

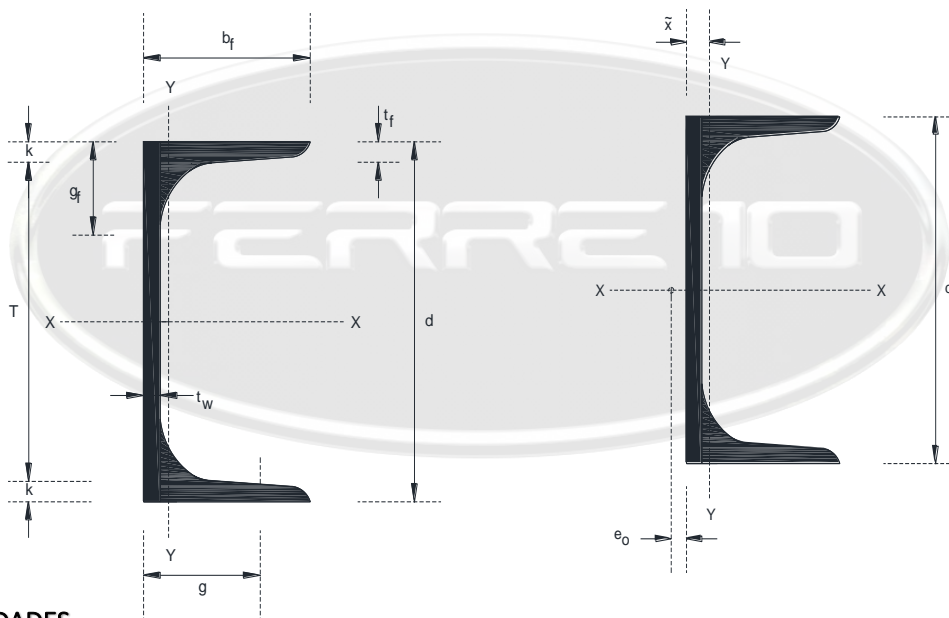
COMERCIAL

DIMENSIONES		PESO		ÁREA	PROPIEDADES				
					EJE X-X y EJE Y-Y				EJE Z-Z
					l	r	S	X	r. min
Plg	mm	kg/m	lb/pie	cm ²	cm ⁴	cm	cm ³	cm	cm
3/4x.109	19.0x2.8	0.8	0.54	0.97	0.31	0.57	0.25	0.57	0.37
3/4x1/8	19.0x3.2	0.88	0.59	1.11	0.37	0.58	0.28	0.58	0.38
1x.109	25.4x2.8	1.06	0.71	1.32	0.79	0.78	0.44	0.74	0.5
1x1/8	25.4x3.2	1.19	0.8	1.52	0.92	0.79	0.51	0.76	0.51
1x3/16	25.4x4.8	1.73	1.16	2.21	1.25	0.76	0.72	0.81	0.48
1x1/4	25.4x6.3	2.22	1.49	2.84	1.54	0.74	0.92	0.86	0.48
1 1/4x.109	31.7x2.8	1.3	0.87	1.67	1.58	0.96	0.68	0.89	0.62
1 1/4x1/8	31.7x3.2	1.5	1.01	1.93	1.83	0.97	0.8	0.89	0.64
1 1/4x3/16	31.7x4.8	2.2	1.48	2.81	2.54	0.97	1.16	0.97	0.61
1 1/4x1/4	31.7x6.3	2.86	1.92	3.65	3.21	0.94	1.49	1.02	0.61
1 1/2x1/8	38.1x3.2	1.83	1.23	2.34	3.25	1.17	1.18	1.07	0.76
1 1/2x3/16	38.1x4.8	2.68	1.8	3.43	4.58	1.17	1.64	1.12	0.74

DIMENSIONES		PESO		ÁREA	PROPIEDADES				
					EJE X-X y EJE Y-Y				EJE Z-Z
					l	r	S	X	r. min
Plg	mm	kg/m	lb/pie	cm ²	cm ⁴	cm	cm ³	cm	cm
1 1/2x1/4	38.1x6.3	3.48	2.34	4.47	5.83	1.14	2.2	1.19	0.74
1 1/2x5/16	38.1x7.9	4.26	2.86	5.40	6.66	1.12	2.62	1.24	0.74
1 1/2x3/8	38.1x9.5	5.01	3.36	6.34	7.91	1.12	3.11	1.30	0.74
2x1/8	50.8x3.2	2.46	1.65	3.15	7.91	1.6	2.13	1.40	1.02
2x3/16	50.8x4.8	3.63	2.44	4.65	11.45	1.57	3.11	1.45	1.02
2x1/4	50.8x6.3	4.75	3.19	6.09	14.57	1.55	4.1	1.50	0.99
2x5/16	50.8x7.9	5.83	3.92	7.40	17.46	1.52	4.92	1.55	0.99
2x3/8	50.8x9.5	6.99	4.70	8.75	19.98	1.5	5.74	1.63	0.99
2 1/2x3/16	63.5x4.8	4.61	3.09	5.87	22.89	1.98	4.92	1.75	1.24
2 1/2x1/4	63.5x6.3	6.10	4.10	7.72	29.14	1.96	6.39	1.83	1.24
2 1/2x5/16	63.5x7.9	7.44	5.00	9.41	35.38	1.93	7.87	1.88	1.22
2 1/2x3/8	63.5x9.5	8.78	5.90	11.16	40.79	1.91	9.34	1.93	1.22
3x1/4	76.2x6.3	7.29	4.90	9.34	51.60	2.36	9.5	2.13	1.59
3x5/16	76.2x7.9	9.08	6.10	11.42	62.90	2.34	11.6	2.21	1.50
3x3/8	76.2x9.5	10.72	7.20	13.58	73.30	2.31	13.6	2.26	1.47
3x1/2	76.2x12.7	13.99	9.40	17.74	92.40	2.29	17.5	2.36	1.47
4x1/4	101.6x6.3	9.82	6.60	12.60	124.90	3.18	17.2	2.77	2.01
4x5/16	101.6x7.9	12.20	8.20	15.43	154.40	3.15	21.1	2.84	2.01
4x3/8	101.6x9.5	14.58	9.80	18.40	181.50	3.12	24.9	2.89	2.01
4x1/2	101.6x12.7	19.05	12.80	24.19	231.40	3.1	32.3	2.99	1.98
6x3/8	152.4x9.5	22.17	14.90	28.05	640.60	4.78	57.8	4.16	3.02
6x1/2	152.4x12.7	29.17	19.60	37.10	828.70	4.72	75.5	4.27	3.00
6x5/8	152.4x15.9	36.01	24.20	45.94	1005.60	4.67	92.8	4.39	3.00

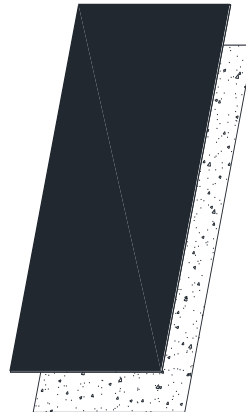
DIMENSIONES

PERALTE d		PESO		DIMENSIONES						
mm	Plg	kg/m	lb/pie	ANCHO PATIN b	a	ESPESOR ALMA	k	tf	GRAMIL g	TORNILLO DIÁM. MÁX.
76	3	6.10	4.10	35.81	31.49	4.32	16.00	6.93	24	10
102	4	8.04	5.40	40.13	35.56	4.57	16.00	7.52	25	13
152	6	12.20	8.20	48.77	43.69	5.08	19.00	8.71	29	16
152	6	15.63	10.50	51.66	43.68	7.98	19.00	8.71	29	16
152	6	19.35	13.00	54.79	43.69	11.10	19.00	8.71	35	16
203	8	17.11	11.50	57.4	51.81	5.59	21.00	9.91	35	19
203	8	20.46	13.75	59.51	51.81	7.70	21.00	9.91	35	19
203	8	27.90	18.75	64.19	51.82	12.37	21.00	9.91	38	19
254	10	22.76	15.29	66.04	59.94	6.10	22.00	11.07	38	19
254	10	37.20	25.00	73.3	59.94	13.36	22.00	11.07	40	19
254	10	44.64	30.00	77.04	59.95	17.09	22.00	11.07	40	19
305	12	30.80	20.69	74.73	67.57	7.16	22.50	12.72	50	22
305	12	37.20	24.99	77.39	67.56	9.83	22.50	12.72	50	22
305	12	44.64	30.00	80.52	67.57	12.95	22.50	12.72	50	22



PROPIEDADES

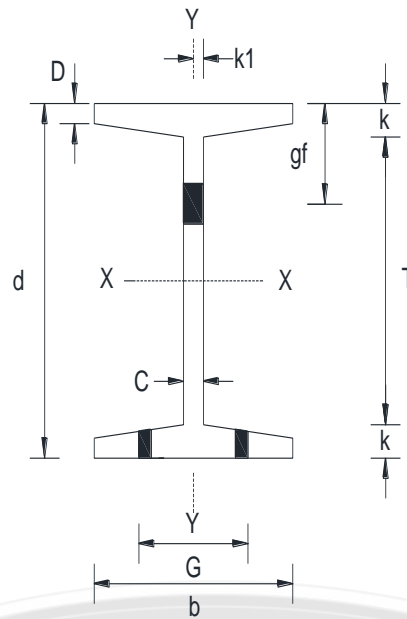
PERALTE d		PESO		ÁREA	PROPIEDADES						
mm	Plg	kg/m	lb/pie		EJE X-X			EJE Y-Y			DISTANCIA X
					l	r	s	l	r	s	
76	3	6.10	4.10	7.68	66.60	2.95	17.50	8.32	1.04	3.44	1.11
102	4	8.04	5.40	10.06	158.20	3.98	31.10	13.32	1.14	4.75	1.16
152	6	12.20	8.20	15.42	541.10	5.94	71.00	29.14	1.37	8.19	1.30
152	6	15.63	10.50	19.81	628.50	5.64	82.50	36.21	1.35	9.34	1.27
152	6	19.35	13.00	24.58	720.10	5.41	94.50	45.79	1.35	10.65	1.31
203	8	17.11	11.50	21.68	1334.50	7.87	132.30	54.11	1.60	12.62	1.45
203	8	20.46	13.75	25.94	1490.10	7.59	146.60	62.43	1.57	14.09	1.41
203	8	27.90	18.75	35.42	1818.90	7.16	179.00	83.25	1.52	16.39	1.44
254	10	22.76	15.29	28.97	2805.40	9.83	221.20	94.90	1.81	19.01	1.61
254	10	37.20	25.00	47.42	3796.00	8.94	298.20	139.85	1.72	24.25	1.57
254	10	44.64	30.00	56.90	4287.20	8.69	339.20	163.99	1.70	27.04	1.65
305	12	30.80	20.69	39.29	5369.40	11.71	352.30	161.50	2.03	28.35	1.77
305	12	37.20	24.99	47.42	5993.70	11.25	394.90	186.05	1.98	30.81	1.71
305	12	44.64	30.00	56.90	6742.90	10.89	442.40	213.94	1.98	33.76	1.71



DIMENSIONES		PESO	
Plg	mm	Kg/m	Lb/pie
1/8 X 1/2	3.2 X 12.7	0.319	0.214
1/8 X 5/8	3.2 X 15.9	0.399	0.268
1/8 X 3/4	3.2 X 19.1	0.480	0.322
1/8 X 1	3.2 X 25.4	0.638	0.429
1/8 X 1 1/4	3.2 X 31.8	0.799	0.537
1/8 X 1 1/2	3.2 X 38.1	0.957	0.643
1/8 X 2	3.2 X 50.8	1.276	0.857
3/16 X 1/2	4.8 X 12.7	0.479	0.322
3/16 X 5/8	4.8 X 15.9	0.599	0.403
3/16 X 3/4	4.8 X 19.1	0.720	0.484
3/16 X 1	4.8 X 25.4	0.957	0.643
3/16 X 1 1/4	4.8 X 31.8	1.198	0.805
3/16 X 1 1/2	4.8 X 38.1	1.436	0.965
3/16 X 2	4.8 X 50.8	1.914	1.286
1/4 X 5/8	6.4 X 15.9	0.799	0.537
1/4 X 3/4	6.4 X 19.1	0.960	0.645
1/4 X 1	6.4 X 25.4	1.276	0.857
1/4 X 1 1/4	6.4 X 31.8	1.598	1.074
1/4 X 1 1/2	6.4 X 38.1	1.914	1.286
1/4 X 2	6.4 X 50.8	2.552	1.715
1/4 X 2 1/2	6.4 X 63.5	3.190	2.144
1/4 X 3	6.4 X 76.2	3.828	2.572
1/4 X 4	6.4 X 101.6	5.104	3.430
5/16 X 1 1/4	7.9 X 31.8	1.972	1.325
5/16 X 1 1/2	7.9 X 38.1	2.363	1.588
5/16 X 2	7.9 X 50.8	3.150	2.117
5/16 X 2 1/2	7.9 X 63.5	3.938	2.646
5/16 X 3	7.9 X 76.2	4.726	3.175
5/16 X 4	7.9 X 101.6	6.301	4.234

DIMENSIONES		PESO	
Plg	mm	Kg/m	Lb/pie
3/8 X 1 1/2	9.5 X 38.1	2.841	1.909
3/8 X 2	9.5 X 50.8	3.788	2.546
3/8 X 2 1/2	9.5 X 63.5	4.736	3.182
3/8 X 3	9.5 X 76.2	5.683	3.819
3/8 X 4	9.5 X 101.6	7.577	5.091
1/2 X 1 1/2	12.7 X 38.1	3.798	2.552
1/2 X 2	12.7 X 50.8	5.065	3.403
1/2 X 2 1/2	12.7 X 63.5	6.331	4.254
1/2 X 3	12.7 X 76.2	7.597	5.105
1/2 X 4	12.7 X 101.6	10.129	6.806
5/8 X 1 1/2	15.9 X 38.1	4.755	4.261
5/8 X 2	15.9 X 50.8	6.341	5.326
5/8 X 2 1/2	15.9 X 63.5	7.926	6.391
5/8 X 3	15.9 X 76.2	9.511	8.521
5/8 X 4	15.9 X 101.6	12.681	3.839
3/4 X 1 1/2	19.1 X 38.1	5.713	3.839
3/4 X 2	19.1 X 50.8	7.653	5.142
3/4 X 2 1/2	19.1 X 63.5	9.521	6.398
3/4 X 3	19.1 X 76.2	11.425	7.677
3/4 X 4	19.1 X 101.6	15.233	10.236
1 X 1 1/2	25.4 X 38.1	7.597	5.105
1 X 2	25.4 X 50.8	10.129	6.806
1 X 2 1/2	25.4 X 63.5	12.661	8.508
1 X 3	25.4 X 76.2	15.194	10.209
1 X 4	25.4 X 101.6	20.258	13.613

SOBRE PEDIDO



DIMENSIONES

PERALTE d	PESO	PATÍN		ALMA			DISTANCIAS			A	G	DIÁMETRO REMACHES TORNILLOS
		ANCHO b	ESPESOR D	ESPESOR C	ESP. MED. C/2	TANGENTE T	k	gf	k			
mm	kg/m	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
76.2	8.48	59	6.60	4.30	2.00	45	15.50	38	12	27	36	9.50
101.6	11.46	68	7.40	4.80	3.00	70	16.00	50	13	32	38	12.70
127.0	14.88	76	8.30	5.30	3.00	89	19.00	64	13	35	40	12.70
152.4	18.60	85	9.10	5.80	3.00	114	19.00	76	13	40	44	15.80
203.2	27.38	102	10.8	6.90	4.00	159	22.00	72	14	48	56	19.00

PROPIEDADES

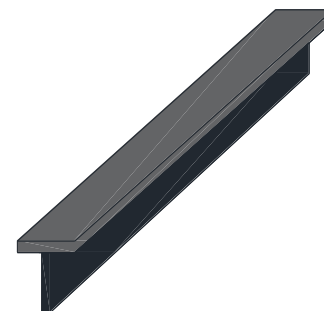
PERALTE d		PESO	ÁREA	EJE X - X			EJE Y - Y		
mm	Plg			kg/m	cm ²	I	r	S	I
mm	Plg	Kg/m	cm ²	cm ⁴	cm	cm ³	cm ⁴	mm	mm
76.2	3	8.48	1052	103.30	3.12	27.10	19.10	1.35	6.50
101.6	4	11.46	14.26	248.30	4.17	48.90	32.10	1.50	9.50
127.0	5	14.88	18.52	503.30	5.21	79.30	51.20	1.65	13.40
152.4	6	18.60	23.29	906.80	6.25	119.00	77.00	1.83	18.20
203.2	8	27.38	34.39	2367.20	8.31	233.00	157.30	2.13	31.00

TEE, REDONDO Y CUADRADO



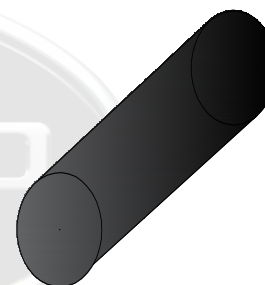
TEE ESTRUCTURAL

TEE	Medida	mm	Kg/m	Kg/ 6 m
	1/8" x 1"	3.2 x 25.4	1.32	7.92



REDONDO

DIMENSIÓN		ÁREA DE LA SECCIÓN		PESO	
mm	Plg	mm ²	Plg ²	Kg/m	Lb/Pie
9.53	3/8	90.73	0.141	0.712	0.479
12.00	17/36	144.00	0.223	1.130	0.760
12.70	1/2	161.29	0.250	1.266	0.851
15.88	5/8	252.02	0.391	1.978	1.329
19.05	3/4	362.90	0.563	2.849	1.914
22.23	7/8	493.95	0.766	3.878	2.606
25.40	1	645.16	1.000	5.065	3.403
28.58	1 1/8	816.53	1.266	6.410	4.307
31.75	1 1/4	1008.06	1.563	7.913	5.317
34.93	1 3/8	1219.76	1.891	9.575	6.434
38.10	1 1/2	1451.61	2.250	11.395	7.657
44.45	1 3/4	1975.80	3.063	15.510	10.422
50.80	2	2580.64	4.000	20.258	13.613



CUADRADO

DIMENSIÓN		ÁREA DE LA SECCIÓN		PESO	
mm	Plg	mm ²	Plg ²	Kg/m	Lb/Pie
6.40	1/4	32.17	0.049	0.249	0.167
7.90	5/16	49.02	0.077	0.388	0.261
9.53	3/8	71.33	0.110	0.559	0.376
12.00	17/36	113.10	0.175	0.888	0.597
12.70	1/2	126.68	0.196	0.994	0.668
15.88	5/8	198.06	0.307	1.552	1.043
19.05	3/4	285.02	0.442	2.235	1.502
22.23	7/8	388.12	0.601	3.045	2.046
25.40	1	506.71	0.785	3.973	2.669
28.58	1 1/8	641.53	0.994	5.022	3.375
31.75	1 1/4	791.73	1.227	6.208	4.172
34.93	1 3/8	958.27	1.485	7.514	5.049
38.10	1 1/2	1140.09	1.767	9.000	6.048
41.30	1 5/8	1339.65	2.074	10.490	7.049
44.45	1 3/4	1551.80	2.405	12.170	8.178
47.63	1 7/8	1781.77	2.761	13.970	9.388
50.80	2	2026.83	3.142	15.890	10.678

