

Decks for 2015 International Residential Codes

R507.1 Decks.

Wood-framed decks shall be in accordance with this section or Section R301 for materials and conditions not prescribed herein. 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.

Deck Checklist

- Shall be positively anchored to structure
- If connection can not be verified deck must be self-supporting (fully supported with posts)
- Designed for vertical and lateral loads
- Cantilevers must be designed for uplift forces
- Ledger bolt patterns should be staggered to eliminate structural damage and “roll”
- An acceptable method (flashing) must be installed to prevent rot and decay of ledger boards and attachment points
- All fasteners and flashing materials must be resistant to rust
- Hangers and fasteners shall be rated for use with the type of pressure treating chemicals being used. Follow manufacturers recommendations regarding the type of hardware required.
- Footings shall be a least 36 inches below grade and capable of supporting the required loads
- All applicable joist hangers, post and girder connections are installed as required and comply with approved plans
- Stairs are required to have a width of 36 inches and minimum tread depth of 9 inches and a maximum riser height of 8 ¼ inches
- Guards are required on decks exceeding 30 inches above grade and shall not be less than 36 inches in height. Required guards shall not allow passage of a 4 inch sphere or more in diameter.
- Handrails shall be installed on all open sides where four or more risers exist and shall be between 34 and 38 inches.

Note: The items listed on this sheet are common deficiencies noted during deck inspections and are not intended to list all code and structural requirements. For all code requirements see the 2015 International Residential Code, 2016 Uniform Code Supplement and your design professional.

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DECKS (SAMPLE)

REQUIREMENTS:

DRAW TO SCALE

- Length and width
- Distance above grade - lowest to highest
- Girder, joist and decking size
- Handrails height and balusters spacing
- Stair detail - Riser height & thread width
- Show all attachments, fasteners, hangers and flashing material

