

GENERAL NOTES

SCOPE

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

APPLICABLE BUILDING CODE

2023 OREGON RESIDENTIAL SPECIALTY CODE (ORSC).

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, OR D
- C. SEISMIC DESIGN CATEGORY: C, D₁, OR D₂
- D. GROUND SNOW LOAD: ≤ 40 PSF DECKS SUPPORTING LARGE CONCENTRATED 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 (X) ON SHEET **\$12** 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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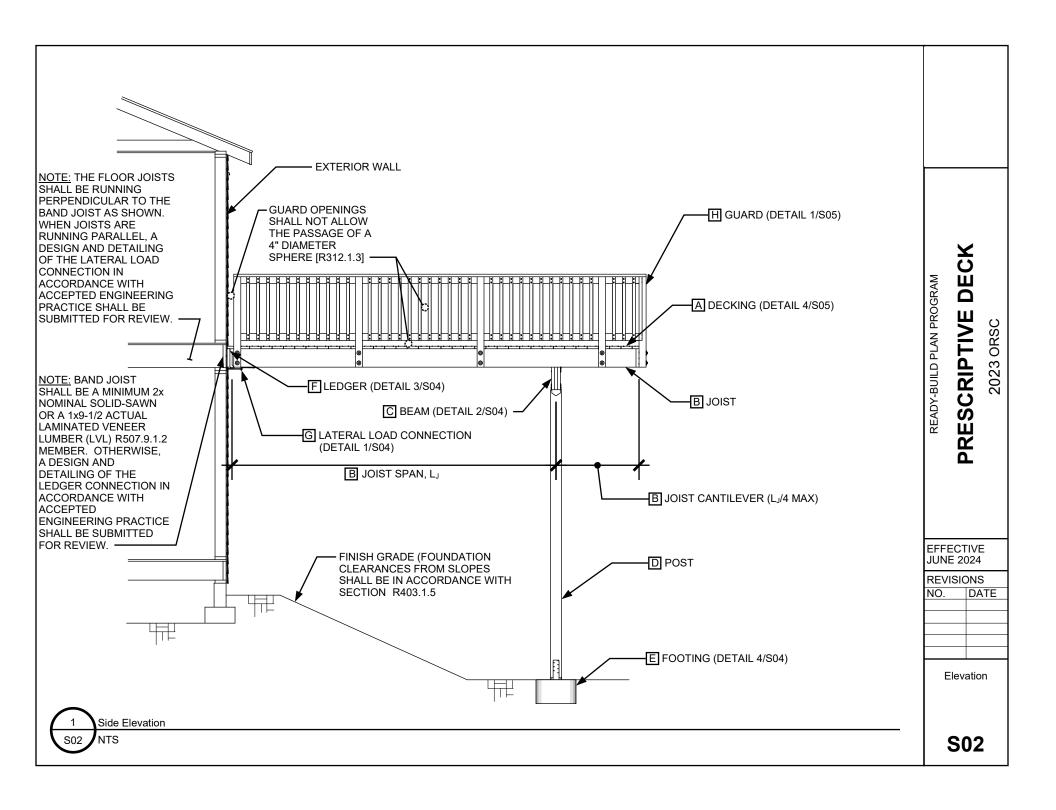
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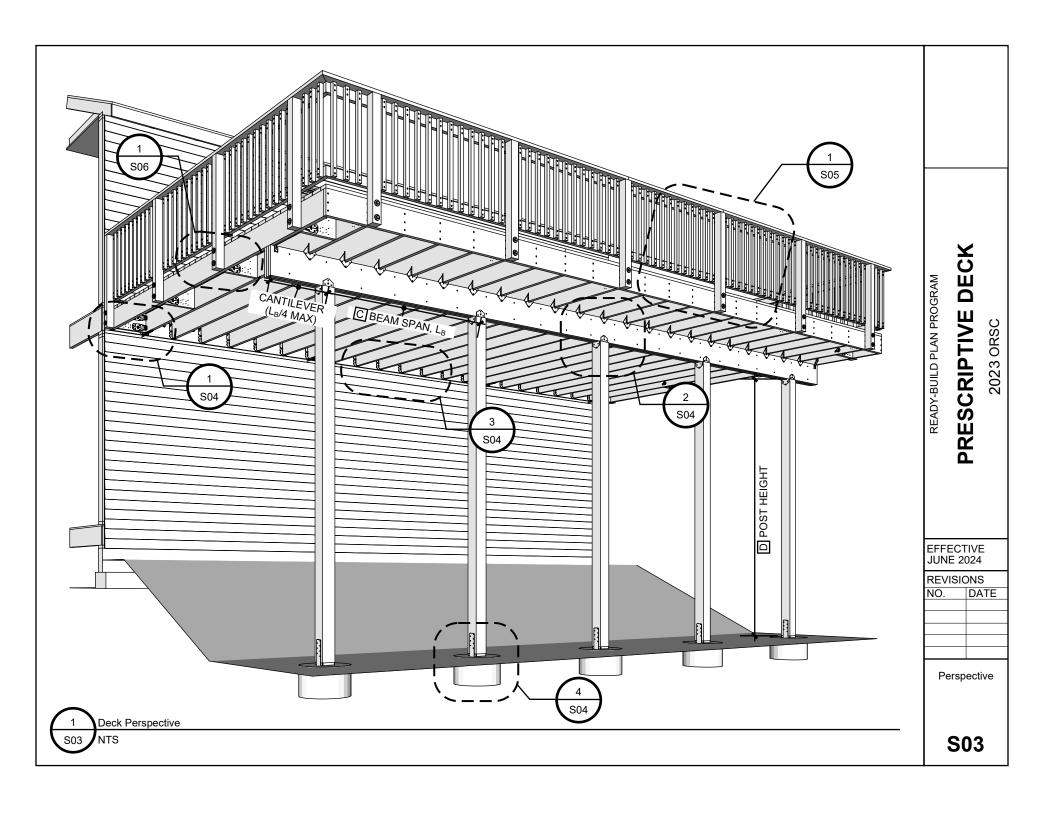
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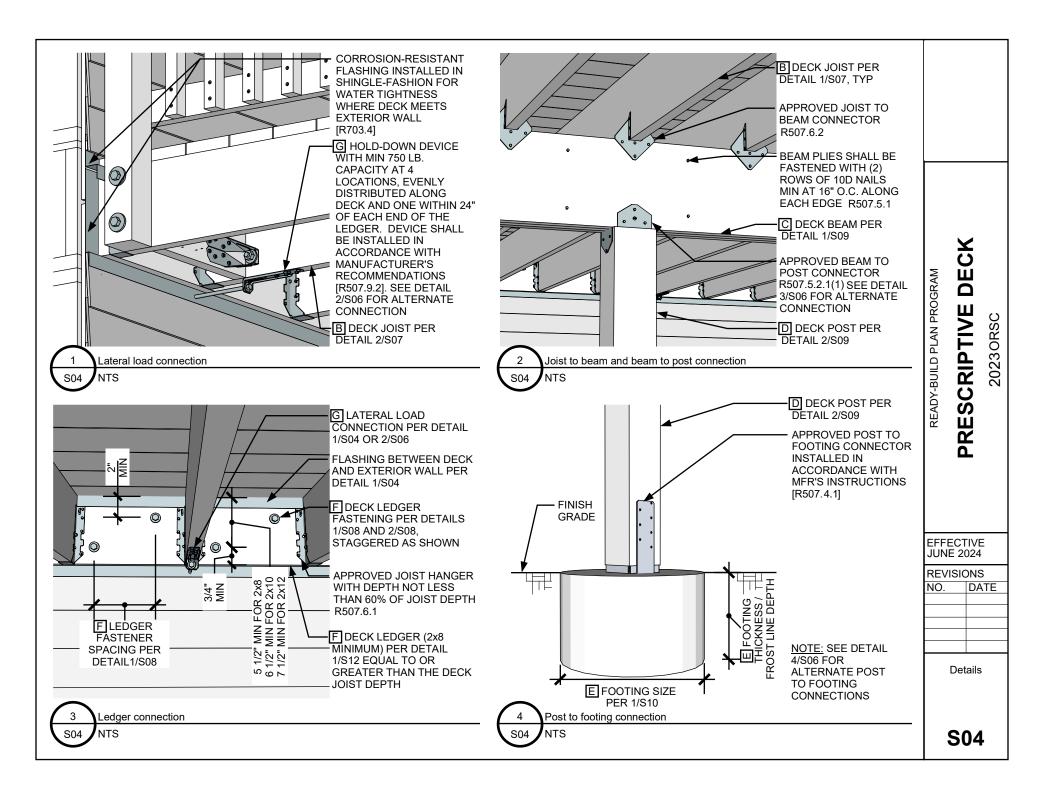
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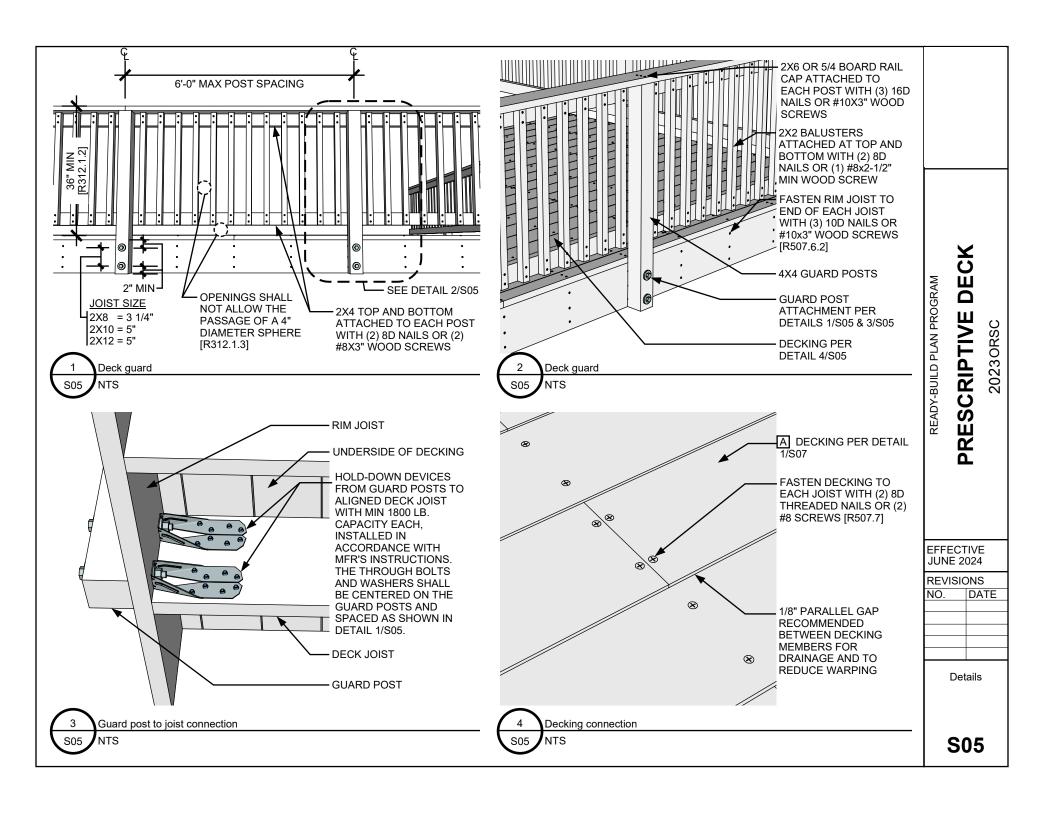
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General Notes









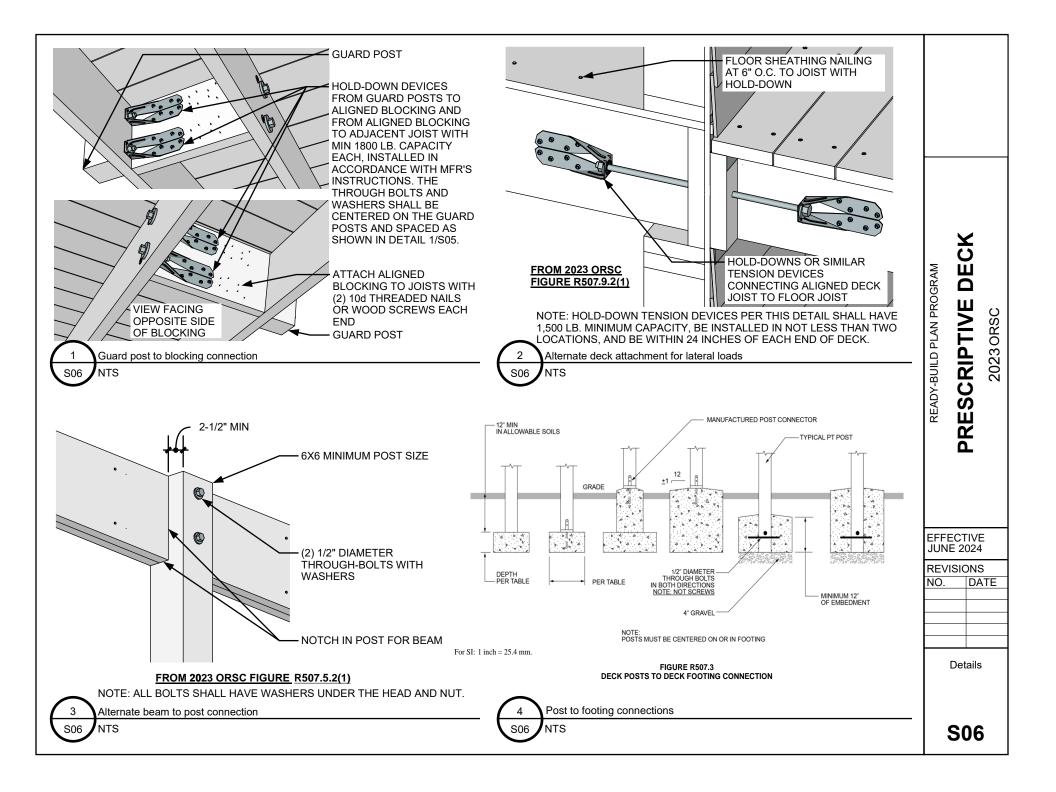


TABLE R507.7 MAXIMUM JOIST SPACING FOR WOOD DECKING

DECKING MATERIAL TYPE AND NOMINAL SIZE	DECKING PERPEN	DICULAR TO JOIST	DECKING DIAGONAL TO JOIST ^a					
	Single span ^c Multiple span ^c		Single span ^c	Multiple span ^c				
	Maximum on-center joist spacing (inches)							
1 ¹ / ₄ -inch-thick wood ^b	12	16	8	12				
2-inch-thick wood	24	24	18	24				

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.01745 rad.

- a. Maximum angle of 45 degrees from perpendicular for wood deck boards.
- b. Other maximum span provided by an accredited lumber grading or inspection agency also allowed.
- c. Individual wood deck boards supported by two joists shall be considered single span and three or more joists shall be considered multiple span.

Maximum Joist Spacing Table

TABLE R507.6 MAXIMUM DECK JOIST SPANS

LOADª	LOUGE OPERATOR	ALLOWABLE JOIST SPAN ^{b, c} (feet-inches)			MAXIMUM CANTILEVER ^{d, f} (feet-inches)								
(psf)	JOIST SPECIES ^b	SIZE	Joist spacing (inches)			Joist back span ^g (feet)							
			12	16	24	4	6	8	10	12	14	16	18
		2 × 6	9-11	9-0	7-7	1-0	1-6	1-5	NP	NP	NP	NP	NP
	Southarn nine	2 × 8	13-1	11-10	9-8	1-0	1-6	2-0	2-6	2-3	NP	NP	NP
	Southern pine	2 × 10	16-2	14-0	11-5	1-0	1-6	2-0	2-6	3-0	3-4	3-4	NP
		2 × 12	18-0	16-6	13-6	1-0	1-6	2-0	2-6	3-0	3-6	4-0	4-1
	D 1 C 1 10	2×6	9-6	8-4	6-10	1-0	1-6	1-4	NP	NP	NP	NP	NP
40 live load	Douglas fir-larch ^e Hem-fir ^e	2 × 8	12-6	11-1	9-1	1-0	1-6	2-0	2-3	2-0	NP	NP	NP
40 live load	Spruce-pine-fir ^e	2 × 10	15-8	13-7	11-1	1-0	1-6	2-0	2-6	3-0	3-3	NP	NP
	Springer print and	2 × 12	18-0	15-9	12-10	1-0	1-6	2-0	2-6	3-0	3-6	3-11	3-11
	Redwood ^f	2 × 6	8-10	8-0	6-10	1-0	1-4	1-1	NP	NP	NP	NP	NP
	Western cedars ^f	2 × 8	11-8	10-7	8-8	1-0	1-6	2-0	1-11	NP	NP	NP	NP
	Ponderosa pine ^f	2 × 10	14-11	13-0	10-7	1-0	1-6	2-0	2-6	3-0	2-9	NP	NP
	Red pine ^f	2 × 12	17-5	15-1	12-4	1-0	1-6	2-0	2-6	3-0	3-6	3-8	NP

Maximum Joist Spans Table

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TABLE R507.9.1.3(1) DECK LEDGER CONNECTION TO BAND JOIST

	LOIGT CDANS	ON-CENTER SPACING OF FASTENERS ^b (inches)							
LOAD ^c (psf)	JOIST SPAN ^a - (feet)	¹ / ₂ -inch diameter lag screw with ¹ / ₂ -inch maximum sheathing ^{d, e}	1/2-inch diameter bolt with 1/2-inch maximum sheathing°	¹ / ₂ -inch diameter bolt with 1-inch maximum sheathing ^f					
	6	30	36	36					
	8	23	36	36					
	10	18	34	29					
40 live load	12	15	29	24					
	14	13	24	21					
	16	11	21	18					
	18	10	19	16					

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

- a. Interpolation permitted. Extrapolation is not permitted.
- b. Ledgers shall be flashed in accordance with Section R703.4 to prevent water from contacting the house band joist.
- c. Dead Load = 10 psf. Snow load shall not be assumed to act concurrently with live load.
- d. The tip of the lag screw shall fully extend beyond the inside face of the band joist. Lag screws shall be full-body diameter screws.
- e. Sheathing shall be wood structural panel or solid sawn lumber.
- f. Sheathing shall be permitted to be wood structural panel, gypsum board, fiberboard, lumber or foam sheathing. Up to ½-inch thickness of stacked washers shall be permitted to substitute for up to \(^1/\), inch of allowable sheathing thickness where combined with wood structural panel or lumber sheathing.

Minimum Ledger Connection Table

TABLE R507.9.1.3(2) PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS								
TOP EDGE BOTTOM EDGE 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				

For SI: 1 inch = 25.4 mm.

- 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 Figure R507.9.1.3(1).
- b. Maximum 5 inches.
- 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 Figure R507.9.1.3(1).

2	Ledger Fasteners Placement Table
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TABLE R507.4 DECK POST HEIGHT

			TRIBUTARY AREA (ft²)g, h								
LOADS (psf) ^b	POST SPECIES ^c	POST SIZEd	20	40	60	80	100	120	140	160	
				-	MAXIMUM [DECK POST	THEIGHT ^a (feet-inches)		
		4 × 4	14-0	13-8	11-0	9-5	8-4	7-5	6-9	6-2	
	Southern pine	4× 6	14-0	14-0	13-11	12-0	10-8	9-8	8-10	8-2	
	Southern pine	6 × 6	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0	
		8 × 8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0	
	Douglas fir ^e Hem-fir ^e	4 × 4	14-0	13-6	10-10	9-3	8-0	7-0	6-2	5-3	
40 live load		4 × 6	14-0	14-0	13-10	11-10	10-6	9-5	8-7	7-10	
40 live load	Spruce-pine-fir ^e	6 × 6	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0	
	Sprace pine in	8 × 8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0	
	Redwood ^f	4×4	14-0	13-2	10-3	8-1	5-8	NP	NP	NP	
	Western cedars ^f	4 × 6	14-0	14-0	13-6	11-4	9-9	8-4	6-9	4-7	
	Ponderosa pine ^f Red pine ^f	6 × 6	14-0	14-0	14-0	14-0	14-0	14-0	13-7	9-7	
		8 × 8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

NP = Not Permitted.

- a. Measured from the underside of the beam to the top of footing or pier.
- b. 10 psf dead load. Snow load not assumed to be concurrent with live load.
- c. No. 2 grade, wet service factor included.
- d. Notched deck posts shall be sized to accommodate beam size in accordance with Section R507.5.2.
- e. Includes incising factor.
- f. Incising factor not included.
- g. Area, in square feet, of deck surface supported by post and footings.
- h. Interpolation permitted. Extrapolation not permitted.

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Maximum Post Height Table

TABLE R507.3.1 MINIMUM FOOTING SIZE FOR DECKS

	TRIBUTARY AREA° (ft²)	LOAD-BEARING VALUE OF SOILS ^{a, c, d} (psf)											
LIVE OR GROUND SNOW LOAD ^b (psf)			1,500			2,000		≥ 3,000					
		Side of a square footing (inches)	Diameter of a round footing (inches)	Plain concrete thickness (inches)	Side of a square footing (inches)	Diameter of a round footing (inches)	Plain concrete thickness (inches)	Side of a square footing (inches)	Diameter of a round footing (inches)	Plain concrete thicknes (inches)			
	5	7	8	6	7	8	6	7	8	6			
	20	10	12	6	9	9	6	7	8	6			
	40	14	16	6	12	14	6	10	12	6			
	60	17	19	6	15	17	6	12	14	6			
40	80	20	22	7	17	19	6	14	16	6			
	100	22	25	8	19	21	6	15	17	6			
	120	24	27	9	21	23	7	17	19	6			
	140	26	29	10	22	25	8	18	21	6			
	160	28	31	11	24	27	9	20	22	7			
	5	7	8	6	7	8	6	7	8	6			
	20	11	13	6	10	11	6	8	9	6			
	40	15	17	6	13	15	6	11	13	6			
	60	19	21	6	16	18	6	13	15	6			
50	80	21	24	8	19	21	6	15	17	6			
	100	24	27	9	21	23	7	17	19	6			
	120	26	30	10	23	26	8	19	21	6			
	140	28	32	11	25	28	9	20	23	7			
	160	30	34	12	26	30	10	21	24	8			
	5	7	8	6	7	8	6	7	8	6			
	20	12	14	6	11	12	6	9	10	6			
	40	16	19	6	14	16	8	12	14	6			
	60	20	23	7	17	20	6	14	16	6			
60	80	23	26	9	20	23	7	16	19	6			
	100	26	29	10	22	25	8	18	21	6			
	120	28	32	11	25	28	9	20	23	7			
	140	31	35	12	27	30	10	22	24	8			
	160	33	37	13	28	32	11	23	26	9			
	5	7	8	6	7	8	6	7	8	6			
	20	12	14	6	11	13	6	9	10	6			
	40	18	20	6	15	17	6	12	14	6			
	60	21	24	8	19	21	6	15	17	6			
70	80	25	28	9	21	24	8	18	20	6			
	100	28	31	11	24	27	9	20	22	7			
	120	30	34	12	26	30	10	21	24	8			
	140	33	37	13	28	32	11	23	26	9			
	160	35	40	15	30	34	12	25	28	9			

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.

Minimum Footing Sizes Table e. Area, in square feet, of deck surface supported by post and footings.

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TABLE R301.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA^{f, g}

	GROUND	BASIC DESIGN	SPECIAL WIND	SEISMIC	SUBJECT TO DAMAGE			AIR
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	FREEZING INDEX
Baker	Note a	103	_	Note c	Severe	24	Slight	2,000
Benton	Note a	96	_	Note c	Moderate	12	Moderate	≤ 1,500
Clackamas	Note a	98	98	Note c	Moderate	12	Moderate	≤ 1,500
Clatsop	Note a	96	120	Note c	Moderate	12	Moderate	≤ 1,500
Columbia	Note a	97	97	Note c	Moderate	12	Moderate	≤ 1,500
Coos	Note a	95	120	Note c	Moderate	12	Moderate	≤ 1,500
Crook	Note a	100	100	Note c	Severe	18	Slight	2,000
Curry	Note a	94	120	Note c	Moderate	12	Moderate	≤ 1,500
Deschutes	Note a	99	99	Note c	Severe	18	Slight	≤ 1,500
Douglas	Note a	97	120	Note c	Moderate	18	Moderate	≤ 1,500
Gilliam	Note a	100	_	Note c	Severe	24	Moderate	≤ 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	98	Note c	Severe	24	Moderate	≤ 1,500
Jackson	Note a	96	_	Note c	Moderate	18e	Slight	≤ 1,500
Jefferson	Note a	99	99	Note c	Severe	18	Moderate	≤ 1,500
Josephine	Note a	95	_	Note c	Moderate	18e	Moderate	≤ 1,500
Klamath	Note a	98	98	Note c	Severe	24	Moderate	≤ 1,500
Lake	Note a	99	_	Note c	Severe	24	Slight	≤ 1,500
Lane	Note a	98	120	Note c	Moderate	12	Moderate	≤ 1,500
Lincoln	Note a	96	120	Note c	Moderate	12	Moderate	≤ 1,500
Linn	Note a	98	_	Note c	Moderate	12	Moderate	≤ 1,500
Malheur	Note a	102	_	Note c	Severe	24	Slight	≤ 1,500
Marion	Note a	98	_	Note c	Moderate	12	Moderate	≤ 1,500
Morrow	Note a	101	_	Note c	Severe	24	Slight	≤ 1,500
Multnomah	Note a	98	98	Note c	Moderate	18e	Moderate	≤ 1,500
Polk	Note a	97	_	Note c	Moderate	12	Moderate	≤ 1,500
Sherman	Note a	99	_	Note c	Severe	24	Slight	≤ 1,500
Tillamook	Note a	96	120	Note c	Moderate	12	Moderate	≤ 1,500
Umatilla	Note a	102	_	Note c	Severe	24	Slight	≤ 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	99	Note c	Severe	24	Slight	≤ 1,500
Washington	Note a	97	_	Note c	Moderate	12	Moderate	≤ 1,500
Wheeler	Note a	100	_	Note c	Severe	24	Slight	≤ 1,500
Yamhill	Note a	97	_	Note c	Moderate	12	Moderate	≤ 1,500

For SI: 1 inch = 25.4 mm.

- a. The ground snow load, p_o , shall be determined in accordance with Section R301.2.3.1.
- b. Sites located within a special wind region, as determined from Figure R301.2.1(1), shall use the special wind region basic design wind speeds provided herein.
- c. The seismic design category shall be determined in accordance with Section R301.2.2.1.
- 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 for site elevations below 2,500 feet in Jackson, Josephine and Multnomah Counties is 12 inches.
- f. See Sections R301.2.4 and R322 for floodplain administrator determinations and flood hazard design criteria.
- g. See Section R327 for establishment of wildfire hazard mitigation design requirements.

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A DECKING [R507.7]: size: □2x □five-quarter material: □preservative-treated □plastic composite □naturally durable (e.g. cedar) orientation: □perpendicular to joists □diagonal to joists	
B JOISTS [R507.6]: size: □2x6 □2x8 □2x10 □2x12 spacing: □12 in. □16 in. □24 in. span, L _J :ftin. cantilever:ftin. (L _J /4 MAX) rim joist: □2x6 □2x8 □2x10 □2x12 □not applicable	
BEAMS [R507.5]: plies: □1 □2 □3 size: □2x6 □2x8 □2x10 □2x12 □4x6 □4x8 □4x10 □4x12 □x span, L _B :ftin. cantilever:ftin. (L _B /4 MAX)	READY-BUILD PLAN PROGRAM ESCRIPTIVE DECK 2023 ORSC
D POSTS [R507.4]: size: □4x4 □4x6 □6x6 □x height: ftin.	READY-BUILD PLAN PRC 2023 ORSC
E FOOTINGS [R507.3.1]: size:in. □square □round thickness:in.	READ
F LEDGER [R507.9.1.3(1)]: size: □2x8 □2x10 □2x12 fastener: □1/2" through-bolt □1/2" lag screw □code-compliant alternate (attach report) fastener spacing:in. on-center	
G LATERAL LOAD CONNECTION [R507.9.2]: □(4) 750 pound hold-down tension devices (detail 1/S04) □(2) 1,500 pound hold-down tension devices (detail 2/S06) □code-compliant alternate (attach report)	EFFECTIVE JUNE 2024 REVISIONS NO. DATE
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 PRIOR TO PERMIT APPLICATION.	Project Specific Information
1 Project Specific Information S12 NTS	
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