

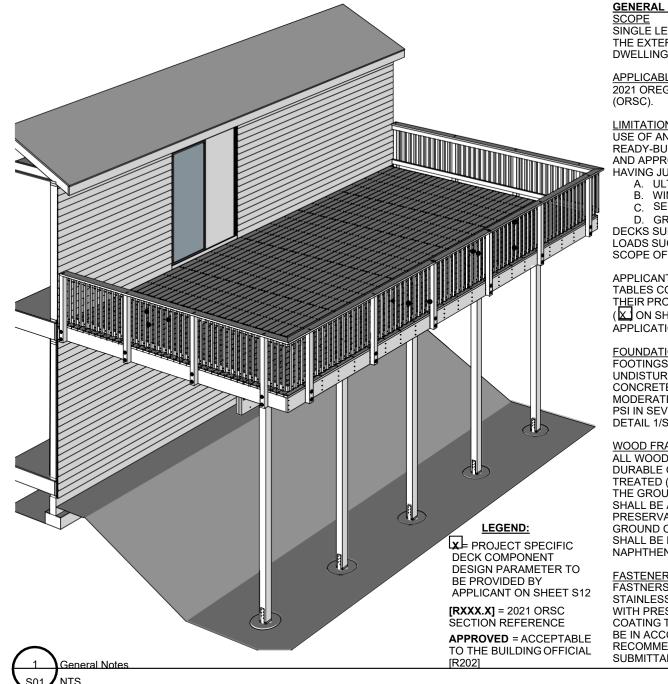
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READY-BUILD PLAN PROGRAM



GENERAL NOTES

SINGLE LEVEL EXTERIOR DECKS ATTACHED TO THE EXTERIOR WALL OF A ONE- OR TWO-FAMILY DWELLING.

APPLICABLE BUILDING CODE

2021 OREGON RESIDENTIAL SPECIALTY CODE

LIMITATIONS OF USE

USE OF AND ANY MODIFICATIONS TO THESE READY-BUILD PLANS IS SUBJECT TO REVIEW AND APPROVAL BY THE BUILDING DEPARTMENT HAVING JURISDICTION.

- A. ULTIMATE WIND SPEED: 105-135MPH
- B. WIND EXPOSURE CATEGORY: B, C, ORD
- SEISMIC DESIGN CATEGORY: C, D₀, D₁, D₂

GROUND SNOW LOAD: ≤ 40 PSF DECKS SUPPORTING LARGECONCENTRATED LOADS SUCH AS HOT TUBS ARE BEYOND THE SCOPE OF THIS DOCUMENT.

APPLICANT SHALL USE THE CODE PRESCRIBED TABLES CONTAINED HEREIN AND RECORD THEIR PROJECT SPECIFIC DESIGN PARAMETERS (ON SHEET **S13** PRIOR TO PERMIT APPLICATION.

FOUNDATION

FOOTINGS SHALL BEAR ON NATIVE, INORGANIC, UNDISTURBED SOIL BELOW EXISTING GRADE. CONCRETE STRENGTH SHALL BE 3.000 PSI IN MODERATE WEATHERING REGIONS AND 3,500 PSI IN SEVERE WEATHERING REGIONS (SEE DETAIL 1/S11) [R301.2 AND R402.2].

WOOD FRAMING

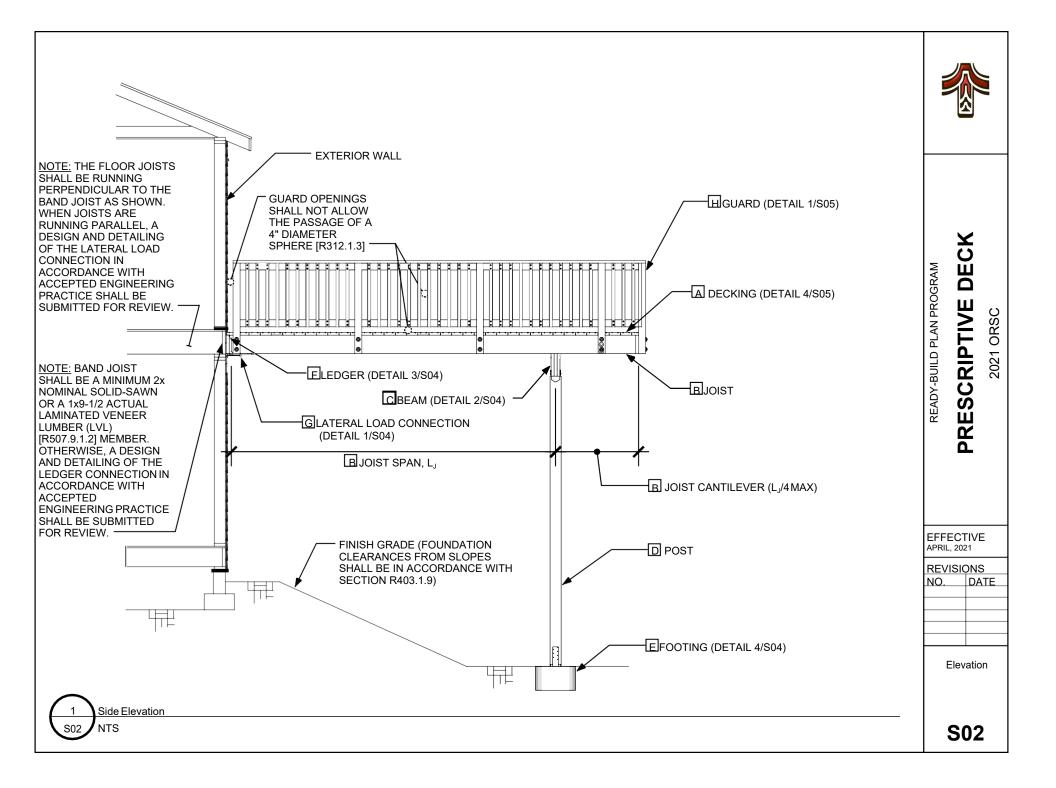
ALL WOOD SHALL BE APPROVED NATURALLY DURABLE OR PRESSURE-PRESERVATIVE-TREATED (R317.1). ALL WOOD IN CONTACT WITH THE GROUND. OR EMBEDDED IN CONCRETE SHALL BE APPROVED PRESSURE-PRESERVATIVE-TREATED WOOD SUITABLE FOR GROUND CONTACT USE (R317.1.2). ALL CUTS SHALL BE FIELD TREATED WITH COPPER NAPHTHENATE (2% COPPER) [R402.1.2].

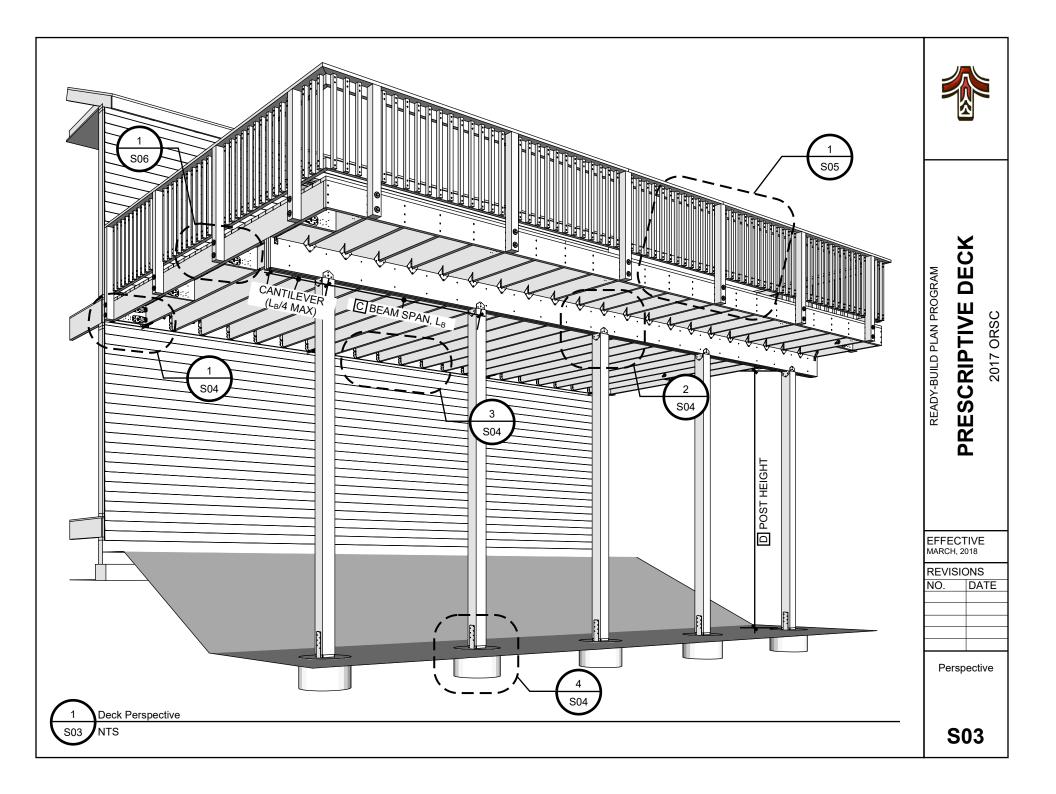
FASTENERS, ANCHORS, AND CONNECTORS FASTNERS SHALL BE HOT-DIPPED GALVANIZED. STAINLESS STEEL, OR APPROVED FOR USE WITH PRESERVATIVE-TREATED LUMBER. COATING TYPES FOR FRAMING ANCHORS SHALL BE IN ACCORDANCE WITH MFR'S RECOMMENDATIONS (SHALL BE PROVIDED WITH SUBMITTAL) [R317.3].

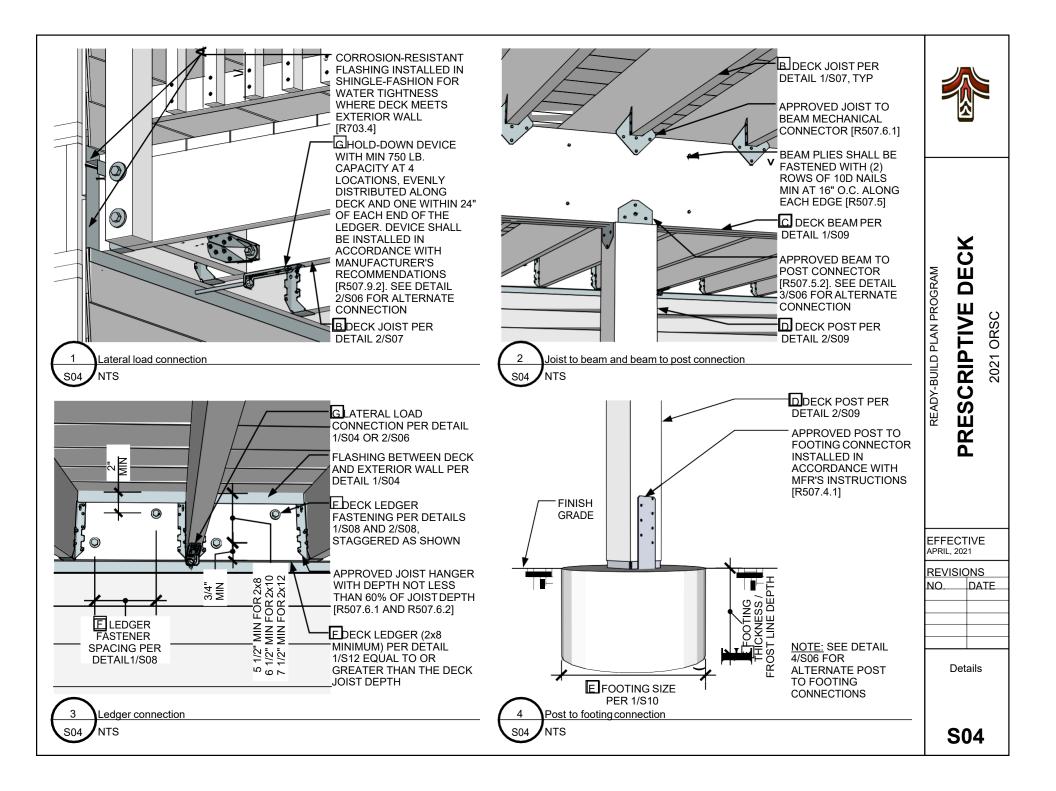
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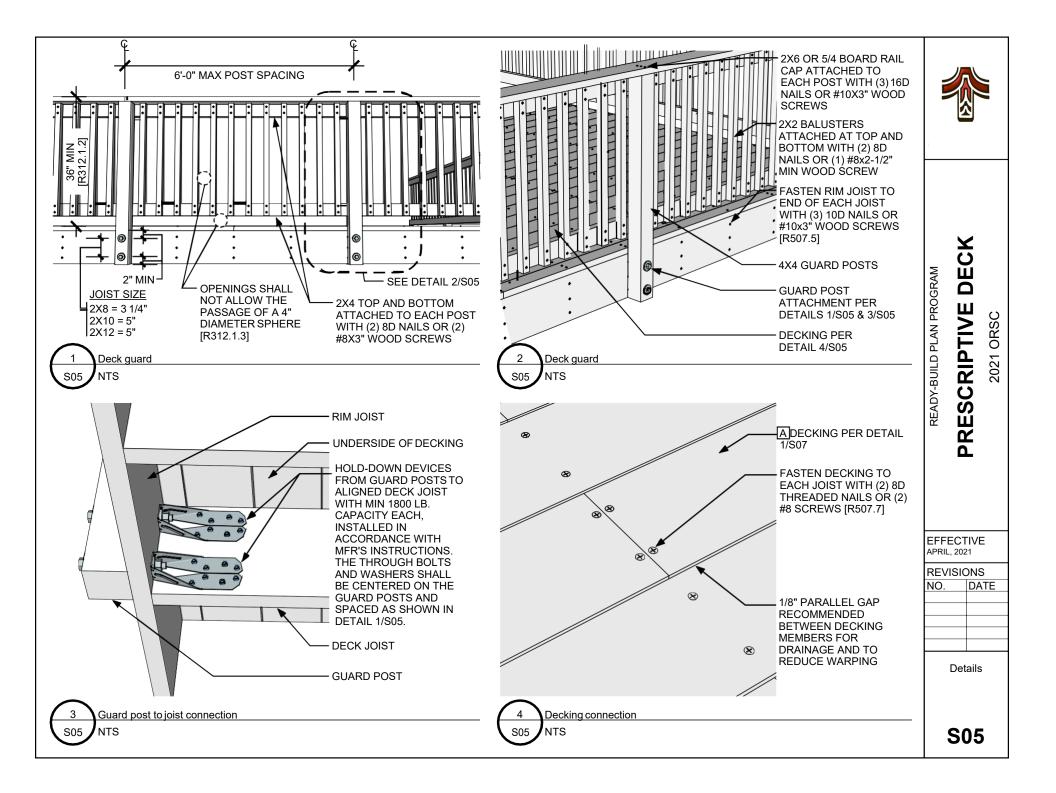
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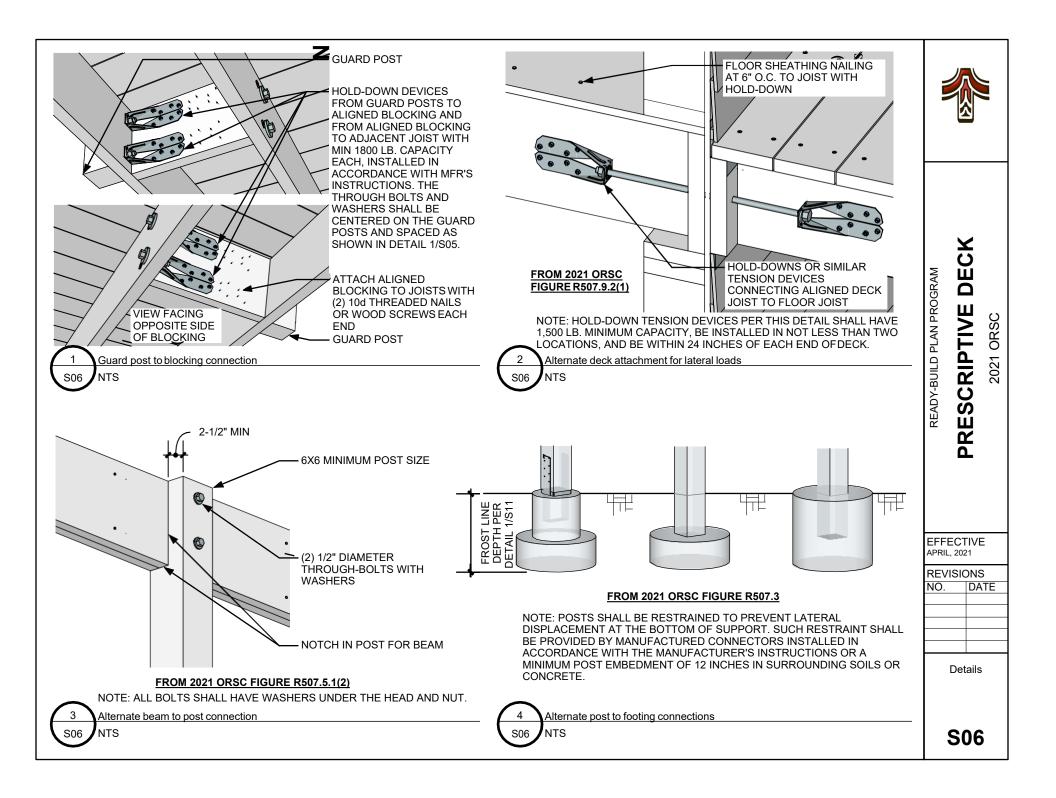
General Notes











	JOIST SPACING					
DECKING TYPE AND	MAXIMUM ON-CENTER JOIST SPACING (in.)					
NOMINAL SIZE	Perpendicular to joist	Diagonal to joist ^a				
5/4-inch-thick wood	16	12				
2-inch-thick wood	24	16				
Plastic composite ^b	Per decking manufacturer	Per decking manufacturer				

FROM 2021 ORSC TABLE R507.7

a. Maximum angle of 45 degrees from perpendicular for wood deck boards.

b. Plastic composite deck materials shall comply with the requirements of ASTM D7032 and Section R507.2.2

Maximum Joist Spacing Table (from 2021 ORSC Table R507.7)

SPACING OF DECK JOISTS WITH CANTILEVER^b SPACING OF DECK JOISTS WITH NO CANTILEVER^b (in.) (in.) SIZE SPECIES^a 12 16 24 12 16 24 1-2 2x6 9-6 8-8 7-2 1-3 1-5 9-1 1-11 2-3 Douglas Fir-2x8 12-6 11-1 2-1 Larch, Hem-Fir, Spruce-Pine-Fir 2x10 15-8 13-7 11-1 3-1 3-5 2-9 2x12 18-0 15-9 12-10 4-6 3-11 3-3 2x6 8-10 7-0 1-0 1-2 8-0 1-1 Redwood, 2x8 11-8 10-7 8-8 1-8 1-10 2-0 Western Cedars. Ponderosa Pine, 2x10 14-11 13-0 10-7 2-8 2-10 2-8 Red Pine 2x12 17-5 15-1 12-4 3-10 3-9 3-1

JOIST SPANS, L_J (ft.-in.)

a. No. 2 grade.

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b. Cantilevered spans not exceeding the nominal depth of the joist are considered "with no cantilever" for this table.

Maximum Joist Spans Table From (from 2021 ORSC Table R507.6)

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LEDGER CONNECTION TO BAND JOIST^{a,b}

	JOIST SPAN (ft.), L _J								
CONNECTION DETAILS	6' and less	6'1" to 8'	8'1" to 10'	10'1" to 12'	12'1" to 14'	14'1" to 16'	16'1" to 18'		
	ON-CENTER SPACING OF FASTENERS (in.)								
1/2-inch diameter lag screw with 1/2- inch maximum sheathing ^{c,d}	30	23	18	15	13	11	10		
1/2-inch diameter through bolt with 1/2- inch maximum sheathing ^d	36	36	34	29	24	21	19		
1/2-inch diameter through bolt with 1- inch maximum sheathing ^e	36	36	29	24	21	18	16		

a. Ledgers shall be flashed with approved corrosion-resistant flashing applied shingle-fashion in a manner to prevent entry of water into the wall cavity or penetration of water to the building structural framing components in accordance with Section R703.4. b. Snow load shall not be assumed to act concurrently with live load.

c. The tip of the lag screw shall fully extend beyond the inside face of the bandjoist.

d. Sheathing shall be wood structural panel or solid sawn lumber.

e. Sheathing shall be permitted to be wood structural panel, gypsum board, fiberboard, lumber, or foam sheathing. Up to 1/2-inch thickness of stacked washers shall be permitted to substitute for up to 1/2-inch of allowable sheathing thickness where combined with wood structural panel or lumber sheathing.

Minimum Ledger Connection Table (from 2021 ORSC Table R507.9.1.3(1))

PLACEMENT OF LAG SCREWS AND THROUGH BOLTS IN LEDGERS AND BAND JOISTS

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS (in.)

	TOP EDGE	BOTTOM EDGE	CUT ENDS	ROW SPACING
LEDGER ^a	2 inches ^d	3/4 Inch	2 inches ^b	1 5/8 inches ^b
BAND JOIST ^c	3/4 inch	2 inches	2 inches ^b	1 5/8 inches ^b

a. Lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with detail 3/S04.

b. Maximum of 5 inches.

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c. For engineered rim joists, the manufacturer's recommendations shall govern.

d. The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with detail 3/S04.

_edger Fasteners Placement Table (from 2021 ORSC Table R507.9.1.3(2))

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SPECIES ^b	SIZE ^c	DECK JOIST SPAN, L _J , (ft.)						
		≤ 6	≤ 8	≤ 10	≤ 12	≤ 14	≤ 16	≤ 18
	3x6 or 2-2x6	5-5	4-8	4-2	3-10	3-6	3-1	2-9
Γ	3x8 or 2-2x8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
Γ	3x10 or 2-2x10	8-4	7-3	6-6	5-11	5-6	5-1	4-8
	3x12 or 2-2x12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4x6	6-5	5-6	4-11	4-6	4-2	3-11	3-8
Douglas Fir-Larch, Hem- Fir, Spruce-Pine-Fir,	4x8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
Redwood, Western Cedars, Ponderosa Pine,	4x10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
Red Pine	4x12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
Γ	3-2x6	7-4	6-8	6-0	5-6	5-1	4-9	4-6
	3-2x8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
Γ	3-2x10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
-	3-2x12	13-11	12-1	10-9	9-10	9-1	8-6	8-1

a. Beams supporting deck joists from one side only (with optional joist cantilever).

b. No. 2 grade.

c. Beam depth shall be greater than or equal to depth of joists with a flush beam condition. d. Beam cantilevers are limited to the adjacent beam's span divided by 4.

Maximum Beam Spans Table (from 2021 ORSC Table R507.5)

POST HEIGHT

SPECIES ^b	DECK POST SIZE	HEIGHT ^a (ft.)
Douglas Fir-Larch, Hem-Fir,	4x4	6-9 ^c
Spruce-Pine-Fir, Redwood, Western Cedars, Ponderosa	4x6	8
Pine, Red Pine	6x6 and 8x8	14

a. Measured to the underside of the beam.

b. No. 2 grade.

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c. The maximum permitted height is 8 feet for one-ply and two-ply beams. The maximum permitted height for three-ply beams on a post cap is 6 feet 9 inches.

Maximum Post Height Table (from 2021 ORSC Table R507.4)

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FOOTING DIMENSIONS ^a								
BEAM SPAN (ft), L _B	JOIST SPAN (ft.), L _J	ROUND FOOTING DIAMETER (in.)	SQUARE FOOTING WIDTH (in.)	MINIMUM FOOTING THICKNESS ^b (in.)				
	≤ 10	18	16	8				
≤ 6	≤ 14	21	19	8				
	≤ 18	24	21	10				
	≤ 10	20	18	8				
≤ 8	≤ 14	24	22	10				
	≤ 18	27	24	11				
≤ 10	≤ 10	23	20	9				
≤ 10	≤ 14	27	24	11				
≤ 12	≤ 10	25	22	10				
≤ 14	≤ 10	27	24	11				

a. Assumes 1,500 psf soil bearing capacity per Section R401.4.1.

b. In accordance with Section R403.1.4, footings shall be placed not less than 12 inches below the finished grade on undisturbed ground surface and shall extend below the frost line depth specified in Table R301.2(1). Coordinate footing thickness with post base manufacturer installation instructions.

Minimum Footing Sizes Table (Ref 2021 ORSC Section R403)

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TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA ^{f, g}									
GROUND BAS		BASIC DESIGN	BASIC DESIGN SPECIAL WIND	SEISMIC	SU	SUBJECT TO DAMAGE			
COUNTY	SNOW LOAD, p _g	WIND SPEED, V (mph) ^b	REGION BASIC DESIGN WIND SPEED, V (mph) ^b	DESIGN CATEGORY	Weathering ^d	Frost line depth (inches)	Decay	AIR FREEZING INDEX	
Baker	Note a	103		Note c	Severe	24	Slight	2000	
Benton	Note a	96		Note c	Moderate	12	Moderate	≤ 1,500	
Clackamas	Note a	98	120	Note c	Moderate	12	Moderate	\le 1,500	
Clatsop	Note a	97	135	Note c	Moderate	12	Moderate	≤ 1,500	
Columbia	Note a	97	120	Note c	Moderate	12	Moderate	\le 1,500	
Coos	Note a	95	120 ^h	Note c	Moderate	12	Moderate	\le 1,500	
Crook	Note a	98	110	Note c	Severe	18	Slight	2,000	
Curry	Note a	95	135	Note c	Moderate	12	Moderate	\le 1,500	
Deschutes	Note a	98	110	Note c	Severe	18	Slight	$\leq 1,500$	
Douglas	Note a	97	120 ^h	Note c	Moderate	18	Moderate	\le 1,500	
Gilliam	Note a	100 ^j		Note c	Severe	24	Moderate	\le 1,500	
Grant	Note a	101		Note c	Severe	24	Slight	2,000	
Harney	Note a	101		Note c	Severe	24	Moderate	2,000	
Hood River	Note a	98 ⁱ	—	Note c	Severe	24	Moderate	\le 1,500	
N.45.5°N	_	_	120 ⁱ	—	_	_	_	_	
S.45.5°N	_	_	110	—		—			
Jackson	Note a	96		Note c	Moderate	18°	Slight	≤ 1,500	
Jefferson	Note a	99	110	Note c	Severe	18	Moderate	≤ 1,500	
Josephine	Note a	95		Note c	Moderate	18 ^e	Moderate	≤ 1,500	
Klamath	Note a	98	120	Note c	Severe	24	Moderate	$\leq 1,500$	
Lake	Note a	99		Note c	Severe	24	Slight	≤ 1,500	
Lane	Note a	98	120 ^h	Note c	Moderate	12	Moderate	≤ 1,500	
Lincoln	Note a	96	135	Note c	Moderate	12	Moderate	≤ 1,500	
Linn	Note a	98		Note c	Moderate	12	Moderate	≤ 1,500	



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Malheur	Note a	102		Note c	Severe	24	Slight	≤1,500
Marion	Note a	98		Note c	Moderate	12	Moderate	≤ 1,500 ≤ 1,500
Morrow	Note a	101 ^j		Note c	Severe	24	Slight	≤ 1,500
Multnomah	Note a	98 ⁱ	120 ⁱ	Note c	Moderate	18 ^e	Moderate	≤ 1,500
Polk	Note a	97		Note c	Moderate	12	Moderate	≤1,500
Sherman	Note a	99 ^j		Note c	Severe	24	Slight	≤ 1,500
Tillamook	Note a	96	135	Note c	Moderate	12	Moderate	≤ 1,500
Umatilla	Note a	102 ^j		Note c	Severe	24	Slight	\le 1,500
Union	Note a	102		Note c	Severe	24	Slight	≤ 1,500
Wallowa	Note a	103		Note c	Severe	24	Slight	≤ 1,500
Wasco	Note a	99	110 ⁱ	Note c	Severe	24	Slight	\le 1,500
Washington	Note a	97		Note c	Moderate	12	Moderate	\leq 1,500
Wheeler	Note a	100	—	Note c	Severe	24	Slight	≤ 1,500
Yamhill	Note a	97		Note c	Moderate	12	Moderate	≤ 1,500

d. A "severe" classification is where weather conditions result in significant snowfall combined with extended periods during which there is little or no natural thawing, causing de-icing salts to be used extensively.

e. The frost line depth at sites below 2,500 feet in Jackson, Josephine and Multnomah Counties is 12 inches.

f. See Sections R301.2.4 and R322 for flood plain administrator determinations and flood hazard design criteria.

g. See Section R327 for establishment of wildfire hazard mitigation design criteria.

h. The basic design wind speed, V, for buildings and structures in this region with full exposure (wind Exposure Category D) to Pacific Ocean winds shall 135 mph.

i. The basic design wind speed, V, for buildings and structures in this region with full exposure (wind Exposure Category D) to Columbia River Gorge winds shall be 135 mph.

i. The basic design wind speed, V, for buildings and structures in this region with full exposure (wind Exposure Category D) to Columbia River Gorge winds shall be 120 mph.

R301.2.3.1 Ground snow load determination. Site-specific ground snow loads, P_a, shall be those set forth in the online lookup tool at Snowload.seao.org/lookup.html. Where the site elevation is higher than the modeled elevation reported by the online lookup tool, the reported ground snow load values shall be adjusted by adding the specified loads from Table R301.2.3.1. The minimum ground snow load, P_g, for prescriptive design is 36. The minimum roof snow load for engineered design is 25 psf.

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A DECKING [R507.7]: size: □2x □five-quarter (5/4 deck material) **material:** □preservative-treated □plastic composite □naturally durable (e.g. cedar) orientation: Deerpendicular to joists Ddiagonal to joists B JOISTS [R507.6]: size: □2x6 □2x8 □2x10 □2x12 **spacing:** □12 in. □16 in. □24 in. span, L_J:____ft. -____in. cantilever: ____ft. - ____in. (L_J/4 MAX) **rim joist:** $\Box 2x6$ $\Box 2x8$ $\Box 2x10$ $\Box 2x12$ \Box not applicable [C] BEAMS [R507.5]: **plies: D**1 **D**2 **D**3 size: 🗆2x6 🗆2x8 🗆2x10 🗆2x12 🗀4x6 🗀4x8 🗀4x10 🗀4x12 🗆 x____ span, L_B:____ft. -___in. cantilever: ft. -___ in. (L_B/4 MAX) D POSTS [R507.4]: size: □4x4 □4x6 □6x6 □___x___ height: _____ft. -_____in. E FOOTINGS [R507.3]: size: in. □square □round thickness: in. [F]LEDGER [R507.9.1.3(1): **size:** □2x8 □2x10 □2x12 fastener: D1/2" through-bolt D1/2" lag screw Code-compliant alternate (attach report) fastener spacing: in. on-center [G] LATERAL LOAD CONNECTION [R507.9.2]: \Box (4) 750 pound hold-down tension devices (detail 1/S04) $\Box(2)$ 1,500 pound hold-down tension devices (detail 2/S06) □code-compliant alternate (attach report) [H] GUARDRAIL POST ATTACHMENT [R301.5]: □details 1-3/S05 & 1/S06 □code-compliant alternate (attach detail). NOTE: THE PERMIT APPLICANT SHALL PROVIDE THE PROJECT SPECIFIC DESIGN BY CHECKING THE APPLICABLE BOXES AND ENTERING THE APPROPRIATE INFORMATION ABOVE PRIORTO PERMIT APPLICATION. Project Specific Information S12 NTS



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