



Proveedor del Herrero

Catálogo

Lámina y Placa

CAL No.	ESPESOR		PESO	
	Milésimas	Límites	Kg/m ²	Límites
1/8	0.125	0.1320 0.1220	25.187	26.598 24.583
11	0.1196	0.1270 0.1121	24.099	25.590 22.588
12	0.1046	0.1120 0.0972	21.077	22.568 19.586
13	0.0897	0.0791 0.0822	18.074	19,566 16,563
14	0.0747	0.0821 0.0710	15.052	16,543 14,306
15	0.0673	0.0700 0.0636	13.561	14.206 12.815
1/16	0.0625	0.0635 0.0568	12.599	12.795 11.445
16	0.0598	0.0635 0.0509	12.050	12,795 10,256
17	0.0538	0.0567 0.0509	10.841	11.425 10.256
18	0.0478	0.0508 0.0449	9.632	10.236 9.047
19	0.0418	0.0448 0.0389	8.423	9.027 7.838
20	0.0360	0.0388 0.0344	7.234	7.818 6.932
21	0.0329	0.0343 0.0314	6.629	6.911 6.327
22	0.0299	0.0313 0.0284	6.025	6.307 5.723
23	0.0269	0.0238 0.0255	5.420	5.702 5.138
24	0.0239	0.0254 0.0225	4.815	5.118 4.534
25	0.0209	0.0224 0.0195	4.211	4.514 3.929
26	0.0179	0.0194 0.0172	3.607	3.909 3.466
27	0.0164	0.0171 0 0157	3.305	3.446 3.164
28	0.0149	0.0156 0.0142	3.002	3.143 2.861
29	0.0135	0.0141 0.0128	2.720	2.841 2.577
30	0.0120	0.0127 0.0113	2.418	2.59 2.27
31	0.0105	0.0112 0.0100	2.116	2.257 2.015

Lámina y Placa

CAL No.	ESPESOR		PESO	
	Milésimas	Límites	Kg/m ²	Límites
1"	1.000	1.0500 0.9500	204.960	215.2080 194.7120
15/16	0.9325	0.9844 0.8906	187.899	197.2940 178.5041
7/8	0.875	0.9188 0.8313	174.380	183.0990 165.6610
13/16	0.8125	0.8531 0.7719	163.719	171.9050 155.5331
3/4	0.750	0.7875 0.7125	152.830	160.4715 145.1885
11/16	0.6875	0.7219 0.6531	138.531	145.4576 131.6045
5/8	0.625	0.6563 0.5938	129.000	135.4500 122.5500
9/16	0.5625	0.5906 0.5344	113.344	119.0112 107.6768
1/2	0.500	0.5250 0.4750	104.090	109.2945 98.8855
7/16	0.4325	0.4541 0.4109	87.149	91.5065 82.7916
3/8	0.375	0.3938 0.3563	78.830	82.7715 74.8885
5/16	0.3125	0.3328 0.2969	64.500	67.7250 61.2750
1/4	0.250	0.2625 0.2375	52.000	54.6000 49.4000
3	0.2391	0.2511 0.2271	48.178	50.5869 45.7691
4	0.2242	0.2354 0.2130	45.176	47.4348 42.9172
5	0.2092	0.2197 0.1987	42.153	44.2607 40.0454
6	0.1943	0.2040 0.1846	39.151	41.1086 37.1935
3/16	0.1875	0.1969 0.1781	38.000	39.9000 36.1000
7	0.1793	0.1838 0.1703	36.129	37.9355 34.3226
8	0.1644	0.1726 0.1562	33.126	34.7823 31.4697
5/38	0.1562	0.1640 0.1484	31.474	33.0477 29.9039
9	0.1495	0.1570 0.1420	30.124	31.6302 28.6178
10	0.1345	0.1412 0.1278	27.102	28.4571 25.7469

PESOS TEÓRICOS CON VARIACIONES DE (+) (-) 5%



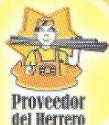
MEDIDAS		1'	7/8	3/4	5/8	1/2	3/8	5/16	1/4	3/16
Pies	Metros	25.4mm	22.2mm	19.1mm	15.9mm	12.7mm	9.5mm	7.9mm	6.4mm	4.8mm
3' x 6'	(.914 x 1.83)	343	292	256	216	174	132	108	87	63.56
3' x 8'	(.914 x 2.44)	457	389	341	288	232	176	144	116	84.75
3' x 10'	(.914 x 3.05)	571	486	426	360	290	220	180	145	105.9
4' x 6'	(1.22 x 2.44)	610	519	455	384	310	235	192	155	113.1
4' x 10'	(1.22 x 3.05)	763	649	569	480	387	293	240	193	141.4
4' x 12'	(1.22 x 3.66)	915	779	682	576	465	352	288	232	169.7
5' x 10'	(1.59 x 3.05)	950	808	709	598	483	365	299	241	176.2
5' x 15'	(1.52 x 4.57)	1424	1211	1062	896	723	548	448	361	264
5' x 20'	(1.52 x 6.10)	1900	1617	1417	1196	965	731	598	482	352.3
6' x 12'	(1.83 x 3.66)	1373	1168	1024	864	697	528	432	348	254.5
6' x 18'	(1.83 x 5.49)	2059	1752	1535	1296	1046	792	648	522	381.8
6' x 20'	(1.83 x 6.10)	2288	1947	1706	1440	1132	880	720	580	424.2
KILOS POR m²		204.96	174.38	152.83	129.00	104.09	78.83	64.50	52.00	38.00
KILOS POR pie²		19.04	16.20	14.20	11.98	9.67	7.32	5.99	4.83	3.5303

PESOS TEÓRICOS CON VARIACIONES DE (+) (-) 5%

Lámina en Caliente y Frío

ESTOS PESOS FUERON CALCULADOS, BASÁNDOSE EN LAS ESPECIFICACIONES UTILIZADAS POR LOS FABRICANTES DE LA LÁMINA

No.	ESPEJOR EN MM	ESPEJOR EN DECIMALES PULGADA	0.914 X 1.829 3' X 6'	0.914 X 2.438 3' X 8'	0.914 X 3.648 3' X 10'	1.219 X 2.438 4' X 8'	1.219 X 3.048 4' X 10'	PESO EN KG X M ²
3	6.0732	0.2391	81.646	108.862	136.077	145.149	181.436	48.8240
4	5.6947	0.2242	76.543	102.058	127.572	136.007	170.096	45.7725
5	5.3137	0.2092	71.440	95.254	119.067	127.005	158.756	42.7210
6	4.9359	0.1943	66.338	88.450	110.563	117.933	147.417	39.6695
7	4.5542	0.1793	61.235	81.646	102.058	108.862	136.077	36.6180
8	4.1758	0.1644	56.132	74.842	93.553	99.790	124.737	33.5665
9	3.7973	0.1495	51.029	68.039	85.048	90.718	113.396	30.5150
10	3.4163	0.1345	45.926	61.235	76.543	81.646	102.058	27.4635
11	3.0378	0.1196	40.823	54.431	68.039	72.574	90.718	24.4120
12	2.6568	0.1046	35.720	47.627	59.534	63.503	79.378	21.3605
13	2.2764	0.0897	30.617	40.823	51.029	54.431	68.039	18.3090
14	1.8974	0.0747	25.514	34.019	42.524	45.359	56.699	15.2575
15	1.7094	0.0673	22.936	30.617	38.272	40.823	51.029	13.7318
16	1.5189	0.0596	20.412	27.215	34.019	36.287	45.359	12.2080
17	1.3665	0.0538	18.370	24.494	30.617	32.659	40.823	10.9854
18	1.2141	0.0478	16.329	21.772	27.215	29.030	36.278	9.7645



Proveedor del Herrero

No.	ESPEJOR MM. EN	ESPEJOR EN DECIMALES PULGADA	1.219 X 3.658 4' X 12'	1.524 X 2.418 5' X 8'	1.524 X 3.048 5' X 10'	1.524 X 2.658 9' X 12'	1.524 X 4.572 5' X 15'	PESO EN KG X M ²
3	6.0732	0.2391	217.723	181.436	226.795	272.154	340.192	48.8240
4	5.6947	0.2242	204.115	170.096	212.620	255.144	316.930	45.7725
5	5.3137	0.2092	190.506	158.756	198.446	238.135	297.688	42.7210
6	4.9359	0.1943	176.900	147.417	184.271	221.125	276.406	39.6695
7	4.5542	0.1793	163.292	136.077	170.096	204.115	255.144	36.6180
8	4.1758	0.1644	149.685	124.737	155.096	187.106	233.882	33.5665
9	3.7973	0.1495	136.007	113.398	141.747	170.097	212.620	30.5150
10	3.4163	0.1345	122.469	102.058	127.572	153.067	191.358	27.4665
11	3.0378	0.1196	108.862	90.718	113.396	136.078	170.096	24.4120
12	2.6568	0.1046	95.254	79.718	99.223	119.067	148.834	21.3605
13	2.2784	0.0897	81.646	68.039	85.048	102.058	127.572	18.3090
14	1.8974	0.0747	68.039	56.699	70.873	85.048	106.310	15.2575
15	1.7094	0.0673	61.235	51.029	63.786	76.544	95.679	13.7318
16	1.5189	0.0596	54.431	45.359	56.699	88.390	85.048	12.2080
17	1.3665	0.0538	48.988	40.823	51.029	61.235	76.543	10.9854
18	1.2141	0.0478	43.545	36.267	45.359	54.431	68.039	9.7645

Lámina en Frío

ESTOS PESOS FUERON CALCULADOS, BASÁNDOSE EN LAS ESPECIFICACIONES UTILIZADAS POR LOS FABRICANTES DE LA LÁMINA

No.	ESPESOR EN MM	ESPESOR EN DECIMALES PULGADA	0.914 X 1.825 3' X 6'	0.914 X 2.438 3' X 8'	0.914 X 3.048 3' X 10'	PESO EN KG	
19	1.0317	0.0418	14.288	19.051	23.814	8.5447	
20	0.9119	0.0359	12.247	16.329	20.412	7.3236	
21	0.8357	0.0329	11.226	14.969	18.711	6.7133	
22	0.7595	0.0299	10.206	13.606	17.010	6.1030	
23	0.6833	0.0269	9.185	12.247	15.309	5.4927	
24	0.6071	0.0239	8.165	10.886	13.608	4.8824	
25	0.5309	0.0209	7.144	9.525	11.907	4.2721	
26	0.4547	0.0179	6.124	8.165	10.206	3.6618	
27	0.4166	0.0164	5.613	7.484	9.255	3.3567	
28	0.3785	0.0149	5.103	6.804	8.505	3.0515	
29	0.3429	0.0135	4.593	6.124	7.655	2.7404	
30	0.3048	0.0120	4.082	5.443	6.804	2.4412	
31	0.2667	0.0105	3.572	4.763	5.954	2.1361	
32	0.2464	0.0097	3.317	4.423	5.528	1.9635	
33	0.2266	0.0090	3.062	4.082	5.103	1.8309	
34	0.2063	0.0082	2.807	3.742	4.678	1.6783	
No.	ESPESOR EN MM	ESPESOR EN DECIMALES PULGADA	1.219 X 2.438 4' X 8'	1.219 X 3.048 4' X 10'	1.219 X 3.658 4' X 12'	PESO EN KG	
19	1.0617	0.0418	25.401	31.751	38.102	8.5442	
20	0.9119	0.0359	21.772	27.215	32.659	7.3236	
21	0.8357	0.0329	19.958	24.947	29.937	6.7133	
22	0.7595	0.0299	18.144	22.680	27.215	6.1030	
No.	ESPESOR EN MM	ESPESOR EN DECIMALES PULGADA	1.524 X 2.438 5' X 8'	1.524 X 3.048 5' X 10'	1.524 X 3.558 5' X 12'	.524 X 4.572 5' X 15'	PESO EN KG
19	1.0617	0.0418	31.75	39.69	47.63	59.534	8.5442
20	0.9119	0.0359	27.22	34.02	40.82	51.029	7.3236
21	0.8357	0.0329	24.95	31.16	37.42	46.776	6.7133
22	0.7595	0.0299	22.68	28.35	34.02	42.524	6.1030

Redondo

DIAMETRO		AREA DE LA SECCION		PESO	
mm.	Pulg.	mm.*	Pulg.*	Kg./m	Lb/pie
6.3	1/4	31.7	0.049	0.249	0.167
7.9	5/16	49.5	0.077	0.388	0.261
9.5	3/8	71.3	0.110	0.559	0.376
12.7	1/2	126.7	0.196	0.994	0.668
15.9	5/8	197.9	0.307	1.552	1.043
19.1	3/4	285.0	0.442	2.235	1.502
22.2	7/8	387.9	0.601	3.045	2.046
25.4	1	506.7	0.785	3.973	2.669
28.6	1 1/8	641.3	0.994	5.022	3.375
31.8	1-1/4	791.7	1.227	6.208	4.172
34.9	1-1/3	958.0	1.485	7.514	5.049
38.1	1-1/2	1140.1	1.767	9.00	6.048
41.3	1-5/8	1338.0	2.074	10.49	7.049
44.5	1-3/4	1551.8	2.405	12.17	8.178
44.7	1-7/8	1781.3	2.761	13.97	9.388
50.8	2	2026.8	3.142	15.89	10.678



Proveedor
del Herrero

Cuadrado

LADO		AREA DE LA SECCION		PESO	
mm.	Pulg.	mm.*	Pulg.*	Kg./m	Lb/pie
9.5	3/8	90.73	0.141	0.71	0.478
12.7	1/2	161.29	0.250	1.266	0.851
15.9	5/8	252.02	0.391	1.978	1.329
19.1	3/4	362.90	0.563	2.849	1.915
22.2	7/8	493.95	0.766	3.877	2.605
25.4	1	645.16	1.000	5.065	3.404
28.6	1-1/8	816.53	1.266	6.410	4.308
31.8	1-1/4	1008.07	1.563	7.913	5.318
34.9	1-3/8	1219.77	1.891	9.575	6.434
38.1	1-1/2	1451.62	2.250	11.395	7.657
44.5	1-3/4	1975.80	3.063	15.510	10.423
50.8	2	2580.65	4.000	20.258	13.613

Ángulos Lados Iguales

DIMENSIONES		PESO		ÁREA	EJE X-X- Y EJE Y-Y				
PULGADAS	mm.	Kg./m	Lbs/pie		1	r	S	X	r. min
				Cm.	Cm ⁴	Cm.	Cm.	Cm.	Cm.
3/4 x 1/8	19.0 x 3.2	0.88	0.6	1.11	0.37	0.58	0.28	0.58	0.32
1 x 1/8	25.4 x 3.2	1.19	0.8	1.52	0.92	0.79	0.51	0.76	0.51
1 x 3/16	25.4 x 4.8	1.73	1.2	2.21	1.25	0.76	0.72	0.81	0.48
1 x 1/4	25.4 x 6.3	2.22	1.5	2.80	1.54	0.74	0.92	0.86	0.48
1-1/4 x 1/8	31.7 x 3.2	1.50	1.0	1.93	1.83	0.97	0.80	0.89	0.64
1-1/4 x 3/16	31.7 x 4.8	2.20	1.5	2.81	2.54	0.97	1.16	0.97	0.61
1-1/4 x 1/4	31.7 x 6.3	2.86	1.9	3.72	3.21	0.94	1.49	1.02	0.61
1-1/2 x 1/8	38.1 x 3.2	1.83	1.2	2.34	3.25	1.17	1.18	1.07	0.76
1-1/2 x 3/16	38.1 x 4.8	2.68	1.8	3.48	4.58	1.17	1.64	1.12	0.74
1-1/2 x 1/4	38.1 x 6.3	3.48	2.3	4.40	5.83	1.14	2.20	1.19	0.74
1-1/2 x 5/16	38.1 x 7.9	4.26	2.9	5.40	6.66	1.12	2.62	1.24	0.74
1-1/2 x 3/8	38.1 x 9.5	4.99	3.4	6.34	7.91	1.12	3.11	1.30	0.74
2 x 1/8	50.8 x 3.2	2.46	1.7	3.10	7.91	1.60	2.13	1.40	1.02
2 x 3/16	50.8 x 4.8	3.63	2.4	4.61	11.45	1.57	3.11	1.45	1.02
2 x 1/4	50.8 x 6.3	4.75	3.2	6.06	14.57	1.55	4.10	1.50	0.99
2 x 5/16	50.8 x 7.9	5.83	3.9	7.42	17.46	1.52	4.92	1.55	0.99
2 x 3/8	50.8 x 9.5	6.99	4.7	8.77	19.98	1.50	5.74	1.63	0.99
2-1/2 x 3/16	63.5 x 4.8	4.61	3.1	5.81	22.89	1.98	4.92	1.75	1.24
2-1/2 x 1/4	63.5 x 6.3	6.10	4.1	7.68	29.14	1.96	6.39	1.83	1.24
2-1/2 x 5/16	63.5 x 7.9	7.44	5.0	9.48	35.38	1.93	7.87	1.88	1.22
2-1/2 x 3/8	63.5 x 9.5	8.78	5.9	11.16	40.79	1.91	9.34	1.93	1.22
3 x 1/4	76.2 x 6.3	7.29	4.9	9.29	51.6	2.36	9.5	2.13	1.59
3 x 5/16	76.2 x 7.9	9.08	6.1	11.48	62.9	2.34	11.6	2.21	1.50
3 x 3/8	76.2 x 9.5	10.72	7.2	13.61	73.3	2.31	13.6	2.26	1.47
3 x 1/2	76.2 x 12.7	13.99	9.4	17.74	92.4	2.29	17.5	2.36	1.47
3 x 5/8	76.2 x 15.9	17.11	11.5	21.68	109.1	2.24	21.3	2.49	1.45
4 x 1/4	101.6 x 6.3	9.82	6.6	12.52	124.9	3.18	17.2	2.77	2.01
4 x 5/16	101.6 x 7.9	12.20	8.2	15.48	154.4	3.15	21.1	2.84	2.01
4 x 3/8	101.6 x 9.5	14.58	9.8	18.45	181.5	3.12	24.9	2.89	2.01
4 x 1/2	101.6 x 12.7	19.05	12.8	24.19	231.4	3.10	32.3	2.99	1.98
4 x 5/8	101.6 x 15.9	23.36	15.7	29.74	277.2	3.05	39.3	3.12	1.95
4 x 3/4	101.6 x 19.0	27.53	18.5	35.10	318.8	3.02	46.0	3.22	1.95
6 x 3/8	152.4 x 9.5	22.17	14.9	28.13	640.6	4.78	57.8	4.16	3.02
6 x 1/2	152.4 x 12.7	29.17	19.6	37.10	828.7	4.72	75.5	4.27	3.00
6 x 5/8	152.4 x 15.9	36.01	24.2	45.87	1005.6	4.67	92.8	4.39	3.00

Solera

DIMENSIONES		PESO	DIMENSIONES		PESO
mm.	Pulgadas	Kg./m.	mm.	Pulgadas	Kg./m.
3 X 13	1/8 X 1/2	0.32	10 X 51	3/8 X 2	3.80
16	5/8	0.40	64	2-1/2	4.75
19	3/4	0.47	76	3	5.70
25	1	0.63	102	4	7.60
32	1-1/4	0.79			
38	1-1/2	0.95	13 X 16	1/2 X 5/8	1.58
51	2	1.27	19	3/4	1.90
			25	1	2.53
5 X 13	3/16 X 1/2	0.47	32	1-1/4	3.17
16	5/8	0.59	38	1-1/2	3.80
19	3/4	0.71	51	2	5.06
25	1	0.95	64	2-1/2	6.33
28	1-1/8	1.07	76	3	7.60
32	1-1/4	1.19	89	3-1/2	8.86
38	1-1/2	1.42	102	4	10.13
51	2	1.90			
			16 X 19	5/8 X 3/4	2.37
6 X 16	1/4 X 5/8	0.79	25	1	3.17
19	3/4	0.95	32	1-1/4	3.96
25	1	1.27	38	1-1/2	4.75
32	1-1/4	1.58	51	2	6.33
38	1-1/2	1.90	64	2-1/2	7.91
51	2	2.53	76	3	9.50
64	2-1/2	3.17	89	3-1/2	11.08
76	3	3.80	102	4	12.66
89	3-1/2	4.43			
102	4	5.06	19 X 25	3/4 X 1	3.80
			32	1-1/4	4.75
8 X 13	5/16 X 1/2	0.79	38	1-1/2	5.70
16	5/8	0.99	51	2	7.60
19	3/4	1.19	64	2-1/2	9.50
25	1	1.58	76	3	11.40
32	1-1/4	1.98	102	4	15.19
38	1-1/2	2.37			
51	2	3.17	22 X 51	7/8 X 2	8.86
64	2-1/2	3.96	64	2-1/2	11.80
76	3	4.75	76	3	13.29
89	3-1/2	5.54	102	4	17.73
102	4	6.33			
10 X 13	3/8 X 1/2	0.95	25 X 38	1 X 1-1/2	7.60
16	5/8	1.19	51	2	10.13
19	3/4	1.42	64	2-1/2	12.66
25	1	1.90	76	3	15.19
32	1-1/4	2.37	102	4	20.26
38	1-1/2	2.85			



Proveedor
del Herrero

ESPECIFIC		LAMI- NADO GENE- RAL	GRADO	COMPOSICION QUIMICA							PROPIEDADES FISICAS DEL MATERIAL					
DESIGN	GRADO			C Máx.	Mn.	P Máx.	C Máx.	Si	Cu	V	RESISTENCIA		LIMITE ELASTICO		ALARGAMIENTO	
										Kgs/cm*	Lbs/pulg	Kgs/cm*	Lbs/pulg	8'	2'	
ASTM-A	A	P.y.L.C.	1015	0.18	.30-.60	.040	.050	.05-10	(b)		3300/3664	45/55000	1595	24000	7	30
	B	P.y.L.C.	1018	0.20	.60-.90	940	.050	.05-10	(b)		3515/4215	50/60000	1895	27000	25	28
	C	P.y.L.C.	1021	0.23	.60-.60	.040	.050	.05-10	(b)		3865/4570	55/65000	2105	30000	23	27
	D	P.y.L.C.	1026	0.28	.60-.60	.040	.050	.05-10	(b)		4215/5080	60/72000	2320	33000	21	24
ASTM-A	A	P.y.L.C.	--	0.15	.45-.75	0.035	.040	.15-30	(b)		3160/3865	45/55000	1685	24000	29	37
	6	P.y.L.C.	--	0.20	.45-.75	0.035	.040	.15-30	(b)		3515/4215	50/60000	1895	27000	27	30
	C	P.y.L.C.	--	0.24	.45-.75	0.035	.040	.15-30	(b)		3865/4570	55/65000	2105	30000	25	29
ASTM-		P.y.L.C.	--	0.25	.80-1.20	.040	.050	.05 máx	(a)	25050	4075/5625	58/80000	2530	36000	20	23
(d)	1/4	P.y.L.C.	--	0.18	.80-1.20	.040	.050	.05-.10	.20-30	25050	4920min.	70000min.	3515	50000	18	--
MON-	1/4	P.	--	0.22	.80-1.20	.040	.050	.05-09	.20-30		4920min.	70000min.	3515	50000	18	--
	5 LB.	P.y.L.C.	--	0.21	.60-.90	.040	.050	.05-.10			(c) 4215 min.	60000 min.	(g) 2460	35000	--	(f) (g)
	X 42	P.y.L.C.	--	0.21	.80-1.20	.040	.050	.05 máx			(c) 4215 min.	60000min.	(g) 2950	42000	--	(f) (g)
	X 52	P.y.L.C.	--	0.27	.90-1.20	.040	.050	.05 máx			(c) 4635 min.	60000min.	(g) 3680	52000		(f)(g)



DIÁMETRO NOMINAL		DIÁMETRO EXTERIOR		ESPESOR		PESO EXT. LISO		PESO ROSCA Y COPLÉ		PESO POR TUBO (Kg.)		TUBOS/TON
mm.	Pulg.	mm.	Pulg.	mm.	Pulg.	Kg/m	(Lb/pie)	Kg/m	(Lb/pie)	extremo	con rosca y cople	
13	1/2	21.34	0.840	2.77	0.109	1.265	0.85	1.265	0.85	8.096	8.096	124
19	3/4	26.67	1.050	2.87	0.113	1.681	1.13	1.681	1.13	10.758	10.758	93
25	1	33.40	1.315	3.38	0.133	2.500	1.68	2.500	1.68	16.000	16.000	63
32	1 1/4	42.16	1.660	3.56	0.140	3.378	2.27	3.393	2.28	21.619	21.715	46
38	1 1/2	48.26	1.900	3.68	0.145	4.048	2.72	4.063	2.73	25.907	25.003	39
50	2	60.33	2.375	3.91	0.154	5.432	3.65	5.476	3.68	34.765	34.046	29
64	2 1/2	73.03	2.875	5.16	0.203	8.616	5.79	8.661	5.82	55.142	55.430	18
76	3	88.90	3.500	5.49	0.216	11.280	7.58	11.339	7.62	72.192	72.570	14
102	4	114.30	4.500	6.02	0.237	16.057	10.79	16.205	10.89	102.760	103.712	10

DIÁMETRO NOMINAL		DIÁMETRO EXTERIOR		ESPESOR		PESO EXT. LISO		PESO ROSCA Y COPLÉ		PESO POR TUBO (Kg.)		TUBOS/TON
mm.	Pulg.	mm.	Pulg.	mm.	Pulg.	Kg/m	(Lb/pie)	Kg/m	(Lb/pie)	extremo liso	con rosca y cople	
64	2 1/2	73.03	2.875	4.060	0.160	6.905	4.640	7.031	4.724	44.192	44.998	22
76	3	88.90	3.500	4.320	0.170	9.010	6.055	9.218	6.194	57.664	58.995	17
102	4	114.30	4.500	4.700	0.185	12.703	8.536	12.985	8.726	81.299	83.104	12

Tubería 40

Tubería X

DIÁMETRO NOMINAL		DIÁMETRO EXTERIOR		ESPESOR		PESO EXT. LISO		PESO ROSCA Y COPLE		PESO POR TUBO (Kg.)
mm.	Pulg.	mm.	Pulg.	mm.	Pulg.	Kg/m	(Lb/pie)	Kg/m	(Lb/pie)	
19	3/4	26.67	1.050	22.86	0.900	1.90	0.75	1.20	0.81	7.20
25	1	33.40	1.315	29.60	1.165	1.90	0.75	1.50	1.00	9.00
32	1 1/4	42.16	1.660	37.60	1.480	2.28	0.90	2.35	1.58	14.1
38	1 1/2	48.26	1.900	43.69	1.720	2.28	0.90	2.70	1.82	16.2
50	2	60.33	2.375	55.00	2.165	2.66	0.50	3.95	2.66	23.7
64	2 1/2	73.03	2.875	67.70	2.665	2.66	0.50	4.80	3.23	28.8
76	3	88.90	3.500	82.81	3.260	3.04	0.20	6.70	4.50	40.2
102	4	114.30	4.500	108.21	4.260	3.04	0.20	8.60	5.78	51.6

Tubería 30

DIÁMETRO NOMINAL		DIÁMETRO EXTERIOR		ESPESOR		PESO EXT. LISO		PESO ROSCA Y COPLE		PESO POR TUBO (Kg.)		TUBOS/TON
mm.	Pulg.	mm.	Pulg.	mm.	Pulg.	Kg/m	(Lb/pie)	Kg/m	(Lb/pie)	extremo liso	con rosca y cople	
13	1/2	21.34	0.840	3.73	0.147	1.622	1.09	1.622	1.09	10.381	10.381	97
19	3/4	26.67	1.050	3.91	0.154	2.188	1.47	2.202	1.48	14.003	14.093	71
25	1	33.40	1.315	4.55	0.179	3.229	2.17	3.244	2.18	20.666	20.762	48
32	1 1/4	42.16	1.660	4.85	0.191	4.464	3.00	4.494	3.02	28.570	28.762	35
38	1 1/2	48.26	1.900	5.08	0.200	5.402	3.63	5.447	3.66	34.573	34.861	29
50	2	60.33	2.375	5.54	0.218	7.471	5.02	7.545	5.07	47.814	48.288	21

Tubería 80

Viga IPS

PERALTE		PESO	PATIN		ALMA
mm.	Pulgadas	Kg./m.	mm.	mm.	mm.
76.2	3	8.84	59	6.6	4.3
101.6	4	11.46	68	7.4	4.8
127.0	5	14.88	76	8.3	5.3
152.4	6	18.60	85	9.1	5.8
203.2	8	27.38	102	10.8	6.9

Canal

PERALTE		PESO	ESPEJOR ALMA	ANCHO PATIN
mm.	Pulgadas	Kgs/m.	mm.	mm.
76.2	3	6.10	4.3	35.8
101.6	4	8.04	4.8	40.2
152.4	6	12.20	5.1	48.7
152.4	6	15.63	8.0	52.0
152.4	6	19.35	11.0	55.0
203.2	8	17.11	5.6	57.4
203.2	8	20.46	8.0	60.0
203.2	8	27.90	12.0	64.0
254.0	10	22.80	6.10	66.0
254.0	10	29.80	10.0	69.0
254.0	10	37.20	13.36	73.3
254.0	10	44.70	17.09	77.04
304.8	12	30.80	7.16	74.73
304.8	12	37.20	9.83	77.39
304.8	12	44.70	12.95	80.52



Proveedor
del Herrero

Polín

+ PERFIL	DIMENSIONES EXTERIORES EN PULGADAS	CALIBRE	DIMENSIONES DE LAS SECCIONES (mm)					LONG. COMERCIALES	c1	
			c1						PESO	AREA
			D	B	d	t	R		m	kg./m.
12EP10	12 x 3 1/2	10	304	89	25	3.42	3.96	12	14.4	17.42
12EP12	12 x 3 1/2	12	304	89	25	2.66	3.96	12	11.1	13.65
12EP14	12 x 3 1/2	14	304	89	25	1.90	3.96	12	8.0	9.82
10EP10	10 X 2 3/4	10	254	69	19	3.42	3.96	10	11.22	13.96
10EP12	10 X 2 3/4	12	254	69	19	2.66	3.96	10	8.80	10.96
10EP14	10 X 2 3/4	14	254	69	19	1.90	3.96	10	6.34	7.90
10EP16	10 X 2 3/4	16	254	69	19	1.52	3.96	10	5.10	6.35
9EP10	9 X 2 3/4	10	228	69	19	3.42	3.96	9	10.52	13.09
9EP12	9 X 2 3/4	12	228	69	19	2.66	3.96	9	8.26	10.28
9EP14	9 X 2 3/4	14	228	69	19	1.90	3.96	9	5.96	7.42
9EP16	9 X 2 3/4	16	228	69	19	1.52	3.96	9	4.79	5.96
8EP10	8 X 2 3/4	10	203	69	19	3.42	3.96	8	9.82	12.23
8EP12	8 X 2 3/4	12	203	69	19	2.66	3.96	8	7.72	9.61
8EP14	8 X 2 3/4	14	203	69	19	1.90	3.96	8	5.57	6.93
8EP16	8 X 2 3/4	16	203	69	19	1.52	3.96	8	4.48	5.57
7EP10	7 X 2 3/4	10	177	69	19	3.42	3.96	7	9.12	11.36
7EP12	7 X 2 3/4	12	177	69	19	2.66	3.96	7	7.17	8.93
7EP14	7 X 2 3/4	14	177	69	19	1.90	3.96	7	5.18	6.45
7EP16	7 X 2 3/4	16	177	69	19	1.52	3.96	7	4.17	5.19
6EP10	6 X 2	10	152	50	19	3.42	3.96	6	7.38	9.19
6EP12	6 X 2	12	152	50	19	2.66	3.96	6	5.82	7.24
6EP14	6 X 2	14	152	50	19	1.90	3.96	6	4.21	5.24
6EP16	6 X 2	16	152	50	19	1.52	3.96	6	3.39	4.22
5EP10	5 X 2	10	127	50	19	3.42	3.96	5	6.68	8.32
5EP12	5 X 2	12	127	50	19	2.66	3.96	5	5.27	6.57
5EP14	5 X 2	14	127	50	19	1.90	3.96	5	3.82	4.76
5EP16	5 X 2	16	127	50	19	1.52	3.96	5	3.08	3.84
4EP10	4 X 2	10	101	50	19	3.42	3.96	4	5.98	7.45
4EP12	4 X 2	12	101	50	19	2.66	3.96	4	4.73	5.89
4EP14	4 X 2	14	101	50	19	1.90	3.96	4	3.44	4.28
4EP16	4 X 2	16	101	50	19	1.52	3.96	4	2.77	3.45
3EP12	3 X 1 1/2	12	76	38	19	2.66	3.96	3	3.6	4.54
3EP14	3 X 1 1/2	14	76	38	19	1.90	3.96	3	2.4	3.31

DIMENSIONES EXTERIORES DXB	ESPESOR I		COLOR DE IDENTIFICACION	CALIBRE	PESO P	AREA A	MOMENTO DE INERCIA I		MODULO DE SECCION S		RADIO DE GIRO		SISTEMA DE EMBARQUE	
							EJE XX	EJE YY	EJE XX	EJE YY	EJE XX	EJE YY	TRAMOS POR PAQUETE	PESO POR PAQUETE KG.
	Pulg./mm.	Pulg.					mm.	Kg/m	cm ²	cm ⁴	cm ⁴	cm ³		
1 X 1 25 x 25	0.095	2.4	Verde	13	1.62	2.07	1.75	1.75	1.38	1.38	1.92	1.92	100	972
	0.133	3.4	Rojo	10	2.10	2.68	2.01	2.01	1.58	1.58	0.87	0.87	81	1021
1 1/2 x 1 1/2 38 x 38	0.110	2.8	Blanco	12	2.95	3.74	7.56	7.56	3.96	3.96	1.42	1.42	56	991
	0.125	3.2	Verde	11	3.29	4.17	8.21	8.21	4.30	4.30	1.40	1.40	49	967
	0.154	4.0	Rojo	10	3.91	4.95	9.24	9.24	4.85	4.85	1.36	1.36	42	985
2 x 2 51 x 51	0.110	2.8	Blanco	12	4.00	5.11	19.04	19.04	7.49	7.49	1.93	1.93	42	1008
	0.125	3.2	Verde	11	4.54	5.79	21.40	21.40	8.42	8.42	1.92	1.92	36	981
	0.156	4.0	Rojo	10	5.45	6.97	24.70	24.70	9.72	9.72	1.88	1.88	30	981
2 1/2 x 2 1/2 64 x 64	0.125	3.2	Blanco	11	5.84	7.40	44.07	44.07	13.88	13.88	2.44	2.44	30	1051
	0.141	3.6	Verde	10	6.47	8.26	48.30	48.30	15.20	15.20	2.42	2.42	25	970
	0.188	4.8	Roja	3/16	8.32	10.60	59.10	59.10	18.70	18.70	2.36	2.36	20	998
3 x 3 76 x 76	0.125	3.5	Blanco	11	7.12	9.01	78.93	78.93	20.71	20.71	2.95	2.95	25	1068
	0.156	4.0	Verde	9	8.62	11.00	93.70	93.70	24.60	24.60	2.92	2.92	20	1034
	0.188	4.8	Rojo	3/16	10.20	13.00	108.00	108.00	28.30	28.30	2.90	0.03	16	979
3 1/2 x 3 1/2 89 x 89	0.125	3.2	Blanco	11	8.39	10.62	128.53	128.53	28.91	28.91	3.47	3.47	20	1007
	0.156	4.0	Verde	9	10.20	13.00	154.00	154.00	34.60	34.60	3.45	3.45	18	979
	0.188	4.8	Rojo	3/16	12.10	15.40	179.00	179.00	40.10	40.10	3.40	3.40	16	1162
	0.250	6.4	Azul	1/4	15.60	19.90	220.00	220.00	49.50	49.50	3.33	3.33	12	1123
3 x 2 76 x 51	0.125	3.2	Blanco	11	5.84	7.40	57.41	30.53	15.07	12.02	2.76	2.03	30	1051
	0.141	3.6	Verde	9	6.47	8.26	63.30	33.40	16.60	13.20	2.77	2.01	25	970
	0.188	4.8	Rojo	3/16	8.32	10.60	77.40	40.70	20.30	16.00	2.69	1.93	20	998
4 x 2 151 x 102	0.125	3.2	Blanco	11	7.12	9.01	117.34	39.69	23.09	15.62	3.60	2.09	24	1025
	0.156	4.0	Verde	9	8.62	11.00	139.00	46.60	27.50	18.40	3.56	2.07	20	1034
	0.188	4.8	Rojo	3/16	10.20	13.00	161.00	53.70	31.80	21.10	3.51	2.03	16	979
4 x 3 102 x 76	0.125	3.2	Blanco	11	8.39	10.62	156.41	100.45	30.79	26.36	3.93	3.07	20	1007
	0.156	4.0	Verde	9	10.20	13.00	187.00	120.00	36.90	31.50	3.81	3.05	16	979
	0.188	4.8	Rojo	3/16	12.10	15.40	218.00	139.00	42.90	36.50	3.76	3.00	16	1162
	0.250	6.4	Azul	1/4	15.60	19.90	269.00	171.00	52.90	44.80	3.67	2.93	12	1123
4 x 4 102 x 102	0.125	3.2	Blanco	11	9.61	12.26	195.65	195.65	38.51	38.51	3.99	3.99	20	1153
	0.156	4.0	Verde	9	11.83	15.27	241.01	241.01	48.48	48.48	3.98	3.96	16	1136
	0.188	4.8	Rojo	3/16	14.10	17.90	275.00	275.00	54.20	54.20	3.92	3.92	12	1015
	0.250	6.4	Azul	1/4	18.20	23.20	342.00	342.00	67.30	67.30	3.84	3.84	12	1310
4 1/2 x 4 1/2 114 x 114	0.125	3.2	Blanco	11	10.88	13.87	282.24	282.24	49.49	49.49	4.52	4.52	16	1044
	0.156	4.0	Verde	9	13.41	17.19	342.37	342.37	60.06	60.06	4.46	4.46	16	1288
	0.188	4.8	Rojo	3/16	15.92	20.26	399.63	399.63	69.67	69.67	4.45	4.45	12	1146
	0.250	6.4	Azul	1/4	20.70	26.39	503.70	503.70	87.83	87.83	4.37	4.37	9	1118
5 x 5 127 x 127	0.125	3.2	Blanco	11	12.14	15.48	391.72	391.72	61.78	61.78	5.03	5.03	16	1166
	0.141	3.6	Verde	9	14.99	19.27	480.54	480.54	75.68	75.68	4.99	4.99	12	1080
	0.188	4.8	Rojo	3/16	17.90	22.80	560.00	560.00	88.10	88.10	4.96	4.96	12	1289
	0.250	6.4	Azul	1/4	23.20	29.60	705.00	705.00	111.00	111.00	4.88	4.88	9	1253
5 X 3 102 x 76	0.125	3.2	Blanco	11	9.61	12.26	268.09	121.97	42.28	31.95	4.67	3.15	20	1153
	0.156	4.0	Verde	9	11.83	15.27	328.17	147.07	51.37	38.70	4.62	3.10	16	1136
	0.188	4.8	Rojo	3/16	14.10	17.90	378.00	171.00	59.60	44.80	4.59	3.08	16	1015
	0.250	6.4	Azul	1/4	18.20	23.20	470.00	210.00	74.10	55.20	4.51	3.01	12	1310
6 x 3 152 x 76	0.125	3.2	Blanco	11	10.88	13.87	420.45	143.62	55.06	37.69	5.51	3.23	16	1044
	0.156	4.0	Verde	9	13.41	17.19	508.76	173.01	66.94	45.53	5.44	3.17	16	1288
	0.188	4.8	Rojo	3/16	15.92	20.26	595.28	201.06	78.00	52.76	5.41	3.15	12	1146
	0.250	6.4	Azul	1/4	20.70	26.39	745.15	143.62	97.99	65.55	5.31	3.07	9	1119
6 x 4 152 x 102	0.125	3.2	Blanco	11	12.14	15.45	507.87	273.50	66.86	53.091	5.74	4.22	16	1166
	0.156	4.0	Verde	9	14.99	19.25	622.69	337.10	81.93	66.10	5.68	4.18	12	1080
	0.188	4.8	Rojo	3/16	17.90	0,023	728.00	389.00	95.60	76.60	5.65	4.13	12	1287
	0.250	6.4	Azul	1/4	23.20	29.60	919.00	488.00	121.00	96.20	5.57	4.06	9	1256

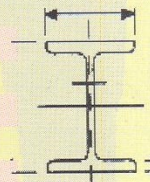
Perfil PPR

Viga IPR

DIMENSIONES	PESO Kg/m	PESO Lb/pie	AREA a cm ²	PATIN mm	ESPEJOR DEL ALMA	EJE X-X		
					mm	1 cm ⁴	S cm ³	r cm ²
152.4 x 101.6 6 x 4	13.4	9	17.29	5.5	4.3	682.6	91.1	6.27
	17.9	12	22.90	7.1	5.8	919.9	119.8	6.32
	23.8	16	30.58	10.3	6.6	1336.1	167.1	6.60
203.2 x 101.6 8 x 4	14.9	10	19.09	5.2	4.3	1281.9	127.9	8.17
	19.4	13	24.77	6.5	5.8	1648.3	162.4	8.26
	22.4	15	28.64	8.0	6.2	1991.9	193.4	8.35
203.2 x 133.4 8 x 5 1/4	26.8	18	33.93	8.4	5.8	2576.5	249.8	8.71
	31.3	21	39.74	10.2	6.4	3134.2	298.2	8.86
254.0 x 201.6 10 x 4	17.9	12	22.83	5.3	4.8	2239.3	178.6	9.90
	22.4	15	28.45	6.9	5.8	2867.8	226.1	10.03
	25.3	17	32.19	8.4	6.1	3408.9	265.5	10.28
	28.3	19	36.25	10.0	6.4	4008.3	308.1	10.51
254.0 x 146.0 10 x 5 3/4	32.8	22	41.87	9.1	6.1	4911.5	380.2	10.87
	38.7	26	49.09	11.2	6.6	5993.7	457.2	11.04
	44.6	30	57.03	13.0	7.6	7075.9	530.9	11.12
304.8 x 101.6 12 x 4	20.9	14	26.80	5.7	5.1	3687.8	244.8	11.73
	23.8	16	30.40	6.7	5.6	4287.2	280.2	11.86
	28.3	19	35.90	8.9	6.0	5411.0	349.0	12.24
	32.8	22	41.80	10.8	6.6	6493.3	416.2	12.47
304.8 x 165.1 12 x 6 1/2	38.7	26	49.30	9.7	5.8	8491.1	547.3	13.13
	44.6	30	56.70	11.2	6.6	9906.3	632.5	13.23
	52.1	35	66.40	13.2	7.6	11862.6	747.3	13.33
304.8 x 203.2 12 x 8	59.6	40	76.10	13.1	7.5	12903.2	850.5	13.03
	67.2	45	85.20	14.6	8.5	14568.1	952.1	13.08
	74.5	50	94.80	16.3	9.4	16299.5	1060.2	13.15
355.6 x 171.5 14.6 x 6 3/4	44.6	30	57.0	9.8	6.9	12053.0	688.3	14.55
	50.6	34	64.5	11.6	7.2	14117.0	796.4	14.80
	56.7	38	72.2	13.1	7.9	16036.0	894.7	14.93
355.6 x 203.2 14 x 8	64.0	43	81.3	13.5	7.7	17814.7	1027.5	14.78
	71.5	48	91.10	15.1	8.6	20187.2	1152.0	14.85
	78.9	53	100.6	16.8	9.4	22518.1	1274.9	14.96
406.4 x 177.8 16 x 7	53.6	36	68.4	10.9	7.5	18647.2	925.9	16.53
	59.6	40	76.1	12.8	7.7	21560.8	1060.2	16.84
	67.1	45	85.8	14.4	8.8	24391.2	1191.3	16.89
	74.5	50	94.8	16.0	9.7	27429.7	1327.4	16.96
457.2 x 190.5 18 x 7 1/2	74.5	50	94.8	14.5	9.0	33298.5	1456.8	18.74
	81.9	55	104.5	16.0	9.9	37044.6	1610.9	18.82
	89.3	60	113.5	17.7	10.5	40957.2	1769.8	18.97
	96.8	65	123.2	19.1	11.4	44536.7	1917.3	19.02
	105.7	71	134.1	20.6	12.6	48699.1	2081.2	19.05
457.2 x 279.4 18 X 11	113.1	76	143.8	17.3	10.8	55358.8	2392.5	19.63
	128.0	86	163.2	19.6	12.2	63683.4	2720.2	19.73
	144.4	97	183.8	22.1	13.6	72840.5	3080.7	19.86
	157.8	106	200.6	23.9	15.0	79500.2	3342.9	19.91
	177.1	119	226.4	26.9	16.6	91154.7	3785.4	20.06

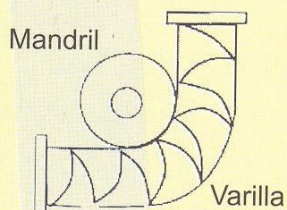


Proveedor
del Herrero



Varilla Corrugada

VARILLA No.	DIAMETRO NOMINAL	PESO		DOBLADO A 180°
	mm.	Pulgadas	Kg./m.	diámetro del mandril
2.5	7.9	5/16	0.384	4.0 d.
3	9.5	3/8	0.557	4.0 d.
4	12.7	1/2	0.996	4.0 d.
5	15.9	5/8	1.560	4.0 d.
6	19.1	3/4	2.250	5.0 d.
7	22.2	7/8	3.034	5.0 d.
8	25.4	1	3.975	5.0 d.
9	28.6	1 1/8	5.033	
10	31.8	1 1/4	6.225	7.0 d.
12	38.1	1 1/2	8.938	8.0 d.



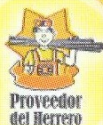
PROPIEDADES MECÁNICAS DEL DOBLADO.

A temperatura ambiente (16° min.) bajo las siguientes condiciones:

- Haciendo uso del MANDRIL adecuado.
- Aplicando una fuerza continua y uniforme.
- Manteniendo unido el producto y el MANDRIL durante el doblado.

Rejillas

	TIPOS	APLICACION
STANDARD	<p>IS-05</p>	Recomendada para todo tipo de uso
	<p>IS-01</p>	Con menor espacio entre soleras. Recomendable para tráfico pesado o donde se requiera rejilla cerrada
FABRICACION ESPECIAL	<p>IS-02</p>	Se utiliza en casos donde se requiera un mínimo espacio abierto.
	<p>IS-03</p>	Con menor espacio entre soleras que el tipo IS-05. 18% mayor capacidad de carga y peso específico.
	<p>IS-04</p>	Igual al tipo IS-03, pero con varillas transversales a menor distancia
	<p>IS-06</p>	Igual al tipo IS-05, pero con varillas transversales a menor distancia.



Proveedor del Herrero

PESO APROXIMADO DE REJILLA ELECTROFORJADA EN ACERO
Kilos por metro cuadrado

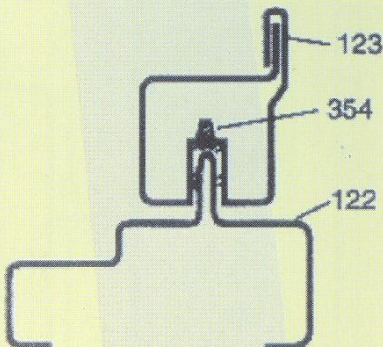
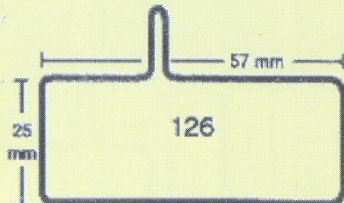
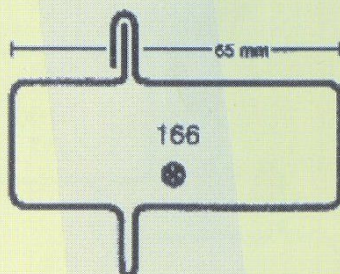
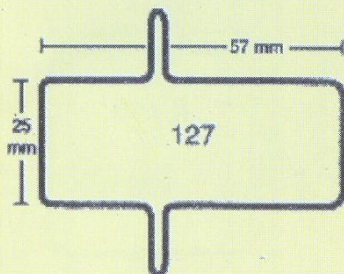
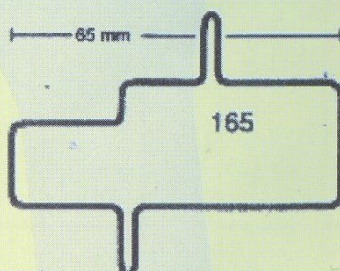
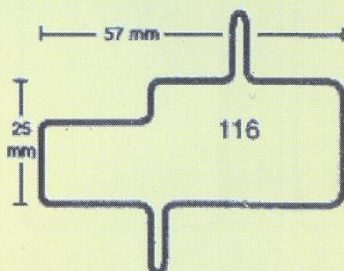
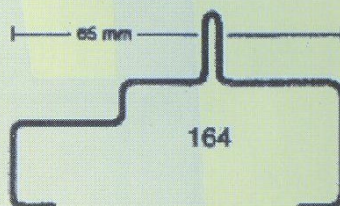
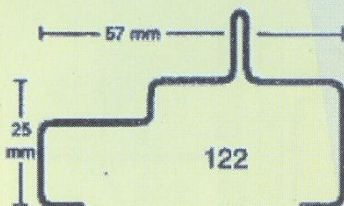
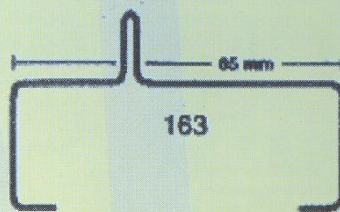
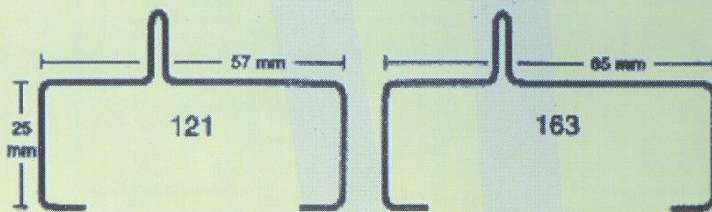
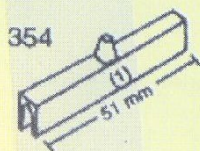
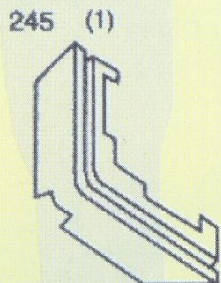
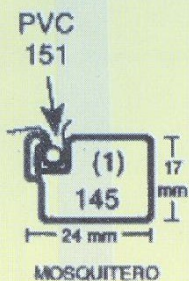
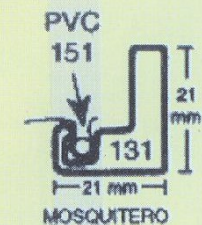
SOLERAS DE CARGA	IS-01	IS-02	IS-03	IS-04	IS-05 STANDARD	IS-06
3.2x 19.1 mm (1/8" x 3/4")	26	29	23	26	19	22
4.8 x 19.1 mm (3/16" x 3/4")	38	41	33	36	27	31
32x 25.4 mm (1/8" x 1")	34	37	30	33	25	28
48 x 25A mm (3/16"x 1")	50	53	43	46	35	39
32 x 31.8 mm (1/8" x 1-1/4")	42	45	36	40	30	33
4.8 x 31.8 mm (3/16" x 1-1/4")	61	65	53	56	44	47
32 x 38.1 mm (3/16"x 1-1/2")	50	53	43	46	36	39
4.8 x 38.1mm (3/16" x 1-1/4")	73	76	63	66	51	55
4.8 x 44.4 mm (3/16" x 1-3/4")	85	88	73	76	60	63
48x 50.8 mm (3/16"x 2")	96	99	83	86	68	71
4.8 x 57.1 mm (3/16" x 2-1/4")	108	111	93	96	76	79
48 x 61.5 mm (3/16" x 2-1/2")	119	122	103	106	84	87



NUMERO	CALIBRADOR DE LA AMERICAN STEEL & WIRW Co. (A.S.&W)			NUMERO	CALIBRADOR DE LA AMERICAN STEEL & WIRW Co. (A.S.&W)		
	Diámetro mm.	Peso en Kgs. de 1000 mts.	Núm. de mts. en 1Kg.		Diámetro mm.	Peso en Kgs. de 1000 mts.	Núm. de mts. en 1Kg.
1	7.188	316.520	3.16	1	7.620	355.709	2.81
2	6.668	272.381	3.67	2	7.213	318.726	3.14
3	6.190	234.729	4.26	3	6.579	265.158	3.77
4	5.723	200.647	4.98	4	6.045	223.861	4.47
5	5.258	169.366	5.90	5	5.588	191.292	5.23
6	4.877	145.710	6.86	6	5.156	162.859	6.14
7	4.496	123.833	8.08	7	4.572	128.056	7.81
8	4.115	103.735	9.64	8	4.191	107.602	9.29
9	3.767	86.931	11.50	9	3.759	86.624	11.54
10	3.429	72.031	13.88	10	3.404	70.984	14.09
11	3.061	57.400	17.42	11	3.048	56.913	17.57
12	2.680	44.000	22.73	12	2.769	46.971	21.29
13	2.324	33.087	30.22	13	2.413	35.670	28.03
14	2.032	25.295	39.53	14	2.108	27.223	36.73
15	1.829	20.493	48.80	15	1.829	20.563	48.63
16	1.588	15.448	64.73	16	1.651	16.699	59.88
17	1.372	11.532	86.72	17	1.473	13.292	75.23
18	1.207	8.925	112.04	18	1.245	9.495	105.32
19	1.041	6.639	150.63	19	1.067	6.975	143.37
20	0.884	4.786	208.94	20	0.889	4.837	206.73
21	0.805	3.972	251.76	21	0.813	3.972	247.10
22	0.726	3.233	309.31	22	0.711	3.233	323.00

Alambre

Material para Ventanas



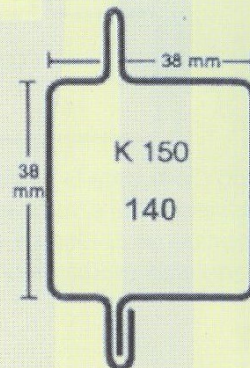
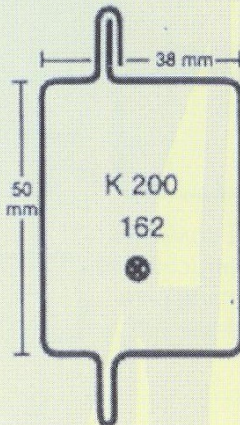
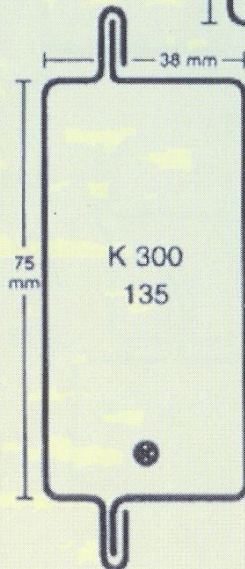
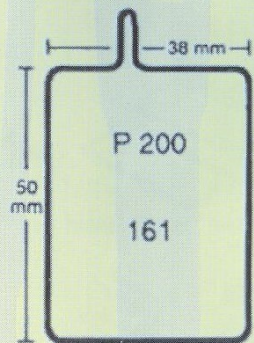
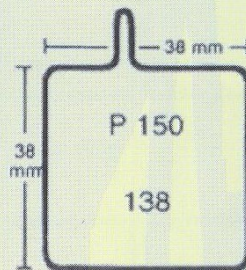
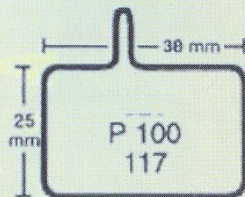
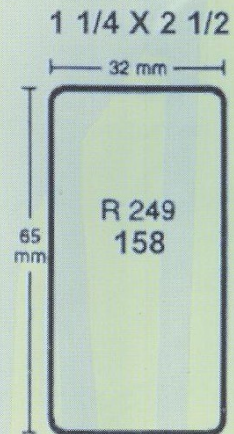
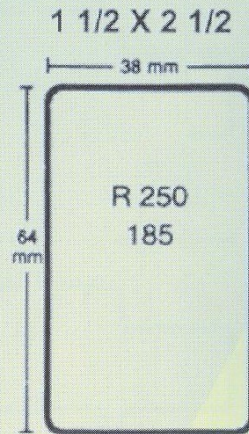
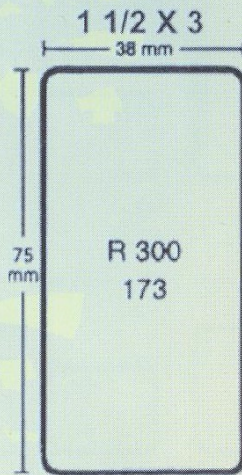
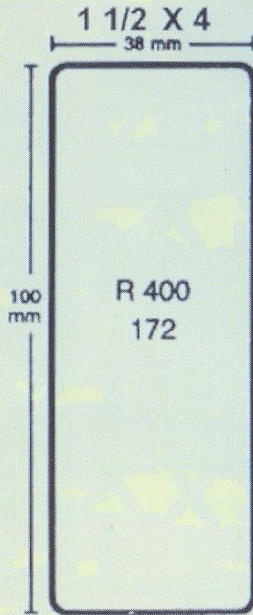
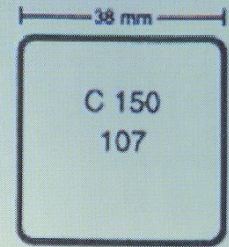
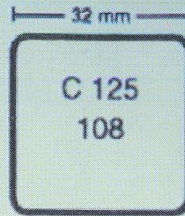
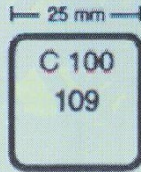
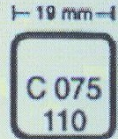
El deslizador autolubricado (354) para la ventana corrediza permite un deslizamiento silencioso, elimina la carrucha y el riel, además le ofrece la opción de colocar la ventana para que abra a la derecha e izquierda mediante un giro a 180°.

(1) Patente en tramite

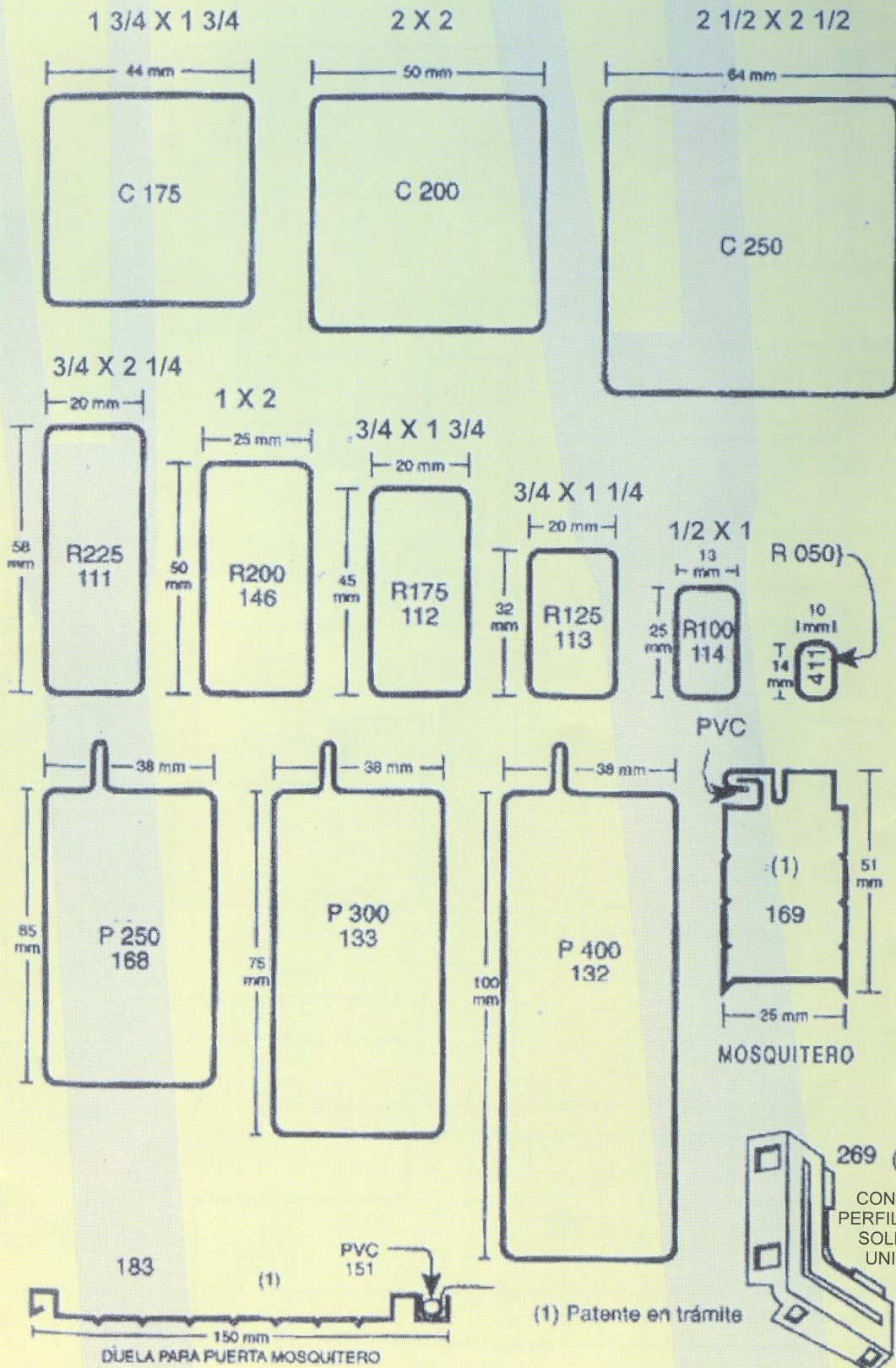
⊗ PERFILES DE 3.05 MTS. DE LONGITUD

Perfil Tubular

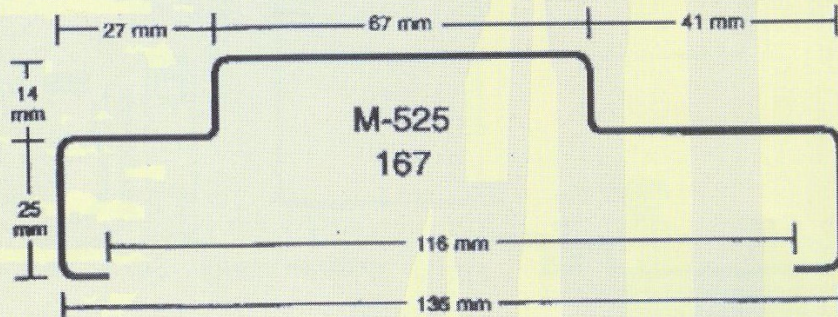
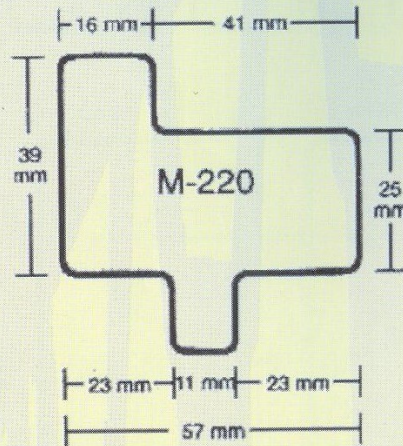
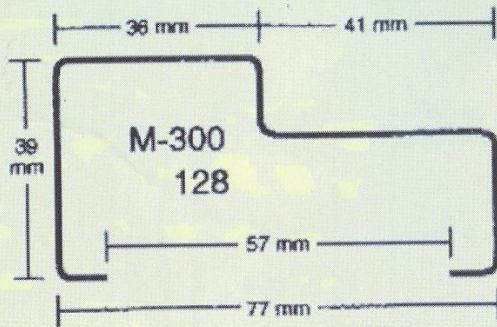
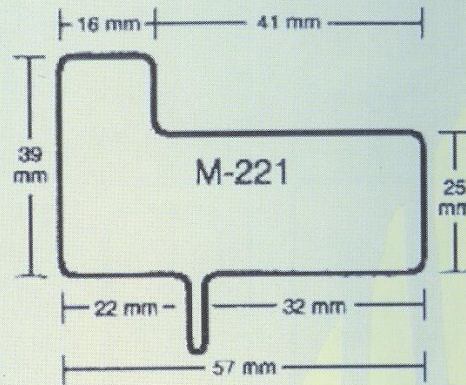
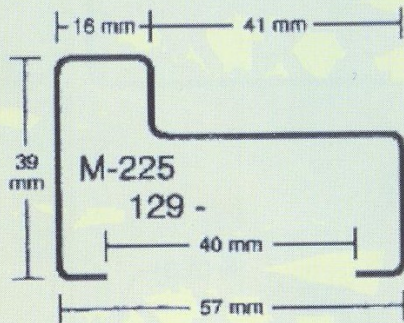
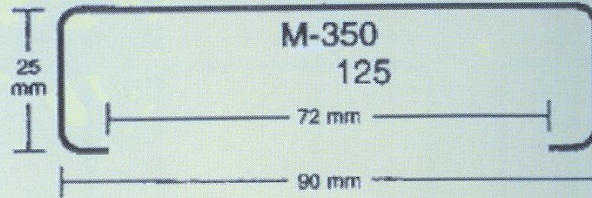
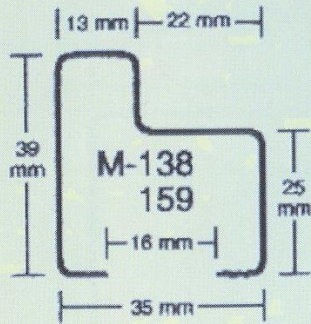
1/2 X 1/2 3/4 X 3/4 1 X 1 1 1/4 X 1 1/4 1 1/2 X 1 1/2



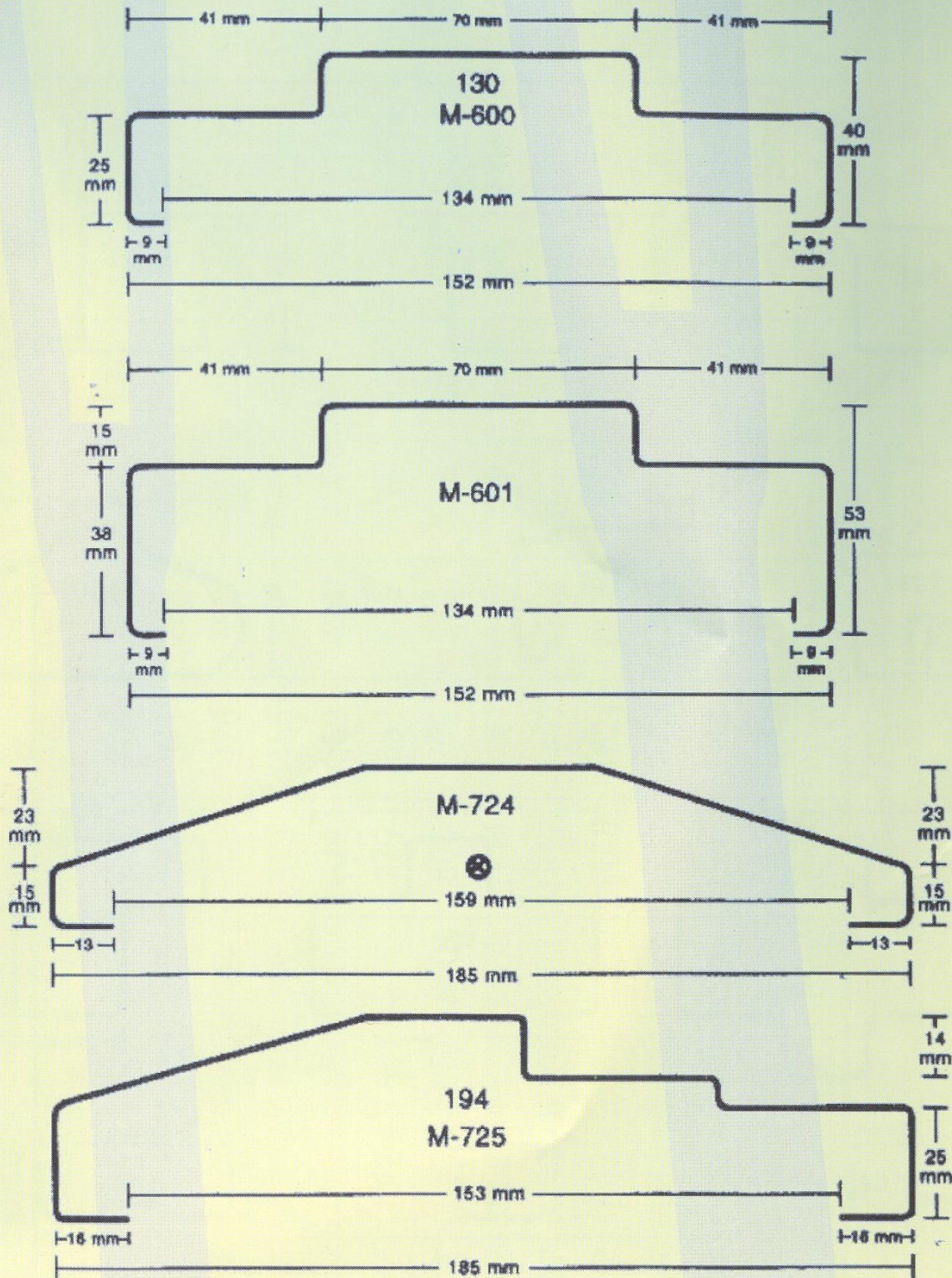
Perfil Tubular



Puerta y Mosquitero



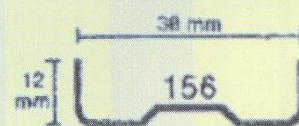
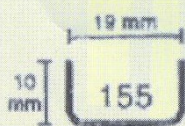
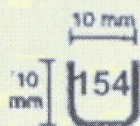
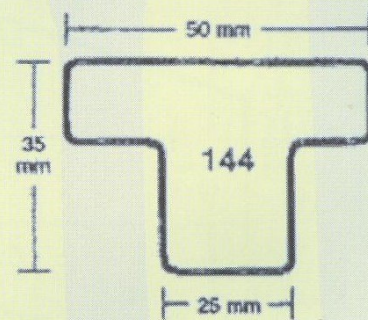
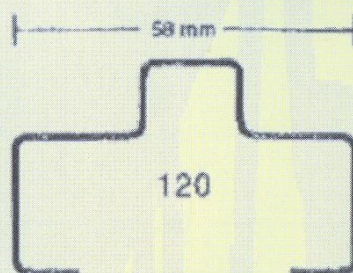
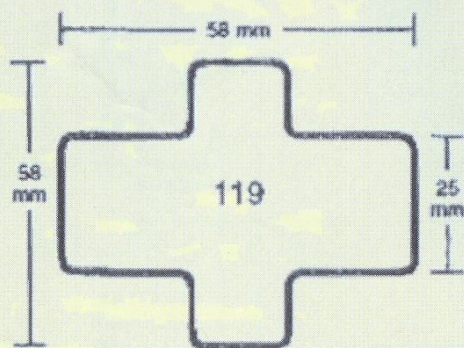
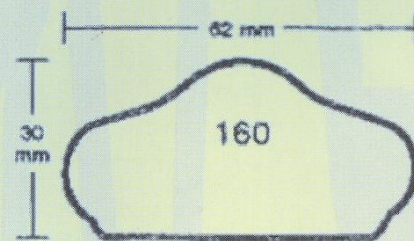
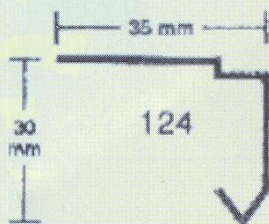
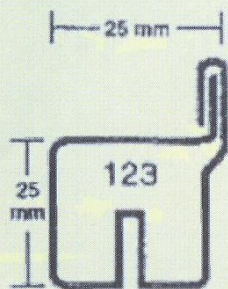
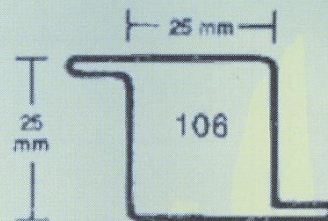
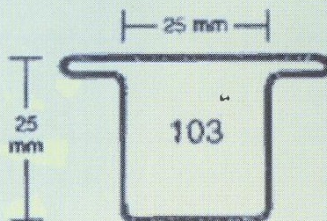
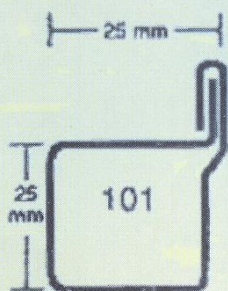
Puerta y Mosquitero



⊗ PERFILES DE 3.05 MTS. DE LONGITUD

Material para Ventanas

NUESTROS PERFILES TIENEN GRABADOS LA MARCA "PROLAMSA" Y EL CALIBRE CORRESPONDIENTE



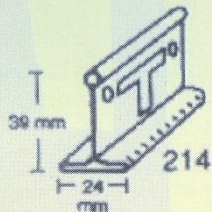
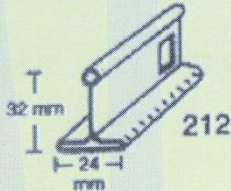
Los perfiles PROLAMSA se fabrican en lámina negra y prepintada con pintura anticorrosiva fosfatizada y horneada, en colores amarillo (Cal. 20) y rojo (Cal. 18).



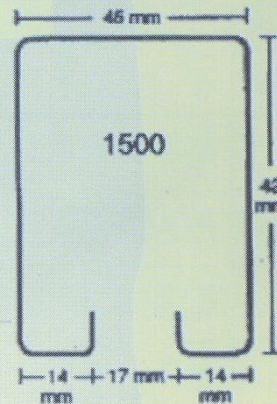
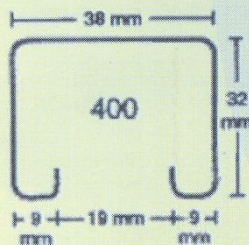
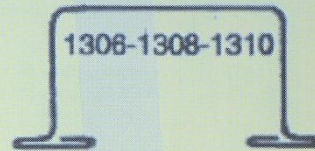
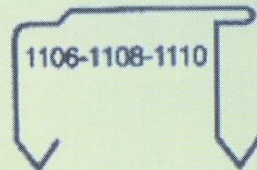
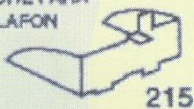
Material para Ventanas

PERFILES PARA CIELO FALSO O PLAFON

(PATENTE EN TRAMITE)

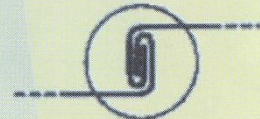


BROCHE PARA PLAFON

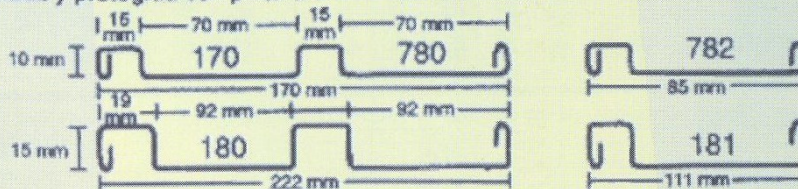


DUELA PARA ENSAMBLAR (PATENTE EN TRAMITE)

Para construir Paneles, Puertas, Divisiones, etc., substituye el tablero tradicional. Se fabrica doble y sencilla en 600 mts. de longitud fosta-tizada y protegida con pintura anticorrosiva secada al tomo.

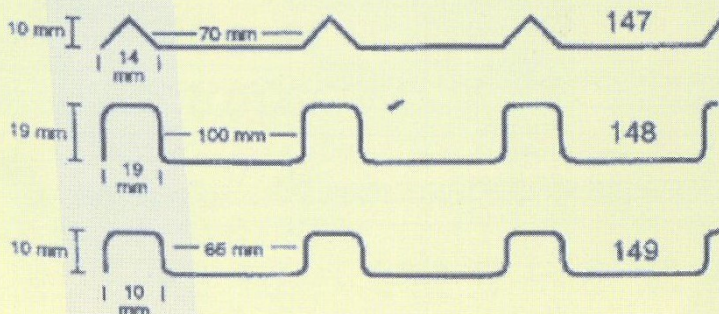


FACIL DE ENSAMBLAR:
FACIL DE CORTAR:



TABLEROS PARA PUERTA:

ESPECIFIQUE. El número de tablero, medida y colocación de la moldura



MEDIDAS LAMINA PLANA

0.91 x 0.91 mts. (3' x 3')

0.91 x 1.83 mts. (3' x 6')

0.91 x 2.44 mts. (3' x 8')

0.91 x 3.05 mts. (3' x 10')

COLOCACION MOLDURA

A (Moldura a lo ancho)

L (Moldura a lo largo)

LC (A lo largo para continuar)



No.	CALIBRE	N	P	LONGITUD MTS.	KILOS POR METRO	KILOS POR PIEZA	PIEZAS POR ATADO	No.	CALIBRE	N	P	LONGITUD MTS.	KILOS POR METRO	KILOS POR PIEZA	PIEZAS POR ATADO	TUBO REDONDO INDUSTRIAL					
																PULG.	MM.	CALIBRE	KILOS POR METRO	KILOS POR PIEZA	PIEZA POR ATADO
101	18		X		1.3	7.8	10	M-350	20	X	X	5.50	1.1	6.6	10	1/2	12.7	18	0.4	2.4	30
	20		X		0.9	5.6	10	M-525	18*	X	X	5.50	2.1	11.6	7			20	0.3	1.8	30
103	18		X		1.5	9.0	10		20	X	X	5.50	1.6	8.8	7	5/8	15.9	18	0.6	3.6	20
	20		X		1.1	6.6	10	M-600	18*	X	X	5.50	2.3	12.7	7			16	0.5	3.0	20
106	18		X		1.5	9.0	10		20	X	X							20	0.4	2.4	20
	20		X		1.5	6.6	10	M-600	20	X	X	5.50	1.7	9.4	7	3/4	19	16	0.7	4.2	20
116	20		X		1.5	9.0	8	M-601*	18	X	X	5.50	2.6	14.3	6			18	0.6	3.6	20
116	18		X		1.9	11.4	5		20	X	X	5.50	2.0	11.0	6			20	0.4	2.4	20
	20		X		1.5	9.0	5	M-724*	18	X	X	3.05	2.4	7.3	10	13/16*	20.6	16	0.8	4.8	15
120	18		X		1.4	8.4	8		20	X	X	3.05	1.8	5.5	10			18	0.6	3.6	20
	20		X		1.0	6.2	8	M-725	18	X	X	5.50	2.7	14.9	6			20	0.5	3.0	20
122	18		X		1.4	8.4	8		20	X	X	5.50	2.0	11.0	6	7/8	22.7	16	0.9	5.4	15
	20		X		1.0	6.2	8	P-100	18	X	X		1.4	8.4	8			18	0.7	4.2	20
123	18		X		1.4	8.4	10		20	X	X		1.0	6.2	8			20	0.5	3.0	20
	20		X		1.1	6.8	10	P-150	18	X	X		1.6	9.7	8	15/16*	23.8	16	0.9	5.4	15
123	20		X		1.1	6.6	10		20	X	X		1.2	7.3	8			18	0.7	4.2	20
124	18		X		0.7	4.2	10	P-200	18	X	X		1.9	11.4	8			20	0.6	3.6	20
126	18		X		1.7	10.4	8		20	X	X		1.4	8.4	8	1	25.4	14	1.2	7.2	15
	20		X		1.3	7.8	8	P-250	18	X	X		2.1	12.6	6			16	1.0	5.7	15
127	18		X		1.9	11.4	5		20	X	X		1.6	9.6	6			18	0.8	4.8	20
	20		X		1.5	9.0	5	P-300	18	X	X		2.3	14.0	6			20	0.6	3.6	20
131	20		X		0.7	4.0	20		20	X	X		1.8	10.6	6	1-1/8*	28.6	14	1.4	8.4	10
144	18		X		1.6	9.8	10	P-400	18	X	X		2.8	16.8	4			16	1.1	6.6	10
	20		X		1.2	7.2	10		20	X	X		2.1	12.6	4			18	0.9	5.4	10
145	20		X		0.7	4.0	20	K-150	18	X	X		1.9	11.4	9			20	0.7	4.2	15
147	20		X	0.91	6.7	6.1	1		20	X	X		1.5	8.7	9	1-1/4	31.8	14*	1.5	9.0	10
	20		X	1.95	6.7	13.1	1	K-200	18	X	X	3.05	2.3	7.0	10			18	1.0	6.0	10
	20		X	2.44	6.7	16.3	1		20	X	X	3.05	1.7	5.2	10			18	0.7	4.4	10
	20		X	3.05	6.7	20.4	1	K-300	18	X	X		2.6	15.6	10			20	0.7	4.4	20
									20	X	X		1.9	11.6	10	1-3/5*	33.4	14	1.7	10.2	10
147	22/3			0.91	5.7	5.2	1	C-050	18	X	X		0.5	2.9	20			16	1.3	7.8	10
				1.95	5.7	11.2	1		20	X	X		0.4	2.2	20			18	1.1	6.6	10
				2.44	5.7	13.9	1	C-075	18	Xbte	X		0.7	4.2	20			20	0.8	4.8	20
				3.05	5.7	17.4	1		20	X	X		0.5	3.2	20	1 3/8	34.9	13	2.0	12.0	10
147	22/4			0.91	7.7	7.0	1	C-100	14	X	X		1.5	8.8	10			14	1.7	10.2	10
				1.22	7.7	9.4	1		16	X	X		1.2	7.2	10			16	1.4	8.4	10
				1.95	7.7	15.0	1		18	Xbte	X		1.0	5.7	10			18	1.1	6.6	10
				2.44	7.7	18.8	1	C-125	12	X	X		0.7	4.3	8	1-1/2	38.1	14*	1.8	10.8	10
				3.05	7.7	23.5	1		14	X	X		1.9	11.4	8			16*	1.5	9.0	10

Perfil Tubular Pasos y Medidas

148*	Ver No. 147																	18	1.2	7.2	10		
149	Ver No. 147																						
154	18		X		0.3	1.5	50											1610	40.89 x 15.34	20	0.9	5.4	10
	20		X		0.2	1.2	50													16	0.8	4.8	10
155	20		X		0.3	1.5	50	C-150	10*	X	X		4.0	23.7	1			20	1.3	7.8	10		
156	18		X		0.4	2.4	25		12	X	X		3.1	18.6	1	1-5/8*	41.3	14	2.0	12.0	10		
157	18		X		2.0	12.0	6		14	X	X		2.3	13.8	1			16	1.6	9.6	1		
	20		X		1.5	9.0	6		16	X	X		1.8	10.8	1			18	1.3	7.8	1		
158	18		X		2.0	12.0	6		18	X*	X		1.5	8.8	10			20	1.0	6.0	1		
	20		X		1.5	9.0	6		20	X*	X		1.1	6.6	10	1.660*	42.2	14	2.0	12.0	1		
159	18		X		1.8	10.8	6	C-175	10*	X	X		4.2	25.2	1			16	1.6	9.6	1		
	20		X		1.4	8.4	6		12	X	X		3.4	20.3	1			18	1.3	7.8	1		
160	18		X		1.5	9.0	10		14	X	X		2.5	15.0	1			20	1.0	6.0	1		
	20		X		1.1	6.6	10		16	X	X		2.0	12.0	1	1-3/4.	44.5	14*	2.1	12.6	1		
163*	20		X		1.1	6.6	8	C-200	10*	X	X		5.0	30.0	1			16*	1.7	10.2	1		
164*	20		X		1.1	6.6	10		12	X	X		4.1	24.6	1			18	1.4	8.4	1		
165*	20		X		1.6	9.6	8		14	X	X		3.0	18.0	1			20*	1.0	6.0	1		
166*	20		X	3.05	1.8	5.5	10		16	X	X		2.4	14.4	1	1-7/8*	47.6	14	2.3	13.8	1		
169	20		X		1.2	7.2	10		18		X		1.2	11.7	8			16	1.8	10.8	1		
170	20		X		1.6	9.6	8	C-250	10*	X	X		6.3	38.0	1			18	1.5	9.0	1		
171	20		X		0.9	5.4	10		12	X	X		5.2	31.2	1			20	1.1	6.6	1		
180	20		X		2.2	13.2	6		14	X	X		3.7	22.2	1	1.900*	48.3	14	2.3	13.8	1		
181	20		X		1.2	7.2	10		16	X	X		3.0	18.0	1			16	1.8	10.8	1		
183*	22		X		1.2	7.2	10		18	X	X		0.4	2.3	20			18	1.5	9.0	1		
212 c/d*	24		X	0.61	0.4	0.2	50	R-050*	18	X	X		0.7	4.2	20			20	1.1	6.6	1		
c/d*	24		X	1.22	0.4	0.5	50	R-100	18	X	X		1.0	5.7	10	2	50.8	14	2.4	14.4	1		
s/d*	24		X	6.2	0.4	2.5	30	R-125	20	X*	X		0.7	4.2	10			16	1.9	11.6	1		
214 c/d*	24		X	4.27	0.4	1.7	30	R-175	18	X*	X		1.2	7.2	10			18	1.6	9.6	1		
s/d*	24		X	6.00	0.4	2.4	30		20	X*	X		0.9	5.4	10			20	1.2	7.2	1		
1106*	20		X	1.83	0.9	1.6	20	R-200	14	X	X		2.3	13.8	8	2-1/4.	57.1	14	2.7	16.2	1		
1108*	20		X	2.44	0.9	2.2	20		16	X	X		1.8	10.8	8			16	2.2	13.2	1		
1110*	20		X	3.05	0.9	2.7	20		18	X	X		1.5	8.8	10			18	1.8	10.8	1		
1306*			X	1.83	1.4	2.6	20		20	X*	X		1.1	6.6	10			20	1.3	7.8	1		
1308*	18		X	2.44	1.4	3.4	20	R-225	18	X	X		1.5	8.8	10	2-3/8*	60.4	14	2.9	17.4	1		
1310*	18		X	3.05	1.4	4.3	20		20	X*	X		1.1	6.6	10			16	2.3	13.8	1		
1400	18		X		1.3	7.8	12	R-249	18	X*	X		1.8	10.8	8			18	1.9	11.4	1		
1500	14		X		3.0	18.0	4		20	X*	X		1.4	8.4	8	2-1/2.	63.5	14	3.1	18.6	1		
	16		X		2.5	15.0	4	R-250	12	X	X		4.1	24.6	1			16	2.4	14.4	1		
M-138*	18		X		1.2	7.2	12		14	X	X		3.0	18.0	1			18	1.9	11.6	1		
	20		X		0.9	5.4	12	R-300	14	X	X		3.4	20.4	1			20	1.5	8.8			