

Residential Plan Review Guide for Square Footing Sizing

	Footing Sizes	Footing Area		Required (Min.) Soil Load Bearing Capacity (PSF) Total Column Loading				
		Square Footing Size	Footing Sq. In. Area	Footing Sq. Ft. Area	1000 PSF Soil Brg.	1500 PSF Soil Brg.	2000 PSF Soil Brg.	2500 PSF Soil Brg.
8" Ftg. Thickness - Min.	8 x 8	64	0.44	444	667	889	1111	1333
	9 x 9	81	0.56	563	844	1125	1406	1688
	10 x 10	100	0.69	694	1042	1389	1736	2083
	11 x 11	121	0.84	840	1260	1681	2101	2521
	12 x 12	144	1.00	1000	1500	2000	2500	3000
	13 x 13	169	1.17	1174	1760	2347	2934	3521
	14 x 14	196	1.36	1361	2042	2722	3403	4083
	15 x 15	225	1.56	1563	2344	3125	3906	4688
10" Ftg.	16 x 16	256	1.78	1778	2667	3556	4444	5333
	17 x 17	289	2.01	2007	3010	4014	5017	6021
	18 x 18	324	2.25	2250	3375	4500	5625	6750
	19 x 19	361	2.51	2507	3760	5014	6267	7521
	20 x 20	400	2.78	2778	4167	5556	6944	8333
12" Ftg. Thickness - Minimum	21 x 21	441	3.06	3063	4594	6125	7656	9188
	22 x 22	484	3.36	3361	5042	6722	8403	10083
	23 x 23	529	3.67	3674	5510	7347	9184	11021
	24 x 24	576	4.00	4000	6000	8000	10000	12000
	25 x 25	625	4.34	4340	6510	8681	10851	13021
	26 x 26	676	4.69	4694	7042	9389	11736	14083
	27 x 27	729	5.06	5063	7594	10125	12656	15188
	28 x 28	784	5.44	5444	8167	10889	13611	16333
	29 x 29	841	5.84	5840	8760	11681	14601	17521
	30 x 30	900	6.25	6250	9375	12500	15625	18750
14" Footing	31 x 31	961	6.67	6674	10010	13347	16684	20021
	32 x 32	1024	7.11	7111	10667	14222	17778	21333
	33 x 33	1089	7.56	7563	11344	15125	18906	22688
	34 x 34	1156	8.03	8028	12042	16056	20069	24083
	35 x 35	1225	8.51	8507	12760	17014	21267	25521
	36 x 36	1296	9.00	9000	13500	18000	22500	27000

Shaded total load numbers may require special column types and/or additional footing reinforcement.

NOTE: This table should only be used as a guide for establishing square column footing pad sizes. When the actual column type, size and total loading has been determined, each column footing condition should be reviewed to determine the required square footing size and thickness. Although actual concrete compressive strength (PSI) may vary, it is assumed that at a minimum, Plain Structural Concrete (2500 PSI) will be used for column footings sized herein. Soil types and bearing capacities must also be verified at each site. Consult with the local Building Code Official prior to using this table.