



# BELLE FOURCHE

## ENGINEERING DEPARTMENT

### BUILDING INSPECTION AND CODE ENFORCEMENT



511 6<sup>TH</sup> AVENUE, BELLE FOURCHE, SD 57717

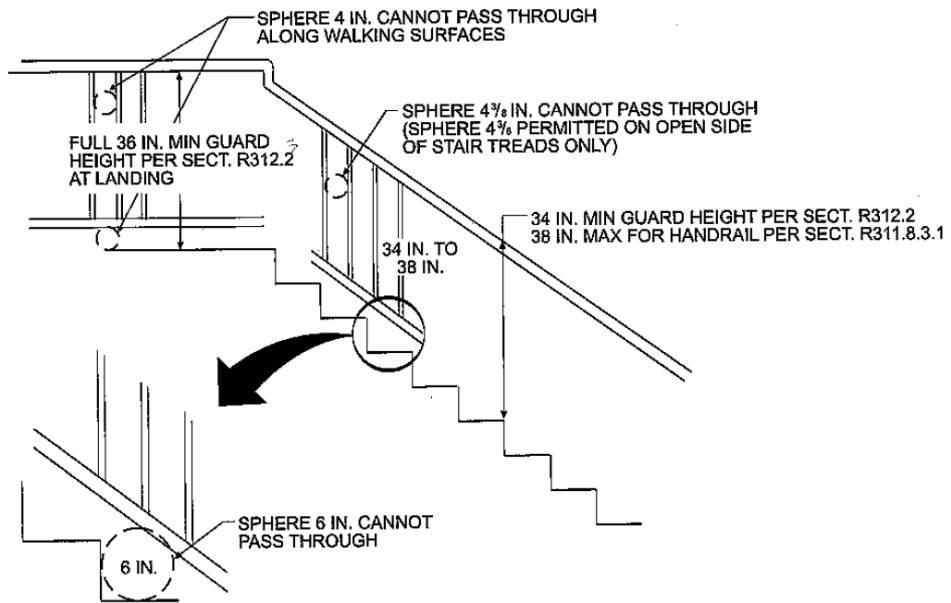
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### Minimum Code Requirements for Decks

1. Building permit is required for all decks.
2. Decks shall be designed and constructed to carry 60 lb. per square foot live load.
3. Footings for decks with a roof shall be at the depth of 42" inches minimum.
4. Decks 30" inches and under are required to have footings at the minimum depth of 30" inches.
5. Rise for steps shall be at a maximum of 7 ¾" inches for residential and 7" inches for commercial.
6. Run for steps shall be at a minimum of 10" inches for residential and 11 inches for commercial.
7. Handrails are required when there are four or more risers. Handrail height shall be 34-38" inches.
8. Maximum opening on any part of guardrail is 4" inches. (See illustration)
9. Detailed construction plans are required, showing details including site plan, elevation, stairways, guardrails & handrails.
10. Inspections are required by the Building Department.
11. Decks receiving Hot Tubs shall be designed by a professional engineer in accordance with IRC & IBC.

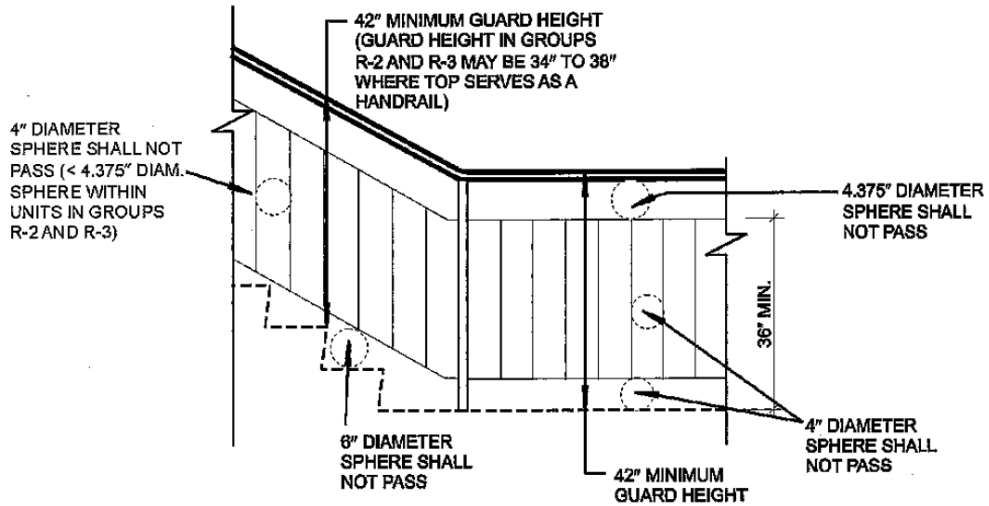
**IRC 2012 (RESIDENTIAL)**



For SI: 1 inch = 25.4 mm.

**Figure R312.1.3  
GUARD REQUIREMENTS**

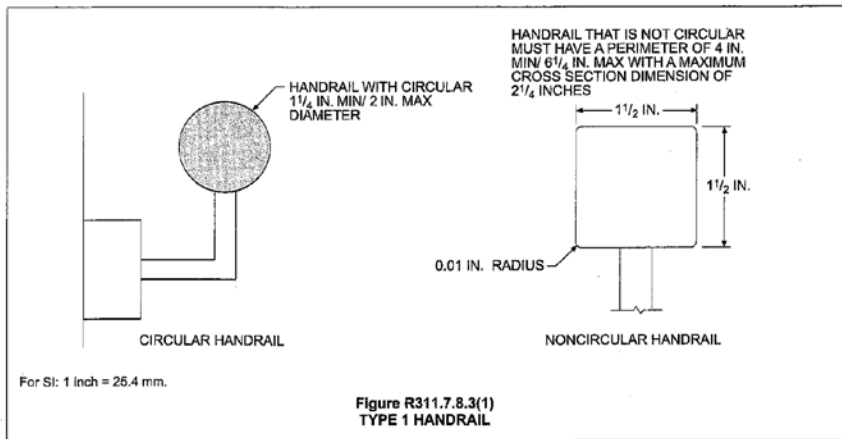
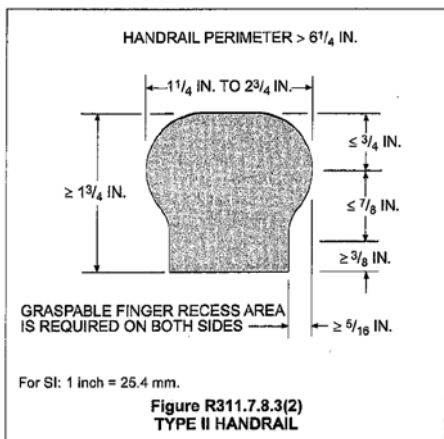
**IBC 2012 (COMMERCIAL)**



Note: Handrail not shown for clarity.

For SI: 1 inch = 25.4 mm.

**Figure 1013.3  
GUARD HEIGHT**



**\*Note: Other shapes may be acceptable if they provide an equivalent gripping surface and meet measurement requirements.**

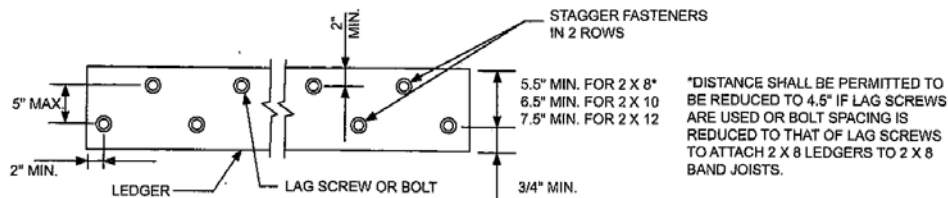
**TABLE R507.2.1**  
**PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS**

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS				
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING
Ledger <sup>a</sup>	2 inches <sup>d</sup>	1/4 inch	2 inches <sup>b</sup>	1 3/8 inches <sup>b</sup>
Band Joist <sup>c</sup>	3/4 inch	2 inches	2 inches <sup>b</sup>	1 3/8 inches <sup>b</sup>

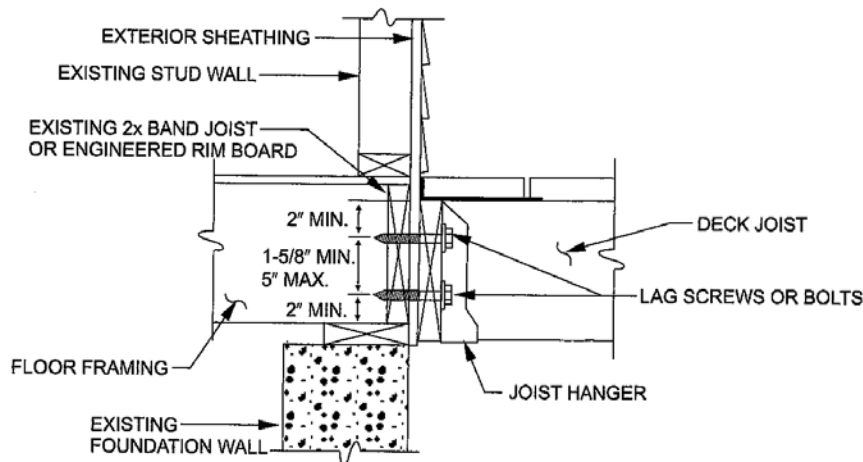
For SI: 1 inch = 25.4 mm.

- 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 R507.2.1(1).
- Maximum 5 inches.
- For engineered rim joists, the manufacturer's recommendations shall govern.
- The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure R507.2.1(1).

❖ See the commentary to Section R507.2.1.

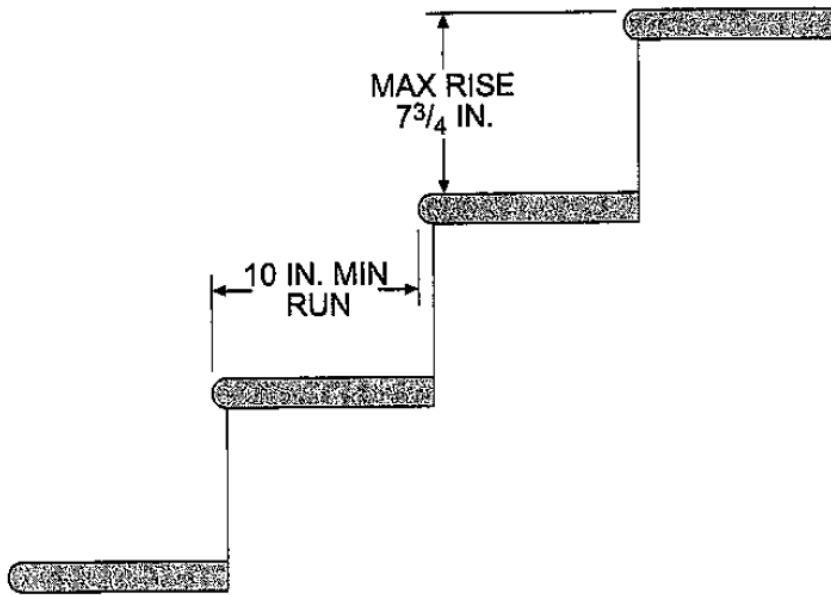


**FIGURE R507.2.1(1)**  
**PLACEMENT OF LAG SCREWS AND BOLTS IN LEDGERS**



**FIGURE R507.2.1(2)**  
**PLACEMENT OF LAG SCREWS AND BOLTS IN BAND JOISTS**

**IRC 2012 (RESIDENTIAL)**



**Figure R311.7.5.1(1)  
CONVENTIONAL STAIRWAY**

**IBC 2012 (COMMERCIAL)**

