

# Single Family Residential—Uncovered Deck and Porches

## Directions:

1. List homeowner name and address of project .
2. Fill in the blanks on pages 2 and 3 with dimensions and materials which will be used to build the structure. Please print legibly.
3. Choose which post to beam detail from page 4 that will be used.

Address:

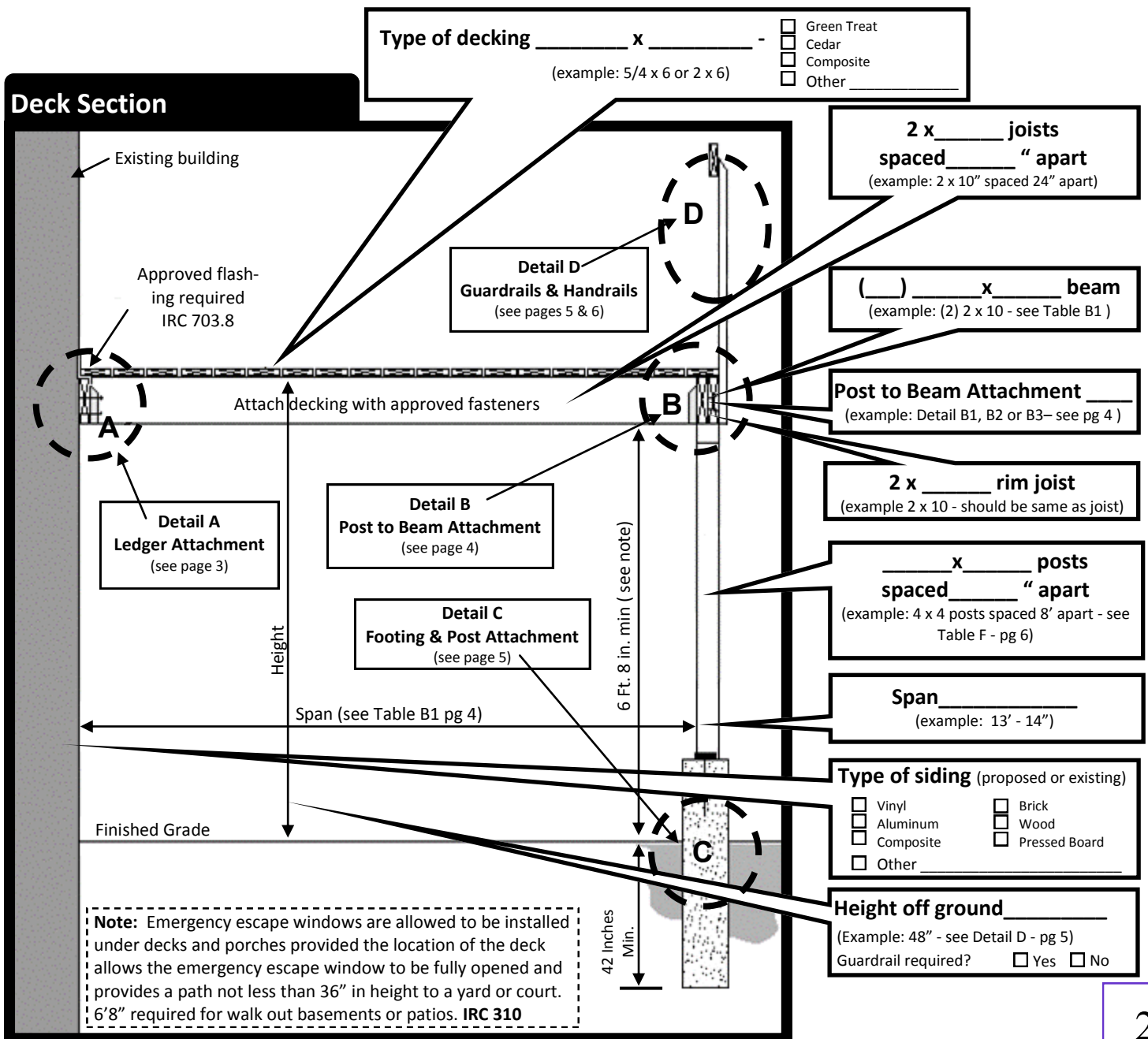
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## Minimum Requirements:

- All lumber shall be naturally durable wood or pressure treated.
- All screws, bolts, and nails for use with preservative treated wood shall be hot-dipped galvanized, stainless steel, silicon bronze or copper. Fasteners to be hot-dipped galvanized shall meet the requirements of ASTM A 153, Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware, Class D for fasteners 3/8" in diameter and smaller or Class C for fasteners with diameters over 3/8". IRC 317.3.1
- All hardware (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, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process, G-185 coating. Hardware to be hot-dipped galvanized after fabrication shall meet ASTM A123, Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.



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## Detail A

### DIRECTIONS:

1. Identify Ledger Size 2 x \_\_\_\_\_ X \_\_\_\_\_ (example 2' x 10 " X 10')
2. Identify # of fasteners needed \_\_\_\_\_ Size \_\_\_\_\_ X \_\_\_\_\_ @ \_\_\_\_\_ O.C.  
(example two 1/2" X 6" lags @ 18" O.C. See Table A1)\*If using fasteners other than 1/2 lag or bolts, provide manufacturer's specs.
3. Location of lateral load connections \_\_\_\_\_ (see Figure A2)

- 1/2 Lags
- 1/2 Bolts
- 1/2 Bolts w washers
- Other\* \_\_\_\_\_ @ \_\_\_\_\_ O.C.

**NOTE:** This is for attached decks only. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting (502.2.2).

**Table A1**

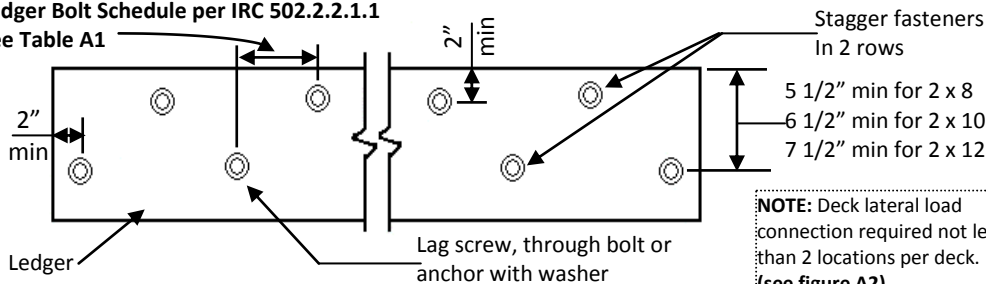
**IRC TABLE 502.2.2.1**  
**FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST<sup>C,F,G</sup>** (Deck live load = 40 psf, deck dead load = 10 psf)

FLOOR JOIST SPAN	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'
<b>Connection details</b>	<b>On-center spacing of fasteners<sup>d,e</sup></b>						
1/2 inc diameter lag screw with 15/32 inch maximum sheathing <sup>a</sup>	30	23	18	15	13	11	10
1/2 inch diameter bolt with 15/32 inch maximum sheathing	36	36	34	29	24	21	19
1/2 inch diameter bolt with 15/32 inch maximum sheathing and 1/2 inch stacked washers <sup>b,h</sup>	36	36	29	24	21	18	16

**Figure A1**

**Ledger Bolt Schedule per IRC 502.2.2.1.1**

See Table A1



**NOTE:** Deck lateral load connection required not less than 2 locations per deck. (see figure A2)

- The tip of the lag screw shall fully extend beyond the inside face of the band joist.
- The maximum gap between the face of the ledger board and face of the band joist.
- Ledgers shall be flashed to prevent water from contacting the house band joist.
- Lag screws and bolts shall be staggered in accordance with the diagram above.
- Deck ledger shall be minimum 2 x 8 pressure-preservative-treated No. 2 grade lumber, or other approved materials by standard engineering practice.
- When solid-sawn preservative-treated deck ledgers are attached to a minimum 1 inch thick engineered wood product (structural composite lumber, LVL or wood structural panel band joist), the ledger attachment shall be designed in accordance with accepted engineering practice.
- A minimum 1 x 9 1/2 Douglas Fir LVL rimboard shall be permitted in lieu of the 2-inch nominal band joist.
- Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch thickness shall be permitted. The maximum distance between the face of the ledger board and the face of the band joist shall be 1 inch.

**Figure A2**

**Deck lateral load connection R502.2.2.3**

Floor sheathing nailed at 6" max on center to joist with holddown

