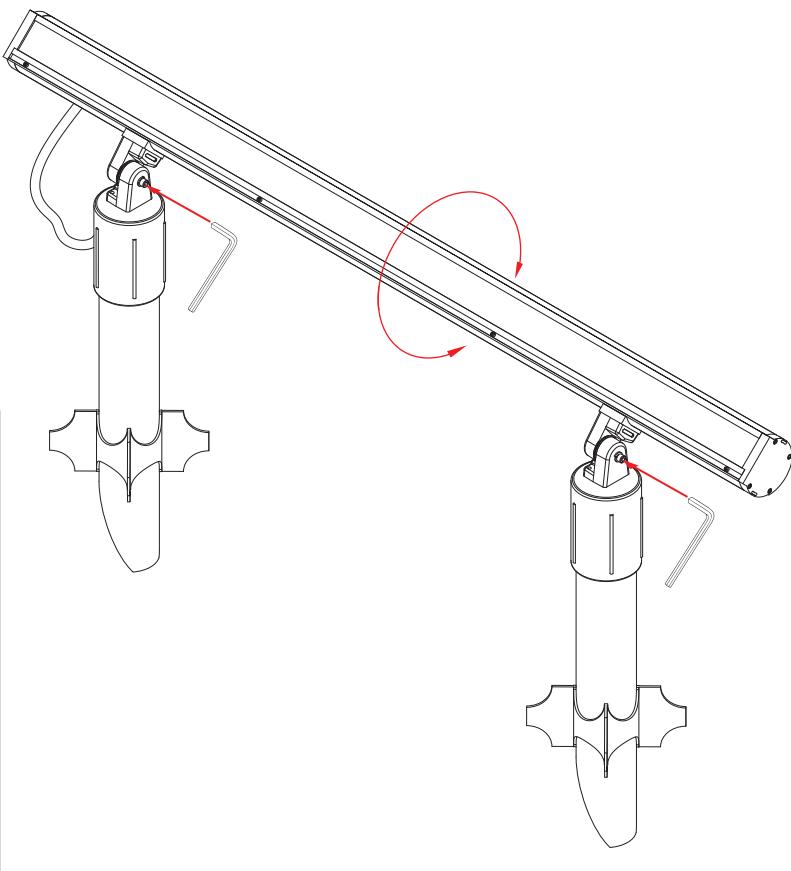
6 SECURE PERMAPOST CAPS

- SECURE PERMAPOST CAPS TO THE STEMS WITH THE PERMAPOST SCREWS..



7 SELECT DESIRED ANGLE

- ROTATE AND TILT THE FIXTURE INTO DESIRED DESIRED ANGLE.
- TIGHTEN SWIVEL SCREWS TO SECURE.





AURORA - Hybrid Technology

Aurora offers a convenient and reliable solution for exit signage with unrivaled operating costs. During normal power conditions, Aurora's LEDs illuminate and charge the photoluminescent display letters. When power is disrupted to the unit, the letters glow for the required 90 minutes, eliminating the need for Batteries or external light source excitation.

Sleek and modern, Aurora's 5/8" profile blends well wherever an inconspicuous fixture is preferred. Single and double face models are constructed from high quality, die cast aluminum housing and are available in fine-grain brushed aluminum, solid red, pure white, solid black or custom finishes to order.

Construction

- Elegantly thin 5/8" Pressure Die Cast Aluminum. Available in Fine Grain Brushed Aluminum or powder coat finish in Red, White or Black. Custom finishes are available to order
- Light Guide, light engine, photoluminescent panel and electrical connectors are neatly housed in a single injection-molded frame assembly with flexible circuit board and simple mating connector
- Mounts to standard 4S Junction box in Wall, Canopy or Pendant mount configurations
- Unique snap fit housing design eliminates unsightly hardware
- Removable face with field selectable Chevron directional indicators
- Low profile canopy for universal end or top mount application
- Hang Straight 1/2" Extruded Aluminum matching Tube Pendant and adaptors
- Optional polycarbonate face shield with snap-fit installation ideal for vandal resistant and low level applications (U.L. listed for floor proximity installation)

Electrical

- LED/Phosphor fusion technology delivers exceptional energy efficiency with just 2-watts total power consumption for either single or double face models
- Zero batteries, eliminates costly monthly battery testing and routine battery replacement and disposal
- Maintenance free, fully automatic operation
- Custom photoluminescent panel charges in the AC mode without reliance on external light sources providing self-sufficiency in outage conditions
- Solid State circuitry provides optimum condition power supply for the LED's which are powered at less than 50% of their rated operating current ensuring minimal heat dissipation and subsequent exceptional LED life predicated to maintain 80% luminosity after 20 years continuous operation.
- 120 or 277 VAC field selectable input
- UL and CSA listed as standard "Suitable for use in damp locations 10° - 40° C"

ORDERING GUIDE – AUR

Example: AUR-1-BA-CN-RS

Model	No. of Faces	Body Color	Mounting	Options
AUR Aurora Hybrid	1 Single 2 Double U* Universal	BK All Black WH All White BA All Brushed Aluminum RD Red CC Custom Color	1B Back mount No canopy CN Canopy Mounting Kit (Universal End/Ceiling) PA 12" Hang Straight Pendant Mount PB 24" Hang Straight Pendant Mount PC 36" Hang Straight Pendant Mount PD 48" Hang Straight Pendant Mount PE 60" Hang Straight Pendant Mount PF 72" Hang Straight Pendant Mount	RS Polycarbonate Security Cover M990010 Wire Guard (Wall Mount Only)
AUR				

Fill in fields from categories above and complete type and part number.

Type Number:

Full Part Number:



Brushed aluminum finish


 Red Finish
 (Also available in white, and black finishes)

Illumination

- Unique injection molded 3mm refractive light guide provides excitation for the photoluminescent material while also producing flawless legend uniformity
- Industry standard 6" high letters with 3/4" stroke with 100' visibility rating in both Normal and Emergency operation
- Legend is vibrantly illuminated at 18fL in the normal mode (AC LED powered) - 7 times the minimum UL 924 requirement at a 100' viewing distance
- Emergency mode illumination is provided by the pre-charged photoluminescent panel, which glows with a luminance sufficient to meet the 100' visibility rating at the end of the required 90 minutes duration
- Aurora end duration luminance is typically twice as bright as traditional photoluminescent signs that require larger lettering and housings with poor pale yellow legend and contrast, under normal ambient light conditions
- Maintenance free LED light source with 25+ year's life expectancy

Certification

- Tested, approved and listed by Underwriters Laboratories to UL 924, meets CSA C22.2 No. 141-10, NFPA 101, NFPA 70-NEC and OSHA requirements

Warranty

- 5-Year Limited Warranty



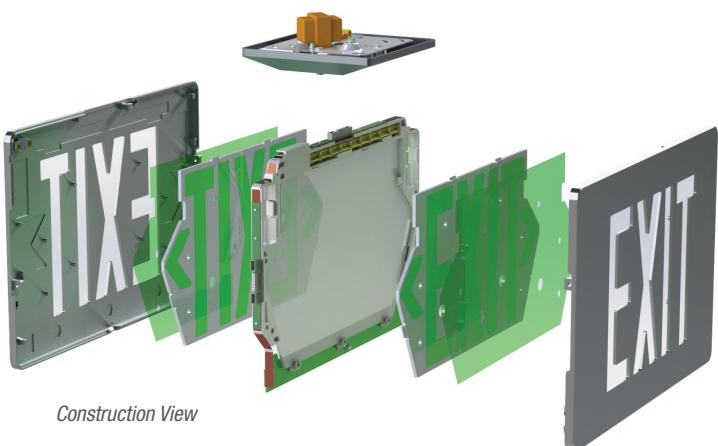
AURORA – Die Cast Aluminum Hybrid Exit Signs



Black Finish



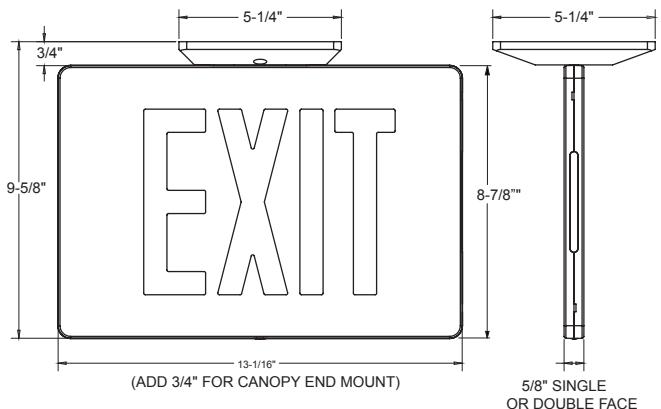
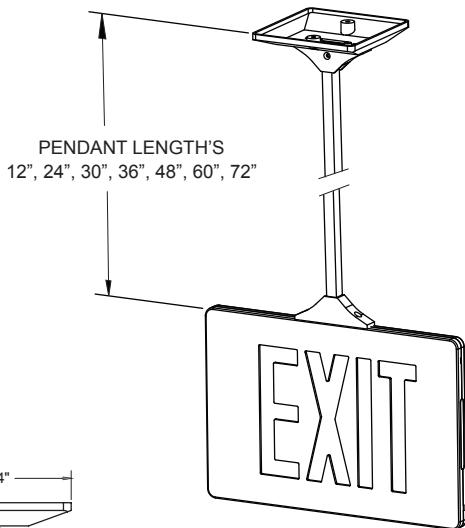
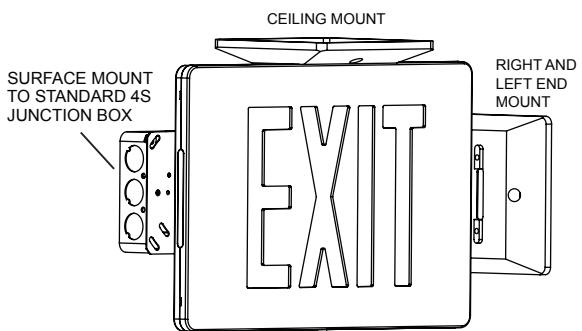
White Finish



Construction View



Brushed Aluminum Finish with Hang Straight Pendant



Optional Vandal-resistant snap lock clear polycarbonate cover. Available for Single or Double face signs in all mounting configurations. Listed for floor proximity installation.





495 Edison Court, Suite A, Fairfield, CA 94534
1494-B East Francis St., Ontario, CA 91761
Phone: 800-300-2945 Fax: 707-864-2700
E-Mail: info@airexchange.com

Data Sheets

Morgan Hill Fire Station

Plymovent - Vehicle Exhaust Removal System

**Plymovent – VSRX Rail Information – VSRX-35-1
Plymovent Fan – Motor/Blower Information
Plymovent – Electrical Information
Submittal Note Sheet**

1/11/2023

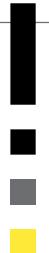
VSRX

RAIL

**Two (2) VSRX-35-1
33' Rail - 1 Hose Per Rail**

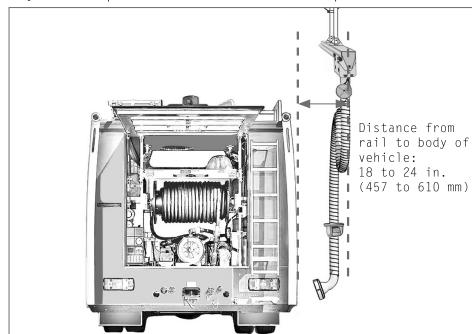
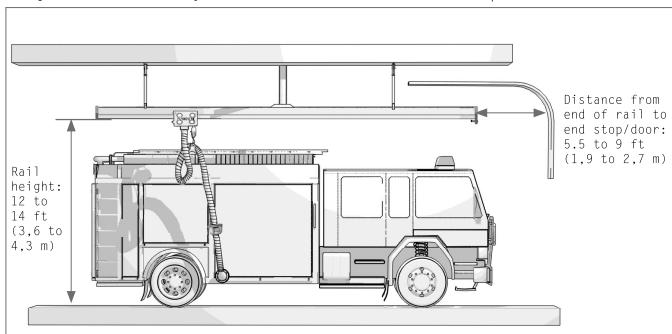


clean air at work



Product: Vehicle Square Rail with External Trolley (VSRX)

Summary: VSRX provides exceptional airflow volume to support apparatus bays in which two to four heavy-duty vehicles are aligned. The trolley travels outside of the rail profile, and the trolley duct opens the rubber seal lips within the profile.



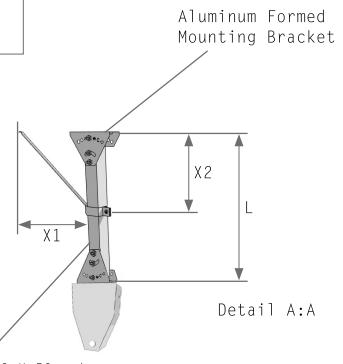
Drawings are not to scale.

System Specifications				
Type	Length: ft (m)	# of Suspensions	Weight: lbs (kg)	QTY
VSRX-20	19 (5.8)	2	210 (95.3)	
VSRX-30	28.5 (8.68)	3	309 (145.1)	
VSRX-35	31.75 (9.7)	3	339 (149.7)	2
VSRX-40	38 (11.58)	4	393 (178.2)	
VSRX-45	42.75 (13)	4	427 (193.6)	
VSRX-50	47.5 (14.47)	5	471 (213.6)	
VSRX-55	51.75 (15.77)	5	507 (229.9)	
VSRX-60	57 (17.37)	6	552 (250.3)	
VSRX-65	61.75 (18.82)	6	591 (268.1)	
VSRX-70	66.5 (20.26)	7	629 (285.3)	
VSRX-75	71.25 (21.7)	7	662 (300.3)	
VSRX-80	76 (23.16)	8	710 (322.1)	
VSRX-85	81.75 (25)	8	741 (336.1)	
VSRX-90	85.5 (26.1)	9	782 (354.7)	
VSRX-95	92.5 (28.2)	9	833 (377.8)	
VSRX-100	95 (28.95)	10	887 (402.3)	
VSRX-120	114 (34.74)	12	1,053 (477.6)	

Disclaimer: The intended use of this drawing is to provide general equipment dimensions. The information provided is confidential and proprietary to Plymovent Corp. and is not to be recreated, modified and/or otherwise distributed without written consent of Plymovent Corp. There are no expressed or implied warranties concerning the accuracy, completeness, reliability, or usability of this information. Use of this or any Plymovent Corp. drawing, for purposes other than its intended use, is unlawful and actions may be taken against the violating party(ies).

Support Details			
L	Brace Length	X1	X2
0 - 1.5 ft (0 - 0.45 m)	N/A	0	0
1.5 - 3 ft (0.45 m - 0.91 m)	20 in. (508 mm)	14 in. (356 mm)	14 in. (356 mm)
3 - 6 ft (0.91 - 1.82 m)	30 in. (762 mm)	21 in. (533 mm)	21 in. (533 mm)
6 - 10 ft (1.82 - 3 m)	72 in. (1829 mm)	51 in. (1295 mm)	51 in. (1295 mm)

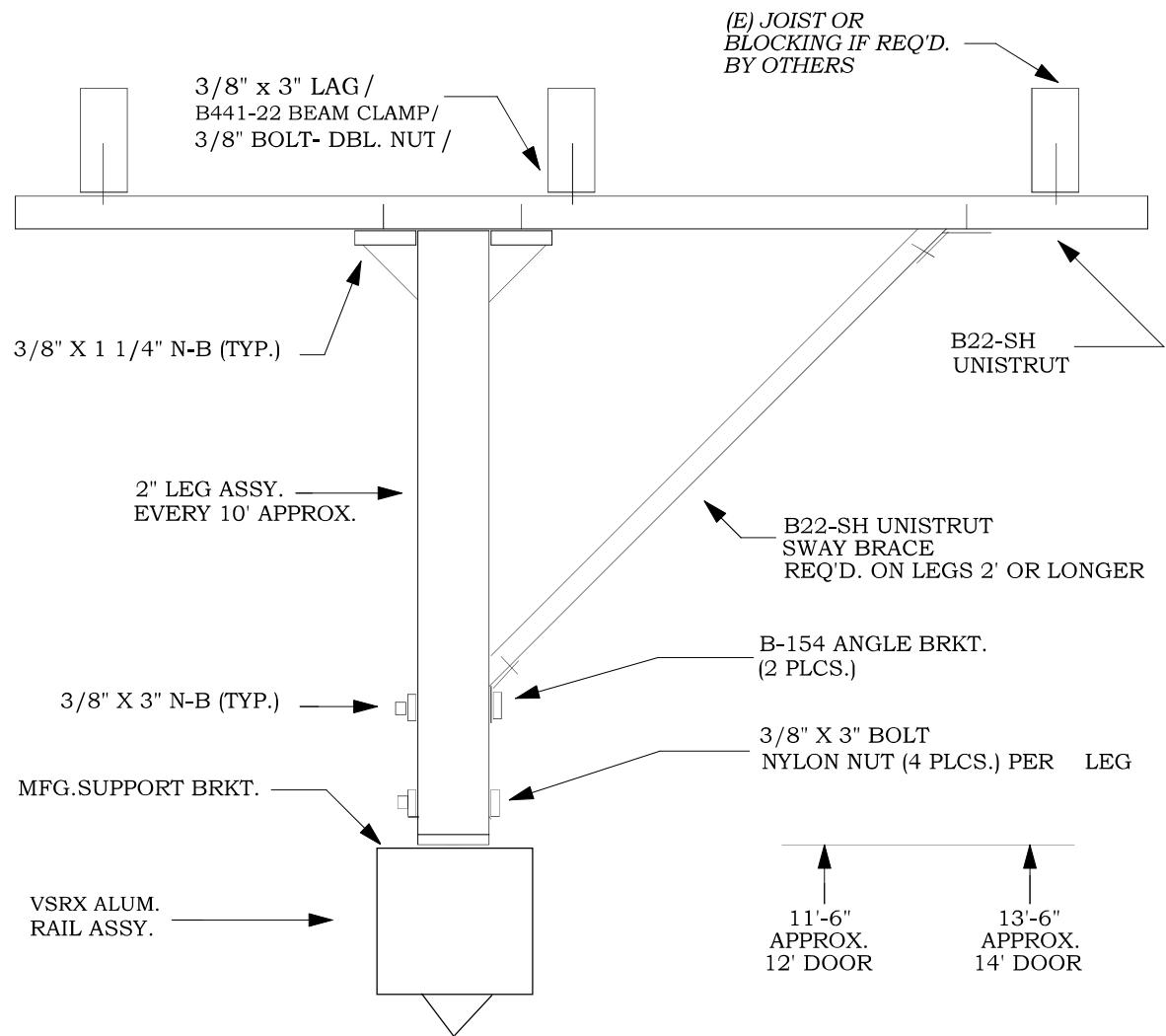
Job name:	DWG BY: RS	Revision: 2	Rev. date: 06/13/18
Engineer:	Plymovent Corp. 5 Corporate Drive Cranbury, NJ 08512 800-644-0911		
Customer:			VSRX



2 X 2 in. (50 X 50 mm)
Aluminum Extruded Sq. Tube

Notes:

1. System support method: see Detail A:A and Support Details Table.
2. System location: See System Specifications Table.
3. System temperature resistance: 400°F (204°C) continuous/500°F (260°C) intermittent.
4. Weight based on 1 crab and hose assembly; each additional crab/hose adds 40 lbs (18 kg).
5. If using Plymovent Pneumatic Grabber, add additional 50 lbs (23 kg) per rail system.



STD. SUPPORT LEG
VSRX

4.4 VSRX-Rail Location

1. VSRX-Rail
2. Tailpipe
3. Bay door
4. Rail height
5. Distance to vehicle
6. Distance to exit door

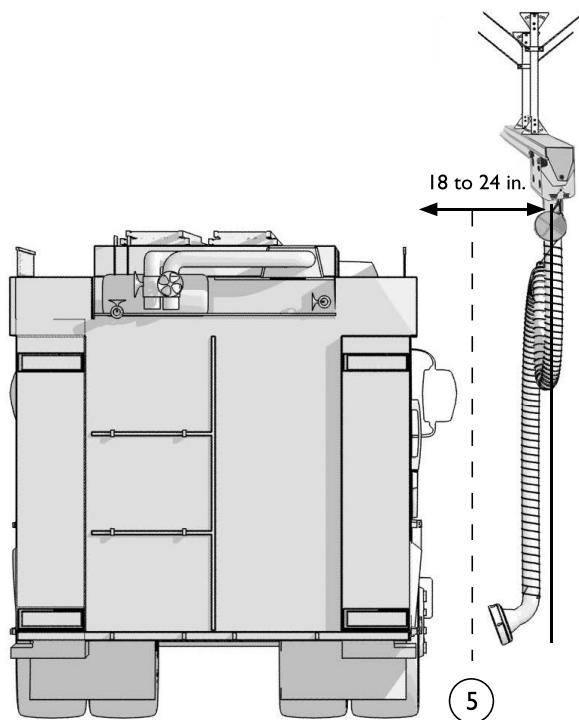
- a. The VS RX-Rail (1) is mounted at a height (4) between 12 ft (3,7 m) and 14 ft (4,3 m) over the floor on the side in which the tailpipe (2) is located.
- b. The rail should be mounted 18 in. to 24 in. (457,2 to 609,6 mm) from the body of the vehicle (5), and positioned on the tailpipe side of the vehicle. Preferably the rail is on or within the boundaries of the exit door.
- c. The rail should be mounted immediately under a sectional door with a clear height from the track to the door of 4 in. (100 mm) to 6 in. (150 mm).
- d. The recommended distance from the end of the rail to the door(s) (6) can be found in the table on page 10.



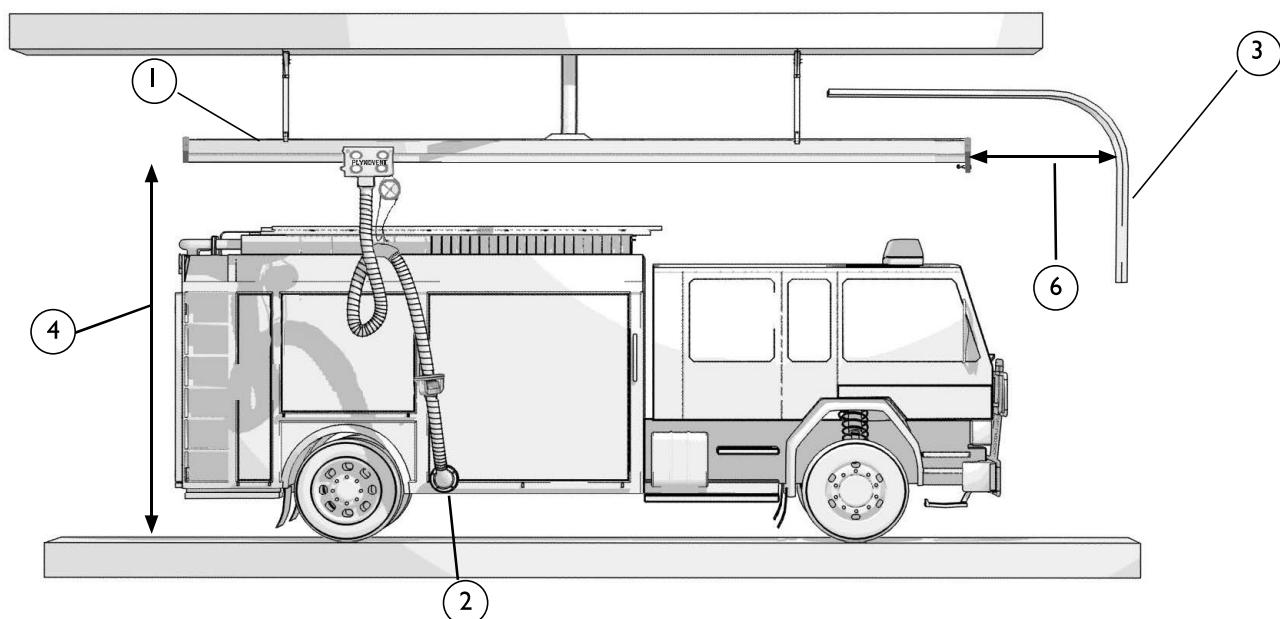
WARNING

PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

End view



Sideview



4.5 Assemble the Legs and Rail

1. Support Legs
2. Unistrut bar clamps
3. Side Braces
4. Rail

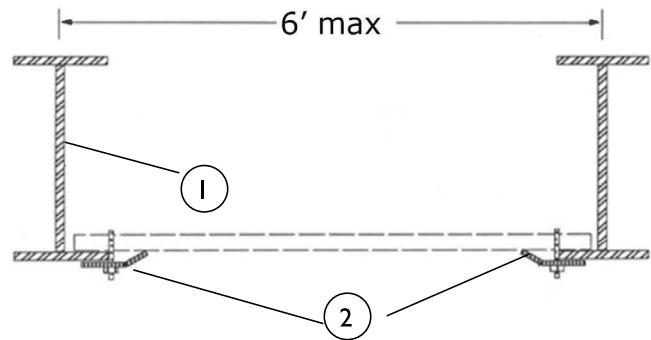
a. If you are attaching the Support Legs to steel beams, use the Unistrut bar clamps. To attach to the top or bottom of a bar joist, use a thru bolt in the slot of the bar joist.

b. Mount the Support Leg to the roof or to beams. The first leg will be approximately 3 to 4 ft from the end of the track or rail. Leg assemblies will need to be placed every 10 to 12 ft. and braced side to side using the appropriate length (20, 30 or 72 in.) side brace kit.

Note: Longer braces can be made out of $\frac{3}{4}$ in. EMT conduit and attached to the leg using a Plymovent 8130-1011 leg/brace mounting kit. You should have at least one long brace running front to back.

c. To calculate the leg length, determine the mounting height of the rail, then subtract that dimension from the bottom of the strut. Cut the aluminum square tube to this length.

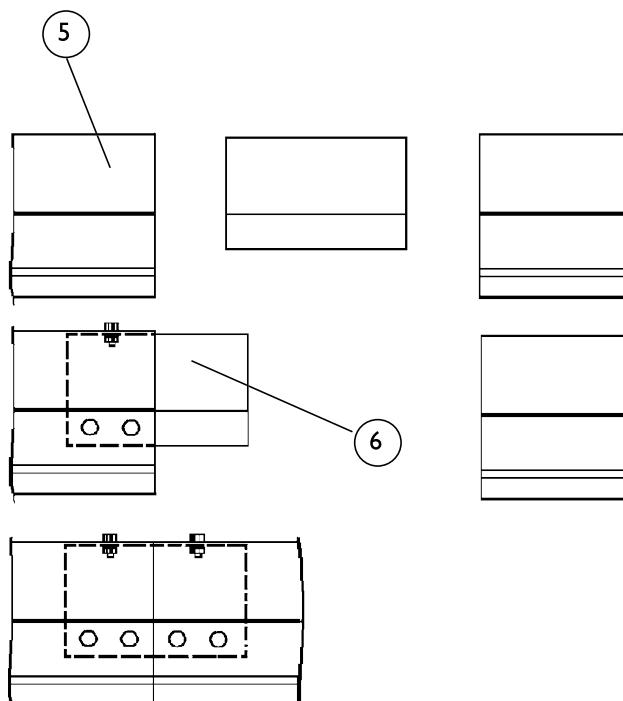
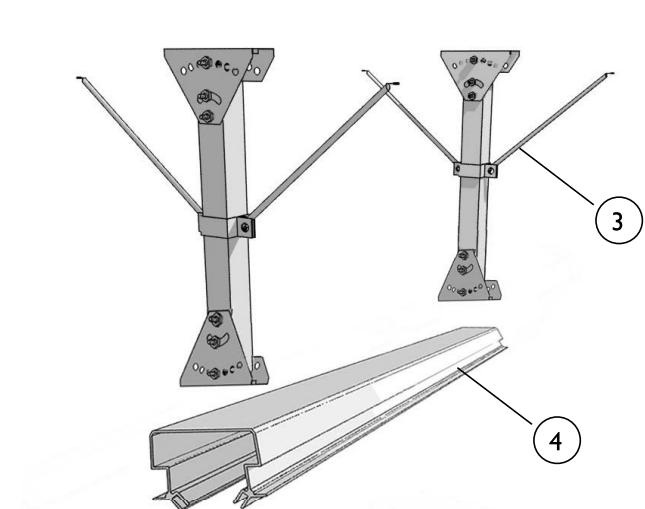
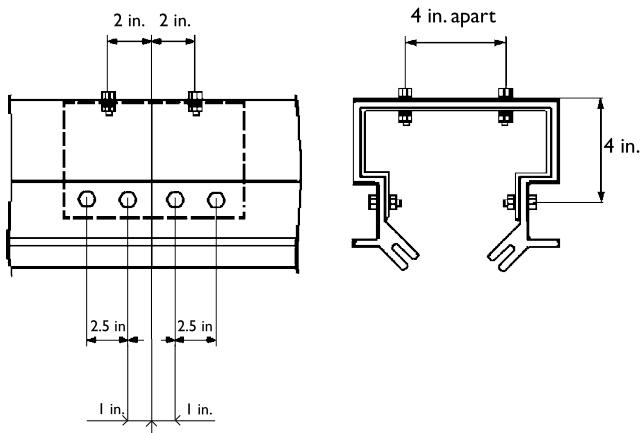
Center a triangular foot and drill 2- $\frac{13}{32}$ in. holes to attach foot. Repeat for the bottom foot positioned perpendicular to the rail (4). Attach the leg assembly to the strut on ceiling using $\frac{3}{8}$ in. strut hardware. Attach the side brace kit (3).



For multiple legs, turn the side braces perpendicular to the rail and install one long front to back brace. Repeat for each leg assembly.

d. To splice two rails, position the rail sections on saw horses. Insert and center a splice plate (6) inside the rail (5), clamp in place with a C-Grip and drill 2- $\frac{5}{16}$ in. holes on top 2 in. from the joint and 4 in. apart.

On both sides, drill the first $\frac{5}{16}$ in. hole in the center of the recessed area 1 in. from the joint and the second $\frac{5}{16}$ in. hole $\frac{1}{2}$ in. from the first hole. Insert the bolts but leave them loose. Silicone the joint and slide the other rail section onto the splice. Line up straight in both directions and clamp. Drill the same holes on the mating rail. Tighten the bolts in sequence - first tighten the top 4 bolts, and then the remaining 8 bolts on the sides for a total of 12 bolts.



4.6 Mount the Rubber Seal

1. VSR profile
2. Rubber seal
3. Tool no. 0000102158

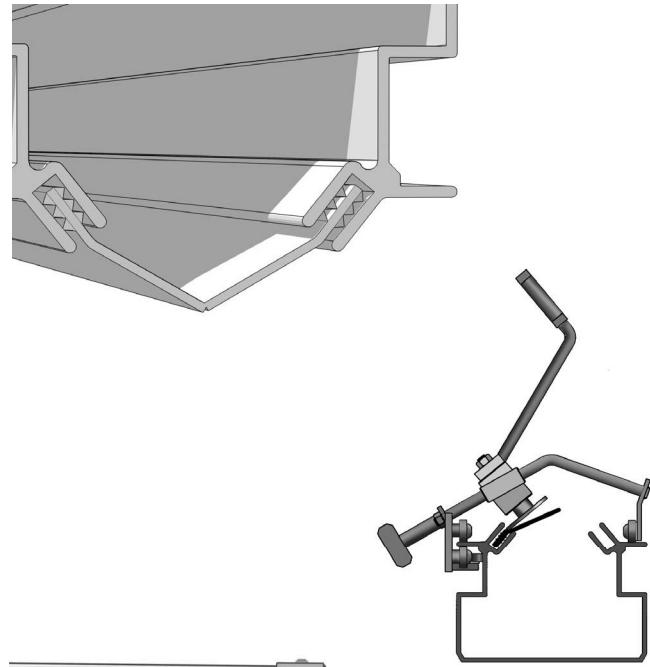
a. Turn the rail profile with the opening upwards.

The rubber lip seal can be easily installed with the Plymovent VSR Lip Tool before hanging the rail from the support legs; or you can install the lip after the rail is hung from the support legs.

The rubber lip seals are directional and must be installed with the inside bend towards the center of the rail or facing each other. With the rail still on saw horses, install the rubber lip with the bend facing inward. Spray the lip and aluminum channel with a soapy solution this will ease installation.

Start installing the first 6 in. of rubber lip by hand using a screwdriver and then position the lip tool on the rail to roll the rest of the lip into the bend. Cut the ends at a 90 degree flush with the end of the rail. Repeat for the other side.

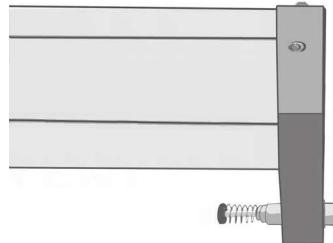
Note! The rubber seal must be angled inward.



4.7 Install the End Caps

Place each end cap on the rail and drill 4 3/8 in. holes through the pre-punched holes in the end caps. Secure the end cap with the provided hardware. Repeat for the back end cap, but do not install until the rail is hung, so you can install the crab/trolley.

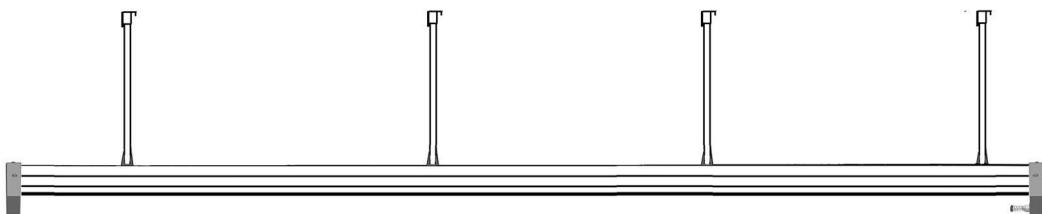
For the front end cap (nearest the door), install the shock absorber centered in the end cap, apply Blue Loctite on nuts and tighten securely.



4.8 Hang the Rail

On the top of the rail, lay out 3/8" inch holes, for the leg mounting feet locations, to match the distances between the leg assemblies previously hung from the ceiling.

Pre drill these holes. Raise the pre assembled rail using multiple scissor lifts or lifting mechanisms such as a chain fall. Position rail under leg assemblies and attach with hardware.



4.9 Assemble and Hang the Hose and Grabber

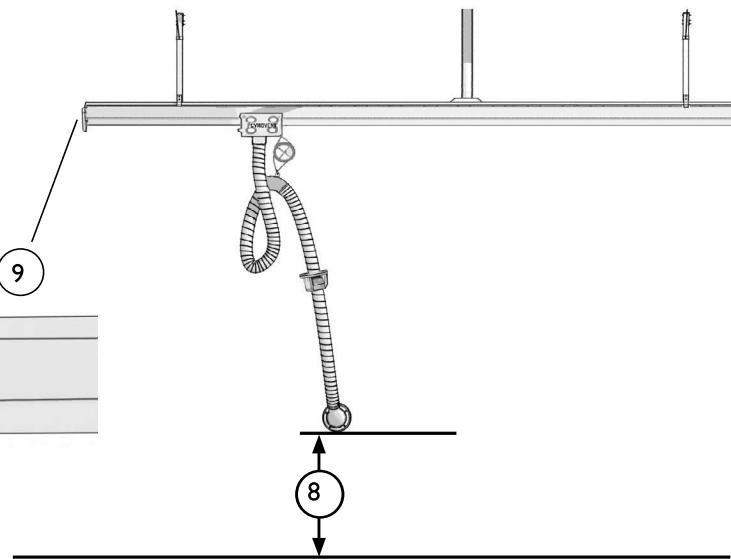
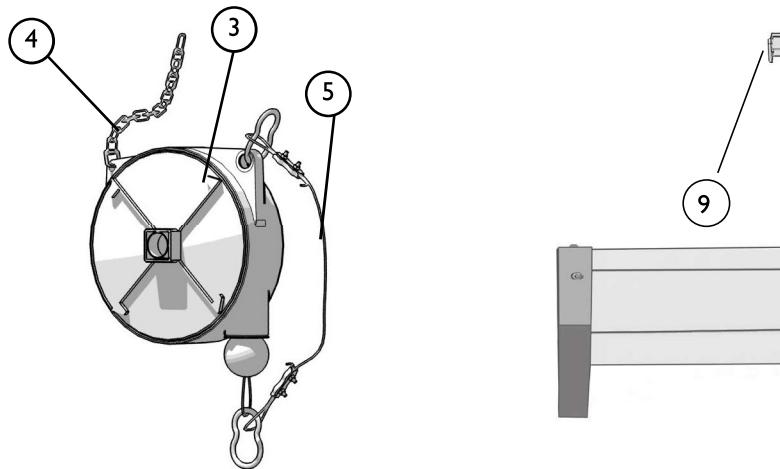
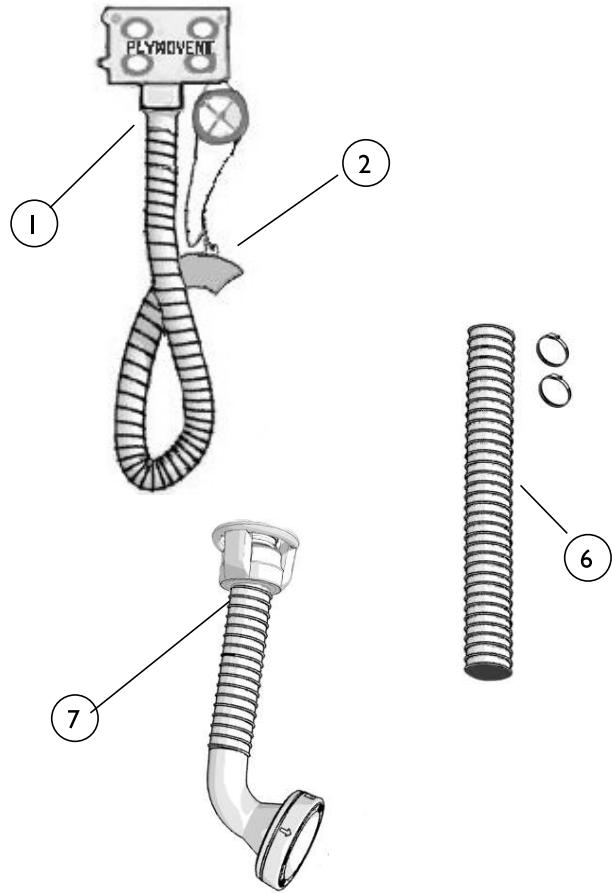
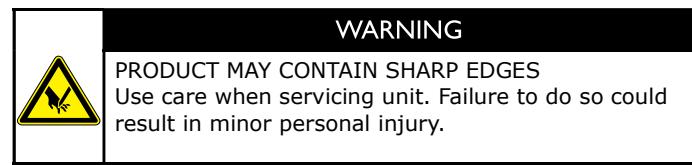
1. VSRX-profile
2. Grabber
3. Saddle
4. Crab Trolley
5. Balancer

Follow these steps to assemble and align the exhaust hose assembly:

- a. Mount the upper hose (1) to the trolley using a hose clamp.
- b. Attach the upper hose to the short side (from the tab) of the metal saddle (2). You may need to twist the hose to have the u-bend or loop positioned away from the vehicle in the 3 o'clock position if looking down at the crab trolley, with the balancer at the 12 o'clock position.
- c. Install the balancer (3) using the carabiner hook and safety cable (4), and attach the Balancer Locking Cable (BLC) to the trolley (5). Assemble the BLC using the length listed in the Installation Table on page 10. Ideally, 6 in. (15 cm) of the Balancer cable should be exposed when the Grabber nozzle is connected to the vehicle.

Install the BLC so that it is on the back side of the balancer and away from the adjustment locking clip. This will keep the BLC from coming into contact and potentially breaking the locking clip. The balancer snap hook should be oriented with the catch or door of the hook on the same side of the balancer as the locking clip. This will ensure that the BLC does not open the snap hook, allowing the BLC to come loose. The BLC attachment to the metal saddle snap hook should be opposite of the catch or door so that it does not open it.

- d. Attach the mid hose (6) to the long side of the metal saddle with the supplied hose clamp. The ST mid hose is directional, so install with directional arrow pointing up or with the airflow.
- e. With the balancer holding the hose all the way up cut the mid hose at approx 4 ft (1,2 m) from the floor and attach to the Safety Disconnect Handle with the supplied hose clamp (7).
- f. The height of the Grabber nozzle should be in. 14 to 18 in. (35,5 to 45,7 cm) from the finished floor (8).
- g. Secure the back end cap using the holes previously drilled (9).



MAGNETIC GRABBER®

Product/Component Reference Guide



90360-1011
Plymovent
Pneumatic Magnetic
Grabber Retro Fit
Kit, 4"

90360-1
Tailpipe Adaptor,
Conical, Kit



PLYMOVENT®

Plymovent - USA
115 Melrich Road
Cranbury, NJ 08512
T 800.644.0911
T 609.395.3500
F 609.655.0569
www.plymovent.com

Plymovent - Canada
24-1200 Aerowood Dr.
Mississauga, ON L4W 2S7
T 800.465.0327
T 905.564.4748
F 905.564.4609

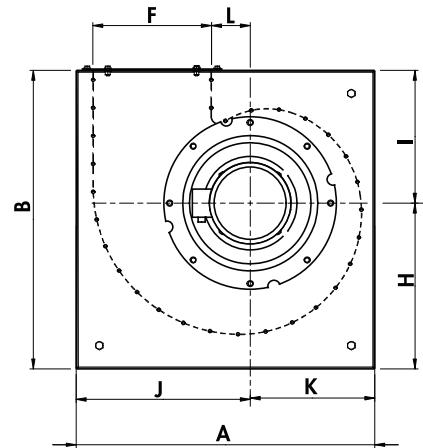
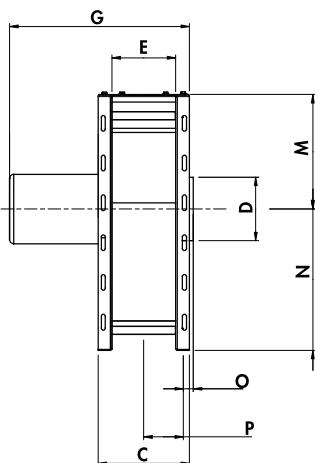
TEV-3110
MOTOR
BLOWER

One (1) Fan
3HP, 208-230, 1 Phase

Model: TEV-3110-60

DIMENSIONAL DATA

	mm	inches
A	640	25 3/16
B	640	25 3/16
C	230	9 1/16
D	200	7 7/8
E	160	6 5/16
F	254	10
G	472	18 9/16
H	355	13 31/32

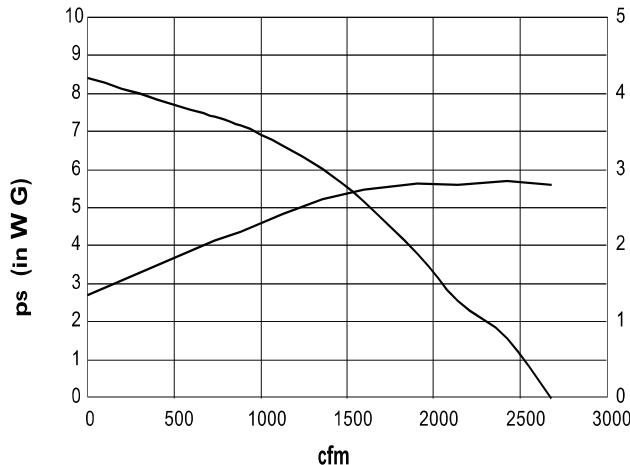


Plymovent reserves the right to make
design and technical changes.

	mm	inches
I	288	11 11/32
J	373	14 11/16
K	267	10 1/2
L	83	3 9/32
M	288	11 11/32
N	355	13 31/32
O	25	1
P	99	3 15/16

TEV 3110

TECHNICAL DATA



Performance shown is for installation type D: Ducted inlet, Ducted outlet.
Performance ratings do not include the effects of appurtenance in the airstream.
Performance measured at a speed of 3500 RPM and the efficiency of the motor.

Fan specifications

Construction:	AMCA Type - B
Drive type:	Direct drive
Impeller type:	Backward incline
Impeller material:	Aluminum
Impeller diameter:	12.4 inch
Impeller width:	2.3.2 inch
Hub size:	5/8 inch
Discharge style:	Rotational 90°
Shaft seal:	Rubber
Housing material:	Galvanized steel
Housing finish:	Epoxy powder coat
Total fan weight:	85 lbs

Motor specifications

Frame size:	NEMA 56C 3-ph
Motor type:	TEFC (IP 55)
Rated output:	3.0 HP
Thermal protection:	No
CSA:	Yes
CE-listed:	Yes
Continuous duty:	104°F/40°C

1 phase motor

Voltage	208-230/460 V
Full load current:	14.6-13.5/6.75A
Motor RPM	3500
Service factor	1.15

SOUND POWER DATA

Octave Band (Hz)

Speed	Pressure in WG	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	4000 Hz	LwA	Sones
3500	0	99	103	99	97	91	86	83	78	98	51
3500	1	100	103	99	96	90	85	82	77	97	50
3500	2	100	104	99	96	89	85	81	76	97	49
3500	3	100	104	99	96	89	84	79	74	97	49
3500	4	101	105	99	96	89	83	79	74	97	50

Performance shown is for installation type D: Ducted inlet, Ducted outlet. The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA standard 301. Values are shown for inlet LwA sound power levels for installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

PLYMOVENT®

Plymovent representative

ELECTRICAL INFORMATION

OS-3 Control Box

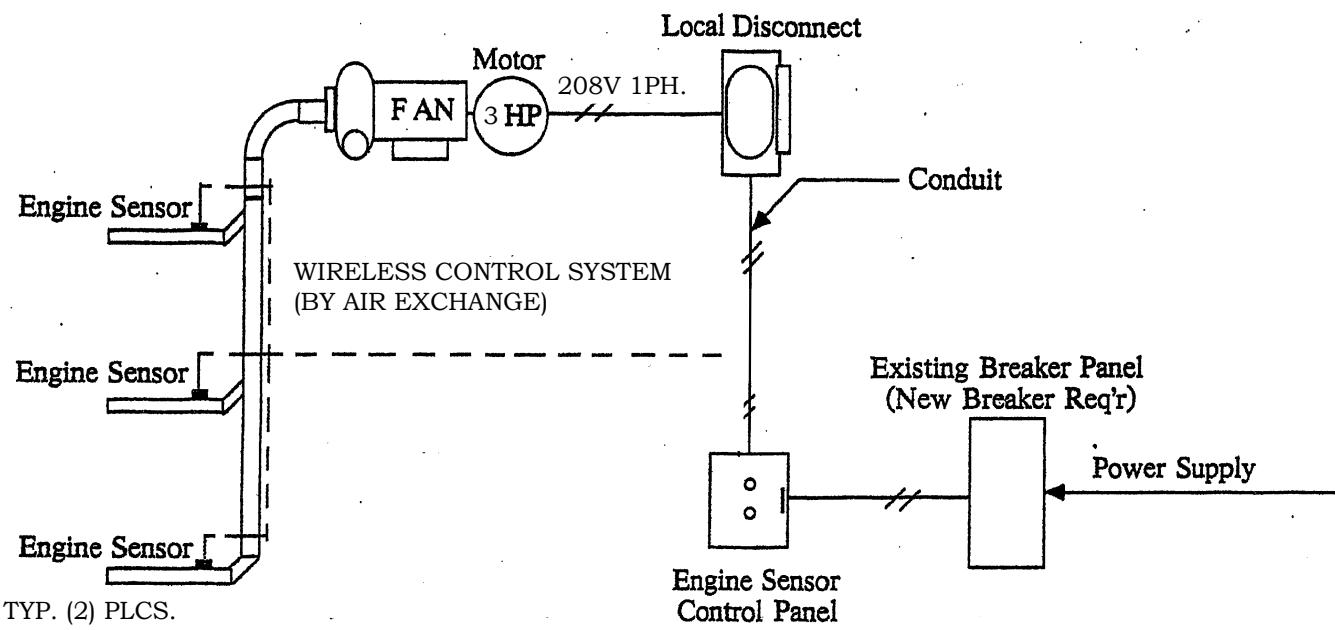
3HP, 1 Phase

Wiring Details

PlymoVent Blower Wire Sizing Chart

PlymoVent Model No.	HP Rating	Voltage	Full Load Amps	Circuit Breaker Size	Number of Conductors	Wire Size THHN AWG Minimum	Conduit Size EMT	Non-fusible Disconnect Sq. D Part No.
Single Phase								
67001	1hp	115V	12A	20A	2	#10	3/4"	DU221RB
		208/230V	6A	15A	2	#14	3/4"	DU221RB
TEV-359-60	2hp	208/230V	15/12A	20A	2	#14	3/4"	DU221RB
TEV-3110-60	3hp	208/230V	16/12.9A	20A	2	#10	3/4"	DU221RB
TEV-559-60	5hp	208/230V	24/20.5A	30A	2	#10	3/4"	DU221RB
TEV-585-60	7.5hp	208/230V	33.3A	50A	2	#8	3/4"	DU222RB
67009	10hp	208/230V	42A	60A	2	#6	3/4"	DU222RB
Three Phase								
TEV-359-60	2hp	208V	6.2A	15A	3	#14	3/4"	DU321RB
		230V	5.6A	15A	3	#14	3/4"	DU321RB
		460V	2.8A	15A	3	#14	3/4"	HU321RB
TEV-3110-60	3hp	208V	10A	15A	3	#14	3/4"	DU321RB
		230V	9A	15A	3	#14	3/4"	DU321RB
		460V	4.5A	15A	3	#14	3/4"	HU321RB
TEV-559-60	5hp	208V	15.5A	20A	3	#10	3/4"	DU321RB
		230V	14A	20A	3	#10	3/4"	DU321RB
		460V	7A	15A	3	#14	3/4"	HU321RB
TEV-585-60	7.5hp	208V	20A	30A	3	#10	3/4"	DU321RB
		230V	18.4A	30A	3	#10	3/4"	DU321RB
		460V	9.2A	15A	3	#14	3/4"	HU321RB
TEV-745-60	10hp	208V	26A	40A	3	#8	3/4"	DU322RB
		230V	23.8A	30A	3	#10	3/4"	DU322RB
		460V	11.9A	20A	3	#12	3/4"	HU321RB

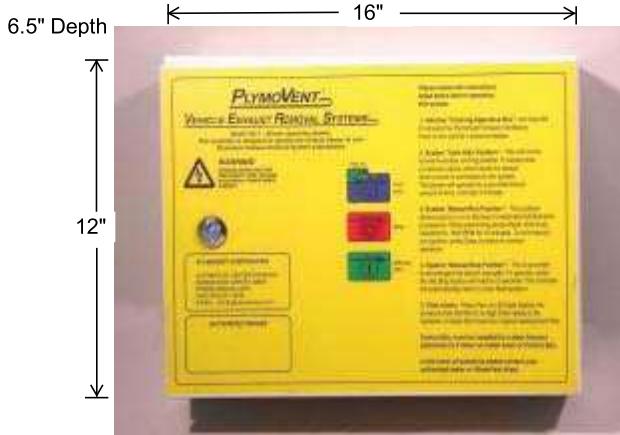
PlymoVent assumes no liability for any electrical installations. This chart was produced as a minimum standard when sizing conductors, and related electrical components.



DETAIL 3
4
Electrical Installation

BLOWER OPERATING SYSTEM: OS-3

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 translated, copied, stored or translated into another language in any form or manner without written
 permission from PlymoVent AB. PlymoVent AB reserves the right to make design changes.



General information:

OS3 controller is designed to be used for control of exhaust fans in vehicle exhaust system, with or without particle filtration system. The controller can be set for both manual and automatic control of the fan. Depending of system, different sensors for start/stop function, can be used. Mainly two types of sensors will be used; pressure sensor to detect pressure difference in systems and temperature sensors to detect temperature level in the system. The OS3 control box also includes an alarm device, which can be used for status control of the airflow in the exhaust system. A built in "after running time" function will secure that toxic gases in the duct system will be exhausted out of the ducting before the fan stops. The after running time can easily be adjusted between 7 sec. to 5 minutes.

Method of operation:

When the control unit is set into "automatic" position, the exhaust fan is started by a signal from an externally mounted pressure, or/and temperature sensor. Normally the system is activated by the pressure sensor and kept running by the temperature sensor.

Pressure sensor:

The pressure sensor reacts on increasing pressure (positive pressure) which occur in the system when a vehicle is starting up. The pressure sensor is adjustable to fit all engine sizes.

Automatic mode:

When the engine is turned on, the pressure sensor reacts and forward a signal to the control Unit. The control unit is then starting the exhaust fan.

When the engine turns off the pressure in the system decreases and the fan stops after The pre-adjusted after run time is out.

Manual mode:

When the control unit is set in manual position the exhaust fan is running continuously.

Stop mode:

When pressing the stop button, the fan will stop immediately and after a short period of time 2-3 sec. the controller will move into automatic mode. This built in function will prevent the risk of having exhaust gas leakage in the system due to operator error.

Area of use:

OS-3 is an energy saving control unit, which together with pressure sensor, temp sensor makes a fully automatic system for the control of PlymoVent's vehicle exhaust fans.

Delivery:

The control unit, OS-3, is delivered complete with functions for manual and automatic start/stop of the exhaust fan.

NOTE! The control unit, OS-3, is delivered without cable for field wiring. Cables for field wiring must apply to UL and NEC.



KTX C Series Wire Input Transmitters

303, 433 MHz

Remote Control Transmitter

The Wire-Input transmitter is a modification of the Applied Wireless standard Keyfob Remote Transmitter with the replacement of the keyfob button with wires to attach to remote contacts.

The remote control transmitters in the KTX C Series are FCC Part 15 certified which allows for a quick and cost effective solution to wireless remote control system design and implementation. The transmitter's ID code is preprogrammed at the factory to one of more than 16.7 million possible codes, providing a very high degree of security. The KTXC Series transmitters incorporate a SAW resonator to ensure excellent frequency stability. Power is supplied by a widely available 12-volt alkaline battery (included).

Features

- Compatible with Applied Wireless RCRC-3R Series Code Learning Receivers
- FCC Certified
- Long Range – 300 to 1400 ft¹
- Highly Secure – More than 16.7 Million Unique Transmitter ID Codes*
- Rugged ABS Case
- Battery Included

Typical Applications

- Industrial ON/OFF Applications
- Motor Control
- Solenoid Control
- Lighting Control
- Access Control
- PLC Activation

Ordering Information

Frequency (MHz)	Model Number	Matching RCR Receiver
303.825	KTX303C-WIRE-AC	RCR303C-3R
433.920	KTX433C-WIRE-AC	RCR433C-3R

Specifications:

Battery: 12VDC Alkaline, type 23A

Size: 2.41 x 1.45 x 0.53 in. (61.22 x 36.83 x 13.47 mm)

FCC ID: N6PKTX303 (or QY4KTX433)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.

¹Unobstructed line of sight range is typically 300-400 feet when used with Applied Wireless RCRC3R Series Remote Control Receiver and its included quarter-wave whip antenna. Optional Dipole and Active (amplified) Dipole receiver antennas are available for increased reception range.



PRESSURE SWITCH PROCEDURE

BSAB no: T0.7
Ser.no: OS-3
Date: NOV-00
Replace:

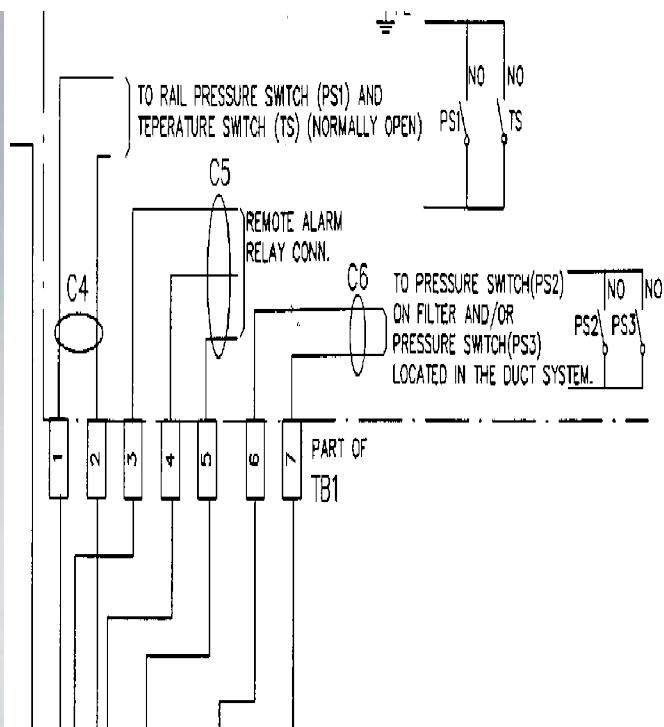
BLOWER OPERATING SYSTEM: OS-3

© Copyright 1997: All rights reserved. All information within this printed matter may not be reproduced, handed over, copied, xeroxed or translated into another language in any form or means without written permission from PlymoVent AB. PlymoVent AB reserves the right to make design changes.

1. Pressure switch: PlymoVent has incorporated a pressure switch, which senses the exhaust gas pressure generated by the vehicle. This adjustable pressure switch allows the electrical controller to start the operation of the fan. The pressure switch has an adjustment range from 0.1 spwg/ 25Pa to allows the field installer the ability to adjust the pressure setting.

2. Electrical wiring: The pressure switch utilizes a parallel connection with the temperature sensor, which is connected to terminals 1, and 2 located at terminal block 1 (TB1). Both the pressure and the temperature switch will maintain a normally open position when vehicle is not in operation. NOTE: Electrical wiring providing signal to temperature and pressure sensor must be 14 AWG/1.5 mm² wire size. Control wiring must be done by certified/licensed electrician.

3. Pressure adjustment procedure: The pressure switch allows for field adjustments by placing a screwdriver in the slotted dial in the back of the switch. By turning the dial counter clockwise you will increase the sensitivity and by turning the dial clockwise you will decrease the sensitivity. The recommended setting will be approx. 0.16 spwg/ 40Pa. The pressure setting, may very up or down depending on the vehicles output pressure. To accurately adjust the pressure switch start the vehicle and check that the fan starts immediately, turn off vehicle and the exhaust fan should run for maximum 7 minutes . NOTE: If exhaust fan do not start adjust the pressure switch by turning dial counter clockwise 1/4 turn . If fan starts when the vehicle is not running increase pressure setting on pressure switch by turning dial clockwise 1/4 turn. Consult PlymoVent engineering department for assistance at www.eng.plymovent.com





Long Range Wireless Applications

RCRC-3R Series

303, 433 MHz 3-Function Remote Control Receiver (with On-Board 10-Amp Relays)

The RCRC-3R Series remote control receivers are designed to provide a quick and cost effective solution for a variety of wireless applications. The receiver includes an external antenna, decoder and three 10-Amp on-board relays. The receiver offers excellent sensitivity and selectivity by the utilization of SAW technology and state-of-the-art low noise amplifiers. An external jack is provided for external long-range antenna. Units are designed to work with Applied Wireless encoders, as in the KTX-C series models. This is a learning receiver, and can learn up to 4 different coded transmitters.



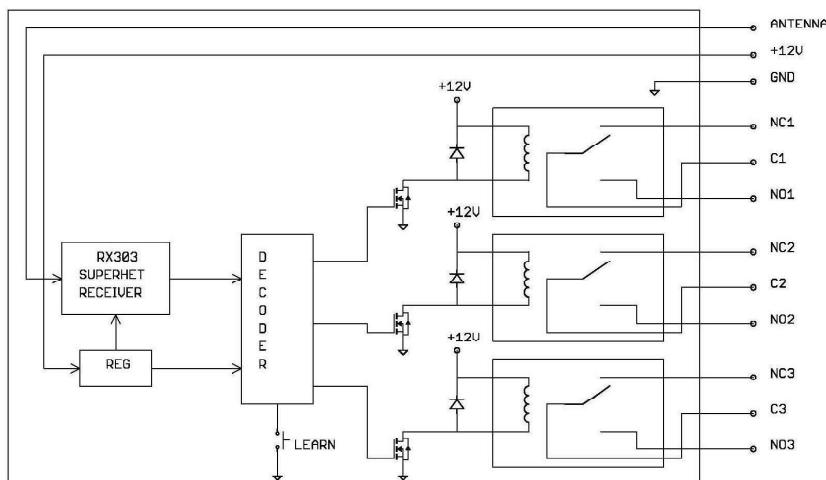
Features

- Matching Transmitters Available
- Three 10-Amp SPDT On-Board Relays
- Long Range – Up to 1000 ft¹
- Integrated Code-Learning Decoder
- Can Learn up to 4 Transmitter IDs
- 16.7+ Million Unique Transmitter IDs
- Momentary, Latched, or Toggle Operation
- 12-24 Volt DC or AC Operation
- LED Output Activation Indicators

Typical Applications

- Remote Control
- Industrial ON/OFF Applications
- Motor Control
- Solenoid Control
- Lighting Control
- Access Control
- PLC Activation

Block Diagram



¹Unobstructed line of sight range, when used with a 1/4-wave ground plane antenna. With the included whip antenna, range is 300-400 ft. Optional antennas are available for longer range. See Antenna Options table.

Specifications subject to change without notice or obligation.

www.applied-wireless.com • Tel: (805) 383-9600 • Fax (805) 383-9001

Revised 12/04/07



DP Series Dipoles

300, 400 MHz Dipole Antenna

The DP300A and DP400A dipole antennas come with a 7-ft. RG-174 cable with Male Phono (RCA) connector. These antennas mate with Applied Wireless RCR series receivers to provide added gain over a standard 1/4-wave whip antenna, especially when a ground-plane is not present. The dipole should be mounted vertically for omnidirectional coverage; it may be mounted horizontally for directional coverage. Comes with 3M adhesive for window mounting, or can be screwed to an appropriate surface. Dipoles with different length cables available as custom order.



Features

- Window or Wall Mountable
- 50-Ohm Impedance
- Interfaces with RCR and RCRB3R Series Receivers

Ordering Information

Model	Frequency (MHz)
DP300A	303.825 – 315.000
DP400A	418.000 - 433.920

Electrical Characteristics

Sym	Parameter	Min	Typ	Max	Unit
Z	Impedance		50		ohms
	VSWR		2:1		

Maximum Ratings

Sym	Parameter	Value	Unit
P _{in}	Input Power	1	Watt
T _{stg}	Storage Temperature	-50 to +150	C

**SUBMITTAL
NOTE
SHEET**

ELECTRICAL HOOK-UP

Electrical by others. Including conduit, wiring and connections.
Wireless pressure sensor system by Air Exchange.

MANAGEMENT SYSTEM CERTIFICATE

Certificate No:
39388-2008-AQ-USA-ANAB

Initial certification date:
25 September 2008

Valid:
26 September 2020 - 25 September 2023

This is to certify that the management system of

Plymovent Corporation

5 Corporate Drive, Cranbury, NJ, 08512, USA

has been found to conform to the Quality Management System standard:

ISO 9001:2015

This certificate is valid for the following scope:

The Assembly, Distribution and Sales of Engineered Exhaust Extraction Air Filtration Systems.

Place and date:
Katy, TX, 11 September 2020



For the issuing office:
DNV GL - Business Assurance
1400 Ravello Drive, Katy, TX, 77449-5164, USA

Sherif Mekkawy
Management Representative

Job Name/Location:**Tag No.:****Date:**

For: File Resubmit
 Approval Other _____

PO No.:**Architect:****GC:****Engr:****Mech:****Rep:**

(Company)

(Project Manager)

PRHR043A
 Multi V™ Heat Recovery Unit
 Four (4) Port

**Performance:**

Maximum Port Capacity Btu/h (each port) ^{1,2}	60,000
Maximum Unit Capacity Btu/h (sum of ports)	230,000
Number of Indoor Unit Ports	4
Max. Connectible Number of Indoor Units	32
Max. Connectible Number of Indoor Units per Branch	8
Power Input ³	
Cooling	39.8
Heating	37.2

Refrigerant Piping:⁴

Port Liquid Line (in., O.D.)	3/8
Port Vapor Line (in., O.D.)	5/8
System Liquid Line (in., O.D.)	5/8
System Vapor Line High (in., O.D.)	7/8
System Vapor Line Low (in., O.D.)	1-1/8

Electrical:³

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps	0.06

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure	
Cooling Mode dB(A)	31
Heating Mode dB(A)	31
Simultaneous dB(A)	38
Changeover Cooling to Heating	33
Changeover Heating to Cooling	38
Unit Net Weight (lbs.)	40
Unit Shipping Weight (lbs.)	53

Features:

- Allows connected indoor units to be in cooling or heating mode simultaneously.
- Internal components are insulated.
 - External casing insulation is not needed.⁴
 - Condensate drain not needed.
- Includes high pressure vapor pipe strainer accessory.
- Factory installed indoor unit vapor pipe strainers.
- Series or parallel connection with additional heat recovery units.
- Flexible placement for service access or pipe routing.
- Access panels:
 - Top panel for EEV heads.
 - Rear panel for control access.
 - Bottom panel for refrigerant circuit.

Notes:

- Each port can allow up to 8 indoor units with a maximum capacity of 60 MBh per port.
- Multiple units installed on the same heat recovery port must operate in the same mode. Auto-changeover or Mode override is not possible.
- Power wiring is field provided, and must comply with the applicable local and national codes.
- All refrigerant piping requires insulation.
- Communication cable between Main outdoor units to indoor units / heat recovery units to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Main outdoor unit chassis only. Do not ground the outdoor unit to indoor units / heat recovery units communication cable at any other point. Wiring must comply with all applicable local and national codes.
- Kit components must be kept dry and free of debris before installation.
- This unit comes with a dry nitrogen charge.
- Must follow installation instructions in the applicable LG installation manual.



Job Name/Location: _____

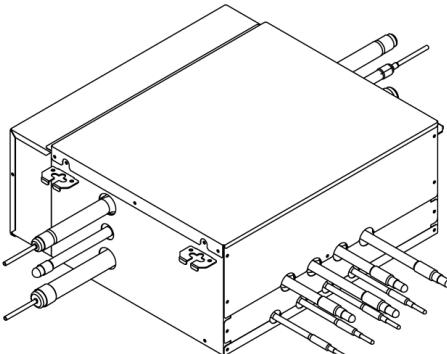
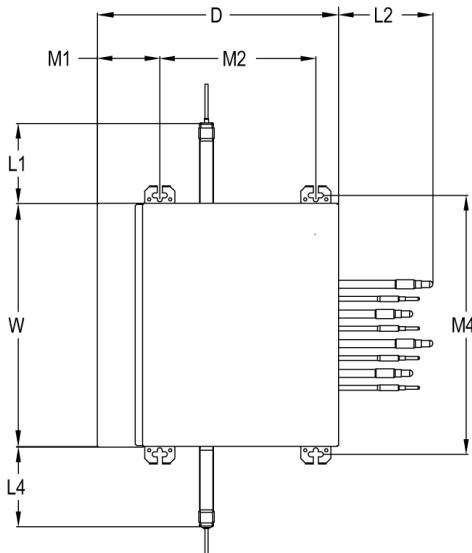
PRHR043A
Multi V™ Heat Recovery Unit
Four (4) Port



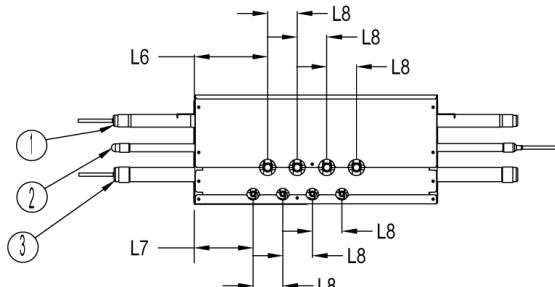
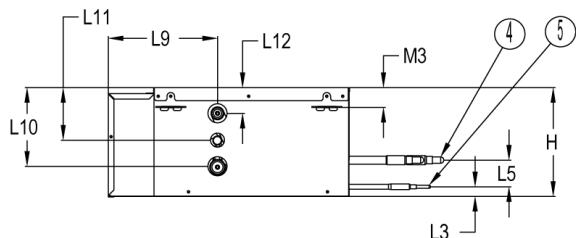
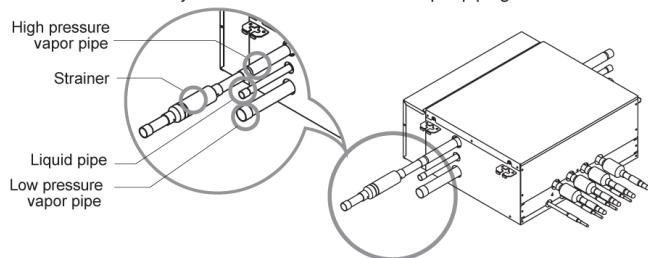
Tag No.: _____

Date: _____

PO No.: _____



- Connect the strainer that is provided as an accessory to the HRU high pressure vapor pipe.
- Strainers are factory installed on the indoor unit vapor piping.



Note:

1. Unit should be installed in compliance with the appropriate LG installation manual.
2. Unit should be grounded in accordance with the local regulations or applicable national codes.
3. All electrical components and materials supplied from the site must comply with the local regulations or national codes.

W	19-1/8"
H	8-5/8"
D	18-15/16"
L1	5-15/16"
L2	6-15/16"
L3	3/4"
L4	5-15/16"
L5	2-3/16"
L6	5-3/4"
L7	4-9/16"
L8	2-5/16"
L9	8-9/16"
L10	6-3/16"
L11	3-9/16"
L12	2"
M1	4-15/16"
M2	12-1/4"
M3	1-1/2"
M4	20-3/8"

[Unit: inch]

6	Control box
5	Liquid pipe to Indoor unit
4	Vapor pipe to Indoor unit
3	Low pressure vapor pipe
2	Liquid pipe to Outdoor unit
1	High pressure vapor pipe
No.	Part Name

Job Name/Location:**Tag No.:****Date:**

For: File Resubmit
 Approval Other _____

PO No.:**Architect:****GC:****Engr:****Mech:****Rep:**

(Company)

(Project Manager)

PRHR063A
 Multi V™ Heat Recovery Unit
 Six (6) Port

**Performance:**

Maximum Port Capacity Btu/h (each port) ^{1,2}	60,000
Maximum Unit Capacity Btu/h (sum of ports)	230,000
Number of Indoor Unit Ports	6
Max. Connectible Number of Indoor Units	48
Max. Connectible Number of Indoor Units per Branch	8
Power Input ³	
Cooling	75.9
Heating	72.1

Refrigerant Piping:⁴

Port Liquid Line (in., O.D.)	3/8
Port Vapor Line (in., O.D.)	5/8
System Liquid Line (in., O.D.)	5/8
System Vapor Line High (in., O.D.)	7/8
System Vapor Line Low (in., O.D.)	1-1/8

Electrical:³

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps	0.09

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure	
Cooling Mode dB(A)	31
Heating Mode dB(A)	31
Simultaneous dB(A)	38
Changeover Cooling to Heating	33
Changeover Heating to Cooling	38
Unit Net Weight (lbs.)	60
Unit Shipping Weight (lbs.)	75

Features:

- Allows connected indoor units to be in cooling or heating mode simultaneously.
- Internal components are insulated.
 - External casing insulation is not needed.⁴
 - Condensate drain not needed.
- Includes high pressure vapor pipe strainer accessory.
- Factory installed indoor unit vapor pipe strainers.
- Series or parallel connection with additional heat recovery units.
- Flexible placement for service access or pipe routing.
- Access panels:
 - Top panel for EEV heads.
 - Rear panel for control access.
 - Bottom panel for refrigerant circuit.

Notes:

- Each port can allow up to 8 indoor units with a maximum capacity of 60 MBh per port.
- Multiple units installed on the same heat recovery port must operate in the same mode. Auto-changeover or Mode override is not possible.
- Power wiring is field provided, and must comply with the applicable local and national codes.
- All refrigerant piping requires insulation.
- Communication cable between Main outdoor units to indoor units / heat recovery units to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Main outdoor unit chassis only. Do not ground the outdoor unit to indoor units / heat recovery units communication cable at any other point. Wiring must comply with all applicable local and national codes.
- Kit components must be kept dry and free of debris before installation.
- This unit comes with a dry nitrogen charge.
- Must follow installation instructions in the applicable LG installation manual.



Job Name/Location:

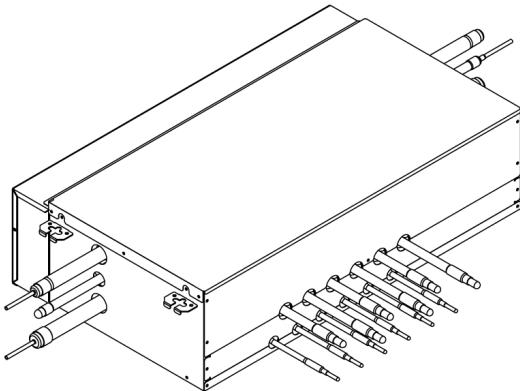
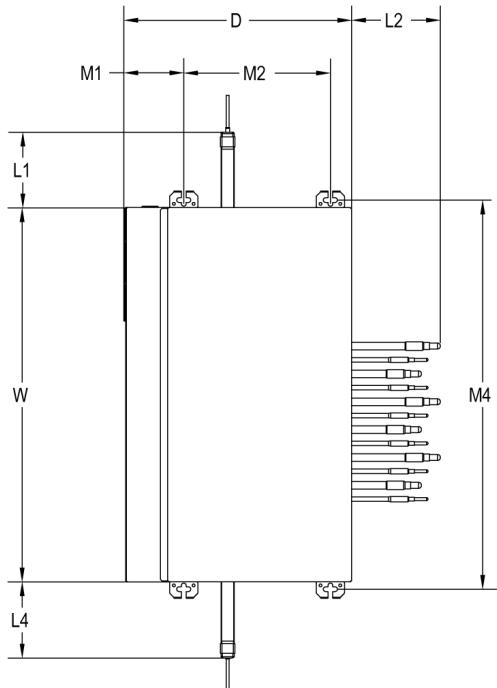
PRHR063A
Multi V™ Heat Recovery Unit
Six (6) Port



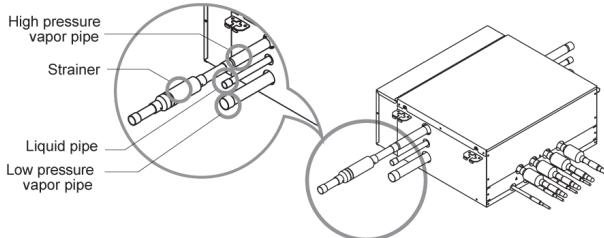
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Date:

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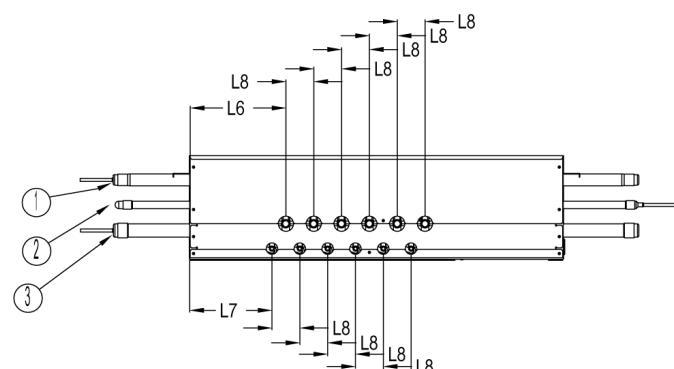
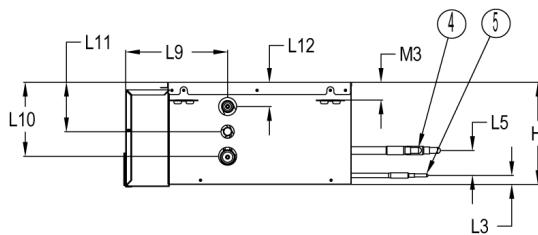


- Connect the strainer that is provided as an accessory to the HRU high pressure vapor pipe.
- Strainers are factory installed on the indoor unit vapor piping.



W	31-1/4"
H	8-5/8"
D	18-15/16"
L1	6-5/16"
L2	6-15/16"
L3	3/4"
L4	6-5/16"
L5	2-3/16"
L6	8-1/16"
L7	6-7/8"
L8	2-5/16"
L9	8-9/16"
L10	6-3/16"
L11	3-9/16"
L12	2"
M1	4-15/16"
M2	12-1/4"
M3	1-1/2"
M4	32-1/2"

[Unit: inch]



Note:

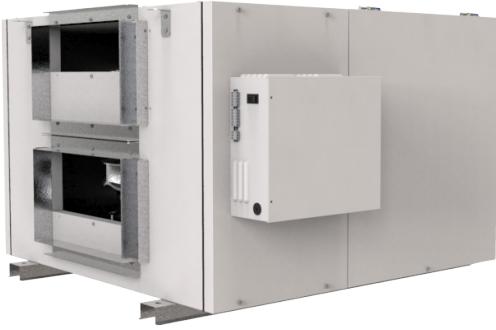
1. Unit should be installed in compliance with the appropriate LG installation manual.
2. Unit should be grounded in accordance with the local regulations or applicable national codes.
3. All electrical components and materials supplied from the site must comply with the local regulations or national codes.

6	Control box
5	Liquid pipe to Indoor unit
4	Vapor pipe to Indoor unit
3	Low pressure vapor pipe
2	Liquid pipe to Outdoor unit
1	High pressure vapor pipe
No.	Part Name

SHR 700

Commercial Heat Recovery Ventilators

Product #: 99268



The SHR 700 Commercial Heat Recovery Ventilation system (HRV) complements today's tight buildings. Fantech Heat Recovery Ventilators (HRV) are designed to supply air into a building while exhausting an equal amount of contaminated air to the outside. The aluminum heat exchanger core transfers sensible energy between air streams resulting in tempering of the supply air and reduced loads on the HVAC system.

Feature

- Push-pull configuration
- Removable screw terminal for easy connection
- Dual service doors & reversible electrical box
- External three position switch (Low/Standby/High)
- Weighs 185 lbs (84Kg)

Specifications

• Voltage/Phase	– 120/1
• Power rated	– 670 W
• Amp	– 5.58 A
• Average airflow @ 0.4" P _S (100Pa)	– 723 cfm (341 L/s)

Port configuration

The unit has access doors on the front and back. Also, the main control panel may be moved from front to back allowing for ducting layout.

Warranty

Limited lifetime on aluminum core, 3 years on motors, and 3 years on parts.

Fans

Two (2) factory balanced fans with backward curved blades. Motors come with permanently lubricated sealed ball bearings, (TOP) thermal overload protected and maintenance-free operation.

Heat recovery core

Fantech manufactures this fixed plate cross-flow heat exchanger using new 1100 alloy aluminum. Heat exchanger is engineered with a turbulence inducing geometry in order to maximize heat transfer while allowing an effective evacuation of condensate. The plates are hemmed and sealed to ensure no cross-contamination of airstreams. The aluminum core had a plastic handle for easy removal. The SHR 700 features two cores, each 12" x 12" (305 mm x 305 mm) with a 15" (380 mm) depth.

Defrost

A preset frost control sequence is initiated if the outdoor temperature falls below the set point of 23°F (-5°C). During the initial stage, the supply blower shuts down & the exhaust blower switches into high speed to eliminate frost build-up in the core. The unit then returns to normal operation for the final stage of the frost control sequence at which time the sequence is repeated if the outdoor air temperatures is still below the set point.

Serviceability

Cores, filters and drain pan can be accessed easily from both sides of the HRV from hinged access panels. Cores conveniently slide out with only 15" (380 mm) clearance. Blowers can be accessed from both side of the HRV from fastened access panels. Blowers are easily removed by taking off the access panel and sliding the motor plates out of the HRV. A quick connect allows for fast inspection of blowers.

Case

20 gauge galvanized steel. Baked powder coated paint.

Insulation

Insulated with 1in. (25 mm) fiberglass with FSK facing for condensation control.

Filters

The exhaust and fresh air streams are protected by MERV1 washable filters constructed to meet UL 900. Optional MERV6 filters are direct replacement to the MERV1. Use of MERV6 filters will add an additional system pressure of 0.64 in.wg (160 Pa) at 700 cfm (330 l/s). Additional MERV Rated filters available upon request.

Controls

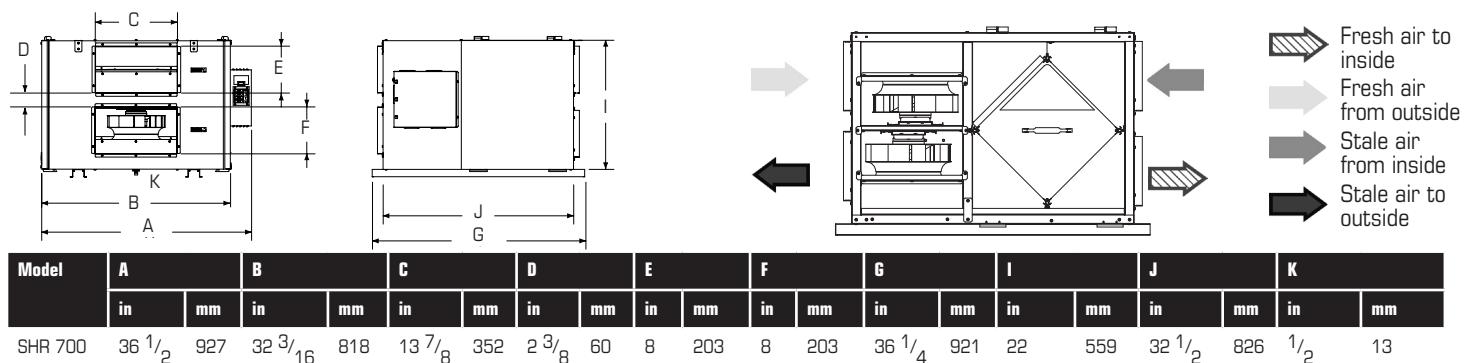
External three (3) position (Low/Stand By/Medium) rocker switch that will offer continuous ventilation. In addition Fantech offers a variety of external controls.

Mounting

Unit may be suspended by using threaded rod, not supplied, or placed on a platform. Unit shall be adaptable for easy service of electrical components.

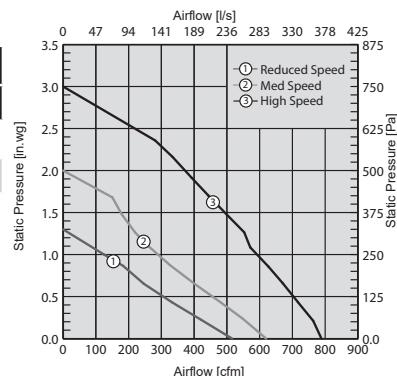


Dimensions & airflow



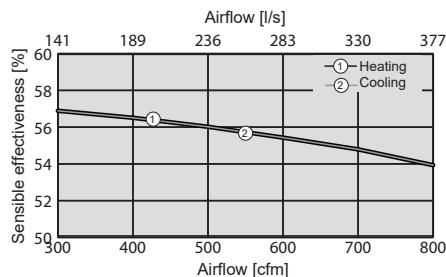
Ventilation Performance

in. wg. (Pa)	0.2 (50)	0.4 (100)	0.6 (150)	0.8 (200)	1.0 (250)	1.4 (350)	1.8 (450)	2.2 (550)
	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)
Supply High	753 (355)	723 (341)	689 (325)	653 (308)	613 (289)	522 (246)	418 (197)	301 (142)
Supply Med	552 (260)	487 (230)	424 (200)	362 (171)	302 (143)	187 (88)	118 (56)	-
Supply Low	432 (204)	352 (166)	274 (129)	196 (93)	120 (57)	-	-	-



Energy performance

	Supply temperature		Net airflow		Net Effectiveness	
	°F	°C	cfm	l/s	Sensible	Total
					%	%
Heating	35	1.7	690	326	55	36
	35	1.7	518	244	56	37
Cooling	95	35	690	326	55	21
	95	35	518	244	56	21



Requirements and standards

- Complies with the UL 1812 requirements regulating the construction and installation of Heat Recovery Ventilators
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- Technical data was obtained from published results of test relating to AHRI 1060 Standards

Contacts

Submitted by:	Date:	
Quantity:	Model:	Project #:
Comments:		
Location:		
Architect:		
Engineer:	Contractor:	

Distributed by:

United States 10048 Industrial Blvd. • Lenexa, KS 66215 • 1.800.747.1762 • www.fantech.net

Canada 50 Kanalflakt Way • Boucherville, NB E4S 3M5 • 1.800.565.3548 • www.fantech.net

Fantech, reserves the right to modify, at any time and without notice, any or all of its products' features, designs, components and specifications to maintain their technological leadership position.

Job Name/Location:

Tag #:

Date: _____

For: File Resubmit

PO No.: _____

 Approval Other _____

Architect: _____

GC: _____

Engr: _____

Mech: _____

Rep: _____

(Company) (Project Manager)

ARVU123ZFA2
 Energy Recovery Ventilator (ERV)
**Performance:**

Nominal Capacity (CFM)	1,180
Power Input SH (W)	980

Capacities are in accordance with AHRI Standard 1060.

Heat Exchanger Data:

Air-to-Air Heat Exchanger	Cross flow fixed core
Quantity	2
Temperature Exchange Efficiency (%)	
Cooling (fan speed SH)	59
Heating (fan speed SH)	58
Enthalpy Exchange Efficiency (%)	
Cooling (fan speed SH)	34
Heating (fan speed SH)	49

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps SH (A)	6.82

Controls Features:**Stand Alone Mode:**

- Can be operated independently

Ventilation Heat Exchange Mode:

- Draws outdoor air and indoor exhaust air across air-to-air heat exchanger

Ventilation Normal (Bypass) Mode:

- Controls by-pass damper to bypass air-to-air heat exchanger and draw in untempered outdoor air

Optional Accessories:
 LG Programmable Thermostat - PREMTA000

 PI485 (required for central controller) -

PSNFP14A0

Operating Range:

Outdoor Temperature (°F DB)	14-113
-----------------------------	--------

Unit Data:

Sound Pressure SH/H/L dB(A)	45/41/35
Filter	Washable
Quantity	4
Net Unit Weight (lbs)	331
Shipping Weight (lbs)	397

Fan:

Type	Cross Flow
Quantity	4
Motor/Drive	Brushless Digitally Controlled/Direct
Airflow Rate SH/H/L (CFM)	1,177/1,177/942
External Static Pressure SH/H/L (in wg)	0.64/0.36/0.20

Notes:

- 1.SH = super high speed, H = high speed, L = low speed
- 2.All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
- 3.Power wiring cable size must comply with the applicable local and national code.
- 4.Must follow installation instructions in the applicable LG installation manual.



ARVU123ZFA2

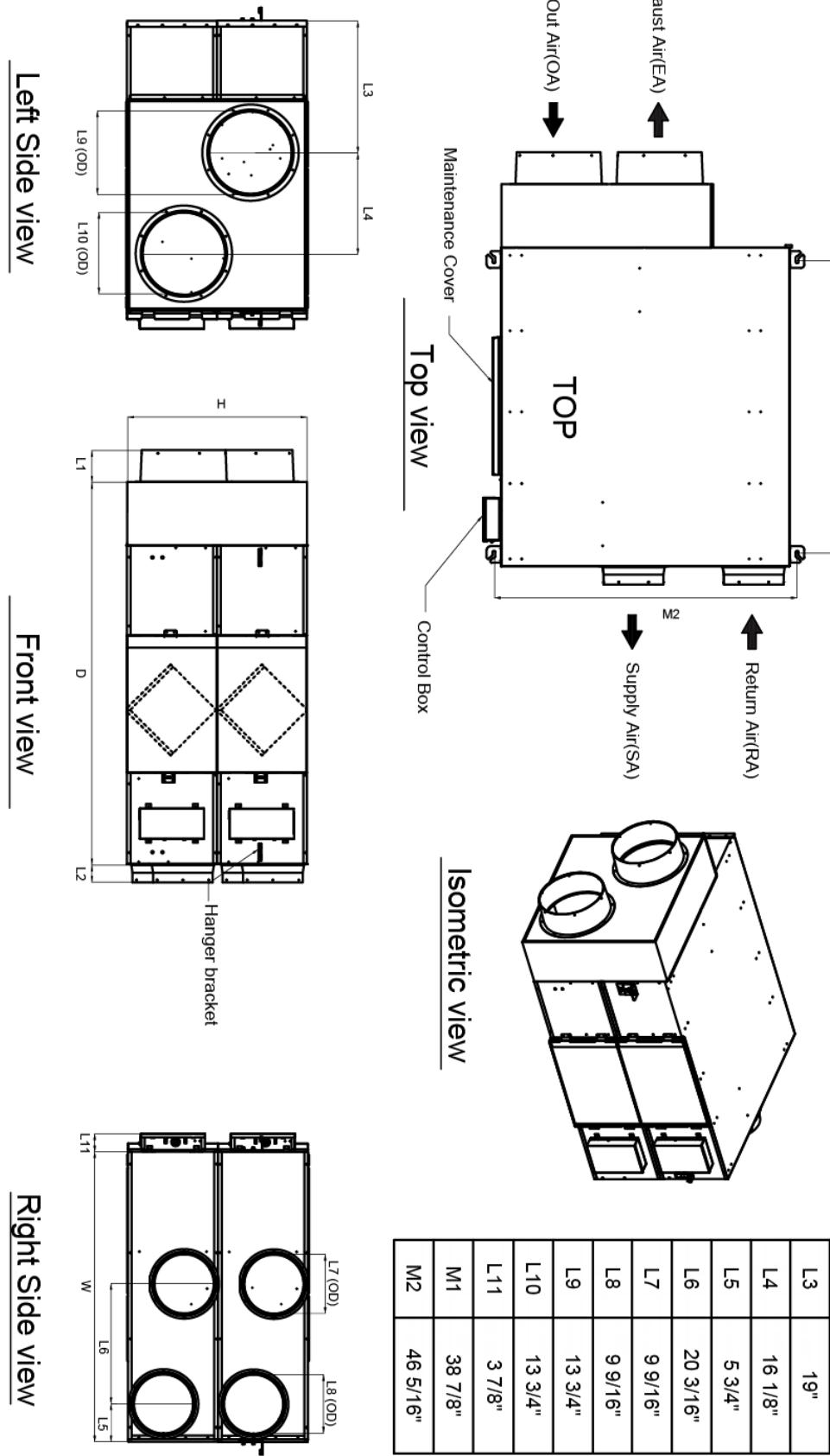
Energy Recovery Ventilator (ERV)



Tag #:

Date:

PO No.:





COMFORT HEATERS



Compare the ThermaZone®

Low initial cost and simple, inexpensive installation make ThermaZone® Infrared Heaters the easy, economical solution to heating. ThermaZone® Heaters are always on the job. No moving parts to break down or bulbs or reflectors to clean or replace. Since no combustion products are discharged and no flames or noxious gases are produced, the UL-approved ThermaZone® Heaters provide safe, clean heat. And, ThermaZone® heat is efficient. One Hundred percent of all energy is converted to useful heat.

In addition, ThermaZone® Heaters can be arranged and controlled in zones. They are easy to install (much like light fixtures) and may be moved to meet future requirements.



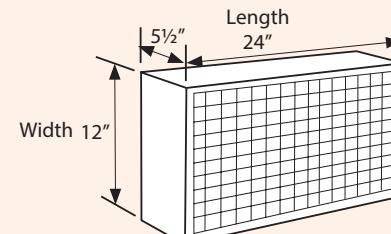
HEATER SPECIFICATIONS

MODEL	BTU'S	WATTS	SINGLE PHASE AMPS				THREE PHASE AMPS		Width 12"	Length 12"	5 1/2"
			120V	240V	277V	480V	240V	480V			
11-800U	2972	871	7.3								
11-1000U	3689	1081	9.0								
11-1200U	3791	1111	9.3								
11-1500U	5807/5572	1702/1633	14.2	6.8							
21-1600U	5661/5804	1659/1701	13.8	7.1							
21-2000U	7479/6828	2192/2001	18.3	8.3							
23-2000U	6811	1996					4.8				
21-2400U	7582/8285	2222/2428	18.5	10.1							
23-2400U	8350	2447					5.9				
21-3000U	11615/11052	3404/3239	28.4	13.5							
23-3000U	10400	3048					7.3				
41-3200U	11608	3402	14.2		7.1						
41-4000U	13655/13526	4002/3964/4002		16.7	14.3	8.3					
43-4000U	13580/13802	3980/4045					9.6	4.9			
41-4800U	16569/16296	4856/4776/4856	20.2	17.3	10.1						
43-4800U	16395/16545	4805/4849					11.6	5.8			
41-6000U	22104/20517	6478/6013/6478	27.0	21.7	13.5						
43-6000U	20933/20725	6135/6074					14.8	7.3			

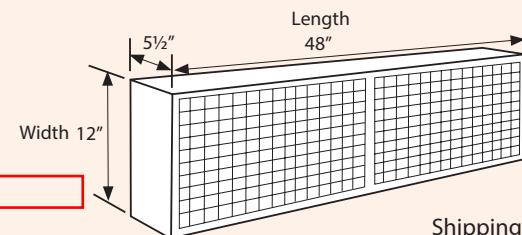
Ordering Guide

Model # + Desired Voltage

Example
11-800U-120V
21-2400U-240V
43-4800U-480V



Shipping
Weight
10 lbs.



Shipping
Weight
38 lbs.



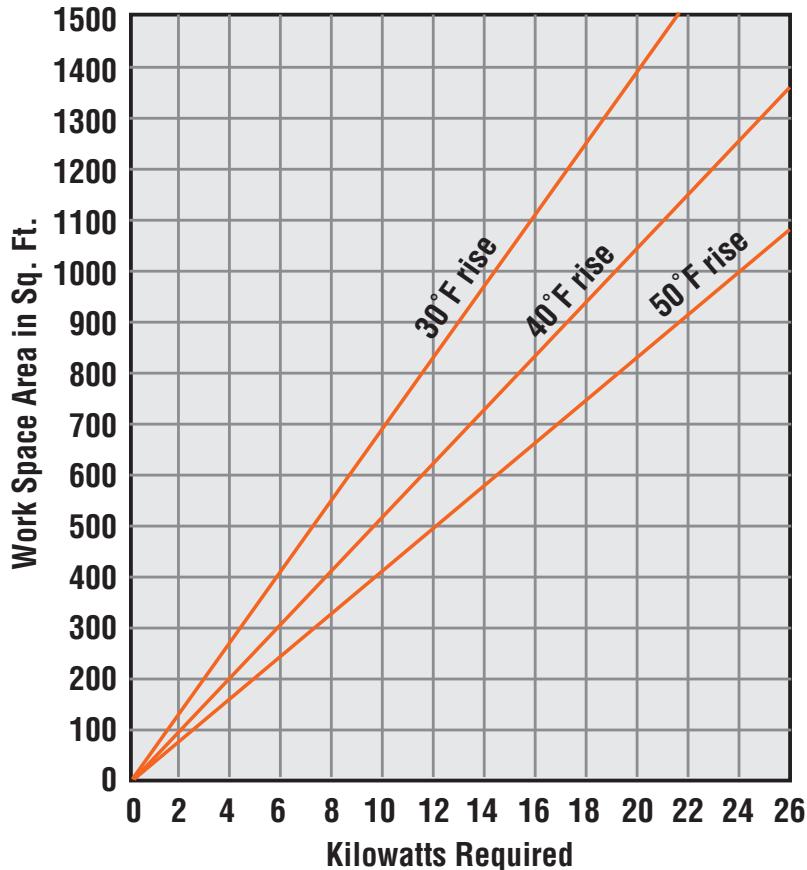
ThermaZone® Heaters

USE THE CHART AT RIGHT TO SEE HOW EFFICIENTLY THERMAZONE® HEATERS CAN HEAT YOUR WORK PLACE AND SAVE YOU MONEY.

On the graph at right, find the number of square feet of the area you want to heat. Then move straight across to the right to intersect the 30°F, 40°F or 50°F rise-in-temperature diagonal – however many degrees you want to raise the temperature of your work place. Then, by dropping down to the bottom of the chart directly below the intersection, you can see how many kilowatts are required.

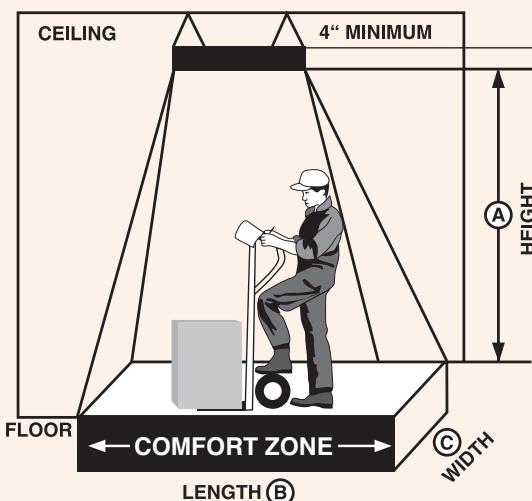
Now consult the table below to see what combinations of ThermaZone® Heaters can give you that kilowatt total.

EXAMPLE: If you want 40°F rise in temperature in a 10' x 10' room (100 sq. ft.), use one Model No. 2-2000U, or two Model No. 1-1000U heaters.



THE BLACK BODY® COMFORT ZONES

HEIGHT A	LENGTH B			WIDTH C
	Model #1 12" Length	Model #2 24" Length	Model #3 48" Length	
6 ft.	7' 10"	8' 10"	10' 10"	7' 10"
8 ft.	10' 2"	11' 2"	13' 2"	10' 2"
10 ft.	12' 6"	13' 6"	15' 6"	12' 6"
12 ft.	14' 10"	15' 10"	17' 10"	14' 10"
14 ft.	17' 2"	20' 2"	22' 2"	17' 2"



Job Name/Location:

Tag #:

Date:

For: File Resubmit

PO No.:

 Approval Other _____

Architect:

GC:

Engr:

Mech:

Rep:

(Company)

(Project Manager)

ARNU763B8A4

Multi V™ High Static Ducted

76,400 Btu/h Indoor Unit

**Performance:**

Total Cooling Capacity (Btu/h)	76,400
Heating Capacity (Btu/h)	86,000
Max Power Input ¹ (W)	800
L/M/H Power Input at Factory Default (W)	505 / 505 / 765

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps (A)	5.2

Piping:**Refrigerant:**

Liquid Line (in, OD) ¹⁴	3/8 Braze
Vapor Line (in, OD)	3/4 Braze

Condensate:

Condensate Pump Drain ² (in, ID)	1 Plain
Gravity Drain Plugged (in, OD)	1 (3/4 MPT)

Controls Features:

- Auto changeover (Heat Recovery only)
- Dual setpoint control
- Multiple aux heater applications
- Auto operation
- Auto restart
- Filter life display
- Dual thermistor control
- External on/off control
- Dual fan
- Leak detection
- Weekly schedule
- Group control
- Hot start
- Self diagnostics
- Timer (on/off)
- Child lock

Optional Accessories:

- Wireless Remote Controller³ - PQWRHQ0FDB
- Premium Controller - PREMTA000
- MultiSITE CRC1 Controller - PREMTBVC0
- MultiSITE CRC1+ Controller - PREMTBVC1
- Simple Controller - PREMTC00U
- Wi-Fi Module - PWFMD200
- Simple Dry Contact (1 contact, 24 VAC external power) - PDRYCB100
- Dry Contact for Economizer - PDRYCB400
- Dry Contact for Third Party Thermostat - PDRYCB320¹⁴
- Aux Heater Kit - PRARH1¹⁴
- Remote Temperature Button Sensor - ZRTBS01
- High Efficiency Filter Box - ZFBXB801A

Entering Mixed Air:

Cooling Max ⁴ (°F WB)	76
Heating Min (°F DB)	59

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure ⁵ dB(A) (H/M/L)	50 / 48 / 48
Filter Type	Washable
MERV	N/A
Filter Quantity	1
Filter Dimensions ⁶ (in)	16-1/2" x 55" x 1/4"
Net Unit Weight (lbs)	192
Shipping Weight (lbs)	222

Fan:

Type	Sirocco
Fan Quantity	2
Motor/Drive	Brushless Digitally Controlled/Direct
Motor Quantity	2
High Mode Airflow Rate H/M/L (CFM)	2,260/1,766/1,766
High Mode External Static Pressure (ESP) (in wg) ⁷	0.86
Airflow Range (CFM)	1413 - 2938
Minimum ESP (in wg) ⁸	0.47
Maximum ESP (in wg) ⁸	0.98

Notes:

- 1 Maximum power input is rated at maximum setting value.
- 2 Maximum lift is 27 in from bottom of unit. Check valve not included (field supplied).
- 3 Requires an LG wall controller because ducted units do not have infrared receiver.
- 4 See Engineering Manual for sensible and latent capacities.
- 5 Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- 6 Actual filter sizes may vary.
- 7 At factory fan speed setting.
- 8 Maximum static pressure may result in reduced airflow (CFM).
- 9 All communication cable between Main outdoor units to indoor units / heat recovery units to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Main outdoor unit chassis only. Do not ground the outdoor unit to indoor units / heat recovery units communication cable at any other point. Wiring must comply with all applicable local and national codes.
- 10 Power wiring cable size must comply with the applicable local and national code.
- 11 This unit comes with a dry nitrogen charge.
- 12 All capacities are net with a combination ratio between 95 – 105%.
- 13 Must follow installation instructions in the applicable LG installation manual.
- 14 If a Third-Party Dry Contact and an LG internal heater or an LG Auxiliary Heater Kit is installed, supplemental heat capability cannot be controlled by the Third-Party Thermostat.



For continual product development, LG reserves the right to change specifications without notice.

Job Name/Location:

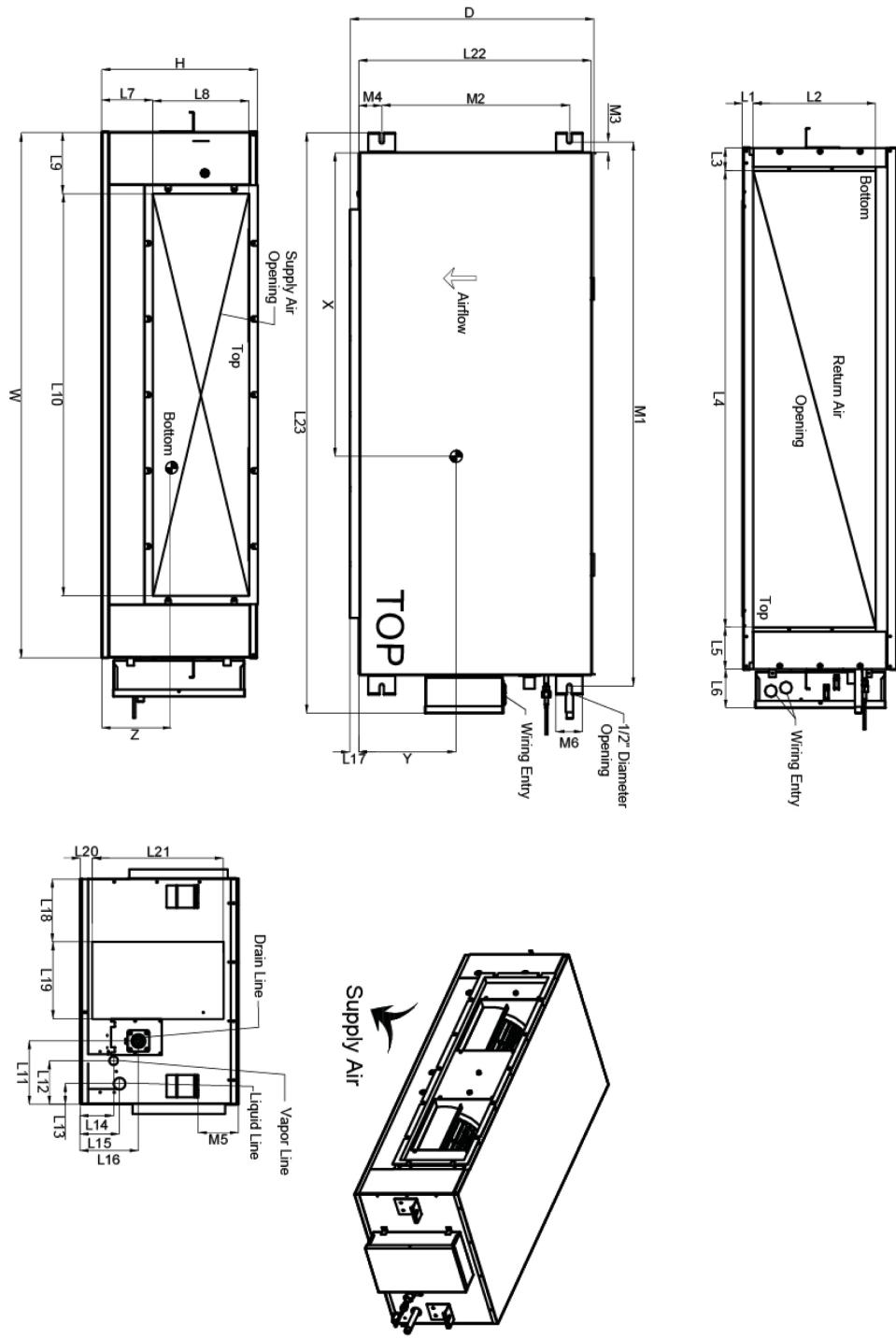
ARNU763B8A4
Multi V™ High Static Ducted
76,400 Btu/h Indoor Unit



Tag #:

Date:

PO No.:



Center of Gravity	
X	31 1/16"
Y	18 1/8"
Z	8 3/4"

Note - All dimensions have a tolerance of ± 0.25 in.
● = Center of Gravity

Job Name/Location:**Tag No.:****Date:**

For:	<input type="checkbox"/> File	<input type="checkbox"/> Resubmit
	<input type="checkbox"/> Approval	Other _____

PO No.:**Architect:****GC:****Engr:****Mech:****Rep:**

(Company)

(Project Manager)

ARNU053TRD4

Multi V™ Four-Way 2' x 2' Ceiling Cassette

5,500 Btu/h Indoor Unit

**Performance:**

Cooling Capacity (Btu/h) ¹	5,500
Heating Capacity (Btu/h) ¹	6,100
L/M/H Power Input at Factory Default (W)	11 / 12 / 13

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps	0.20

Piping:

Refrigerant	
Liquid Line (in., O.D.)	1/4 Flare
Vapor Line (in., O.D.)	1/2 Flare
Condensate	
Condensate Line (in., I.D.)	1
Factory Installed Pump ³	Yes

Controls Features:

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto restart
- Dual thermistor control
- Dual setpoint control
- Timer (on/off)
- Weekly schedule
- Auto direction/ swing (up/down)
- Swirl wind (alternating vanes)
- Fan speed control
- Jet cool (fast cooling)
- Filter life display
- Multiple auxiliary heater applications
- Child lock
- Group control
- High ceiling
- Hot start
- Self diagnostics
- External on/off control
- Wi-Fi compatible
- Auto fan
- Leak detection

Required Accessories:

Grille Kit (24-7/16" x 24-7/16") - PT-QCHW0

Optional Accessories:

- Wireless Remote Controller - PQWRHQ0FDB
- MultiSITE™ CRC1 Controller - PREMTBVC0
- MultiSITE CRC1+ Controller - PREMTBVC1
- Simple Remote Controller - PREMTC00U
- Premium Remote Controller - PREMTA000
- Remote Temperature Button Sensor - ZRTBS01
- Simple Dry Contact (1 contact, 24 VAC external power) - PDRYCB100
- Dry Contact for Third Party Thermostat - PDRYCB320
- Dry Contact for Economizer - PDRYCB400
- Ventilation Kit - PTVK430
- Auxiliary Heater Kit - PRARH1
- Wi-Fi Module - PWFMD200

Entering Mixed Air:

Cooling Maximum ¹ (°F WB)	76
Heating Minimum (°F DB)	59

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure dB(A) (H/M/L) ³	29 / 27 / 26
Primary Filter Type	Washable
Unit Net Weight (lbs.)	29
Unit Shipping Weight (lbs.)	34
Grille Net Weight (lbs.)	7
Grille Shipping Weight (lbs.)	11

Fan:

Type	Turbo
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Motor Quantity	1
Air Flow Rate H/M/L (CFM)	265 / 247 / 212

Notes:

1. See Engineering Manual for sensible and latent capacities.
2. Maximum lift is 27-1/2 inches from bottom of unit.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. Communication cable between Main outdoor units to indoor units / heat recovery units to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Main outdoor unit chassis only. Do not ground the outdoor unit to indoor units / heat recovery units communication cable at any other point. Wiring must comply with all applicable local and national codes.
5. Power wiring is field provided, and must comply with the applicable local and national codes.
6. This unit comes with a dry nitrogen charge.
7. All capacities are net with a combination ratio between 95 – 105%.
8. Must follow installation instructions in the applicable LG installation manual.



Job Name/Location:

ARNU053TRD4

Multi V™ Four-Way 2' x 2' Ceiling Cassette

5,500 Btu/h Indoor Unit



Tag No.:

Date:

PO No.:

Unit: Inch (mm)

Unit: Inch (mm)

Front View

Front View dimensions: Body width 24-7/16 (620), Body height 14-15/16 (379), Air outlet hole 14-15/16 (379), Air outlet hole 24-7/16 (620).

Side View

Side View dimensions: Ceiling opening 23-5/8 (600), Hanging bolt 20-3/8 (517), Hanging bolt 10-3/16 (259).

3D View

3D View dimension: Height 11-13/16 (300).

View A Fresh Air Intake hole

View A dimensions: Top width 9-5/16 (236), Top height 7-15/16 (202), Bottom width 7-15/16 (202), Bottom height 5-15/16 (150). Max. Condensate Lift: 27-9/16 (700) or less.

View B

View B dimensions: Top width 4-1/2 (115), Top height 2-13/16 (71), Bottom width 4-1/2 (115), Bottom height 2-3/4 (70). Hole diameter 4-1/8 (105).

View C

View C dimensions: Top width 22-7/16 (570), Top height 18-1/8 (467), Bottom width 22-7/16 (570), Bottom height 10-3/16 (259). Hanging bolt 10-3/16 (259), Hanging bolt 18-1/8 (467), Hanging bolt 10-3/16 (259), Hanging bolt 20-9/16 (523).

Installation position of body

(Keep this distance between the bottom surface of body and ceiling surface)

Table: Installation position of body

No.	Part Name	Description
12	Fresh Air Intake Hole	Knock-out type
11	Flexible Drain Hose	Supplied with product
10	Decoration Corner Display Cover	Supplied with panel
9	Decoration Corner Cover	Supplied with panel
8	Decoration Panel(Accessory)	PT-QCHW0
7	Air Outlet	-
6	Air Intake	-
5	Wired remote controller, wire routing hole	-
4	Power and Communication cable routing hole	-
3	Drain Pipe Connection	-
2	Liquid Pipe Connection	-
1	Gas Pipe Connection	-

Job Name/Location:**Tag No:****Date:**

For: File Resubmit
 Approval Other _____

PO No.:**Architect:****GC:****Engr:****Mech:****Rep:**

(Company)

(Project Manager)

ARUM036GSS5

Multi V™ S with LGRED° Outdoor Unit
 3.0 Ton Heat Pump and Heat Recovery

Performance:**Cooling Mode:**

Rated Capacity (Btu/h)	36,000
Power Input (kW)	2.32

Heating Mode:

Rated Capacity (Btu/h)	42,000
Power Input (kW)	2.92

Rated Capacity is based on the following conditions:

Cooling	Heating:
Indoor: 80°F DB / 67°F WB	Indoor: 70°F DB
Outdoor: 95°F DB	Outdoor: 47°F DB / 43°F WB

Electrical:

Power Supply (V/Hz/Ø) ¹	208-230V, 60, 1
MOP (A)	40.0
MCA (A)	23.5
Rated Amps (A)	
Compressor Amps (A)	18.0
Fan (A) x Qty.	0.5 x 2

Piping / Connections:²

Refrigerant Charge (lbs.)	7.7
Piping / Connections for Heat Recovery Operation	
Liquid Line (in., O.D.)	3/8 Braze
Low Pressure Vapor Line (in., O.D.)	3/4 Braze
High Pressure Vapor Line (in., O.D.)	5/8 Braze
Piping / Connections for Heat Pump Operation	
Liquid Line (in., O.D.)	3/8 Braze
Vapor Line (in., O.D.)	5/8 Braze

Compressor:

Type	Hermetically Sealed Scroll
Quantity	1
Oil / Type	PVE / FVC68D

Standard Features:

- Night Quiet Operation
- Fault Detection and Diagnosis
- Smart Load Control
- Smart Oil Management
- Drain Pan Heater Built In

Optional Accessories:

Low Ambient Baffle Kit - ZLABGP04A (2 required)³

**Operating Range:**

Cooling (°F DB) ³	23 to 122
Heating (°F WB)	-13 to +61
Synchronous	
Cooling Based (°F DB)	14 to 81
Heating Based (°F WB)	14 to 61

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Max. Number of Indoor Units ⁴	6
Sound Pressure dB(A) ⁵	
Cooling Mode	50
Heating Mode	53
Weight	
Net (lbs.)	263
Shipping (lbs.)	294
Communication Cable (No x AWG) ⁶	2 x 18
Heat Exchanger Coating	Black Fin™

Fan:

Type	Axial Flow
Quantity	2
Motor / Drive	Brushless Digitally Controlled/Direct
Air Flow Rate (CFM)	4,238

Notes:

1. Power wiring size must comply with the applicable local and national codes.
2. For main pipe segment size, refer to the LATS Multi V tree diagram.
3. Installation of an optional Low Ambient Wind Baffle Kit will allow operation down to -9.9°F in cooling mode.
4. The combination ratio must be between 50 - 130%.
5. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
6. Communication cable between ODU, IDU(s) / HRU(s) must be a minimum of 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the ODU chassis only. **DO NOT** ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
7. Nominal data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.
8. Power wiring cable size must comply with the applicable local and national codes.
9. The voltage tolerance is ± 10%.



Job Name/Location: _____

ARUM036GSS5

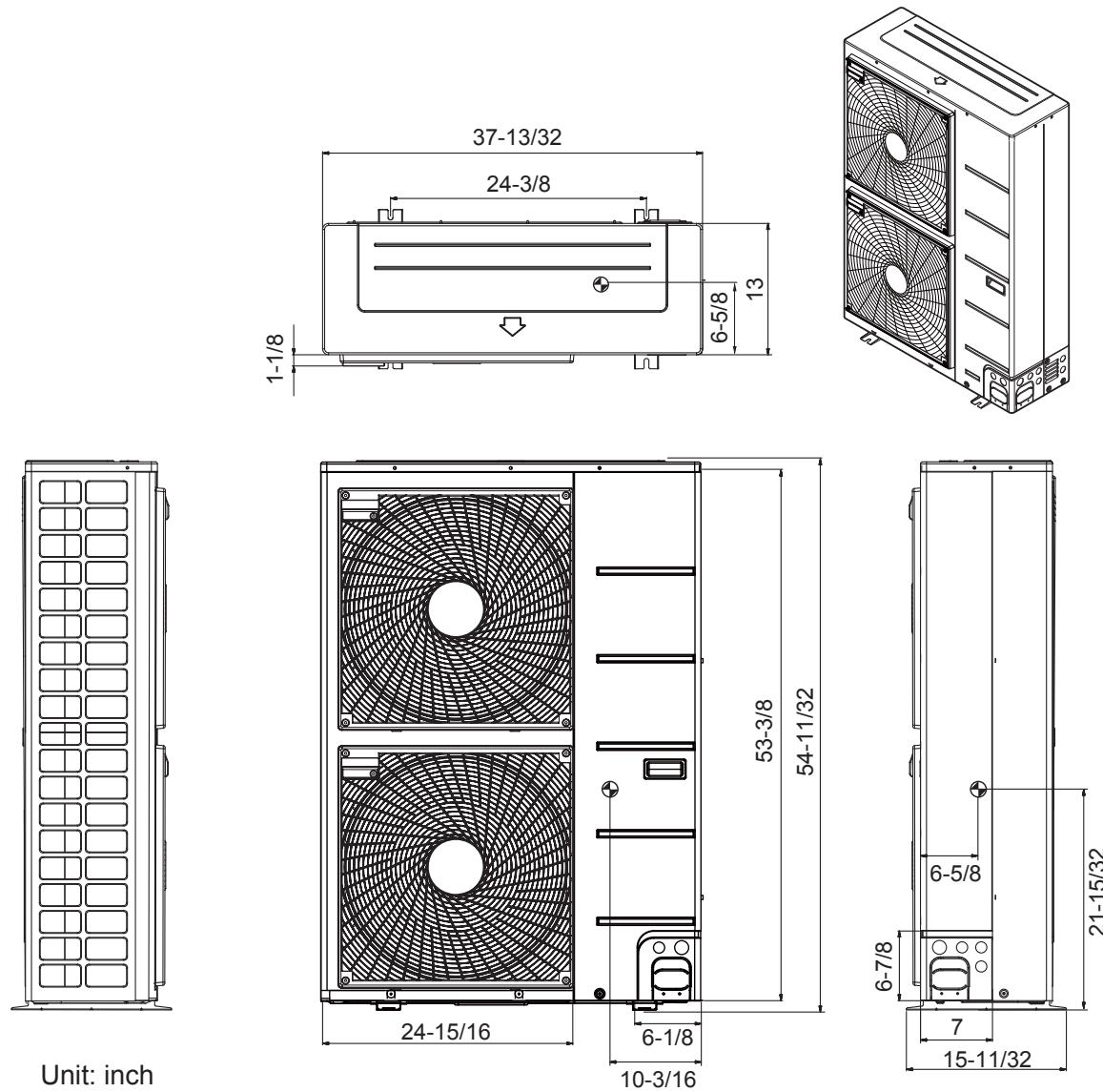
Multi V™ S with LGRED° Outdoor Unit
3.0 Ton Heat Pump and Heat Recovery



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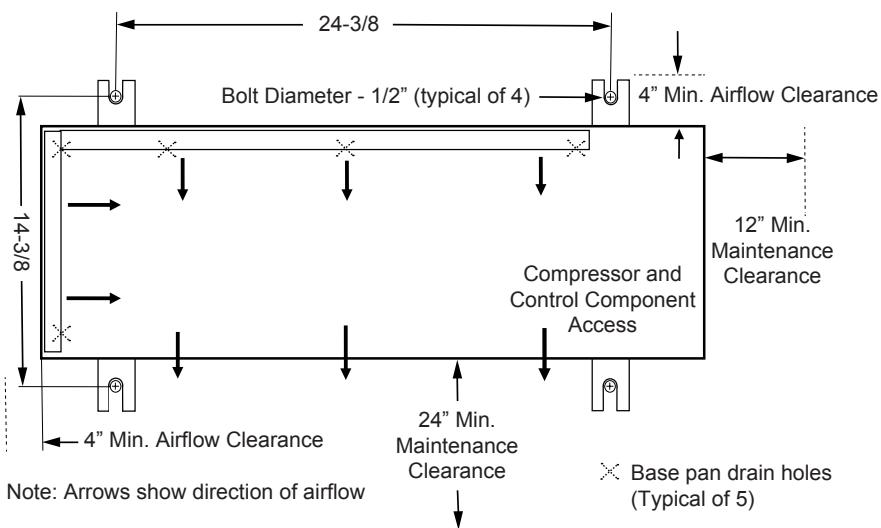
Date: _____

PO No.: _____



Unit: inch

⊕ Center of Gravity



Job Name/Location: _____

ARUM036GSS5

Multi V™ S with LGRED° Outdoor Unit

3.0 Ton Heat Pump and Heat Recovery



Tag No.: _____

Date: _____

PO No.: _____

AHRI Data:

Reference Number	Indoor Unit Type	Cooling Capacity (95°F)	EER (95°F)	SEER	High Heating Capacity (47°F)	Low Heating Capacity (17°F)	HSPF
205967237	Non-Ducted Indoor Units	36,000	15.50	23.00	42,000	26,000	12.00
205967238	Ducted Indoor Units	36,000	13.00	18.30	42,000	28,000	11.40
205967240	Mixed Ducted and Non-Ducted Indoor Units	36,000	14.25	20.65	42,000	27,000	11.70

Job Name/Location:**Tag No.:****Date:**

For: File Resubmit
 Approval Other _____

PO No.:**Architect:****GC:****Engr:****Mech:****Rep:**

(Company)

(Project Manager)

ARUM121BTE5

Multi V™ 5 with LGRED° 208-230V ODU**10 Ton Single Frame Heat Pump and Heat Recovery****Performance:****Cooling Mode:**

Nominal Capacity (Btu/h)	119,700
Power Input (kW)	7.72

Heating Mode:

Nominal Capacity (Btu/h)	135,000
Power Input (kW)	9.20

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.

Electrical:

Frame	ARUM121BTE5
Power Supply (V/Hz/Ø) ¹	208-230/60/3
MOP (A)	40
MCA (A)	30.9
Rated Amps (A)	26.3
Compressor A (A)	18.3
Compressor B (B)	-
Fan (A)	8.0

Piping:²

Frame	ARUM121BTE5
Refrigerant Charge (lbs.)	23.2
Liquid (in., O.D.)	1/2 Braze
High Pressure Vapor (Heat Recov only; in, O.D.)	3/4 Braze
Low Pressure Vapor (in., O.D.)	1-1/8 Braze

Standard Features:

- Advanced Smart Load Control
- Intelligent Heating
- HiPOR (High Pressure Oil Return)
- Smart Oil Control
- Night Quiet Operation
- Fault Detection and Diagnosis
- Active Refrigerant Control
- Variable Heat Path Exchanger
- Subcooling and Vapor Injection Control
- Liquid Cooled Inverter Controller
- Advanced Comfort Cooling

Optional Accessories:

- Air Guide - ZAGDKA52A
- Hail Guard Kit - ZHGDKA52A
- Low Ambient Baffle Kit - ZLABKA52A, Control Kit - PRVC2 (1 per system)
- Base Pan Heater - ZPLT1A52A

**Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F and is achieved only when all indoor units are operating in cooling mode. Does not impact heat recovery system synchronous operating range.

For continual product development, LG reserves the right to change specifications without notice.

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Operating Range:

Cooling (°F DB)**	5 - 122
Heating (°F WB)	-22 - 61
Synchronous	
Cooling Based (°F DB)	14 - 81
Heating Based (°F WB)	14 - 61

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Max. Number of Indoor Units ³	20
Sound Pressure ⁴ dB(A)	59.0
Weight	
Frame	ARUM121BTE5
Net (lbs.)	507
Shipping (lbs.)	534
Communication Cable (No x AWG) ⁵	2 x 18
Heat Exchanger Coating	Black Coated Fin™

Compressor:

Type	HSS DC Scroll
Quantity	1
Oil / Type	PVE / FVC68D

Fan:

Type	Propeller
Quantity	2
Motor Drive	Brushless Digitally Controlled Direct
Air Flow Rate (rated/max, CFM)	8,400 / 11,300

Notes:

1. Power wiring cable size must comply with the applicable local and national codes. Cables terminate at each frame.
2. For main pipe segment size, refer to the LATS Multi V tree diagram.
3. The combination ratio must be between 50-130%.
4. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745 for the combination of outdoor units.
5. Communication cable between ODU and IDUs must be 2-conductor, 18 AWG, twisted, stranded, and shielded. Ensure the communication cable shield is properly grounded to the Main ODU chassis only. Do not ground the communication cable at any other point. Wiring must comply with all applicable local and national codes.
6. Acceptable operating voltage: 187V - 253V
7. Fan ESP (in wg) selectable range is 0.16 to 0.32.



Job Name/Location: _____

ARUM121BTE5

Multi V™ 5 with LGRED° 208-230V ODU

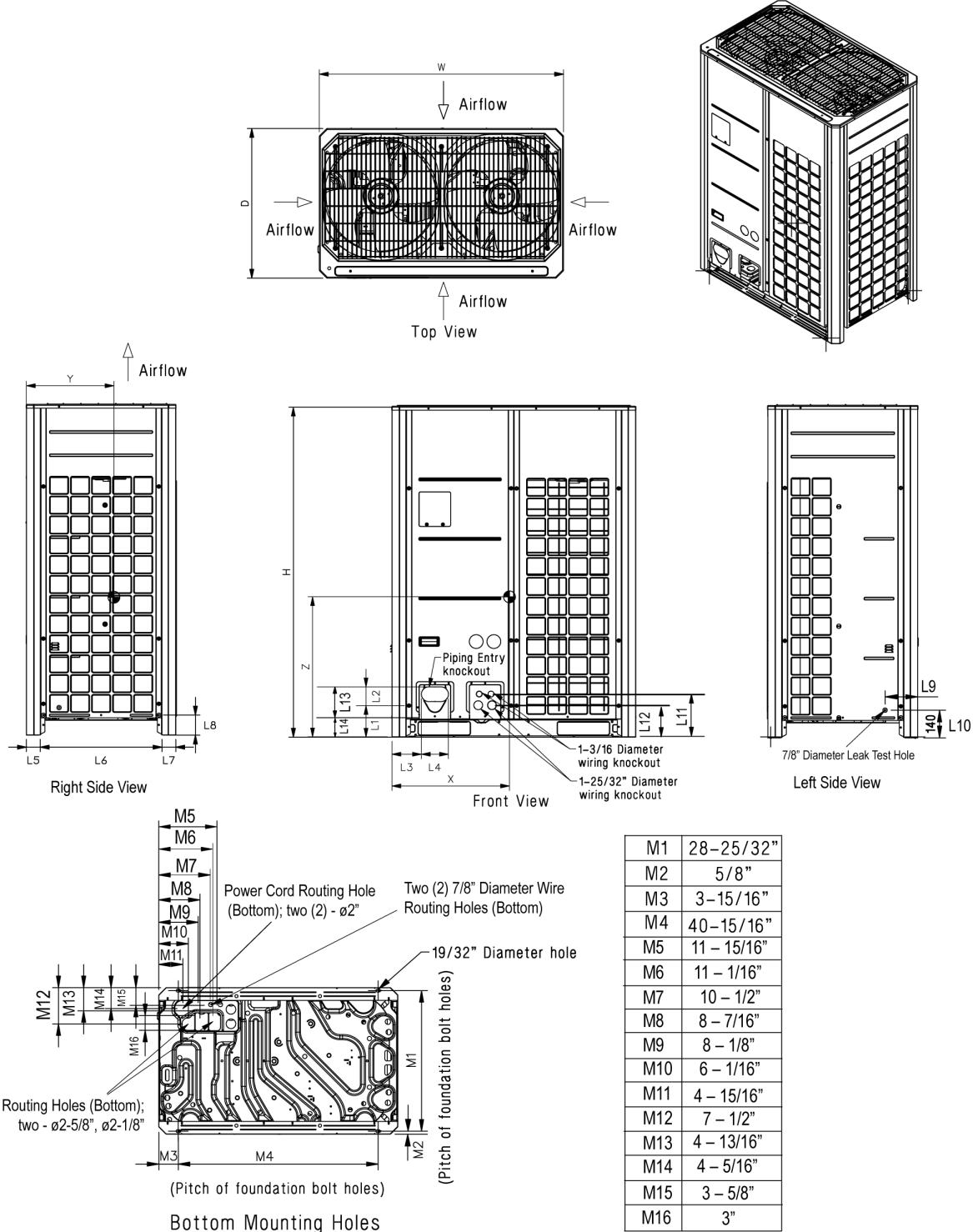
10 Ton Single Frame Heat Pump and Heat Recovery



Tag No.: _____

Date: _____

PO No.: _____



W	48-13/16"
H	66-17/32"
D	29-29/32"
L1	6-5/16"
L2	3-3/4"
L3	5-29/32"
L4	5-13/32"
L5	2-25/32"
L6	24-9/32"
L7	2-25/32"
L8	4-1/32"
L9	6-1/2"
L10	5-9/16"
L11	8-5/8"
L12	6-7/16"
L13	9-15/16"
L14	3-5/8"

Center of Gravity

X	23-7/32"
Y	15-5/8"
Z	25-9/16"

All dimensions have a tolerance of ± 0.25 in.
[Unit: inch]

 = Center of Gravity

Job Name/Location: _____

ARUM121BTE5

Multi V™ 5 with LGRED° 208-230V ODU

10 Ton Single Frame Heat Pump and Heat Recovery



LG

Life's Good

Tag No.: _____

Date: _____

PO No.: _____

AHRI Data:

Reference Number	Indoor Type	Cooling Capacity (95°F)	EER (95°F)	IEER	SCHE	High Heating Capacity (47°F)	High COP (47°F)	Low Heating Capacity (17°F)	Low COP (17°F)
205281462	Ducted Indoor Units	114,000	12.50	24.60	26.40	129,000	3.46	84,000	2.53
202516176	Non-Ducted Indoor Units	114,000	13.10	29.60	31.00	129,000	3.97	84,000	2.74

Job Name/Location:

Tag #:

Date:

For: File Resubmit

PO No.:

 Approval Other _____

Architect:

GC:

Engr:

Mech:

Rep:

(Company)

(Project Manager)

ARNU543M3A4

Multi V™ Mid Static Ducted

54,000 Btu/h Indoor Unit

**Performance:**

Total Cooling Capacity (Btu/h)	54,000
Heating Capacity (Btu/h)	61,400
Max Power Input ¹ (W)	650
L/M/H Power Input at Factory Default (W)	172 / 215 / 260

Rated capacity is certified under AHRI Standard 1230. Ratings are subject to change without notice. Current certified ratings are available at www.ahridirectory.org.

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps (A)	2.5

Piping:**Refrigerant:**

Liquid Line (in, OD)	3/8 Flare
Vapor Line (in, OD)	5/8 Flare

Condensate:

Condensate Pump Drain ² (in, ID)	1 Plain
Gravity Drain Plugged (in, OD)	1 (3/4 MPT)

Controls Features:

- Auto changeover (Heat Recovery only)
- Dual setpoint control
- Multiple aux heater applications
- Filter life display
- External on/off control
- Auto fan
- Leak detection
- Weekly schedule
- Group control
- Hot start
- Self diagnostics
- Timer (on/off)
- Child lock

Optional Accessories:

- Wireless Remote Controller³ - PQWRHQ0FDB
- Premium Controller - PREMTA000
- MultiSITE CRC1 Controller - PREMTBVC0
- MultiSITE CRC1+ Controller - PREMTBVC1
- Simple Controller - PREMTC00U
- Wi-Fi Module - PWFMD200
- Simple Dry Contact (1 contact, 24 VAC external power) - PDRYCB100
- Dry Contact for Economizer - PDRYCB400
- Dry Contact for Third Party Thermostat - PDRYCB320¹⁴
- Aux Heater Kit - PRARH1¹⁴
- Remote Temperature Button Sensor - ZRTBS01
- High Efficiency Filter Box - ZFBXM301A

Entering Mixed Air:

Cooling Max ⁴ (°F WB)	76
Heating Min (°F DB)	59

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Power ⁵ dB(A) (H/M/L, @0.24 ESP)	69/68/67
Filter Type	Washable
MERV	N/A
Filter Quantity	2
Filter Dimensions ⁶ (in)	13-1/4 x 23-15/16 x 3/16
Net Unit Weight (lbs)	96.1
Shipping Weight (lbs)	110.0

Fan:

Type	Sirocco
Fan Quantity	2
Motor/Drive	Brushless Digitally Controlled/Direct
Motor Quantity	1
Standard Mode Airflow Rate H/M/L (CFM)	1720 / 1558 / 1424
Standard Mode External Static Pressure (ESP) ⁷ (in wg)	0.19
High Mode Airflow Rate H/M/L (CFM)	1744 / 1614 / 1482
High Mode External Static Pressure (ESP) ⁷ (in wg)	0.23
Airflow Range (CFM)	522 - 2,076
Minimum ESP (in wg) ⁸	0.16
Maximum ESP (in wg) ⁸	0.79

Notes:

- 1 Maximum power input is rated at maximum setting value.
- 2 Maximum lift is 27 in from bottom of unit. Check valve not included (field supplied).
- 3 Requires an LG wall controller because ducted units do not have infrared receiver.
- 4 See Engineering Manual for sensible and latent capacities.
- 5 Sound Power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- 6 Actual filter sizes may vary.
- 7 At factory fan speed setting.
- 8 Maximum static pressure may result in reduced airflow (CFM).
- 9 All Communication cable between Main outdoor units to indoor units / heat recovery units to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Main outdoor unit chassis only. Do not ground the outdoor unit to indoor units / heat recovery units communication cable at any other point. Wiring must comply with all applicable local and national codes.
- 10 Power wiring cable size must comply with the applicable local and national code.
- 11 This unit comes with a dry nitrogen charge.
- 12 All capacities are net with a combination ratio between 95 - 105%.
- 13 Must follow installation instructions in the applicable LG installation manual.
- 14 If a Third-Party Dry Contact and an LG internal heater or an LG Auxiliary Heater Kit is installed, supplemental heat capability cannot be controlled by the Third-Party Thermostat.

For continual product development, LG reserves the right to change specifications without notice.



Job Name/Location:

ARNU543M3A4
Multi V™ Mid Static Ducted
54,000 Btu/h Indoor Unit

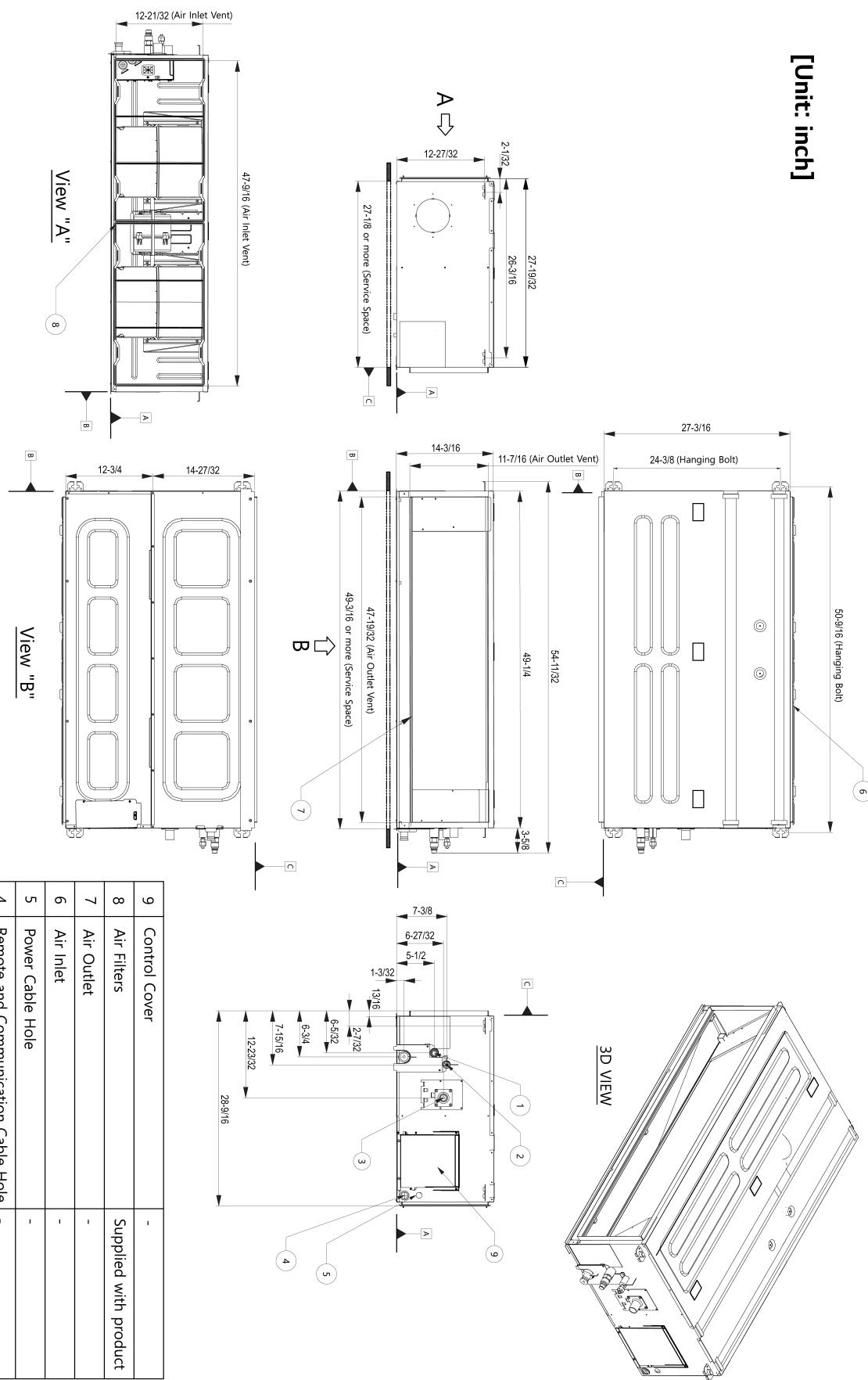


Tag #:

Date:

PO No.:

[Unit: inch]



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