

DESIGN CRITERIA

ITEMS	UNITS
SOIL BEARING	1500 psf
SEISMIC ZONE	D
WIND SPEED	98 mph
EXPOSURE	R301.2.1.3
SNOW LOAD (in Oregon City)	10 psf
ROOF HEIGHT (AVERAGE)	12'-0"

**GENERAL NOTES -
BASED ON THE PROVISIONS OF
THE 2023 OREGON
RESIDENTIAL SPECIALTY CODE**

SCOPE

RESIDENTIAL PATIO AND PORCH COVERS THAT ARE NOT OVER 200 SQUARE FEET AND SUPPORTED BY AN EXTERIOR WALL ARE EXEMPT FROM A BUILDING PERMIT. CHECK WITH OUR OTHER DEPARTMENTS TO VERIFY THEIR REQUIREMENTS.

COVERS LARGER THAN THESE AND/OR SELF SUPPORTED MUST BE DESIGNED IN ACCORDANCE WITH SECTION **AH101**

PERMITTED USES:

PATIO COVERS SHALL BE USED FOR RECREATIONAL, OUTDOOR LIVING PURPOSES, AND NOT AS CARPORTS, GARAGES, STORAGE ROOMS OR HABITABLE ROOMS.

ALLOWABLE DIMENSIONS:

MEAN ROOF HEIGHT = 12 FEET AND LIMITED TO ONE STORY

(THE MEAN ROOF HEIGHT IS THE AVERAGE ROOF HEIGHT, TAKEN FROM A CENTER POINT BETWEEN THE EAVES AND THE HIGHEST POINT OF THE ROOF)
MAXIMUM SIZE = 200SF

ENCLOSURE (IF DESIRED):

1. INSECT SCREENING
2. TRANSLUCENT OR TRANSPARENT PLASTIC NOT MORE THAN 0.125 IN IN THICKNESS
3. GLASS CONFORMING TO THE PROVISIONS OF SECTION R308 (GLAZING)
4. ANY COMBINATION OF THE ABOVE

LEGEND:

[RXXX.X] = 2023 ORSC SECTION REFERENCE

APPROVED = ACCEPTABLE TO THE BUILDING OFFICIAL



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GENERAL DESIGN NOTES:

THE OWNER/CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE OWNER/CONTRACTOR SHALL NOTIFY THE OREGON CITY BUILDING DEPARTMENT OF ANY DISCREPANCIES, CHANGES, OMISSIONS OR SUBSTITUTIONS THAT ARE BEYOND THE SCOPE OF THIS DOCUMENT.

MATERIAL CONSIDERATIONS:

WOOD -

ALL STRUCTURAL WOOD SHALL BE DF #2 OR BETTER

ALL WOOD IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES SHALL BE APPROVED PRESSURE PRESERVATIVE TREATED WOOD (PT) SUITABLE FOR GROUND CONTACT USE.

IN AREAS SUBJECT TO WEATHER EXPOSURE, OR WHERE EXPERIENCE HAS DEMONSTRATED A SPECIFIC NEED, APPROVED PRESSURE TREATED WOOD SHALL BE USED FOR THOSE PORTIONS OF WOOD MEMBERS THAT FORM THE STRUCTURAL SUPPORT OF DECK, PORCHES, BALCONIES OR SIMILAR BUILDING APPURTENANCES.

SUCH MEMBERS MAY INCLUDE:

1. HORIZONTAL MEMBERS SUCH AS GIRDERS, JOISTS AND DECKING
2. VERTICAL MEMBERS SUCH AS POSTS, POLES AND COLUMNS
3. BOTH HORIZONTAL AND VERTICAL MEMBERS

CONCRETE -

CONCRETE SLAB ON GRADE SHALL BE OF 3000psi CONCRETE AND BE A MINIMUM OF 3.5" THICK AND SHOULD BE SLOPED A MINIMUM OF 5% AWAY FROM THE HOME TO DIRECT WATER AWAY FROM THE FOUNDATION

CONCRETE FOOTINGS SHALL BE MINIMUM 2500psi AND BE SET AT LEAST 12" BELOW GRADE

THE BOTTOM SURFACE OF THE FOOTING SHALL NOT HAVE A SLOPE EXCEEDING 1 in 10 (10% SLOPE)

THE AREA WITHIN THE CONCRETE SLAB SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED PRIOR TO POURING CONCRETE

CONNECTORS / HANGERS -

ALL POST BASES, POST CAPS, JOIST HANGERS, HURRICANE TIES ETC., SHALL BE INSTALLED AND FASTENED ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS

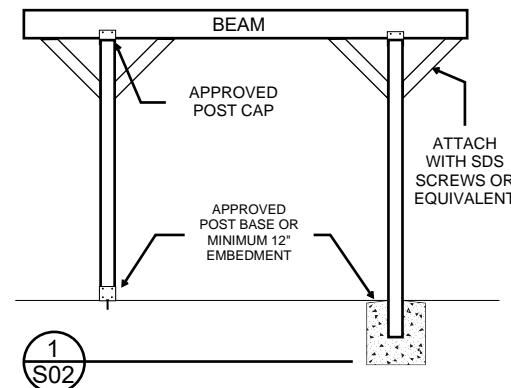
IN ORDER TO RESIST WIND AND SEISMIC FORCES, APPROVED POST CONNECTIONS ARE RECOMMENDED.

AT THE BASE:

EITHER AN APPROVED POST BASE OR MINIMUM 12" OF EMBEDMENT IN CONCRETE.

AT THE POST-TO-BEAM CONNECTION:

THE MAIN BEAM SHALL BE ATTACHED TO THE SUPPORT POSTS IN A MANNER CAPABLE OF TRANSFERRING VERTICAL LOADS AND RESISTING HORIZONTAL DISPLACEMENT. THIS CAN BE DONE WITH AN APPROVED POST CAP OR GUSSETS, SHOWN BELOW.



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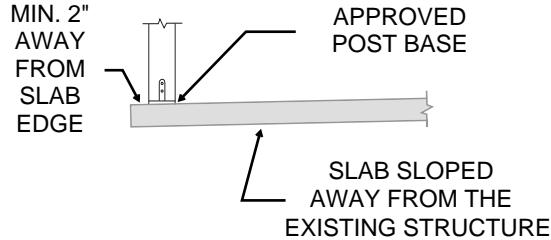
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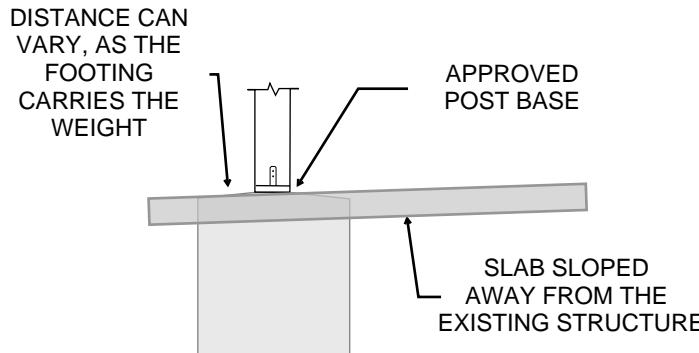
FOOTING SIZING BASED ON TABLE 507.3.1

FOOTING OPTIONS:

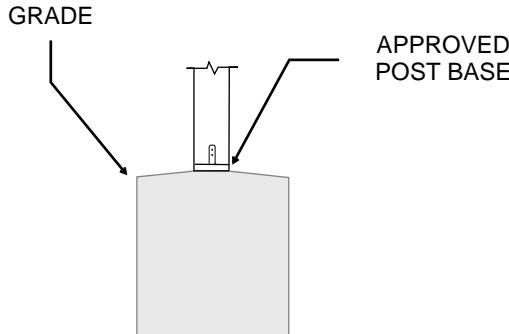
NONE - DIRECT SLAB MOUNT



FOOTING / SLAB COMBINATION



FOOTING ONLY, NO SLAB



LIVE OR GROUND SNOW LOAD ^b (psf)	TRIBUTARY AREA ^a (ft ²)	1,500		
		Side of a square footing (inches)	Diameter of a round footing (inches)	Plain concrete thickness (inches)
40	5	7	8	6
	20	10	12	6
	40	14	16	6
	60	17	19	6
	80	20	22	7
	100	22	25	8
	120	24	27	9
	140	26	29	10
	160	28	31	11

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m², 1 pound per square foot = 0.0479 kPa.

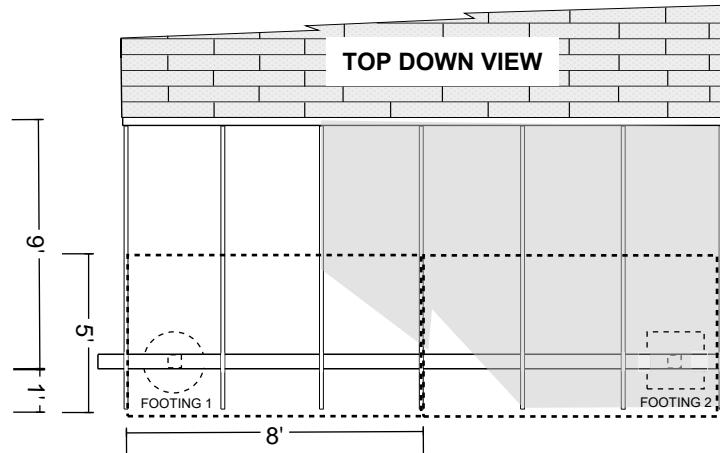
a. Interpolation permitted, extrapolation not permitted.

b. Based on highest load case: Dead + Live or Dead + Snow.

c. Footing dimensions shall allow complete bearing of the post.

d. If the support is a brick or CMU pier, the footing shall have a minimum 2-inch projection on all sides.

e. Area, in square feet, of deck surface supported by post and footings.



TO CALCULATE A FOOTING:

THE TRIBUTARY IS HALF THE DISTANCE FROM THE CARRIER BEAM TO THE LEDGER. IN THIS EXAMPLE, THE TOTAL OF 9' IS CUT IN HALF (BECAUSE THE EXISTING STRUCTURE CARRIES HALF THE WEIGHT), AND THE CANTILEVER DISTANCE IS ADDED TO IT, FOR A TOTAL OF 5' x 8' - OR 40 SQUARE FEET.

ACCORDING TO THE TABLE ABOVE - FOOTING #1 WOULD NEED TO BE 16" ROUND, AND FOOTING #2 WOULD NEED TO BE 14" SQUARE.

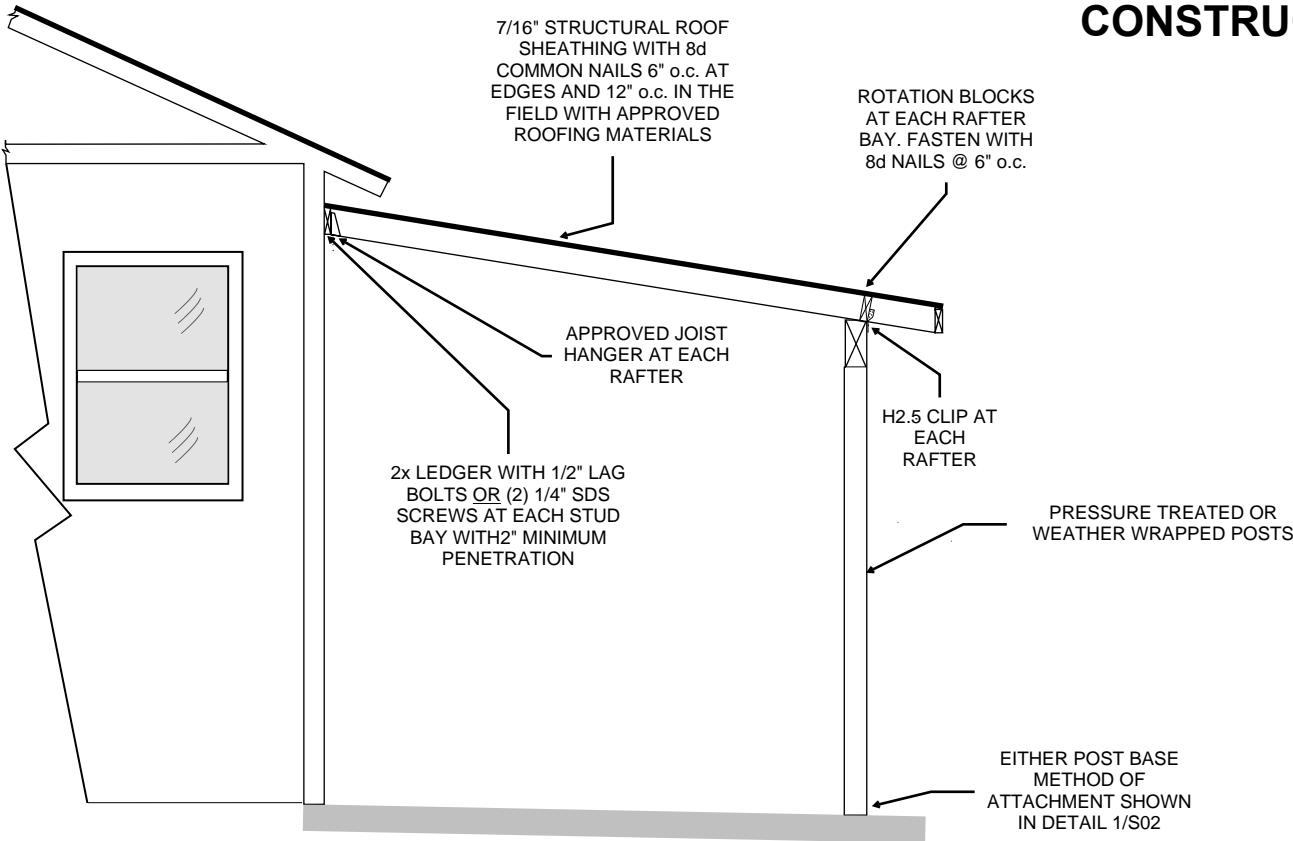


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CONSTRUCTION DETAILS



COMMON DF #2 RAFTER SPANS BASED ON
THE 2023 ORSC TABLE 802.4.1(4)

Min. Size	Max. Spacing	Max. Span
2x4	12"	8'-7"
	16"	7'-10"
	24"	6'-9"
2x6	12"	13'-6"
	16"	12'-1"
	24"	9'-10"
2x8	12"	17'-8"
	16"	15'-4"
	24"	12'-6"
2x10	12"	21'-7"
	16"	18'-9"
	24"	15'-3"
2x12	12"	25'-1"
	16"	21'-8"
	24"	17'-9"

COMMON HEADER SPANS BASED ON
THE 2023 ORSC TABLE 502.5

Size of wood beam	Spacing between posts or supports					
	4 feet	6 feet	8 feet	10 feet	12 feet	16 feet
4x4	--	5'-0"	4'-0"	3'-6"	3'-0"	2'-10"
4x6	--	7'-6"	6'-0"	5'-6"	4'-6"	4'-4"
4x8	6x6	10'-0"	8'-6"	7'-6"	6'-6"	6'-0"
4x10	6x8	13'-0"	10'-6"	9'-6"	8'-6"	7'-6"
4x12	6x10	16'-0"	12'-6"	11'-0"	10'-0"	9'-4"

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