

## MINIMUM REQUIREMENTS & LIMITATIONS

1. This document applies to single level residential wood decks that are attached to the house to resist lateral forces. [R507.2.4]
2. Overall deck length shall be equal to or less than overall deck width. See DECK FRAMING PLAN for definition of deck length and width.
3. Minimum post size is 6x6 nominal and maximum post height shall be in accordance with Table 4.
4. All lumber shall be identified by the grade mark of, or certificate of inspection issued by, an *approved* lumber grading or inspection bureau or agency ([www.alsc.org](http://www.alsc.org)). All lumber and glued laminated timber shall be a naturally durable species (such as Redwood or Western Cedars where 90 percent or more of the width of each side is heartwood); or be preservatively treated with an *approved* process in accordance with American Wood Protection Association standards (Table 1) [R317 and R318]. All lumber in contact with the ground shall be *approved* preservative treated wood suitable for ground contact. [R317.1.2] All cuts shall be field treated with an *approved* preservative (such as copper naphthenate) [R402.1.2].
5. All nails shall meet the requirements of *ASTM F 1667*. Threaded nails as stated in this document include helical (spiral) and annular (ring-shank) nails. Wood screws shall meet the requirements of *ANSI/ASME B18.6.1*. Bolts and lag screws shall meet the requirements of *ANSI/ASME B18.2.1*.
6. Throughout this document, 1/2" diameter bolts and lag screws are specified for various connections. Edge distance and spacing requirements are based on 1/2" diameter fasteners. If larger (or smaller) fasteners are specified, edge distance and spacing shall be adjusted.
7. To resist corrosion, the following is required [R317.3]:
  - All screws, bolts, washers, nuts, and nails for use with preservative treated wood shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. Hot-dipped galvanized fasteners shall meet the requirements of *ASTM A 153*, Class D for fasteners 3/8" diameter and smaller or Class C for fasteners with diameters over 3/8". Stainless steel driven fasteners shall be in accordance with the material requirements of *ASTM F 1667*.
  - Fasteners other than nails and timber rivets shall be permitted to be of mechanically deposited zinc-coated steel with coating weights in accordance with *ASTM B 695*, Class 55, minimum.
  - All connectors (joist hangers, cast-in-place post anchors, etc.) shall be galvanized or shall be stainless steel. Hardware to be hot-dipped prior to fabrication shall meet *ASTM A 653*, G-185 coating. Hardware to be hot-dipped galvanized after fabrication shall meet *ASTM A 123*.
  - Fasteners and connectors exposed to salt water or located within 300 feet of a salt water shoreline shall be stainless steel grade 304 or 316.
  - Fasteners and connectors shall be of the same corrosion-resistant material.
  - Other coated or non-ferrous fasteners or hardware shall be *approved* by the authority having jurisdiction.
8. Decks supporting large concentrated loads such as hot tubs are beyond the scope of this document.
9. This document does not apply to decks which will experience snow loads, snow drift loads, or sliding snow loads that exceed 40 psf.
10. Lateral load resistance is limited to the prescriptive provisions of R507.2.4 of the IRC. Alternative loads and detailing shall be *approved* by the authority having jurisdiction.

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11. Flashing shall be corrosion-resistant metal [R703.8] of minimum nominal 0.019-inch thickness or *approved* non-metallic material. Aluminum should not be used in direct contact with lumber treated with preservatives that contain copper such as ACQ, Copper Azole, or ACZA.
12. Decks shall not be used or occupied until final inspection and approval is obtained.
13. This document is not intended to preclude the use of other construction methods or materials not described herein.