

Maximum Allowable Wind Force at Mid-height, F_a (lbs) & Maximum Axial Force, P_a (lbs) - Square Steel Posts

Post Size	D _p lbs / ft		Fence Height, h (ft)																	
			3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1-1/2" x 1-1/2" x 14 Ga	1.54	F _a	294	221	176	147	126	110	98	-	-	-	-	-	-	-	-	-	-	-
		P _a	3,670	2,064	1,321*	917*	674*	516*	407*	-	-	-	-	-	-	-	-	-	-	-
1-1/2" x 1-1/2" x 11 Ga	2.13	F _a	383	287	229	191	164	143	-	-	-	-	-	-	-	-	-	-	-	-
		P _a	4,761	2,678	1,713*	1,190*	874*	669*	-	-	-	-	-	-	-	-	-	-	-	-
2" x 2" x 16 Ga	1.67	F _a	450	337	270	225	193	168	150	135	122	112	-	-	-	-	-	-	-	-
		P _a	6,699	4,196	2,685	1,865	1,370*	1,049*	828*	671*	554*	466*	-	-	-	-	-	-	-	-
2" x 2" x 14 Ga	2.1	F _a	556	417	334	278	238	208	185	167	151	139	-	-	-	-	-	-	-	-
		P _a	8,496	5,279	3,379	2,346	1,723*	1,319*	1,042*	844*	698*	586*	-	-	-	-	-	-	-	-
2" x 2" x 11 Ga	2.94	F _a	745	559	447	372	319	279	248	223	203	186	-	-	-	-	-	-	-	-
		P _a	11,382	6,957	4,452	3,092	2,271*	1,739*	1,374*	1,113*	919*	773*	-	-	-	-	-	-	-	-
2" x 2" x 1/4"	5.38	F _a	1,443	1,082	865	721	618	541	481	432	393	-	-	-	-	-	-	-	-	-
		P _a	19,050	11,070	7,085	4,920*	3,614*	2,767*	2,186*	1,771*	1,463*	-	-	-	-	-	-	-	-	-
2-1/2" x 2-1/2" x 14 Ga	2.66	F _a	902	677	541	451	386	338	300	270	246	225	208	193	180	-	-	-	-	-
		P _a	13,347	9,899	6,741	4,681	3,439	2,633*	2,080*	1,685*	1,392*	1,170*	997*	859*	749*	-	-	-	-	-
2-1/2" x 2-1/2" x 11 Ga	3.76	F _a	1,227	920	736	613	526	460	409	368	334	306	283	263	245	-	-	-	-	-
		P _a	18,541	13,598	9,156	6,358	4,671	3,576*	2,826*	2,289*	1,891*	1,589*	1,354*	1,167*	1,017*	-	-	-	-	-
2-1/2" x 2-21/2" x 1/4"	7.08	F _a	2,440	1,830	1,464	1,220	1,045	915	813	732	665	610	563	522	-	-	-	-	-	-
		P _a	33,639	23,591	15,377	10,678	7,845	6,006*	4,746*	3,844*	3,177*	2,669*	2,274*	1,961*	-	-	-	-	-	-
3" x 3" x 12 Ga	4.22	F _a	1,700	1,275	1,020	850	728	637	566	510	463	425	392	364	340	318	300	283	-	-
		P _a	23,684	19,210	14,677	10,568	7,764	5,944	4,697	3,804*	3,144*	2,642*	2,251*	1,941*	1,690*	1,486*	1,316*	1,174*	-	-
3" x 3" x 11 Ga	4.57	F _a	1,829	1,372	1,097	914	784	686	609	548	498	457	422	392	365	343	322	304	-	-
		P _a	25,630	20,751	15,818	11,366	8,350	6,393	5,051	4,091*	3,381*	2,841*	2,421*	2,087*	1,818*	1,598*	1,415*	1,262*	-	-
3" x 3" x 1/4"	8.78	F _a	3,712	2,784	2,227	1,856	1,591	1,392	1,237	1,113	1,012	928	856	795	742	696	655	-	-	-
		P _a	48,452	38,212	28,160	19,765	14,521	11,118	8,784*	7,115*	5,880*	4,941*	4,210*	3,630*	3,162*	2,779*	2,462*	-	-	-
4" x 4" x 11 Ga	5.7	F _a	3,142	2,356	1,885	1,571	1,346	1,178	1,047	942	856	785	725	673	628	589	554	523	496	471
		P _a	36,225	32,288	27,848	23,242	18,771	14,656	11,580	9,380	7,752	6,514	5,550*	4,785*	4,169*	3,664*	3,245*	2,895*	2,598*	2,345*
4" x 4" x 1/4"	12.18	F _a	7,020	5,265	4,212	3,510	3,008	2,632	2,340	2,106	1,914	1,755	1,620	1,504	1,404	1,316	1,238	1,170	1,108	1,053
		P _a	77,166	67,989	57,775	47,351	37,429	28,794	22,751	18,428	15,230	12,797	10,904*	9,402*	8,190*	7,198*	6,376*	5,687*	5,104*	4,607*
6" x 6" x 1/4"	18.99	F _a	16,766	12,574	10,059	8,383	7,185	6,287	5,588	5,029	4,572	4,191	3,869	3,592	3,353	3,143	2,958	2,794	2,647	2,514
		P _a	131,824	124,967	116,671	107,276	97,144	86,636	76,094	65,823	56,075	47,160	40,184	34,648	30,182	26,527	23,498	20,960	18,812*	16,977*
Post Size	lbs / ft		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	D _p		Fence Height, h (ft)																	