

Maximum Allowable Wind Force at Mid-height, F _a (lbs) & Maximum Axial Force, P _a (lbs) - Group IV, IV-L and Light Gauge Posts																
Post Size	Wt lbs / ft		Fence Height, H (ft)													
			3	3.5	4	5	6	7	8	9	10	11	12	13	14	15
18 Ga / 40 ksi																
1-5/8"	0.8	F _a	155	133	116	93	77	66	58	51	-	-	-	-	-	-
		P _a	1,924	1,413	1,082	692*	481*	353*	270*	213*	-	-	-	-	-	-
1-7/8"	0.9	F _a	205	176	154	123	102	88	77	68	61	-	-	-	-	-
		P _a	2,828	2,142	1,640	1,049	729*	535*	410*	324*	262*	-	-	-	-	-
2-3/8"	1.2	F _a	326	279	244	195	163	139	122	108	97	88	81	75	-	-
		P _a	4,703	3,947	3,225	2,081	1,445	1,062*	813*	642*	520*	430*	361*	307*	-	-
17 Ga / 40 ksi																
1-5/8"	1.0	F _a	179	153	134	107	89	76	67	59	-	-	-	-	-	-
		P _a	2,219	1,630	1,248	798*	554*	407*	312*	246*	-	-	-	-	-	-
1-7/8"	1.1	F _a	237	203	178	142	118	101	89	79	71	-	-	-	-	-
		P _a	3,274	2,475	1,895	1,213	842*	618*	473*	374*	303*	-	-	-	-	-
2-3/8"	1.4	F _a	377	323	283	226	188	161	141	125	113	103	94	87	-	-
		P _a	5,467	4,583	3,739	2,411	1,674	1,230*	941*	744*	602*	498*	418*	356*	-	-
16 Ga / 40 ksi																
1-5/8"	1.1	F _a	207	178	155	124	103	89	77	-	-	-	-	-	-	-
		P _a	2,575	1,891	1,448	927*	643*	472*	362*	-	-	-	-	-	-	-
1-7/8"	1.3	F _a	276	236	207	165	138	118	103	92	82	-	-	-	-	-
		P _a	3,817	2,879	2,204	1,411	979*	719*	551*	435*	352*	-	-	-	-	-
2-3/8"	1.6	F _a	441	378	330	264	220	189	165	147	132	120	110	-	-	-
		P _a	6,406	5,363	4,368	2,813	1,953	1,435*	1,099*	868*	703*	581*	488*	-	-	-
15 Weight / 15 Ga / 50 ksi / ASTM F1083 Group IV-L																
1-5/8"	1.2	F _a	284	243	213	170	142	121	106	-	-	-	-	-	-	-
		P _a	2,816	2,068	1,584	1,013*	704*	517*	396*	-	-	-	-	-	-	-
1-7/8"	1.4	F _a	378	324	283	227	189	162	141	126	113	-	-	-	-	-
		P _a	4,293	3,154	2,415	1,545	1,073*	788*	603*	477*	386*	-	-	-	-	-
2-3/8"	1.9	F _a	635	544	476	381	317	272	238	211	190	173	158	-	-	-
		P _a	8,193	6,546	5,068	3,243	2,252	1,655*	1,267*	1,001*	810*	670*	563*	-	-	-
20 Weight / 50 ksi / ASTM F1083 Group IV																
1-5/8"	1.5	F _a	280	245	196	163	140	122	-	-	-	-	-	-	-	-
		P _a	2,385	1,826	1,168*	811*	596*	456*	-	-	-	-	-	-	-	-
1-7/8"	1.8	F _a	394	344	275	229	197	172	153	137	-	-	-	-	-	-
		P _a	3,831	2,933	1,877	1,303*	957*	733*	579*	469*	-	-	-	-	-	-
2-3/8"	2.3	F _a	664	581	465	387	332	290	258	232	211	193	-	-	-	-
		P _a	8,006	6,183	3,957	2,748	2,019*	1,545*	1,221*	989*	817*	687*	-	-	-	-
2-7/8"	3.3	F _a	1,133	992	793	661	566	496	440	396	360	330	305	283	264	-
		P _a	14,798	12,375	8,172	5,675	4,169	3,192*	2,522*	2,043*	1,688*	1,418*	1,208*	1,042*	908*	-
Schedule 20 / 50 ksi / ASTM F1083 Group IV																
1-5/8"	1.7	F _a	331	290	232	193	165	145	-	-	-	-	-	-	-	-
		P _a	2,818	2,157	1,380*	958*	704*	539*	-	-	-	-	-	-	-	-
1-7/8"	2.2	F _a	487	426	341	284	243	213	189	170	-	-	-	-	-	-
		P _a	4,736	3,626	2,320	1,611*	1,184*	906*	716*	580*	-	-	-	-	-	-
2-3/8"	2.8	F _a	790	691	553	460	395	345	307	276	251	230	-	-	-	-
		P _a	9,539	7,350	4,704	3,267	2,400*	1,837*	1,452*	1,176*	972*	816*	-	-	-	-
2-7/8"	3.8	F _a	1,294	1,132	906	755	647	566	503	453	411	377	348	323	302	-
		P _a	16,983	14,170	9,330	6,479	4,760	3,644*	2,879*	2,332*	1,927*	1,619*	1,380*	1,190*	1,036*	-
30 Weight / 50 ksi / ASTM F1083 Group IV																
1-5/8"	1.6	F _a	308	269	215	179	154	134	-	-	-	-	-	-	-	-
		P _a	2,617	2,003	1,282*	890*	654*	500*	-	-	-	-	-	-	-	-
1-7/8"	2.0	F _a	448	392	314	261	224	196	174	157	-	-	-	-	-	-
		P _a	4,363	3,340	2,138	1,484*	1,090*	835*	659*	534*	-	-	-	-	-	-
2-3/8"	2.8	F _a	784	686	549	457	392	343	305	274	249	228	-	-	-	-
		P _a	9,468	7,296	4,669	3,243	2,382*	1,824*	1,441*	1,167*	964*	810*	-	-	-	-
2-7/8"	3.8	F _a	1,312	1,148	918	765	656	574	510	459	417	382	353	328	306	-
		P _a	17,222	14,366	9,456	6,566	4,824	3,693*	2,918*	2,364*	1,953*	1,641*	1,398*	1,206*	1,050*	-
Post Size	Wt lbs / ft		3	3.5	4	5	6	7	8	9	10	11	12	13	14	15
Fence Height, H (ft)																

Notes: (*) Keep pa / Pa ≤ 0.2 as KH / r exceeds 200 (-) KH / r exceeds 400 K = 2.1 for cantilevers