

TILE SIZE CHART

Fifteen stocked tile sizes with the tiles per square foot, the count for a 100 and a 200 square foot floor, and the thinset each size drinks.

The number people want is tiles per square foot, and the number people calculate is wrong, because a 12 by 12 tile does not occupy 12 by 12 inches once it is set. It occupies the tile plus one grout joint on two sides, which at an eighth of an inch is 12.125 by 12.125. That is why the column below reads 0.98 rather than a clean 1.00.

On a 12 inch tile the difference is two percent and easy to shrug at. On a 2 by 2 mosaic the joint is a third of the area, and shrugging at it means a third of the order is missing. Every count here is the joint inclusive one, with 10 percent waste already added.

Tiles per square foot by tile size

Tile size	Coverage of one tile, sq ft	Tiles per sq ft	For 100 sq ft	For 200 sq ft	Thinset bags, 100 sq ft
1 x 1 in	0.009	113.78	12,516	25,032	2
2 x 2 in	0.031	31.89	3,508	7,016	2
3 x 6 in	0.133	7.52	828	1,656	2
4 x 4 in	0.118	8.46	931	1,862	2
4 x 12 in	0.347	2.88	317	634	2
6 x 6 in	0.261	3.84	423	845	2
6 x 24 in	1.026	0.97	108	215	3
8 x 8 in	0.458	2.18	240	480	2
12 x 12 in	1.021	0.98	108	216	2
12 x 24 in	2.031	0.49	55	109	3
16 x 16 in	1.806	0.55	61	122	3
18 x 18 in	2.281	0.44	49	97	3
20 x 20 in	2.813	0.36	40	79	3
24 x 24 in	4.042	0.25	28	55	3
24 x 48 in	8.063	0.12	14	28	3

Joint held at 1/8 in across the whole table, waste at 10 percent. Coverage is the tile plus one joint on two sides, which is the space the tile really takes up on the floor. Thinset assumes 85 sq ft per 50 lb bag under small tile, 60 under 12 inch and 40 under large format, because the notch grows with the tile.

Tiles needed by floor area and tile size

Area	4 x 4	6 x 6	12 x 12	12 x 24	18 x 18	24 x 24
25 sq ft	233	106	27	14	13	7
50 sq ft	466	212	54	28	25	14
75 sq ft	699	317	81	41	37	21
100 sq ft	931	423	108	55	49	28
150 sq ft	1,397	634	162	82	73	41
200 sq ft	1,862	845	216	109	97	55
250 sq ft	2,328	1,056	270	136	121	69
300 sq ft	2,793	1,267	324	163	145	82
400 sq ft	3,724	1,689	431	217	193	109
500 sq ft	4,655	2,112	539	271	242	137

Tiles, not boxes, with 10 percent waste in the number. Divide by the tiles per box on the carton to get the order, and always round the box count up, because a box and a half is two boxes.

Every figure on this sheet was produced by the same calculator that runs at contractorhandbook.com, free and with no signup.

These are estimating figures for ordering and pricing, not engineering. Nothing here sizes a structural member, checks a load, or replaces local code, a permit, or a manufacturer's installation instructions. Where a rule of thumb is doing the work it is written into the notes under each table rather than hidden.