



ICC CODES - PUBLIC COMMENT FORM

FOR PUBLIC COMMENTS ON THE 2013 REPORT
OF THE PUBLIC HEARINGS ON THE 2012 EDITIONS OF:

- Administrative Provisions*® (ADM)
- International Energy Conservation Code*®
 - Commercial Energy (CE)
 - Residential Energy (RE)
- International Existing Building Code*® (EB)
- International Fire Code*® (F)
- ICC Performance Code*® (PC)
- International Residential Code*®
 - Building (RB)
 - Mechanical (RM)
 - Plumbing (RP)
- International Property Maintenance Code*® (PM)
- International Swimming Pool and Spa Code*® (SP)
- International Wildland-Urban Interface Code*® (WUIC)

CLOSING DATE: All Comments Must Be Received by: July 15, 2013

1) Please type or print clearly: Public comments will be returned if they contain unreadable information.

Name:		Date:	
Jurisdiction/Company:			
Submitted on Behalf of:			
Address:			
City:		State:	
Phone:		Ext:	
e-mail:			
		Zip +4:	
		Fax:	

2) Copyright Release: In accordance with Council Policy #28 Code Development, all Code Change Proposals, Floor Modifications and Public Comments are required to include a copyright release. A copy of the copyright release form is included at the end of this form. Please follow the directions on the form. This form as well as an alternative release form can also be downloaded from the ICC website at www.iccsafe.org. If you have previously executed the copyright release, please check the box below:

2012-2014 Cycle copyright release on file

3) Code Change Proposal Number:

Indicate the Code Change Proposal Number that is being addressed by this Public Comment: **RB265-13**

4) Public Comment: The Final Action requested on this Code Change Proposal is: (Check Box)

<input type="checkbox"/> Approved as Submitted (AS):	<input checked="" type="checkbox"/> Approved as Modified by this Public Comment (AMPC):	<input type="checkbox"/> Approved as Modified by the Code Committee as Published in the ROH (AM):	<input type="checkbox"/> Approved as Modified by Assembly Floor Action as Published in the ROH (AMF):	<input type="checkbox"/> Disapproved (D):
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Attached Proposed Modifications and/or Reason Statements: **YES**

See Attached Individual Consideration Form

INDIVIDUAL CONSIDERATION FORM

RB264-13

R507.1, R507.5, Figure R507.5, Table R507.5, R507.5.1, R507.6, Figure R507.6, Table R507.6, R507.7, R507.8,

Individual Consideration Agenda

This item is on the agenda for individual consideration because a public comment was submitted.

Public Comment:

Name:

Modify the proposal as follows

R507.1 Decks. Wood-framed decks shall be in accordance with this section. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. For decks with cantilevered framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.5 acting on the cantilevered portion of the deck. The use of other grades, species, loading, materials and conditions not described herein shall be permitted be in accordance with Section R301.

Insert new text as follows:

~~**R507.4 Decking.** Wood decking shall be at least a nominal 2 inch (51 mm) in thickness and placed at an angle between 45 and 90 degrees to deck joists spaced a maximum of 24 inches (610 mm) on center. Wood decking shall be attached to each supporting member with a minimum of (2) 8d threaded nails or (2) #8 wood screws.~~

Exceptions:

- ~~1. Wood decking with a minimum nominal thickness of $\frac{5}{8}$ inches (32 mm) shall be permitted to be installed at 90 degrees to deck joists spaced a maximum of 24 inches (610 mm) on center and not less than 45 degrees to deck joists spaced a maximum of 16 inches (406 mm) on center.~~
- ~~2. Wood/plastic composite decking in accordance with Section R507.3.~~

R507.5 Allowable deck joist spans. Spans for wood deck joists, as shown in Figure R507.5, shall be in accordance with Table R507.5. Deck joist shall be permitted to cantilever a maximum of one-fourth of the joist span.

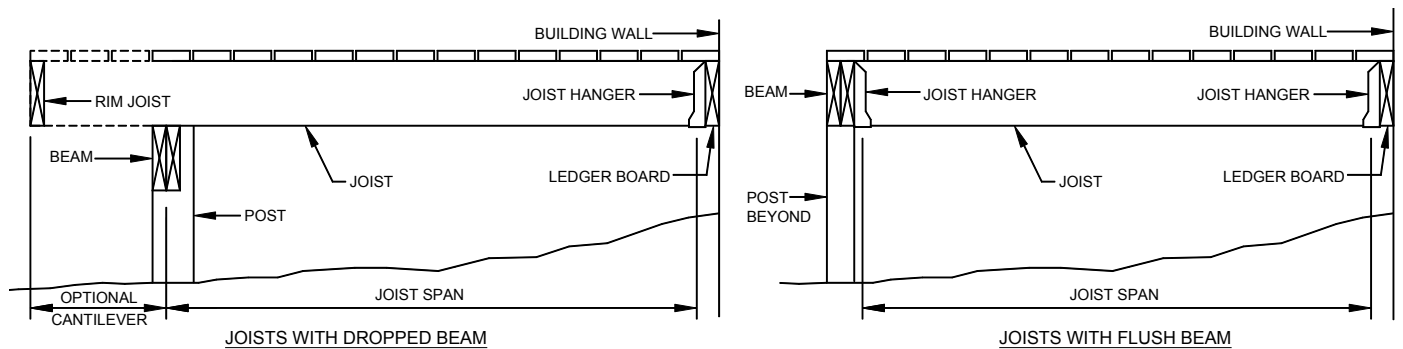


FIGURE R507.5
TYPICAL DECK JOIST SPANS

**TABLE R507.5
DECK JOIST SPANS FOR COMMON LUMBER SPECIES (ft.-in.)**

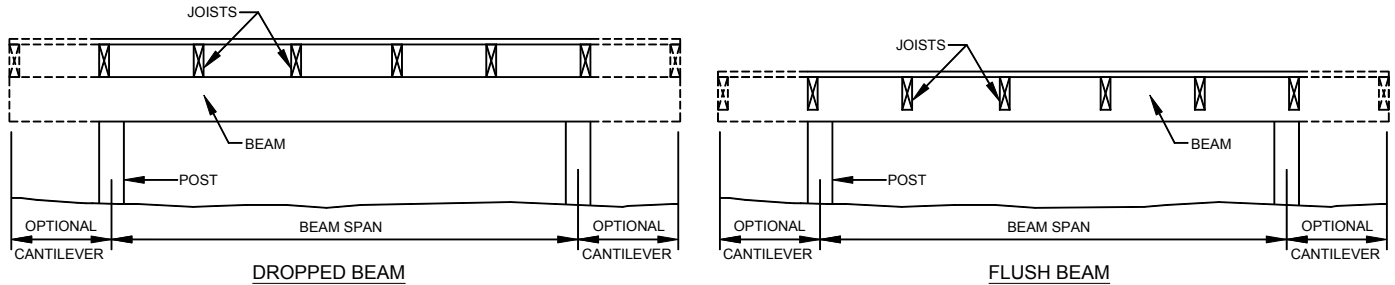
SPECIES ^a	SIZE	SPACING OF DECK JOISTS WITH NO CANTILEVER ^b (in.)			SPACING OF DECK JOISTS WITH CANTILEVERS ^c (in.)		
		12	16	24	12	16	24
Southern pine	2 x 6	10-4	9-5	7-10	7-1	7-1	7-1
	2 x 8	13-8	12-5	10-2	10-9	10-9	10-2
	2 x 10	17-5	15-10	13-1	15-6	15-6	13-1
	2 x 12	18-0	18-0	15-5	18-0	18-0	15-5
Douglas fir-larch ^d , hem-fir ^d , spruce-pine-fir ^d	2 x 6	9-6	8-8	7-2	6-3	6-3	6-3
	2 x 8	12-6	11-1	9-1	9-5	9-5	9-1
	2 x 10	15-8	13-7	11-1	13-7	13-7	11-1
	2 x 12	18-0	15-9	12-10	18-0	15-9	12-10
Redwood, western cedars, ponderosa pine ^e , red pine ^e	2 x 6	8-10	8-0	7-0	5-7	5-7	5-7
	2 x 8	11-8	10-7	8-8	8-6	8-6	8-6
	2 x 10	14-11	13-0	10-7	12-3	12-3	10-7
	2 x 12	17-5	15-1	12-4	16-5	15-1	12-4

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

- 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

R507.5.1 Lateral restraint at supports. Joist ends and bearing locations shall be provided with lateral restraint to prevent rotation. Where lateral restraint is provided by joist hangers or blocking between joists, their depth shall equal not less than 60 percent of the joist depth. Where lateral restraint is provided by rim joists, they shall be secured to the end of each joist with a minimum of (3) 10d (3" x 0.128") threaded nails or (3) #10x3 inch (76 mm) long wood screws.

R507.6 Deck Beams. Spans for deck beams, as shown in Figure R507.6, shall be in accordance with Table R507.6. Beam plies shall be fastened with two rows of 10d (3" x 0.128") threaded nails minimum at 16 inches (406 mm) on center along each edge. Beams shall be permitted to cantilever at each end up to one-fourth of the beam span. Splices of multi-span beams shall be located at interior post locations.



**FIGURE R507.6
TYPICAL DECK BEAM SPANS**

TABLE R507.6
DECK BEAM SPAN LENGTHS (ft.-in.)^{a, b}

SPECIES ^c	SIZE ^d	DECK JOIST SPAN (ft.) LESS THAN OR EQUAL TO:						
		6	8	10	12	14	16	18
Southern pine	2-2x6	7-1	6-2	5-6	5-0	4-8	4-4	4-1
	2-2x8	9-2	7-11	7-1	6-6	6-0	5-7	5-3
	2-2x10	11-10	10-3	9-2	8-5	7-9	7-3	6-10
	2-2x12	13-11	12-0	10-9	9-10	9-1	8-6	8-0
	3-2x6	8-7	7-8	6-11	6-3	5-10	5-5	5-2
	3-2x8	11-4	9-11	8-11	8-1	7-6	7-0	6-7
	3-2x10	14-5	12-10	11-6	10-6	9-9	9-1	8-7
Douglas fir-larch ^e , hem-fir ^e , spruce-pine-fir ^e , redwood, western cedars, ponderosa pine ^f , red pine ^f	3x6 or 2-2x6	5-5	4-8	4-2	3-10	3-6	3-1	2-9
	3x8 or 2-2x8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
	3x10 or 2-2x10	8-4	7-3	6-6	5-11	5-6	5-1	4-8
	3x12 or 2-2x12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4x6	6-5	5-6	4-11	4-6	4-2	3-11	3-8
	4x8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
	4x10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
	4x12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
	3-2x6	7-4	6-8	6-0	5-6	5-1	4-9	4-6
	3-2x8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
	3-2x10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
	3-2x12	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.

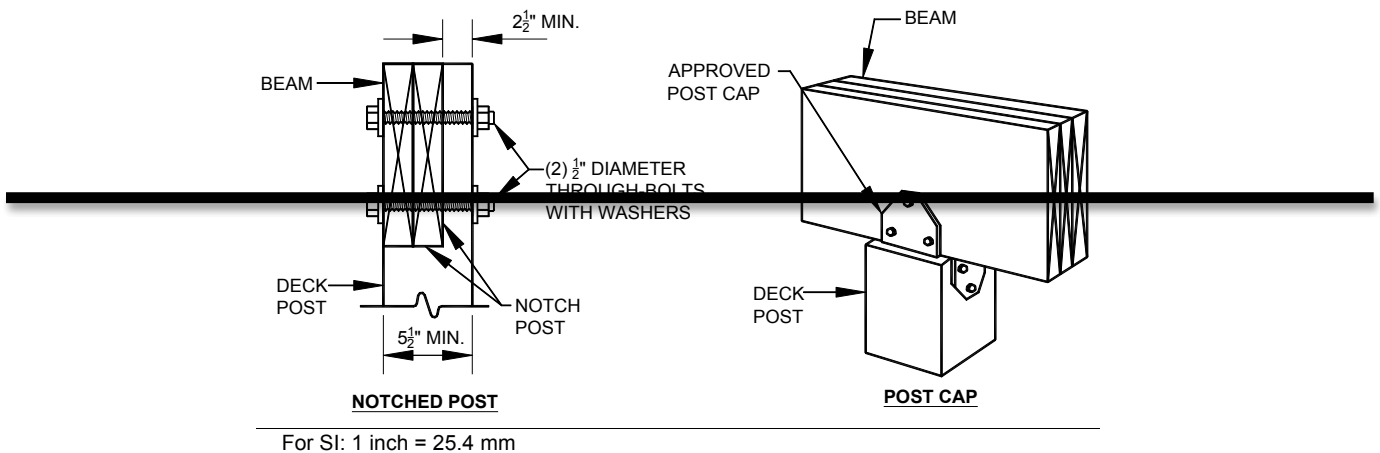
- Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220 pound point load applied at the end.
- Beams supporting deck joists from one side only.
- No 2 grade, wet service factor.
- Beam depth shall be greater than or equal to depth of joists with a flush beam condition.
- Includes incising factor.
- Northern species with no incising factor.

R507.7 Deck joist and deck beam bearing. The ends of each joist and beam shall have not less than 1.5 inches (38 mm) of bearing on wood or metal and not less than 3 inches (76 mm) on concrete or masonry for the entire width of the beam. Joist framing into the side of a ledger board or beam shall be supported by approved joist hangers. ~~Beam bearing at deck posts shall be in accordance with Section R507.8.1.~~

R507.8 Deck posts. For single level wood-framed decks with beams sized in accordance with Table R507.6, posts shall be a minimum nominal 6x6 with a maximum height of 14 feet (5486 mm), measured to the underside of the beam.

Exception: Nominal 4x4 or 4x6 posts shall be permitted with a maximum height of 8 feet (2438 mm), measured to the underside of the beam.

~~**R507.8.1 Deck post to deck beam.** Deck beams shall be attached to deck posts in accordance with Figure R507.8.1. Post to beam connections shall be constructed to resist lateral displacement. Manufactured post to beam connectors shall be sized for the post and beam sizes. All bolts shall have washers under the head and nut.~~



For SI: 1 inch = 25.4 mm

FIGURE R507.8.1
DECK BEAM TO DECK POST

R507.8.2 Deck post to deck footing. Posts shall bear on footings in accordance with Section R403 and Figure R507.8.2.

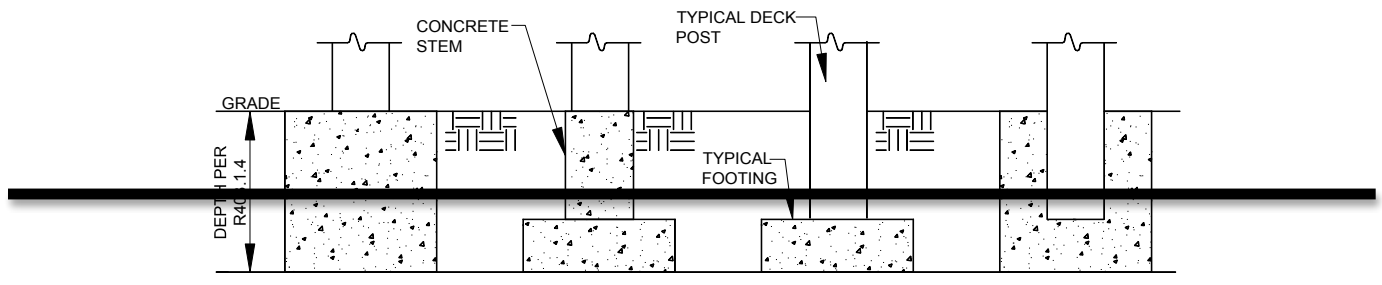


FIGURE R507.8.2
TYPICAL DECK POSTS TO DECK FOOTINGS

Commenter's Reason:

There is no method in which any typical, wood-framed, exterior deck can be built under the prescriptive provisions of the IRC. Decks have notoriously never been address comprehensively in any building standard in our country, and therefore there are a great variety of construction methods that have long been in practice. An informal and open group of professionals and organizations have been working together to recognize this variety and develop well-rounded provisions suitable for the IRC. It hasn't and won't be easy or quick. The provisions proposed in the original RB264-13 represented what could generally be agreed upon by the majority, however, testimony during the hearings on this and other deck-related proposals drew doubt from the committee that industry-wide agreement had been met.

This group continues to work together and will likely do so toward 2018 IRC proposals, ideally with ad-hoc committee support from the ICC. Until then, the nation is left without clear guidance for joist and beams spans intended specifically for conventionally framed decks in wet use environments. The joist span tables currently in the IRC are not suitable for exterior, treated or incised lumber and there is no method for sizing beams appropriately. RB264-13, in this public comment, has been pared down to joist, beam and post sizing only in hopes that the most basic of deck structural elements can be recognized by the nation's leading model residential code. Tens of thousands of decks will be built every summer and permitted by building officials...shouldn't the IRC address them a little better?