

MATERIALES ESTRUCTURALES



SIA SA. de C.V

Servicios Integrales en Acero

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Varilla corrugada r-42

Núm.	Pulg	mm	Peso aprox. kg/mtr.	Peso aprox. de 12m x ton
2.5	5/16	7.9	0.384	214
3	3/8	9.5	0.560	148
4	1/2	12.7	0.994	83
5	5/8	15.9	1.552	53
6	3/4	19.1	2.235	37
8	1	25.4	3.973	20
10	1 1/4	31.8	6.225	13
12	1 1/2	38.1	8.938	9



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Viga ips

Peralte		Patín (mm)	Alma	Peso aprox.
Pulg	mm	Ancho	mm	kg/mtr.
3	76.2	59.23	4.3	8.48
4	101.6	67.64	4.9	11.46
5	127.0	76.30	5.4	14.88
6	152.4	84.63	5.9	18.60
8	200	89.99	7.5	26.19

te		Peso aprox.	
Pulg.	mm.	kg/m	kg pz. 6 m
1/8 x 1	3.2 x 25.4	1.32	7.92

Tablero pintado y zintro

Ancho	Largo	Calibre	Peso aprox.
Pies-m	Pies-m		kgs / pz.
3 (0.91)	3 (0.91)	20	6.06
3 (0.91)	4 (1.22)	20	8.01
3 (0.91)	6 (1.83)	20	12.12
3 (0.91)	8 (2.44)	20	16.18
3 (0.91)	10 (3.05)	20	20.21
4 (1.22)	3 (0.91)	20	8.08
4 (1.22)	4 (1.22)	20	10.78
4 (1.22)	6 (1.83)	20	16.17
4 (1.22)	8 (2.44)	20	21.56
4 (1.22)	10 (3.05)	20	26.95
3 (0.91)	3 (0.91)	22	5.05
3 (0.91)	4 (1.22)	22	6.74
3 (0.91)	6 (1.83)	22	10.1
3 (0.91)	8 (2.44)	22	13.47
3 (0.91)	10 (3.05)	22	16.84
4 (1.22)	3 (0.91)	22	6.74
4 (1.22)	4 (1.22)	22	8.98
4 (1.22)	6 (1.83)	22	13.48
4 (1.22)	8 (2.44)	22	17.97
4 (1.22)	10 (3.05)	22	22.46



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Servicios Integrales en Acero

VIGA IPR

	Peso aprox		Dimensiones en mm.				
Dimensiones Pulgadas	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E
4 x 4	13	19.3	106	88	7.1	103	8.8
5 x 5	16	23.8	127	109	6.1	127	9.1
5 x 5	19	28.3	131	109	6.9	128	10.9
6 x 4	8.5	12.6	152	140	4.5	100	4.6
6 x 4	9	13.5	150	139	4.3	100	5.5
6 x 4	12	17.9	153	138	5.8	102	7.1
6 x 4	16	23.8	160	139	6.6	102	10.3
6 x 6	15	22.3	152	139	5.8	152	6.6
6 x 6	20	29.8	157	138	6.6	153	9.3
6 x 6	25	37.2	162	139	8.1	154	11.6
8 x 4	10	14.9	200	190	4.3	100	5.2
8 x 4	13	19.3	203	190	5.8	102	6.5
8 x 4	15	22.3	206	190	6.2	102	8.0
8 x 5 1/4"	18	26.8	207	190	5.8	133	8.4
8 x 5 1/4"	21	31.3	210	190	6.4	134	10.2
8 x 6 1/2"	24	35.7	201	181	6.2	201	10.2
8 x 6 1/2"	28	41.7	205	181	7.2	205	11.8
8 x 8	31	46.1	203	181	7.2	203	11.0
8 x 8	35	52.1	206	181	7.9	204	12.6
8 x 8	40	59.5	210	182	9.1	205	14.2
8 x 8	48	71.4	216	181	10.2	206	17.4
8 x 8	58	86.3	222	181	13.0	209	20.6
8 x 8	67	99.7	229	182	14.5	210	23.7
10 x 4	12	17.9	251	240	4.8	101	5.3
10 x 4	15	22.3	254	240	5.8	102	6.9
10 x 4	17	25.3	257	240	6.1	102	8.4
10 x 4	19	28.3	260	240	6.4	102	10.0
10 x 5 3/4"	22	32.7	258	240	6.1	146	9.1
10 x 5 3/4"	26	38.7	262	240	6.6	147	11.2
10 x 5 3/4"	30	44.6	266	240	7.6	147	13.0
10 x 8	33	49.1	247	225	7.4	202	11.0
10 x 8	39	58.0	252	225	8.0	203	13.5
10 x 8	45	67.0	257	226	8.9	204	15.7
10 x 10	49	72.9	253	225	8.6	254	14.2
10 x 10	54	80.4	256	225	9.4	255	15.6



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VIGA IPR

Dimensiones Pulgadas	Peso aprox		Dimensiones en mm.				
	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E
10 x 10	60	89.3	260	225	10.7	256	17.3
10 x 10	68	101	264	225	11.9	257	19.6
10 x 10	77	115	269	225	13.5	259	22.1
10 x 10	88	131	275	225	15.4	261	25.1
10 x 10	100	149	282	225	17.3	263	28.4
10 x 10	112	167	289	225	19.2	265	31.8
12 x 4	14	20.8	303	292	5.1	101	5.7
12 x 4	16	23.8	305	292	5.6	101	6.7
12 x 4	19	28.3	309	291	6.0	102	8.9
12 x 4	22	32.7	313	291	6.6	102	10.8
12 x 6 1/2"	26	38.7	310	291	5.8	165	9.7
12 x 6 1/2"	30	44.6	313	291	6.6	166	11.2
12 x 6 1/2"	35	52.1	317	291	7.6	167	13.2
12 x 8	40	59.5	303	277	7.5	203	13.1
12 x 8	45	67.0	306	277	8.5	204	14.6
12 x 8	50	74.4	310	277	9.4	205	16.3
12 x 10	53	78.9	306	277	8.8	254	14.6
12 x 10	58	86.3	310	277	9.1	254	16.3
12 x 12	65	96.7	308	277	9.9	305	15.4
12 x 12	72	107	311	277	10.9	306	17.0
12 x 12	79	118	314	277	11.9	307	18.7
12 x 12	87	129	318	277	13.1	308	20.6
12 x 12	96	143	323	277	14.0	309	22.9
12 x 12	106	158	327	277	15.5	310	25.1
12 x 12	120	179	333	277	18.0	313	28.1
12 x 12	136	202	341	277	20.1	315	31.8
12 x 12	152	226	348	277	22.1	317	35.6
12 x 12	170	253	356	277	24.4	319	39.6
12 x 12	190	283	365	277	26.9	322	44.1
12 x 12	210	313	374	277	30.0	325	48.3
12 x 12	230	342	382	277	32.6	328	52.6
12 x 12	252	375	392	277	36.0	332	58.0
12 x 12	279	415	400	277	38.0	335	64.0
12 x 12	305	454					
12 x 12	336	500	405	277	42.0	339	74.0



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Dimensiones Pulgadas	Peso aprox		Dimensiones en mm.				
	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E
14 x 15	22	32.7	349	332	5.8	127	8.5
14 x 15	26	38.7	353	332	6.5	128	10.7
14 x 6 3/4"	30	44.6	352	332	6.9	171	9.8
14 x 6 3/4"	34	50.6	355	332	7.2	171	11.6
14 x 6 3/4"	38	56.6	358	332	7.9	172	13.1
14 x 8	43	64	347	320	7.7	203	13.5
14 x 8	48	71.4	350	320	8.6	204	15.1
14 x 8	53	78.9	354	320	9.4	205	16.8
14 x 10	61	90.8	353	320	9.5	254	16.4
14 x 10	68	101	357	320	10.5	255	18.3
14 x 10	74	110	360	320	11.4	256	19.9
14 x 10	82	122	363	320	13.0	257	21.7
14 x 14 1/2"	90	134	356	320	11.2	369	18.0
14 x 14 1/2"	99	147	360	320	12.3	370	19.8
14 x 14 1/2"	109	162	364	320	13.3	371	21.8
14 x 14 1/2"	120	179	368	320	15.0	373	23.9
14 x 14 1/2"	132	196	372	320	16.4	374	26.2
14 x 16	145	216	375	320	17.3	394	27.7
14 x 16	159	237	380	320	18.9	395	30.2
14 x 16	176	262	387	320	21.1	398	33.3
14 x 16	193	287	393	320	22.6	399	36.6
14 x 16	211	314	399	320	24.9	401	39.6
14 x 16	233	347	407	320	27.2	404	43.7
14 x 16	257	382	416	320	29.8	406	48.0
14 x 16	283	421	425	320	32.8	409	52.6
14 x 16	311	463	435	320	35.8	412	57.4
14 x 16	342	509	446	321	39.1	416	62.7
14 x 16	370	551	455	320	42.0	418	67.6
14 x 16	398	592	465	320	45.0	421	72.3
14 x 16	426	634	474	320	47.6	424	77.1
14 x 16	455	677	483	320	51.2	428	81.5
14 x 16	500	744	498	320	55.6	432	88.9
14 x 16	550	818	514	320	60.5	437	97.0
14 x 16	605	900	531	319	65.9	442	106.0
14 x 16	665	990	550	320	71.9	448	115.0



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Dimensiones Pulgadas	Peso aprox		Dimensiones en mm.				
	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E
14 x 16	730	1086	569	319	78.0	454	125.0
16 x 5 1/2"	26	39	399	381	6.4	140	8.8
16 x 5 1/2"	31	46	403	381	7.0	140	11.2
16 x 7	36	53.6	403	381	7.5	177	10.9
16 x 7	40	59.5	407	381	7.7	178	12.8
16 x 7	45	67	410	381	8.8	179	14.4
16 x 7	50	74.4	413	381	9.7	180	16.0
16 x 7	57	84.8	417	381	10.9	181	18.2
16 x 10 1/4"	67	100	415	381	10.0	260	16.9
16 x 10 1/4"	77	115	420	381	11.6	261	19.3
16 x 10 1/4"	89	132	425	381	13.3	263	22.2
16 x 10 1/4"	100	149	431	381	14.9	265	25.0
18 x 6	35	52.1	450	428	7.6	152	10.8
18 x 6	40	59.5	455	428	8.0	153	13.3
18 x 6	46	68.5	459	428	9.1	154	15.4
18 x 7 1/2"	41	61	455	430	8.4	190	12.0
18 x 7 1/2"	45	67	458	432	8.7	190	12.3
18 x 7 1/2"	50	74.4	457	428	9.0	190	14.5
18 x 7 1/2"	55	81.8	460	428	9.9	191	16.0
18 x 7 1/2"	60	89.3	463	428	10.5	192	17.7
18 x 7 1/2"	65	96.7	466	428	11.4	193	19.0
18 x 7 1/2"	71	106	469	428	12.6	194	20.6
18 x 11	76	113	463	428	10.8	280	17.3
18 x 11	86	128	467	428	12.2	282	19.6
18 x 11	97	144	472	428	13.6	283	22.1
18 x 11	106	158	476	428	15.0	284	23.9
18 x 11	119	177	482	428	16.6	286	26.9
18 x 11	130	193	489	428	17.0	283	30.5
18 x 11	143	213	495	428	18.5	285	33.5
18 x 11	158	235	501	428	20.6	287	36.6
18 x 11	175	260	509	428	22.6	289	40.4
18 x 11	192	286	519	428	22.8	293	45.0
18 x 11	211	314					
18 x 11	234	348					
18 x 11	258	384					



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Dimensiones Pulgadas	Peso aprox		Dimensiones en mm.				
	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E
18 x 11	283	421					
18 x 11	311	463					
21 x 6 1/2"	44	65.5	525	502	8.9	165	11.4
21 x 6 1/2"	50	74.4	529	502	9.7	166	13.6
21 x 6 1/2"	57	84.8	535	502	10.3	166	16.5
21 x 8 1/4"	48	71.4	522	500	8.2	208	11.9
21 x 8 1/4"	55	81.8					
21 x 8 1/4"	62	92.3	533	501	10.2	209	15.6
21 x 8 1/4"	68	101	537	502	10.9	210	17.4
21 x 8 1/4"	73	109	539	502	11.6	211	18.8
21 x 8 1/4"	83	124	544	502	13.1	212	21.2
21 x 8 1/4"	93	138	549	502	14.7	214	23.6
21 x 12 1/4"	101	150	543	502	12.7	312	20.3
21 x 12 1/2"	111	165	546	502	14.0	313	22.2
21 x 12 1/2"	122	182	551	502	15.2	315	24.2
21 x 12 1/2"	132	196	554	501	16.5	316	26.3
21 x 12 1/2"	147	219	560	502	18.3	318	29.2
21 x 12 1/2"	166	247	571	502	19.0	315	34.5
21 x 12 1/2"	182	271	577	502	21.1	318	37.6
21 x 12 1/2"	201	299	585	502	23.1	319	41.4
21 x 12 1/2"	223	332					
21 x 12 1/2"	248	369					
21 x 12 1/2"	275	409					
24 x 7	55	81.8	599	573	10.0	178	12.8
24 x 7	62	92.3	603	573	10.9	179	15.0
24 x 9	56	83.3	599	573	9.0	228	13.0
24 x 9	61	90.8					
24 x 9	68	101	603	573	10.5	228	14.9
24 x 9	76	113	608	573	11.2	228	17.3
24 x 9	84	125	612	573	11.9	229	19.6
24 x 9	94	140	617	573	13.1	230	22.2
24 x 9	103	153	623	573	14.0	229	24.9
24 x 12 3/4"	104	155	611	573	12.7	324	19.0
24 x 12 3/4"	117	174	616	573	14.0	325	21.6
24 x 12 3/4"	131	195	622	573	15.4	327	24.4



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Dimensiones Pulgadas	Peso aprox		Dimensiones en mm.				
	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E
24 x 12 3/4"	146	217	628	573	16.5	328	27.7
24 x 12 3/4"	162	241	635	573	17.1	329	31.0
24 x 12 3/4"	176	262	641	573	19.0	327	34.0
24 x 12 3/4"	192	286	647	573	20.6	329	37.1
24 x 12 3/4"	207	308	660	573	22.0	333	39.0
24 x 12 3/4"	229	341	661	573	24.4	333	43.9
24 x 12 3/4"	250	372	670	573	26.6	335	47.5
24 x 12 3/4"	279	415	679	573	29.5	338	53.1
24 x 12 3/4"	306	455	689	573	32.0	340	57.9
24 x 12 3/4"	335	499	699	573	35.1	343	63.0
24 x 12 3/4"	370	551	711	573	38.6	347	69.1
27 x 10	84	125	678	645	11.7	253	16.3
27 x 10	94	140	684	646	12.4	254	18.9
27 x 10	102	152	688	646	13.1	254	21.1
27 x 10	114	170	693	646	14.5	256	23.6
27 x 10	129	192	702	646	15.5	254	27.9
27 x 14	146	217	700	650	15.0	358	25.3
27 x 14	161	240					
27 x 14	178	265	707	647	19.0	362	30.0
27 x 14	194	289	716	645	19.0	358	33.0
27 x 14	217	323	727	650	21.0	361	38.0
27 x 14	235	350	728	647	23.0	362	41.0
27 x 14	258	384	733	647	25.0	364	44.0
27 x 14	281	418	745	648	28.0	365	49.0
27 x 14	307	457	753	648	30.0	368	53.0
27 x 14	336	500	762	649	32.0	370	57.0
27 x 14	368	548	772	647	33.0	370	61.0
30 x 10 1/2"	90	134	746	716	11.9	265	14.9
30 x 10 1/2"	99	147	753	719	13.2	265	17.0
30 x 10 1/2"	108	161	758	719	13.8	266	19.3
30 x 10 1/2"	116	173	762	719	14.4	267	21.6
30 x 10 1/2"	124	185	766	719	14.9	267	23.6
30 x 10 1/2"	132	196	770	719	15.6	268	25.4
30 x 10 1/2"	148	220	779	719	16.5	266	30.0
30 x 15	173	257	772	722	16.6	390	25.4



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Dimensiones Pulgadas	Peso aprox		Dimensiones en mm.				
	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E
30 x 15	191	284	784	722	18.0	384	29.1
30 x 15	211	314	790	722	20.0	385	32.0
30 x 15	235	350	796	722	24.0	385	36.0
30 x 15	261	388	803	723	23.0	389	41.0
30 x 15	292	435	803	720	25.0	385	46.0
30 x 15	326	485	825	722	29.0	390	53.0
30 x 15	357	531	831	723	31.0	388	54.0
30 x 15	391	582	840	718	34.0	388	61.0
33 x 11 1/2"	118	176	835	797	14.0	292	18.8
33 x 11 1/2"	130	193	840	797	14.7	292	21.7
33 x 11 1/2"	141	210	846	797	15.4	293	24.4
33 x 11 1/2"	152	226	851	797	16.1	294	26.8
33 x 11 1/2"	169	252	859	797	17.0	292	31.0
33 x 15 3/4"	201	299	861	801	18.0	403	29.0
33 x 15 3/4"	221	329	862	800	20.0	403	32.0
33 x 15 3/4"	241	359	871	802	21.0	410	34.0
33 x 15 3/4"	263	391	879	800	28.0	401	38.0
33 x 15 3/4"	291	433	885	801	26.0	404	41.0
33 x 15 3/4"	318	473	891	800	27.0	405	51.0
33 x 15 3/4"	354	527	902	801	29.0	403	51.0
33 x 15 3/4"	387	576	911	798	33.0	410	55.0
36 x 12	135	201	903	863	15.2	304	20.1
36 x 12	150	223	911	863	15.9	304	23.9
36 x 12	160	238	915	863	16.5	305	25.9
36 x 12	170	253	919	863	17.3	306	27.9
36 x 12	182	271	923	863	18.4	307	30.0
36 x 12	194	289	927	863	19.4	308	32.0
36 x 12	210	313	932	863	21.1	309	34.5
36 x 12	232	345	940	863	22.0	311	39.0
36 x 12	256	381	948	863	23.0	313	43.0
36 x 16 1/2"	231	344	927	825	19.3	418	32.0
36 x 16 1/2"	247	368	931	824	20.3	419	34.3
36 x 16 1/2"	262	390	936	824	21.3	420	36.6
36 x 16 1/2"	282	420	943	825	22.5	422	39.9
36 x 16 1/2"	302	449	948	825	24.0	423	42.7



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Dimensiones Pulgadas	Peso aprox		Dimensiones en mm.				
	lb/ft	kg/mt	Peralte exterior A	Peralte Interior B	Espesor Peralte C	Ancho Patin D	Espesor Patin E

36 x 16 1/2"	330	491	957	825	25.9	422	47.0
36 x 16 1/2"	361	537	965	825	28.4	425	51.1
36 x 16 1/2"	395	588	976	825	31.0	427	55.9
36 x 16 1/2"	441	656	987	825	34.5	431	62.0
36 x 16 1/2"	487	725	999	825	38.1	434	68.1
36 x 16 1/2"	529	787	1011	825	40.9	437	73.9
36 x 16 1/2"	652	970	1043	825	50.0	446	89.9
40 x 12	149	222	970	928	16.0	300	21.1
40 x 12	167	249	980	928	16.5	300	26.0
40 x 12	183	272	990	928	16.5	300	31.0
40 x 12	211	314	1000	928	19.1	300	35.9
40 x 12	235	350	1008	928	21.1	302	40.0
40 x 12	249	371					
40 x 12	264	393	1016	928	24.4	303	43.9
40 x 12	278	414	1020	928	26.0	304	46.0
40 x 12	294	438	1026	928	27.0	305	49.0
40 x 12	327	487					
40 x 12	331	493	1036	928	31.0	309	54.0
40 x 12	392	583	1056	928	36.0	314	64.0
40 x 16	199	296	982	928	16.5	400	27.1
40 x 16	215	320	990	928	16.5	400	31.0
40 x 16	249	371	1000	928	19.0	400	36.1
40 x 16	277	412	1008	928	21.1	402	40.0
40 x 16	297	442	1012	928	23.6	402	41.9
40 x 16	324	482	1020	928	25.4	404	46.0
40 x 16	362	539	1030	928	28.4	407	51.1
40 x 16	372	554	1032	928	29.5	408	52.0
40 x 16	397	591	1040	928	31.0	409	55.9
40 x 16	431	641	1048	928	34.0	412	60.0
40 x 16	503	749	1068	928	39.0	417	70.0
40 x 16	593	882	1092	928	45.5	424	82.0
44 x 16	230	342	1090	1028	18.0	400	31.0
44 x 16	262	390	1100	1028	20.0	400	36.0
44 x 16	290	432	1108	1028	22.0	402	40.0
44 x 16	335	499	118	1028	26.0	405	45.0



SIA SA. de C.V

Servicios Integrales en Acero

HSS (rectangular)

Peso aprox. Por pieza de 12.20 mts

Pulgadas	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"
5" x 3"	117.24	171.04	221.67	269.25	313.54	392.72		
6" x 2"	117.24	171.04	221.67	269.25	313.54	392.72		
5" x 4"	132.49	194.22	252.52	307.93	359.90	454.45		
6" x 3"	132.49	194.22	252.52	307.93	359.90	454.45		
7" x 2"	132.49	194.22	252.52	307.93	359.90	454.45		
6" x 4"	147.99	217.28	283.65	346.36	406.14	516.18		
7" x 3"	147.99	217.28	283.65	346.36	406.14	516.18		
8" x 2"	147.99	217.28	283.65	346.36	406.14	516.18		
6" x 5"		240.58	314.39	385.03	452.62	578.28		
7" x 4"		240.58	314.39	385.03	452.62	578.28		
8" x 3"		240.58	314.39	385.03	452.62	578.28		
7" x 5"		263.76	345.26	423.71	498.86	639.77		
8" x 4"		263.76	345.26	423.71	498.86	639.77		
9" x 3"		263.76	345.26	423.71	498.86	639.77		
10" x 2"		263.76	345.26	423.71	498.86	639.77		
8" x 6"		310.12	406.99	500.93	591.46	763.48		
9" x 5"		310.12	406.99	500.93	591.46	763.48		
10" x 4"		310.12	406.99	500.93	591.46	763.48		
12" x 2"		310.12	406.99	500.93	591.46	763.48		
8" x 7"		333.18	437.86	539.61	637.82	825.21		
9" x 6"		333.18	437.86	539.61	637.82	825.21		
10" x 5"		333.18	437.86	539.61	637.82	825.21		
12" x 3"		333.18	437.86	539.61	637.82	825.21		
9" x 7"		356.36	468.72	578.04	684.30	886.94	1078.48	
10" x 6"		356.36	468.72	578.04	684.30	886.94		
12" x 4"		356.36	468.72	578.04	684.30	886.94		
10" x 8"		402.72	530.70	655.38	776.90	1010.53	1233.42	
12" x 6"		402.72	530.70	655.38	776.90	1010.53	1233.42	
14" x 4"		402.72	530.70	655.38	776.90	1010.53		
12" x 8"		448.96	592.43	732.61	869.62	1133.99	1388.36	
14" x 6"		448.96	592.43	732.61	869.62	1133.99	1388.36	
16" x 4"		448.96	592.43	732.61	869.62	1133.99	1388.36	
12" x 10"			658.80	806.42	960.14	1257.82	1572.28	
18" x 4"			658.80	806.42	960.14	1257.82		
14" x 10"		541.80	715.90	887.06	1054.81	1381.04	1697.02	
16" x 8"		541.80	715.90	887.06	1054.81	1381.04	1697.02	
18" x 6"		541.80	715.90	887.06	1054.81	1381.04	1697.02	
20" x 4"		541.80	715.90	887.06	1054.81	1381.04	1697.02	
16" x 12"				1041.39	1240.25	1628.21	2035.26	2366.80
20" x 8"				1041.39	1240.25	1628.21		
20" x 12"				1195.60	1425.57	1875.14	2306.00	
24" x 12"						2123.00	2623.00	3099.00



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SA. de C.V

Servicios Integrales en Acero

TABLA ESTACA

CALIDADES: ASTM 572 Gr. 42 o 50 ASTM A 328 CSA G 40.21 GR.300 W o 350w

LIGERA

SECCIÓN	In.	mm.	In.	mm.	In.	mm.	In.2	cm2	Lbs/Ft Lineal	KG/Mt Lineal	Lbs/Ft2	KG/Mt 2	Ln4/ft (pared)	cm4 (pared)	In	mm	Ln3/ft (pared)	Cm3/m (pared)
Z55	0.217	5.50	8.64	219	24.00	610	7.57	48.8	25.8	38.4	12.9	63	49.7	6790	3.61	91.7	11.4	613
Z60	0.326	6.00	8.66	220	24.00	610	8.26	53.3	28.2	42.0	14.1	68.8	54.2	7400	3.62	91.9	12.4	667
Z65	0.256	6.50	8.68	220	24.00	610	8.95	57.7	30.6	45.5	15.3	74.7	58.7	8010	3.62	91.9	13.4	720
Z70	0.276	7.00	8.70	221	24.00	610	9.64	62.2	33.0	49.1	16.5	80.6	63.2	8630	3.62	91.9	14.4	774
Z75	0.295	7.50	8.72	221	24.00	610	10.3	66.5	35.2	52.4	17.6	85.9	67.7	9250	3.63	92.2	15.6	839
EZ80	0.315	8.00	10.75	273	25.00	635	12.1	77.9	41.1	61.2	19.8	96.4	110	15000	4.35	110	20.5	1100
EZ88	0.344	8.75	10.78	274	25.00	635	13.2	85.1	44.9	66.8	21.6	105	121	16500	4.36	111	22.4	1200
EZ95	0.375	9.50	10.81	275	25.00	635	14.4	92.7	48.9	72.8	23.5	115	131	17900	4.36	111	24.4	1310

MEDIA

SECCIÓN	In.	mm.	In.	mm.	In.	mm.	In.2	cm2	Lbs/Ft Lineal	KG/Mt Lineal	Lbs/Ft2	KG/Mt 2	Ln4/ft (pared)	cm4 (pared)	In	mm	Ln3/ft (pared)	Cm3/m (pared)
XZ85	0.335	8.50	14.06	357	25.00	635	13.6	87.9	46.4	69.0	22.3	109.0	212	29,00	5.70	145	30.2	1630
XZ90	0.354	9.00	14.09	358	25.00	635	14.4	93.0	48.9	72.7	23.5	115.0	225	30,80	5.70	145	31.8	1710
XZ95	0.375	9.50	14.12	359	25.00	635	15.2	98.2	51.7	76.9	24.8	121.0	237	32,40	5.70	145	33.5	1800
														34,20				

PESADA

SECCIÓN	In.	mm.	In.	mm.	In.	mm.	In.2	cm2	Lbs/Ft Lineal	KG/Mt Lineal	Lbs/Ft2	KG/Mt 2	Ln4/ft (pared)	cm4 (pared)	In	mm	Ln3/ft (pared)	Cm3/m (pared)
JZ112	0.441	11.20	16.44	418	26.50	673	20.1	129.7	68.2	101.0	30.9	151.0	374.0	51,10	6.41	163	45.3	2430
JZ120	0.472	12.00	16.47	418	26.50	673	21.5	138.7	73.0	109.0	33.0	161.0	401.0	54,70	6.41	163	48.5	2610
JZ127	0.500	12.70	16.50	419	26.50	673	22.7	146.5	77.3	115.0	35.0	171.0	424.0	57,90	6.41	163	51.4	2760



SIA SA. de C.V.
Servicios Integrales en Acero

Tuberla negra cedula 30

(TRAMOS DE 6.0 M)

Diámetro nominal		Diámetro Exterior	Espesor	Peso aprox.	Piezas por atado
Pulg	mm	mm	mm	Kg/pza	
½"	12.7	21.3	1.90	5.56	127
¾"	19.1	26.7	1.90	6.78	127
1"	25.4	33.4	1.90	9.00	91
1 ¼"	31.8	42.2	2.29	14.10	91
1 ½"	38.1	48.3	2.29	16.20	61
2"	50.8	60.3	2.67	23.70	37
2 ½"	63.5	73.0	2.67	27.78	37
3"	76.2	88.9	3.05	40.20	24
4"	101.6	114.3	3.05	52.20	24

Tuberla GALVANIZADA Y negra

cedula 40

(TRAMOS DE 6.4 M)

Diámetro nominal		Diámetro Exterior	Espesor	Peso aprox.
Pulg	mm	mm	mm	Kg/pza
½"	12.7	21.3	2.77	8.13
¾"	19.1	26.7	2.87	10.82
1"	25.4	33.4	3.38	16.00
1 ¼"	31.8	42.2	3.56	21.70
1 ½"	38.1	48.3	3.68	25.92
2"	50.8	60.3	3.91	34.82
2 ½"	63.5	73.0	5.16	55.23
3"	76.2	88.9	5.49	72.26
4"	101.6	114.3	6.08	102.85

Tubería PARA REDES CONTRA

cedula 10

Tamaño nominal	D.E.	D.I	Peso aprox./ pie	Pzas. por atado
1"	1.315"	1.097"	1.41 lbs / pie	91
1 ¼"	1.660"	1.442"	1.81 lbs / pie	61
1 ½"	1.900"	1.682"	2.09 lbs / pie	61
2"	2.375"	2.157"	2.64 lbs / pie	37
2 ½"	2.875"	2.635"	3.53 lbs / pie	30
3"	3.500"	3.260"	4.34 lbs / pie	19
4"	4.500"	4.260"	5.62 lbs / pie	19

Eddy thread

Tamaño nominal	Peso aprox./ pie	Diámetro interior	Pzas. por atado
1"	1.461	1.083	70
1 ¼"	2.070	1.418"	51
1 ½"	2.547	1.654"	44
2"	3.308	2.123"	30

cedula 40

Tamaño nominal	D.E.	D.I	Peso aprox./ pie	Pzas. por atado
1"	1.315"	1.049"	1.68 lbs / pie	70
1 ¼"	1.660"	1.380"	2.27 lbs / pie	51
1 ½"	1.900"	1.610"	2.72 lbs / pie	44
2"	2.375"	2.067"	3.66 lbs / pie	30
2 ½"	2.875"	2.468"	5.80 lbs / pie	30
3"	3.500"	3.068"	7.58 lbs / pie	19
4"	4.500"	4.260"	10.80 lbs / pie	19

Eddy flow

Tamaño nominal	D.E.	D.I	Pzas. por atado
1 ¼"	1.660"	1.530"	61
1 ½"	1.900"	1.728"	61
2"	2.375"	2.203"	37
2 ½"	2.875"	2.705"	30
3"	3.500"	3.334"	19
4"	4.500"	4.310"	19



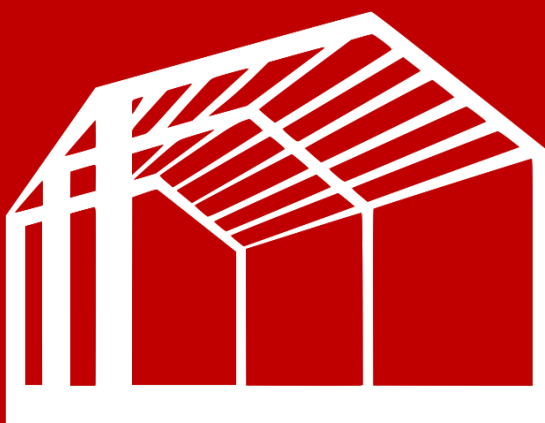
SIA

SA. de C.V

Servicios Integrales en Acero

TUBERÍA ESTRUCTURAL

Diámetro Nominal	Diámetro Pulg.	Ext. mm.	Espesor de pared			Cédula	Peso aprox.	
			Fracc. Pulg.	Milésimas Pulg.	mm.		Lb/pie	kg/m
6"	6 5/8"	168.3	3/16"	0.188"	4.78	40	12.92	19.35
			7/32"	0.219"	5.60	40	14.98	22.47
			1/4"	0.250"	6.35	40	17.02	25.55
			9/32"	0.280"	7.10	40	18.97	28.22
			3/8"	0.375"	9.50	40	24.99	37.2
8"	8 5/8"	219.1	3/16"	0.188"	4.78	10	16.94	25.37
			7/32"	0.219"	5.60	20	19.66	29.48
			1/4"	0.250"	6.35	20	22.36	33.57
			5/16"	0.312"	7.90	30	27.70	41.14
				0.322"	8.20	40	28.55	42.65
			3/8"	0.375"	9.50	20	33.04	49.1
			1/2"	0.500"	12.70	80	43.99	65.47
10"	10 3/4"	273.1	3/16"	0.188"	4.78	10	21.21	31.76
			7/32"	0.219"	5.60	10	24.63	36.94
				0.225"	5.72	10	24.66	36.69
			1/4"	0.250"	6.35	20	28.04	42.09
				0.307"	7.80	30	34.24	51.03
	0.365"	9.27	40	40.48	60.50			
12"	12 3/4"	323.9	3/8"	0.375"	9.50	40	41.10	61.16
			1/2"	0.500"	12.70	60	54.80	81.55
			3/16"	0.188"	4.78	10	25.22	37.77
			7/32"	0.219"	5.60	10	29.31	43.96
				0.225"	5.72	10	30.30	45.09
			1/4"	0.250"	6.35	20	33.38	50.11
			3/8"	0.375"	9.50	CED. STD.	49.56	73.65
13/32"	0.406"	10.30	40	53.52	79.65			
14"	14"	355.6		0.210"	5.30	10	30.93	45.78
				0.225"	5.72	10	32.68	48.63
			1/4"	0.250"	6.35	10	36.71	55.11
			5/16"	0.312"	7.90	20	45.61	67.74
			3/8"	0.375"	9.50	30	54.57	81.08
				0.438"	11.10	40	63.44	94.30
				0.465"	11.81	40	67.87	101.00
			1/2"	0.500"	12.70	EXT. FTE.	72.09	107.39
16"	16"	406.4	7/32"	0.219"	5.60	10	36.91	55.35
				0.225"	5.72	10	37.28	55.48
			1/4"	0.250"	6.35	10	42.05	63.13
				0.281"	7.14	20	47.17	69.91
			5/16"	0.312"	7.90	20	52.27	77.63
			3/8"	0.375"	9.50	30	62.58	92.98
18"	18"	457.2	1/2"	0.500"	12.70	40	82.77	123.30
			1/4"	0.250"	6.35	10	47.39	71.12
			5/16"	0.312"	7.90	20	58.94	87.49
			3/8"	0.375"	9.50	CED. STD.	70.59	104.84
			1/2"	0.500"	12.70	EXT. FTE.	93.45	139.15



SIA SA. de C.V

Servicios Integrales en Acero

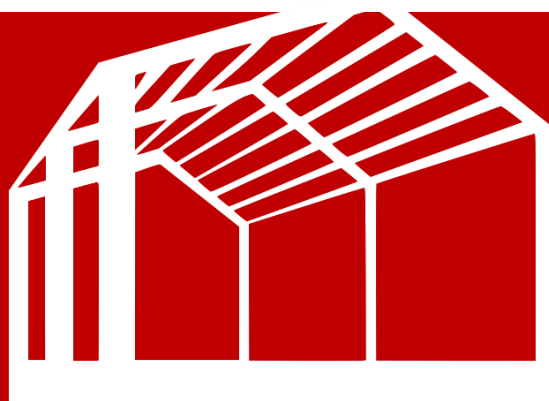
TUBERÍA ESTRUCTURAL

Diámetro Nominal	Diámetro Pulg.	Ext. mm.	Espesor de pared		mm.	Cédula	Peso aprox.	
			Frac. Pulg.	Milésimas Pulg.			Lb/pie	kg/m
20"	20"	508.0	1/4"	0.250"	6.35	10	52.73	79.16
			5/16"	0.312"	7.90	20	65.60	97.43
			3/8"	0.375"	9.50	20	78.60	116.78
			1/2"	0.500"	12.70	30	104.13	155.12
24"	24"	609.6	1/4"	0.250"	6.35	10	63.41	95.26
			3/8"	0.375"	9.50	20	94.62	140.68
			1/2"	0.500"	12.70	EXT. FTE.	125.49	187.06
			1/4"	0.250"	6.35	5	79.43	119.25
30"	30"	762.0	3/8"	0.375"	9.50	CED. STD.	118.65	176.29
			1/2"	0.500"	12.70	EXT. FTE.	157.53	234.67
			1/4"	0.250"	6.35	5	84.77	127.30
			3/8"	0.375"	9.50	CED. STD.	126.66	188.24
32"	32"	812.8	1/2"	0.500"	12.70	EXT. FTE.	168.21	250.64
			1/4"	0.250"	6.35	5	84.77	127.30
			3/8"	0.375"	9.50	CED. STD.	126.66	188.24
			1/2"	0.500"	12.70	EXT. FTE.	168.21	250.64
36"	36"	914.4	5/16"	0.312"	7.90	10	118.92	176.52
			3/8"	0.375"	9.50	CED. STD.	142.68	211.90
			1/2"	0.500"	12.70	EXT. FTE.	189.57	282.27
			1/4"	0.250"	6.35	5	84.77	127.30

HSS (cuadrado)

Peso aprox. Por pieza de 12.20 mts

Pulgadas	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"
4 x 4	117.24	171.04	221.67	269.25	313.54	392.72			
4 1/2 x 4 1/2	132.49	194.22	252.54	307.93	359.90	454.45			
5 x 5	147.99	217.28	283.65	346.36	406.14	516.18			
5 1/2 x 5 1/2		240.58	314.39	385.03	452.62				
6 x 6		263.76	345.25	423.71	498.86	639.77	769.82		
6 1/2 x 6 1/2		310.12	406.99	500.93	591.46	763.48			
7 x 7		333.18	437.86	539.61	637.82	825.21			
7 1/2 x 7 1/2		356.36	468.72	578.04	684.30	886.94	1078.48		
8 x 8		402.72	530.70	655.38	776.90	1010.53			
9 x 9		448.96	592.43	732.61	869.62	1133.99	1388.36	1666.03	
10 x 10		541.80	715.90	887.06	1054.81	1381.04	1697.02	2036.42	
12 x 12				1041.39	1240.25	1628.21	2035.26	2366.80	2708.40
14 x 14				1195.60	1425.57	1875.51	2306.00	2732.80	3147.60
16 x 16						2123.00	2623.00	3099.00	3574.60
18 x 18						2367.00	2928.00	3477.00	4013.80
20 x 20								3843.00	4440.80
22 x 22									



SIA

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Servicios Integrales en Acero

TOLERANCIA

EN ESPESOR ASTM A-6, A-20, A635, A568

ACERO AL CARBON R.C., DECAPADO,
R.F.

Tolerancia y espesor por calibre				
Cal.	Espesor		Tolerancia	
	mm.	pulg.	R.C.D R.C.S.D 36"	38"
				R.F.

3	6.07	0.2391	0.2471		
			0.2311		
			0.2322	0.2332	
4	5.69	0.2242	0.2162	0.2152	
			0.2172	0.2182	
5	5.31	0.2092	0.2012	0.2002	
			0.2023	0.2033	
6	4.95	0.1943	0.1863	0.1853	
			0.1955	0.1965	
3/16	4.76	0.1875	0.1795	0.1785	
			0.1863	0.1873	
7	4.55	0.1793	0.1723	0.1713	
			0.1714	0.1724	
8	4.18	0.1644	0.1574	0.1564	
			0.1565	0.1575	
9	3.80	0.1495	0.1425	0.1415	
			0.1415	0.1425	
10	3.42	0.1345	0.1275	0.1265	0.1285
			0.1320	0.1330	0.1131
1/8	3.17	0.1250	0.1180	0.1170	0.1190
			0.1266	0.1276	0.1256
11	3.04	0.1196	0.1126	0.1116	0.1136
			0.1160	0.1126	0.1106
12	2.66	0.1046	0.0976	0.0966	0.0986
			0.0967	0.0977	0.0947
13	2.28	0.0897	0.0827	0.0817	0.0847
			0.0817	0.0827	0.0797
14	1.90	0.0747	0.0677	0.0667	0.0697
			0.0733	0.0743	0.0723
15	1.71	0.0673	0.0613	0.0603	0.0623
			0.0745	0.0755	0.0675
1/16	1.58	0.0625	0.0505	0.0505	0.0575
			0.0658	0.0668	0.0648
16	1.52	0.0598	0.0538	0.0528	0.0548
			0.0588	0.0598	0.0578
17	1.37	0.0538	0.0488	0.0478	0.0498
			0.0428	0.0438	0.0518
18	1.21	0.0478	0.0428	0.0418	0.0438
				0.0458	0.0448
19	1.06	0.0418		0.0378	0.0389
				0.0389	0.0379
20	0.91	0.0359		0.0329	0.0329
				0.3590	0.3590
21	0.84	0.0329		0.0299	0.0299

Tolerancia y espesor por calibre				
Cal.	Espesor		Tolerancia	
	mm.	pulg.	PLACA	R.F.
				R.C.D R.C.S.D

				0.0342	
1/32	0.79	0.0312		0.0282	
				0.0329	
22	0.76	0.0299		0.0269	
				0.0299	
23	0.68	0.0269		0.0239	
				0.0269	
24	0.61	0.0239		0.0209	
				0.0239	
25	0.53	0.0209		0.0179	
				0.0199	
26	0.45	0.0179		0.0159	
				0.0184	
27	0.42	0.0164		0.0144	
				0.0169	
28	0.38	0.0149		0.0129	
29	0.34	0.0135			
30	0.30	0.0120			
			0.2800		0.2620
1/4	6.35	0.2500	0.2400		0.2380
			0.3420		0.3245
5/16	7.93	0.3125	0.3020		0.3005
			0.4050		0.3880
3/8	9.52	0.3750	0.3650		0.3620
			0.4670		0.4515
7/16	11.11	0.4375	0.4270		0.4235
			0.5300		0.5140
1/2	12.70	0.5000	0.4900		0.4860
			0.5920		0.5775
9/16	14.28	0.5625	0.5220		0.5475
			0.6550		0.6400
5/8	15.87	0.6875	0.6150		0.6100
			0.7170		0.7035
11/16	17.46	0.6875	0.6770		0.6715
			0.7800		0.7660
3/4	19.05	0.7500	0.7400		0.7340
			0.8420		0.8285
13/16	20.63	0.8125	0.8020		0.7965
			0.9050		0.8910
7/8	22.22	0.8750	0.8650		0.8590
			0.9670		0.9535
15/16	23.81	0.9375	0.9270		0.9215
			1.0600		1.0160
1	25.40	1.0000	0.9900		0.9840



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SA. de C.V

Servicios Integrales en Acero



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