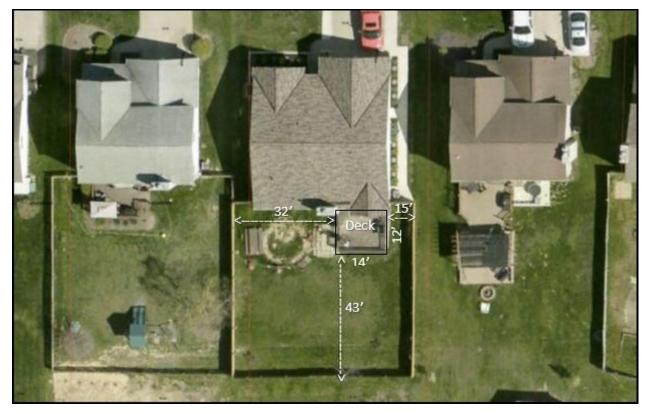
	The City Of The City Of Application	G CERTIFICATE	132 North Elmwood Avenue Phone: 330-722-9030 www.medinaoh.org permits@medinaoh.org			
	Preserving the Past. Forging the Future.	Date of Application				
GENERAL	Property Location TCOV DEStimated cost (omit cents) \$ Scope of Work	Historic District				
ACT INFORMATION	Contractor/Applicant Contractor Address City Phone Email Property Owner Name	State	Zip			
CONTACT	Address City Phone Email					
PROJECT INFORMATION	Type of Use: Single Family Duplex Multi-family #Units	OFFICIAL Base Permit: Sq. Ft x Permit Total: BBS% Fee: Zoning Certificate: Grand Total:	\$			
SIGNATURE & SUBMITTAL	The owner or agent of the owner of this building and undersigned, do hereby covenant Codified Ordinances of the City of Medina pertaining to the performance of work for w approved plans, specifications or manufacturer's instructions submitted herewith, and application, drawings and specifications are to the best of their knowledge, true and co required inspections in a timely manner. Application By:	hich this permit is issued, and in accordance certify that the information and statement rrect. Undersigned accepts responsibility j Date rd agent	re with the ts given on this for requesting all			
Signature Date Zoning Official Date Signature Date Building Official Date HVAC Permit # & Fee (if applicable) Elect Permit # & Fee (if applicable) Planning Application # (if						
0	HVAC Permit # & Fee (if applicable) Elect Permit # & Fee (if applicable) Plumb Permit #	F & Fee (IT applicable) Planning Applic	ation # (if applicable)			

Submittal Requirements

All applications shall be accompanied by two (2) sets of plans, a scope of work which includes a materials list, deck size, height, railings, stairs treads/risers, footers, and whether deck is attached or detached. Also include a site plan with setbacks marked.

The searchable Medina County Auditor's Website at <u>http://gm.medinaco.org/</u> is a good resource to create a site map.

Site map – please mark the location of deck and setbacks – the distance of the deck from the sides and rear of your property.



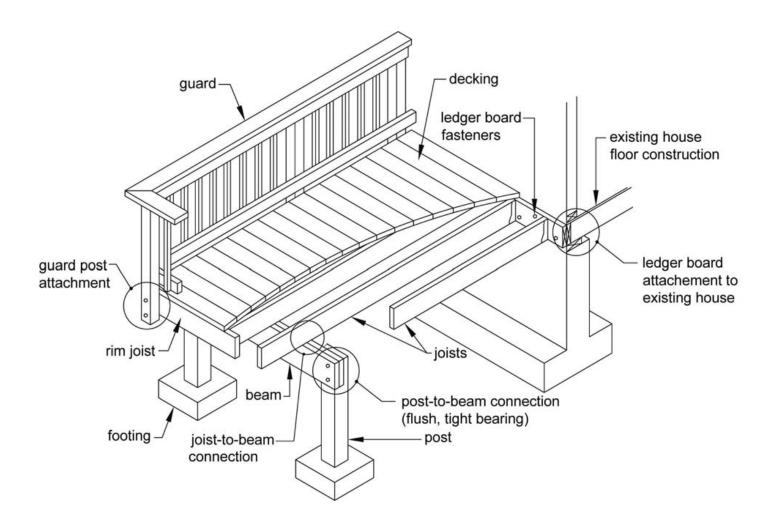


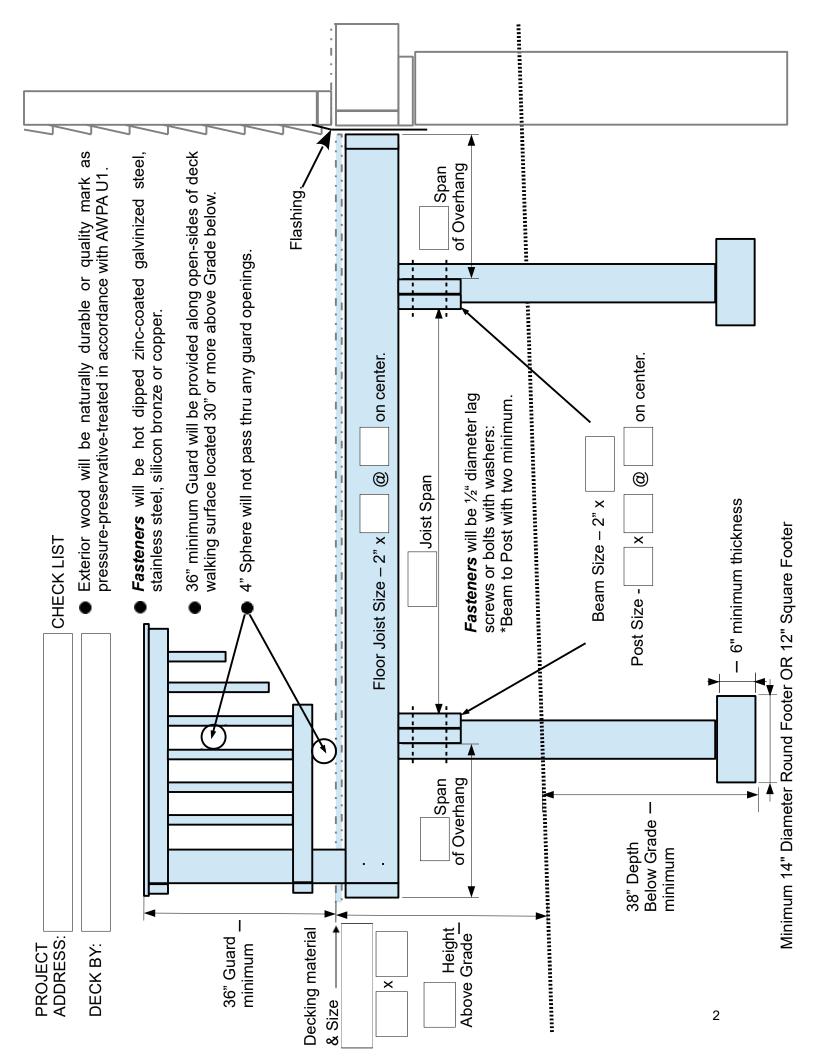
132 North Elmwood Avenue Medina, OH 44256 Phone: 330-722-9030 <u>www.medinaoh.org</u> permits@medinaoh.org

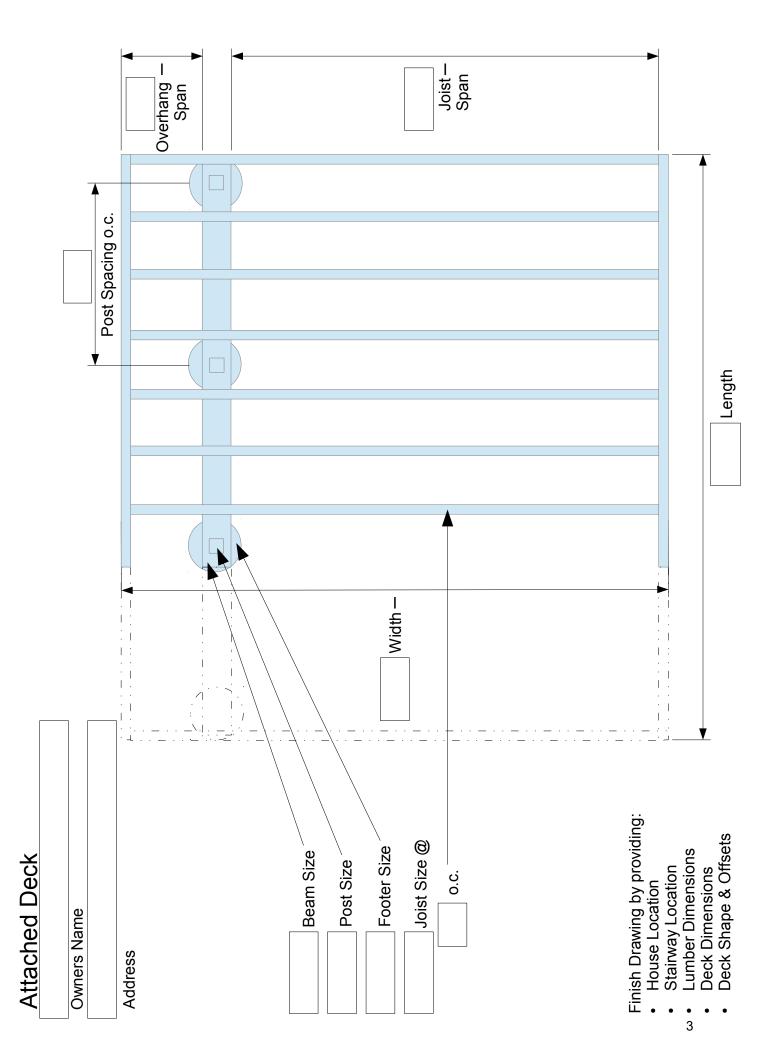
Residential Wood Deck Construction Guide

For Deck Permit submittal, please include the following:

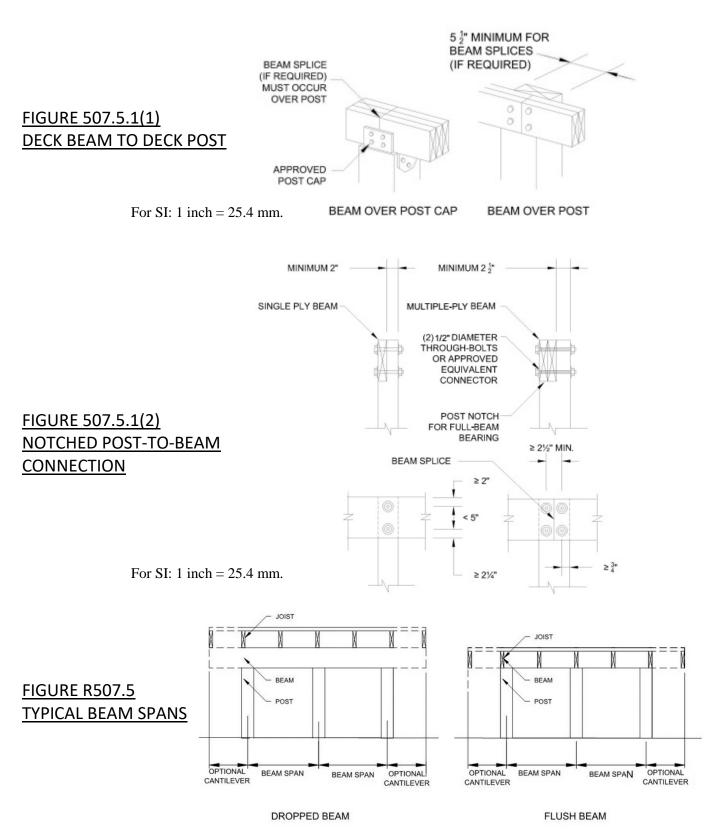
- Completed Deck Permit & Zoning Certificate Application
- 2 Sets of Plans/Drawings
- Scope of Work materials used, size, height, railing, stairs tread/riser, footer, whether attached or detached
- Site Map with setbacks marked distance from deck to sides and rear of property
- Page two (2) and three (3) of this guide, with all boxes filled in







Beams



Beams

Solid sawn or multi-ply beam 6x6 min. post

Prohibited Connection

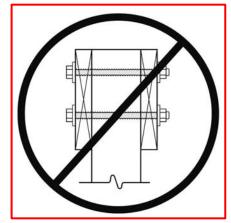


TABLE R507.5 DECK BEAM SPAN LENGTHS^{a,b,g} (feet-inches)

			DECK JOIST SPAN LESS THAN OR EQUAL TO:						
	SIZE ^d	(feet)							
		6	8	10	12	14	16	18	
	1 – 2 x 6	4-11	4-0	3-7	3-3	3-0	2-10	2-8	
	1 – 2 x 8	5-11	5-1	4-7	4-2	2-10	3-7	3-5	
	1 – 2 x 10	7-0	6-0	5-5	4-11	4-7	4-3	4-0	
	1 – 2 x 12	8-3	7-1	6-4	5-10	5-5	5-0	4-9	
	2 – 2 x 6	6-11	5-11	5-4	4-10	4-6	4-3	4-0	
Southern pine	2 – 2 x 8	8-9	7-7	6-9	6-2	5-9	5-4	5-0	
	2 – 2 x 10	10-4	9-0	8-0	7-4	6-9	6-4	6-0	
	2 – 2 x 12	12-2	10-7	9-5	8-7	8-0	7-6	7-0	
	3 – 2 x 6	8-2	7-5	6-8	6-1	5-8	5-3	5-0	
	3 – 2 x 8	10-10	9-6	8-6	7-9	7-2	6-8	6-4	
	3 – 2 x 10	13-0	11-3	10-0	9-2	8-6	7-11	7-6	
	3 – 2 x 12	15-3	13-3	11-10	10-9	10-0	9-4	8-10	
	3 x 6 or 2 – 2 x 6	5-5	4-8	4-2	3-10	3-6	3-1	2-9	
	3 x 8 or 2 – 2 x 8	6-10	5-11	5-4	4-10	4-6	4-1	3-8	
Douglas fir-larch ^e ,	3 x 10 or 2 – 2 x 10	8-4	7-3	6-6	5-11	5-6	5-1	4-8	
hem-fir ^e ,	3 x 12 or 2 – 2 x 12	9-8	8-5	7-6	6-10	6-4	5-11	5-7	
spruce-pine-fir ^e ,	4 x 6	6-5	5-6	4-11	4-6	4-2	3-11	3-8	
redwood,	4 x 8	8-5	7-3	6-6	5-11	5-6	5-2	4-10	
western cedars,	4 x 10	9-11	8-7	7-8	7-0	6-6	6-1	5-8	
ponderosa pine ^f ,	4 x 12	11-5	9-11	8-10	8-1	7-6	7-0	6-7	
$red\ pine^{\mathrm{f}}$	3 – 2 x 6	7-4	6-8	6-0	5-6	5-1	4-9	4-6	
	3 – 2 x 8	9-8	8-6	7-7	6-11	6-5	6-0	5-8	
	3 – 2 x 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/Δ = 360 at main span, L/Δ = 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.

TABLE 507.9.1.3(1) DECK LEDGER CONNECTION TO BAND JOIST^{a,b}

(Deck live load = 40 psf, deck dead load = 10 psf, snow load \leq 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-cen	ter spacing of	fasteners			
½-inch diameter lag screw with ½-inch	30	23	18	15	13	11	10	
maximum sheathing ^{c,d}								
½-inch diameter bolt with ½-inch	36	36	34	29	24	21	19	
maximum sheathing ^d								
½-inch diameter bolt with 1-inch	36	36	29	24	21	18	16	
maximum sheathing ^e								

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 703.4 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.

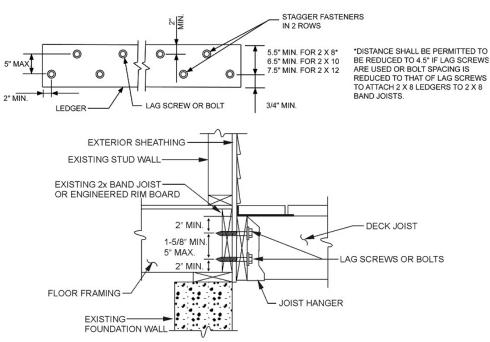
Table R507.9.1.3(2)

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

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS							
		TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING		
	Ledger ^a	2 inches ^d	¾-inch	2 inches ^b	1 ⅔ inches ^b		
	Band Joist ^c ¾-inch		2 inches	2 inches ^b	1 ⅔ inches ^b		

For SI: 1 inch = 25.4 mm.

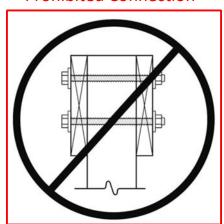
- a. Lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Figure R507.9.1.3(1).
- b. Maximum 5 inches.
- c. For engineered rim joists, the manufacturer's recommendations shall govern.
- d. The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure R507.9.1.3(1).



Connections

Ledger Board Connections

- 1. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure.
- 2. Ledger boards shall be equal to or greater than the joist depth.
- 3. Ledger boards shall not be attached to veneers brick, stone, masonry; or to cantilevered floors or windows.
- 4. Exterior finish (siding) shall be removed prior to the placement of a ledger board.
- 5. Continuous flashing is required when the ledger board is attached to wood-framed construction.
- 6. Type of Fasteners:
 - A. Lag Screws: Lag screws shall be hot-dipped galvanized or stainless steel with a ½ inch minimum diameter and installed with washers.
 - B. Expansion Anchors: Expansion anchors, ½ inch diameter bolt or threaded rod minimum, equipped with washers installed according to the manufacturer's installation instructions.
 - C. Adhesive Anchors: Adhesive anchors (Hilti-HY-70; Red Head Epcon A7) minimum ½ inch threaded rod with washers shall be used for concrete, solid or hollow masonry. Adhesive cartridges must remain on jobsite for inspector verification.
 - D. Wood Screws: Wood screws (FastenMaster Ledgerlok; SimpsonStrong Tie-Strong-Drive Screws (SDS, SDW) with a minimum ¼ inch diameter may be used to attach to wood frame construction.



Prohibited Connection

Joists

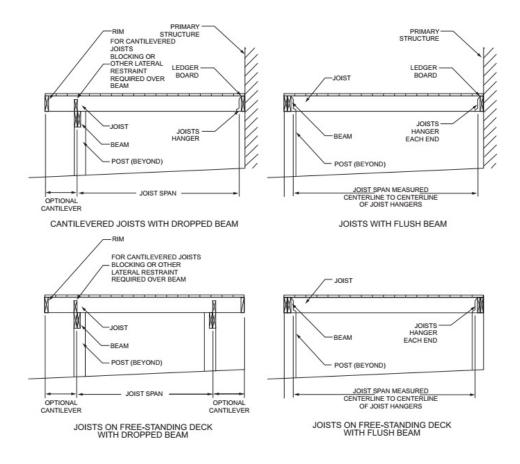


Table R507.6	
DECK JOIST SPANS FOR COMMON LUMBER SPECIES (ft in.))

		ALLOWABLE JOIST SPAN ^b			MAXIMUM CANTILEVER ^{c,f}			
SPECIES ^a	SIZE SPACING OF DI (inche			DISTS	SPACING OF DECK JOISTS WITH CANTILEVERS ^e (inches)			
		12	12 16 24		12	16	24	
	2 x 6	9-11	9-0	7-7	1-3	1-4	1-6	
Southern pine	2 x 8	13-1	11-10	9-8	2-1	2-3	2-5	
	2 x 10	16-2	14-0	11-5	3-4	3-6	2-10	
	2 x 12	18-0	16-6	13-6	4-6	4-2	3-4	
Douglas fir-	2 x 6	9-6	8-8	7-2	1-2	1-3	1-5	
larch ^d , hem-fir ^d ,	2 x 8	12-6	11-1	9-1	1-11	2-1	2-3	
spruce-pine-fir ^d	2 x 10	15-8	13-7	11-1	3-1	3-5	2-9	
	2 x 12	18-0	15-9	12-10	4-6	3-11	3-3	
Redwood,	2 x 6	8-10	8-0	7-0	1-0	1-1	1-2	
western cedars,	2 x 8	11-8	10-7	8-8	1-8	1-10	2-0	
ponderosa pine ^e ,	2 x 10	14-11	13-0	10-7	2-8	2-10	2-8	
red pine ^e	2 x 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 for = 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.

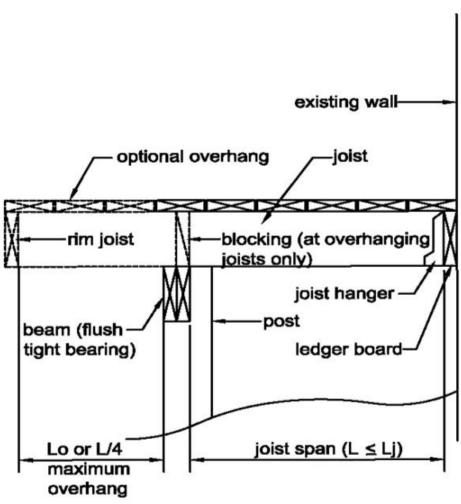
c) Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220-pound point load applied to end.

d) Includes incising factor.

e) Northern species with no incising factor.

f) Cantilevered spans not exceeding the nominal depth of the joist are permitted.

Joists

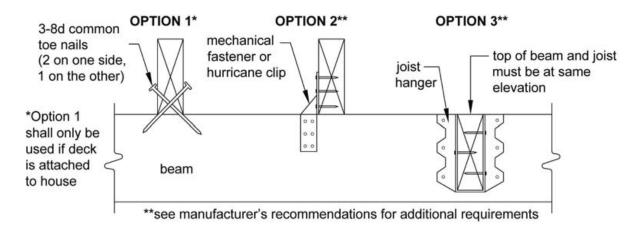


Joist Span – Joist Attached at House and Bearing over Beam

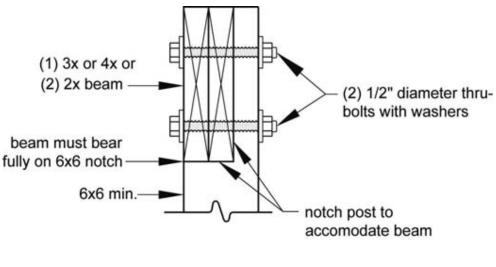
The joist span is the distance between the two points supporting the joist (i.e. ledger to beam, beam to beam) and does not include any overhang. Allowable cantilever is joist span = (L)/4.

Connections

Joist to Bean Detail



Post to Beam Connections



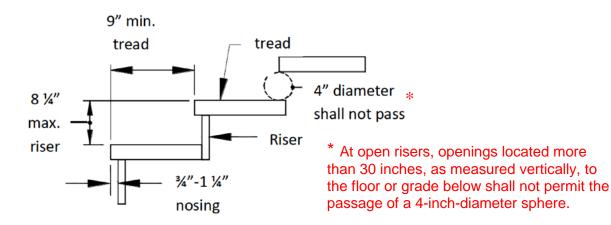
Notched post

Guards

- 1. A Guard is required when a deck is greater than 30" above grade measured vertically at any point within 36" measured horizontally along the deck edge. (2019 RCO 312.1.1)
- 2. The height of the guard shall be not less than 36" measured vertically above the walking surface. (2019 RCO 312.1.2)
- 3. Required guards shall not have openings from the walking surface to the required guard height which allow the passage of a sphere 4" in diameter. (2019 RCO 312.1.3)

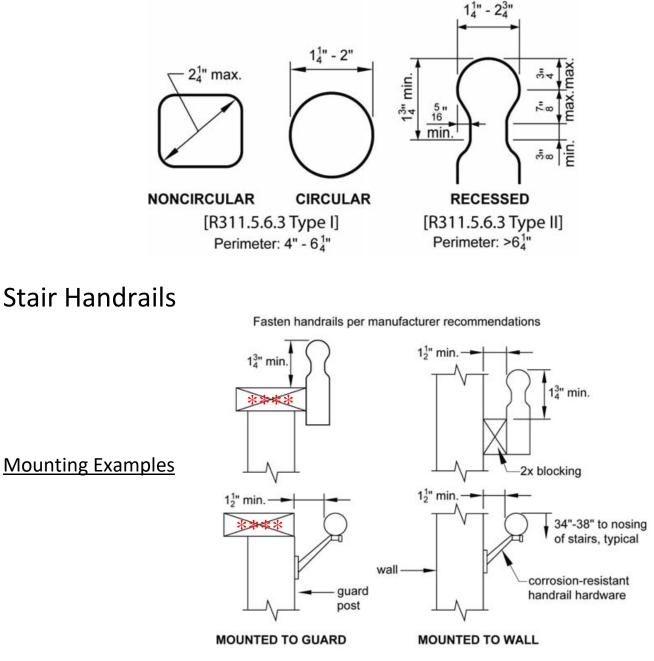
Stairs

- 1. Stairs shall have a minimum clear width 36". (2019 RCO 311.7.1)
- 2. The maximum riser height shall be 8 ¼". (2019 RCO 311.7.5.1)
- 3. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8". (2019 RCO 311.7.5.1)
- 4. The minimum tread depth shall be 9". (2019 RCO 311.7.5.2)
- 5. Wood-plastic composites used shall bear a label indicating the required performance levels and demonstrating compliance with the provisions of ASTM D 7032 (2019 RCO 507.2.2).
- Flight of stairs shall not have a vertical rise larger than 148 ½" between floor levels or landings. (2019 RCO 311.7.3)



Stair Handrails

- 1. Handrails shall be provided on at least one side of each continuous run of treads or flight with four (4) or more risers. (2019 RCO 311.7.8)
- 2. Handrail height, measured vertically from the tread nosing shall not be less than 34" and not more than 38". (2019 RCO 311.7.8.1)
- 3. Handrails shall be continuous for the full length of the flight. (2019 RCO 311.7.8.4)
- 4. Handrails shall be provided with graspability as illustrated below. (2019 RCO 311.7.8.5)



****Decking or lumber on top of posts is not an approved railing per the Handrail Standards in the 2019 RCO – Section 311.7.8.***