

GENERAL NOTES

SCOPE

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

APPLICABLE BUILDING CODE

2021 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) IR317.31.

PRESCRIPTIVE DECK

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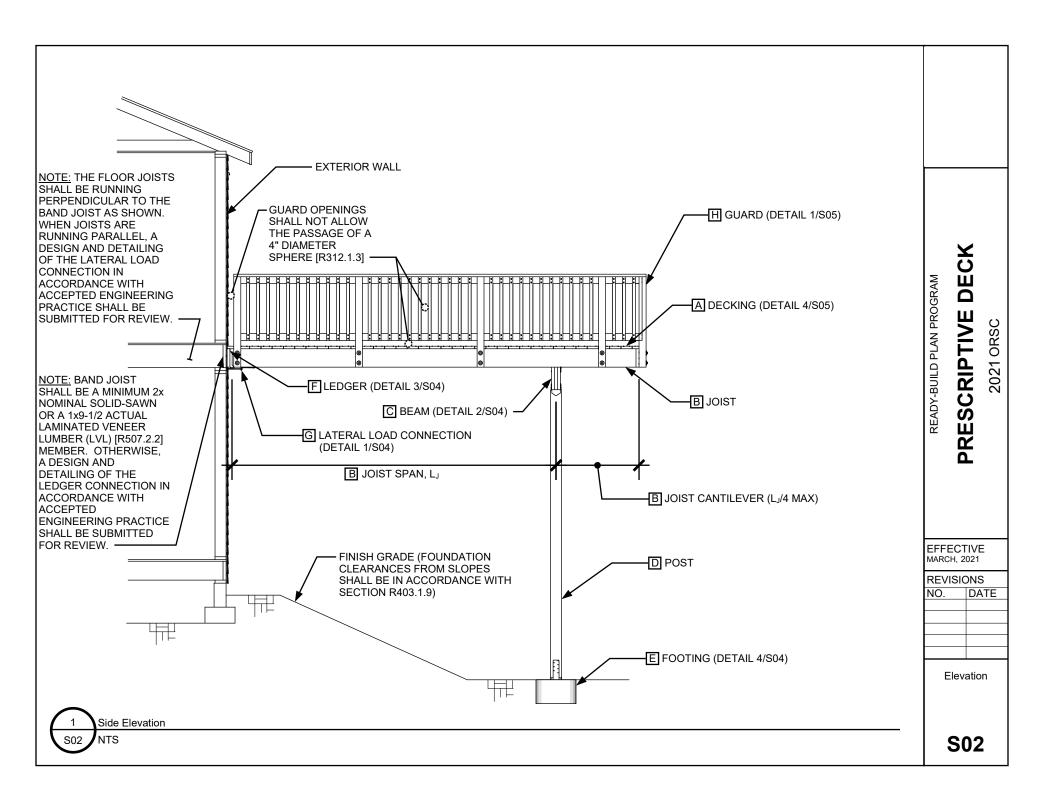
READY-BUILD PLAN PROGRAM

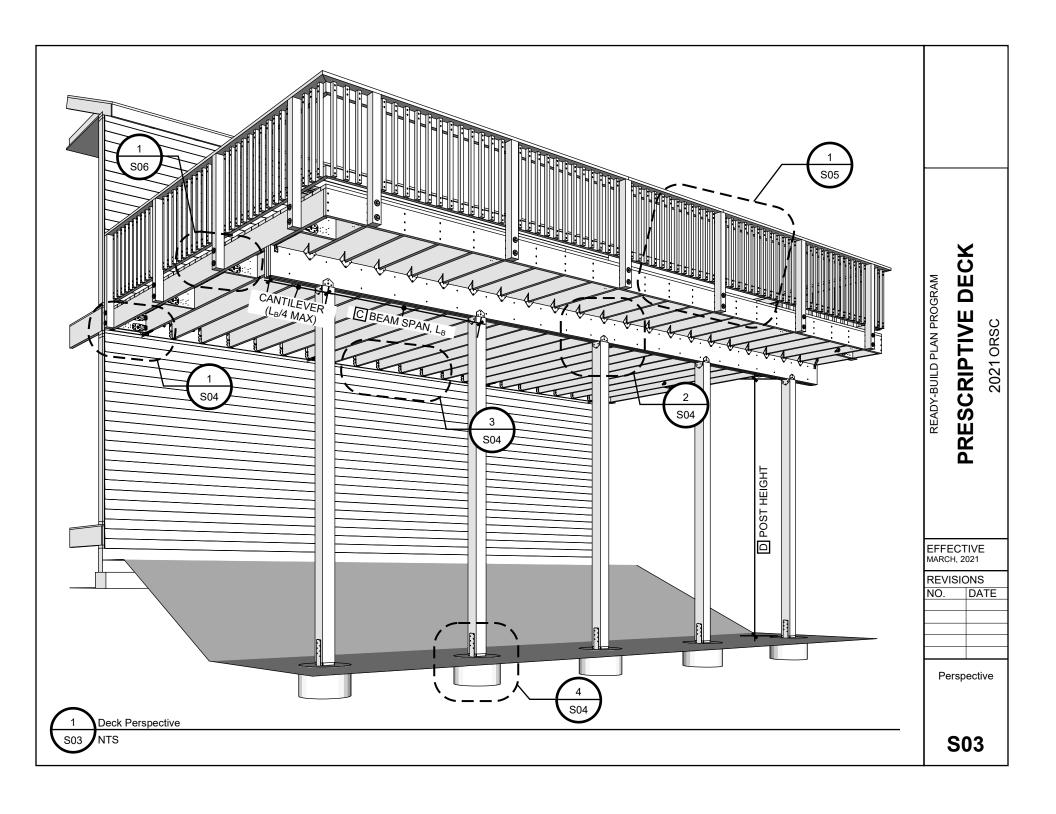
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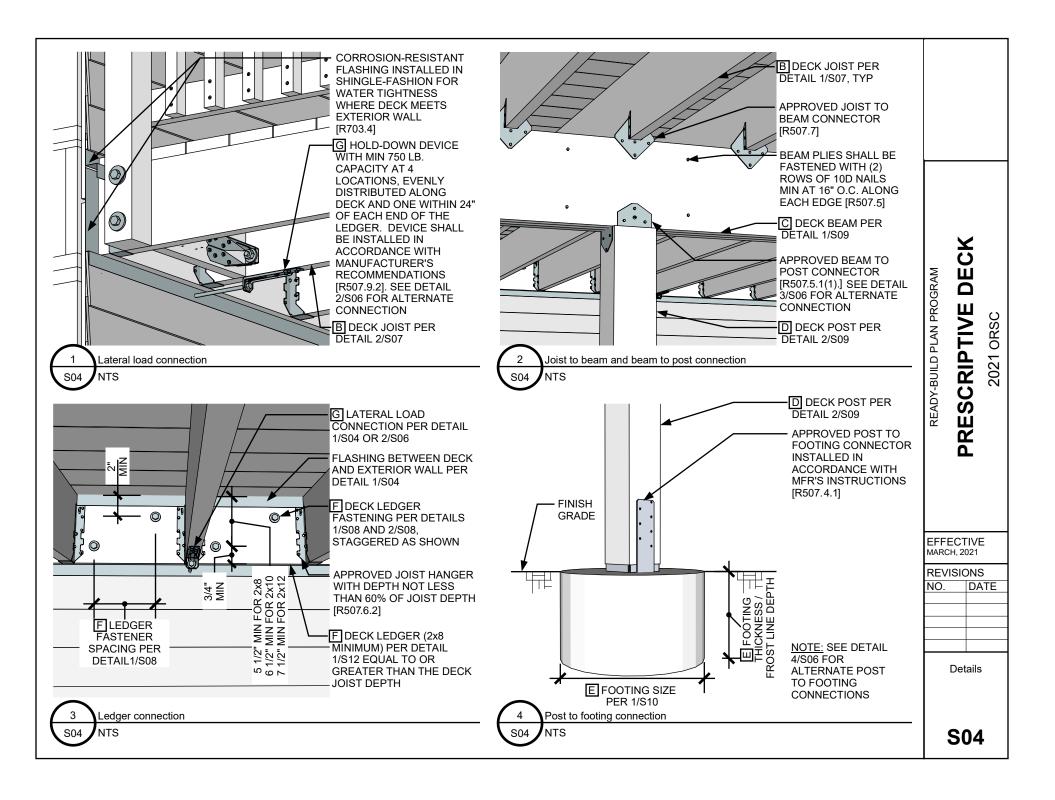
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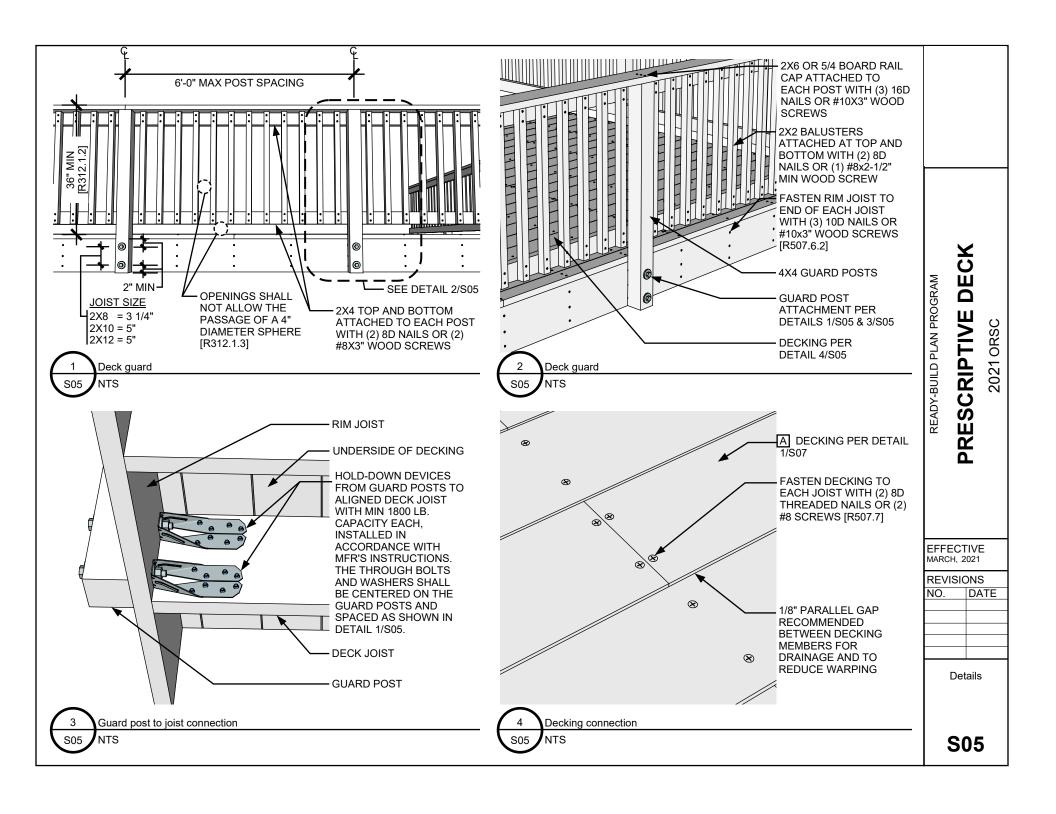
General Notes

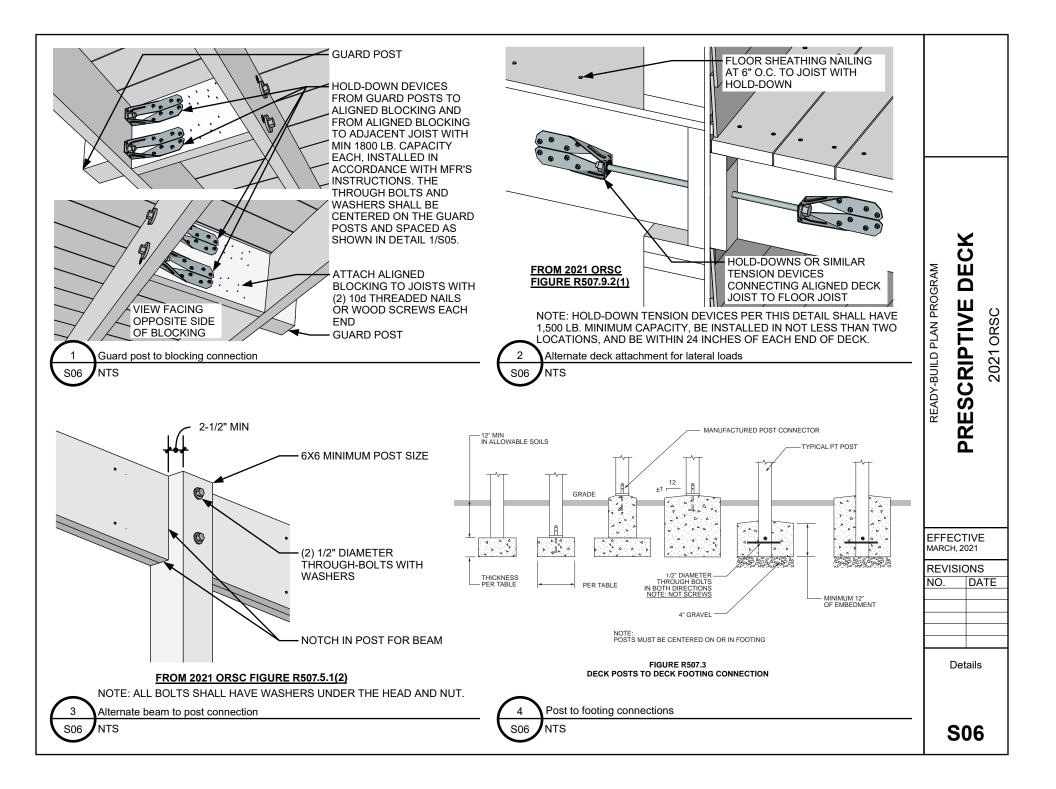
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FROM 2021 ORSC TABLE R507.4 **JOIST SPACING**

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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	In accordance with Section R507.2	In accordance with Section R507.2					

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

Maximum Joist Spacing Table

TABLE R507.6 DECK JOIST SPANS FOR COMMON LUMBER SPECIES (ft. - in.)

		ALL	OWABLE JOIST S	PAN ^b	MA	XIMUM CANTILEV	ER ^{c, f}	
SPECIES ^a	SIZE	SPA	CING OF DECK Jo	DISTS	SPACING OF DECK JOISTS WITH CANTILEVERS° (inches)			
		12	16	24	12	16	24	
	2 × 6	9-11	9-0	7-7	1-3	1-4	1-6	
Coutham nina	2 × 8	13-1	11-10	9-8	2-1	2-3	2-5	
Southern pine	2 × 10	16-2	14-0	11-5	3-4	3-6	2-10	
	2 × 12	18-0	16-6	13-6	4-6	4-2	3-4	
	2 × 6	9-6	8-8	7-2	1-2	1-3	1-5	
Douglas fir-larch ^d , hem-fir ^d	2 × 8	12-6	11-1	9-1	1-11	2-1	2-3	
spruce-pine-fir ^d ,	2 × 10	15-8	13-7	11-1	3-1	3-5	2-9	
	2 × 12	18-0	15-9	12-10	4-6	3-11	3-3	
Redwood.	2 × 6	8-10	8-0	7-0	1-0	1-1	1-2	
western cedars,	2 × 8	11-8	10-7	8-8	1-8	1-10	2-0	
ponderosa pine ^e ,	2 × 10	14-11	13-0	10-7	2-8	2-10	2-8	
red pine ^e	2 × 12	17-5	15-1	12-4	3-10	3-9	3-1	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa, 1 pound = 0.454 kg.

- a. No. 2 grade with wet service factor.
- b. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360.
- c. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220-pound point load applied to end.
- d. Includes incising factor.
- e. Northern species with no incising factor.
- f. Cantilevered spans not exceeding the nominal depth of the joist are permitted.

Maximum Joist Spans Table

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TABLE R507.9.1.3(1) DECK LEDGER CONNECTION TO BAND JOIST^{a, b} (Deck live load = 40 psf, deck dead load = 10 psf, snow load ≤ 40 psf)

	JOIST SPAN							
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							
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 bolt with ¹ / ₂ -inch maximum sheathing ^d	36	36	34	29	24	21	19	
¹ / ₂ -inch diameter bolt with 1-inch maximum sheathing ^e	36	36	29	24	21	18	16	

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

- a. Ledgers shall be flashed in accordance with Section R703.4 to prevent water from contacting the house band joist.
- 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 band joist.
- 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 ½-inch thickness of stacked washers shall be permitted to substitute for up to ½ inch of allowable sheathing thickness where combined with wood structural panel or lumber sheathing.

1	Minimum Ledger Connection Table
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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 ^d	3/4	2 ^b	1 5/8 ^b					
BAND JOIST ^C	3/4	2	2 ^b	1 5/8 ^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.
- 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.

2	Ledger Fasteners Placement TABLE R507.9.1.3(2

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TABLE R507.5 DECK BEAM SPAN LENGTHS^{a, b, g} (feet - inches)

SPECIES°	SIZEd	DECK JOIST SPAN LESS THAN OR EQUAL TO: (feet)								
		6	8	10	12	14	16	18		
	$3 \times 6 \text{ or } 2 - 2 \times 6$	5-5	4-8	4-2	3-10	3-6	3-1	2-9		
	$3 \times 8 \text{ or } 2 - 2 \times 8$	6-10	5-11	5-4	4-10	4-6	4-1	3-8		
	$3 \times 10 \text{ or } 2 - 2 \times 10$	8-4	7-3	6-6	5-11	5-6	5-1	4-8		
Douglas fir-larch ^e ,	$3 \times 12 \text{ or } 2 - 2 \times 12$	9-8	8-5	7-6	6-10	6-4	5-11	5-7		
hem-fir ^e ,	4 × 6	6-5	5-6	4-11	4-6	4-2	3-11	3-8		
spruce-pine-fir ^e , redwood.	4 × 8	8-5	7-3	6-6	5-11	5-6	5-2	4-10		
western cedars,	4 × 10	9-11	8-7	7-8	7-0	6-6	6-1	5-8		
ponderosa pine ^f ,	4 × 12	11-5	9-11	8-10	8-1	7-6	7-0	6-7		
red pine ^f	$3-2\times 6$	7-4	6-8	6-0	5-6	5-1	4-9	4-6		
	$3-2\times 8$	9-8	8-6	7-7	6-11	6-5	6-0	5-8		
	$3 - 2 \times 10$	12-0	10-5	9-4	8-6	7-10	7-4	6-11		
	$3 - 2 \times 12$	13-11	12-1	10-9	9-10	9-1	8-6	8-1		

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa, 1 pound = 0.454 kg.

- a. Ground snow load, live load = 40 psf, dead load = 10 psf, $L/\Delta = 360$ at main span, $L/\Delta = 180$ at cantilever with a 220-pound point load applied at the end.
- b. Beams supporting deck joists from one side only.
- c. No. 2 grade, wet service factor.
- d. Beam depth shall be greater than or equal to depth of joists with a flush beam condition.
- e. Includes incising factor.
- f. Northern species. Incising factor not included.
- g. Beam cantilevers are limited to the adjacent beam's span divided by 4.

1 Max

Maximum Beam Spans Table

TABLE R507.4 DECK POST HEIGHT^a

DECK POST SIZE	MAXIMUM HEIGHT ^{a, b} (feet-inches)
4×4	6-9°
4 × 6	8
6 × 6	14
8 × 8	14

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

- a. Measured to the underside of the beam.
- b. Based on 40 psf live load.

υ.	Based on 40 psi five load.
c.	The maximum permitted height is 8 feet for one-ply and two-ply beams.
	The maximum permitted height for three-ply beams on post cap is 6 feet 9
	inches.

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2 Maximum Post Height Table

TABLE R507.3.1 MINIMUM FOOTING SIZE FOR DECKS LOAD BEARING VALUE OF SOILS a, c, d (psf) LIVE OR GROUND **TRIBUTARY** ≥ 3000 SNOW AREA Diameter of a Diameter of a Diameter of a Diameter of a Side of a Side of a Side of a Side of a Thickness Thickness Thickness Thickness LOAD (sq. ft.)e square footing round footing square footing round footing square footing round footing quare footing round footing (inches) (inches) (inches) (inches) (psf) (inches) (inches) (inches) (inches) (inches) (inches) (inches) (inches) DECK READY-BUILD PLAN PROGRAM **PRESCRIPTIVE** 20210RSC

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. Assumes minimum square footing to be 12 inches x 12 inches x 6 inches for 6 x 6 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.

Minimum Footing Sizes Table (Ref 2021 ORSC Section R403)

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TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA^{f, g}

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA ** CROWN PAGE PERSON SPECIAL WIND SUBJECT TO DAMAGE CROWN PAGE PERSON SPECIAL WIND SPECIAL WIND SUBJECT TO DAMAGE							1	
COUNTY	GROUND SNOW LOAD, $ ho_g$	BASIC DESIGN WIND SPEED, V (mph) ^b	REGION BASIC DESIGN WIND SPEED, V (mph) ^b	SEISMIC DESIGN CATEGORY	Weatheringd	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	≤ 1,500
Clatsop	Note a	97	135	Note c	Moderate	12	Moderate	≤ 1,500
Columbia	Note a	97	120	Note c	Moderate	12	Moderate	≤ 1,500
Coos	Note a	95	120 ^h	Note c	Moderate	12	Moderate	≤ 1,500
Crook	Note a	98	110	Note c	Severe	18	Slight	2,000
Curry	Note a	95	135	Note c	Moderate	12	Moderate	≤ 1,500
Deschutes	Note a	98	110	Note c	Severe	18	Slight	≤ 1,500
Douglas	Note a	97	120 ^h	Note c	Moderate	18	Moderate	≤ 1,500
Gilliam	Note a	100 ^j	_	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 ⁱ	_	Note c	Severe	24	Moderate	≤ 1,500
N.45.5°N	_		120 ⁱ	_		_	_	
S.45.5°N	_		110	_	_	_	_	
Jackson	Note a	96	_	Note c	Moderate	18e	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	≤ 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
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 ^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	≤ 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 ^j	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
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For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.

- a. The ground snow load, p_g 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 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 nature.
- 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.

 The frost line depth at sites below 2,500 feet in Jackson, Josephine and Multnomah Counties is 12 inches. i. p. g. i. i.
 - 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. See Sections R301.2.4 and R322 for flood plain administrator determinations and flood hazard design criteria. See Section R327 for establishment of wildfire hazard mitigation design criteria.
- 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 The basic design wind speed, V, for buildings and structures in this region with full exposure (wind Exposure Category D) to Columbia River Gorge shall be 120 mph. PRESCRIPTIVE DECK READY-BUILD PLAN PROGRAM NO. shall be 135 mph.

winds

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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 2021 ORSC
D POSTS [R507.4]: size: □4x4 □4x6 □6x6 □x height: ftin.	READY-BUILD PLAN PRO 2021 ORSC
E FOOTINGS [R507.3.1]: size:in. □square □round thickness:in.	READY
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 MARCH, 2021 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	S12