



# CITY OF MORGAN HILL

## BUILDING DEPARTMENT

## DESIGN GUIDELINES

## FOR

## OPEN PATIO COVERS

Submit complete plans, drawn to scale, to [permits@morganhill.ca.gov](mailto:permits@morganhill.ca.gov). The recommended plan size is 11"x17". The plans are required to include:

### 1. Plot/Site Plan

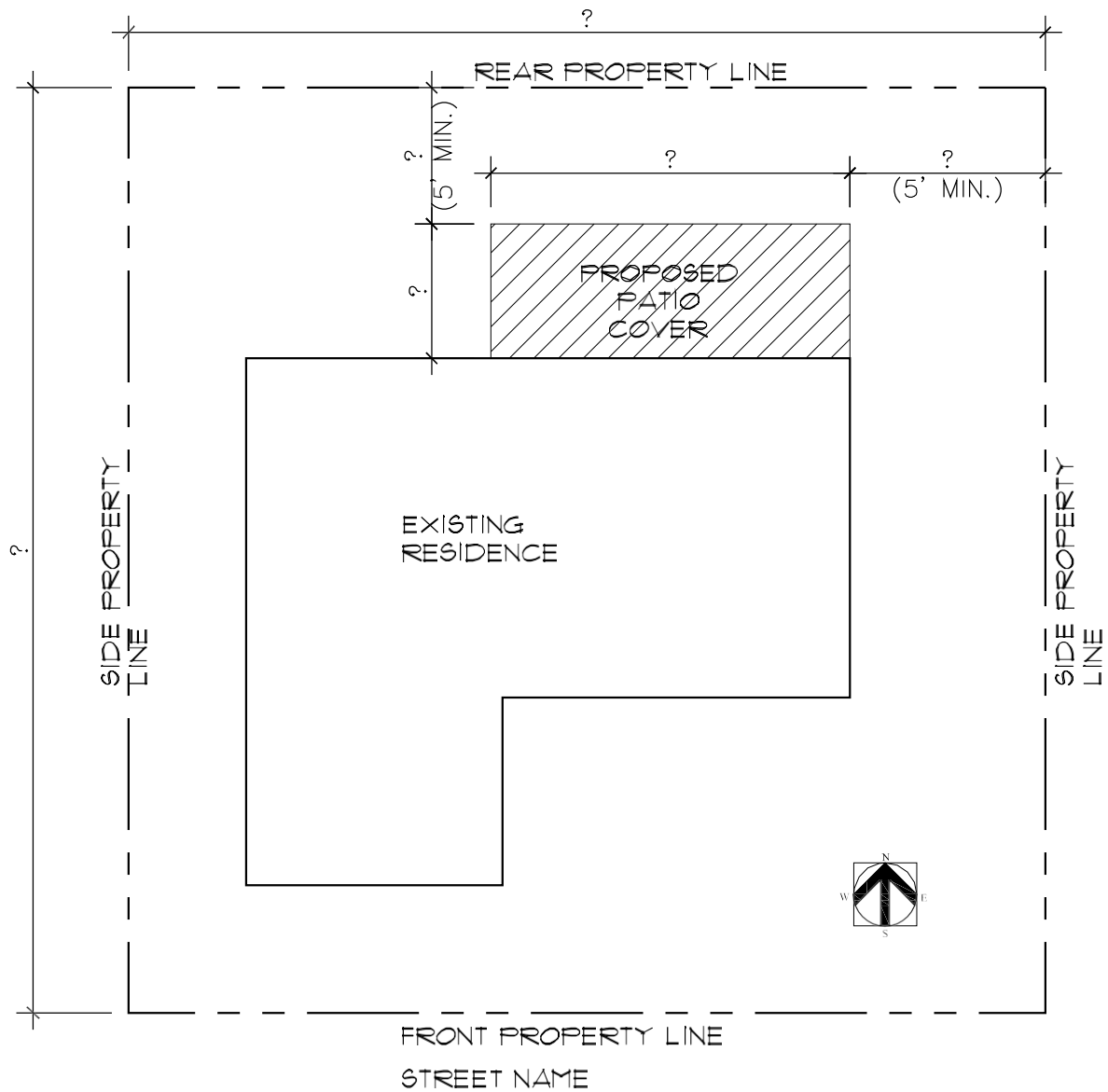
- a. Lot Dimensions and Easements
- b. Existing structures and proposed patio cover and their dimensions
- c. Distance between proposed patio cover, existing structure and property line

### 2. Foundation Plan

### 3. Framing Plan

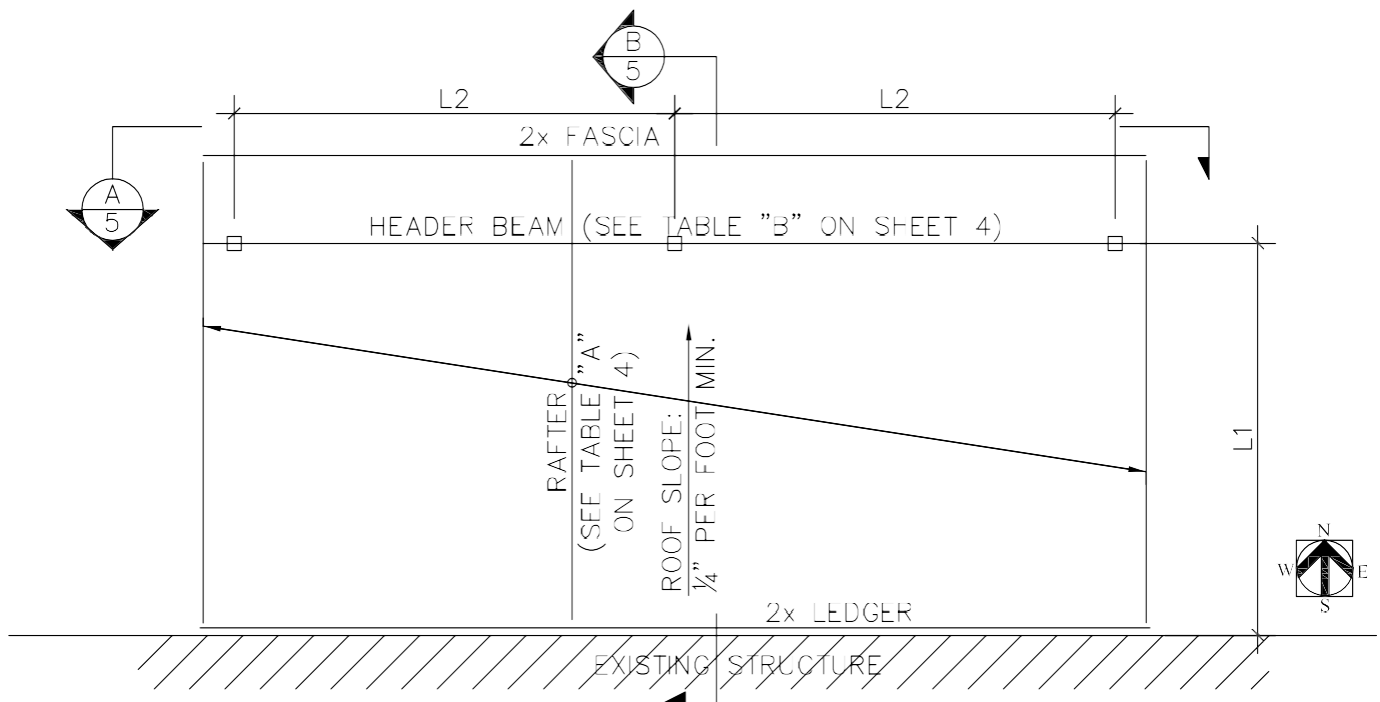
### 4. Elevations

Contact the Planning Division for height restrictions and setbacks at (408) 778-6480 or [planning@morganhill.ca.gov](mailto:planning@morganhill.ca.gov).



**OPEN PATIO COVER  
SAMPLE PLOT PLAN**

SHEET  
**1**  
OF 8 SHEETS

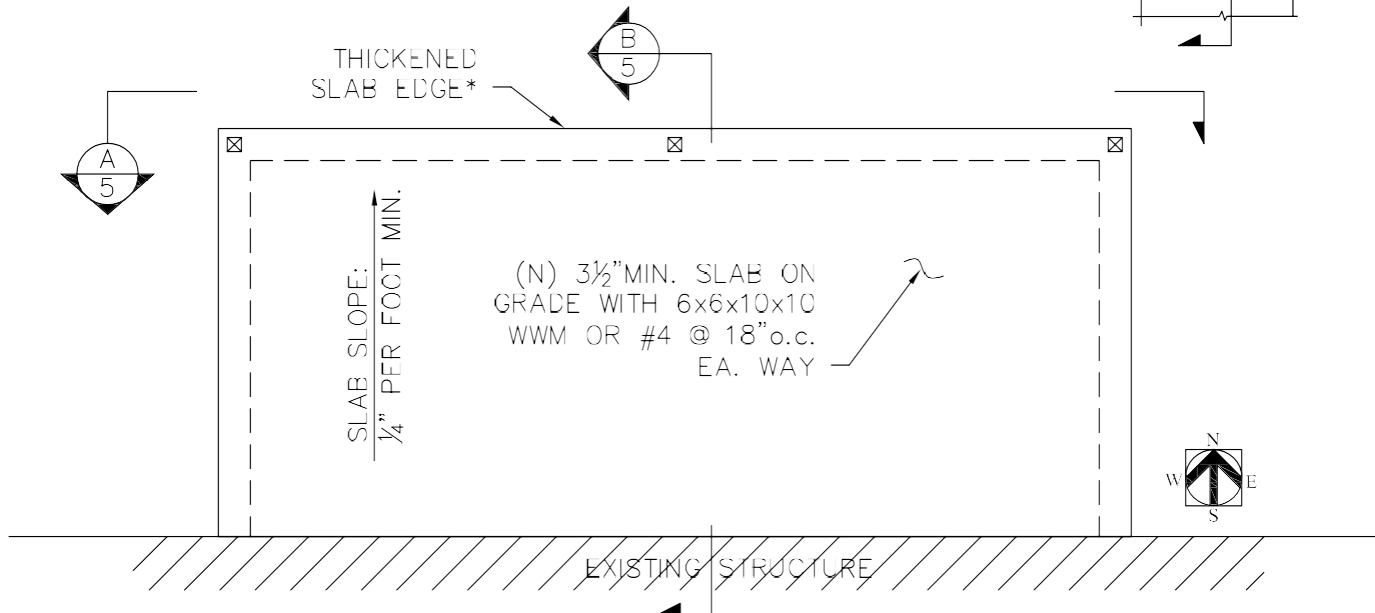
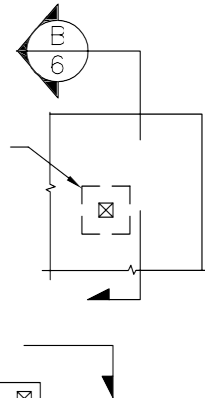


**B** ROOF FRAMING PLAN

SCALE: N.T.S.

\*THICKENED SLAB EDGE OR ISOLATED FOOTING IS NOT REQUIRED WHEN THE COLUMN LOAD DOES NOT EXCEED 750 LB (i.e. ~38 SQ FT TRIB. AREA)

ISOLATED FOOTING\* IS REQUIRED WHEN POST IS NOT LOCATED AT THE THICKENED SLAB EDGE

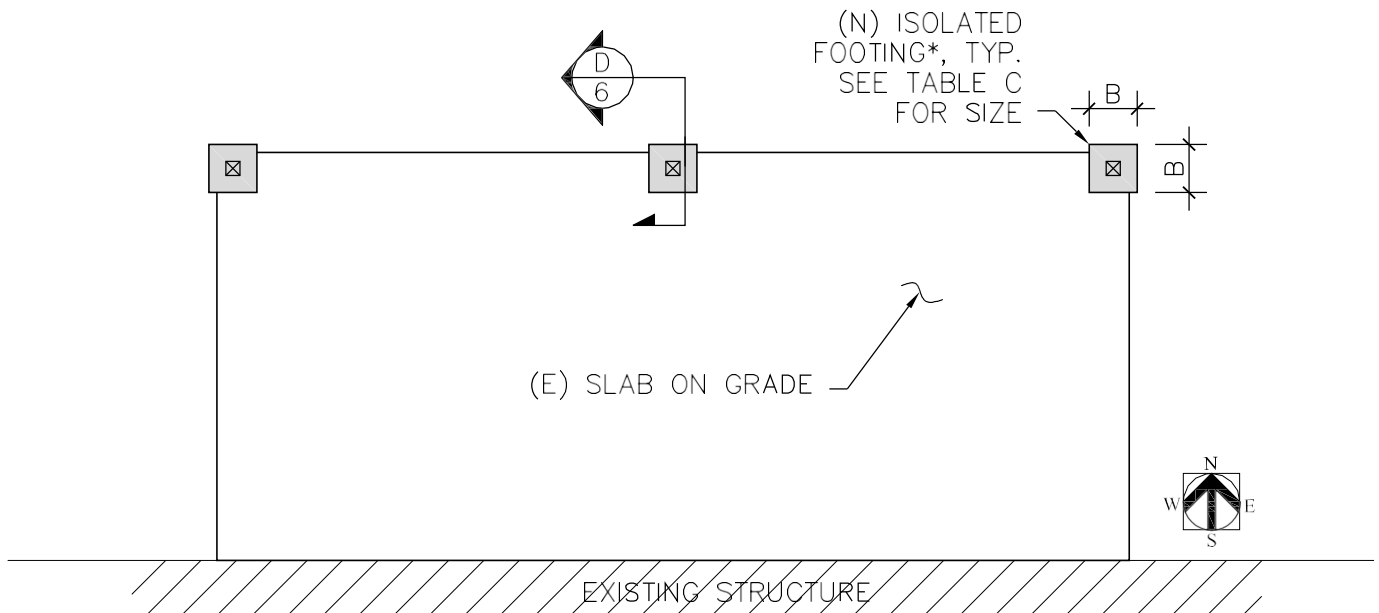


**A** FOUNDATION PLAN AT (N) PATIO SLAB

SCALE: N.T.S.

# **OPEN PATIO COVER** **SAMPLE FOUNDATION AND FRAMING PLAN**

**SHEET**  
**2**  
**OF 8 SHEETS**

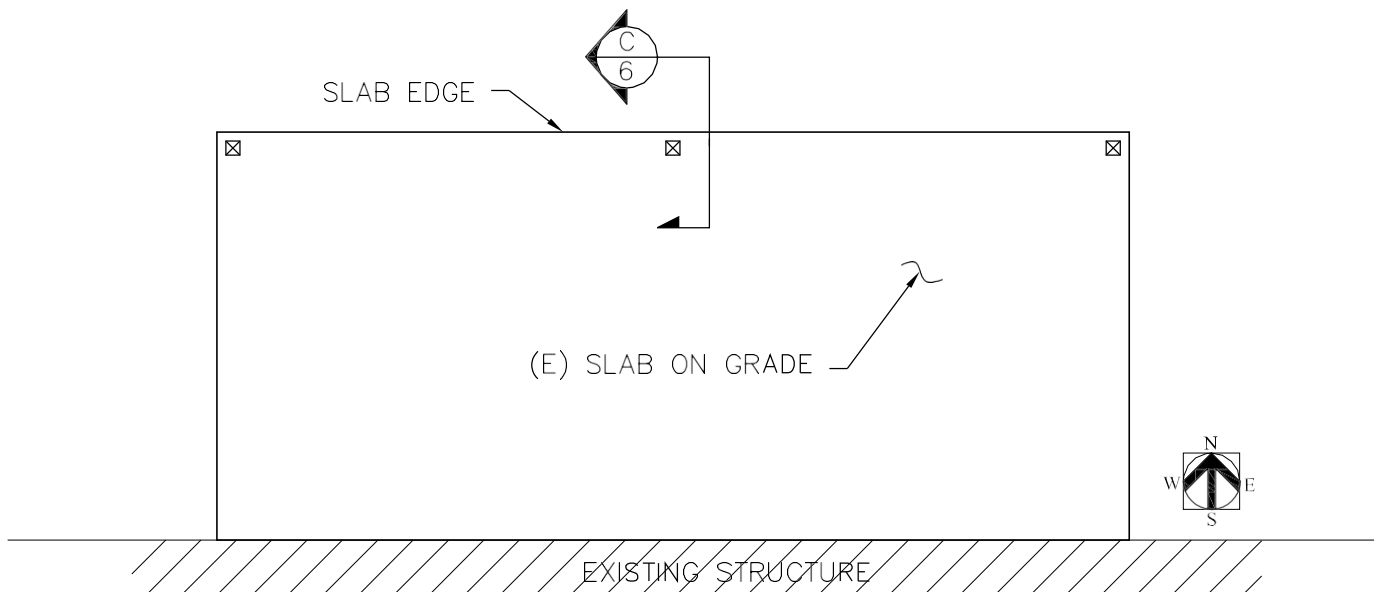


\* (N) FOOTING REQUIRED WHEN ANY ONE OF THE CONDITIONS IN DET. A OCCUR

**(B)** FOUNDATION PLAN AT (E) PATIO SLAB  
CASE 2: (N) FOOTING REQUIRED SCALE: N.T.S.

CONDITIONS FOR USING (E) SLAB FOR COLUMN SUPPORT:

1. MIN.  $3\frac{1}{2}$ " SLAB THK.
2. SLAB IN GOOD CONDITIONS
3. COLUMN LOAD DOES NOT EXCEED 750 LB (~38 SQ FT TRIB. AREA)



**(A)** FOUNDATION PLAN AT (E) PATIO SLAB  
CASE 1: NO FOOTING REQUIRED SCALE: N.T.S.

NOTES:

TABLE "A"		
RAFTER SPANS "L1" (DOUGLAS FIR LARCH #2 OR BETTER)		
SIZE	SPACING	SPAN
2x4	12"o.c.	10'-0"
	16"o.c.	8'-9"
	24"o.c.	7'-0"
	32"o.c.*	6'-3"*
2x6	12"o.c.	15'-9"
	16"o.c.	13'-9"
	24"o.c.	11'-3"
	32"o.c.*	9'-6"*
2x8	12"o.c.	20'-0"
	16"o.c.	18'-3"
	24"o.c.	14'-9"
	32"o.c.*	12'-9"*
2x10	12"o.c.	20'-0"
	16"o.c.	20'-0"
	24"o.c.	19'-0"
	32"o.c.*	16'-3"*
2-2x4 OR 4x4	24"o.c.	10'-0"
	32"o.c.*	8'-9"*
2-2x6 OR 4x6	48"o.c.*	7'-0"*
	24"o.c.	15'-9"
2-2x8 OR 4x8	32"o.c.*	13'-9"*
	48"o.c.*	11'-3"*
2-2x8 OR 4x8	24"o.c.	20'-0"
	32"o.c.*	18'-3"*
4x8	48"o.c.*	14'-9"*

\* SPACING AND SPAN DENOTED BY ASTERISKS ARE FOR LATTICE TYPE PATIO COVER ONLY.

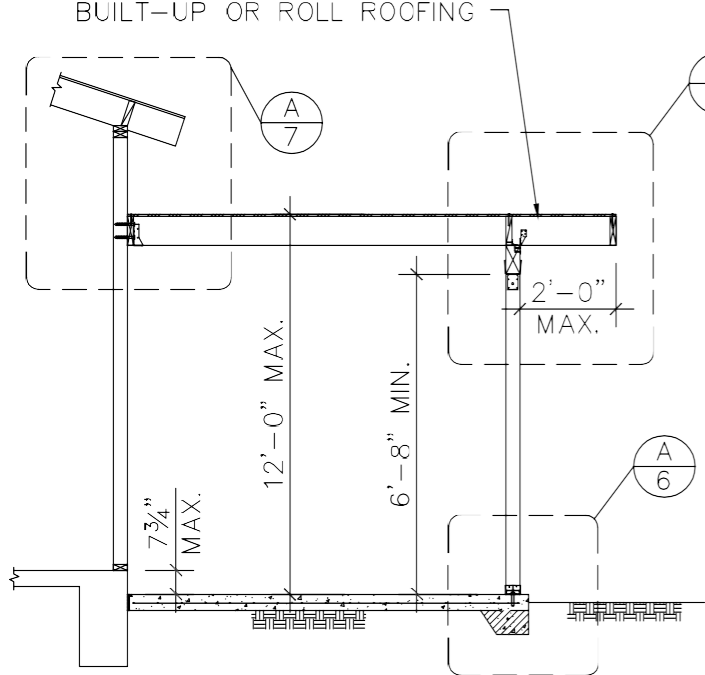
- LAG SCREWS MUST FULLY ENGAGE A WOOD STUD OR RIM JOIST AND BE PROVIDED WITH APPROPRIATE WASHERS.
- THESE TABLES ARE APPLICABLE TO OPEN PATIO COVER ONLY, NOT FOR ENCLOSED PATIO ENCLOSURE.
- PATIO COVER IN HILLSIDE AREAS SHALL BE DESIGNED BY CALIFORNIA LICENSED ARCHITECT OR ENGINEER FOR A 3-SECOND GUST MINIMUM NOMINAL DESIGN WIND SPEED (V<sub>asd</sub>) OF 95 MPH AND EXPOSURE C
- ALL WEATHER EXPOSED WOOD MEMBERS SHALL BE NATURALLY DURABLE OR PRESSURE TREATED.
- ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL.
- WOOD POSTS, RAFTERS AND BEAMS SHALL BE DOUGLAS FIR LARCH NO. 2 OR BETTER.
- CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500psi MIN. AND REINFORCEMENT YIELD STRENGTH SHALL BE 40ksi MIN.
- ALL METAL CONNECTORS AND HARDWARE SHALL MEET AN APPROVED STANDARD FOR ITS INTENDED USE AND BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- THIS GUIDELINE IS FOR MAX. COLUMN LOAD NOT TO EXCEED 750 POUNDS.
- THE INFORMATION PROVIDED IN THIS DESIGN GUIDE CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS. BY USING THIS DESIGN GUIDE, THE CONTRACTOR/OWNER ACCEPTS THE FULL RESPONSIBILITY OF RISK. ALTERNATE DESIGN MAY BE USED WHEN PROVIDED WITH WET STAMPED AND SIGNED STRUCTURAL CALCULATIONS & DETAILS BY A CALIFORNIA LICENSED ENGINEER OR ARCHITECT.

RAFTER SPAN	TABLE "B"		TABLE "C"	TABLE "D"	TABLE "E"
	HEADER SIZE & SPANS "L2" (DOUGLAS FIR LARCH #2 OR BETTER)		FOOTING SIZE	THRU' BOLTS	LEDGER LAG SCREW
	HEADER				
	SPAN	SIZE			
UP 10 12'-0"	9'-3"	2-2x6 OR 4X6	12"SQ. x 12"DP.	(2)-1/2"Ø @ 1 1/2"o.c.	(1)-1/2"Ø x 6 1/2" LONG @ 16"o.c. STAGG.
	12'-0"	2-2x8 OR 4X8	13"SQ. x 12"DP.	(2)-5/8"Ø @ 2 1/2"o.c.	
	15'-6"	2-2x10 OR 4X10	14"SQ. x 12"DP.	(2)-5/8"Ø @ 3 1/2"o.c.	
	18'-0"	2-2x12 OR 4X12	15"SQ. x 12"DP.	(2)-3/4"Ø @ 4 1/2"o.c.	
12'-1" 10 20-0"	7'-0"	2-2x6 OR 4X6	14"SQ. x 12"DP.	(2)-1/2"Ø @ 1 1/2"o.c.	(2)-3/8"Ø x 4 1/2" LONG @ 16"o.c.
	9'-3"	2-2x8 OR 4X8	15"SQ. x 12"DP.	(2)-5/8"Ø @ 2 1/2"o.c.	
	12'-0"	2-2x10 OR 4X10	16"SQ. x 12"DP.	(3)-1/2"Ø @ 2 1/2"o.c.	
	14'-6"	2-2x12 OR 4X12	18"SQ. x 12"DP.	(3)-5/8"Ø @ 3"o.c.	

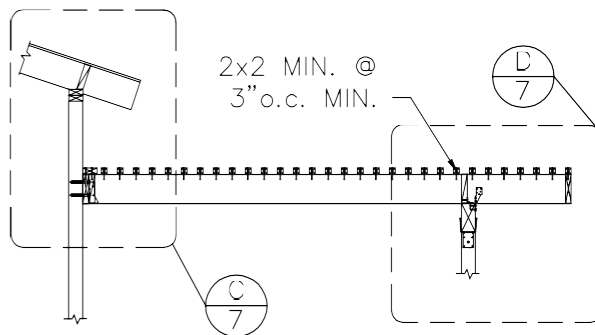
**OPEN PATIO COVER  
SAMPLE SPAN TABLE**

**SHEET  
4  
OF 8 SHEETS**

1/2" PLYWOOD WITH 8d @ 6" o.c.  
E.N. & @ 12" o.c. F.N. WITH  
BUILT-UP OR ROLL ROOFING



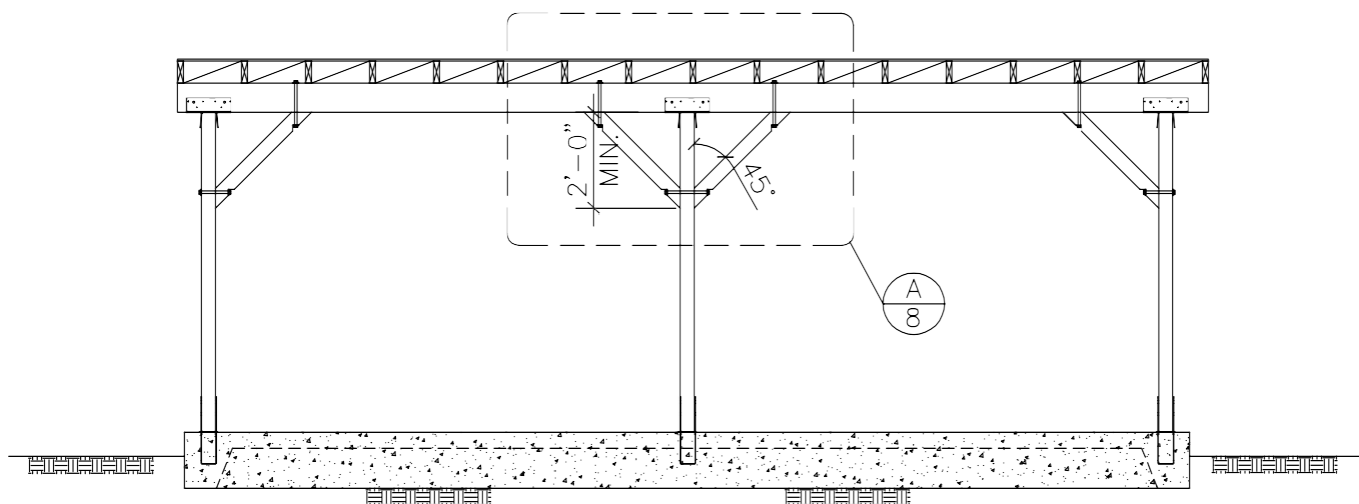
SOLID COVER OPTION



LATTICE COVER OPTION

(B) PATIO COVER SECTION

SCALE: 1/4" = 1'-0"

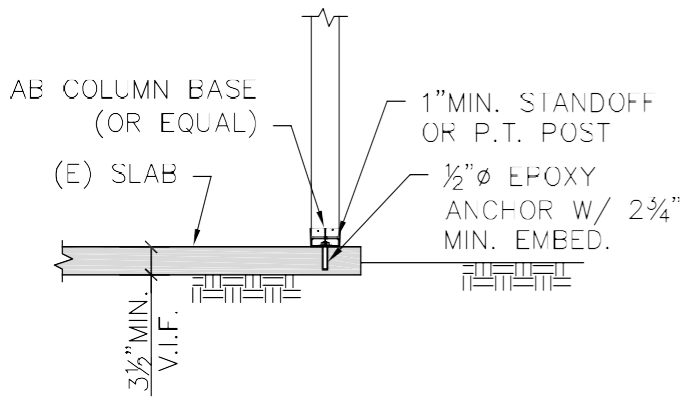


(A) PATIO COVER ELEVATION

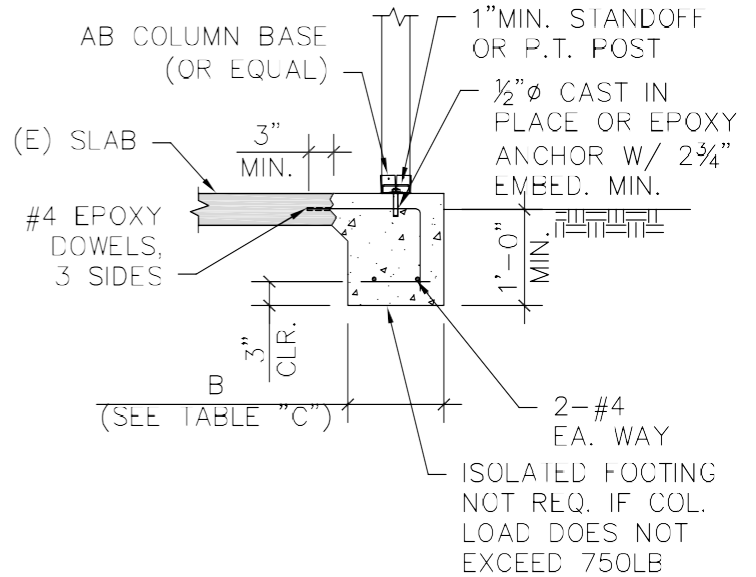
SCALE: 1/4" = 1'-0"

# **OPEN PATIO COVER SAMPLE SECTIONS AND ELEVATION**

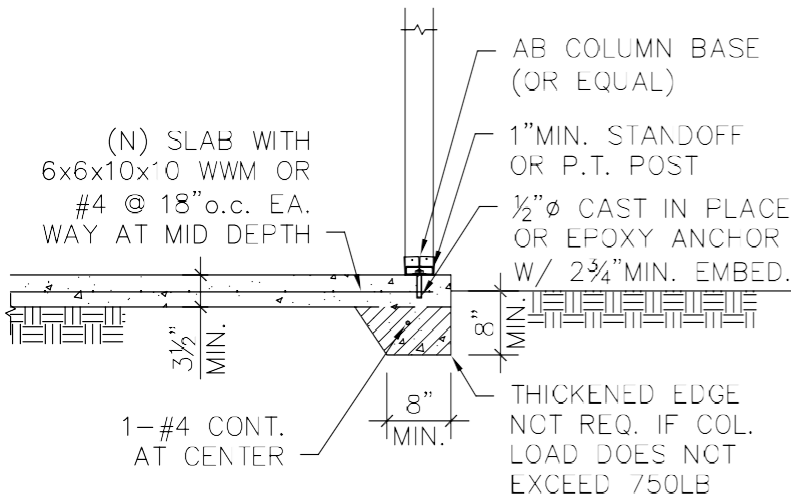
**SHEET  
5  
OF 8 SHEETS**



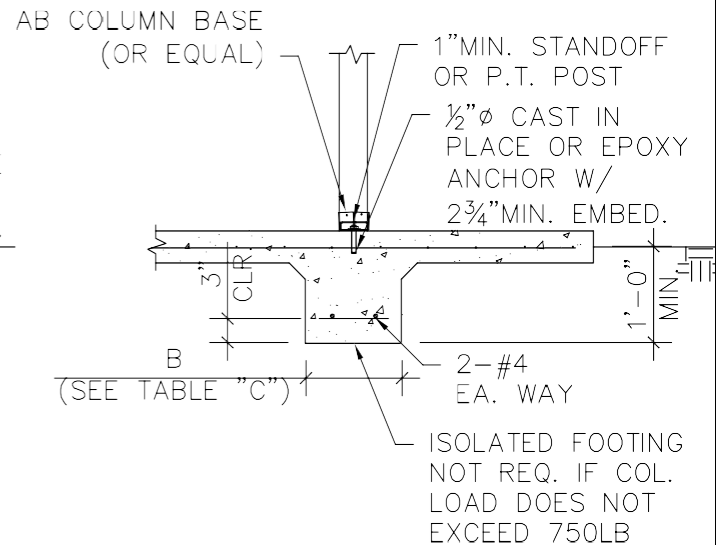
C (N) POST TO (E) SLAB DETAIL  
SCALE: 1/2" = 1'-0"



D (N) ISOLATED FOOTING AT (E) SLAB DETAIL  
SCALE: 1/2" = 1'-0"



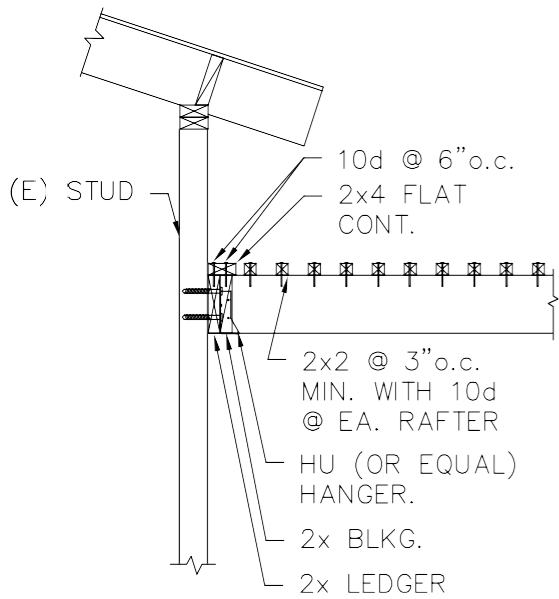
A (N) PATIO SLAB THICKENED EDGE DETAIL  
SCALE: 1/2" = 1'-0"



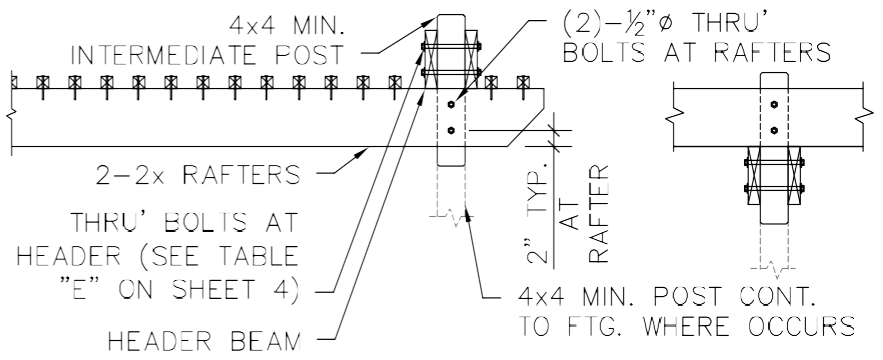
B (N) ISOLATED FOOTING IN (N) PATIO SLAB  
SCALE: 1/2" = 1'-0"

## OPEN PATIO COVER SAMPLE DETAILS

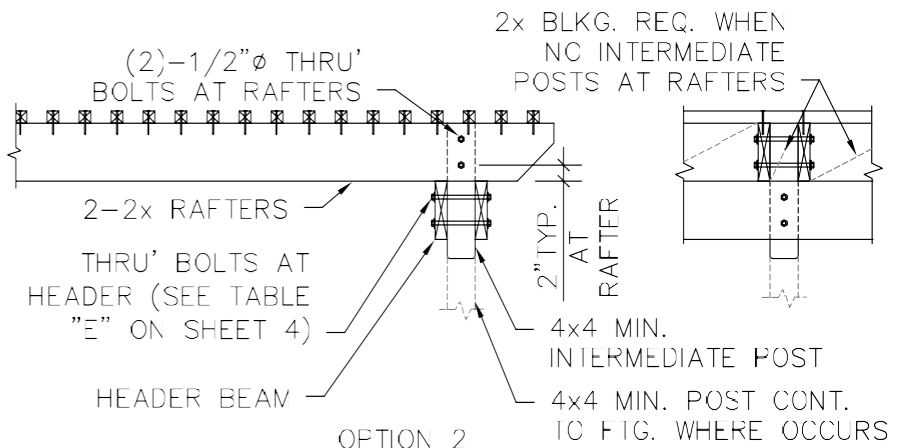
SHEET  
6  
OF 8 SHEETS



NOTE:  
SEE DET. A/7 FOR  
DETAILS NOT SHOWN.

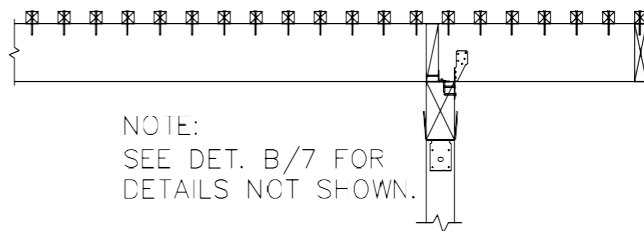


OPTION 3 - INVERTED HEADER



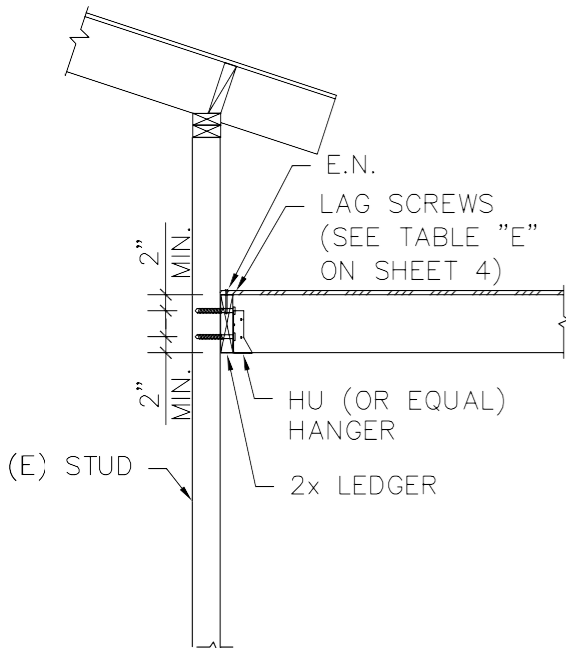
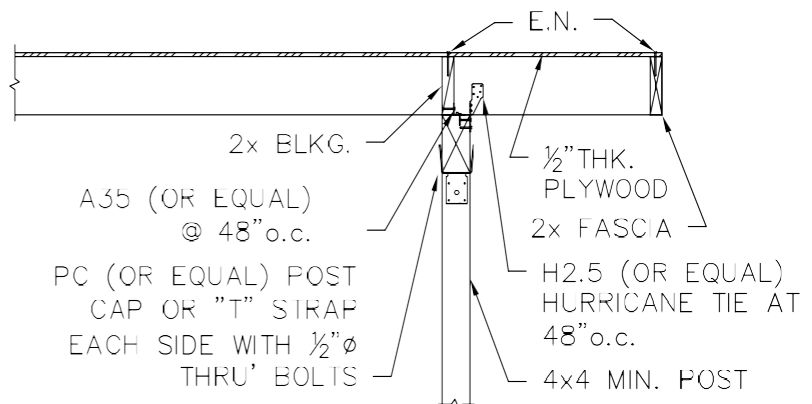
OPTION 2

C LEDGER DETAIL (LATTICE COVER) SCALE: 1/2" = 1'-0"



OPTION 1

D BEAM DETAIL (LATTICE COVER) SCALE: 1/2" = 1'-0"



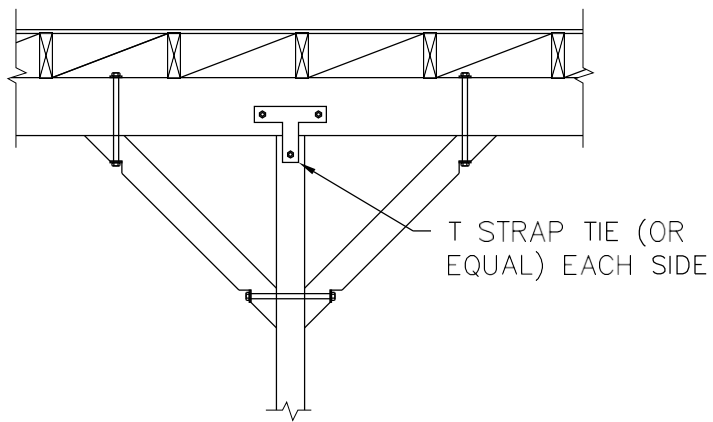
A LEDGER DETAIL (SOLID COVER) SCALE: 1/2" = 1'-0"

B BEAM DETAIL (SOLID COVER) SCALE: 1/2" = 1'-0"

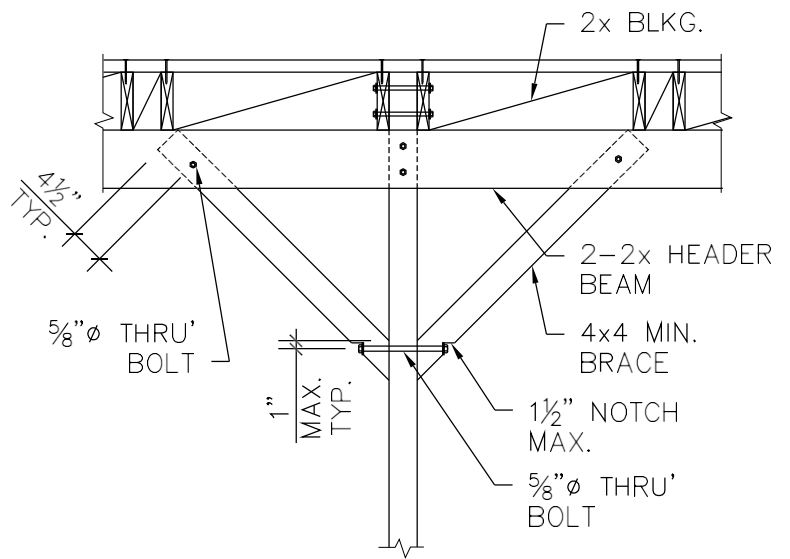
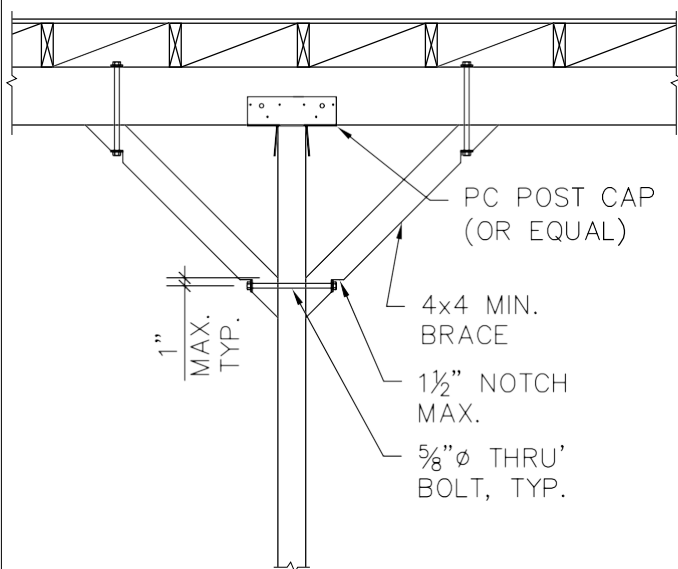
## OPEN PATIO COVER SAMPLE DETAILS

SHEET  
7  
OF 8 SHEETS





T STRAP TIE OPTION



ALTERNATIVE OPTION



BRACE DETAIL

SCALE: 1/2" = 1'-0"