

1309.0507 SECTION R507, EXTERIOR DECKS.

Subpart 1. **IRC Table R507.3.1.** Table R507.3.1 is modified to read as follows:

TABLE R507.3.1**MINIMUM FOOTING SIZE FOR DECKS**

LIVE LOAD ^b (psf)	TRIBUTARY AREA (sq. ft.)	LOAD-BEARING VALUE OF SOILS ^{a, c, d} (psf)					
		1500 ^e			2000 ^e		
		Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)	Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)
40	20	12	14	6	12	14	6
	40	14	16	6	12	14	6
	60	17	19	6	15	17	6
	80	20	22	7	17	19	6
	100	22	25	8	19	21	6
	120	24	27	9	21	23	7
	140	26	29	10	22	25	8
	160	28	31	11	24	27	9

LIVE LOAD ^b (psf)	TRIBUTARY AREA (sq. ft.)	LOAD-BEARING VALUE OF SOILS ^{a, c, d} (psf)					
		2500 ^e			>3000 ^e		
		Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)	Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)
40	20	12	14	6	12	14	6
	40	12	14	6	12	14	6
	60	13	15	6	12	14	6
	80	15	17	6	14	16	6
	100	17	19	6	15	17	6

	120	19	21	6	17	19	6
	140	20	23	7	18	21	6
	160	21	24	8	20	22	7

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m², 1 pound per square foot = 0.0479 kPa.

^a Interpolation permitted, extrapolation not permitted.

^b Live load = 40 psf, dead load = 10 psf.

^c Assumes minimum square footing to be 12 inches x 12 inches x 6 inches for a 6 x 6 post.

^d If the support is a brick or CMU pier, the footing shall have a minimum 2-inch projection on all sides.

^e Area, in square feet, of deck surface supported by post and footings.

Subp. 2. **IRC Table R507.5.** Table R507.5 is amended by modifying footnote "a" to read as follows:

^a Live load = 40 psf, dead load = 10 psf, $L/\Delta = 360$ at main span, $L/\Delta = 180$ at cantilever with a 220-pound load applied at the end.

Subp. 3. **IRC Table R507.6.** Table R507.6 is amended by modifying footnotes "b" and "c" to read as follows:

^b Live load = 40 psf, dead load = 10 psf, $L/\Delta = 360$.

^c Live load = 40 psf, dead load = 10 psf, $L/\Delta = 360$ at main span, $L/\Delta = 180$ at cantilever with a 220-pound point load applied to end.

Subp. 4. **IRC Table 507.9.1.3(1).** Table R507.9.1.3(1) is modified to read as follows:

TABLE R507.9.1.3(1)

DECK LEDGER CONNECTION TO BAND JOIST^a

(Deck live load = 40 psf, deck dead load = 10 psf)

CONNECTION DETAILS	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'
	On-center spacing of fasteners						
1/2-inch diameter lag screw with 1/2-inch maximum sheathing ^{b,c}	30	23	18	15	13	11	10

1/2-inch diameter bolt with 1/2-inch maximum sheathing ^c	36	36	34	29	24	21	19
1/2-inch diameter bolt with 1-inch maximum sheathing ^d	36	36	29	24	21	18	16

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

^a Ledgers shall be flashed in accordance with Section R703.4 to prevent water from contacting the house band joist.

^b The tip of the lag screw shall fully extend beyond the inside face of the band joist.

^c Sheathing shall be wood structural panel or solid sawn lumber.

^d 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.

Statutory Authority: *MS s 326B.02*

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