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S01 NTS  
General Notes

#### **GENERAL NOTES - SCOPE**

SINGLE LEVEL EXTERIOR DECKS ATTACHED TO THE EXTERIOR WALL OF A 1- OR 2-FAMILY DWELLING. DECKS SUPPORTING LARGE CONCENTRATED LOADS SUCH AS HOT TUBS ARE BEYOND THE SCOPE OF THIS DOCUMENT.

#### **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: 98 MPH
- B. WIND EXPOSURE CATEGORY: B, C, OR D
- C. SEISMIC DESIGN CATEGORY: D
- D. GROUND SNOW LOAD: SNOW LOAD IS TO BE DETERMINED ONLINE AT [Snowload.seao.org/lookup.html](http://Snowload.seao.org/lookup.html) - HOWEVER OREGON CITY IS GENERALLY 10 psf

APPLICANT SHALL USE THE CODE PRESCRIBED TABLES CONTAINED HEREIN AND RECORD THEIR PROJECT SPECIFIC DESIGN PARAMETERS (X) ON SHEET S14 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].

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**

FASTENERS 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].

#### **STAIR CONSTRUCTION**

SEE PAGE S12



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## **PRESCRIPTIVE DECK**

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Elevation

**S02**

NOTE: THE FLOOR JOISTS SHALL BE RUNNING PERPENDICULAR TO THE BAND JOIST AS SHOWN. WHEN JOISTS ARE RUNNING PARALLEL, A DESIGN AND DETAILING OF THE LATERAL LOAD CONNECTION IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE SHALL BE SUBMITTED FOR REVIEW.

NOTE: BAND JOIST SHALL BE A MINIMUM 2 INCH NOMINAL SOLID-SAWN OR A 1 INCH ACTUAL LAMINATED VENEER LUMBER (LVL) [R507.9.1.2] MEMBER. OTHERWISE, A DESIGN AND DETAILING OF THE LEDGER CONNECTION IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE SHALL BE SUBMITTED FOR REVIEW.

EXTERIOR WALL

GUARD OPENINGS SHALL NOT ALLOW THE PASSAGE OF A 4" DIAMETER SPHERE [R312.1.3]

H GUARD (DETAIL 1/S05)

A DECKING (DETAIL 4/S05)

F LEDGER (DETAIL 3/S04)

C BEAM (DETAIL 2/S04)  
G LATERAL LOAD CONNECTION (DETAIL 1/S04)

B JOIST SPAN,  $L_J$

B JOIST

B JOIST CANTILEVER ( $L_J/4$  MAX)

D POST

FINISH GRADE (FOUNDATION CLEARANCES FROM SLOPES SHALL BE IN ACCORDANCE WITH SECTION R403.1.9)

E FOOTING (DETAIL 4/S04)

1 Side Elevation  
S02 NTS



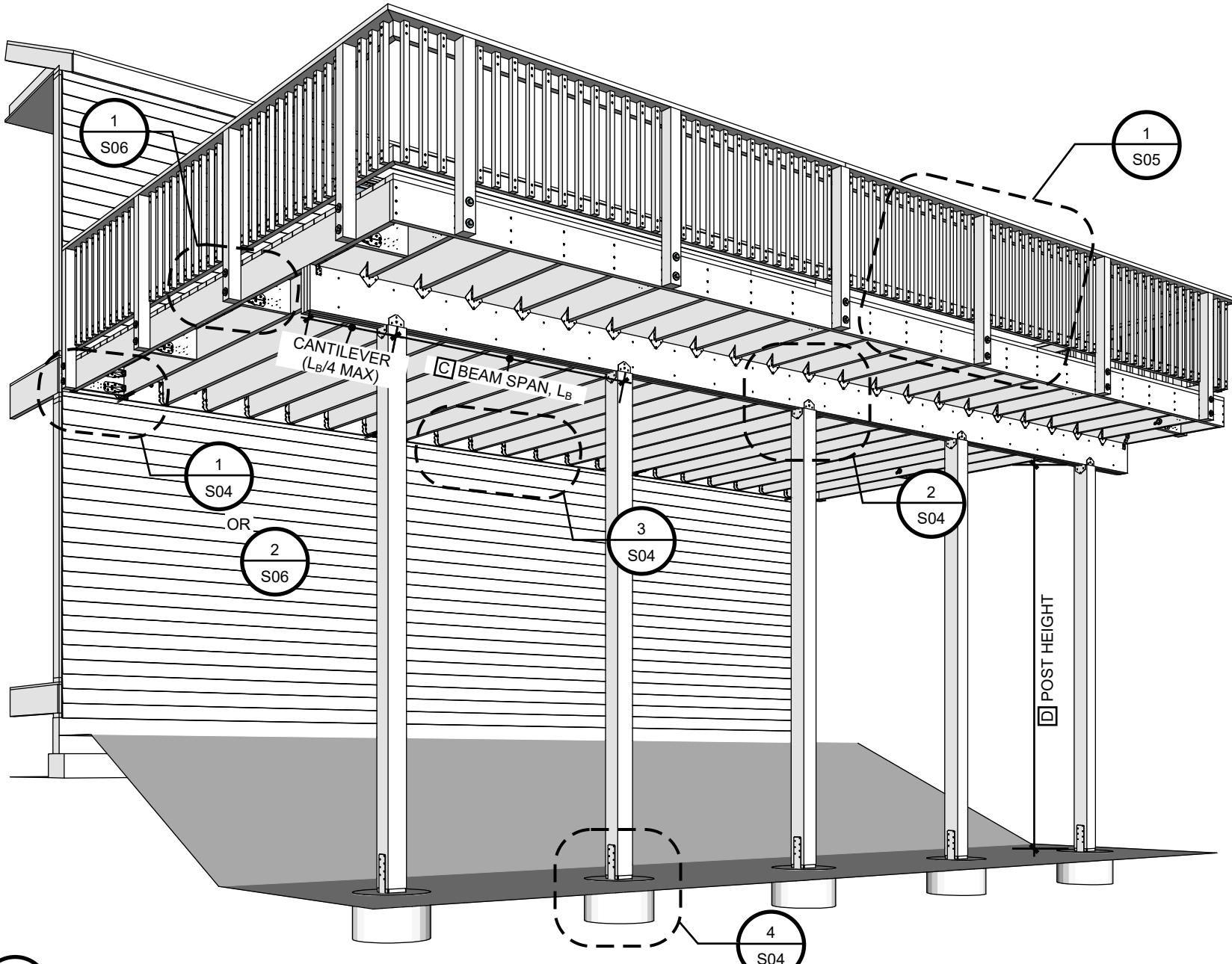
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Perspective

**S03**



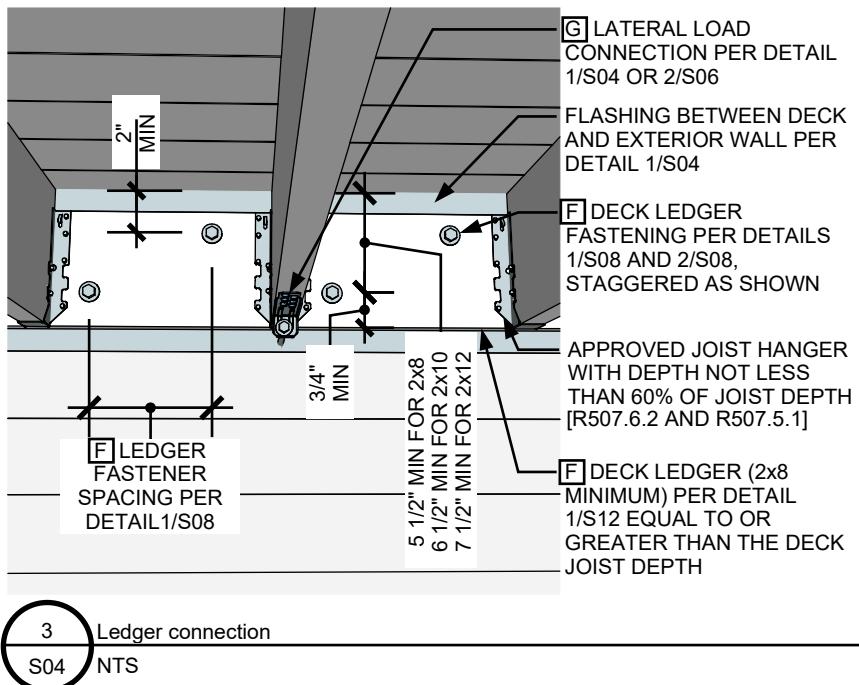
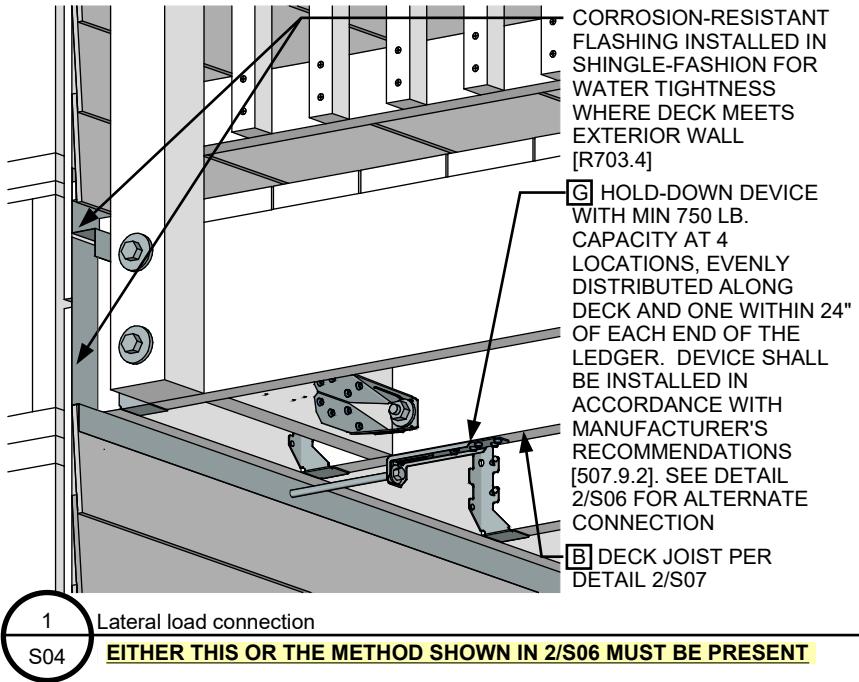
1 S03  
Deck Perspective  
NTS



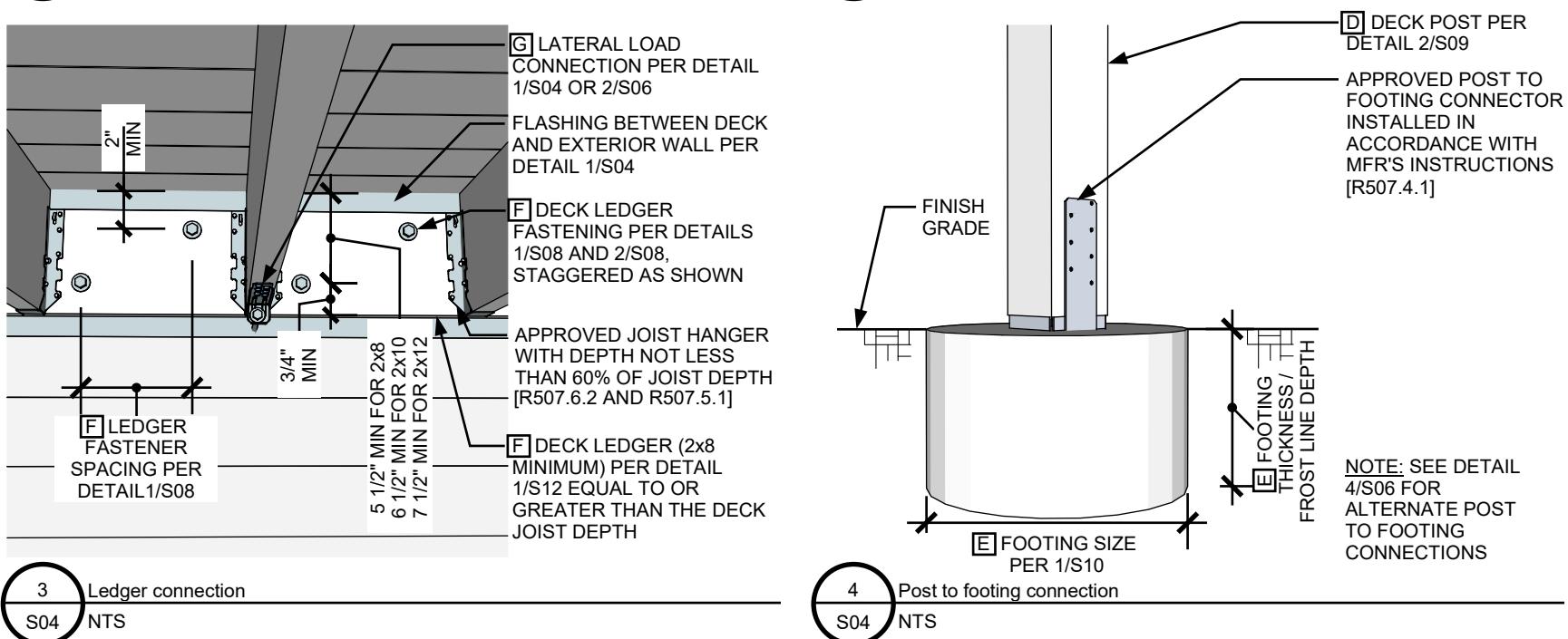
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4 S04 NTS Post to footing connection



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Details

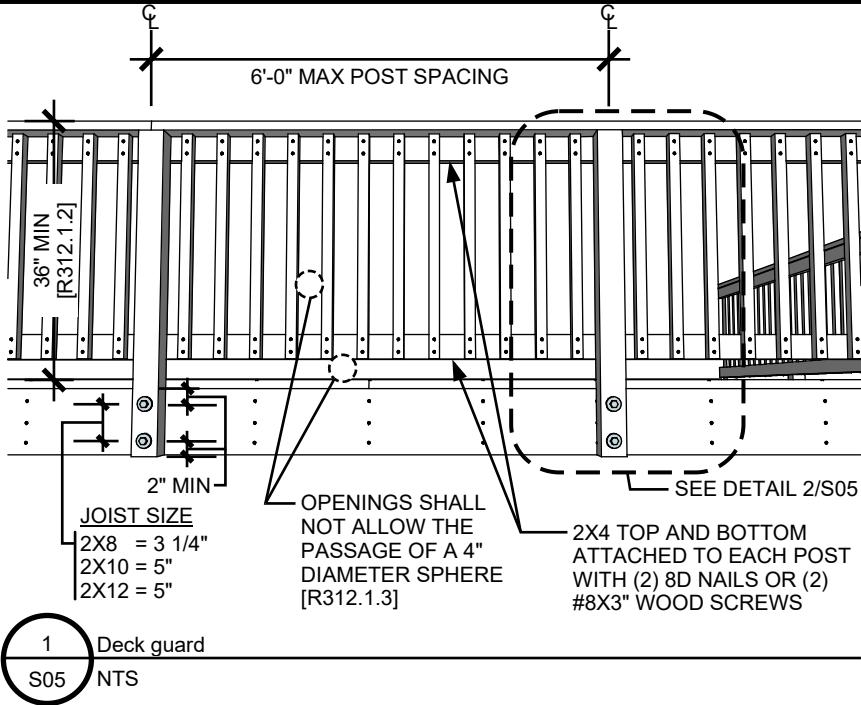
**S04**



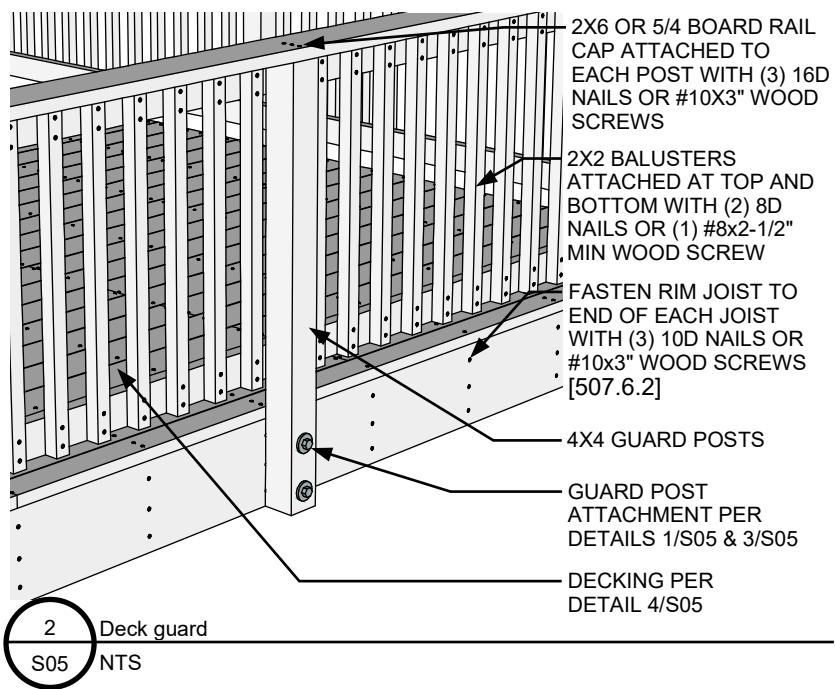
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2023 ORSC

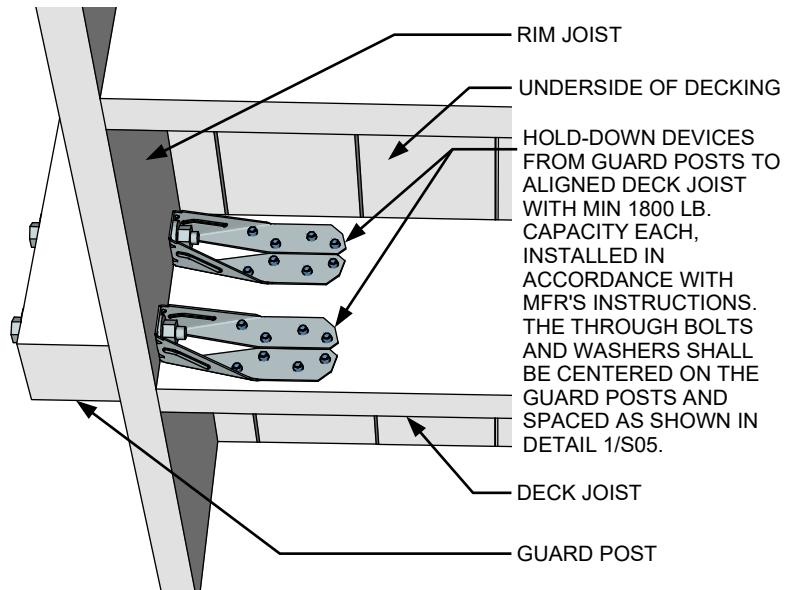
READY-BUILD PLAN PROGRAM



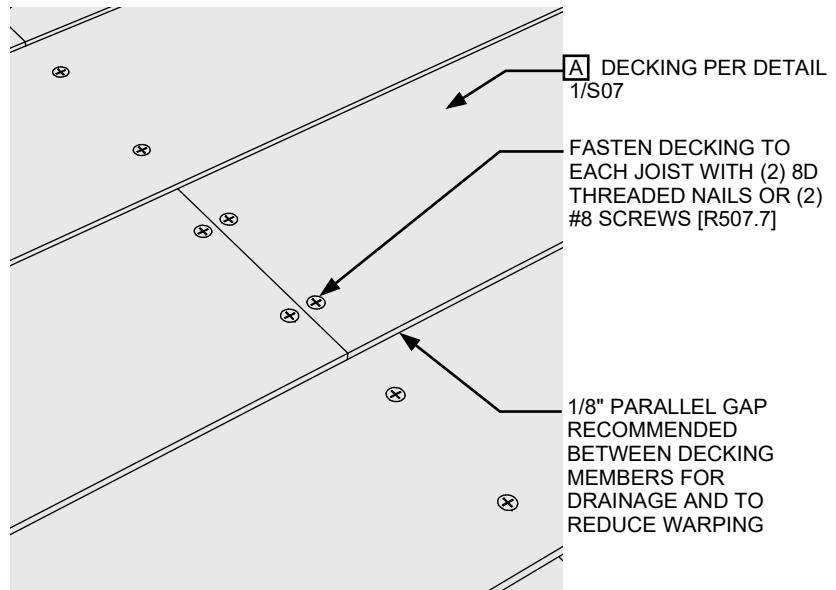
1 Deck guard  
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2 Deck guard  
S05 NTS



3 Guard post to joist connection  
S05 NTS



4 Decking connection  
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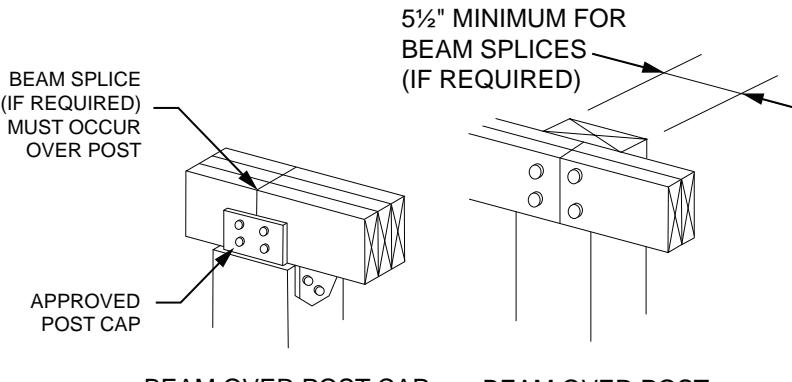
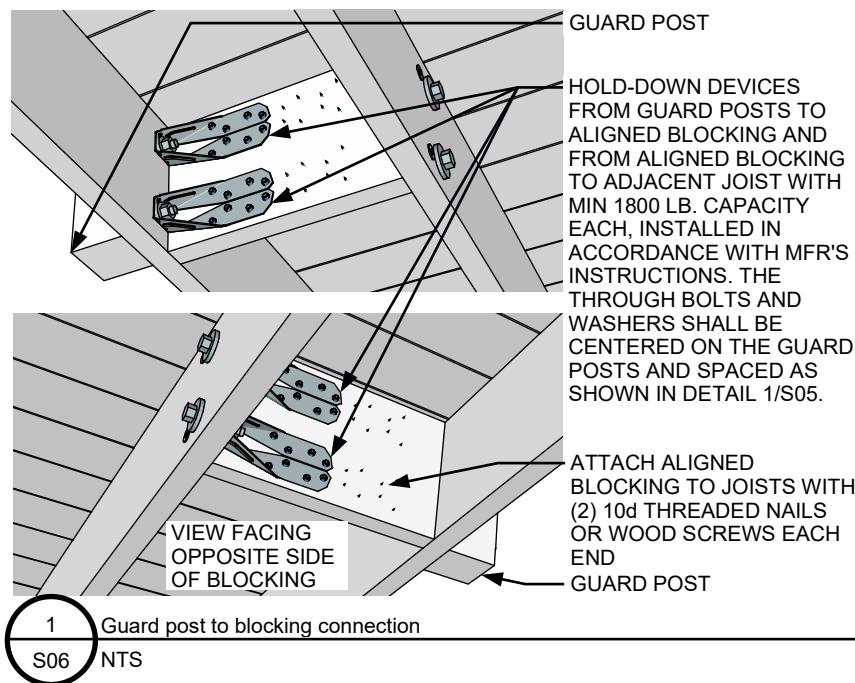
**S05**



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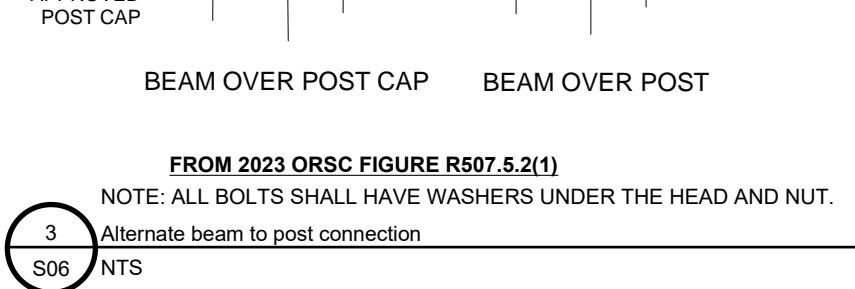
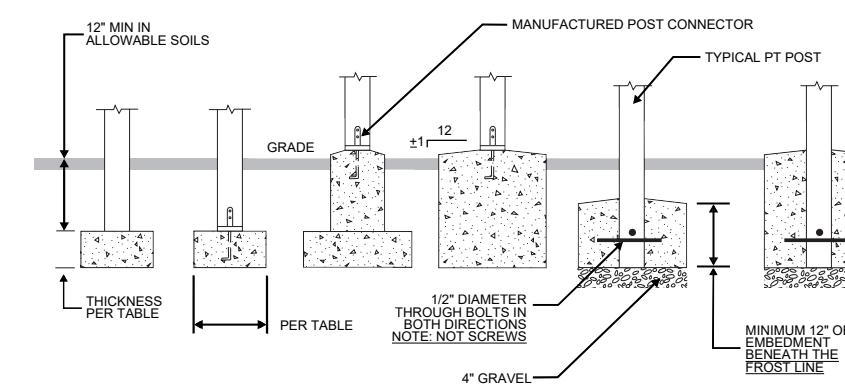
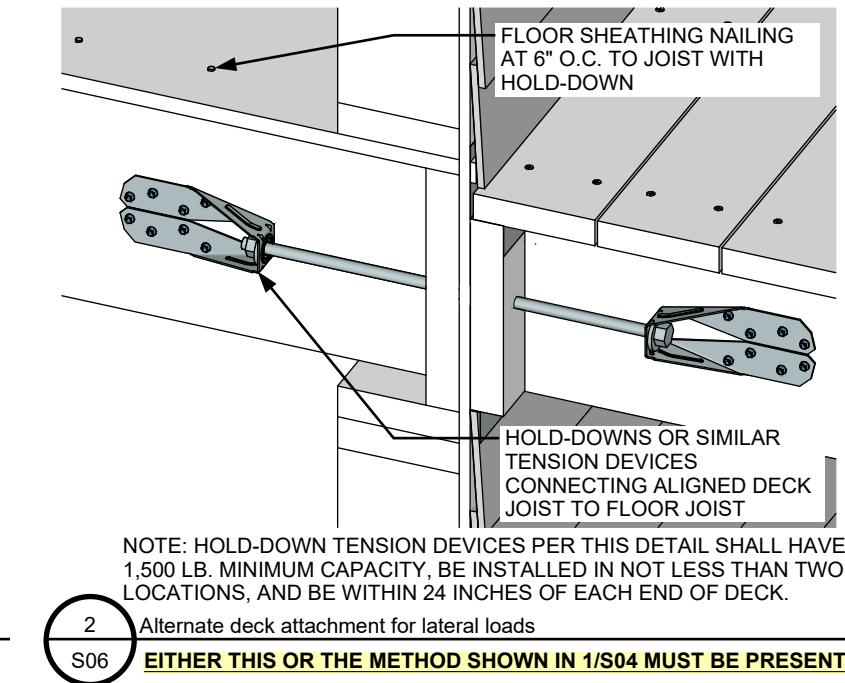
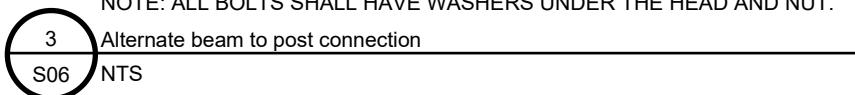
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### FROM 2023 ORSC FIGURE R507.5.2(1)

NOTE: ALL BOLTS SHALL HAVE WASHERS UNDER THE HEAD AND NUT.



NOTE: POSTS SHALL BE RESTRAINED TO PREVENT LATERAL DISPLACEMENT AT THE BOTTOM OF SUPPORT. SUCH RESTRAINT SHALL BE PROVIDED BY MANUFACTURED CONNECTORS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS OR A MINIMUM POST EMBEDMENT OF 12 INCHES IN SURROUNDING SOILS OR CONCRETE. NOTE: POSTS MUST BE CENTERED ON OR IN FOOTING.

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**TABLE R507.7  
MAXIMUM JOIST SPACING FOR WOOD DECKING**

DECKING MATERIAL TYPE AND NOMINAL SIZE	DECKING PERPENDICULAR TO JOIST		DECKING DIAGONAL TO JOIST <sup>a</sup>	
	Single span <sup>c</sup>	Multiple span <sup>c</sup>	Single span <sup>c</sup>	Multiple span <sup>c</sup>
	Maximum on-center joist spacing (inches)			
1 <sup>1</sup> / <sub>4</sub> -inch-thick wood <sup>b</sup>	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.

\*\*Plastic composite decking shall be installed per section 507.2.2 and the manufacturer's installation instructions.

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Maximum Joist Spacing Table (from 2023 ORSC Table R507.7)

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**TABLE R507.6  
MAXIMUM DECK JOIST SPANS**

LOAD <sup>a</sup> (psf)	JOIST SPECIES <sup>b</sup>	JOIST SIZE	ALLOWABLE JOIST SPAN <sup>b, c</sup> (feet-inches)			MAXIMUM CANTILEVER <sup>d, f</sup> (feet-inches)								
			Joist spacing (inches)			Joist back span <sup>g</sup> (feet)								
			12	16	24	4	6	8	10	12	14	16	18	
40 live load	Southern pine	2 x 6	9-11	9-0	7-7	1-0	1-6	1-5	NP	NP	NP	NP	NP	
		2 x 8	13-1	11-10	9-8	1-0	1-6	2-0	2-6	2-3	NP	NP	NP	
		2 x 10	16-2	14-0	11-5	1-0	1-6	2-0	2-6	3-0	3-4	3-4	NP	
		2 x 12	18-0	16-6	13-6	1-0	1-6	2-0	2-6	3-0	3-6	4-0	4-1	
	Douglas fir-larch <sup>e</sup> Hem-fir <sup>e</sup> Spruce-pine-fir <sup>e</sup>	2 x 6	9-6	8-4	6-10	1-0	1-6	1-4	NP	NP	NP	NP	NP	
		2 x 8	12-6	11-1	9-1	1-0	1-6	2-0	2-3	2-0	NP	NP	NP	
		2 x 10	15-8	13-7	11-1	1-0	1-6	2-0	2-6	3-0	3-3	NP	NP	
		2 x 12	18-0	15-9	12-10	1-0	1-6	2-0	2-6	3-0	3-6	3-11	3-11	
	Redwood <sup>f</sup> Western cedars <sup>f</sup> Ponderosa pine <sup>f</sup> Red pine <sup>f</sup>	2 x 6	8-10	8-0	6-10	1-0	1-4	1-1	NP	NP	NP	NP	NP	
		2 x 8	11-8	10-7	8-8	1-0	1-6	2-0	1-11	NP	NP	NP	NP	
		2 x 10	14-11	13-0	10-7	1-0	1-6	2-0	2-6	3-0	2-9	NP	NP	
		2 x 12	17-5	15-1	12-4	1-0	1-6	2-0	2-6	3-0	3-6	3-8	NP	

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.

NP = Not Permitted.

a. Dead load = 10 psf. Snow load not assumed to be concurrent with live load.

b. No. 2 grade, wet service factor included.

c.  $L/\Delta = 360$  at main span.

d.  $L/\Delta = 180$  at cantilever with a 220-pound point load applied to end.

e. Includes incising factor.

f. Incising factor not included.

g. Interpolation allowed. Extrapolation is not allowed.

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Maximum Joist Spans Table from 2023 ORSC Table R507.6 (The full table can be found at <https://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx>)

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### DECK LEDGER CONNECTION TO BAND JOIST

LOAD <sup>c</sup> (psf)	JOIST SPAN <sup>a</sup> (feet)	ON-CENTER SPACING OF FASTENERS <sup>b</sup> (inches)		
		1/4-inch diameter lag screw with 1/2-inch maximum sheathing <sup>d, e</sup>	1/2-inch diameter bolt with 1/2-inch maximum sheathing <sup>e</sup>	1/2-inch diameter bolt with 1-inch maximum sheathing <sup>f</sup>
40 live load	6	30	36	36
	8	23	36	36
	10	18	34	29
	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 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.

1

Minimum Ledger Connection Table from 2023 ORSC Table R507.9.1.3(1) (The full table can be found at <https://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx>)

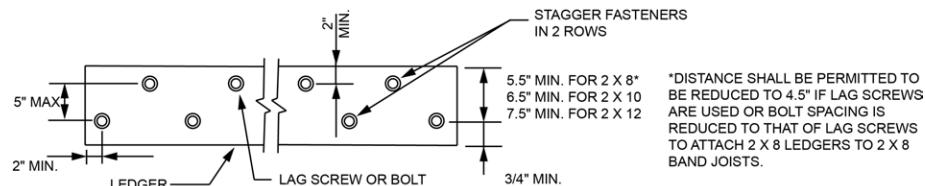
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### PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS				
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING
Ledger <sup>a</sup>	2 inches <sup>d</sup>	3/4 inch	2 inches <sup>b</sup>	1 5/8 inches <sup>b</sup>
Band Joist <sup>c</sup>	3/4 inch	2 inches	2 inches <sup>b</sup>	1 5/8 inches <sup>b</sup>

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).



For SI: 1 inch = 25.4 mm.

**FIGURE R507.9.1.3(1)**  
PLACEMENT OF LAG SCREWS AND BOLTS IN LEDGERS

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Ledger Fasteners Placement Table from 2023 ORSC Table R507.9.1.3(2)

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**TABLE R507.5(1)**  
**MAXIMUM DECK BEAM SPAN—40 PSF LIVE LOAD<sup>c</sup>**

JOIST SPAN (feet)	JOIST SPAN LENGTH AND JOIST CANTILEVER LENGTH <sup>a, i</sup> (feet and feet)										
	6	6 & 0	6 & 1.5								
8		8 & 0	8 & 1	8 & 2							
10			10 & 0	10 & 1	10 & 2.5						
12				12 & 0	12 & 1	12 & 2	12 & 3				
14					14 & 0	14 & 1	14 & 2	14 & 3.5			
16						16 & 0	16 & 1	16 & 2.5	16 & 4		
18							18 & 0	18 & 1.5	18 & 3	18 & 4.5	
BEAM SPECIES <sup>d</sup>	BEAM SIZE <sup>e</sup>	MAXIMUM DECK BEAM SPAN LENGTH <sup>a, b, f</sup> (feet-inches)									
Douglas fir-larch <sup>g</sup> Hem-fir <sup>g</sup> Spruce-pine-fir	1 – 2 x 6	4-5	4-1	3-9	3-6	3-0	2-10	2-8	2-5	2-3	2-1
	1 – 2 x 8	5-11	5-6	5-1	4-8	4-0	3-9	3-6	3-2	2-11	2-9
	1 – 2 x 10	7-1	6-8	6-3	5-10	5-1	4-9	4-6	4-1	3-9	3-6
	1 – 2 x 12	8-3	7-9	7-3	6-9	6-0	5-9	5-6	5-0	3-9	3-6
	2 – 2 x 6	6-6	6-1	5-8	5-3	4-9	4-6	4-4	3-11	3-7	3-3
	2 – 2 x 8	8-8	8-2	7-7	7-1	6-4	6-0	5-9	5-2	4-8	4-4
	2 – 2 x 10	10-8	10-0	9-3	8-7	7-9	7-4	7-0	6-6	6-0	5-6
	2 – 2 x 12	12-4	11-7	10-9	10-0	8-11	8-6	8-2	7-7	7-1	6-8
	3 – 2 x 6	8-2	7-8	7-2	6-8	6-0	5-9	5-6	5-1	4-9	4-6
	3 – 2 x 8	10-11	10-3	9-6	8-10	7-11	7-7	7-3	6-8	6-3	5-11
	3 – 2 x 10	13-4	12-6	11-8	10-10	9-8	9-3	8-10	8-2	7-8	7-2
	3 – 2 x 12	15-6	14-6	13-6	12-7	11-3	10-9	10-3	9-6	8-11	8-5

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. Interpolation permitted for conditions with zero joist cantilever length. Extrapolation is not permitted.

b. Beams supporting a single span of joists with or without cantilever.

c. Dead load = 10 psf,  $L/\Delta = 360$  at main span,  $L/\Delta = 180$  at cantilever. Snow load is not assumed to be concurrent with live load.

d. No. 2 grade, wet service factor included.

e. Beam depth shall be equal to or greater than the depth of intersecting joist for a flush beam connection.

f. Beam cantilevers are limited to the adjacent beam's span divided by 4.

g. Includes incising factor.

h. Incising factor not included.

i. Deck joist span as shown in Figure R507.5.



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See page S13  
for an example  
footing guide

TABLE R507.3.1  
MINIMUM FOOTING SIZE FOR DECKS

LIVE OR GROUND SNOW LOAD <sup>b</sup> (psf)	TRIBUTARY AREA <sup>e</sup> (ft <sup>2</sup> )	LOAD-BEARING VALUE OF SOILS <sup>a, c, d</sup> (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 thickness (inches)
40	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
	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			6			6	8		6

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m<sup>2</sup>, 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.



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TABLE R301.2  
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA<sup>f, g</sup>

COUNTY	GROUND SNOW LOAD, $p_g$	BASIC DESIGN WIND SPEED, $V$ (mph) <sup>b</sup>	SPECIAL WIND REGION BASIC DESIGN WIND SPEED, $V$ (mph) <sup>b</sup>	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE			AIR FREEZING INDEX
					Weathering <sup>d</sup>	Frost line depth (inches)	Decay	
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 c		12	Moderate	

For SI: 1 inch = 25.4 mm.

- 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(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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Climatic and Geographic Criteria By County from 2023 ORSC Table 301.2 (The full table can be found at <https://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx>

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.

LOADS (psf) <sup>b</sup>	POST SPECIES <sup>c</sup>	POST SIZE <sup>d</sup>	TRIBUTARY AREA (ft <sup>2</sup> ) <sup>g, h</sup>							
			20	40	60	80	100	120	140	160
40 live load	Southern pine	4 × 4	14-0	13-8	11-0	9-5	8-4	7-5	6-9	6-2
		4 × 6	14-0	14-0	13-11	12-0	10-8	9-8	8-10	8-2
		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 <sup>e</sup> Hem-fir <sup>e</sup> Spruce-pine-fir <sup>e</sup>	4 × 4	14-0	13-6	10-10	9-3	8-0	7-0	6-2	5-3
		4 × 6	14-0	14-0	13-10	11-10	10-6	9-5	8-7	7-10
		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
	Redwood <sup>f</sup> Western cedars <sup>f</sup> Ponderosa pine <sup>f</sup> Red pine <sup>f</sup>	4 × 4	14-0	13-2	10-3	8-1	5-8	NP	NP	NP
		4 × 6	14-0	14-0	13-6	11-4	9-9	8-4	6-9	4-7
		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

2  
S11

Maximum Deck Post Height from 2023 ORSC Table 507.4 (The full table can be found at <https://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx>

## STAIRS

STAIRWAYS, STRINGERS, HANDRAILS AND GUARDRAILS SHALL MEET THE REQUIREMENTS SHOWN IN DETAILS 1 THROUGH 4 ON THIS PAGE. ALL STRINGERS SHALL BE MINIMUM 2x12. A LEVEL LANDING IS REQUIRED AT THE TOP (THIS IS USUALLY THE DECK SURFACE) AND AT THE BOTTOM OF THE STAIRWAY (USUALLY A CONCRETE PAD, OR THE GROUND).

NOTE: THE DETAILS SHOWN HEREIN ARE FOR A THREE-FOOT WIDE MAXIMUM STAIRWAY WITH MINIMUM 2x TREAD MATERIAL. PLASTIC OR COMPOSITE, OR 1x DECKING PRODUCTS MAY BE USED FOR STAIR TREADS; HOWEVER, THEY MAY REQUIRE ADDITIONAL STRINGERS FOR BRACING. CHECK WITH THE MANUFACTURER'S REQUIREMENTS FOR SPACING.



## PREScriptive DECK

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General Notes

**S12**

9" min. tread depth  
shall not deviate from  
one another by more  
than 3/8"

8" max. riser height  
shall not deviate  
from one another  
by more than 3/8"

Risers may be open but  
shall not allow the  
passage of a 4" sphere

Risers: 1X material min.  
3/4" to 1 1/2" nosing  
shall not deviate  
from one another by  
more than 3/8"

1 TREAD AND RISER DETAIL

Stair guardrail  
required for  
stairs with a  
total rise of 30"  
or more. See  
detail 4 for  
more  
information

5'-0" max.  
between posts

Stair  
guardrail  
height 34"  
min.  
measured  
from the  
nosing of  
the tread

Triangular opening  
shall not permit the  
passage of a 6" sphere

3 STAIR GUARD REQUIREMENTS

2x tread  
material

Approved sloped  
hanger for each  
stringer

Stringer  
2x4 cleat ea. side full  
depth of tread: Attach  
w/ (4)10d nails or #8  
wood screws

Band board  
or outside  
joist

5" min.

Max. single  
vertical stair run  
15'

2 STAIR STRINGERS AND TREAD CONNECTIONS

Stairs with four or more risers must  
have a handrail on at least one side.  
Handrails shall be graspable and shall  
be of decay-resistant and/or  
corrosion-resistant material.  
The hand grip portion, if circular, shall  
be between 1 1/4" and 2" in cross  
section. Shapes other than circular  
shall have a perimeter dimension  
between 4" and not greater than 6  
1 1/4" with a maximum cross sectional  
dimension of 2 1/4". All shapes must  
have a smooth surface with no sharp  
corners. Handrails shall run  
continuously from a point directly  
above the lowest riser to a point  
directly above the highest riser and  
shall return to the guard at each end.  
Handrails may be interrupted at  
guardrail posts only at a turn in the  
stair.

3 1/2" max.

1 1/2" min.

Corrosion  
resistant  
handrail  
hardware

4 HANdRAIL REQUIREMENTS

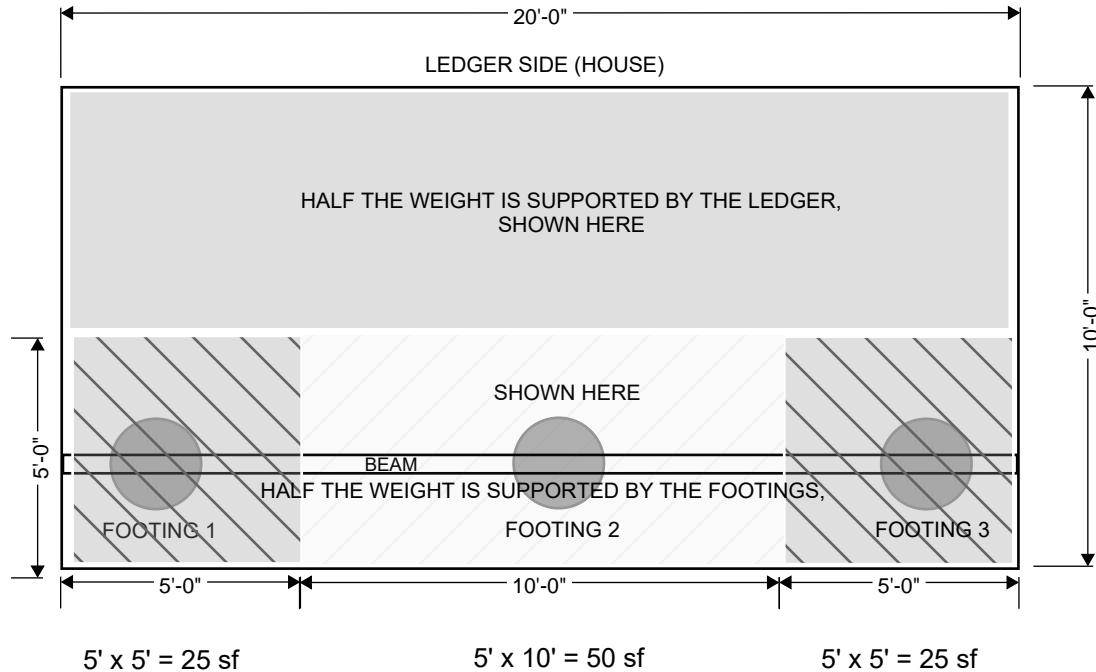
4  
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## PREScriptive DECK

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REFER TO TABLE R507.3.1 (S10) TO SIZE THE FOOTINGS

### EXAMPLE -

FOOTINGS ARE SIZED AT 40 psf AND ROUNDED UP TO THE NEXT HIGHEST SIZE IN THE TABLE  
 FOOTING 1 WOULD BE 14" PER SIDE IF SQUARE, OR 16" IF ROUND  
 FOOTING 2 WOULD BE 20" PER SIDE IF SQUARE, AND 22" IF ROUND  
 FOOTING 3 WOULD BE 14" PER SIDE IF SQUARE, OR 16" IF ROUND  
 ALL ARE REQUIRED TO BE 24" DEEP MINIMUM TO THE BOTTOM OF THE FOOTING

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NO. DATE

Project Specific  
Information



## PRESCRIPTIVE DECK

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**A DECKING [R507.7]:**

**size:** 2x five-quarter other (specify): \_\_\_\_\_  
**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<sub>J</sub>:** \_\_\_\_\_ ft. - \_\_\_\_\_ in.  
**cantilever:** \_\_\_\_\_ ft. - \_\_\_\_\_ in. (L<sub>J</sub>/4 MAX)  
**rim joist:** 2x6 2x8 2x10 2x12 not applicable

**C BEAMS [R507.5]:**

**plies:** 1 2 3  
**size:** 2x6 2x8 2x10 2x12 4x6 4x8 4x10 4x12 \_\_\_\_\_ x \_\_\_\_\_  
**span, L<sub>B</sub>:** \_\_\_\_\_ ft. - \_\_\_\_\_ in.  
**cantilever:** \_\_\_\_\_ ft. - \_\_\_\_\_ in. (L<sub>B</sub>/4 MAX)

**D POSTS [R507.4]:**

**size:** 4x4 4x6 6x6 8x8  
**height:** \_\_\_\_\_ ft. - \_\_\_\_\_ in.

**E FOOTINGS [R507.3.1]:**

**size:** \_\_\_\_\_ in. square round  
**thickness:** \_\_\_\_\_ in.

**F LEDGER [507.9.1.1]:**

**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)

**H GUARDRAIL POST ATTACHMENT [R301.5]:**

details 1-3/S05 & 1/S06  
code-compliant alternate (attach detail).

**SITE ADDRESS:** \_\_\_\_\_

**- PLEASE NOTE -**  
 THE FOLLOWING ARE  
 ALSO REQUIRED TO BE  
 SUBMITTED ALONG WITH  
 THIS DECK GUIDE:

1) A SITE PLAN  
 COMPLYING WITH OUR  
 SITE PLAN GUIDELINES,  
 INCLUDING:

- a. Address, Subdivision name and lot number (if applicable)
- b. An identified scale and north arrow
- c. All property lines
- d. Existing and proposed structures including decks and eaves
- e. Setback envelope
- f. Driveway curb cut width (curb to back of sidewalk)
- g. Location and dimensions of all public and private utilities and easements (identify if onsite)

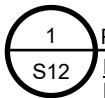
2) SCALED ELEVATION  
 DRAWINGS FROM FRONT  
 AND SIDE (if applicable)

3) SCALED PLAN VIEW  
 DRAWING (overhead looking  
 down)

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Project Specific Information

S12

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.

**S14**

## NOTES:



READY-BUILD PLAN PROGRAM

PREScriptive DECK

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## Project Specific Information

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