

GENERAL NOTES

SCOPE

SINGLE-LEVEL EXTERIOR WOOD-FRAMED DECKS ATTACHED TO AN EXTERIOR WALL OF A BUILDING REGULATED BY THE OREGON RESIDENTIAL SPECIALTY CODE.

PERMIT APPLICATION

THE PERMIT APPLICANT SHALL REFERENCE THE PRESCRIBED DETAILS AND TABLES CONTAINED HEREIN TO DEVELOP AND RECORD THEIR PROJECT SPECIFIC DECK DESIGN PARAMETERS **(X)** ON **SHEET S28** PRIOR TO PERMIT APPLICATION. THE PERMIT APPLICANT IS RESPONSIBLE FOR PRODUCING AND ATTACHING A SITE PLAN IN ACCORDANCE WITH THE LOCAL MUNICIPALITY'S SUBMISSION REQUIREMENTS. EXTERIOR DECKS WHERE THE WALKING SURFACE IS NOT MORE THAN 30 INCHES ABOVE ADJACENT GRADE MEASURED AT ANY POINT WITHIN 3 FEET HORIZONTALLY OF THE WALKING SURFACE ARE EXEMPT FROM PERMIT [R105.2].

APPLICABLE BUILDING CODE

2023 OREGON RESIDENTIAL SPECIALTY CODE (ORSC).

LIMITATIONS OF USE

USE OF AND ANY MODIFICATIONS TO THIS PERMIT-READY PLAN IS SUBJECT TO REVIEW AND APPROVAL BY THE LOCAL MUNICIPALITY.

- SINGLE-SPAN DECK JOISTS WITH OR WITHOUT A CANTILEVER
- BASIC DESIGN WIND SPEED: ≤ 120 MPH
- WIND EXPOSURE CATEGORY: B, C, OR D
- SEISMIC DESIGN CATEGORY: B, C, D₀, D₁, D₂, OR E RECLASSIFIED TO D₂
- DECK DEAD LOAD: ≤ 10 PSF
- DECK LIVE LOAD: ≤ 40 PSF
- GROUND SNOW LOAD: ≤ 70 PSF
- NOT SUPPORTING FINISH MATERIALS, SUCH AS CONCRETE, TILE, ETC., ON TOP OF THE DECKING.
- NOT SUPPORTING LARGE CONCENTRATED LOADS SUCH AS HOT TUBS, ETC.
- WHERE PROPOSED CONSTRUCTION IS IN A FLOOD HAZARD AREA, AS ESTABLISHED BY THE LOCAL FLOODPLAIN ADMINISTRATOR, THE PERMIT APPLICANT IS RESPONSIBLE FOR MODIFYING THESE PLANS AS NECESSARY FOR COMPLIANCE WITH ORSC SECTIONS R301.2.4 AND R322.
- WHERE PROPOSED CONSTRUCTION IS IN AN AREA SUBJECT TO WILDFIRE HAZARD MITIGATION, THE PERMIT APPLICANT IS RESPONSIBLE FOR MODIFYING THESE PLANS AS NECESSARY FOR COMPLIANCE WITH ORSC SECTION R327.

LEGEND

[X] = PROJECT SPECIFIC DECK COMPONENT DESIGN PARAMETER TO BE PROVIDED BY THE PERMIT APPLICANT ON **SHEET S28**

[R###.#] = ORSC SECTION REFERENCE

APPROVED = ACCEPTABLE TO THE BUILDING OFFICIAL [R202]

ORSC = OREGON RESIDENTIAL SPECIALTY CODE

MIN = MINIMUM

MAX = MAXIMUM

TYP = TYPICAL

MFR = MANUFACTURER

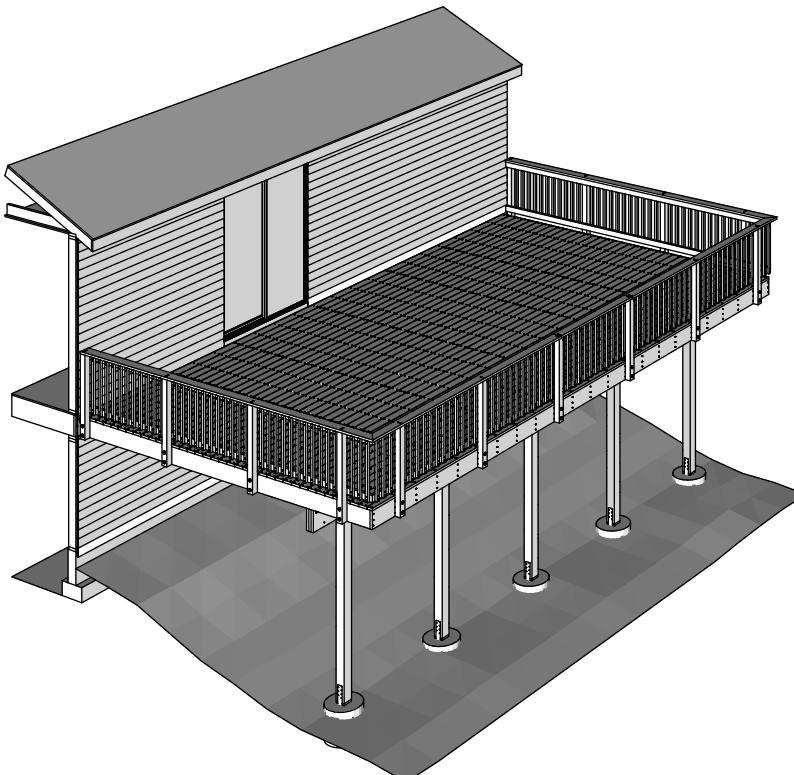
#S# = DETAIL NUMBER ON SHEET NUMBER

FOUNDATION

FOOTINGS SHALL BEAR ON NATIVE, INORGANIC, UNDISTURBED SOIL BELOW EXISTING GRADE. CONCRETE STRENGTH SHALL BE 3,000 PSI MIN IN MODERATE WEATHERING REGIONS AND 3,500 PSI MIN IN SEVERE WEATHERING REGIONS (SEE SHEET S28) [R301.2 AND R402.2].

WOOD FRAMING, FASTENERS AND CONNECTORS

ALL WOOD SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND BE NATURALLY DURABLE OR PRESSURE-PRESERVATIVE-TREATED UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL (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). ANY FIELD CUTS OF PRESSURE-PRESERVATIVE-TREATED WOOD SHALL BE TREATED WITH COPPER NAPHTHENATE (2% COPPER) [R317.1.1]. ALL FASTENERS, ANCHORS, AND CONNECTORS SHALL BE EXTERIOR RATED AND APPROVED FOR STRUCTURAL USE (SEE DETAIL 2/S16 FOR SPECIFICATIONS). MANUFACTURER'S (MFR'S) INSTRUCTIONS FOR APPROVED PROPRIETARY PRODUCTS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION [R106.1.2].



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PERMIT-READY PLAN
EXTERIOR DECK
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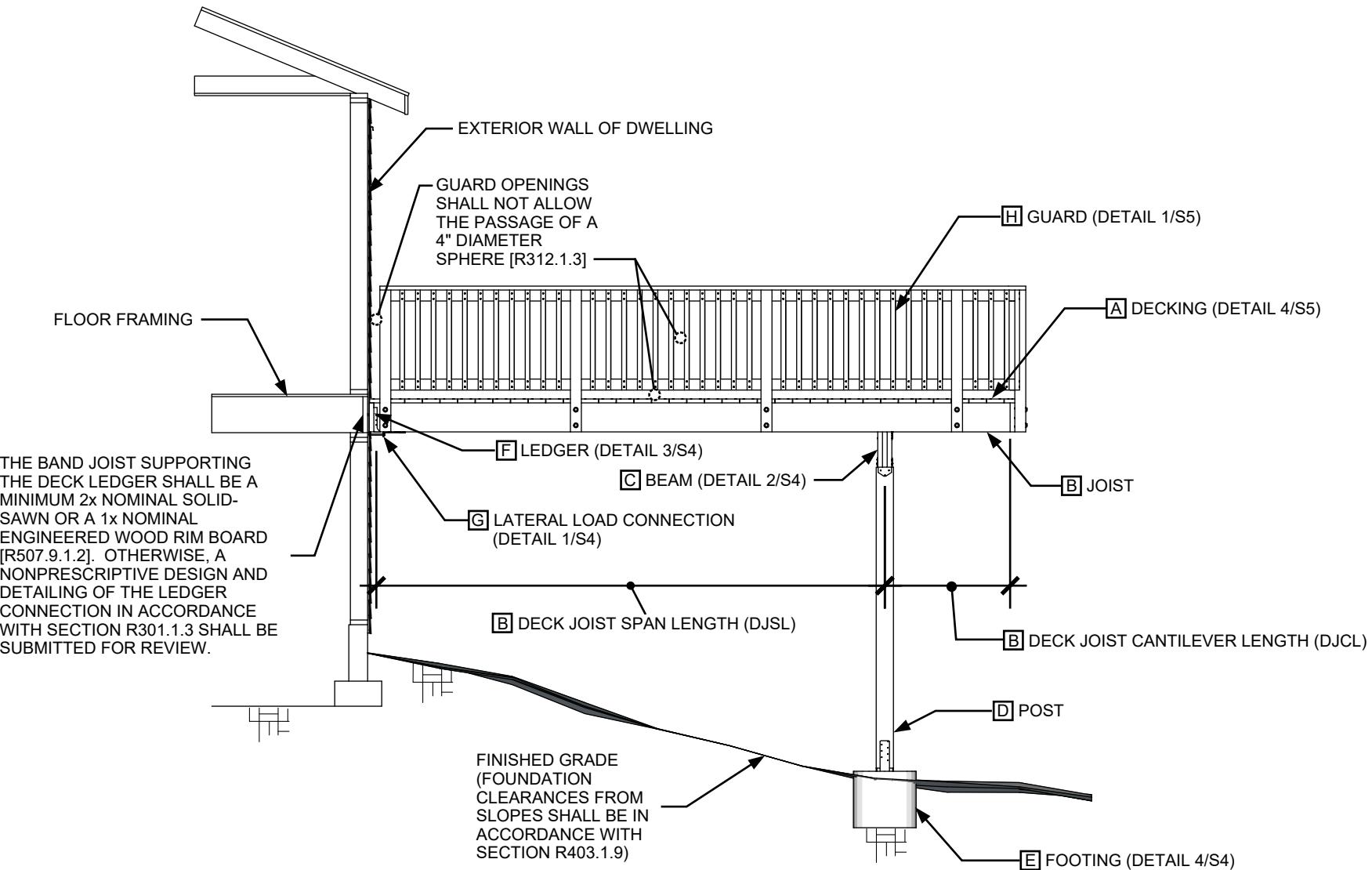
General Notes
Sheet

S1

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2023 ORSC



1 Side Elevation
S02 NTS

REVISIONS	NO.	DATE

Side Elevation Sheet

S2



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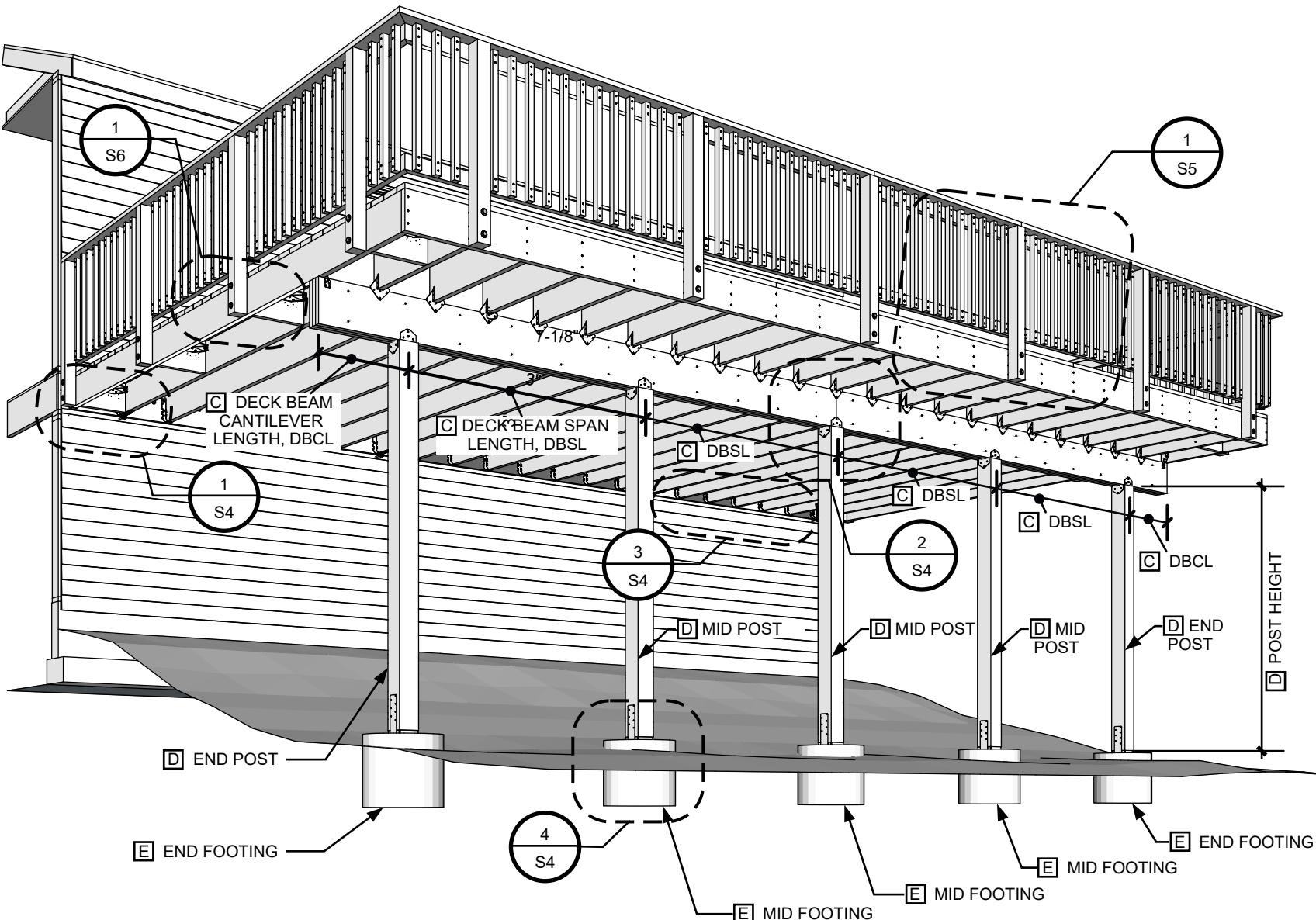
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EXTERIOR DECK

2023 ORSC

PERMIT-READY PLAN



REVISIONS
NO. DATE

Perspective
Sheet

S3

1 Deck Perspective
S3 NTS



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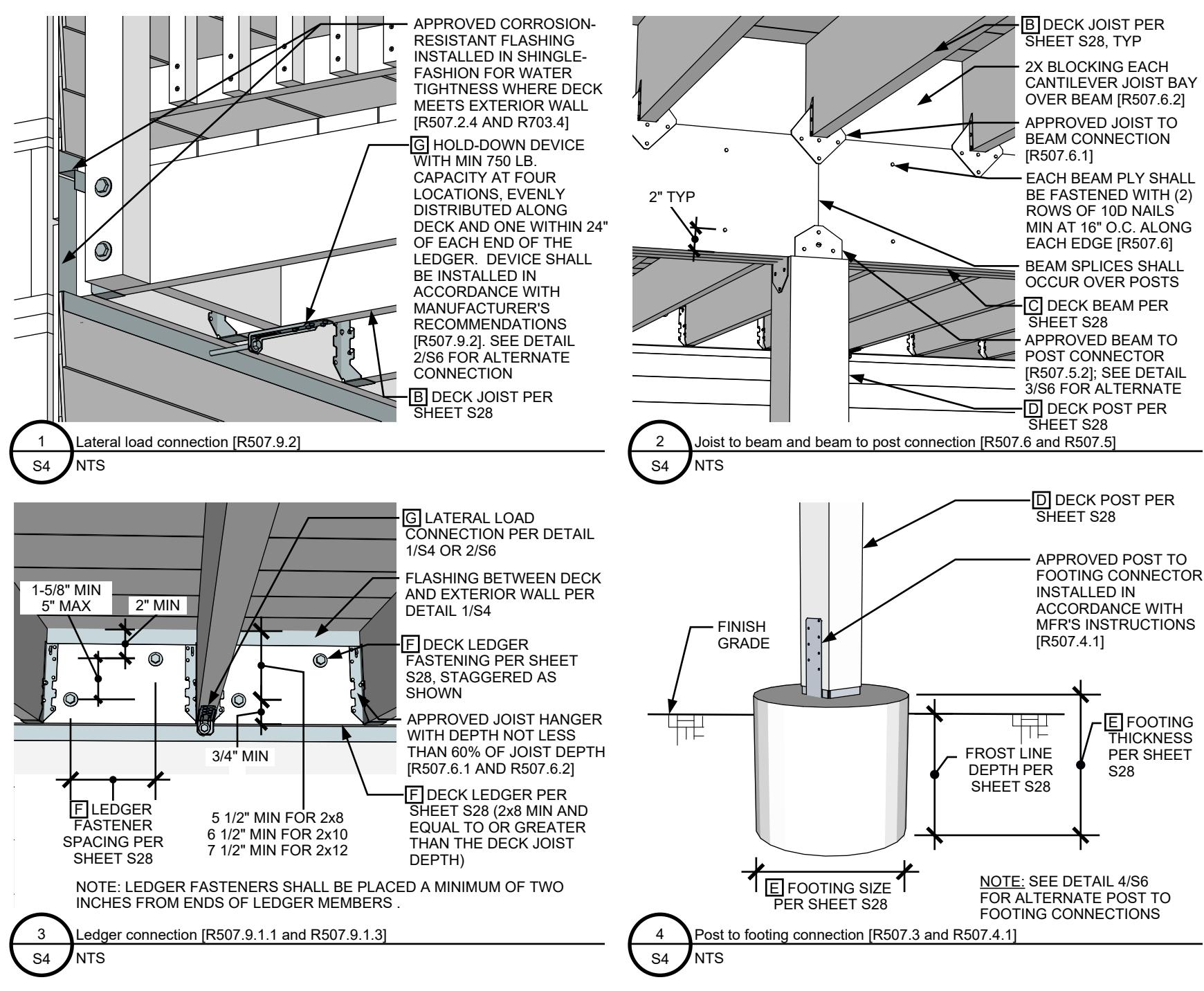
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2023 ORSC





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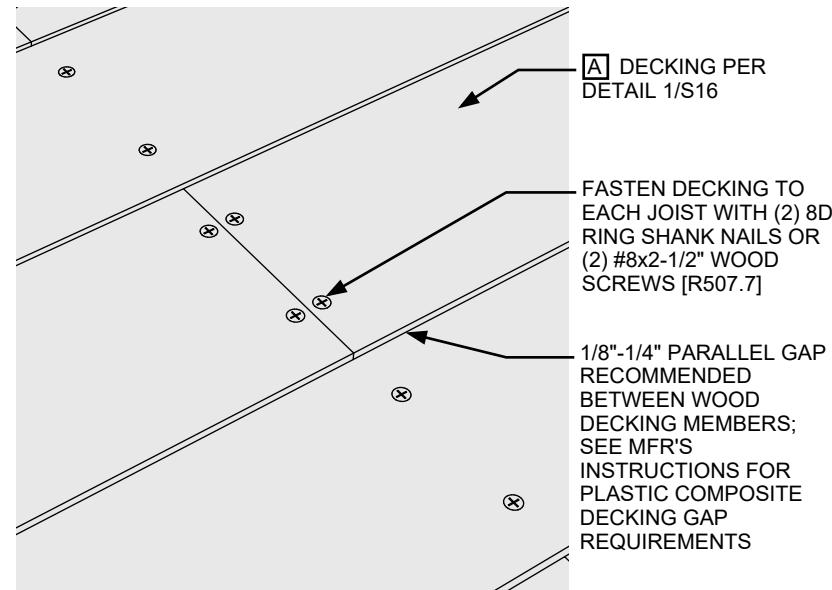
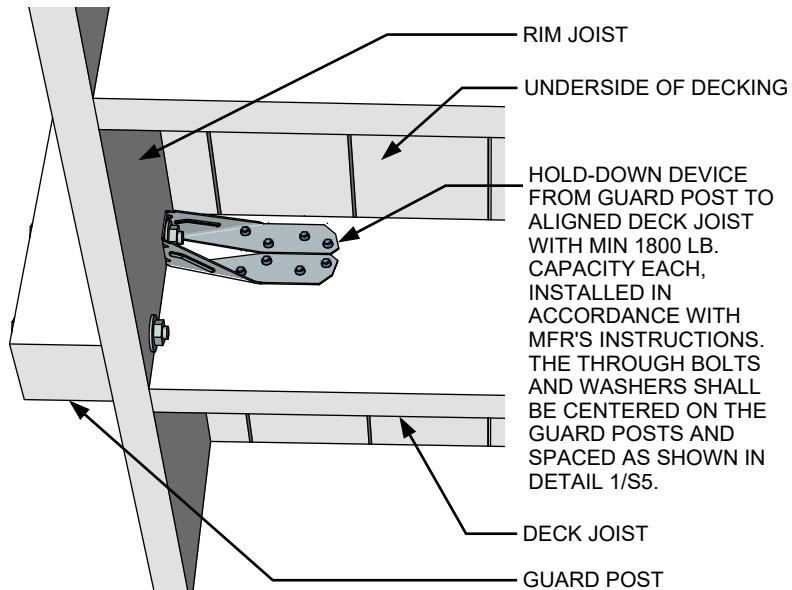
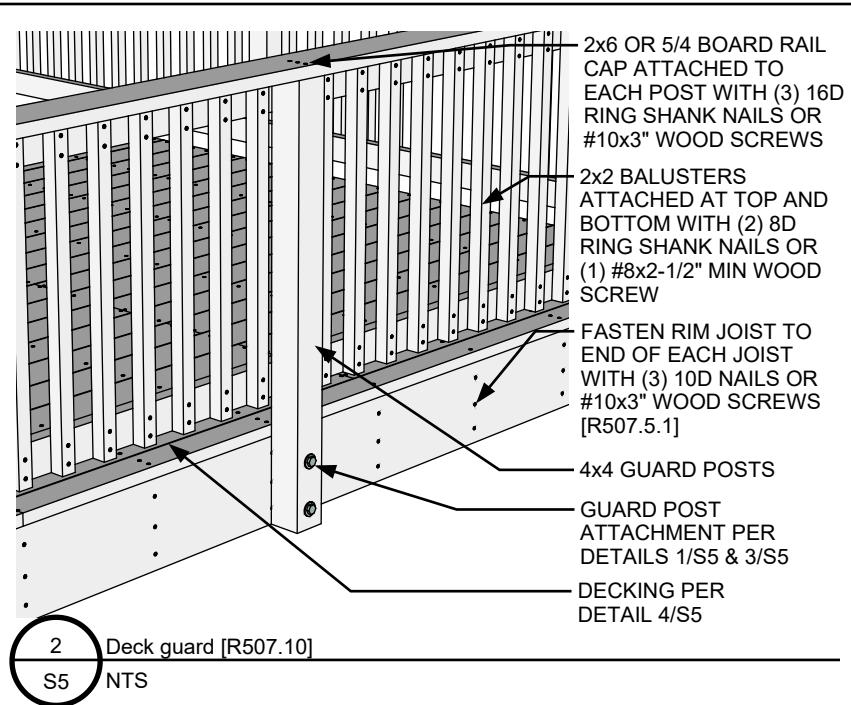
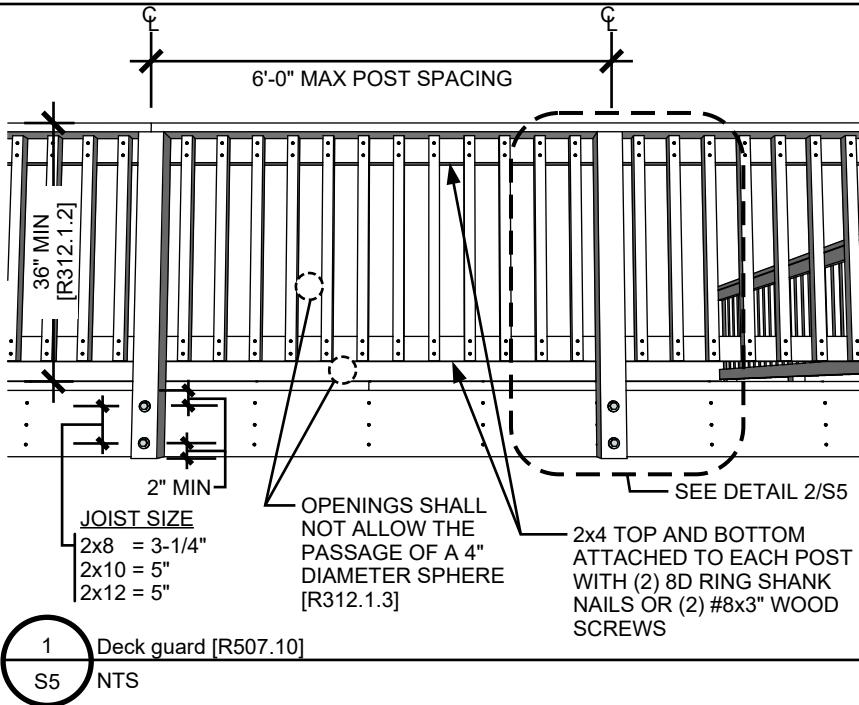
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REVISIONS	NO.	DATE

Details Sheet

S5



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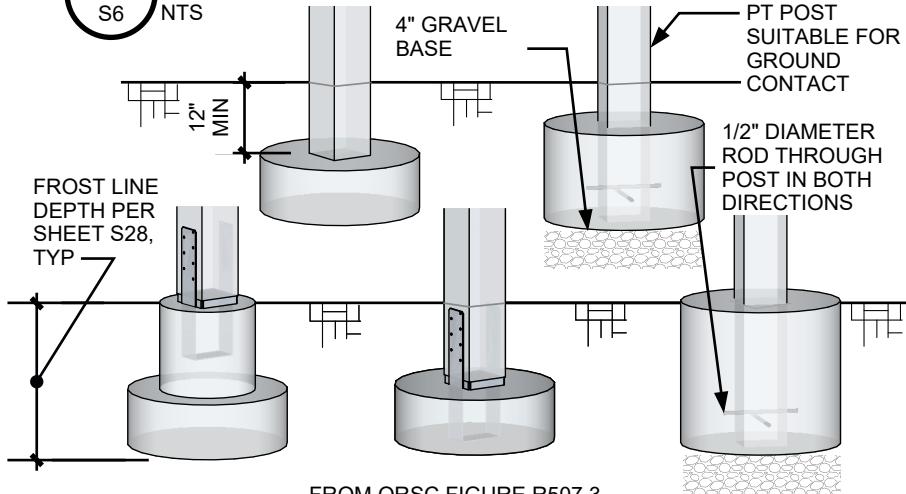
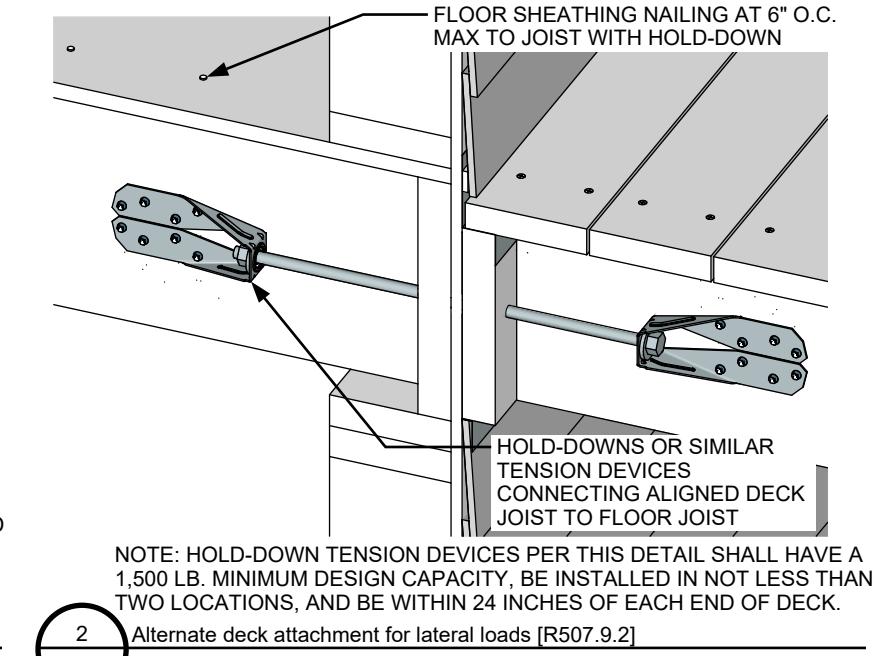
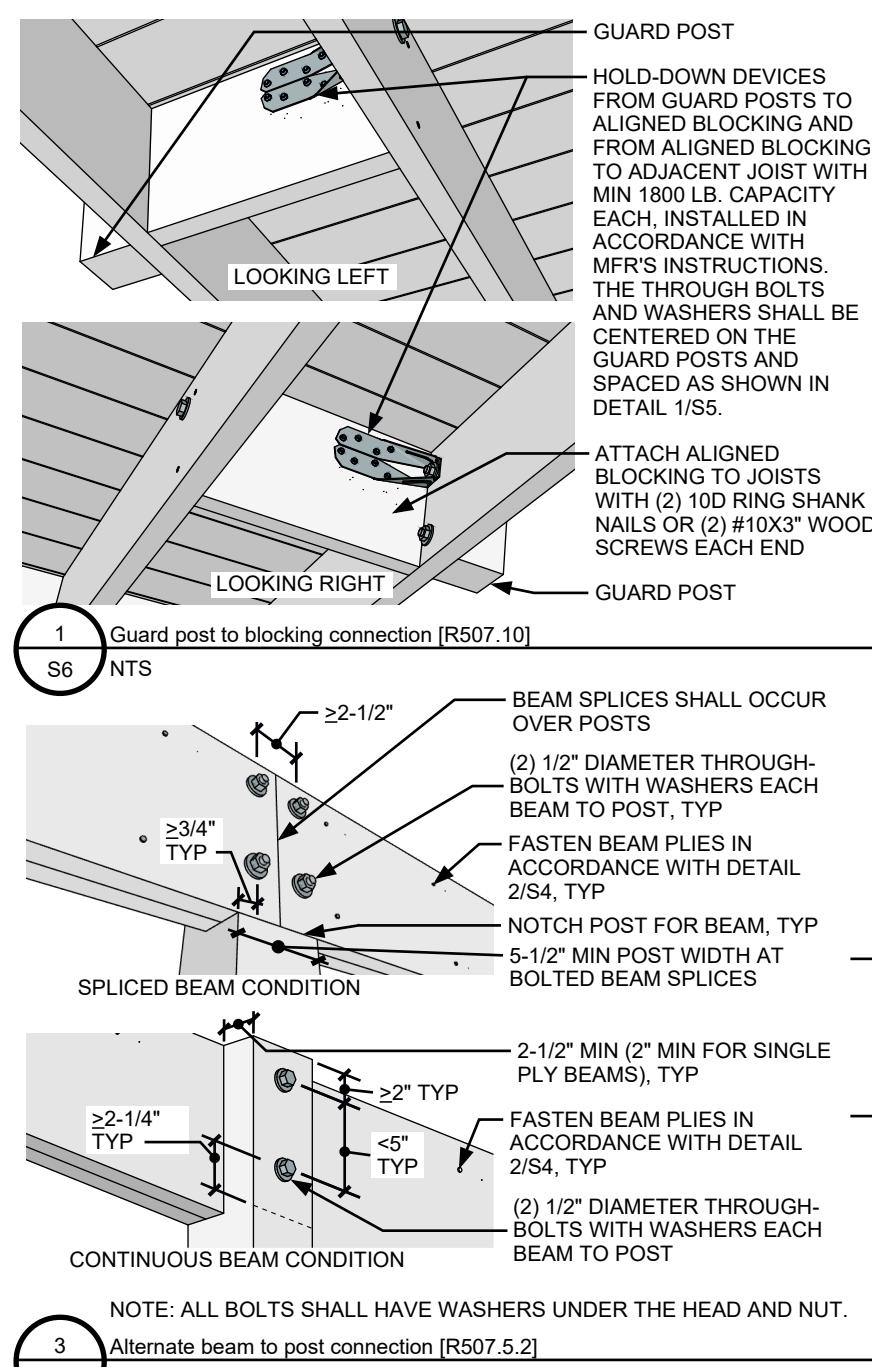
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NOTE: POSTS SHALL BE CENTERED ON OR IN FOOTING, AND RESTRAINED TO PREVENT LATERAL DISPLACEMENT AT THE BOTTOM OF SUPPORT. SUCH RESTRAINT SHALL BE PROVIDED BY APPROVED MANUFACTURED CONNECTORS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS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

REVISIONS	NO.	DATE

Details
Sheet

S6

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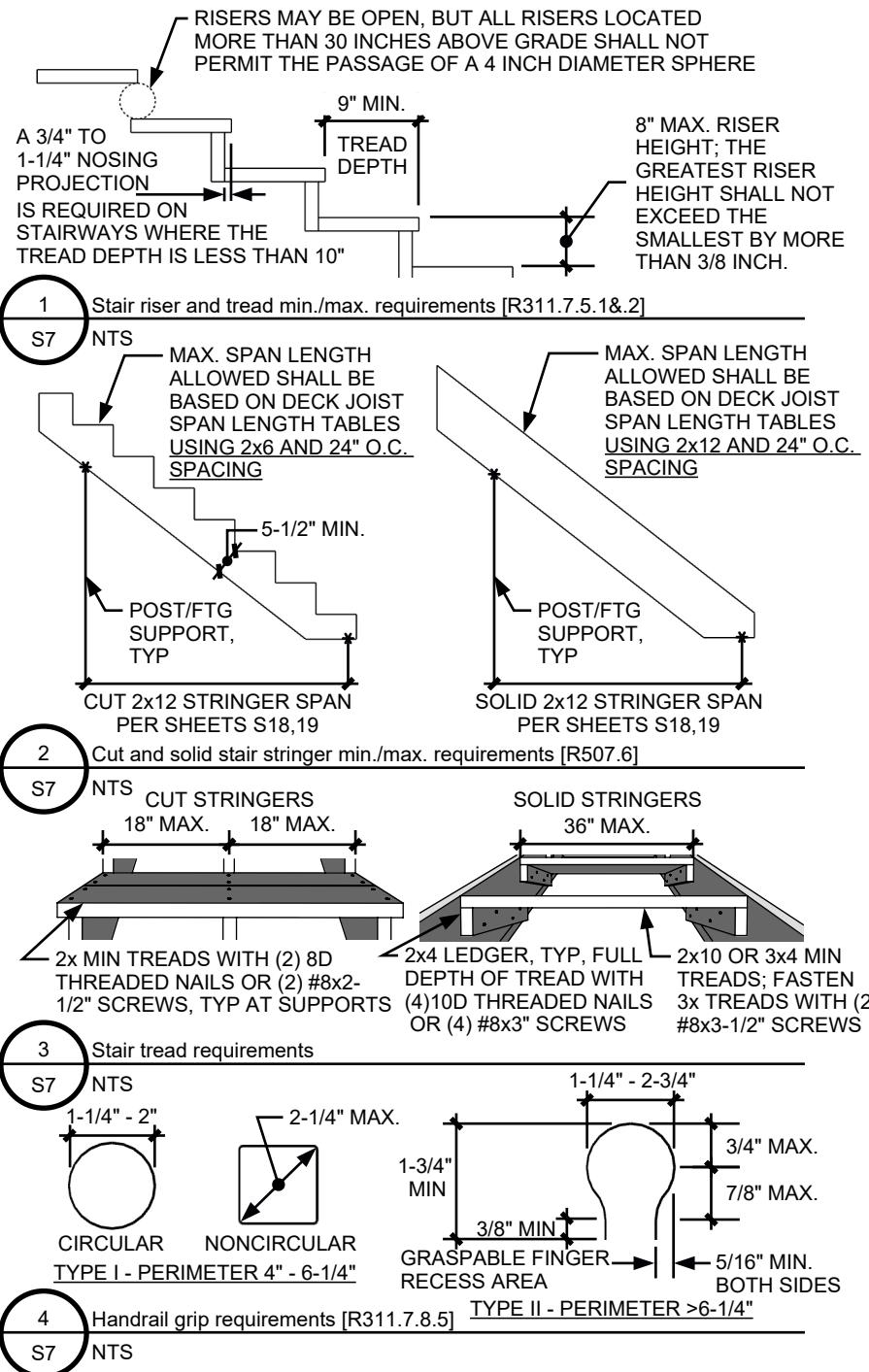
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STAIRWAY REQUIREMENTS [R311.7]

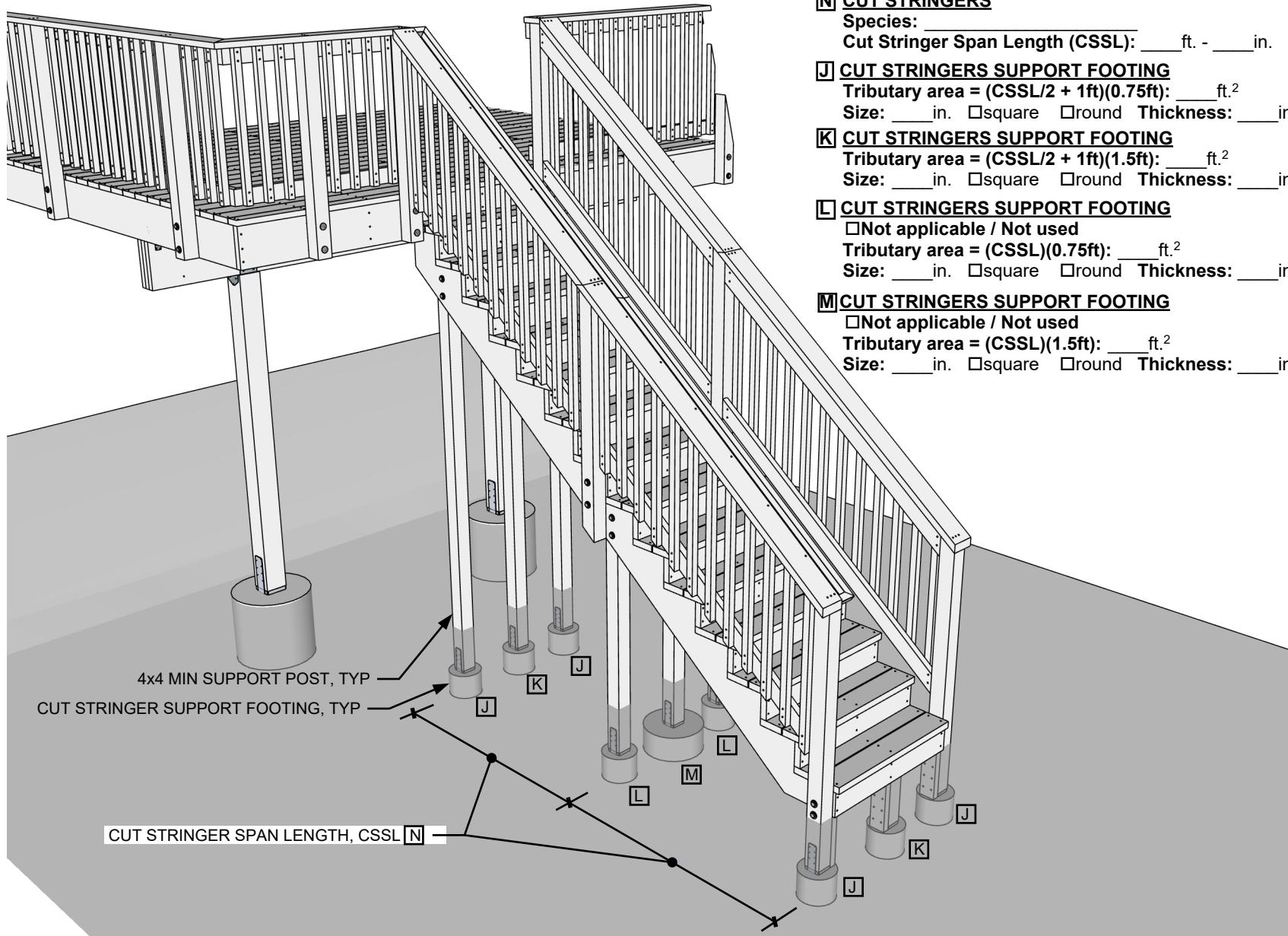
ALL STAIR ELEMENTS SHALL MEET THE REQUIREMENTS IN THIS PLAN EXCEPT WHERE OTHERWISE APPROVED BY THE LOCAL BUILDING OFFICIAL. ALL STAIRWAYS CONSTRUCTED IN ACCORDANCE WITH THIS PLAN SHALL BE SELF-SUPPORTING TO RESIST GRAVITY LOADS WITH THE USE OF POSTS AND FOOTINGS, AND POSITIVELY ANCHORED TO THE DECK TO RESIST LATERAL FORCES (ATTACHMENT SHALL NOT BE ACCOMPLISHED BY USE OF TOENAILS OR NAILS SUBJECT TO WITHDRAWAL) [R311.5]. ALL STRINGERS, CUT OR SOLID, SHALL BE A MINIMUM OF 2x12. STAIR STRINGERS SHALL NOT SPAN MORE THAN THE DIMENSIONS SHOWN ON THIS SHEET. IF THE STRINGER SPAN EXCEEDS THESE DIMENSIONS, THEN A 4x4 POST MAY BE PROVIDED TO SUPPORT THE STRINGER AND SHORTEN ITS SPAN LENGTH. THE 4x4 POST SHALL BE NOTCHED AND BOLTED TO THE STRINGER WITH (2) 1/2" DIAMETER THROUGH BOLTS WITH WASHERS. THE POST SHALL BE CENTERED ON A FOOTING THAT IS SIZED IN ACCORDANCE WITH THE TABLES ON SHEETS S22 AND S23. STAIRWAYS SHALL BE A MINIMUM OF 36 INCHES IN CLEAR WIDTH AT ALL POINTS ABOVE THE HANDRAIL HEIGHT; THE CLEAR WIDTH OF STAIRWAYS AT AND BELOW THE ACTUAL HANDRAIL HEIGHT SHALL NOT BE LESS THAN 31-1/2 INCHES WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES WHERE A HANDRAIL IS INSTALLED ON BOTH SIDES [R311.7.1]. A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE GREATER THAN 12 FEET 7 INCHES BETWEEN THE TOP OF DECK AND FINISH GRADE (INTERMEDIATE LANDINGS ARE BEYOND THE SCOPE OF THIS PLAN AND WOULD REQUIRE LOCAL APPROVAL) [R311.7.3]. LANDINGS HAVING A MINIMUM DIMENSION OF 36 INCHES IN THE DIRECTION OF TRAVEL AND WIDTH PERPENDICULAR TO TRAVEL NOT LESS THAN THE WIDTH OF THE FLIGHT SERVED ARE REQUIRED AT THE TOP AND BOTTOM OF THE STAIRWAY [R311.7.6]. THE TOP LANDING OF STAIRWAYS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE [R303.8]. APPROVED GUARDS COMPLYING WITH SECTION R301.5 AND R312 SHALL BE PROVIDED ON OPEN SIDES OF STAIRWAYS HAVING A TOTAL RISE OF 30 INCHES OR MORE [R312.1.1].

STAIRWAY HANDRAIL REQUIREMENTS [R311.7.8]

ALL STAIRWAYS WITH 4 OR MORE RISERS SHALL HAVE A HANDRAIL ON AT LEAST ONE SIDE [R311.7.8]. THE HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, SHALL NOT BE LESS THAN 30 INCHES (OR 34 INCHES WHERE INCORPORATED AS THE TOP OF A GUARD) AND NOT MORE THAN 38 INCHES [R311.7.8.1]. HANDRAILS SHALL NOT PROJECT MORE THAN 4-1/2 INCHES ON EITHER SIDE OF THE STAIRWAY [R311.7.8.2]. HANDRAILS ADJACENT TO A WALL OR GUARD SHALL HAVE A SPACE OF NOT LESS THAN 1-1/2 INCHES BETWEEN THE WALL OR GUARD AND THE HANDRAIL [R311.7.8.3]. A HANDRAIL END SHALL BE RETURNED TO ITSELF OR TOWARD A WALL, GUARD OR WALKING SURFACE, OR SHALL TERMINATE TO A POST. HANDRAILS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE STAIRWAY, FROM A POINT DIRECTLY ABOVE THE TOP RISER TO A POINT DIRECTLY ABOVE THE LOWEST RISER, EXCEPT THAT A HANDRAIL RETURN OR STARTING EASING IS ALLOWED TO BEGIN/TERMINATE OVER THE LOWEST TREAD AND OVER THE TOP LANDING [R311.7.8.4]. REQUIRED HANDRAILS SHALL BE OF TYPE I OR TYPE II AS SHOWN IN DETAIL 4/S7 OR PROVIDE EQUIVALENT GRASPABILITY. EDGES OF HANDRAILS SHALL HAVE RADIUS OF NOT LESS THAN 0.01 INCH (NO SHARP CORNERS).



WHERE USING SHEETS S8-S11 FOR CUT STRINGERS STAIRWAY CONSTRUCTION, THE PERMIT APPLICANT SHALL PROVIDE THEIR PROJECT-SPECIFIC CUT STRINGER AND FOOTING INFORMATION BELOW PRIOR TO PERMIT APPLICATION:



1
S8
NTS

Cut Stringers Option - Perspective

[N] CUT STRINGERS

Species: _____
Cut Stringer Span Length (CSSL): _____ ft. - _____ in.

[J] CUT STRINGERS SUPPORT FOOTING

Tributary area = (CSSL/2 + 1ft)(0.75ft): _____ ft.²
Size: _____ in. square round Thickness: _____ in.

[K] CUT STRINGERS SUPPORT FOOTING

Tributary area = (CSSL/2 + 1ft)(1.5ft): _____ ft.²
Size: _____ in. square round Thickness: _____ in.

[L] CUT STRINGERS SUPPORT FOOTING

Not applicable / Not used
Tributary area = (CSSL)(0.75ft): _____ ft.²
Size: _____ in. square round Thickness: _____ in.

[M] CUT STRINGERS SUPPORT FOOTING

Not applicable / Not used
Tributary area = (CSSL)(1.5ft): _____ ft.²
Size: _____ in. square round Thickness: _____ in.



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2023 ORSC

REVISIONS	NO.	DATE

Cut Stringers
Stairways
Sheet

S8



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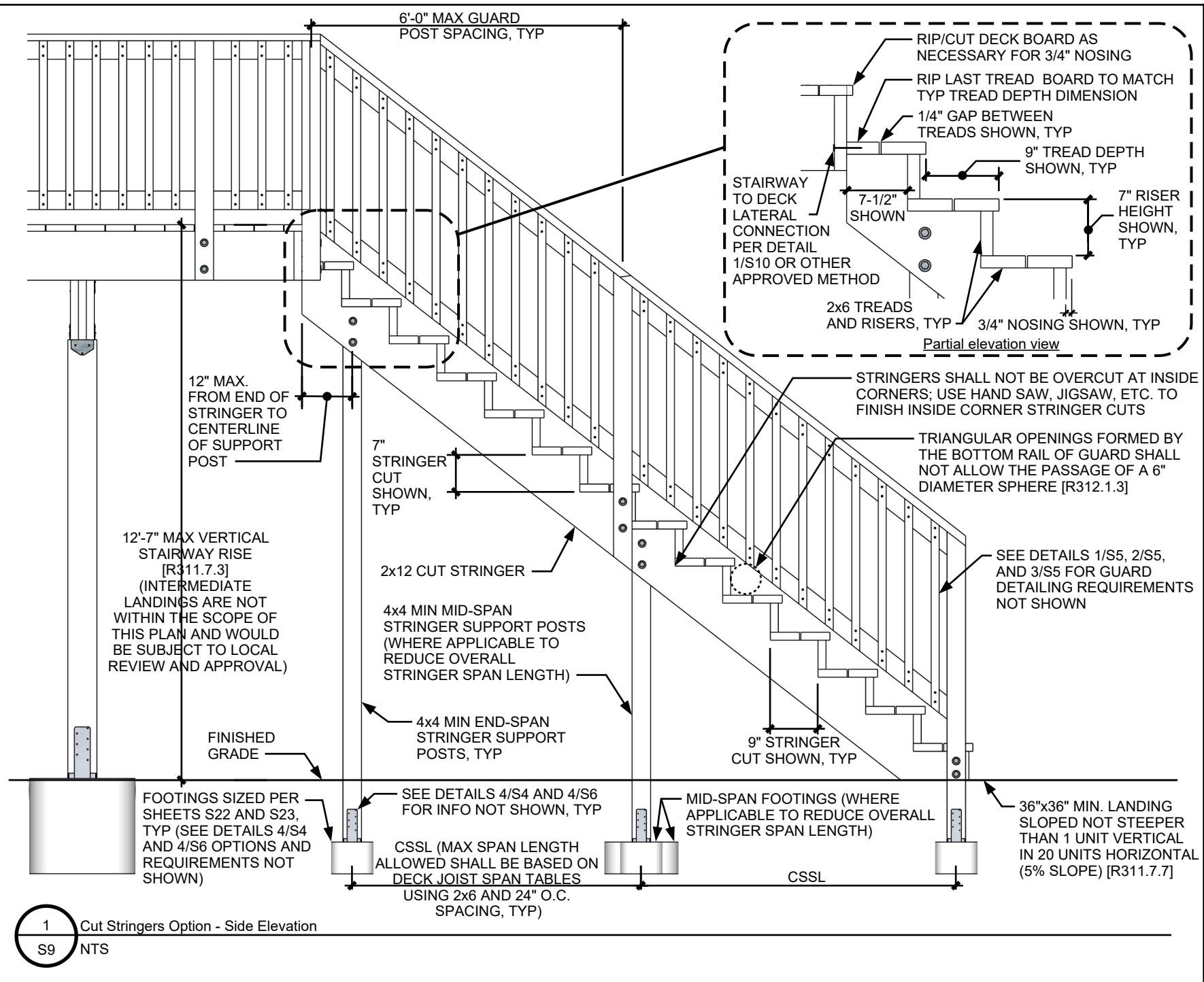
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EXTERIOR DECK

2023 ORSC

PERMIT-READY PLAN



REVISIONS	NO.	DATE

Cut Stringers
Stairways
Sheet

S9



BCD

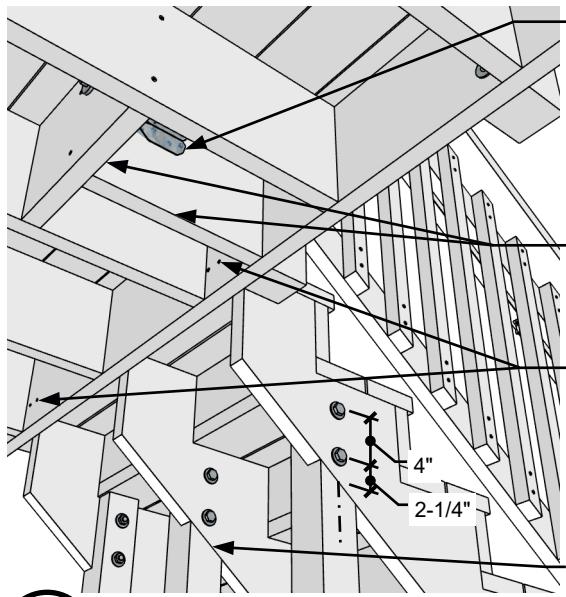
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Division

Department of
Consumer and
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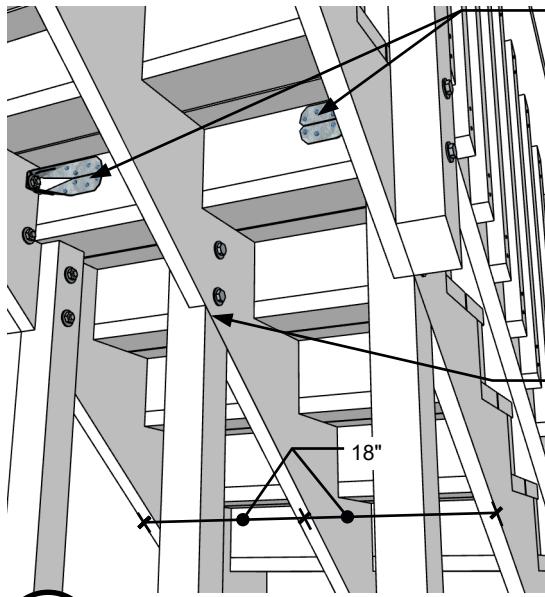
EXTERIOR DECK

2023 ORSC

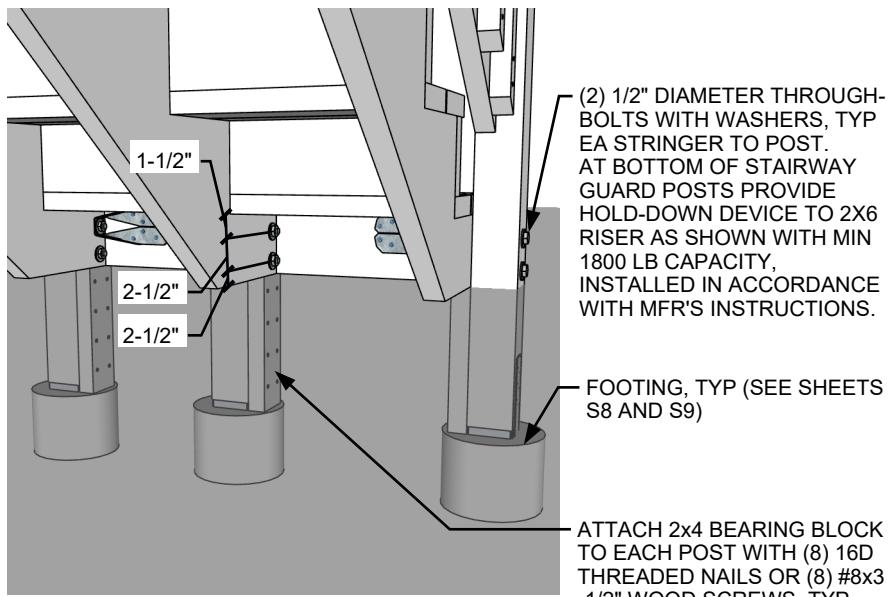
PERMIT-READY PLAN



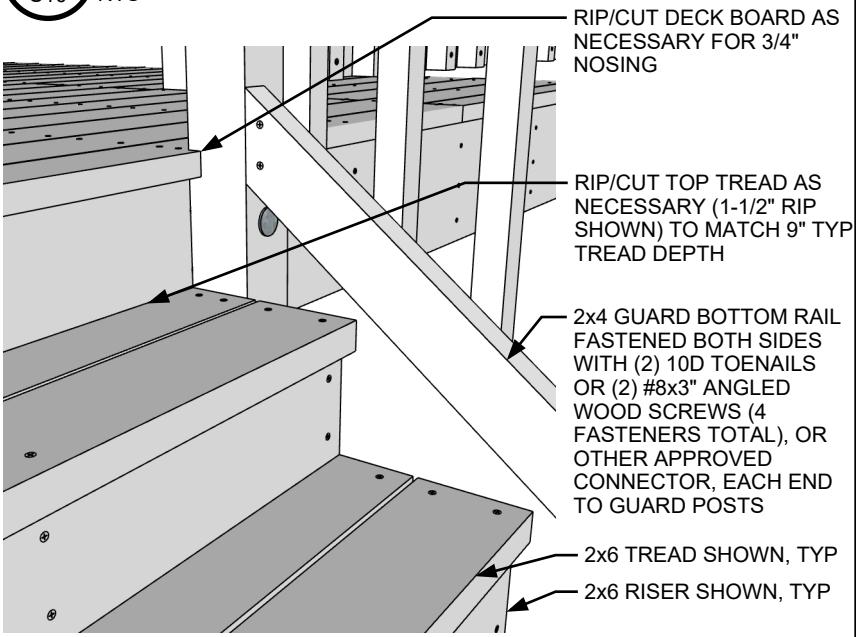
1 Top of stairway (from below)
S10 NTS



2 Mid-height of stairway
S10 NTS



3 Bottom of stairway
S10 NTS



4 Top of stairway (from above)
S10 NTS

REVISIONS	NO.	DATE

Cut Stringers
Stairways
Sheet

S10



BCD

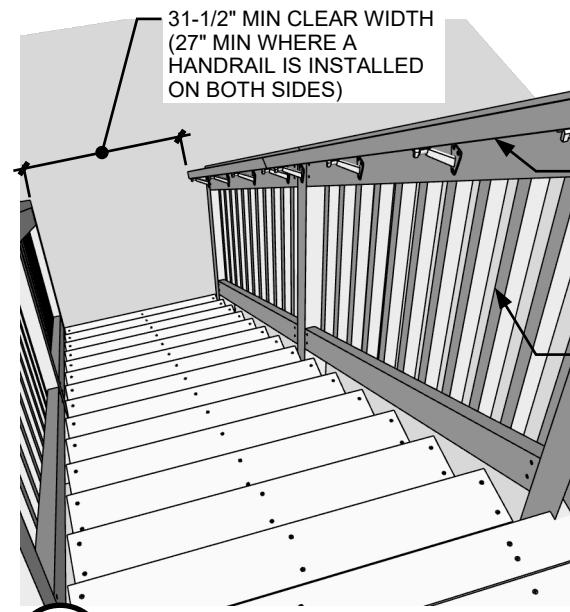
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Division

Department of
Consumer and
Business Services

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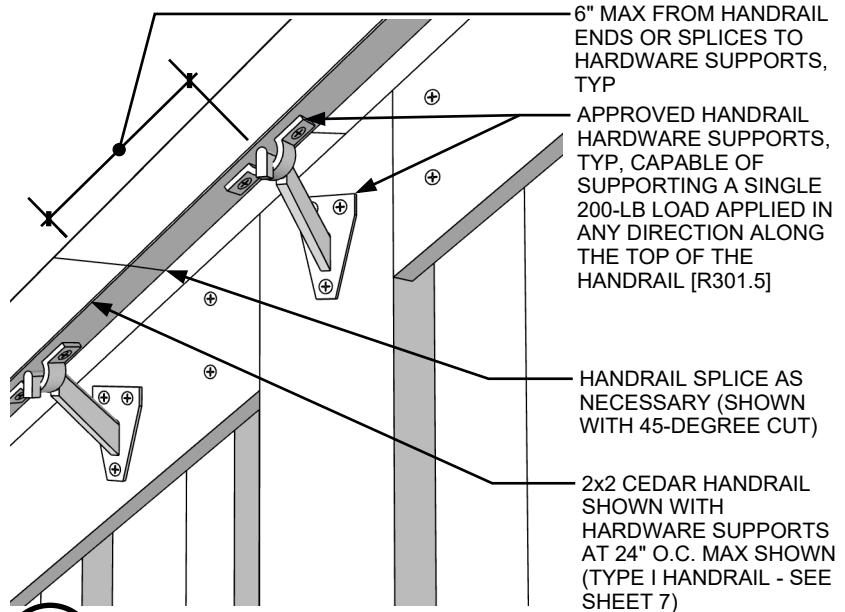
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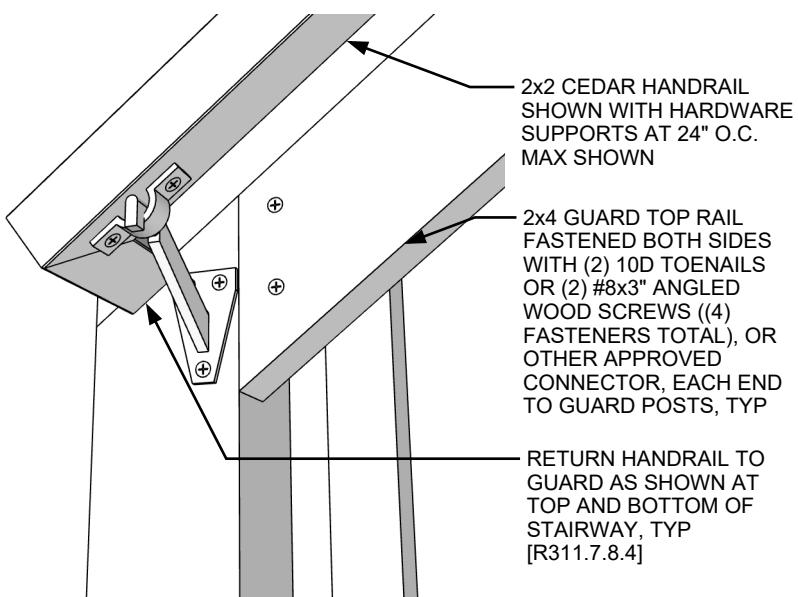


1 Stairway with guards and handrail
S11 NTS

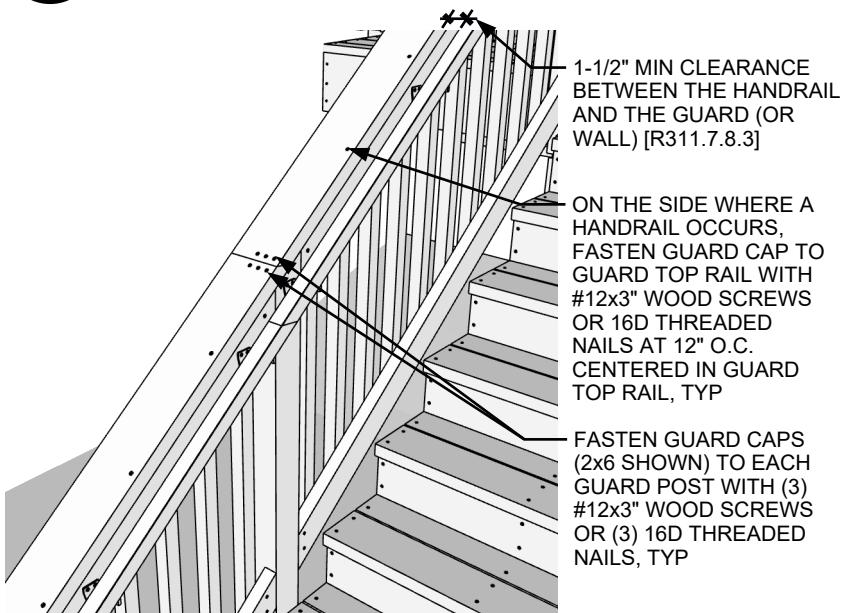
AN APPROVED HANDRAIL SHALL BE PROVIDED ON AT LEAST ONE SIDE OF STAIRWAYS HAVING FOUR OR MORE RISERS [R311.7.8]
APPROVED GUARDS SHALL BE PROVIDED ON OPEN SIDES OF STAIRWAYS HAVING A TOTAL RISE OF 30 INCHES OR MORE [R312.1.1]



2 Handrail splice
S11 NTS



3 Bottom of handrail
S11 NTS



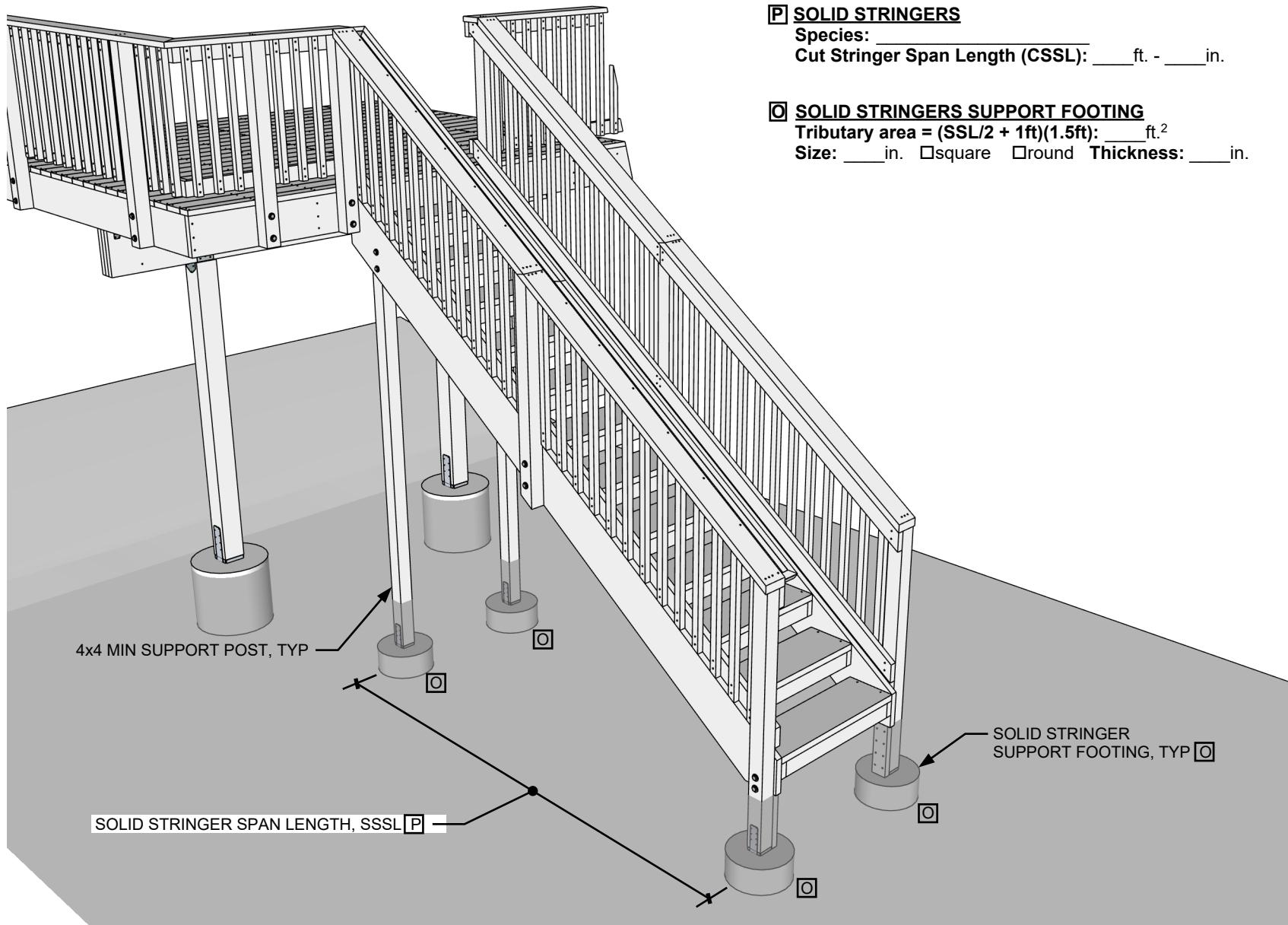
4 Guard caps and handrail
S11 NTS

REVISIONS	NO.	DATE

Cut Stringers
Stairways
Sheet

S11

WHERE USING SHEETS S12-S15 FOR SOLID STRINGERS STAIRWAY CONSTRUCTION, THE PERMIT APPLICANT SHALL PROVIDE THEIR PROJECT-SPECIFIC SOLID STRINGER AND FOOTING INFORMATION BELOW PRIOR TO PERMIT APPLICATION:



SOLID STRINGERS

Species: _____
Cut Stringer Span Length (CSSL): _____ ft. - _____ in.

SOLID STRINGERS SUPPORT FOOTING

Tributary area = $(SSL/2 + 1\text{ft})(1.5\text{ft})$: _____ ft.²
Size: _____ in. square round Thickness: _____ in.



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PERMIT-READY PLAN
EXTERIOR DECK
2023 ORSC

REVISIONS
NO. DATE

Solid Stringers
Stairways
Sheet

S12

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S03
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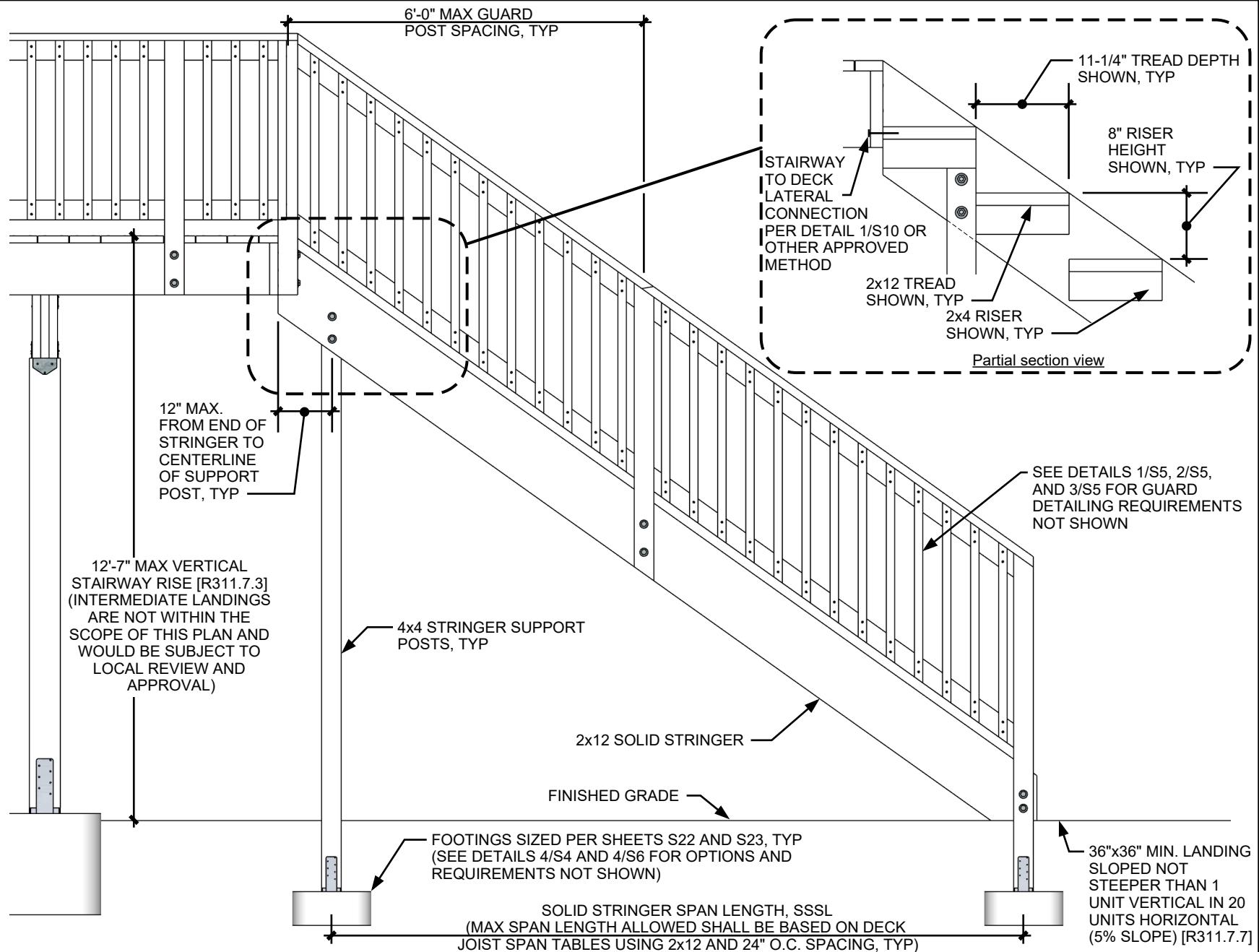
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Department of
Consumer and
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EXTERIOR DECK

2023 ORSC

PERMIT-READY PLAN



1
S03
NTS

SOLID STRINGER SPAN LENGTH, SSSL
(MAX SPAN LENGTH ALLOWED SHALL BE BASED ON DECK
JOIST SPAN TABLES USING 2x12 AND 24" O.C. SPACING, TYP)

REVISIONS	NO.	DATE

Solid Stringers
Stairways
Sheet

S13



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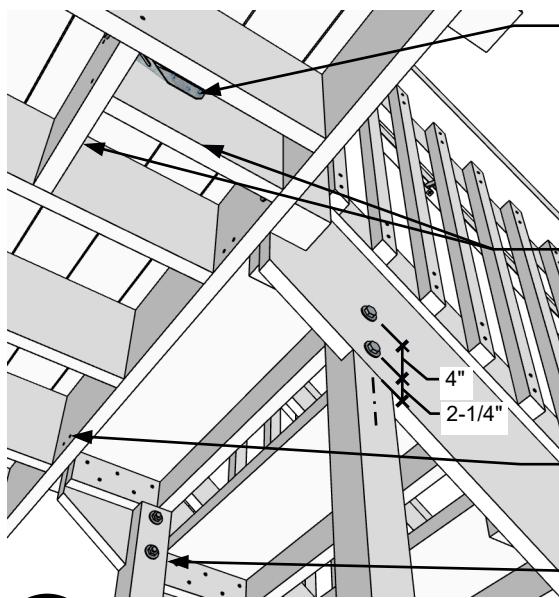
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Division

Department of
Consumer and
Business Services

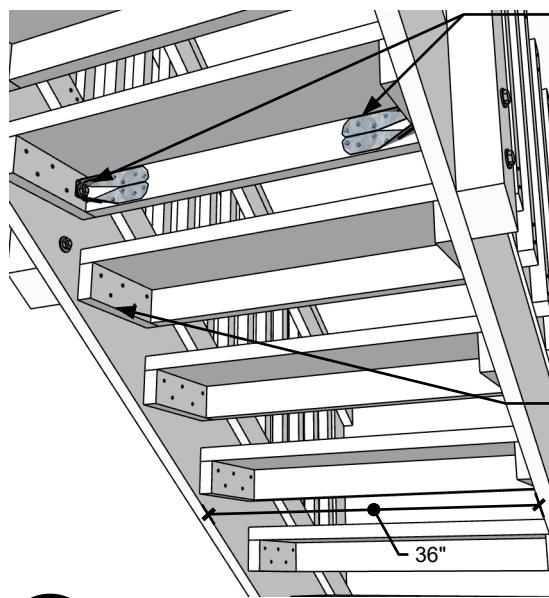
EXTERIOR DECK

2023 ORSC

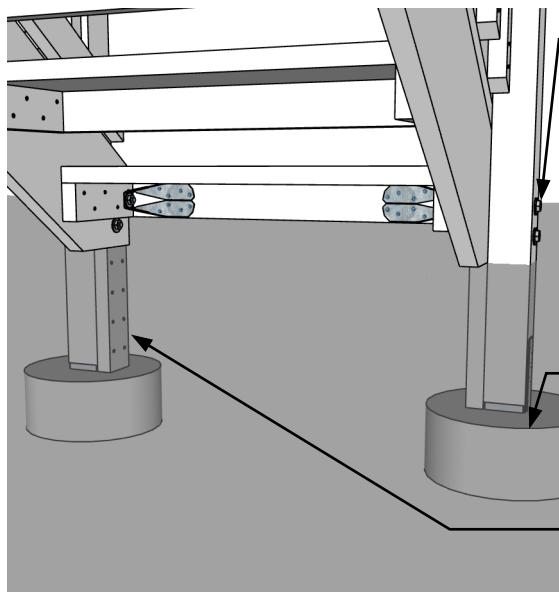
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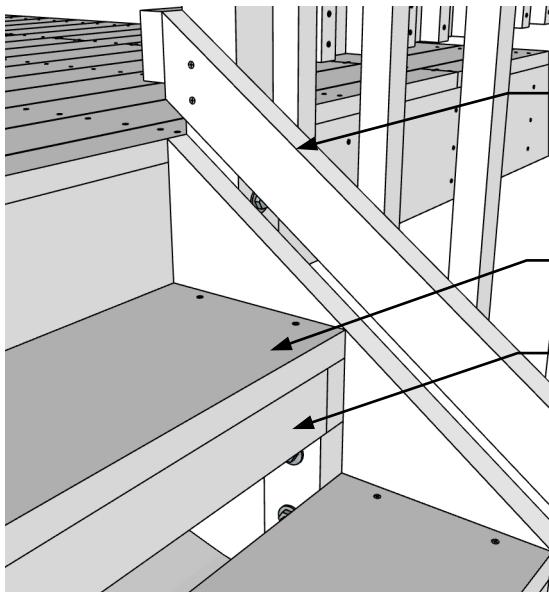
1 Top of stairway (from below)
S14 NTS



2 Mid-height of stairway
S14 NTS



3 Bottom of stairway
S14 NTS



4 Top of stairway (from above)
S14 NTS

REVISIONS	NO.	DATE

Solid Stringers
Stairways
Sheet

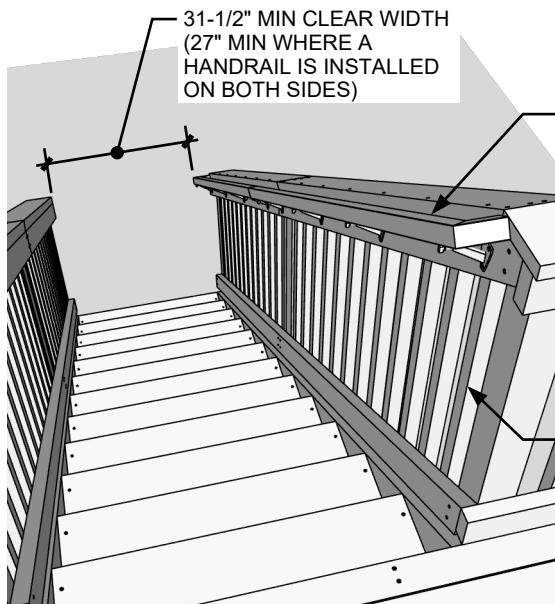
S14

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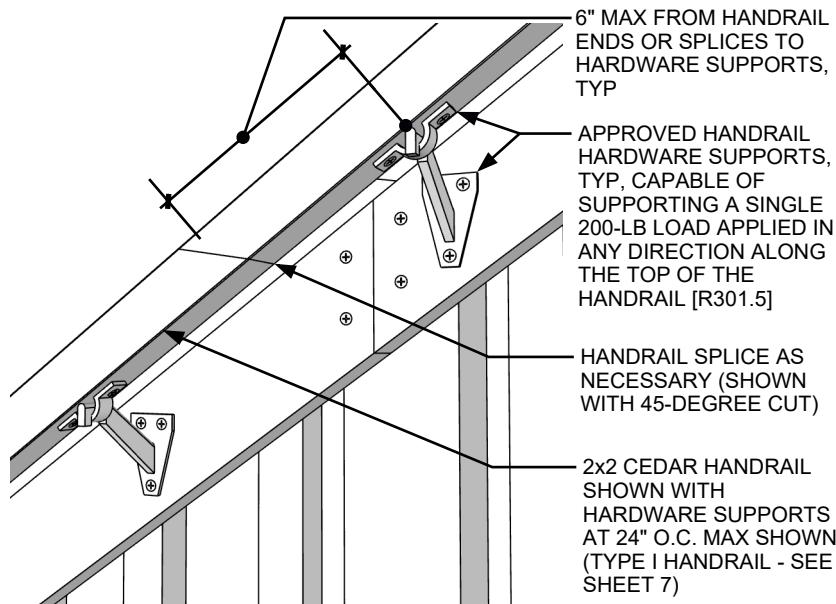
EXTERIOR DECK

2023 ORSC

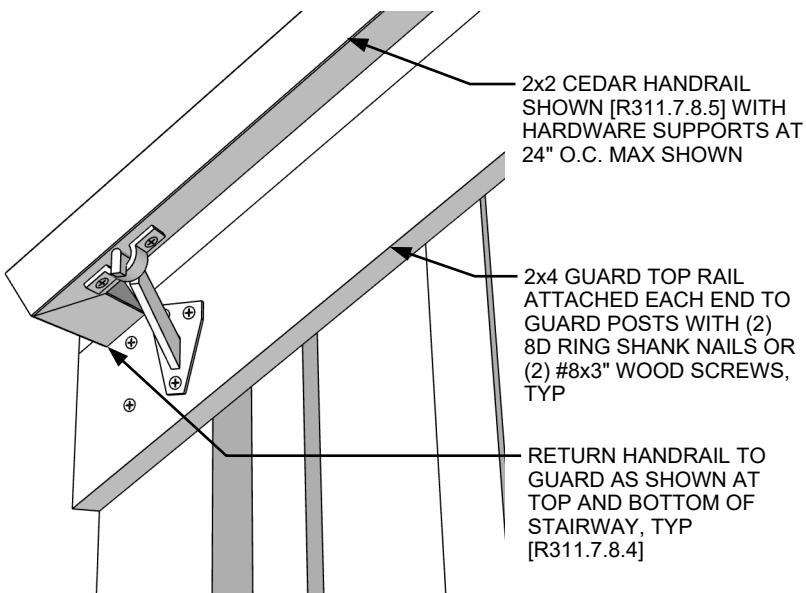
PERMIT-READY PLAN



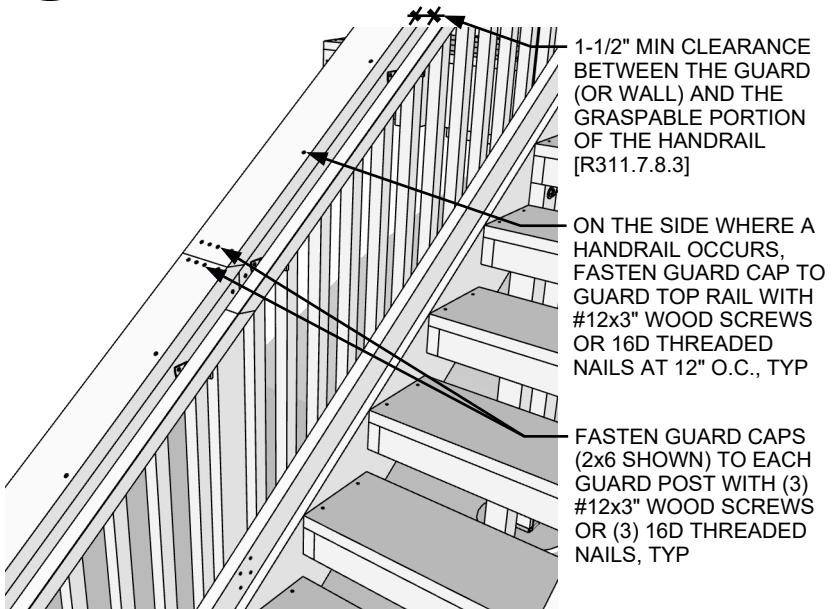
1 Stairway with guards and handrail
S15 NTS



2 Handrail splice
S15 NTS



3 Bottom of handrail
S15 NTS



4 Guard caps and handrail
S15 NTS

REVISIONS	NO.	DATE

Solid Stringers
Stairways
Sheet**S15**



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Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK

PERMIT-READY PLAN

2023 ORSC

Tables
Sheet

S16

MAXIMUM JOIST SPACING FOR DECKING

DECKING MATERIAL TYPE AND NOMINAL SIZE	DECKING PERPENDICULAR 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)			
5/4x wood ^b	12	16	8	12
2x wood	24	24	18	24
Plastic composite ^d	Per decking manufacturer	Per decking manufacturer	Per decking manufacturer	Per decking manufacturer

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.

d. Plastic composite decking materials or their packaging shall bear a label that indicates compliance with ASTM D7032 and maximum allowable span.

1

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

S16

DECK FASTENER AND CONNECTOR SPECIFICATIONS^{a, b}

ITEM	MATERIAL	MINIMUM FINISH/COATING	ALTERNATE FINISH/COATING ^c
Nails and glulam rivets	In accordance with ASTM F1667	Hot-Dipped galvanized per ASTM A153, Class D for 3/8-inch diameter and less	Stainless steel, silicon bronze or copper
Approved wood screws	Per manufacturer's code-compliance report and specification for structural use	Per manufacturer's code-compliance report and specification for exterior use	Per manufacturer's code-compliance report and specification for exterior use
Bolts	In accordance with ASTM A307 (bolts), ASMT A563 (nuts), ASTM F844 (washers)	Hot-Dipped galvanized per ASTM A153, Class C (Class D for 3/8-inch diameter and less) or mechanically galvanized per ASTM B695, Class 55 or 410 stainless steel	Stainless steel, silicon bronze or copper
Lag screws (including nuts and washers)	Per manufacturer's code-compliance report and specification	ASTM A653 Type G185 zinc-coated galvanized steel or post hot-dipped galvanized per ASTM A123 providing a minimum average coating weight of 2.0 oz./ft ² (total both sides)	Stainless steel
Metal connectors	Per manufacturer's code-compliance report and specification	ASTM A653 Type G185 zinc-coated galvanized steel or post hot-dipped galvanized per ASTM A123 providing a minimum average coating weight of 2.0 oz./ft ² (total both sides)	Stainless steel

a. Equivalent materials, coatings and finishes shall be permitted.

b. Fasteners and connectors exposed to salt water or located within 300 feet of a salt water shoreline shall be stainless steel.

c. Stainless-steel-driven fasteners shall be in accordance with ASTM F1667.

2

Deck fastener and connector specifications (from ORSC Table R507.2.3)

S16



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EXTERIOR DECK

2023 ORSC

PERMIT-READY PLAN

REVISIONS
NO. DATE

Tables
Sheet

S17

DECK LEDGER CONNECTION TO BAND JOIST

GROUND SNOW LOAD (psf)	JOIST SPAN ^a (feet)	ON-CENTER SPACING OF FASTENERS ^b (inches)		
		1/2-inch diameter lag screw with 1/2-inch maximum sheathing ^{c, d}	1/2-inch diameter bolt with 1/2-inch maximum sheathing ^d	1/2-inch diameter bolt with 1-inch maximum sheathing ^e
≤ 40	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
≤ 50	6	29	36	36
	8	22	36	35
	10	17	33	28
	12	14	27	23
	14	12	23	20
	16	11	20	17
	18	9	18	15
≤ 60	6	25	36	36
	8	18	35	30
	10	15	28	24
	12	12	23	20
	14	10	20	17
	16	9	17	15
	18	8	15	13
≤ 70	6	22	36	35
	8	16	31	26
	10	13	25	21
	12	11	20	17
	14	9	17	15
	16	8	15	13
	18	7	13	11

a. Interpolation is allowed. Extrapolation is not allowed.

b. Ledgers shall be flashed in accordance with Section R703.4 to prevent water from contacting the house band joist.

c. 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.

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.



BCD

Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK
PERMIT-READY PLAN
2023 ORSC

REVISIONS
NO. DATE

Tables
Sheet

S18

MAXIMUM DECK JOIST SPAN LENGTHS, DJS_L

GROUND SNOW LOAD (psf)	JOIST SPECIES ^a	JOIST SIZE	MAXIMUM DECK JOIST SPAN LENGTH, DJS _L (feet- inches)			MAXIMUM DECK JOIST CANTILEVER LENGTH, DJCL (feet-inches)							
			Joist spacing (inches)			DECK JOIST BACK SPAN LENGTH ^b , DJS _L (feet)							
			12	16	24	4	6	8	10	12	14	16	18
≤ 40	Southern pine	2x6	9-11	9-0	7-7	1-0	1-6	1-5	NP	NP	NP	NP	NP
		2x8	13-1	11-10	9-8	1-0	1-6	2-0	2-6	2-3	NP	NP	NP
		2x10	16-2	14-0	11-5	1-0	1-6	2-0	2-6	3-0	3-4	3-4	NP
		2x12	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, Hem-fir, Spruce-pine-fir	2x6	9-6	8-4	6-10	1-0	1-6	1-4	NP	NP	NP	NP	NP
		2x8	12-6	11-1	9-1	1-0	1-6	2-0	2-3	2-0	NP	NP	NP
		2x10	15-8	13-7	11-1	1-0	1-6	2-0	2-6	3-0	3-3	NP	NP
		2x12	18-0	15-9	12-10	1-0	1-6	2-0	2-6	3-0	3-6	3-11	3-11
	Redwood, Western cedars, Ponderosa pine, Red pine	2x6	8-10	8-0	6-10	1-0	1-4	1-1	NP	NP	NP	NP	NP
		2x8	11-8	10-7	8-8	1-0	1-6	2-0	1-11	NP	NP	NP	NP
		2x10	14-11	13-0	10-7	1-0	1-6	2-0	2-6	3-0	2-9	NP	NP
		2x12	17-5	15-1	12-4	1-0	1-6	2-0	2-6	3-0	3-6	3-8	NP
≤ 50	Southern pine	2x6	9-2	8-4	7-4	1-0	1-6	1-5	NP	NP	NP	NP	NP
		2x8	12-1	11-0	9-5	1-0	1-6	2-0	2-5	2-3	NP	NP	NP
		2x10	15-5	13-9	11-3	1-0	1-6	2-0	2-6	3-0	3-1	NP	NP
		2x12	18-0	16-2	13-2	1-0	1-6	2-0	2-6	3-0	3-6	3-10	3-10
	Douglas fir-larch, Hem-fir, Spruce-pine-fir	2x6	8-10	8-0	6-8	1-0	1-6	1-4	NP	NP	NP	NP	NP
		2x8	11-7	10-7	8-11	1-0	1-6	2-0	2-3	NP	NP	NP	NP
		2x10	14-10	13-3	10-10	1-0	1-6	2-0	2-6	3-0	3-0	NP	NP
		2x12	17-9	15-5	12-7	1-0	1-6	2-0	2-6	3-0	3-6	3-8	NP
	Redwood, Western cedars, Ponderosa pine, Red pine	2x6	8-3	7-6	6-6	1-0	1-4	1-1	NP	NP	NP	NP	NP
		2x8	10-10	9-10	8-6	1-0	1-6	2-0	1-11	NP	NP	NP	NP
		2x10	13-10	12-7	10-5	1-0	1-6	2-0	2-6	2-9	NP	NP	NP
		2x12	16-10	14-9	12-1	1-0	1-6	2-0	2-6	3-0	3-5	3-5	NP

NP = Not Permitted

a. No. 2 grade.

b. Interpolation is allowed. Extrapolation is not allowed.



BCD

Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK
PERMIT-READY PLAN
2023 ORSC

REVISIONS NO.	DATE

Tables
Sheet

S19

MAXIMUM DECK JOIST SPAN LENGTHS, DJS_L

GROUND SNOW LOAD (psf)	JOIST SPECIES ^a	JOIST SIZE	MAXIMUM DECK JOIST SPAN LENGTH, DJS _L (feet- inches)			MAXIMUM DECK JOIST CANTILEVER LENGTH, DJCL (feet-inches)							
			Joist spacing (inches)			DECK JOIST BACK SPAN LENGTH ^b , DJS _L (feet)							
			12	16	24	4	6	8	10	12	14	16	18
≤ 60	Southern pine	2x6	8-8	7-10	6-10	1-0	1-6	1-5	NP	NP	NP	NP	NP
		2x8	11-5	10-4	8-9	1-0	1-6	2-0	2-4	NP	NP	NP	NP
		2x10	14-7	12-9	10-5	1-0	1-6	2-0	2-6	2-11	2-11	NP	NP
		2x12	17-3	15-0	12-3	1-0	1-6	2-0	2-6	3-0	3-6	3-7	NP
	Douglas fir-larch, Hem-fir, Spruce-pine-fir	2x6	8-4	7-6	6-2	1-0	1-6	1-4	NP	NP	NP	NP	NP
		2x8	10-11	9-11	8-3	1-0	1-6	2-0	2-2	NP	NP	NP	NP
		2x10	13-11	12-4	10-0	1-0	1-6	2-0	2-6	2-10	NP	NP	NP
		2x12	16-6	14-3	11-8	1-0	1-6	2-0	2-6	3-0	3-5	3-5	NP
	Redwood, Western cedars, Ponderosa pine, Red pine	2x6	7-9	7-0	6-2	1-0	1-4	NP	NP	NP	NP	NP	NP
		2x8	10-2	9-3	7-11	1-0	1-6	2-0	1-11	NP	NP	NP	NP
		2x10	13-0	11-9	9-7	1-0	1-6	2-0	2-6	2-7	NP	NP	NP
		2x12	15-9	13-8	11-2	1-0	1-6	2-0	2-6	3-0	3-2	NP	NP
≤ 70	Southern pine	2x6	8-3	7-6	6-5	1-0	1-6	1-5	NP	NP	NP	NP	NP
		2x8	10-10	9-10	8-2	1-0	1-6	2-0	2-2	NP	NP	NP	NP
		2x10	13-9	11-11	9-9	1-0	1-6	2-0	2-6	2-9	NP	NP	NP
		2x12	16-2	14-0	11-5	1-0	1-6	2-0	2-6	3-0	3-5	3-5	NP
	Douglas fir-larch, Hem-fir, Spruce-pine-fir	2x6	7-11	7-1	5-9	1-0	1-6	NP	NP	NP	NP	NP	NP
		2x8	1-05	9-5	7-8	1-0	1-6	2-0	2-1	NP	NP	NP	NP
		2x10	13-3	11-6	9-5	1-0	1-6	2-0	2-6	2-8	NP	NP	NP
		2x12	15-5	13-4	10-11	1-0	1-6	2-0	2-6	3-0	3-3	NP	NP
	Redwood, Western cedars, Ponderosa pine, Red pine	2x6	7-4	6-8	5-10	1-0	1-4	NP	NP	NP	NP	NP	NP
		2x8	9-8	8-10	7-4	1-0	1-6	1-11	NP	NP	NP	NP	NP
		2x10	12-4	11-0	9-0	1-0	1-6	2-0	2-6	2-6	NP	NP	NP
		2x12	14-9	12-9	10-5	1-0	1-6	2-0	2-6	3-0	3-0	NP	NP

NP = Not Permitted

a. No. 2 grade.

b. Interpolation is allowed. Extrapolation is not allowed.

1

Maximum Deck Joist Span Lengths For Ground Snow Loads ≤ 60 PSF and ≤ 70 PSF (from ORSC Table R507.6)

S19



BCD

Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK

2023 ORSC

PERMIT-READY PLAN

REVISIONS
NO. | DATE

Tables
Sheet

S20

MAXIMUM DECK POST HEIGHTS

GROUND SNOW LOAD (psf)	POST SPECIES ^a	POST SIZE	TRIBUTARY AREA (ft ²) ^{b, c}							
			20	40	60	80	100	120	140	160
			MAXIMUM DECK POST HEIGHT ^a (feet-inches)							
≤ 40	Southern pine	4x4	14-0	13-8	11-0	9-5	5-4	7-5	6-9	6-2
		4x6	14-0	14-0	13-11	12-0	10-8	9-8	8-10	8-2
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Douglas fir-larch, Hem-fir, Spruce-pine-fir	4x4	14-0	13-6	10-10	9-3	8-0	7-0	6-2	5-3
		4x6	14-0	14-0	13-10	11-10	10-6	9-5	8-7	7-10
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Redwood, Western cedars, Ponderosa pine, Red pine	4x4	14-0	13-2	10-3	8-1	5-8	NP	NP	NP
		4x6	14-0	14-0	13-6	11-4	9-9	8-4	6-9	4-7
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	13-7	9-7
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
≤ 50	Southern pine	4x4	14-0	12-2	9-10	8-5	7-5	6-7	5-11	5-4
		4x6	14-0	14-0	12-6	10-9	9-6	8-7	7-10	7-3
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	14-0	13-4
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Douglas fir-larch, Hem-fir, Spruce-pine-fir	4x4	14-0	12-1	9-8	8-2	7-1	6-2	5-3	4-2
		4x6	14-0	14-0	12-4	10-7	9-4	8-4	7-7	6-11
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	14-0	12-10
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Redwood, Western cedars, Ponderosa pine, Red pine	4x4	14-0	11-8	9-0	6-10	3-7	NP	NP	NP
		4x6	14-0	14-0	12-0	10-0	8-6	7-0	5-3	NP
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	10-8	2-4
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0

NP = Not Permitted

a. Measured from the underside of the beam to the top of footing or pier.

b. Deck floor area, in square feet, supported by post and footing.

c. Interpolation is allowed. Extrapolation is not allowed.





BCD

Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK
PERMIT-READY PLAN
2023 ORSC

REVISIONS	NO.	DATE

Tables
Sheet

S21

MAXIMUM DECK POST HEIGHTS

GROUND SNOW LOAD (psf)	POST SPECIES ^a	POST SIZE	TRIBUTARY AREA (ft ²) ^{b, c}							
			20	40	60	80	100	120	140	160
			MAXIMUM DECK POST HEIGHT ^a (feet-inches)							
≤ 60	Southern pine	4x4	14-0	11-1	8-11	7-7	6-7	5-10	5-2	4-6
		4x6	14-0	14-0	11-4	9-9	8-7	7-9	7-1	6-6
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	12-9	11-2
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Douglas fir-larch, Hem-fir, Spruce-pine-fir	4x4	14-0	10-11	8-8	7-3	6-2	5-0	3-7	NP
		4x6	14-0	13-11	11-2	9-7	8-4	7-5	6-8	5-11
		6x6	14-0	14-0	14-0	14-0	14-0	14-0	12-2	10-2
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Redwood, Western cedars, Ponderosa pine, Red pine	4x4	14-0	10-6	7-9	4-7	NP	NP	NP	NP
		4x6	14-0	13-7	10-9	8-9	7-0	4-9	NP	NP
		6x6	14-0	14-0	14-0	14-0	14-0	9-9	NP	NP
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
≤ 70	Southern pine	4x4	14-0	10-2	8-2	6-11	5-11	5-2	4-4	3-4
		4x6	14-0	12-11	10-5	8-11	7-10	7-1	6-5	5-10
		6x6	14-0	14-0	14-0	14-0	14-0	12-9	10-11	8-7
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Douglas fir-larch, Hem-fir, Spruce-pine-fir	4x4	14-0	10-1	7-11	6-6	5-3	3-7	NP	NP
		4x6	14-0	12-10	10-3	8-9	7-7	6-8	5-10	4-11
		6x6	14-0	14-0	14-0	14-0	14-0	12-2	9-9	5-9
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0
	Redwood, Western cedars, Ponderosa pine, Red pine	4x4	14-0	9-5	6-5	NP	NP	NP	NP	NP
		4x6	14-0	12-6	9-8	7-7	5-3	NP	NP	NP
		6x6	14-0	14-0	14-0	14-0	10-8	NP	NP	NP
		8x8	14-0	14-0	14-0	14-0	14-0	14-0	14-0	14-0

NP = Not Permitted

a. Measured from the underside of the beam to the top of footing or pier.

b. Deck floor area, in square feet, supported by post and footing.

c. Interpolation is allowed. Extrapolation is not allowed.



BCD

Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK
PERMIT-READY PLAN
2023 ORSC

REVISIONS
NO. | DATE

Tables
Sheet

S22

MINIMUM DECK FOOTING SIZES

GROUND SNOW LOAD (psf)	TRIBUTARY AREA ^b (ft ²)	LOAD-BEARING VALUE OF SOIL ^{a, c, d} (psf)								
		1,500			2,000			≥ 3,000		
		Side length of square footing (inches)	Diameter of round footing (inches)	Thickness (inches)	Side length of square footing (inches)	Diameter of round footing (inches)	Thickness (inches)	Side length of square footing (inches)	Diameter of round footing (inches)	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
≤ 50	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
	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

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

b. Deck floor area, in square feet, supported by post and footing.

c. Interpolation is allowed. Extrapolation is not allowed.

d. A default value of 1,500 psf shall be used unless otherwise required or approved by the building official.



BCD

Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK
PERMIT-READY PLAN
2023 ORSC

REVISIONS
NO. | DATE

Tables
Sheet

S23

MINIMUM DECK FOOTING SIZES

GROUND SNOW LOAD (psf)	TRIBUTARY AREA ^b (ft ²)	LOAD-BEARING VALUE OF SOIL ^{a, c, d} (psf)								
		1,500			2,000			≥ 3,000		
		Side length of square footing (inches)	Diameter of round footing (inches)	Thickness (inches)	Side length of square footing (inches)	Diameter of round footing (inches)	Thickness (inches)	Side length of square footing (inches)	Diameter of round footing (inches)	Thickness (inches)
≤ 60	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
	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
≤ 70	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
	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

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

b. Deck floor area, in square feet, supported by post and footing.

c. Interpolation is allowed. Extrapolation is not allowed.

d. A default value of 1,500 psf shall be used unless otherwise required or approved by the building official.



BCD

Building Codes
Division

Department of
Consumer and
Business Services

EXTERIOR DECK

2023 ORSC

PERMIT-READY PLAN

REVISIONS
NO. DATE

Tables
Sheet

S24

MAXIMUM DECK BEAM SPAN LENGTHS, DBSL - \leq 40 PSF GROUND SNOW LOAD

JOIST SPAN (feet)	DECK JOIST SPAN LENGTH, DJSL, AND DECK JOIST CANTILEVER LENGTH ^b , DJCL (feet & 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	
BEAM SPECIES ^a	BEAM SIZE ^e	MAXIMUM DECK BEAM SPAN LENGTH ^{b,c,d} , DBSL (feet-inches)									
Southern pine	1-2x6	4-10	4-7	4-3	4-0	3-7	3-5	3-3	3-0	2-10	2-8
	1-2x8	6-4	5-11	5-6	5-1	4-7	4-4	4-2	3-10	3-7	3-5
	1-2x10	7-6	7-0	6-6	6-0	5-5	5-2	4-11	4-7	4-3	4-0
	1-2x12	8-8	8-3	7-8	7-1	6-4	6-1	5-10	5-5	5-0	4-9
	2-2x6	7-4	6-11	6-5	5-11	5-4	5-1	4-10	4-6	4-3	4-0
	2-2x8	9-4	8-9	8-2	7-7	6-9	6-5	6-2	5-9	5-4	5-0
	2-2x10	11-0	10-4	9-8	9-0	8-0	7-8	7-4	6-9	6-4	6-0
	2-2x12	13-0	12-2	11-4	10-7	9-5	9-0	8-7	8-0	7-5	7-0
	3-2x6	9-0	8-6	7-11	7-5	6-8	6-4	6-1	5-8	5-3	4-11
	3-2x8	11-7	10-11	10-3	9-6	8-6	8-1	7-9	7-2	6-8	6-4
	3-2x10	13-11	13-0	12-1	11-2	10-0	9-7	9-2	8-6	7-11	7-6
	3-2x12	16-3	15-3	14-3	13-3	11-10	11-3	10-9	10-0	9-4	8-10
Douglas fir-larch, Hem-fir, Spruce-pine-fir	1-2x6	4-5	4-1	3-9	3-6	3-0	2-10	2-8	2-5	2-3	2-1
	1-2x8	5-11	5-6	5-1	4-8	4-0	3-9	3-6	3-2	2-11	2-9
	1-2x10	7-1	6-8	6-3	5-10	5-1	4-9	4-6	4-1	3-9	3-6
	1-2x12	8-3	7-9	7-3	6-9	6-0	5-9	5-6	5-0	3-9	3-6
	2-2x6	6-6	6-1	5-8	5-3	4-9	4-6	4-4	3-11	3-7	3-3
	2-2x8	8-8	8-2	7-7	7-1	6-4	6-0	5-9	5-2	4-8	4-4
	2-2x10	10-8	10-0	9-3	8-7	7-9	7-4	7-0	6-6	6-0	5-6
	2-2x12	12-4	11-7	10-9	10-0	8-11	8-6	8-2	7-7	7-1	6-8
	3-2x6	8-2	7-8	7-2	6-8	6-0	5-9	5-6	5-1	4-9	4-6
	3-2x8	10-11	10-3	9-6	8-10	7-11	7-7	7-3	6-8	6-3	5-11
	3-2x10	13-4	12-6	11-8	10-10	9-8	9-3	8-10	8-2	7-8	7-2
	3-2x12	15-6	14-6	13-6	12-7	11-3	10-9	10-3	9-6	8-11	8-5
Redwood, Western cedars, Ponderosa pine, Red pine	1-2x6	4-5	4-2	3-10	3-7	3-1	2-11	2-9	2-6	2-3	2-2
	1-2x8	5-8	5-4	4-11	4-7	4-1	3-10	3-7	3-3	3-0	2-10
	1-2x10	6-11	6-6	6-0	5-7	5-0	4-9	4-7	4-2	3-10	3-7
	1-2x12	8-0	7-6	7-0	6-6	5-10	5-7	5-4	4-11	4-7	4-4
	2-2x6	6-7	6-2	5-9	5-4	4-10	4-7	4-5	4-0	3-8	3-4
	2-2x8	8-4	7-10	7-4	6-10	6-1	5-10	5-7	5-2	4-10	4-5
	2-2x10	12-2	9-7	8-11	8-4	7-5	7-1	6-9	6-3	5-10	5-6
	2-2x12	11-9	11-1	10-4	9-8	8-7	8-2	7-10	7-3	6-10	6-5
	3-2x6	8-1	7-8	7-2	6-9	6-0	5-9	5-6	5-1	4-9	4-6
	3-2x8	10-6	9-10	9-2	8-6	7-7	7-3	6-11	6-5	6-0	5-8
	3-2x10	12-9	12-0	11-2	10-5	9-4	8-11	8-6	7-10	7-4	6-11
	3-2x12	14-10	13-11	13-0	12-1	10-9	10-3	9-10	9-1	8-6	8-1

a. No. 2 grade or better.

b. Interpolation is only allowed for conditions with zero Deck Joist Cantilever Length, DJCL. Extrapolation is not allowed.

c. For deck beams supporting a single span of joists with or without joist cantilever.

d. Deck Beam Cantilever Lengths, DBCL, are limited to the actual Deck Beam Span Length, DBSL, divided by 4 (DBSL/4).

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

MAXIMUM DECK BEAM SPAN LENGTHS, DBSL — \leq 50 PSF GROUND SNOW LOAD

JOIST SPAN (feet)	JOIST SPAN (feet)	DECK JOIST SPAN LENGTH, DJSL, AND DECK JOIST CANTILEVER LENGTH ^b , DJCL (feet & 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 ^a	BEAM SIZE ^e	MAXIMUM DECK BEAM SPAN LENGTH ^{b,c,d} , DBSL (feet-inches)									
Southern pine	1-2x6	4-9	4-6	4-2	3-11	3-6	3-4	3-2	2-11	2-9	2-7
	1-2x8	6-2	5-9	5-4	4-11	4-5	4-2	4-0	3-9	3-6	3-3
	1-2x10	7-2	6-9	6-3	5-10	5-3	5-0	4-9	4-5	4-2	3-11
	1-2x12	8-6	8-0	7-5	6-11	6-2	5-11	5-8	5-3	4-11	4-7
	2-2x6	7-1	6-8	6-2	5-9	5-2	4-11	4-9	4-4	4-1	3-10
	2-2x8	9-1	8-6	7-11	7-4	6-7	6-3	6-0	5-7	5-2	4-11
	2-2x10	10-9	10-1	9-5	8-9	7-10	7-5	7-1	6-7	6-2	5-10
	2-2x12	12-9	11-11	11-1	10-3	9-2	8-9	8-5	7-9	7-3	6-10
	3-2x6	8-3	7-11	7-6	7-2	6-6	6-2	5-11	5-6	5-1	4-10
	3-2x8	11-0	10-5	9-10	9-3	8-3	7-10	7-6	6-11	6-6	6-2
	3-2x10	13-6	12-8	11-9	10-11	9-9	8-4	8-11	8-3	7-9	7-3
	3-2x12	15-11	14-11	13-11	12-11	11-6	11-0	10-6	9-9	9-1	8-7
Douglas fir-larch, Hem-fir, Spruce-pine-fir	1-2x6	4-3	4-0	3-8	3-5	2-11	2-9	2-7	2-4	2-2	2-0
	1-2x8	5-9	5-4	4-11	4-7	3-11	3-8	3-5	3-1	2-10	2-8
	1-2x10	7-0	6-7	6-1	5-8	4-11	4-8	4-5	4-0	3-8	3-5
	1-2x12	8-1	7-7	7-1	6-7	5-11	5-7	5-4	4-10	4-6	4-2
	2-2x6	6-5	6-0	5-7	5-2	4-7	4-4	4-2	3-10	3-5	3-2
	2-2x8	8-6	8-0	7-5	6-11	6-2	5-11	5-8	5-0	4-7	4-2
	2-2x10	10-5	9-9	9-1	8-5	7-7	7-3	6-11	6-4	5-10	5-4
	2-2x12	12-1	11-4	10-7	9-10	8-9	8-4	8-0	7-5	6-11	6-6
	3-2x6	8-0	7-6	7-0	6-6	5-9	5-6	5-3	4-11	4-7	4-4
	3-2x8	10-8	10-0	9-4	8-8	7-9	7-5	7-1	6-6	6-1	5-8
	3-2x10	13-1	12-3	11-5	10-7	9-6	9-1	8-8	8-0	7-6	7-0
	3-2x12	15-2	14-3	13-3	12-4	11-0	10-6	10-1	9-4	8-9	8-3
Redwood, Western cedars, Ponderosa pine, Red pine	1-2x6	4-4	4-1	3-9	3-6	3-0	2-10	2-8	2-5	2-3	2-1
	1-2x8	5-6	5-2	4-10	4-6	4-0	3-9	3-6	3-2	2-11	2-9
	1-2x10	6-9	6-4	5-11	5-6	4-11	4-8	4-6	4-1	3-9	3-6
	1-2x12	7-10	7-4	6-10	6-4	5-8	5-5	5-2	4-10	4-6	4-3
	2-2x6	6-6	6-1	5-8	5-3	4-8	4-6	4-4	3-11	3-6	3-3
	2-2x8	8-2	7-8	7-2	6-8	5-11	5-8	5-5	5-0	4-8	4-3
	2-2x10	10-0	9-5	8-9	8-2	7-3	6-11	6-8	6-2	5-9	5-5
	2-2x12	11-8	10-11	10-2	9-5	8-5	8-0	7-8	7-2	6-8	6-3
	3-2x6	7-5	7-1	6-9	6-5	5-11	5-8	5-5	5-0	4-8	4-5
	3-2x8	9-10	9-4	8-10	8-4	7-5	7-1	6-10	6-4	5-11	5-7
	3-2x10	12-6	11-9	10-11	10-2	9-1	8-8	8-4	7-8	7-2	6-9
	3-2x12	14-7	13-8	12-9	11-10	10-7	10-1	9-8	8-11	8-4	7-10

a. No. 2 grade or better.

b. Interpolation is only allowed for conditions with zero Deck Joist Cantilever Length, DJCL. Extrapolation is not allowed.

c. For deck beams supporting a single span of joists with or without joist cantilever.

d. Deck Beam Cantilever Lengths, DBCL, are limited to the actual Deck Beam Span Length, DBSL, divided by 4 (DBSL/4).

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



BCD
Building Codes
Division
Department of
Consumer and
Business Services

EXTERIOR DECK
PERMIT-READY PLAN
2023 ORSC

REVISIONS
NO. DATE

Tables
Sheet

S25

MAXIMUM DECK BEAM SPAN LENGTHS, DBSL — \leq 60 PSF GROUND SNOW LOAD

JOIST SPAN (feet)	JOIST SPAN (feet)	DECK JOIST SPAN LENGTH, DJSL, AND DECK JOIST CANTILEVER LENGTH ^b , DJCL (feet & 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 ^a	BEAM SIZE ^e	MAXIMUM DECK BEAM SPAN LENGTH ^{b,c,d} , DBSL (feet-inches)									
Southern pine	1-2x6	4-5	4-2	3-10	3-7	3-3	3-1	2-11	2-9	2-6	2-5
	1-2x8	5-7	5-3	4-11	4-7	4-1	3-11	3-9	3-5	3-3	3-0
	1-2x10	6-8	6-3	5-10	5-5	4-10	4-7	4-5	4-1	3-10	3-7
	1-2x12	7-11	7-5	6-11	6-5	5-9	5-6	5-3	4-10	4-6	4-3
	2-2x6	6-7	6-2	5-9	5-4	4-9	4-6	4-4	4-0	3-9	3-7
	2-2x8	8-4	7-10	7-4	6-10	6-1	5-10	5-7	5-2	4-10	4-6
	2-2x10	9-10	9-4	8-8	8-1	7-3	6-11	6-7	6-1	5-8	5-4
	2-2x12	11-9	11-0	10-3	9-6	8-6	8-1	7-9	7-2	6-9	6-4
	3-2x6	7-9	7-5	7-1	6-9	6-0	5-9	5-6	5-1	4-9	4-6
	3-2x8	10-4	9-9	9-1	8-6	7-8	7-3	6-11	6-5	6-0	5-8
	3-2x10	12-5	11-8	10-11	10-2	9-1	8-8	8-3	7-8	7-2	6-9
	3-2x12	14-8	13-9	12-10	11-11	10-8	10-2	9-9	9-0	8-5	7-11
Douglas fir-larch, Hem-fir, Spruce-pine-fir	1-2x6	3-11	3-8	3-4	3-1	2-8	2-6	2-4	2-2	2-0	1-10
	1-2x8	5-5	5-0	4-6	4-1	3-6	3-3	3-1	2-10	2-7	2-5
	1-2x10	6-6	6-1	5-7	5-2	4-6	4-3	4-0	3-7	3-4	3-2
	1-2x12	7-7	7-1	6-7	6-1	5-5	5-1	4-10	4-5	4-1	3-10
	2-2x6	5-10	5-6	5-1	4-9	4-3	4-0	3-10	3-5	3-1	2-10
	2-2x8	7-11	7-5	6-11	6-5	5-9	5-4	5-0	4-6	4-1	3-9
	2-2x10	9-7	9-0	8-5	7-10	7-0	6-8	6-4	5-9	5-2	4-10
	2-2x12	11-2	10-6	9-9	9-1	8-1	7-9	7-5	6-10	6-4	5-10
	3-2x6	7-4	6-11	6-5	6-0	5-4	5-1	4-11	4-6	4-2	3-10
	3-2x8	9-10	9-3	8-7	8-0	7-2	6-10	6-6	6-1	5-6	5-0
	3-2x10	12-1	11-4	10-7	9-10	8-9	8-4	8-0	7-5	6-11	6-5
	3-2x12	13-6	13-2	11-9	11-5	10-2	9-9	9-4	8-7	8-1	7-7
Redwood, Western cedars, Ponderosa pine, Red pine	1-2x6	4-0	3-9	3-5	3-2	2-9	2-7	2-5	2-2	2-0	1-11
	1-2x8	5-2	4-10	4-6	4-2	3-7	3-4	3-2	2-11	2-8	2-6
	1-2x10	6-2	5-10	5-5	5-1	4-6	4-3	4-1	3-8	3-5	3-3
	1-2x12	7-3	6-10	6-4	5-11	5-3	5-0	4-10	4-5	4-2	3-11
	2-2x6	5-11	5-7	5-2	4-10	4-4	4-1	3-11	3-6	3-2	2-11
	2-2x8	7-6	7-1	6-7	6-2	5-6	5-3	5-0	4-7	4-2	3-10
	2-2x10	9-3	8-8	8-1	7-6	6-9	6-5	6-2	5-8	5-4	4-11
	2-2x12	10-8	10-1	9-5	8-9	7-10	7-6	7-2	6-7	6-2	5-10
	3-2x6	6-11	6-8	6-4	6-1	5-5	5-2	5-0	4-7	4-3	3-11
	3-2x8	9-3	8-9	8-3	7-9	6-11	6-7	6-4	5-10	5-5	5-3
	3-2x10	11-8	10-11	10-2	9-5	8-5	8-0	7-8	7-3	6-8	6-3
	3-2x12	13-6	12-8	11-9	10-11	9-9	8-4	8-11	8-3	7-9	7-3

a. No. 2 grade or better.

b. Interpolation is only allowed for conditions with zero Deck Joist Cantilever Length, DJCL. Extrapolation is not allowed.

c. For deck beams supporting a single span of joists with or without joist cantilever.

d. Deck Beam Cantilever Lengths, DBCL, are limited to the actual Deck Beam Span Length, DBSL, divided by 4 (DBSL/4).

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



BCD
Building Codes
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Department of
Consumer and
Business Services

PERMIT-READY PLAN
EXTERIOR DECK
2023 ORSC

REVISIONS
NO. DATE

Tables
Sheet

S26

MAXIMUM DECK BEAM SPAN LENGTHS, DBSL — \leq 70 PSF GROUND SNOW LOAD

JOIST SPAN (feet)	JOIST SPAN (feet)	DECK JOIST SPAN LENGTH, DJSL, AND DECK JOIST CANTILEVER LENGTH ^b , DJCL (feet & 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
BEAM SPECIES ^a	BEAM SIZE ^e	MAXIMUM DECK BEAM SPAN LENGTH ^{b,c,d} , DBSL (feet-inches)								
Southern pine	1-2x6	4-2	3-11	3-7	3-4	3-0	2-10	2-9	2-6	2-4
	1-2x8	5-4	4-11	4-8	4-3	3-10	3-8	3-6	3-3	3-0
	1-2x10	6-2	5-10	5-5	5-1	4-6	4-4	4-2	3-10	3-7
	1-2x12	7-4	6-11	6-5	6-0	5-4	5-1	4-11	4-6	4-0
	2-2x6	6-3	5-9	5-4	5-0	4-6	4-3	4-1	3-9	3-6
	2-2x8	7-10	7-4	6-10	6-4	5-8	5-5	5-2	4-10	4-6
	2-2x10	9-6	8-9	8-2	7-7	6-9	6-5	6-2	5-8	5-4
	2-2x12	10-11	10-3	9-7	8-11	8-0	7-7	7-3	6-9	6-3
	3-2x6	7-4	7-0	6-7	6-3	5-7	5-4	5-1	4-9	4-5
	3-2x8	9-10	9-3	8-7	8-0	7-2	6-10	6-6	6-0	5-8
	3-2x10	11-7	10-11	10-2	9-6	8-6	8-1	7-9	7-2	6-8
	3-2x12	13-9	12-11	12-0	11-2	10-0	9-6	9-1	8-5	7-11
Douglas fir-larch, Hem-fir, Spruce-pine-fir	1-2x6	3-8	3-5	3-1	2-10	2-5	2-3	2-2	2-0	1-10
	1-2x8	4-10	4-7	4-1	3-8	3-2	3-0	2-10	2-7	2-5
	1-2x10	6-1	5-8	5-2	4-9	4-1	3-10	3-8	3-4	3-1
	1-2x12	7-0	6-7	6-1	5-8	5-0	4-9	4-6	4-1	3-10
	2-2x6	5-6	5-2	4-10	4-6	4-0	3-8	3-5	3-1	2-10
	2-2x8	7-4	6-11	6-5	6-0	5-3	4-11	4-7	4-1	3-8
	2-2x10	8-11	8-5	7-10	7-4	6-6	6-2	5-10	5-2	4-9
	2-2x12	10-6	9-10	9-2	8-6	7-7	7-3	6-11	6-4	5-9
	3-2x6	6-11	6-6	6-0	5-7	5-0	4-9	4-7	4-2	3-9
	3-2x8	9-3	8-8	8-1	7-6	6-8	6-4	6-1	5-6	5-0
	3-2x10	11-3	10-7	9-10	9-2	8-2	7-10	7-6	6-11	6-4
	3-2x12	13-2	12-4	11-6	10-8	9-7	9-2	8-9	8-1	7-7
Redwood, Western cedars, Ponderosa pine, Red pine	1-2x6	3-9	3-6	3-2	2-11	2-6	2-4	2-3	2-0	1-11
	1-2x8	4-10	4-6	4-2	3-10	3-3	3-1	2-11	2-8	2-6
	1-2x10	5-10	5-6	5-1	4-9	4-2	3-11	3-9	3-5	3-2
	1-2x12	6-9	6-4	5-11	5-6	4-11	4-8	4-6	4-2	3-11
	2-2x6	5-7	5-3	4-11	4-7	4-1	3-9	3-6	3-2	2-11
	2-2x8	7-1	6-8	6-2	5-9	5-2	4-11	4-8	4-2	3-10
	2-2x10	8-8	8-2	7-7	7-1	6-4	6-0	5-9	5-4	4-10
	2-2x12	10-0	9-5	8-9	8-2	7-4	7-0	6-8	6-2	5-5
	3-2x6	6-8	6-4	6-0	5-8	5-1	4-10	4-8	4-3	3-10
	3-2x8	8-10	8-4	7-9	7-3	6-5	6-2	5-11	5-5	4-8
	3-2x10	10-10	10-2	9-6	8-10	7-11	7-6	7-2	6-8	6-3
	3-2x12	12-7	11-10	11-0	10-3	9-2	8-9	8-4	7-9	7-3

a. No. 2 grade or better.

b. Interpolation is only allowed for conditions with zero Deck Joist Cantilever Length, DJCL. Extrapolation is not allowed.

c. For deck beams supporting a single span of joists with or without joist cantilever.

d. Deck Beam Cantilever Lengths, DBCL, are limited to the actual Deck Beam Span Length, DBSL, divided by 4 (DBSL/4).

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



BCD
Building Codes
Division

Department of
Consumer and
Business Services

PERMIT-READY PLAN
EXTERIOR DECK
2023 ORSC

REVISIONS
NO. DATE

Tables
Sheet

S27

**BCD**

Building Codes Division

Department of Consumer and Business Services

EXTERIOR DECK

PERMIT-READY PLAN

2023 ORSC

A DECKING [R507.7] (Sheet S16)

Material: preservative-treated naturally durable (e.g. cedar) plastic composite
 Nominal Size: 2-inch-thick wood 5/4-in-thick wood plastic composite (attach report)
 Orientation: perpendicular to joists diagonal to joists

B JOISTS [R507.6] (Sheets S18-19)

Species: _____
 Size: 2x6 2x8 2x10 2x12

Spacing: 12 in. 16 in. 24 in.

Deck Joist Span Length (DJS): _____ ft. - _____ in.

Deck Joist Cantilever Length (DJCL): _____ ft. - _____ in.

C BEAMS [R507.5] (Sheets S24-27)

Species: _____
 Plies: 1 2 3

Size: 2x6 2x8 2x10 2x12 _____ x _____ (subject to review)

Deck Beam Span Length (DBSL): _____ ft. - _____ in.

Deck Beam Cantilever Length (DBCL): _____ ft. - _____ in.

D POSTS [R507.4] (Sheets S20-S21)

Species: _____
 Height: _____ ft. - _____ in.

End posts & footings tributary area = (DJS/2 + DJCL)(DBSL/2 + DBCL): _____ ft.²

End posts size: 4x4 4x6 6x6 8x8

Mid posts & footings tributary area = (DJS/2 + DJCL)(DBSL): _____ ft.²

Mid posts size: 4x4 4x6 6x6 8x8

E FOOTINGS [R507.3] (Sheets S22-S23 using same tributary area as supported post)

End footings size: _____ in. square round Thickness: _____ in.

Mid footings size: _____ in. square round Thickness: _____ in.

F LEDGER [R507.9.1] (Sheet S17)

Size: 2x8 2x10 2x12

Fasteners: 1/2" through-bolts 1/2" lag screws alternate (attach report)

Fastener spacing: _____ in. on-center

G LATERAL LOAD CONNECTION [R507.9.2]

(4) 750 pound hold-down tension devices (detail 1/S4)
 (2) 1,500 pound hold-down tension devices (detail 2/S6)
 code-compliant alternate (attach details/report)

NOTE: THE PERMIT APPLICANT SHALL PROVIDE THEIR PROJECT-SPECIFIC PRESCRIPTIVE DESIGN BY CHECKING THE APPLICABLE BOXES AND ENTERING THE APPROPRIATE INFORMATION ABOVE PRIOR TO PERMIT APPLICATION.

CLIMATIC DESIGN CRITERIA

The permit applicant shall obtain a site-specific summary report from the Oregon Design Criteria Hub and attach it to this permit-ready plan. The Oregon Design Criteria Hub can be accessed here: <https://www.oregon.gov/bcd/codes-stand/Pages/design-criteria.aspx>.

The summary report provides the ground snow load, frost line depth, and weathering and decay potential needed to check the climatic design criteria boxes below.

GROUND SNOW LOAD (psf) [R301.2]:

40 50 60 70

FROST LINE DEPTH (inches) [R301.2]

12 18 24

WEATHERING POTENTIAL [R301.2]

moderate (use 3,000 psi min concrete)

severe (use 3,500 psi min concrete)

DECAY POTENTIAL [R301.2]

slight moderate

H GUARD SYSTEM [R507.10]

details 1-3/S05 & 1/S06

code-compliant alternate system (attach details/report)

I STAIRWAY [R311.7]

not provided/not applicable (N/A)

cut stringers - see sheets S7-S11 (provide project-specific info on sheet S8)

solid stringers - see sheets S7, S12-S15 (provide project-specific info on sheet S12)

code-compliant alternate system (attach details/report)

REVISIONS	NO.	DATE

Project-Specific Design Parameters Sheet