

## TC Figure 20 A Deck Ledger Requirements

## TABLE R507.9.1.3(1) DECK LEDGER CONNECTION TO BAND JOIST

| Load <sup>c</sup><br>(psf)                         | Joist<br>Spana<br>(feet) | On-Center Spacing of Fasteners <sup>b</sup> (inches)                             |   |  |  |  |  |  |
|--|--------------------------|--|---|--|--|--|--|--|
|  |                          | 1/2-inch diameter lag<br>screw with 1/2-inch<br>maximum sheathing <sup>d,e</sup> | 1/2-inch diameter bolt with 1/2-inch maximum sheathing <sup>e</sup> | 1/2-inch diameter bolt with<br>I-inch maximum sheathing <sup>f</sup> |  |  |  |  |
| 60 Live<br>Load<br>or<br>70 Ground<br>Snow<br>Load | 6                        | 22   | 36  | 35   |  |  |  |  |
|  | 8                        | 16   | 31  | 26   |  |  |  |  |
|  | 10                       | 13   | 25  | 21   |  |  |  |  |
|  | 12                       | 11   | 20  | 17   |  |  |  |  |
|  | 14                       | 9  | 17  | 15   |  |  |  |  |
|  | 16                       | 8  | 15  | 13   |  |  |  |  |
|  | 18                       | 7  | 13  | 11   |  |  |  |  |

- a. Interpolation permitted. Extrapolation is not permitted.
- b. Ledgers shall be flashed in accordance with Section R703.4 to prevent water from contacting the house band joist.
- c. Dead load = 10 psf. Snow load shall not be assumed to act concurrently with live load.
- d. The tip of the lag screw shall fully extend beyond the inside face of the band joist.
- e. Sheathing shall be wood structural panel or solid sawn lumber.
- f. Sheathing shall be permitted to be wood structural panel, gypsum board, fiberboard, lumber or foam sheathing. Up to 1/2-inch thickness of stacked washers shall be permitted to substitute for up to 1/2 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                           |  |  |  |
| Ledgera   | 2 inches <sup>d</sup> | 3/4 inch    | 2 inches <sup>b</sup> | 1 <sup>5</sup> /8 inches <sup>b</sup> |  |  |  |
| Band Joist <sup>C</sup>                                 | <sup>3</sup> /4 inch  | 2 inches    | 2 inches <sup>b</sup> | 1 <sup>5</sup> /8 inches <sup>b</sup> |  |  |  |

- 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
- e. The 2 inches may be reduced to  $\frac{3}{4}$  inch when the band joist is directly supported by a mudsill, a header or by the double wall plates

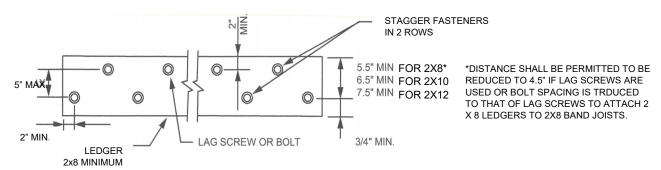


FIGURE R507.9.1.3(1)
PLACEMENT OF LAG SCREWS AND BOLTS IN LEDGERS

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