



Dimensions & Strength

AP-15

Fence Industry Size		Actual Outside Dimension		Decimal Wall Thickness		Weight		Section Modulus	Minimum Yield Strength	Maximum Bending Moment	Calculated Load (lbs)				
		in.	mm	in.	mm	lbs/ft	kg/m				in.	psi	lbs/in	10' Supported	Cantilever 4' 6'
1 5/8"	AP-15	1.660	42.16	0.072	1.83	1.22	1.82	0.1367	x	50,000	=	6,835	228	142	95
1 7/8"	AP-15	1.900	48.26	0.072	1.83	1.40	2.09	0.1821	x	50,000	=	9,104	303	190	126
2 3/8"	AP-15	2.375	60.33	0.072	1.83	1.77	2.63	0.2911	x	50,000	=	14,556	485	303	202

AP-20

Fence Industry Size		Actual Outside Dimension		Decimal Wall Thickness		Weight		Section Modulus	Minimum Yield Strength	Maximum Bending Moment	Calculated Load (lbs)				
		in.	mm	in.	mm	lbs/ft	kg/m				in.	psi	lbs/in	10' Supported	Cantilever 4' 6'
1 3/8"	AP-20	1.315	33.40	0.080	2.03	1.05	1.57	0.0904	x	50,000	=	4,519	151	94	63
1 5/8"	AP-20	1.660	42.16	0.085	2.16	1.43	2.13	0.1576	x	50,000	=	7,879	263	164	109
1 7/8"	AP-20	1.900	48.26	0.090	2.29	1.74	2.59	0.2212	x	50,000	=	11,058	369	230	154
2 3/8"	AP-20	2.375	60.33	0.095	2.41	2.31	3.44	0.3730	x	50,000	=	18,650	622	389	259
2 7/8"	AP-20	2.875	73.03	0.110	2.79	3.24	4.83	0.6362	x	50,000	=	31,812	1,060	663	442
3 1/2"	AP-20	3.500	88.90	0.110	2.79	3.98	5.92	0.9627	x	50,000	=	48,133	1,604	1,003	669
4"	AP-20	4.000	101.60	0.110	2.79	4.57	6.79	1.2724	x	50,000	=	63,619	2,121	1,325	884

AP-30

Fence Industry Size		Actual Outside Dimension		Decimal Wall Thickness		Weight		Section Modulus	Minimum Yield Strength	Maximum Bending Moment	Calculated Load (lbs)				
		in.	mm	in.	mm	lbs/ft	kg/m				in.	psi	lbs/in	10' Supported	Cantilever 4' 6'
1 5/8"	AP-30	1.660	42.16	0.095	2.41	1.59	2.36	0.1729	x	50,000	=	8,646	288	180	120
1 7/8"	AP-30	1.900	48.26	0.105	2.67	2.01	2.99	0.2519	x	50,000	=	12,594	420	262	175
2 3/8"	AP-30	2.375	60.33	0.115	2.92	2.77	4.13	0.4401	x	50,000	=	22,006	734	458	306
2 7/8"	AP-30	2.875	73.03	0.125	3.18	3.67	5.46	0.7116	x	50,000	=	35,582	1,186	741	494

AP-40

Fence Industry Size		Actual Outside Dimension		Decimal Wall Thickness		Weight		Section Modulus	Minimum Yield Strength	Maximum Bending Moment	Calculated Load (lbs)				
		in.	mm	in.	mm	lbs/ft	kg/m				in.	psi	lbs/in	10' Supported	Cantilever 4' 6'
1 5/8"	AP-40	1.660	42.16	0.111	2.82	1.83	2.73	0.1962	x	50,000	=	9,810	327	204	136
1 7/8"	AP-40	1.900	48.26	0.120	3.05	2.28	3.39	0.2810	x	50,000	=	14,051	468	293	195
2 3/8"	AP-40	2.375	60.33	0.130	3.30	3.11	4.63	0.4881	x	50,000	=	24,403	813	508	339
2 7/8"	AP-40	2.875	73.03	0.160	4.06	4.63	6.90	0.8778	x	50,000	=	43,889	1,463	914	610
3 1/2"	AP-40	3.500	88.90	0.160	4.06	5.70	8.48	1.3408	x	50,000	=	67,042	2,235	1,397	931
4"	AP-40	4.000	101.60	0.160	4.06	6.55	9.75	1.7820	x	50,000	=	89,098	2,970	1,856	1,237