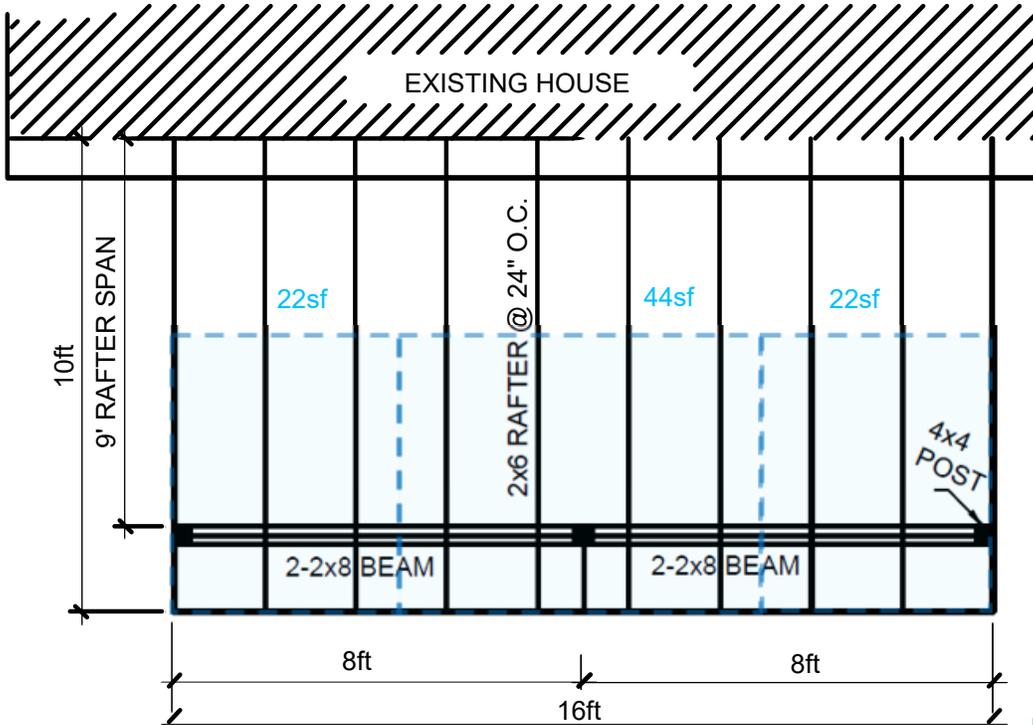


Residential Patio Cover Guide

Floor Plan



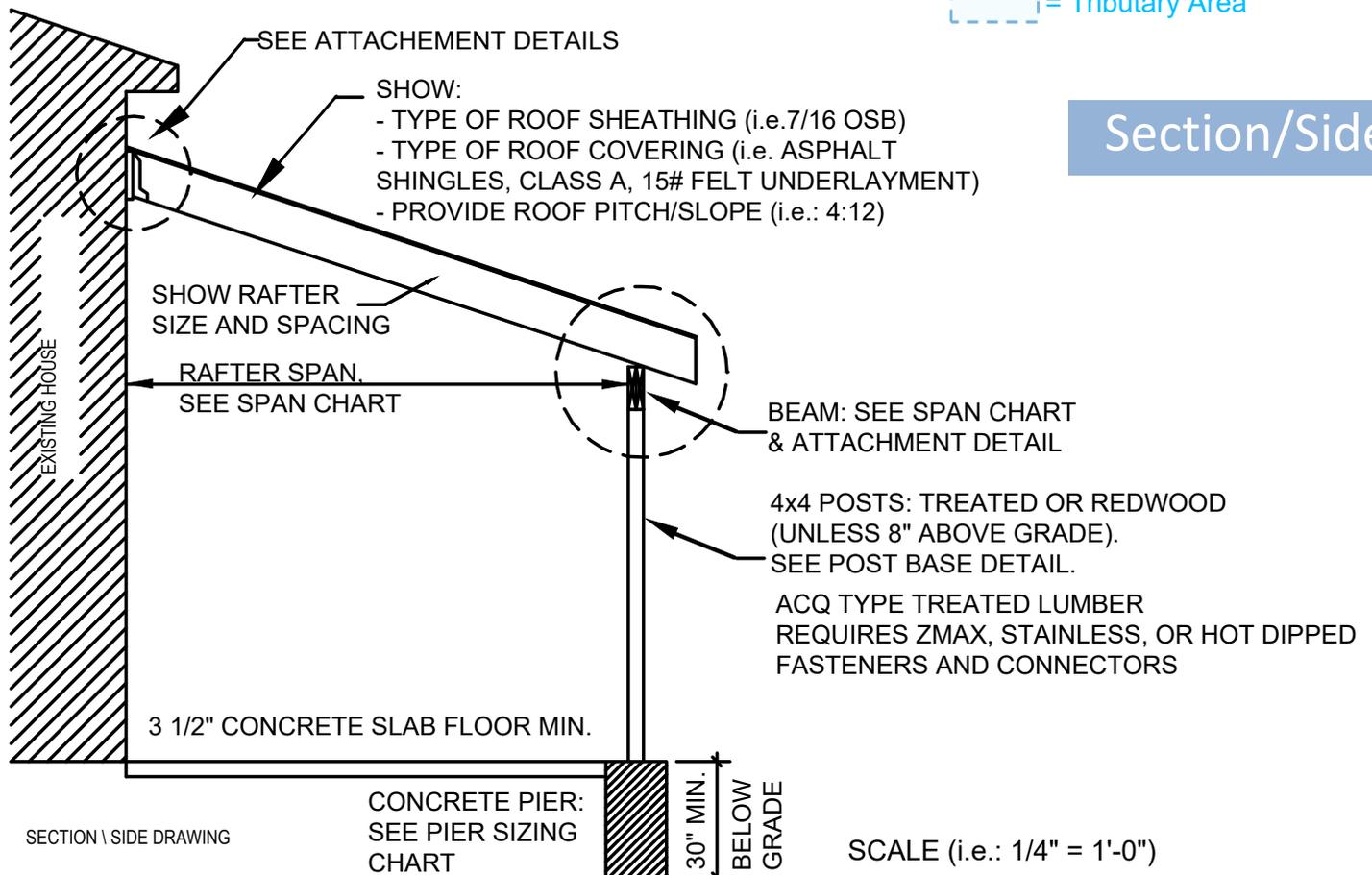
Structural Engineering is required for:

1. Patio cover supported by or attached directly to the top of a deck.
2. Ledger attached to a cantilever/overhang on the house.
3. Ledger attached to rafter tails/fascia board of existing house roof.
4. Metal or Plastic patio structures

SCALE (i.e.: 1/4" = 1'-0")

= Tributary Area

Section/Side



Residential Patio Cover Guide

Beam Chart

PATIO COVER - BEAM SPANS				
Max Beam SPAN (length of beam in feet & inches based on rafter span) 30psf live, IRC table R602.7(3)				
BEAM SIZE	Rafter Span (in feet)			
	8	10	12	14
2-2X6	7-6	6-10	6-3	5-8
2-2X8	10-1	9-3	8-5	7-7
2-2X10	12-4	11-4	10-4	9-4
2-2X12	14-4	13-2	12	10-10

Rafter Chart

PATIO COVER - RAFTER SPANS				
Max RAFTER SPAN (length of rafter in feet & inches based on spacing) HEM FIR #2, 30psf live, 10psf dead, L-240, Ceiling attached				
RAFTER SIZE	Rafter Spacing (center to center - Inches)			
	12"	16"	19.2"	24"
2X4	8-0	7-3	6-10	6-4
2X6	12-7	11-5	10-9	9-7
2X8	16-7	14-11	13-7	12-2
2X10	21-0	18-2	16-7	14-10
2X12	24-4	21-1	19-3	17-3

Pier Chart

PATIO COVER - Pier Diameter	
Min. Pier Diameter (inches)	Maximum Tributary Area (Square Feet)
10 in	41
11 in	49
12 in	59
13 in	69
14 in	80
15 in	92
16 in	105
17 in	118
18 in	133
19 in	148
20 in	164
21 in	180
22 in	198
23 in	216
24 in	236

