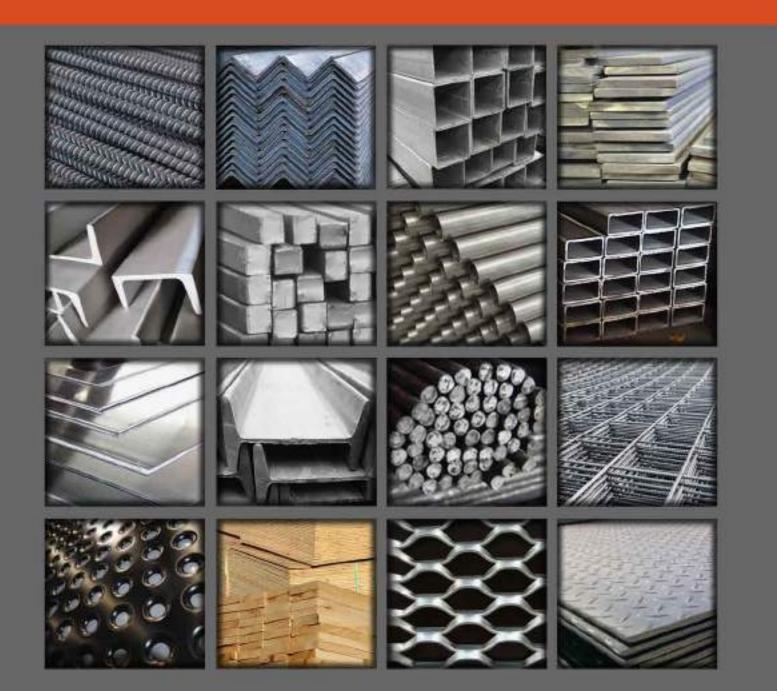


#### REINFORCING THE FUTURE





# **STEEL SUPPLIES**, INC.

#### REINFORCING THE FUTURE

Steel Services & Supplies, Inc., has provided the rebar construction industry in Puerto Rico and the Caribbean, with a fabrication plant of rebars (cut and bent) being one of the most advanced in P. R. and the U.S.

Under the visionary direction of Francisco Garcia Alonso, Don Paco, who himself counts with a vast experience (50 years) in the steel industry, Steel Services & Supplies, Inc., has become the undeniable leader of products and services in the construction industry.

From our early stages we have strived our utmost passion to convert challenges into opportunities and realities. Having seen and experienced the challenges in a continuing changing construction industry, Steel Services & Supplies, Inc., has restructured all of its departments to deal closely with our customer's requirements and needs, to facilitate the delivery of materials to the respective job sites at the lowest possible costs, adapting new strategies for a better and efficient reduction of costs. These innovative strategies have contributed significantly to the success that our company has achieved, being a big part of the infrastructure of the island projects, such as bridges, highways, tunnels, pharmaceuticals, monuments, commercial and residential buildings.

We count with the largest inventory in Puerto Rico of rebars, structural steel, and other related construction material such as wood, wire mesh, panels and others.

Steel Services & Supplies, Inc., continues with a firm determination to keep on servicing the construction industry and Puerto Rico's progress, extending our products, prices, quality and excellent service throughout the Caribbean.

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### **Organizational Philosophy**

In Steel Services & Supplies, more than 70 employees work with an extraordinary spirit of loyalty and integrity, resulting in the highest levels of workmanship towards the firm, and the highest customer satisfaction.

Our policy of quality is to benefit continuously our clients and others, for which we certify our process of production with international standards in the fabrication of both rebar and structural steel.

We are committed to comply with this policy under the continuous evaluation of our customers, by keeping a strict control and supervision of the projects that will guarantee the quality of the services rendered.

### **Our Mission**

To be a leader in our market with the best strategies in competitiveness and growth, becoming a true business partner for our customers, and by offering them the products and services of the highest quality and excellence, with the largest and most complete inventory.

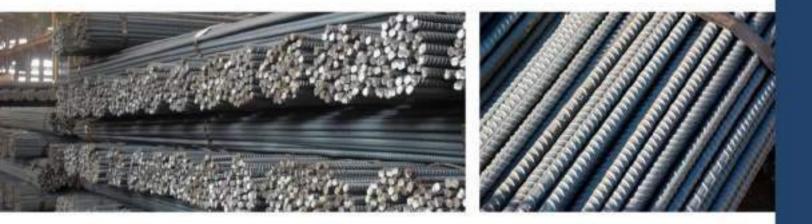


### **Reinforcing Steel**

### **Reinforcing Steel**

Reinforcing Bars Epoxy Coated Bars Weldable Bars Rebar Rings Rebar Accessories

### Reinforcing Steel Rebar



We import rebar in coils and straight in different mill lengths from countries throughout the world. Besides having the most competitive prices in the market, we are proud to assure that all quality requirements from the ASTM (American Standard Testing Material), ACI (American Concrete Institute) and building codes and regulations are met.

We have the most complete inventory of reinforcing steel in Puerto Rico, including:

- -Foreign and Domestic ASTM A-615 Grade 60
- -Weldable ASTM A-706 Grade 60
- -Coils
- -Epoxy Coated ASTM A-775

We provide our customers complete solutions, including supervision and installation at the job site. Thus, guaranteeing our focus in safety, the experience and quality execution.

AS	STM Stan	idard - Rein	forcing Bars	
	N	ominal Dimi	ensions	
Bar Size	Area	Weight	Diameter	Aprox.
Designation	(in.2)	(lb/ft)	(in.)	(mm)
#3	0.11	0.376	0.375	10
#4	0.20	0.668	0.500	13
#5	0.31	1.043	0.625	16
#6	0.44	1.502	0.750	19
#7	0.60	2.044	0.875	22
#8	0.79	2.670	1.000	25
#9	1.00	3.400	1.128	29
#10	1.27	4.303	1.270	32
#11	1.56	5.313	1.410	36
#14	2.25	7.650	1.693	43
#18	4.00	13.60	2.257	57

### **Reinforcing Steel** Epoxy Coated Rebar



Epoxy coating on rebar is designed to act as a chemical barrier, isolating the steel from the three primary elements needed for corrosion to occur: oxygen, moisture, and chloride ions. The coating also serves as an electrical insulator for the steel and minimizes the flow of corrosion current. The most widely used ASTM standards covering epoxy-coated rebar are ASTM A-775, "Standard Specification for Epoxy-Coated Steel Reinforcing Bars"

#### The use of epoxy:

Coated rebar is commonly used for concrete applications in bridges and roadways, marine applications, parking structures, concrete repairs and structures challenged with corrosion from deicing chemicals, continuous moisture exposure and/or salts.

#### Epoxy-coated

This reinforced rebar provides corrosion resistance that extends the service life of concrete structures.

### Reinforcing Steel Weldable Rebar



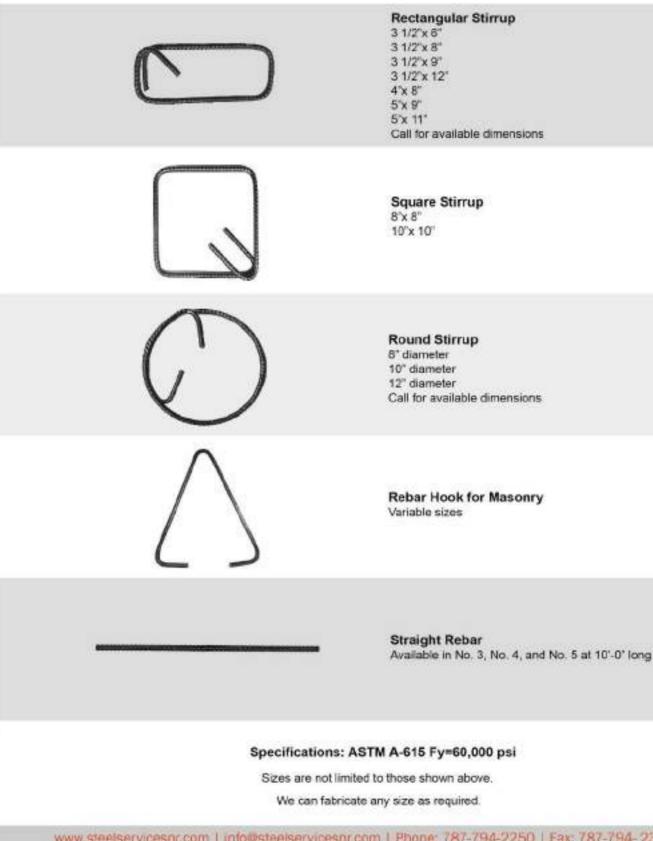


Weldable Bars that complies with ASTM A-706, allows welding without weakening. Because it is weldable, it allows welding-on-site without laboratory conditions. You can connect structurally to steel sections or substitute tying wire to secure in place, facilitating the handling of steel when working with pre-welded concrete reinforcement.

#### Applications:

Reinforcement of concrete structures, welded anchors for mixed structures (concrete-steel), pre-welded concrete reinforcement assembly.

### **Reinforcing Steel Rebar Rings**



12

### Reinforcing Steel Accessories





Jab Chair Plastic Sizes: 1 1/2", 2 1/2", 3 1/4"



**EZ Chair** Plastic Sizes: 1/4" @ 6"



Mesh Chair Plastic



X - Chair Plastic 3/4", 1 1/2", 2"



Bar - Chair Plastic Sizes: 2", 2 1/4"



Screed Chair 2 pieces, Plastic



Locking Wheel Plastic Sizes: 1 1/2"

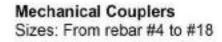


Space Wheel Plastic Sizes: 1 1/2", 2 1/2"



Snap on Chair Plastic Sizes: 1 1/2", 2 1/2"







Concrete Cover (Limber) Concrete Sizes: 3/4", 1", 1 1/2", 2"x3", 3"x3"

Slab Bolster Plastic Sizes: 1", 1 1/2", 2"

> Metal Chairs Sizes: 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 2 3/4", 3",

5 3/4", 6" Screed Chair

Metal

Safety Caps Plastic

Epoxy Coated Wire Black Annealed Wire Ga.16

Loop Tie Wire Sizes 4 1/2" & 6"

**Tie Wire Twister** 

www.steelservicespr.com | info@steelservicespr.com | Phone: 787-794-2250 | Fax: 787-794-2390

### STRUCTURAL STEEL

\*\*\*\*\*\*\*\*

### **Structural Steel**

**Steel Angles** Round Bars **Square Bars** Flat Bars Channels I Beams (S) WF Beams Welding Electrodes **Rectangular Tubing Square Tubing** Pipes **Isolite Pipes** Steel Sheets Steel Plates Floor Plates **Expanded Metal EM- Mosquitoes Metal Gratings** Louver Mesh Gratings **Expanded Gratings Fiber Glass Gratings** Perforated Metal

### Structural STEEL ANGLES



The ASTM A-36 Grade 36 and 50 Steel Angle with radius corners is used widely for structural applications, general fabrication, and repairs. It cuts, welds, forms, and machines easily. This product is available in carbon steel and galvanized.

The larger the metal angle, the more stress and weight it can bear. When angles are bolted or welded to the corner of anything being constructed, this increases its ability to bear stress and enhances the longevity of the structure. A common use of steel angles is as bracket support for shelving, usually attached to the wall at a perpendicular angle. Steel angles are a basic component of nearly every construction project. From buildings to factory machinery to beds, steel angles are used to provide a strong framework.

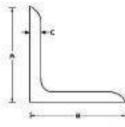
Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

#### MECHANICHAL PROPERTIES

Yield Point36,000 psi for Grade 36, 50,000 psi for Grade 50Tensile Strength58 - 80,000 psiElongation23% 2" minnimun for plates and bars,<br/>21% on 2" minnimun for shapes

#### HOW TO MEASURE:

Leg (A) x Leg (B) x Thickness (C) x Length (D)



4

3.1/2

X 1/4

6.2

124

198

248

×

Structural	
ANGLE SIZES	5



#### Angles- Bar Size Size Inches Estimated Weight Lbs A C Per 20 Ft 30 Ft 40 Ft B Length Foot Length Longth 1/2 × 1/2 1/8 38 7.6 11.4 х 5/8 f/H 14.4 1 1/8 48 9.6 'v 3/4 х 3/4 Х 1/8 .59 11.8 17.7 X 7/8 7/8 1/8 70 14.0 21.0 1 х 5/8 X 1/0 64 12.0 19.2 1/8 80 18.0 24.0 32.0 2 1 x 1 × 1.16 23.2 34.8 2 3/16 48.4 1/4 1.48 29.8 44.7 59.6 1 14 × 1.1/4 1/8 1.01 20.2 30.3 40.4 X 3/16 1.48 29.6 44.4 59.2 1/4 1.92 38.4 57.6 76,8 1 3/8 7/8 1/8 91 18.2 27.3 36.4 1 1/2 1.23 х 1 1/2 1.8 24.6 36.9 49.2 54.0 3/16 1.80 38.0 72.0 1/4 2.54 48.8 70.2 93,6 1 34 1.3/4 1/8 1.44 28.8 43.2 57.6 3/16 2.12 42.4 63.6 84.8 2.77 1/4 55.4 110.8 83.1 -2 × 1.1.10 1.96 3/16 20.5 58.8 X 78.4 2 1 1/2 1/8 1.44 28.8 43.2 57.6 X N 3/16 2.12 42.4 63.6 84.8 1/4 2.77 55.4 83.1 110.8 2 × 1/8 1.65 53.0 49.5 66.0 2 х 3/16 2:44 48.8 73.2 97.6 3.19 127.6 36 1/4 63.8 95.7 5/16 3.92 78.4 117.6 158.8 3/8 4.70 54.0 141.0 188.0 λi 1/2 6.00 120.0 180.0 240.0 2 1/2 X 11/2 97.6 X 3/16 2.44 48.8 13.2 1/4 3,19 63.8 95.7 127.6 5/16 3.92 78.4 117.6 155.8 2 1/2 N 2 3/16 2.75 55.0 62.0 110.0 1/4 3.62 72.4 108,6 144.8 5/16 4.50 90.0 135.0 180.0 5.30 106.0 159.0 3/8 212.0 2 1/2 2.1/2 02.1 3/16 3.07 122.8 65.4 82.0 123.0 164.0 × 1/4 4.10 5/16 5.00 100.0 150.0 200.0 х 3/0 5.90 118.0 177.0 236.0 х x 1/2 7.70 154 0 231.0 308.0 Angles-Structural Sizes 3 × 2 92 123 × 3/16 3.07 61 х 1/4 4.1 82 123 164 N 5/16 5.0 100 150 200 x 3/6 5.9 118 177 236 1/2 77 154 231 308 3 x 2 1/2 X 3/16 3.39 68 102 136 1/4 45 90 135 180 х 5/16 5.6 112 168 224 х 3/8 6.6 132 198 264 1/2 8.5 170 255 340 х Х з 3 3.71 111 3/16 148 74 1/4 68 147 × 4.9 1961 3ù 5/16 6.1 122 183 244 3/8 72 144 216 288 ði 1/2 9,4 188 376 282 3 1/2 174 5.4 108 182 216 x 5/16 6.6 132 198 264 3/8 79 158 237316 ж 1/2 10.2 204 306 408 3 1/2 х 31/2 1/4 5.8 116 174 232 х X 5/16 72 144 218 288 378 85 170 255 340 × X 7/16 9.8 294 242 х 196 × 222 444 х 1/2 11.1 333 4 х 3 1/4 5.8 118 174 232 ЗÝ 5/16 7.2 144 216 288 3/8 8.5 170 255 340 х х 7/16 98 196 294 392 X 222 333 444 х 1/2 11.1 х 544 30 X 后周 13.5 272 40B

2.9	ze i	n Inche		- <u>19</u> 84		ted Weigl		
A.		B		C	Per	20 Ft.	30 Ft.	40 F
					Foot	Length	Length	Lengt
	X		X	5/16	7.7	154	231	308
	х		×	3,/8	9.1	192	273	364
	X		X	1/2	11.9	238	357	476
	х		X	5/8	14.7	294	441	588
4	X	4	X	1/4	6.6	132	198	264
	×		X	5/16	82	164	246	328
	×.		X	3,8	BB	196	294	392
	-X		×.	7/16	11.3	226	338	452
	X		X	1/2	12.8	256	384	512
	х		X	5/8	15.7	314	471	628
	X		X	3/4	18.5	370	555	740
5	x	3	×	1,68	6.6	132	198	264
	X		X	5/16	82	164	246	328
	X		X	3/8	8.9	195	294	392
	X		×	\$/2	12.6	256	364	512
5	X	3 1/2	X	174	7.0	140	210	280
-	X	1000	X	5/16	87	174	261	348
	8		x	3/8		208		
	â		ŵ.		10.4		312	416
				1/2	10.6	272	408	544
	Š.		X	5/8	16.8	336	504	672
5	X	-	X	3/4	19.8	396	594	75)2
0	X	5	×	5/16	10.3	208	309	412
	X		x	3,9	12.3	246	369	492
	х		х	7/18	14.3	286	429	572
	X		X	1/2	10.2	324	486	648
	×.		×	5/8	20.0	400	600	800
	X		X	3/4	23.6	472	708	944
	X		х.	7/8	27.2	544	816	1088
6	X	3 1/2	X	1/4	7.9	158	237	316
	X		X	5/16	58	196	294	392
	X		X	3/8	11.7	234	361	468
	X		X	1/2	15.3.	306	459	612
6	X	4	X	5/3E	10.3	206	809	412
	X		X	3/8	12.3	246	369	- 492
	X		X	7/18	14.3	286	429	572
	x		x	1/2	16.2	324	486	648
	X		X	5/8	20.0	400	600	800
	x		x	3,64	23.6	472	708	944
	x		x	7/8	27.7	544	816	1058
6	X	6	x	5/16	12.5	250	375	500
-	X	14.	x	3,9	14.9	298	447	596
	8		x	7/18	17.2	344	516	688
	X.		X	1/2	19.6	302	588	784
	x		x	5/8	24.2	484	726	968
	8		ŵ.	3,44	28.7	574	861	1148
			x					
	XX		Ŷ	17/8	33.1	66Z 748	993	1324
+					37.4		1122	
7	X	4	X	3/8	13.6	272	408	544
	×.		X	7/16	15.8	316	474	632
	X		X	1/2	17.9.	358	637	716
	X		X	5/8	22.1	442	663	884
	х		×	3,44	26.2	524	786	1048
	X		X	778	30.2	604	906	1208
8	X	4	X	7/16	17.2	344	516	688
	×.		X	1/2	19,6	392	688	784
	х		X	6,18	24.2	464	726	-968
	X		x	3,01	28.7	574	861	1148
	×.		×.	778	33.1	662	993	132
	X		X	. đ.	37.4	745	1122	1498
8	х	6	X	7/16	20.2	404	600	808
	X		x	1/2	23.0	460	690	920
	Х		X	5/8	28.5	570	855	1140
	X		X	1/4	33.8	676	1014	135
	X		X	7/8	39.1	782	1075	1564
	X		X	1	44.2	884	1326	176
8	x	8	x	1/2	26.4	528	792	1056
1	ŝ.	1	x.	5/9	32.7	654	981	1308
	x		X	3/4	38.9	778	1167	165
	x		Â	7/8	45.0	900	1350	1800
	S.		x					
	x		â	1	51.0	1020	1530	2040
	- A.		- A.	1 1/8	56.9	1138	1707	2276

\*Some sizes available only by special orders



18

### Structural ROUND BARS



ASTM A-36 Grade 36 & 50 Steel Round Bar is a hot rolled, mild steel solid steel bar that is ideal for all general fabrication, manufacturing and repairs. Steel Rounds are widely used in industrial maintenance, agricultural implements, transportation equipment, ornamental iron work, fencing, artwork, etc. This steel shape is easy to weld, cut, form and machine with the proper equipment and knowledge. Steel Round Bar is used in framework, braces, supports, shafts, axles, and more. This product is available in carbon steel and galvanized.

	apes Conform to the ASTM for Testing and Materials)	Hot Rolled Round Bar Standard length 20'							
MECHANICAL PR		Size in Inches	10.110	imated aht Lbs.	Size in Inches	Estimated Weight Lbs.			
Yield Point Tensile Strength	36,000 psi 58-80,000 psi		Per foot	20 ft. Bar		Per foot	20 ft. Bar		
Elongation	23% in 2° minnimun	1/4	.167	3.34	1 1/2	6.01	120.20		
A THE OWNER AND A THE ADDRESS AND	for plates and bars,	5/16	.261	5.22	1 5/8	7.05	141.00		
	21% on 2°minnimun	*3/8	376	7.52	1 3/4	8.18	163.60		
	for shapes	7/16	.511	10.22+	17/8	9.39	187.80		
	rei enapee	*1/2	.668	13.36	2	10.68	213.60		
AVAILABLE STO	CK SIZES:	9/16	.845	16.90	2 1/8	12.06	241.20		
20ft, or Cut to Size		*5/8	1.04	20.86	2 1/4	13.52	270.40		
Stock lengths may		.680	1.26	25.20+	2 3/8	15.06	301.20		
oroentiongino may	and the second sec	*3/4	1.50	30.04	2 1/2	16.69	333.80		
HOW TO MEASU	RE:	25/32	1.63	32.60+	2 5/8	18.40	368.00		
Thickness (A) x W		*7/8	2.04	40.88	2 3/4	20.20	404.00		
THIGHTODS (M) X W	iditi (b) x congiti	29/32	2.19	43.80	2 7/8	22.07	441.40		
		*1	2.67	53.40	3	24.03	480.60		
		*1 1/8	3.38	67.58	3 1/2	32.71	654.20		

1.145

1 1/4

1 3/8

3.47

4.17

5.05

69,40+

83.46

101.00 6

\*Some Sizes available only by special order.

4

5

42.73

66.76

96.13

854.60

1335.20

1922.60

## SQUARE BARS







ASTM A-36 Steel Square Bar is a hot rolled, mild steel solid steel bar with radiuscorners that is ideal for all structural applications, general fabrication, manufacturing and repairs. Steel Squares are widely used in industrial maintenance, agricultural implements, transportation equipment, ornamental iron work, fencing, artwork, etc. This steel shape is easy to weld, cut, form and machine with the proper equipment and knowledge. Steel Services stocks hundreds of sizes of steel square at wholesale prices in small or large quantity. This product is available in carbon steel and galvanized.

Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

#### MECHANICAL PROPERTIES:

Yield Point Tensile Strength Elongation 36,000 psi 58-80,000 psi 23% on 2" minnimun for plates and bars, 21% on 2" minnimun for shapes

#### AVAILABLE STOCK SIZES:

20ft, or Cut to Size Stock lengths may vary +/- 1/4"

#### HOW TO MEASURE:

Thickness (A) x Width (B) x Length

	Estir	nated		Esti	mated
Size	Weig	ht Lbs.	Size in	Weig	ht Lbs.
in	Per	20 ft.	Inches	Per	20 ft.
Inches	foot	Bar		foot	Bar
3/8	.478	9.56	1 1/4	5.31	106.30
1/2	.850	17.00	1 3/8	6.43	128.60
5/8	1.33	26.56	1 1/2	7.65	153.00
3/4	1.91	38.26	1 3/4	10.41	208.20
7/8	2.60	52.06			
			2	13.60	272.00
1	3.40	68.00	2 1/4	17.21	344.20
1 1/8	4.30	86.06	2 1/2	21.25	425.00

\*Some sizes available only by special orders.

### **Structural** FLAT BARS



Hot Rolled Steel Flat is widely used for all general fabrication and repairs in industrial maintenance, agricultural implements, transportation equipment, etc. This product is available in carbon steel and galvanized.

Specifications: ASTM A-36 (1/4" & over) AKA: HR steel flat bar, steel strip, steel rectangle Applications: frame work, braces, supports, plates, straps, etc. Workability: Easy to Weld, Cut, Form, and Machine

Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

#### MECHANICHAL PROPERTIES:

Brinell 112 Tensile 48-80K Yield 35-36K

HOW IS IT MEASURED?

Thickness (A) X Width (B) X Length

#### Available Stock Sizes:

20ft or Cut to Size Stock lengths may vary +/- 1/4"



### Structural FLAT BAR SIZES

	Hot Rolled Flat Bar							Hot Rolled Flat Bar							
Estima	ted Weig	ght Lbs.		Esti	mated W	/eight Lbs		Estima	ted We	ight Lbs.		Estin	nated W	/eight Lbs	
Size in	inches	Per	20 ft.	Si	ze in	Per	20 ft.	Size in	inches	Per	20 ft.	Siz	e in	Per	20 代
		Foot	Bar	ind	ches	Foot	Bar			Foot	Bar	inc	hes	Foot	Bar
1/4 x	3/8	.319	6,38	5/16x	23/4	2.922	58.44	1/2 x	5/8	1,053	21.26	5/8 x	7	14.875	297.50
	1/2	.425	8.50		3	3.188	63.76		3/4	1.275	25.50		8	17,000	340.00
	5/8	.531	10.62		3 1/2	3.719	74.38		7/8	1.488	29.76		9	19.150	383.00
	3/4	.638	12.76		4	4.250	85.00		1	1.700	34.00		10	21.270	425.40
	7/8	.744	14.88		4 1/2	4,781	95.62		1 1/8	1,913	38.26		11	23,400	468.00
	1	.850	17.00		5	5.313	106.26		1 1/4	2.125	42.50		12	25.530	510.60
	1 1/8	.956	19.12		5 1/2	5.844	116.88		1 3/8	2.338	46,76				
	1 1/4	1.063	21.26		6	6.375	127.50		11/2	2,550	51.00	3/4 x	7.8	2.231	44.62
	1 3/8	1.169	23.38		7	7.438	148.766		13/4	2.975	59.50		1.1.	2.550	51.00
	1 1/2	1.275	25.50		8	8.500	170.00		2	3.400	68.00		1 1/8	2,869	57.38
	1 5/8	1.381	27.62		9	9.570	191.40		21/4	3.825	76.50		1 1/4	3.188	63.76
	1 3/4	1.488	29.76		10	10.630	212.60		21/2	4.250	85.00		1 1/2	3.825	76.50
	2	1.700				11.700	234.00		234	4.675	93.50		1 3/4	4.463	89.26
			34.00		11				3	5,100	102.00		2	5.100	102.00
	2 1/4	1.913	38.26		12	12760	255.20		31/4	5.525	110.50		2 1/4	5.738	114,76
	21/2	2.125	42.50				40.70		31/2	5.950	119.00		2 1/2	6.375	127.50
	2 3/4	2.338	46.76	3/8 x	1/2	.638	12.76		4	6.800	136.00		2 3/4	7.103	140.26
	3	2,550	51,00		5/8	.797	15.94		41/2	7.650	153.00		3	7.650	153.00
	3 1/4	2.763	55.26		3/4	.956	19.12		5	8.500	170.00		3 1/4	8.288	165,76
	3.1/2	2.975	59.50		7/8	1.116	22.32		51/2	9,350	187.00		3 1/2	8.925	178.50
	3.3/4	3.188	63.76		1	1.276	25.52		6	10.200	204.00		4	10.200	204.00
	-4	3.400	68.00		1.1/8	1.434	28.68		7	11,900	238.00		41/2	11.475	229,50
	41/2	3.825	76,50		1 1/4	1.594	31.88		8	13.600	272.00		5	12.750	255.00
	5	4.250	85.00		1 3/8	1.753	35.06		9	15.320	306.40		51/2	14.025	280.50
	5 1/2	4.675	93,50		1 1/2	1.913	38.26		10	17.020	340.40		6	15.300	306.00
	6	5.100	102.00		1 5/8	2.072	41.44		11	18,720	374.40		7	17.850	357.00
	7	5.950	119.00		1 3/4	2.231	44,62		12	20.420	408.40		8	20.400	408.00
	8	6.800	136.00		2	2.550	51.00						9	22.970	459.40
	9	7.660	153.20		2.1/4	2.869	57.38	5/8 x	3/4	1.594	31.88		10	25.520	510.40
	10	8.510	170.20		2 1/2	3.188	63.76		7/8	1.859	37.18		11	28.080	561.60
	11	9.360	187.20		2 3/4	3.506	70.12		1	2.125	42.50		12	30.63	612.60
	12	10.210	204.20		3	3.825	76.50		1 1/8	2.391	47.82				
	1.00	19.961.9	And strengt		3 1/4	4.144	B2.88		11/4	2.656	53.12	7/8 x	- t)	2.957	59.50
5/16 x	1/2	.531	10.62		3 1/2	4.463	89.26		11/2	3.188	63.76		1 1/4	3.719	74.38
ALL PLATE	5/8	.664	13.28		4	5.100	102.00		13/4	3.719	74.38		1 1/2	4.463	89.26
	3/4	.797	15.94		4 1/2	5.738	114.76		2	4.250	85,00		1 3/4	5.206	104.12
	7/8	.930	18.60		5	6.375	127.50		2.1/4	4.781	95.62		2	5,950	119.00
	110	1.063	21.26		5 1/2	7.013	140.26		21/2	5.313	106.26		21/4	6.694	133.88
	1 1/8	1,195							2 3/4	5.844	116.88		21/2	7.438	148 76
			23,90		6	7.650	153.00		3	6.375	127.50		2 3/4	8,181	163.62
	1 1/4	1.328	26.56		7	8.925	178.50		3 1/4	6.906	138.12		3	8.925	178.50
	1 3/8	1.461	29.22		8	10.200	204.00		31/2	7,438	148.76		3 1/2	10.413	208.26
	1 1/2	1,594	31.88		9	11.490	229.80		4	8,500	170.00		4	11.900	238.00
	1 3/4	1,859	37.18		10	12,770	255.40		41/2	9.563	191.26		4 1/2	13.388	267.76
	2	2.125	42.50		11	14.040	280.80		5	10.625	212.50		5	14.875	297.50
	2 1/4	2.391	47.82		12	15320	306.40		51/2	11.688	233.76		ő	17.850	357.00
	2 1/2	2.656	53.12						6	12.750	255.00		7	20.825	416.50

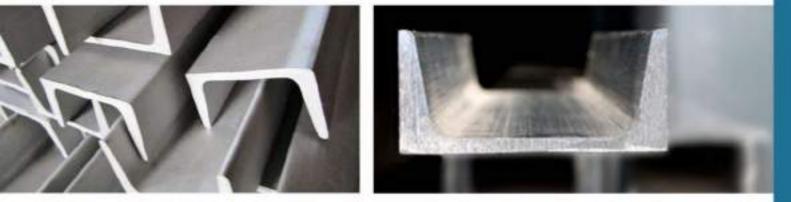
www.steelservicespr.com | info@steelservicespr.com | Phone: 787-794-2250 | Fax: 787-794-2390

### Structural FLAT BAR SIZES

		H	ot Rolled	Flat Bar	5		Hot Rolled Flat Bar					
Estima	ated Wei	ght Lbs.		Estima	ted We	ight Lbs.		Estimated Weight Lbs.				
Size in	inches	Per Foot	20 ft.	Size in i	inches	Per	20 ft.	Size in	inches	Per Foot	20 A.	
			Bar			Foot	Bar				Bar	
7/8 x	8	23.800	476.00	1 1/4 x	2 3/4	11.688	233.76	2x	21/2	17.000	340.00	
	9	26.805	536.10		3	12,750	255.00		3	20.400	408.00	
	10	29.783	595,66		3 1/2	14.875	297.50		31/2	23.800	476.00	
	11	32.761	655.22		4	17.000	340.00		4	27.200	544.00	
	12	35,740	714.80		4 1/2	19.125	382.50		41/2	30.660	612.00	
					5	21.250	425.00		5	34.000	680.00	
1 x	1 1/4	4.25	85.00		5 1/2	23 375	467.50		6	40,800	816.00	
	1 1/2	5.100	102.00		6	25.500	510.00		7	47,600	952.00	
	1 3/4	5.950	119.00		7	29.750	595.00		8	54.400	1088.00	
	2	6.800	136.00		8	34,000	680.00		9	61,260	1225.20	
	21/4	7.650	153.00		9	38.287	765.74		10	68.066	1361.32	
	21/2	8.500	170.00		10	42.541	850.82		11	74.873	1497.46	
	2 3/4	9.350	187.00		11	46.796	935.92		12	81,680	1633.60	
	3	10.200	204.00		12	51.050	1021.00				and a state of the	
	3 1/4	11.050	221.00					2 1/2	3	25 500	510.00	
	3 1/2	11,900	238.00	1.1/2 x	2	10.200	204.00	The state	31/2	29.750	595.00	
	4	13.600	272.00		2 1/2	12.750	255.00		4	34.000	680.00	
	4 1/2	15.300	306.00		3	15.300	306.00		4 1/2	38.250	765.00	
	5	17.000	340.00		3 1/2	17.850	357.00		5	42.500	850.00	
	51/2	18,700	374.00		4	20.400	408.00		6	51.000	1020.00	
	6	20.400	408.00			22.950	459.00		7	59.500	1190.00	
	7	23.800	476.00		5	25 500	510.00		8	68.000	1360.00	
	8	27.200	544.00		6	30.600	612.00		9	76.575	1531.50	
	9	30.63	612.60		7	35.700	714.00		10	85.083	1701.66	
	10	34,030	680.60		8	40.800	816.00		11	93.591	1871.82	
	11	37.440	748.80		9	45.953	919.06		12	102,10	2042.00	
	12	40.840	816,80		10	51.058	1021.16	Зx	4	40.8	816.00	
			110		11		1123.28		4.1/2	45,900		
1 1/8 x	2	7.650	153.00		12		1225.40		5	51.000		
	3	11.475	229.50						6		1224.00	
	4	15.300	306.00	1 3/4	2	11,900	238.00		7		1428.00	
	5	19.125	382.50	All All	2 1/2	14.857	297.50		8	81.600		
	6	22.950	459.00		3	17.850	357.00		9		1837.80	
	7	26.775	535.50		3 1/2	20.825	416.50		10			
	8	30.600	612.00		4	23.800	476.00		11	112.31		
	9	34.462	689.24		4 1/2		535.50		12		2450.40	
	10	38.291	765.82		5	29.750	595.00					
	11	42.120	842.40		6	35.700	714.00	'Some	sizes a	available	only by special orders.	
	12	45.950	919.00		7	41.650	833.00					
		In the second	212/22		8	47.600	952.00					
1 1/4 x	1 1/2	6.375	127.50		9	53.602	1072.04					
	1 3/4	7.438	148.76		10	59.558	1191.16					
	2	8.500	170.00		11	65.514	1310.28					
		9.563			12	71,470	1429.40					
	2.1/4	1000	191.26		1.4	1 4 /11	14 / 40					

### Structural CHANNELS





ASTM A-36 Grade 50 Structural Steel Channel is a hot rolled, mild steel channel shape with inside radius corners that is ideal for all structural applications, general fabrication and repairs. A-36 Steel Channel is used in industrial maintenance, agricultural implements, transportation equipment, etc. A-36 Steel This product is available in carbon steel and galvanized.

Specifications: ASTM A-36 Grade 50 AKA: HR steel channel, mild steel channel, steel C channel

Applications: frame work, braces, supports, cross members, etc.

Workability: Easy to Weld, Cut, Form, and Machine

Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

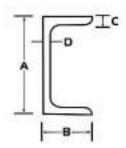
AVAILABLE STOCK SIZES:

20ft, 30ft, 40ft

			Bar C	hannels			
A		В		D			
		Size in Inc	hes		Estima	ted Weight Lbs.	
Secti		Flange	With	Web Thickness	Per Foot	Per 20 Ft Length	
1/2	×	1/4	×	1/8	.28	5.60	
3/4	X	5/16	X	1/8	.50	10.00	
3/4	x	3/8	×	1/8	.54	10.80	
7/8	X	3/8	×	1/8	.61	12.20	
7/8	X	7/16	×	1/8	.69	13.80	
1	X	3/8	х	1/8	.68	13.60	
1	х	1/2	x	1/8	.80	16.00	
11/8	X	9/16	×	1/8	1.16	23.20	
1 1/4	Х	1/2	×	1/8	1.00	20.00	
1 1/2	Х	1/2	х	1/8	1.12	22.40	
1 1/2	X	3/4	×	1/8	1.17	23.40	
2	X	1/2	х	1/8	1.34	26.80	
2	Х	1	×	1/8	1.78	35.60	
11/2	Х	9/16	Х	3/16	1.44	28.80	
1 1/2	X	1 1/2	×	3/16	2.65	53,00	
13/4	Х	1/2	х	3/16	1.55	31.00	
2	х	9/16	×	3/16	1.76	35.20	
2	X	1	×	3/16	2.57	51.40	
2 1/2	x	5/8	х	3/16	2.27	45.40	
2	X	5/8	х	1/4	2.18	43.60	



### Structural CHANNEL SIZES



		Standard	Channel	Is				MC Cha	nnels		
		A	В	Ċ	D			A	в	с	D
Section	Weight	Depth	F	lange	Web	Section	Weight	Depth	F	lange	Web
number	Per/Foot	of Section		Thickness	Thickness	Number Thickness	Per/Foot	of Section		Thickness	
	lb.	In.	In.	In.	In.			lb.	in.	In.	in,
3	3.5	3	1.376	.284	.130	3	7.1	2.93	1.983	.351	312
	4.1	з	1.410	.273	.170	4	13.8	4	2,500	.500	.500
	5	3	1,498	.273	.258	6	6.5	6	1.840	.189	.155
	6	3	1.596	.273	356		7	6	1.870	.189	.179
4	4.5	4	1.585	,149	.163		12	6.	2.497	.375	.310
	5.4	4	1.580	.295	.184		15.1	6	2.941	.475	.316
	7.25	4	1.721	.295	.321		15.3	6	3.500	385	.340
5	6.7	5	1.750	.32	.190		16.3	6	3.000	.475	375
	9	5	1.885	32	325		18	6	3 504	.475	379
6	8.2	6	1.920	.343	.200	7	17.6	7	3.000	.475	375
	10.5	6	2.034	.343	.314		19.1	7	3.452	.500	352
	13	6	2.157	.343	.437		22.7	7	3.603	.500	.503
7	9.8	7.	2.090	366	.210	8	6.6	8	1.075	.159	.138
	12.25	7	2.194	.366	.303		8.5	8	1.874	.311	179
	14.75	7	2.299	.366	.487		18.7	8	2.978	.500	.353
8	11.5	8	2.260	.39	.220		20	8	3.025	.500	.400
	13.75	8	2.343	.39	.303		21.4	8	3.450	.525	375
	18.75	8	2.527		.487		22.8	8	3.502	.525	.427
9	13.4	9	2.433	.413	,233	9	23.9	9	3.450	.550	.400
	15	9	2.485	.413	.285		25.4	9	3.500	.550	.450
	20	9	2.648	.413	.448	10	6.5	10	1.127	.202	152
10	15.3	10	2.600	.435	.240		8.4	10	1.500	.280	.170
	20	10	2.739	,436	.379		22	10	3.315	.575	.290
	25	10	2.886	.436	.526		25	10	3,405	.575	.380
	30	10	3.033	.435	.673		28.5	10	3.950	.575	.425
12	20.7	12	2.942	.501	.282		33.6	10	4.100	575	.575
	25	12	3.047	.501	.387		41.1	10	4.321	.575	.796
	30	12	3.170	.501	.510	12	10.6	12	1.500	.309	.190
15	33.9	15	3,400	.65	.400		31	12	3.670	,700	.370
	40	15	3.520	.65	.520		35	12	3.767	.700	.467
	50	15	3.716	.65	.716		40	12	3.890	.700	590
3924	10.02007						45	12	4.012	.700	712
*So	me sizes a	available	only by	y special o	rders.		50	12	4.135	.700	835
									Takend.		

13

18

31.8

35

40

50

42.7

45.8

51.9

58

13

13

13

13

18

18

18

18

4.000

4.072

4.185

4.412

3.950

4.000

4.100

4.200

610

.610

.610

.610

.625

.625

625

625

.375

.447

560

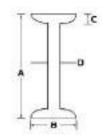
787

450

500

600

700



### Structural I-BEAMS (S)





Sloping wings and steel quality, according ASTM A-36 and tolerances according to ASTM A-6. These beams are available in standard lengths. Special orders can be made.

Applications: Construction of houses and buildings, racks of trucks and trailers, mezzanines, platforms, machine bases, bridges, etc.

Specifications: ASTM A-992/ASTM 572-992, the standard specification for structural steel shapes for use in building framing.

Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

#### MECHANICHAL PROPERTIES:

Tension	65,000 psi
Yield	50,000 psi
Brinell Hardness	143 (+/-)

AVAILABLE STOCK SIZES: 20 feet, 30 feet, 40 feet. Other sizes available on request

Standard Lengths 20'-60' A C D Section Web Weight Depth of Flange Width Thickness Number Per/Foot Section Thickness lb: In. In. In. In. 5.7 53 3.00 2,330 0.260 0.170 7.5 3.00 2.509 0.260 0.349 54 7.7 4.00 2.660 0.293 0.193 9.5 4.00 2.796 0.293 0.326 55 10 5.00 3.000 0.326 0.214 14:75 5.00 3.284 0.326 0.494 56 12.5 6.00 3,332 0.359 0.232 17.25 6.00 3.565 0.359 0.465 57 15.3 7.00 3.662 0.392 0.252 20 7.00 3.860 0.392 0.450 58 18.48.00 4.001 0.425 0.271 23 8.00 4.171 0.425 0.441 \$10 25.4 10.00 4.661 0.491 0.311 35 10.00 4.944 0.491 0.594 512 31.8 12.00 5.000 0.544 0.350 35 12.00 5.078 0.544 0.428 40.8 12.00 5.252 0.659 0,462 50 12.00 5.477 0.659 0.687 \$15 42.9 5,501 0.622 15.00 0.411 50 15.00 5.640 0.622 0.550 \$18 54.7 18.00 6.001 0.691 0.461 70 18.00 6.251 0.691 0.711 520 55 20.00 6.255 0.505 0.795 75 20.00 6.385 0.795 0.635 86 7.060 20.30 0.920 0.660 96 20.30 7.200 0.920 0.800 80 524 24.00 7.000 0.870 0.500 90 24.00 7.125 0.870 0.625 100 24.00 7.245 0.870 0.745 106 24.50 7.870 1.090 0.620

\*Some sizes available only by special orders

121

24.50

8.050

1.090

0.800





Steel beams, alias WF Beam, have non-conical edges that are wider than standard "S" or "I" beams, which we also work with.

Specifications: ASTM A-572, A-992, the standard specification for structural steel shapes for use in building framing, and or bridges. This product is available in carbon steel and galvanized.

Applications: Construction of houses and buildings, racks of trucks and trailers, mezzanines, platforms, machine bases, bridges, etc.

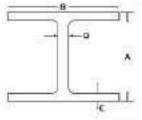
Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

#### MECHANICHAL PROPERTIES:

Tension	65,000 psi
Yield	50,000 psi
Brinell Hardness	143 (+/-)

#### AVAILABLE STOCK SIZES:

20 feet, 30 feet, 40 feet. Other sizes below under request.



### Structural WF BEAM SIZES



D

Web

Thickness

In.

0.980

1.070

1,175

1.290

1,410

1.540

1.655

1.770

1.875

2.015

2.190

2,380

2.595

2,830

3.070

0.250

0.275

0.295

0.305

0.345

0.380

0,430

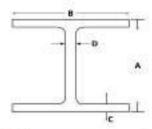
0.395

	Standard	WIDE FL/		AMS 5'-0"increme	nts	WIDE FLANGE BEAMS Standard Lengths 20'-70' in 5'-0"increment					
	or arreated	A	B	C C	D		Junuaru	A	B C		
Section	Weight	Depth of		enge	Web	Section	Weight	Depth of		ange	
Number	Per/Foot	Section	Width	Thickness	Thickness	Number	Per/Foot	Section	Width	Thickness	Thi
	lb.	In.	In.	in.	in,		Ib.	In.	In.	In.	
W4	13	4.16	4.060	0.345	0.280		79	12,38	12.080	0.735	0
W5	16	5.01	5,000	0.360	0.240		87	12.53	12.125	0.610	6
	19	5.15	5.030	0.430	0.270		96	12.71	12.160	0.900	
W6	8,5	5.83	3.940	0.194	0.170		106	12.89	12 220	0.990	- 5
	9	5.90	3.940	0.215	0.170		120	13.12	12.320	1.105	
	12	6.03	4.000	0.280	0.230		136	13.41	12.400	1.250	- 3
W6	15	6.28 5.99	4.030	0.405	0.260		152 170	13.71 14.03	12.480	1.400	
W0	20	6.20	6.020	0.365	0.260		190	14.38	12.670	1.560	
	25	6.38	6.080	0.455	0 320		210	14.71	12.790	1.900	
W8	10	7.89	3.940	0.205	0.170		230	15.05	12.895	2.070	
110	13	7.99	4,000	0.255	0.230		252	15.41	13.005	2.250	
	15	8.11	4.015	0.315	0.245		279	15.85	13.140	2.470	- 3
W8	18	8.14	5.250	0.330	0.230		305	16.32	13.235	2.705	-
100	21	8.28	5,270	0.400	0.250		336	16.82	13.385	2.955	3
W8	24	7.93	6.490	0.400	0.245	W14	22	13.74	5.000	0.335	0
	28	8.06	6.535	0.465	0.285		26	13.91	5.025	0.420	C
W8	31	8.00	7.995	0.435	0.285	W14	30	13.84	6.730	0.385	1
0.020	35	8.12	8.020	0.495	0.310	100000	34	13.98	6.785	0.455	1
	40	8.25	8.070	0.560	0.360		38	14.10	6.770	0.515	.0
	48	8.50	8.110	0.685	0.400	W14	43	13.65	7.995	0.530	0
	68	8.75	8.220	0.810	0.510		48	13.79	8.030	0.595	1
	67	9.00	8.280	0.935	0.570		.53	13.92	8.060	0.660	(
W10	12	9.87	3,960	0.210	0.190	W14	61	13.89	9.995	0.645	. (
	15	9.99	4.000	0.270	0.230		68	14.04	10.035	0.720	0
	17	10.11	4.010	0.330	0.240		74	14.17	10.070	0.785	4
	19	10.24	4.020	0.395	0.250		82	14.31	10.130	0.855	0
W10	16	9.95	5,710	0.250	0.195	W14	90	14.02	14.520	0.710	1
	22	10.17	5,750	0.360	0.240		99	14,16	14.565	0.780	
W10	16	9.95	5,710	0.250	0.195		109	14.32	14.605	0.860	- 5
	22	10.17	5.750	0.300	0.240		120	14,48	14.670	0,940	- 5
	26	10.33	5.770	0.440	0.260	1014.4	132	14.66	14.725	1.030	- 5
1414.0	30 33	10.47	5.810	0.510	0.300	W14	145	14.78	15,500	1.090	
W10	39	9.73	7.960	0.435	0.290		159 176	14.98	15.565	1.190	
			7.985	0.530	0.315			15.22	15.650	1,310	- 3
W10	45 49	10.10	8,020	0.560	0.350		193 211	15.48	15,800	1,560	3
1110	54	10.09	10.000	0.615	0.370		233	16.04	15.890	1,500	1
	60	10.22	10.080	0.680	0.420		257	16.38	15,995	1,890	-
	68	10.40	10.130	0.770	0.470		283	16.74	16.110	2.070	
	77	10.60	10.190	0.870	0.530		311	17.12	16.230	2.260	1
	88	10.84	10.265	0.990	0.605		342	17.54	16.360	4.270	1
	100	11.10	10.340	1.120	0.680		370	17.92	18.475	2.660	3
	112	11.35	10.415	1 250	0.755		398	18.29	16.590	2.845	1
W12	14	11.91	3,970	0.225	0.200		426	18,67	16.695	3.035	1
1000000	16	11.99	3,990	0.265	0.220		455	19.02	16.835	3.210	1
	19	12.16	4.005	0.350	0.235		500	19,60	17.010	3.500	100
	22	12.31	4.030	0.425	0.260		550	20.24	17.200	3.820	2
W12	21	12.04	6.450	0.290	0.195		605	20.92	17.415	4,180	1
	26	12.22	6.490	0.380	0.230		665	21.64	17.650	4.520	1
	30	12.34	6.520	0.440	0.260		730	22,42	17.890	4.910	1
NOTION V	35	12.50	6.560	0.520	0.300	W16	26	15.69	5.500	0.345	4
W12	40	11.94	8.005	0.515	0.295	1100	31	15.88	5.525	0.440	.(
	45	12.06	8,045	0.575	0.335	W16	-36	15.86	6.985	0.430	(
	50	12,19	8.080	0.640	0.370		40	16.01	6.995	0.505	5
W12	53	12.06	9.995	0.757	0.345		45	16.13	7 035	0 565	1
1414.0	58	12.19	10.010	0.640	0.360		50	16.25	7.070	0.630	- 5
W12	65	12.12	12.00	0.605	0.390		57	16.43	7.120	0.715	
	72	12.25	12.04D	0.670	0.430	W16	67	16.33	10.235	0.665	

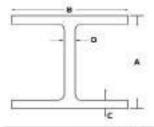
	HALS	011.	10.	641.	
	79	12,38	12.080	0.735	0.470
	87	12.53	12.125	0.810	0,515
	96	12.71	12.160	0.900	0.550
	106	12.89	12.220	0.990	0.610
	120	13.12	12.320	1.105	0.710
	136	13.41	12.400	1.250	0.790
	152	13.71	12.480	1,400	0.870
	170	14.03	12.570	1.560	0.960
	190	14.38	12.670	1.735	1.060
	210	14:71	12,790	1.900	1.180
	230	15.05	12.895	2.070	1.285
	252	15.41	13.005	2.250	1.395
	279	15.85	13.140	2.470	1.530
	305	15.32	13.235	2.705	1.625
	336	16.82	13.385	2.955	1.775
W14	22	13.74	5.000	0.335	0.230
	26	13.91	5.025	0.420	0.255
W14	30	13.84	6,730	0.385	0.270
	34	13.98	6.785	0.455	0.285
	38	14.10	6.770	0.515	0.310
W14	43	13.65	7.995	0.530	0.305
	48	13.79	8.030	0.595	0.340
	.53	13.92	8.060	0.660	0.370
W14	61	13.89	9.995	0.645	0.375
	68	14.04	10.035	0.720	0.415
	74	14.17	10.070	0.785	0,450
	82	14.31	10.130	0.855	0.510
W14	90	14.02	14.520	0.710	0.440
	99	14.16	14.565	0.780	0.485
	109	14.32	14.605	0.860	0.525
	120	14,48	14.670	0,940	0.590
	132	14.66	14.725	1.030	0.645
W14	145	14.78	15,500	1.090	0.680
	159	14.98	15.565	1.190	0.745
	176	15.22	15.650	1.310	0.830
	193	15,48	15.710	1.440	0.890
	10.0	a 17 1964	1 M 10 M 10	A 17 0.0	A

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### Structural WF BEAM SIZES



	Standard			MS -0°increme			Standard			-0"increme	
	1.80	A	B	G	D			A	B	C	D
Section	Weight	Depth of		inge	Web	Section	Weight	Depth of		inge	Web
lumber	Per/Foot	Section	Width	Thickness	Thickness	Number	Per/Foot	Section	Width	Thickness	Thickness
	Rb,	In.	in,	In.	In,		lb.	In.	In.	In.	In.
	77	16.52	10.295	0.760	0.455		148	25.32	9.220	1,380	0.770
	89	16.75	10.365	0.875	0.525		163	25.63	9.290	1.540	0.850
10122	100	16.97	10.425	0.985	0.585		198	26.26	9.470	1.850	1.020
W18	35	17.70	6.000	0.425	0.300	V/24	104	24.06	12.750	0.750	0.500
	40	17.90	6.015	0.525	0,315		117	24.26	12.800	0.850	0.550
	46	18.06	6.060	0.605	0.360		131	24.48	12,855	0.960	0.605
	41	17.70	7.450	0.530	0.320		146	24.74	12,900	1.090	0,650
	45	17,86	7.480	0.500	0.340		162	25.00	12.995	1,220	0.705
	50	17.99	7.495	0.570	0,355		176	25.24	12.890	1.340	0.750
	55	18.11	7.530	0.630	0.390		192	25.47	12.950	1.460	0.810
	60	18.24	7.555	0.695	0.415		207	25.71	13.010	1.570	0.870
	65	18.35	7.590	0.750	0.450		229	26.02	13,110	1.730	0.960
	71	18.47	7.635	0.810	0.495		250	26.34	13.185	1.890	1.040
W18	76	18,21	11.035	0.680	0.425		279	26.73	13.305	2.090	1.160
	88	18.39	11.090	0,770	0.480		306	27.13	13,405	2.280	1,260
	97	18:59	11.145	0.870	0.535		335	27.52	13.520	2.480	1.380
	106	18,73	11.200	0.940	0,590		370	27.99	13.660	2.720	1.520
	119	18.97	11.265	1.060	0.655		408	28.54	13.800	2.990	1.650
	130	19.25	11.160	1.200	0.670		450	29.09		3,270	1.810
	143	19.49	11.220	1.320	0.730				13.955		
	158	19.72	11.300	1.440	0.810	10000	492	29.65	14.115	3.540	1.970
	175	20.04	11.375	1.590	0.890	W27	84	26.71	9.960	0.640	0.460
	192	20.35	11.455	1.750	0.960		94	26.92	9.990	0.745	0.490
	211	20.67	11.555	1.910	1.060		102	27.09	10.015	0.830	0.515
	234	21.06	11,650	2.110	1,160		114	27.29	10.070	0.930	0.570
	258	21.46	11.770	2.300	1.280		129	27.63	10.010	1,100	0.610
	283	21.85	11.890	2.500	1,400		159	28.11	10.150	1.340	0.750
	311	22.32	12.005	2.740	1.520		182	28.50	10.240	1.540	0.850
W21	44	20.66	6.500	0.450	0.350		201	28.82	10.350	1.690	0 940
842.1	50	20.83	6.530	0.535	0,380		221	29.13	10.430	1.850	1,020
	57	21.06	6.555	0.650	0.405	V/27	146	27.38	13.965	0.975	0.605
W21	48	20.62		0.430	0.350		161	27.59	14.020	1.080	0.660
121			8.140				178	27.81	14:085	1.190	0.725
	55	22.80	8.220	0.522	0.375		194	287.11	14.035	1,340	0.750
	62	20.99	8.240	0.615	0.400		217	28.43	14.115	1,500	0.830
	68	21.13	8.270	0.685	0.430		235	28.66	14,190	1.610	0.910
	73	2124	8.295	0.740	0.455		258	28.98	14.270	1.770	0.980
	83	21,43	8.355	0.835	0.515		281	29.29	14.350	1.930	1.060
	93	21.62	8.420	0.930	0.580		307	29.61	14.445	2 090	1.160
W21	101	21.38	12.290	0.800	0.500		336	30.00	14.545	2.280	1.260
	111	21.51	12.340	0.875	0.650		368	30.39	14.665	2.480	1.380
	122	21.68	12.390	0.960	0.600		407	30.87	14.800	2.720	1.520
	132	21.83	12.440	1.035	0.650		440	31.42	14.940	2.990	1,650
	147	22.06	12,510	1.150	0.720		494	31.97		3.270	
	166	22.48	12,420	1.360	0.750	1000.0			15.095		1.810
	182	22.72	12.500	1,480	0.830	W30	90	29.53	10.400	0.610	0.470
	201	23,03	12,560	1.630	0.910		99	29.65	10.450	0.670	0.520
	223	23.35	12.680	1.790	1.000		108	29.83	10.475	0.760	0.545
	248	23.74	12.775	1.990	1,110		118	30.01	10.459	0.850	0.565
	275	24.13	12.890	2 190	1.220		124	30.17	10.515	0.930	0.585
W24	55	23.57	7.005	0.505	0.395		132	30.31	10.545	1.000	0.615
	62	23.74	7,040	0.590	0.430		148	30.67	10.480	1.180	0.650
	56	23.48	8.900	0.460	0.355	W30	173	30,44	14,985	1.065	0.655
	61	23.56	8.930	0.500	0.380		191	30.68	15.040	1.185	0.710
	68	23.73	8.965	0.585	0.415		211	30.94	15.105	1.315	0.775
	76	23,92	8.990	0.630	0.440		235	31.30	15.055	1.500	0.830
	84	24.10	9.020	0.770	0.470		261	31.61	15.155	1.650	0.930
	94	24.31	9.065	0.875	0.515		292	32.01	15.255	1.850	1.020
	103	24.53	9.000	0.980	0.550		326	32.40	15.370	2.050	1.140
	114	24.76	9.060	1 100	0.610		357	32.80	15.470	2.240	1.240
	128	25.00	9,110	1 220	0.670		391	33.19	15.590	2.440	1.360
	a wind your	1.00 B.D.	-W11.1.W	1.000	m. 19. 1 m.		and a	00.10	10.000	ALC: NOT A	and the second second



### Structural WF BEAM SIZES

	Standard		ANGE BEA	-0"increme	nts
		A	В	C	D
Section	Weight	Depth of	Fla	nge	Web
Number	Per/Foot	Section		Thickness	Thickness
	Ib.	In.	In. 🗧	in,	In.
	433	33.66	15.725	2.680	1.500
	477	34.21	15.865	2,950	1.630
W33	118	32.86	11,480	0.740	0,550
	130	33.09	11.510	0.855	0.580
	141	33.30	11.535	0.960	0.605
	152	33.49	11.565	1.055	0.635
	169	33.82	11.500	1,220	0.670
	187	34.06	11.580	1.340	0.750
	204	34.30	11.640	1.460	0.810
	219	34.53	11.700	1.570	0.870
W33	201	33.68	15.745	1,150	0.715
*****	221	33.93	15.805	1.257	0.775
	241	34.18	15.860	1,400	0.830
	263	34.53	15.805	1.570	0.870
	291	34.84	15,905	1.730	0.960
	318	35.16	15.985	1.890	1.040
	354	35.55	16 100	2,090	1.160
	387				
		35.95	18.200	2.280	1.260
	424	36.34	16.315	2.480	1.390
W36	468	36.81	16.455	2.720	1.520
W36	135	35,55	11.950	0,790	0.600
	150	35.85	11.975	0.940	0.625
	160	36.01	12.000	1.020	0,650
	170	36.17	12.030	1.100	0.680
	182	36.33	12.075	1.180	0.725
	194	36,49	12.115	1.260	0.785
	210	36,69	12,180	1,360	0.830
	232	37.12	12.120	1.570	0.960
	256	37,43	12.215	1.730	0.870
	285	37,83	12.310	1.930	1.000
	318	38.22	12.430	2.130	1.180
	349	38.61	12.550	2.320	1.300
	386	39.09	12.670	2.560	1,420
W36	231	36,49	16,470	1.260	0.760
	247	36.67	16.510	1.350	0.800
	262	36.85	16.550	1.440	D.840
	282	37.11	18,595	1.570	0.885
	302	37.33	16.655	1.680	0.945
	330	37.67	18.630	1.850	1.020
	361	37.99	16.730	2.010	1.120
	395	38.41	16.830	2.200	1.220
	441	38.85	16.956	2.440	1.360
	487	39.33	17.105	2.680	1.500
	529	39.79	17.220	2.910	1.610
	652	41.05	17.575	3.540	1.970
W40	149	38,20	11.810	0.630	0.630
	167	38.59	11.810	1.025	0.650
	183	38,98	11.810	1.220	0.650
	211	39.37	11.811	1,413	0.762
	235	39.68	11.980	1.575	0.831
	264	40.00	11.929	1.728	0.961
	278	40.16	11,968	1,811	1.024
	294	40.16	12.008	1.929	1,059
	327	40.39	12.000	2.130	1.181
		40.79		2.130	1.220
			12.165	2.120	1.220
	331			5 600	4 447
Mile	392	41.57	12 362	2.520	1.417
W40				2.520 1.065 1.220	1.417 0.650 0.650

	Standard	WIDE FL		AMS 5'-0"increme	ots
	o carrent o	A	В	C	D
Section	Weight	Depth of	FI	ange	Web
Number	Per/Foot	Section	Width	Thickness	Thickness
	lb.	Brt.	in	In.	In.
W40	277	39.69	15.830	1.575	0.830
	297	39.84	15,825	1.650	0.930
	324	40.16	15.905	1.810	1,000
	362	40.55	16.020	2.010	1.120
	372	40.63	16.060	2.050	1.160
	397	40.95	16,120	2.200	1.220
	431	41.26	16.220	2.362	1.339
	436	41.34	16.240	2.400	1.340
	480	41.81	16,360	2.640	1,460
	503	42.05	16.417	2.756	1.535
	593	42.99	16.693	3.228	1.791
W40	192	38.20	17,710	0.830	0.710
	221	38.67	17,710	1.065	D.710
	244	39.06	17,710	1.260	0.710
	268	39.37	17,750	1,415	0.750
	298	39.69	17.830	1.575	0.830
	328	40.00	17.910	1.730	0.910
W44	230	42.91	15,750	1.220	0.710
	262	43.31	15.750	1.420	0.790
	290	43.62	15.830	1,580	0.870
	335	44.02	15,950	1,770	1.020
			a construction of the second		

\*Some sizes available only by special orders

### **Reinforcing Steel** Welding Electrodes



Welding Electrode XL 610 P: It is an electrode of high penetration and fast solidification. For welding low carbon steel, ordinary and galvanized sheet, boilers, structures, pressure pipes and cast steel.

Welding Electrode 6011 ACP 611 SS: It is used to weld all types of low carbon steel in pipes, structures, ship-building, pressure vessels, etc, especially penetration passes.

Welding Electrode 6013 SW 10: Easy to handle, European type electrode developed for all types of welding, Require little penetration. It is used for iron constructions carpentry in general, with thin sheet, manufacture of doors, windows, bars, ducts, assembly of bodywork and ornamentation in general. The draw technique can be used for flat joints and horizontal.

### Structural RECTANGULAR TUBING





Rectangle Steel Tube is a welded structural grade tubing that is available in either type ASTM A-513 or A-500 = Seamless B, depending on its size and wall thickness. Either grade is ideal for all structural applications, general fabrication, manufacturing and repairs. Steel rectangle tube is widely used in industrial maintenance, agricultural implements, transportation equipment, truck beds, trailers, frames, etc. Its box-shape configuration allows for much greater strength and rigidity compared to angles or channels.

This steel shape is easy to weld, cut, form and machine with the proper equipment and knowledge. This product is available in carbon steel and galvanized.

Steel Services & Supplies stocks a variety of sizes of rectangle tube at wholesale prices in ready to ship, precut and mill lengths or you can order just what you need custom cut to size in any quantity.

Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

MECHANICAL PROPERTIES:

Yield Point	72 ksi (A513);	45 ksi (A500)
Tensile Strength	87 ksi (A513);	58 ksi (A500)
Elongation in 2"	10% (A513);	23% (A500)

### Structural RECTANGULAR TUBING SIZES

	RECTANGUL	AR TUBING		RECTANGULAR TUBING					
	Carbo	in Steel	Weight			on Steel	Weight		
Size in		ge Well	per ft.	Size in		ge Well	per ft.		
Inches	Gauge	Decimal	In Lbs.	Inches	Gauge	Decimal	In Lbs.		
				31/2×11/2	1/4	.250	7.11		
1 1/2 x1	16	.065	1.03	3 1/2×2	1/4	.083	3.01		
	14	.083	1.32		1/8	.125	4.29		
	1/8	.125	1.84	21/2-21/2	3/16	.188	6.29		
2x1	16	.065	1.25	3 1/2x2 1/2	16 14	.065	2.59		
	14	.083	1.57		1/8	.125	4.75		
	1/8	.125	2.25		3/16	.188	6.88		
	3/16	.188	3.35		1/4	250	8.81		
	1/4	.250	4.25		5/16	.313	10.58		
A				4x2	16	.065	2.59		
2x1 1/2	16	.065	1.49		14	.083	3.29		
	14	.083	1.88		1/8	.125	4.83		
	1/8	.125	2.66		3/16	.188	6.87		
	3/15	.188	3.99		1/4	.250	8.81		
21/2x1	16	.065	1.49		5/16	.313	10.58		
100 P.	14	.083	1.88	4×2 1/2	14	.083	3,55		
	1/8	.125	2.66		1/8	.125	5.11		
	3/15	.188	3.99		3/16	.188	7.48		
					1/4	.250	9.65		
1/2 x 1 1/2	16	.065	1.69	4x3	14	.083	3.80		
	14	.083	2.16		1/8	.125	5.61		
	1/8	.125	3.05		3/16	.188	8.16		
	3/16	.188	4.31		1/4	.250	10.51		
	1/4	.250	5.41	4 1/2×2	5/16 14	.083	12.70		
3x1	16	.065	1.69	4 1/ 282	1/8	.125	5.11		
341	14	.083	2.16		3/16	.188	7.48		
					1/4	.250	9.65		
	1/8	.125	3.05	4x3	14	.083	3.80		
	3/16	.188	4.31		1/8	.125	5.61		
	1/4	.250	5,41		3/16	.188	8.16		
3x1 1/2	16	.065	1,93		1/4	.250	10.51		
	14	.083	2.45		5/16	.313	12.70		
	1/8	.125	3,48	4 1/2x2	14	.083	3.55		
	3/16	.188	5.07		1/8	.125	5.11		
3x2	16	.065	2.15		3/16	.188	7.48		
JAC					1/4	.250	9.65		
	14	.083	2.73	5x2	14	.083	3.80		
	1/8	.125	3.90		1/8 3/16	.125	5.61 8.16		
	3/16	.188	5.59		1/4	.250	10.51		
	1/4	.250	7.11		5/16	.313	12.70		
3x2 1/2	14	.083	3.01	5x2 1/2	1/8	.125	5.92		
	1/8	.125	4.29	Sine al a	3/16	.188	8.75		
	3/16	.188	6.29		1/4	.250	11.35		
1/2 × 1 1/2	16	.065	2.15	5x3	1/8	.125	6.46		
MERINE.		.083			3/1.6	.188	9,44		
	14		2.73		1/4	.250	12.21		
	1/8	.125	3,90		5/16	.313	14.84		
	3/16	188	5.59		3/8	.375	17.27		

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### Structural

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### **RECTANGULAR TUBING SIZES**

R	ECTANGUL	AR TUBING		R		AR TUBING	
	Carbo	n Steel	Weight	the contractor		n Steel	Weig
Size in	Avera	ge Well	per ft.	Size in		ge Well	perf
Inches	Gauge	Decimal	In Lbs.	Inches	Gauge	Decimal	In Lb
5x3	1/2	.500	21.63	7x5	3/16	.188	14.5
1.000	5/8	.625	25.26		1/4	.250	19.0
5x4	3/16	.188	10.71		5/16	.313	23.3
344	1/4	.250	13.91		3/8	.375	27.4
					1/2	.500	35.2
	5/16	.313	16.96		5/8	.625	42.2
	3/8	.375	19.82	8x2	3/16	.188	11.9
	1/2	.500	27.20		1/4	.250	15.6
6x2	1/8	.125	6.46	0.0	5/16	.313	19.0
	3/16	.188	9.44	8x3	3/16	.188	13.2
	1/4	.250	12.21		1/4	.250	17.3
	5/16	.313	14.84		5/16	.313	21.2
	3/8	.375	17.27	0.0	3/8	.375	24.9
	1/2	.500	21.63	8x4	3/16	,188	14.5
	5/8	.625	25.26		1/4	.250	19.0
6x3	3/16	.188	10.71		5/16	.313	23.3
UNU	1/4	.250	13.91		3/8	.375	27.4
	5/16	.313	16.96		1/2 5/8	.500	42.2
				8x5	3/16	.188	15.8
	3/8	.375	19.82	643	1/4	.250	20.7
	1/2	.500	27.20		5/16	.313	25.4
6x4	3/16	.188	11.97		3/8	.375	30.0
	1/4	.250	15.62	8x6	3/16	.188	17.1
	5/16	.313	19.08	040	1/4	.250	22.4
	3/8	.375	22.37		5/16	.313	27.5
	1/2	.500	28.43		3/8	.375	32.5
6x5	3/16	.188	13.25		1/2	.500	42.0
	1/4	.250	17.32		5/8	.625	50.7
	5/16	.313	21.21	9x5	1/4	.250	22.4
	3/8	.375	24.93		5/16	.313	27.5
	1/2	.500	31.81		3/8	.375	32.9
7x3	3/16	.188	11.97		1/2	.500	42.0
185	710000				5/8	.625	50.8
	1/4	.250	15.62	9x7	1/4	.250	25.8
	5/16	.313	19.08		5/16	.313	31.8
	3/8	375	22.37		3/8	.375	37.6
111011	1/2	.500	28.43		1/2	.500	48.8
7×4	3/16	.188	13.25		5/8	.625	59.3
	1/4	.250	17.32	10x2	3/16	.188	14.5
	5/16	.313	21.21		1/4	.250	19.0
	3/8	.375	24.93		5/16	.313	23.3
	1/2	.500	31.81	10×3	3/16	.188	15.8
					1/4	.250	20.7
*Some siz	es available (	only by specia	l orders		5/16	.313	25.4
Serie dia	es erenewie i	and all about		10x4	3/16	.188	17.1

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### Structural RECTANGULAR TUBING SIZES

RECTANGULAR TUBING				RECTANGULAR TUBING					
	Carbo	n Steel	Weight		Carbo	Weight			
Size in	Avera	ge Well	per ft.	Size in	Avera	ge Well	per ft.		
Inches	Gauge	Decimal	In Lbs.	Inches	Gauge	Decimal	in Lbs.		
10x4	1/4	.250		12x10	5/16	.313	44.60		
	5/16	.313			3/8	.375	53.00		
	3/8	.375			1/2	.500	69.27		
	1/2	.500		14x4	5/16	.313	36.12		
	5/8	.625			3/8	.375	42.79		
10x5	1/4	.250			1/2	.500	55.66		
	5/16	.313			5/8	.625	67.82		
	3/8	.375		14x6	5/16	.313	40.37		
10x6	1/4	.250			3/8	.375	47.90		
	5/16	.313			1/2	.500	62.46		
	3/8	.375			5/8	.625	76.33		
	1/2	.500		14x10	5/16	.313	48.86		
	5/8	.625			3/8	.375	58.10		
10x8	1/4	.250			1/2	.500	76.07		
TONO	5/16	.313			5/8	.625	93.25		
	3/8	.375		16x4	5/16	.313	40.37		
	1/2	.500			3/8	.375	47.90		
	5/8	.625			1/2	.500	62.46		
12x2	3/16	.188			5/8	.625	76.33		
1282	1/4	.250		16x8	5/16	.313	48.86		
	5/16				3/8	.375	58.10		
		.313			1/2	.500	76.07		
10.0	3/8	.375			5/8	.625	93.25		
12x3	3/16	.188		16x12	5/16	.313	57.36		
	1/4	.250			3/8	.375	68.31		
	5/16	.313			1/2	.500	89.68		
12x4	1/4	.250			5/8	.625	110.36		
	5/16	.313		18x6	5/16	.313	48.86		
	3/8	.375			3/8	.375	58.10		
	1/2	.500			1/2	.500	76.07		
	5/8	.625			5/8	.625	93.25		
12x6	1/4	.250		20x4	3/8	.375	58.10		
	5/16	.313			1/2	.500	76.07		
	3/8	.375			5/8	.625	93.25		
	1/2	.500		20x8	3/8	.375	68.31		
	5/8	.625			1/2	.500	89.68		
12x8	5/16	.313			5/8	.625	110.36		
	3/8	.375		20x12	3/8	.375	78.52		
	1/2	.500			1/2	.500	103.30		
	5/8	,625			5/8	.625	127.37		

## SQUARE TUBES





Square Steel Tube is a welded structural grade tubing that is available in either type ASTM A-513 or A-500 Grade B, depending on its size and wall thickness. Either grade is ideal for all structural applications, general fabrication, manufacturing and repairs. Steel square tube is widely used in industrial maintenance, agricultural implements, transportation equipment, truck beds, trailers, frames, etc. Its box-shape configuration allows for much greater strength and rigidity compared to angles or channels.

This steel shape is easy to weld, cut, form and machine with the proper equipment and knowledge. This product is available in carbon steel and galvanized.

Steel Services & Supplies stocks a variety of sizes of square tube at wholesale prices in ready to ship precut and mill lengths or you can order just what you need custom cut to size in any quantity.

Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

MECHANICAL PROPERTIES:

	72 ksi	(A513)	46ksi	(A500)
Yield Point	87 ksi	(A513)	58ksi	(A500)
Tensile Strength	10%	(A513)	23%	(A500)
Elongation in 2"	3X wa	Il max.		
Outside Corner Radius				

AVAILABLE STOCK SIZES: 20ft, 30ft, 40ft and other sizes by special orders.

### Structural SQUARE TUBES SIZES

SQUARE TUBING			S	QUARE	TUBING		SQUARE TUBING				
	the second s	n Steel	Weight		Carbon Steel Weight			Carbon Steel		Weight	
Size in	Avera	ge Well	per ft.	Size in	Avera	ige Well	per ft.	Size in	Avera	ge Well	per ft.
Inches	Gauge	Decimal	In Lbs.	Inches	Gauge	They shall read a read and	In Lbs.	Inches	Gauge	Decimal	In Lbs.
1/2 x 1/2	16	.065	.364		1/4	.250	8.81		1/2	.500	35.24
	14	.083	.470		5/16	.313	10.58		5/8	.625	42.26
3/4 X 3/4	16	.065	.585		3/8	3.75	12.16	7 x 7	3/16	.188	17.11
	14	.083	.727	3 1/2 x 3 1/2	14	.083	3.80		14	.250	22.42
	1/8	.125	.950		1/8	.125	5.61		5/16	.313	27.59
1x1	16	.065	.806		3/16	.188	8.16		3/8	.375	32.58
	14	.083	1.01		3/4	.250	10.51		1/2	.500	42.05
	1/8	.125	1.44		5/16	.313	12.70		5/8	.625	50.76
1%x1%	16	.065	1.03		3/8	.375	15.94	8 x 8	3/16	.188	19.66
	14	.083	1.32	4x4	1/8	.125	6.46		1/4	.250	25.85
	1/8	.125	1.84		3/16	.188	9.44		5/16	.313	31.86
	3/16	.188	2.62		1/4	.250	12.21		3/8	.375	37.69
	1/4	.250	4.11		5/16	.313	14.84		1/2	.500	48.85
1 1/2 x 1 1/2	16	.065	1.25		3/8	.375	17.27		5/8	.625	59.32
A MARKAGANA	14	.083	1.57		1/2	.500	21.63	9 x 9	1/4	.250	29.23
	1/8	.125	2.25		5/8	.625	25.26		5/16	.313	36.12
	3/16	.188	3.35	4 ½ x 4 ½	3/16	.188	10.71		3/8	.375	42.79
	1/4	.250	4.25		1/4	.250	13.91		1/2	.500	55.66
1 % x 1 %	16	.065	1.49		5/16	313	16.96		5/8	.625	67.82
	14	.083	1.88		3/8	.375	19.82	10 x 10	3/16	.188	24.73
	1/8	.125	2.66		1/2	.500	27.20		1/4	.250	32.63
	3/16	.188	3.99	5 x 5	3/16	.188	11.97		5/16	.313	40.37
2 x 2	16	.065	1.69	2017	1/4	.250	15.62		3/8	.375	47.90
	14	.083	2.16		5/16	.313	19.08		1/2	.500	62.46
	1/8	.125	3.05		3/8	.375	22.37		5/8	.625	76.33
	3/16	.188	4.31		1/2	.500	28.43	12 x 12	5/16	.313	48.86
	1/4	.250	5.41		5/8	.625	33.76		3/8	.375	58.10
2 1/2 x 2 1/2	16	.065	2.15	5 1/2 x 5 1/2	3/16	.188	13.25		1/2	.500	76.07
	14	.083	2.73		1/4	.250	17.32		5/8	.625	93.34
	1/8	.125	3.90		5/16	.313	21.21	14 x 14	5/16	.313	57.36
	3/16	.188	5.59		3/8	.375	24.93		3/8	.375	68.31
	1/4	.250	7.11		1/2	.500	31.81		1/2	.500	89.68
3 x 3	16	,065	2.59	6 x 6	3/16	.188	14.53		5/8	.625	110.36
	14	.083	3.26		1/4	250	19.02	16 x 16	5/16	.313	65.87
	1/8	.125	4.75		5/16	.313	23.35	Contraction of the local distance of the loc	3/8	.375	78.52
	3/16	.188	6.88		3/8	.375	27.48		1/2	.500	103.30
to and all		le only by s		dam					5/8	.625	127.37



#### Structural PIPES



Is a welded steel tube with a internal weld seam that is measured in nominal size unlike DOM or Welded Round Tube. ASTM A-53, A-500, A-501 and A-618 Steel Pipe is a economical structural grade pipe with a smooth bare finish that has slighter higher mechanical properties than standard pipe. Our sch 40 and sch 80 Steel Pipe is a tested pipe that can be used for structural or pressure applications and may have a black coated finish. We stock most sizes in black and galvanized, threaded or plain end. This product is available in carbon steel and galvanized.

Specifications: ASTM A-500 Grade B; ASTM A-53 Gr B, Type E, Tested Applications: frames, roll cages, truck racks, trailers, railings, etc. Workability: Easy to Weld, Cut, Form and Machine

Structural Steel Shapes Conform to the ASTM (American Society for Testing and Materials)

AVAILABLE STOCK SIZES: Length 21ft, Diameter 1/2" to 24". Other lengths available by special orders.

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### Structural PIPE SIZES

Pipe Dimensions							Pipe Dimensions										
Nominal	Outside			Inside	Well	Weight per	Nominal	Outside			Inside	Wall	Weight per				
Pipe Size	Diameter	Sche	dule	Diameter	Thickness	Foot Lbs.	Pipe Size	Diameter	Schedule		Schedule		Schedule		Diameter	meter Thickness	Foot Lbs.
Inches	Inches			Inches	Inches	Pain End	Inches	Inches			Inches	Inches	Plain End				
1/2	.840	5		.710	.065	538	3	3.500	5		3.334	.083	3.029				
		10		.674	.083	.671			10		3.260	.120	4.332				
		40	Std	622	.109	850			40	Std	3.068	.216	7.580				
		80	Ex Hvy.	.546	.147	1.09			80	Ex Hvy.	2.900	300	10.250				
		160	CALCONDO.	.466	.188	1.309			160		2.624	.438	14.320				
			XX Hvy.	252	.294	1.714				XX Hvy.	2.300	.600	18.580				
3/4	1.050	5	-	.920	.065	.683	3 1/2	4.000	5		3.834	.083	3.472				
		10		.844	.083	.857			10		3.760	.120	4,973				
		40	Std	.824	.113	1.130			40	Std	3.548	226	9.110				
		80	Ex Hvy.	.742	.154	1.470			80	Ex Hvy.	3.364	.318	12,500				
		160		.614	.219	1.944	4	4.500	5	and the second s	4.334	.083	3.915				
			XX Hvy.	.434	.308	2.441	20	1111-1-1-1-	10		4.260	.120	5.613				
1	1.315	5	second.	1.185	.065	868			40	Stci	4.026	237	10.790				
	1790061	10		1.097	.109	1.404			80	Ex Hvy.	3.826	.337	14.980				
		40	Std.	1.049	.133	1680			120	Provide.	3.624	438	19.000				
		80	Ex Hyy.	.957	.179	2.170			160		3.438	.531	22.510				
		180	Ex my.	.815	.250	2.844			100	XX Hvy.	3.152	.674	27.540				
		100	XX Hvy.	.599	.358	3.659	4 1/2	5.000	40	Stcl	4.506	.247	12.530				
1.1/4	1,660	5	ANTINY.	1.530	.065	1.107	4.116	0.000	80	Ex Hvy.	4.290	.355	17.610				
1 104	1,000	10		1.442	109	1,806			00	XX Hw.	3.580	.710	32.430				
		40	Std.	1,380	.140	2.270	5	5.536	5	AA FINY.	5.345						
		80		1.278	191	3.000	9	0.000				.109	6.349				
		160	Ex Hvy.						10	PLU	5,295	.134	7.770				
		10U	WITTL	1,160	.250	3,765			40	Std	5.047	.258	14.620				
1.40	4.000		XX Hvy.	.896	.382	5.214			80	Ex Hvy.	4.813	.375	20,780				
1 1/2	1,900	5		1,770	.065	1.274			120		4.563	.500	27.040				
		10	Cul -	1.682	.109	2.085			160		4.313	.625	32.960				
		40	Std.	1.610	.145	2.720	12			XX Hw.	4.053	.750	38,550				
		80	Ex Hvy.	1.500	.200	3.630	6	6.625	5		6.407	109	7.585				
		160	a protection of the	1.338	.281	4.859			10		6.357	.134	9.289				
- 22	BLOS -	10	XX Hvy.	1.100	.400	6.408			40	Std	6.065	.280	18.970				
2	2.375	5		2.245	.065	1.604			80	Ex Hvy.		.432	28.570				
		10		2.157	.109	2.638			120		5.491	.526	36.390				
		40	Std.	2.067	.154	3,650			160		5.189	.719	45.350				
		80	Ex Hvy.	1.939	.218	5.020				XX Hvy	4.897	864	53,160				
		160		1,689	.344	7.462	7	7.625	40	Std.	7.023	.301	23.570				
			XX Hvy.	1.503	.436	9.030			80	Ex Hvy	6.625	.500	38.050				
2 1/2	2.875	5		2.709	.083	2.475				XX Hvy.	5.875	.875	63.080				
		10		2.635	.120	3.531	8	8.625	5	and the second second	8.407	.109	9.914				
		40	Std.	2.469	.203	5.790			10		8.329	.148	13.400				
		80	Ex Hvy.	2.323	.276	7.660			20		8.125	.250	22.360				
		160	COMPANY OF	2.125	.375	10.010			40	Std	7,981	.322	28.550				
			XX Hvy.	1.771	.552	13.690			60	101	7.813	.406	35.640				

### Structural PIPE SIZES



								10.74	1	- 1	100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	10.000	
	S-12-310.02		Pipe Dim	ensions	Store -					Pipe Dim	ensions		
Nominal	Outside			Inside	Wall	Weight per	Nominal	Cutside			Inside	Wall	Weight per
Pipe Size	Diameter	Sche	dule	Diameter	Thickness	Foot Lbs.	Pipe Size	Diameter	Sche	dule	Diameter	Thickness	Foct Lbs.
Inches	inches			Inches	Inches	Plain End	inches	Inches			Inches	Inches	Pain End
		80	Ex Hvy.	7.625	.500	43,390	18	18.000	10		17.500	.250	47,390
			XX Hvy.	5,875	.875	72.420			20		17.376	.312	58.940
		160		6,813	.906	74.690				Std.	17.250	.375	70.590
9	9,625	40	Std.	8.941	.342	33.900			30		17.124	.438	82.150
		80	Ex Hvy.	8.625	.500	48.720				Ex Hvy.	17,000	.500	93,450
			XX Hvy.	7.875	.875	81.770			40		16.876	.562	104.670
10	10.750	5		10.482	_134	15.190			60		16,500	.750	138.170
		10		10.420	.165	18,700			80		16.126	.938	170.920
		30		10.136	307	34.240			100		15,688	1,156	207,960
		40	Std.	10.020	.365	40.480			120		15.250	1.375	244,140
		80	Ex Hvy.	9.750	.500	54,740			140		14.876	1.562	274,220
		140	and the	8,750	1.000	104.130			160		14.438	1.781	308,500
		160		8.500	1.125	115.640	20	20.000	10		19.500	.250	52.730
11	11.750	40	Std.	11.000	.375	45.550			20	Std.	19.250	.375	78.600
		80	Ex Hvy.	10.750	500	60.070			30	Ex Hw.	19,000	.500	104,130
			XX Hvy.	10.000	.875	101.630			40		18.814	.594	123.110
12	12.750	5	+	12.420	.165	22,180			60		18.376	.812	166.400
			Std.	12.000	.375	49.560			80		17.938	1.031	208.870
		40	- She	12.000	.406	53.530			100		17.438	1.281	256,100
		80	Ex Hvy.	11.750	.500	65.420			120		17.000	1.500	296.370
		160	- maring-	10.126	1.312	160.270			140		16.500	1.750	341.090
14	14,000	10		13.500	250	36,710			160		16.064	1.969	379.170
	COMP.	20		13.376	.312	45.610	22	22.000	10		21.500	.250	58.070
		30	Std.	13.250	.375	54.570		54.000	20	Std.	21.250	.375	86.610
		40	Serve.	13.124	.438	63.440			30	Ex Hvy.	21.000	.500	114,510
			Ex Hvy.	13.000	500	72.090			60	and target	20.250	.875	197,410
		60	The second second	12.814	594	85.050			80		19,750	1.125	250,810
		80		12.500	.750	106,130			100		19,250	1.375	302.880
		100		12.126	938	130.850			120		18,750	1.625	353.610
		120		11.814	1.094	150,900			140		18,250	1.875	403,000
		140		11.500	1.250	170.210			160		17,750	2.125	451.060
		160		11.188	1.406	189,100	24	24.000	10		23,500	250	63,410
16	16.000	10		15.500	.250	42.050	44	24.000	20	Std.	23.250	375	94.620
10	10.000	20		15.376	.312	52.270			00	ExHw.	23.000	.500	125.490
		30	Std.	15.250	375	62.580			30	CARING.	22.876	.562	140.680
		40	Ex Hvy.	15.000	.500	82.770			40				
		60	warny.	14.688	.656	107.500					22.626	688,	171,290
		80		14.314	.844	136.610			60		22.064	.969	238.350
		100		13.938	1.031	164.820			80		21.564	1 219	296.580
		120		13.564		192.430			100		20.938	1.531	376,390
		140			1.219				120		20.376	1.812	429.390
		160		13.124 12.814	1.438	223,640			140		19.876	2062	483.100
		100			and the second	245 250 ailable only			160		19.314	2.344	542.130

\*Some sizes available only by special orders.

#### Seal .

## Structural



Is a galvanized steel pipe suitable for welding or for screwing.Structural grade pipe with a smooth finish. We stock most sizes in galvanized, threaded or plain end. Not suitable for preasure aplications.

Specifications: BS 1387 Applications: Fence, Railings, etc. Workability: Easy to Weld, Cut, Form and Machine

Galvanized Steel Pipe - ISOLITE								
Size	Outside Dimension	Inside Dimension	Thickness	Weight Per Ft.	Weight Per Piece			
1/2	0.841	0.691	0.075	0.670	13.400			
3/4	1.059	0.894	0.083	0.855	17.100			
1	1.328	1.135	0.097	1.405	28.100			
1 1/4	1.670	1.477	0.097	1.400	28.000			
1 1/2	1.903	1.699	0.102	2.085	41.700			
2	2.370	2.166	0.102	2.640	52.800			
2 1/2	2.991	2.755	0.118	3.530	70.600			
3	3,491	3.255	0.118	4.330	86.600			
4	4.481	4.225	0.128	5.615	112.300			
5	5.563	5.295	0.134	7.770	155,400			
6	6.625	6.357	0.134	9,290	185.800			

### Structural STEEL SHEETS





Steel Sheets comes in grade ASTM A-36 This specification covers carbon steel plates for use in riveted, bolted or welded construction of bridges and buildings and for general structural purposes. Steel Sheets are also available in grade ASTM A-572 Grade 50 and ASTM A-529 Grade 50. This specification covers five grades of high-strenght low-alloy structural steel plates intended for bolted constructions of bridges, or for bolted or welded construction in other applications.

1	<b>Hot Rolled Steel</b>	Sheets		Hot Rolled Steel Sheets				
Gauge Number	Stock Sizes	Wt. Per	Wt. Per	Gauge Number	Stock Sizes	Wt. Per	Wt. Pe	
	Inches	sq.ft.	Sheet		Inches	sq. ft.	Sheet	
16 Ga.	48 x 96	2.500	80.0	11 Ga.	48 x 96	5.000	160.0	
	48 x 120	2.500	100.0		48 x 120	5.000	200.	
	48 x 144	2.500	120.0		48 x 144	5.000	240.	
	60 x 96	2.500	100.0		60 x 96	5.000	200.	
	60 x 120	2.500	125.0		60 x 120	5.000	250.	
	60 x 144	2.500	150.0		60 x 144	5.000	300.	
14 Ga.	48 x 96	3.125	100.0		72 × 120	5.000	300	
	48 x 120	3,125	125.0		72 x 144	5.000	360.	
	48 x 144	3.125	150.0		72 x 240	5.000	500.	
	60 x 96	3.125	125.0	10 Ga.	48 x 96	5.625	180.	
	60 x 120	3.125	156.3		48 x 120	5.625	225.	
	60 x 144	3.125	187.5		48 x 144	5.625	270.	
12 Ga.	48 x 96	4.375	140.0		60 x 95	5.625	225.	
	48 x 120	4.375	175.0		60 x 120	5.625	281.	
	48 x 144	4.375	210.0		60 x 144	5.625	337.	
	60 x 96	4.375	175.0		72 x 120	5.625	337.	
	60 x 120	4.375	218.8		72 × 144	5.625	405.	
	60 x 144	4.375	262.5		72 x 240	5.625	675.	
	72 x 120	4.375	262.5					
	72 × 144	4.375	315.0					

#### Structural HOT ROLLED PLATES



Steel Plate, also known as Hot Rolled A-36 Steel Plate is a structural quality steel plate used for a large variety of general construction and industrial applications. We also offer Corten Plates A-572, A-588 in different sizes, stainless steel and aluminum.

Specifications: ASTM A-36, AISI A-36 (Grade 50 also available) Applications: base plates, gussets, liners, road plates, trench covers, etc. Workability: Easy to Weld, Cut, Form and Machine.

#### AVAILABLE STOCK SIZES:

1/16", 1/8", 3/16", 1/4", 5/16", 3/8", 5/8", 7/8", 3/4", 1", 1 1/2", 2", 3". Widths of 4', 5', 6', 8' Lengths from 8' to 10', 12' & 20'

		Ho	t Rolle	d Plate			
Size (Inches)		Sto		Wt. Per Sq. ft.	Wt. Per Sheet		
1/16	48	x	96	2.55	81.71		
	48	×	120		102.13		
	60	x	120		127.67		
1/8	48	×	96	5.10	163.2		
	48	х	120		204		
	60	х	120		255		
	60	х	144		306		
	72	×	120		306		
	72	×	144		367.2		
5/16	96	×	480	12.76	4083.2		
3/8	96	x	240	15.32	2451.2		
	96	x	288		2941.44		
	96	x	360		3676.8		
	96	x	480		4902.4		
	120	×	240		3064		
	120	×	480		6128		
7/16	96	×	480	17.87	5718.4		

## **Structural** HOT ROLLED PLATE SIZES

	Rolled	Plate		Hot Rolled Plate							
Size		Sto	ck	Wt. Per	Wt. Per	Size		Sto	ck	Wt. Per	Wt. Per
(Inches)		Size		Sq. ft.	Sheet	(Inches)		Size		Sq. ft.	Sheet
1/2	96	х	240	20.42	3267.2	, , ,	60	х	240	i i	1,021.00
	96	х	360		4900.8		72	Х	120		612.60
	96	х	480		6534.4		72	х	240		1,225.20
	120	Х	240		4084		84	Х	240		1,429.39
	120	х	480		8168		96	х	240		1,633.59
5/8	96	Х	240	25.53	4084.8		96	Х	480		3,267.20
	96	х	360		6127.2		120	Х	480		4,084.00
	96	х	480		8169.6	5/16	48	Х	96	12.76	408.32
	120	х	480		10212		48	х	120		510.40
3/4	96	Х	240	30.63	4900.8		48	Х	144		612.48
	96	х	480		9801.6		48	х	240		1,020.80
	120	Х	480		12252		60	X	120		638.00
1	96	х	240	40.84	6534.4		60	Х	144		765.60
	96	Х	480		13068.8		60	Х	240		1,276.00
	120	х	480		16336		72	Х	240		1,531.50
1 1/8	96	Х	240	45.95	7352		84	X	240		1,786.74
1 1/4	96	х	240	51.05	8168		96	Х	240		2,042.00
1 3/8	96	х	240	56.16	8985.6		96	X	480		4,083.20
1 1/2	96	X	240	61.27	9803.2		120	Х	480		5,104.00
1 5/8	96	X	240	66.37	10619.2	3/8	48	Х	96	15.32	490.08
1 3/4	96	Х	240	71.47	11435.2		48	Х	120		612.60
2	96	X	240	81.68	13068.8		48	Х	144		735.36
2 1/2	96	Х	240	102.10	16336		48	Х	240		1,225.20
2 3/4	96	Х	240	112.31	17969.6		60	X	120		765.75
3	96	Х	240	122.52	19603.2		72	Х	120		919.20
3/16	48	Х	96	7.66	245.04		72		240		1,837.79
	48	Х	120		306.30		84	Х	240		2,144.09
	48	X	144		367.56		96	Χ	240		2,450.39
	48	х	240		612.60		96	Х	360		3,676.80
	60	Х	120		382.87		96	X	480		4,902.40
	60	Х	144		459.44		120	Х	240		3,064.00
	60	Χ	240		765.74	440	120	Х	480	00.40	6,128.00
	72	Х	120		459.45	1/2	48	Х	96	20.42	653.44
	72	X	240		918.90		48	Х	120		816.80
	96	Х	240		1,225.60		48	Х	144		980.16
	120	Χ	480	10.01	3,064.00		60	Х	120		1,021.00
1/4	48	Х	96	10.21	326.72		72	Х	120		1,225.20
	48	Х	120		408.40		72	X	240		2,450.39
	48	Х	144		490.08		84	X	240		2,858.79
	48	Χ	240		816.80		96	X	240		3,267.19
	60	Х	120		510.50		96	X	360		4,900.80
	60	Х	144		612.60		96	Х	480		6,534.40

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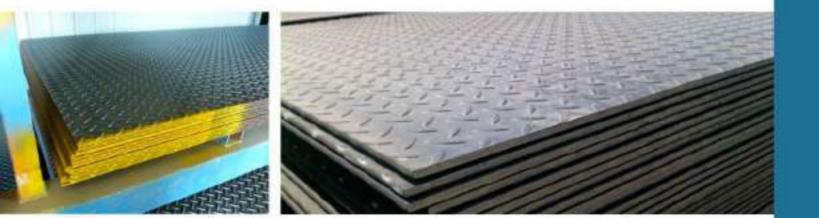
#### Structural HOT ROLLED PLATE SIZES

		Ho	t Rolled	I Plate		Hot Rolled Plate					
Size		Stock Wt. Per		Wt. Per	Size		Sto	ck	Wt. Per	Wt. Per	
(Inches)	Sizes		Sq. ft.	Sheet	(Inches)		Siz	es	Sq. ft.	Sheet	
	120	х	240		4,084.00	1-3/4	96	X	240	the second second	11,435.20
	120	х	480		8,168.00	2	48	х	96	B1.68	2,613.76
5/8	48	х	96	25.53	816.96		48	x	120		3,267.20
	48	X	120		1,021.20		48	x	240		6,534.40
	48	х	240		2,042.00		96	x	240		13,068.80
	60	х	120		1,276.50		48	х	240		7,351.20
	72	х	120		1,531.80		96	х	240		14,702.40
	84	X	240		3,573.49	2-1/2	48	X	96	102.10	3,267.20
	96	х	240		4,083.98		48	x	240	122.12	8,168.00
	96	х	480	22.22	8,169.60		96	X	240		16,336.00
3/4	48	х	96	30.63	980.16	2-3/4	48	x	96	112.31	3,593.20
	48	X	120		1,225.20	6-014	96	x	240	112.01	17,969.60
	60	X	120		1,531.49	3		20		100 50	
	72	х	240		3,675.59	2	48	X	96	122.52	3,920.64
	84	x	240		4,288.18	0.4/0	96	х	240	110.01	19,603.20
	96	Х	240		4,900.78	3-1/2	48	х	96	142.94	4,574.08
	96	Х	480		9,801.60		96	X	240		22,870.40
7/8	96	X	240	35.74	5,718.40	4	48	х	96	163.36	5,227.52
1"	48	х	96	40.84	1,306.88		48	×	240		13,068.80
	48	X	120		1,633.60	4-1/2	48	х	96	183.78	5,871.36
	48	х	240		3,267.19		96	×	240		29,404.80
	60	х	120		2,042.00	5	48	X	96	204.20	6,534.40
	72	х	120		2,450.39		96	х	120		16,336.00
	72	х	240		4,900.78		96	X	240		32,672.00
	84	х	240		5,717.58	5-1/2	60	х	120	224.61	11,230.50
	96	Х	240		6,534.37		60	×	240	224,61	22,461.00
	96	Х	480		13,068.80		60	x	480	224.61	44,922.00
1-1/8	96	х	240	45.95	7,352.00	6	60	X	240	245.03	24,503.00
	120	Х	240		9,190.00		60	X	480	245.03	49,006.00
1-1/4	48	Х	96	51.05	1,633,59		72	x	120	245.03	14,701.80
	48	Х	120		2,042.00		72	x	240	245.03	29,403.60
	48	Х	240		4,083.98		96	x	120	245.03	19,602.40
	60	Х	120		2,552.50		96		240	245.03	and the second sec
	72	х	240		6,125.98	6 4/2		Х			39,204.80
	96	х	240		8,167.96	6-1/2	96	X	120	265.45	21,236.00
1-1/2	48	X	96	61.27	1,960.64	-	96	X	240	265.45	42,472.00
	48	х	120		2,450.80	7	60	х	120	285.87	14,293.50
	48	x	240		4,900.78		60	Х	240	285.87	28,587.00
	60	х	120		3,063.50		96	×	120	285.87	22,869.60
	48	х	96		3,063.50		96	X	240	285.87	45,739.20
1000	96	х	240	CANCER.	9,801.56	8	60	х	120	326.71	16,335.50
1-3/4	48	х	96	71.47	2,287.04		60	Х	240	326.71	32,671.00
	48	X	120		2,858.80	10	84	×	120	408,38	28,586.60

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#### **Structural** FLOOR PLATE





This raised lug pattern often takes on a diamond shape, making it commonly referred to as diamond plate. Individual floor plate patterns are manufactured exclusively by each producer of floor plate products, including diamond plate patterns. Although there may be a close resemblance, floor plates from different manufacturers are not identical in dimension or appearance of "lugs".

Specifications: ASTM A-36, AISI A-36 (Grade 50 also available) Applications: base plates, liners, road plates, trench covers, etc. Workability: Easy to Weld, Cut, Form and Machine.

#### MCHANICAL PROPERTIES:

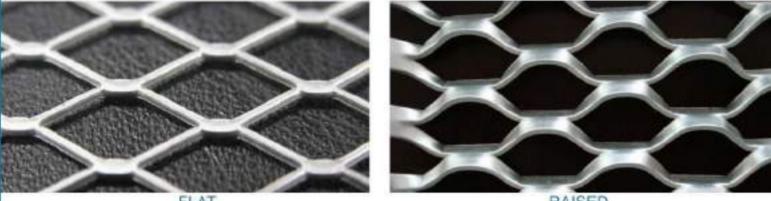
ASTM A-36 Tensile 58,000 to 80,000 Yield 36,000 Elongation 23

ASTM A-572 Tensile 65,000 Yield 50,000 Elongation 21

\*Some sizes available only by special orders

Floor Plate						
Thickness	Stock Sizes	Wt. Per	Wt. Per			
	(inches)	Sq. FL	Piece			
1/8	48 x 95	6.16	197.12			
	48 x 120		246.25			
	48 x 144		295.68			
	48 x 240		492.49			
	60 x 120		307.81			
	60 x 240		615.62			
3/16	48 × 96	8.71	278.67			
	48 x 120		348.34			
	48 x 240		696.80			
	60 × 120		435.43			
	6D x 240		870,86			
	72 x 240		1,045.03			
	96 x 240		1,393.60			
1/4	48 x 96	11.26	360.36			
	48 x 120		450.45			
	48 x 240		900.89			
	60 x 240		1,126.12			
	72 x 240		1,351.34			
	96 x 240		1,801.60			
5/16	48 x 120	13.81	552,40			
	48 x 240		1,104.80			
	60 x 240		1,381.00			
	72 × 240		1,657.20			
	96 x 240		2,209.60			
3/8	48 × 120	16.37	654.80			
	48×240		1,309.28			
	60 x 240		1,636.60			
	72 × 240		1,963.96			
	96 x 240		2,618.56			
1/2	48 x 120	21.47	858.80			
	48 x 240		1,717.60			
	60 x 240		2,147.00			
	96 x 240		3,435.20			
5/8	96 x 240	26.58	4,252.80			
3/4	96 x 240	31.68	5,068.80			
1	96 x 240	41.89	6,702.40			

#### Structural **EXPANDED METAL - MDI**



FI AT

RAISED

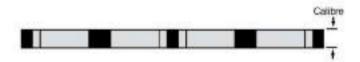
Is a metal mesh formed in one piece, without seam or welding, which has a series of openings of uniform size in the form of rhomb or diamonds. It is made by a die-cutting process to the rolls of steel sheets, which allows to develop multiple designs of mesh. Available in Black Steel, Aluminium, Galvanized and Stainless Steel

#### RAISED

Is the Natural Deployed Metal without additional finishing, material that is applied when greater strength and structural strength is required.

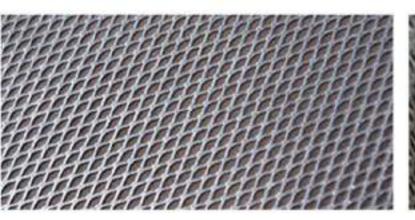
#### FLAT

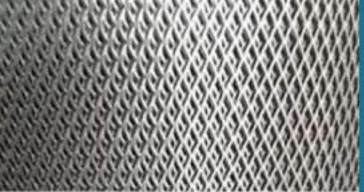
Is the Iron Expanded Metal that is used in the manufacture of those products in which a finishing free of rough edges is desired.



AVAILABLE SIZE: 4 ft. x 8 ft.

### **Structural** EXPANDED METAL- MOSQUITOES





It is a sturdy steel mesh with small openings designed to prevent the passage of insects, offering greater security for its strength. It is the ideal product to be applied as mesh mosquito nets in doors and windows, surpassing for its strength, resistance, durability and economy compared to the traditional and fragile wire and plastic meshes.

Available: Galvanized and Aluminium

Sizes: 3ft. x 7ft. - Galvanized and aluminium 4ft. x 8ft. - Aluminium

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#### **Structural** EXPANDED METAL - EXAMPLES

Gótico PR	GR-2100 MR LN
3/8* #16A MR LN	1/2" # 16 PR LN
1/2" # 11 MR LN	1/2" # 16A PR LN
3/4* #9 MR LN	1/2" # 13 PR LN
1" #6 MR LN	3/4" # 16 PR LN
1 1/2* # 6 MR LN	3/4" # 13 PR LN
GR-1500 MR LN	3/4" # 9 PR LN





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Galvanized Saddle Clips



U Channel Borders

### Structural LOUVER MESH





The Louver mesh has several applications, including a revolutionary security barrier, ideal for perimeter fences. The louver helps to cross the wind. With this application the level of protection is higher, and installs easily with very low cost.

In protection applications, this deployed low-lying area provides:

- Anti-Scale Barrier
- Cut resistant
- Visual privacy

Using heavy gauges, the Louver mesh has multiple applications:

- Perimeters for oil or chemical installations
- Perimeter security
- Anti-shock barriers
- Prison facilities Military bases

#### Structural STEEL GRATINGS



Steel Bar Grating, also known as Welded Steel Bar Grate, is extremely strong and durable for all load bearing applications and is primarily used for pedestrian and light vehicle traffic. This type of welded mesh wire provides advantages like high strength, easy installation and feasible cost. It is also used for grating roads, making drainage coverings and building safety walls. It also has uses in chemical plantation, platform grating, metallurgy etc.

Steel bar grating is available in a variety of bearing bar spacing and thicknesses depending on applications and load requirements. Available in either smooth top or serrated for slip resistance.

Specifications: 19W4, Carbon Steel, Painted Black, hot dipped galvanized. Applications: Walkways, flooring, ramps, bridge flooring, trench and drainage covers, mezzanines, platforms, stair treads, etc.

Workability: Easy to Weld, Cut, Form and Machine

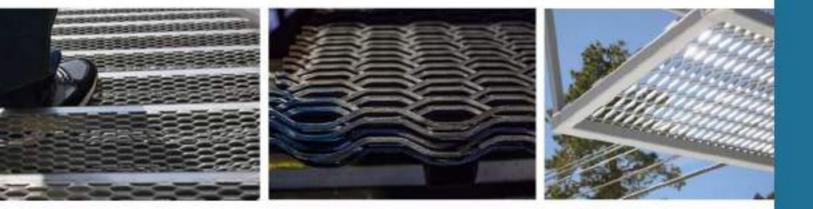
Mechanical Properties: Tensile 58,000 +/-Yield 42,000 +/-

How is it Measured? Bar thickness X bar height, Bearing bars run parallel to each other, the length of the panel.

Available Stock Sizes: 3ft. x 10ft. Standard high: 1", 1 1/4" and 1 1/2". Special Orders High: 2", 2 1/2" and 3".

#### Structural EXPANDED GRATING





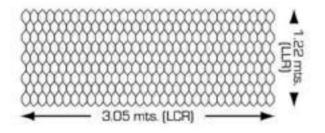
The expanded grating is the alternative to the electro-welded grating. This product is made from steel plate, and It has no welds or seams.

Available:

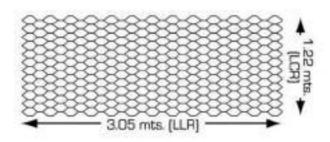
Comes in 3 lb. with 3/16" of thickness and in 4lb.with 1/4 of thickness. Black Steel and Galvanized

Size: 4ft. x 8ft.

GR -1500 CW (3 Lbs. Grating CW)



GR-1500 (3 Lbs. Grating)



#### Structural FIBER GLASS GRATINGS



Molded fiberglass grating is a good choice when a lightweight, corrosion-resistant and high impact resistant material is desired. Under normal use, the available grit surface will not bend or dent and provides excellent, long lasting slip resistance in a variety of surface conditions.

Molded fiberglass grating is a fiberglass-reinforced polymer (FRP) that combines fiberglass rovings with thermosetting resins to form a strong, one-piece molded panel. A 65%/35% resin to glass weight ratio provides high corrosion resistance. Meniscus fiberglass flooring surfaces or applied grit fiberglass flooring surfaces provide slip resistance when compared to other flooring products. This fiberglass product is better suited for corrosive environments.

Important Features of Molded Fiberglass Grating:

- High corrosion resistance
- Bi-directional strength
- Lightweight 1/3 the weight of steel
- High impact resistance
- Long service life
- Low thermal conductivity
- Non-conductive
- Easy to fabricate
- Skid resistance
- UV inhibitors

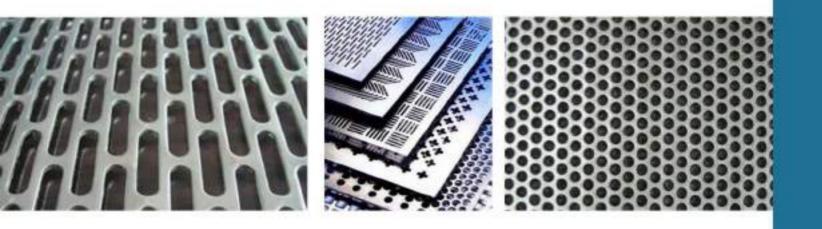
#### SPECIFICATIONS:

IFR-25: Premium isophthalic polyester resin with a fire retardant class 1 flame spread rating of 25 or less per ASTM - E84. Provides a very good level of chemical resistance for industrial applications and is fire retardant.

Available in dark gray, green and yellow.



#### Structural PERFORATED METAL



Perforated metal applications are many and varied. Some of them are typical of this industry for many years and others are new designs because Perforated Metal becomes increasingly popular.

Engineers, designers and architects are finding more and more uses for Perforated Metal in its different presentations in design and materials such as:

- Outdoor Bench
- Baskets and Bins
- Screens and Drums
- Architectural Elements
- Dust Extractors
- Air and Oil Filters
- Mufflers and Exhaust Pipes
- Garden Furniture
- Ceiling Panels
- Lighting Screens
- Radios and Radars
- Refrigerators
- Vents
- Grain Dryers and Sorters
- Acoustic System
- Fruit Crushers

#### CONSTRUCTION MATERIALS

#### Construction Materials

Lumber Laminated Plywood Construction Plywood Fittings Gates Ornamental Hardware Safety Accesories Chemicals Tools

# Construction Materials



The construction market is divided into the different species of trees from which the product is cut. The usual species in our market are Douglas Fir, Hem Fir, Spruce and Southern Yellow Pine (SYP). But the local market is concentrating mainly on the SYP or better known as pine since it is of great hardness and low cost.

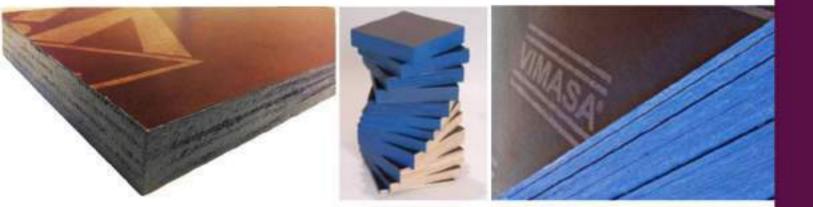
It is sold per unit and marketed from 2" x 4" to 2 "x 12". Their lengths range from 8' to 20'.

The pine is also traded treated. This treatment is a chemical injection process that delays the decomposition due to its exposure to humidity, termites and the weather.

Also available wood batten raw, in size 1"x 4".

#### Construction Materials FILM FACED PLYWOOD





The film faced plywood is a layered panel. Its great advantage is that the two outer faces are covered in a smooth and strong finished laminate. For example 125 Gr / m2. These two faces are the ones that are in contact with the concrete leaving a smooth finish once stripped. Among the advantages of this product, stands out its rate of uses and the significant saving by reducing plastering process.

Description: Vimasa 9 layer 125 G/m2 Size: 4ft x 8ft. x 3/4in. (thickness)

#### Construction Materials CONSTRUCTION PLYWOOD



The construction plywood is made on mills and constructed from sheets compressed and glued. Its used mostly in the construction industry at formwork. It is recommended that its edges be sealed whenever it is cut.

The C + / C + plywood is a layered panel where its two outer faces are mashed and sanded to give it a porous but uniform finish. This panel is usually marketed in its OES variant. This means that O = Oiled in factory-cleaned with non-stick chemicals for easy stripping and with sealed edges (ES = Edge Sealed) with paint to delay or prevent the panel from peeling off as any material enters its edges. The other side is maintained with the natural imperfections of the manufacturing process.

#### Construction Materials FENCE FITTINGS



Aluminium Gate Corner: 1\*



Aluminium Loop cap: 1 1/2" x 1" Aluminium Loop Cap: 2" x 1 1/4"



Brace Band: 1 1/2" Brace Band: 2" Brace Band: 2 1/2" Brace Band: 3"

Tension Band: 1 1/4" Tension Band: 1 1/2" Tension Band: 2" Tension Band: 2 1/2" Tension Band: 3"

Clamp with bar: 4\*



Aluminium Post Cap: 1" Aluminium Post Cap: 1 1/4" Aluminium Post Cap: 1 1/2" Aluminium Post Cap: 2"



Female Gate Hinge: 1" Male Post Hinge: 2"



Aluminium Post Cap 1 way: 1 1/2"

Aluminium Post Cap 2 way: 1 1/2"



Sleeve: 1" x 6" Sleeve: 1 1/4"x 6"



Aluminium Rail End: 1"

Barb Arm 3 Way: 1 1/2° x 1 1/4° Barb Arm 3 Way: 2° x 1 1/4°

Barb Arm 6 Way: 1 1/2" x 1 1/4"

Barb Arm 6 Way: 2" x 1 1/4"

Fence Barrier

Sizes: 4'pieces

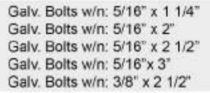
50 items per box

Aluminium Rail End: 1 1/4"



Sleeve: 1 1/2 x 6" Sleeve: 2"x 6"

Tension Bar: 5/8" x 4" Tension Bar: 5/8" x 5" Tension Bar: 5/8" x 6" Tension Bar: 5/8" x 8"



Cyclone Fence: #9.5 - 4' x 50' Cyclone Fence: #9.5 - 5' x 50' Cyclone Fence: #9.5 - 6' x 50'

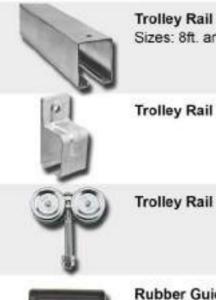


Boulevard Clamp: 1 1/2"x 1" Boulevard Clamp: 1 1/2"x 1 1/4" Boulevard Clamp: 2"x 1" Boulevard Clamp: 2"x 1 1/4"



End Rail Clamp: 1 1/2"x 1" End Rail Clamp: 1 1/2"x 1 1/4"

#### **Construction Materials GATES HARDWARE**



Sizes: 8ft, and 10ft.

**Trolley Rail Bracket** 

**Trolley Rail Truck** 



Security Lock Double Cilinder Dead Bolt



Security Lock Double Cilinder Hook



Lock Box Double

Lock Box

Simple



Rubber Guide for Gates Sizes: 3 in. and 6 in.

Gate Wheel Double Bearing Size: 4in.



Cast Iron Wheel Size: 6in.



Wheel Box for Gates Galvanized Size: 4 in.



Galvanized Size: 1/2 in.



Cast Iron Wheel Size: 4in.



Unassemble Latch Galvanized



Plastic Caps For Tubes Sizes: 1"x 1", 1"x 2", 2"x 2", 3"x 3" and 4"x 4"





Floor Plate Size: 4" x 4"



Floor Flaner Size: 1-1/4"

#### Construction Materials ORNAMENTAL





#### **Construction Materials** ORNAMENTAL



Forged Steel Item: SART802/1



Forged Steel Item: SARTRAD619



Forged Steel Item: SOR606G



Item: SART1435

**Forged Steel** 



Forged Steel Item: SART26/C/1



Forged Steel Item: S405



Item: S147

**Cast Iron Decorative** 



Cast Iron Decorative Item: S150



Cast iron Decorative Item: S618



Cast Iron Decorative Item: S19

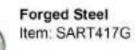


Forged Steel Item: SART409

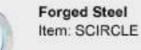


Forged Steel Item: SART159/3

Cast Iron Item: SCAPBOLA4



Item: SART





223



Cast Iron Decorative Item: S639

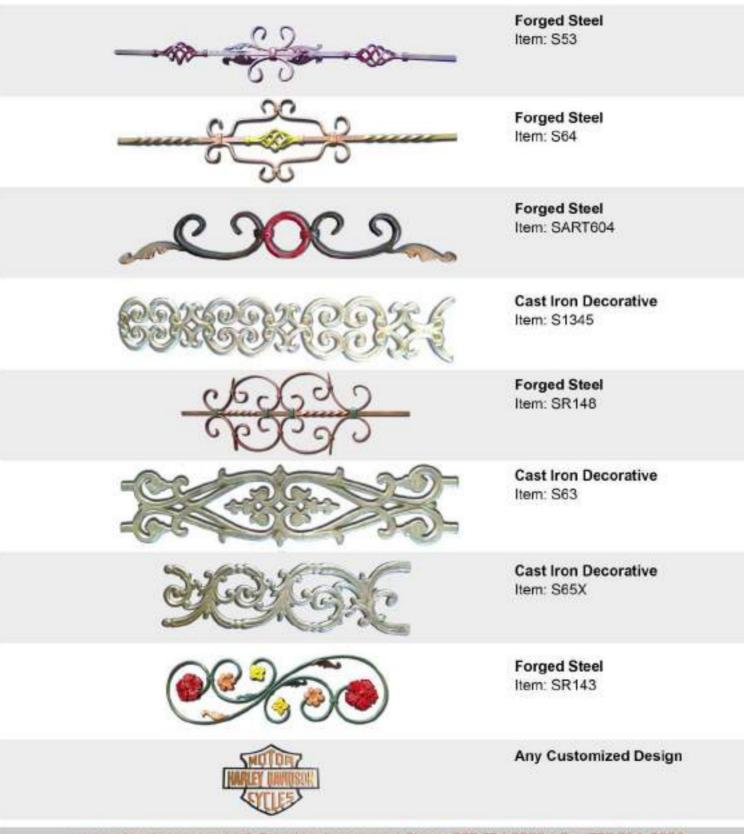
**Cast Iron Decorative** 

Item: S680SF

Cast Iron Item: 631

#### Construction Materials ORNAMENTAL





#### **Construction Materials** HARDWARE



#### Wire Mesh Sheet

W1.4; 6"x6"; 7'-2" x 19" W2.9; 6"x6"; 7'-2" x 19"



Wire Mesh Roll W1.4; 6"x6"; 5' x 150' W2.9; 6"x6"; 5' x 150'



Black Annealed Wire Ga.16 70lb. Box (20 rolls 3.5 lb. ea.)



Tie Wire Galvanized G.16 Rolls: 2 lb & 5 lb



Epoxy Wire G. 16 Rolls of 3.5 lb.



Wire Reel For G.16 tire wire rolls Can be worn on work belt



Tie Wire Sizes: 4 1/2" & 6" 100 lb. Bag



Common Nails Sizes: 2" & 4" 50 lb. box



Steel Nails Sizes: 1 1/2" to 4" 50 lb. box



Hose Clamp 3 inches





Galvalume Colors: Green, Blue, Gray, Red and White



Purlings Sizes: 4", 6", 8", 10" and 12" Ga. 16, 14 and 12 Build to customers size Nelson Stud- Lifting Stud Sizes: 1/2"x 4", 5/8" x 4", 3/4"x 4" and 3/4" x 6"



Corner Bead Vinyl Sizes: 8ft. and 10ft.





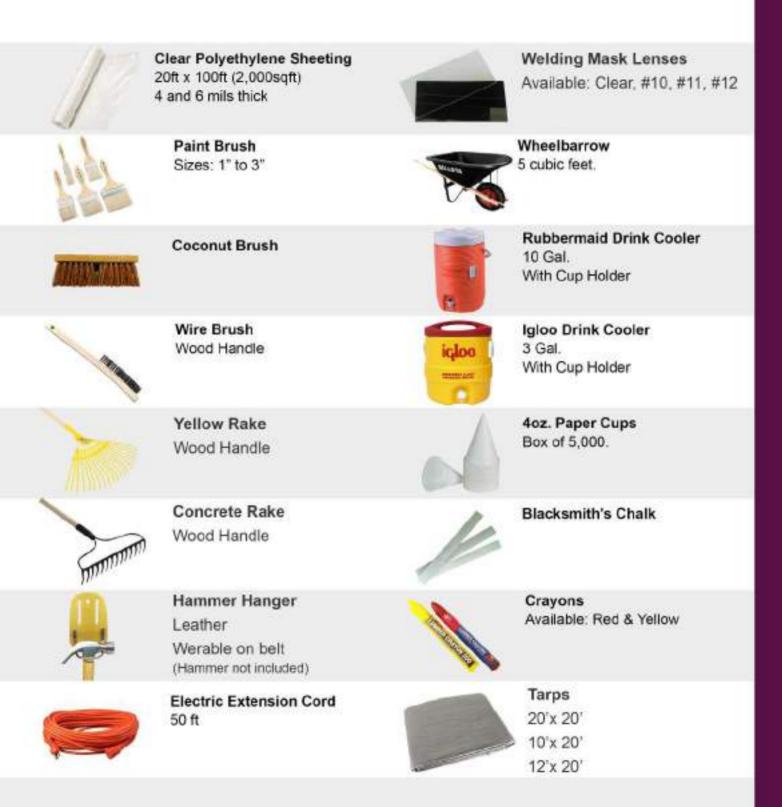
STANLEY Measure Tape 25 ft.



Duck Tape Gray 2" x 55 yds.

#### Construction Materials HARDWARE





#### **Construction Materials** HARDWARE





Washers Sizes: 1/4\* to 2 1/2\* Gr. 2, Gr. 5, Gr. 8 and A 325 Available: Black, Galvanized and Stainless Steel 304 Titen HD- Heavy Duty Screw Anchor 1/4" to 1" Diameter 1 3/4" to 8" Long









Wedge All- Wedge Anchor

1/4" to 1" Diameter

1 3/4" to 8" Long







Action Threaded Rods Size: 3/4" Diameter - 10 x 6 feet Finish: Zinc Plated Blue

Anchor Bolt 3/8" to 1" Special orders from 1" onwards.

Tek with Rubber Sizes: 3/4", 1", 1 1/4", 1 1/2"

#### Construction Materials SAFETY ACCESORIES





Construction Materials Chemicals

	Contact Cement Industrial 5 Gal.	<b>Rebar Epoxy Green Paint</b> Spray
CB 610	Bond Super Agent Blue 5 Gal.	Cartridge Epoxy For Gun 22 fl oz
7	Metal Finishes Red Oxide 5 Gal.	Gun 300 M Manual - Epoxy
	Metal Finishes Red Oxide 1 Gal.	Epoxy Mixing Nozzle
	Metal Finishes Gray Oxide 5 Gal.	<b>Fast Dry</b> Black Paint 1 Gal.
The second secon	Metal Finishes Gray Oxide 1 Gal.	Fast Dry White Paint 1 Gal.
ALVACY	Cold Galvanized 1 Gal.	Cold Galvanized Spray

#### Construction Materials POWER TOOLS





Chop Saw DeWALT - Mo.D28720 15 amp.



Angle Grinder DeWALT - Mo.DWE4212 7.5 amp.



Circular Saw DeWalt- Mo. DW494 19 amp.

Angle Grinder DeWalt- Mo. DWe4212 11 amp.



Hammer Drill DeWALT - Mo.DW505 8.2 amp. 1/2" Head



Grinder Hitachi - Mo.G 12SR2 19 amp.



Grinder DeWalt - Mo. DW494 19 amp.

Rotary Hammer Hitachi - Mo. DH38YE 8 amp.



Hammer Drill Hitachi - Mo.DV 20VB2 8.3 amp. 3/4" Head



Reciprocating Saw Blade High Performance Bi-Metal 14/18 TPI Sizes: 8" and 6"



Rotary Hammer Makita - Mo. HR4041C 12 amp. 1 9/16" Head

Reciprocating Saw Blade High Performance Bi-Metal 14 TPI Size: 6"



### Construction Materials TOOLS



STUD Cutter DW8003 - 14"x 7/64" x 1" For light gage materials less than 1/8"



Carbon Knot Cup Brush DeWalt Mo. 4910 Size: 3"



Piranha Lumber Disc Black & Decker Mo. 40T 7 1/4" - For finishing



Piranha Lumber Disc Black & Decker Mo. 24T 7 1/4° - For general purpose.



Metal Grinder DeWalt Mo. DW44540 Size: 4 1/2"x 1/4"x 7/8"



Zirconia Flap Disc DeWalt Mo. Dw 8306 Size: 4 1/2" x 7/8"

Zirconia Flap Disc DeWalt Mo. D8309 Size: 4 1/2" x 7/8"

Zirconia Flap Disc DeWalt Mo. D8309 Size: 4 1/2" x 7/8"



Metal / Stainless Cutting DeWalt Mo. DW8427 Size: 7"x 045"x 7/8"



Metal Griding Ja Flex Size: 7"x 1/4"



Boring Bits Sizes: From 5/16" to 1 1/2"







Percusion Bits Sizes: From 5/32" to 1"

Spline DeWalt Mo. DW5773 Use with Chipping Hammer

#### Construction Materials TOOLS









### Services

Rebar Fabrication (Cut & Bent) Assembly Placing Structural Steel Fabrications Customized Fabrications Shop Drawings Manufacturing Consulting - Design - Value Engineering Estimating Delivery Surface coating (painting - oxide)

## Services Rebar Fabrication (Cut & Bent)



Our manufacturing work shops, with more than 46,824 square feet, have the most modern and precise manufacturing european machinery in the market.

Our elaborated drawings or sketches, shows the correct, easy and secure way to assemble a structure. Following the tightest specifications of the designer, with whom we work closely to achieve a successful work. Shop drawings show the way in which the steel must be manufactured. We accomplish this by being precisely in detailing the amounts, diameters, lengths and angles. Following the specifications of our drawing, the workshop will achieve to manufacture any piece no matter how complex or it's structural importance.









For those projects where quality and time are critical, we can assemble the structural elements whether they are beams, columns, footings, shafts, walls or barriers. We use cutting-edge methods including automated equipment with mechanisms that apply weld using steel under the ASTM A-706 standard. Also we dominate conventional mooring methods.



### Services Placing



With an experience of over 50 years in the industry, we have been part of jobs of high complexity. This experience along with the most dynamic and arranged group of professionals in the industry enable us to provide installation services on site to satisfy any work plan. This service offers advantages in time and execution of each job and ensures the structural integrity of the project.



## Services Structural Steel Fabrications



Cut, bend or perforate structural profiles, (steel, plates, channels, angles, beams) with the highest technology that allows us to satisfy the needs of our customers. Our specialized computerized program on cuts and perforations allow us to answer our customer's demands at its highest level. We also make anchor bolts for steel structures threaded and bent, made to our customers' specifications.

Your processing options:

Slitting and Cutting to length, Plasma Cutting, Sawing, Drilling, Coating, Metal Working, Bending, Welding, Punching and more.



### Services Customized Fabrications



Our plasma cutter machine, allows us to make any design in metal to be able to personalize your product. We can make plates for custom rod mounting, custom gates, comercial signs, perforated dividers, accents for the home or patio and much more, to your taste and style.



## Services Shop Drawings





Our elaborated drawings show the correct, safe and easy way to build a structure. Everything following the strictest specifications of the designer, with whom we work hand in hand to achieve a successful work. The shop drawings show the way in which the steel must be made and placed. This is achieved by accurately detailing the quantities, diameters, angles and lengths. Following the specifications of our drawing, the workshop will be able to manufacture any piece regardless of its complexity or structural importance

### Services Manufacturing



Our workshops, with more than 44,365 square feet and conformed with the most complete and precise manufacturing machinery existing in the market complement our already recognized service of excellence. We manufacture your design following the highest quality standards that govern the industry. Some of our works consist on:

- Tanks
- Railings
- Galvalum Roof Decking
- Light Weight Structures
- Stairs
- Waste Containers
- Mezzanines



### Services Additional Specialties



#### **Consulting - Design - Value Engineering**

With a background of more than 50 years as leaders in the construction industry, we hold in our curriculum the most specialized structures and applications. This includes and not limited to tunnels, bridges, piers, pharmaceuticals, dams, multi-story buildings and silos among others. This background provides the expertise to evaluate your design and provide optimized alternatives that will save time and money. All this for reinforced concrete and structural steel structures.

Among the solutions available for reinforced concrete, we can provide an evaluation considering the addition of post-tensioning strand to slabs and beams, change the slab-beams design for a flat plate or a combined reinforcing system including reinforcing steel and post-tensioning strand.

Structural steel buildings can be evaluated and optimized according to the most technologically advanced materials available on the steel world. Our wide variety of stock material will allow the designer to select any profile that suits every structural need. We offer solutions, contact our specialists for further details.

#### Estimating

Our estimating department, with a combined background of more than 40 years of experience, will estimate your job on time and on budget. Our team is fully detail and service oriented. They will understand every job at any complexity level providing a breakdown detailed to the last item. As leaders in the steel industry, we aim to excellence. If you require an estimate for structural steel or reinforcing steel, please contact us for further details.

#### Delivery

Steel Services and Supplies has a logistics department that handles all our imports and exports from all over the world. With a vast experience and resources, we are in the position to offer delivery options either inland or maritime.

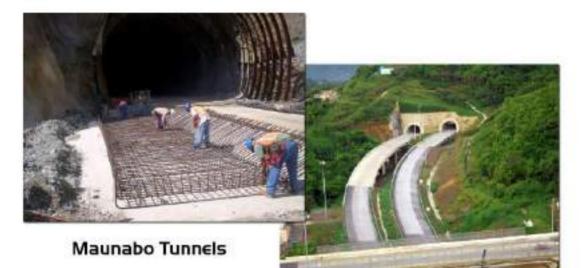
Our truck fleet will deliver any product or material on time and on schedule. Let our experienced team handle your logistics needs for products and materials at any complexity level.

#### Surface Coating (Painting - Oxide)

To work on schedule and on budget is the challenge that every fabricator must face. As your partners, we offer coating services that will save you time and will narrow your costs. We can provide our structural steel products with an oxide coating. This will ease your labor and expedite the delivery of your work.

Steel plates, channels, beams or any other miscellaneous fabrication or stock material can be delivered properly coated. Please contact us for further details.

### Projects







### Projects







Statue of Christopher Columbus

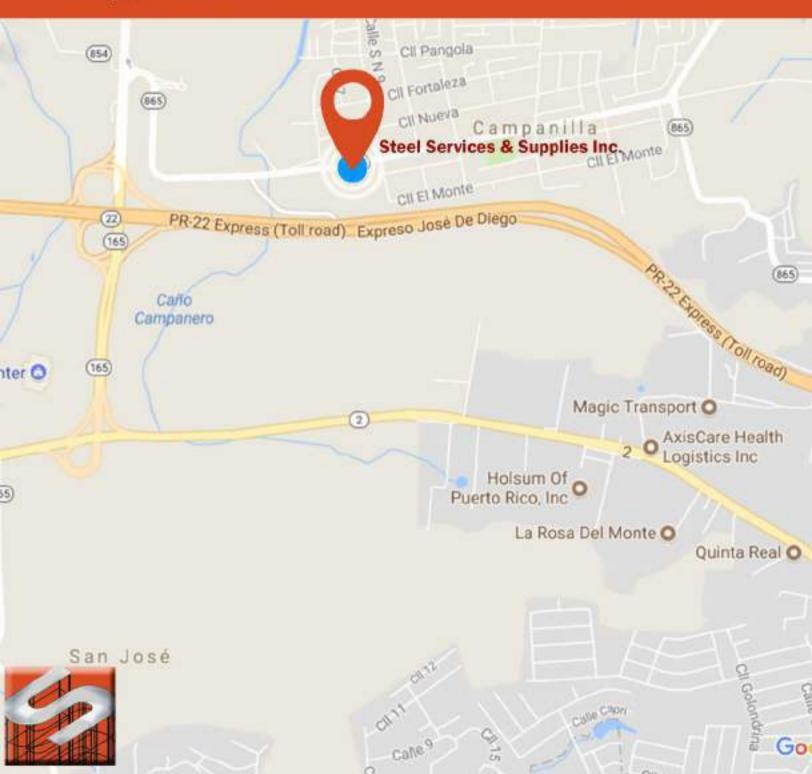




# LOCATION

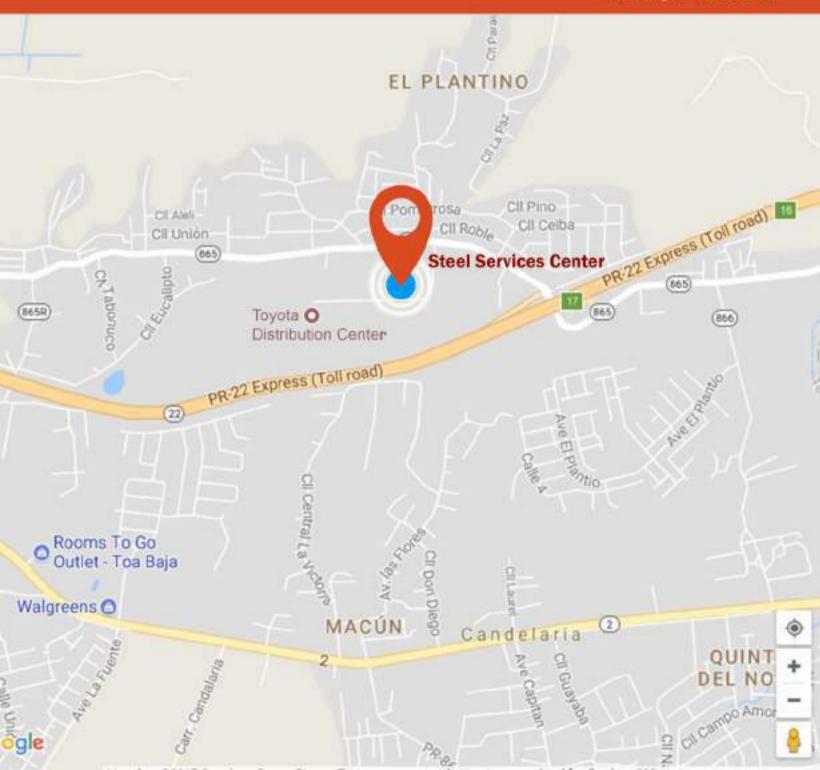
#### Steel Services & Supplies Inc.

Campanillas Ward road 865 km 1.2 Toa Baja, PR. 00949



www.steelservicespr.com info@steelservicespr.com Phone: 787-794-2250 Fax: 787-794- 2390

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