



Material Reference

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Redding, CA - (530) 243-1053

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Services

- Bandsaw cutting to 25" x 30"
- Shearing to 3/4" x 12'
- Press brakes to 400 ton x 22'
- Plate Rolls to 3/4" x 10'
- 400 amp CNC High definition Plasma w/ Bevel Head and Oxyfuel
- Multiple 4000 Watt Amada Lasers- 5' x 10' Bed
- Mazak 4000 Watt Tube Laser—20" OD
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- Pipe Threading to 8"
- CNC Vertical Machine Centers to 80" x 30"
- Lathes to 48" swing x 156" centers
- Milling planer 48" w x 36" h x 288" travel
- Solidworks/AutoCad-experienced estimating department
- Full Weld Shop
- Full Machine Shop
- Daily delivery throughout Northern California and the Bay Area

1527 Sacramento Street, Redding CA 96001

Phone: 530.243.1053

Sales and Estimating Fax: 530.246.4736

1510 Tanforan Ave, Woodland CA 95776

Phone: 530.406.0492

Sales and Estimating Fax: 530.406.0495

Email inquiries to sales@gerlinger.com



GERLINGER:

Synonymous with West Coast Industry for over 100 years.

Fred W. Gerlinger, Sr., who founded Gerlinger Steel with his son Bert Gerlinger, had worked for family members in Oregon's Willamette Valley since the turn of the 20th century. They realized the opportunity to purchase and operate an iron foundry and machine shop facility in Redding. The business that had occupied the foundry prior had been established in 1906, but closed due to a fire not long after. Acquiring and transporting shop machines and equipment in the fall of 1929 and rebuilding and opening the fire damaged facility required much effort and tenacity on their part. Gerlinger Steel & Supply Co. was incorporated in 1930 as Gerlinger Foundry & Machine Works, Inc. in Redding, CA. Third and fourth generation Gerlinger family members still own and are very active participants in the day-to-day operations of the company.

During a similar stressful economic period in today's world, we are proud to continue serving our community in order to honor our neighbors, our customers, and our founders' dedication and risk taking that 90 years later allows us to offer our customers more goods and services that at any other time in our history.

Check us out on the web! Take a look at our bi-monthly flyer for the latest in used and new machinery. Don't forget to call us about your fasteners, valves, fittings, ornamental iron, and industrial supply needs.

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Faxes get lost. We'd really prefer that you email drawings to sales@gerlinger.com

PHONE NUMBERS

TELEPHONE	
Redding	530-246-1053
Woodland	530-406-0492
FAX	
Redding	530-246-4736
Woodland	530-406-0495

DISCLAIMER:

The information and data in this book are correct to the best of our knowledge, but are intended for general information only. Like everyone, we also make mistakes from time to time, and have done our best to limit those. The publishers of this book make no express or implied warranties and take no responsibility for errors or omissions. We have attempted to list the most general and commonly used metals. For information on items or sizes not listed, please contact our sales office.

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INDEX

STEEL

<u>Round bar and shafting</u>	10
<u>Square</u>	16
Hex.....	17
<u>Flat</u>	
HR flat and UM	18
CR flat	22
<u>Angles</u>	
Bar size.....	26
Structural	28
<u>Channel</u>	
Bar size.....	30
Structural	30
Junior	31
MC / Ship.....	31
<u>Beam</u>	
Standard.....	32
Junior	32
Wide Flange	33
Tee – Bar / Structural	37
Rail.....	38
<u>Tube</u>	
Square.....	39
Rectangle	41
Round.....	43
<u>Pipe</u>	45
<u>Rebar</u>	52
<u>Sheet & plate</u>	
Hot Rolled	54
Cold Rolled	65
Galvanized	66
Mild Steel Diamond Floor Plate.....	67
<u>Expanded</u>	
Raised	68
Flat	69
Grate-X	70
Grip Strut Diamond Plank Safety Grating	71

INDEX continued

ROUND	STAINLESS	
	Round and Shafting	72
	Square	73
SQUARE	Hex	74
	Flat	75
	Angle	77
FLAT	Channel	78
	Beam	78
	Tee	78
	Square/Rectangular Tube	79
ANGLE	Round Tube	80
	Pipe	82
CHANNEL	Sheet	83
	Plate	84
	ALUMINUM	
	Round	88
BEAM	Square	88
	Rectangle (includes flat bar)	89
	Square/Rectangular Tube	90
TUBE	Angle	96
	Channel	98
	Round Tube/Pipe	99
PIPE	Sheet	101
	Plate	102
	Expanded	104
REBAR	Diamond Tread	105
	USEFUL INFORMATION	
	Availability of Shapes, Plates, and Bars	106
	ASTM Specifications for Steel	108
PLATE	Machinability Ratings	109
	Formed Shapes (roll, brake, transitions, cones, fittings)	110
EXPANDED	Standard Burned Shapes	113
	Strength Design Considerations	114
	Applicable Welds	116
STAINLESS	Standard Weld Symbols	117
	Fraction—Decimal—Millimeter Conversion	118
	Tap and Drill Chart	120
ALUMINUM	Morse and Jacobs Taper Dimensions	120
	SAE Bold Designations	121
	Weight Formulas	122



**Email us at
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Metal Processing Services

Our Service Centers have invested in metalworking equipment designed to furnish you with precision pieces and parts ready for your final assembly. Below are some of the processes we perform in-house. By teaming with customers and vendors, we can provide even more first and second stage processing. Whether you need simple cut-to-size, more involved sub-assemblies, or complete fabrication, Gerlinger Steel & Supply can deliver.

LASERS—Flat and Tube: We can produce virtually any shape from plate or sheet on our fleet of flat and tubing lasers. Whether it's carbon, alloy, stainless or aluminum, we can cut close tolerance parts for your application. If you have a special shape to cut, all we need is your drawing with clearly marked dimensions and tolerances. For ordering common shapes over the phone, you can refer to the examples at the last section of this book.

CNC PLASMA & FLAME CUTTING: Our CNC oxyfuel multi-torch machines can burn close tolerance shapes to your specs. We can provide from stock or special order almost any alloy, thickness, and shape you require. Our high definition and conventional plasma cutting machines deliver precise parts. We can work with your drawings. We can cut in HD up to 3" thick in both stainless and carbon. The rotary bevel head produces quality compound bevels, eliminating secondary processing. The CNC Plasma and Lasers are capable of etching as well.

SAW CUTTING: We can cut to length everything we carry in stock and more! Our various band saws are available to cut your requirements, whether simply cutting a piece in half for handling or producing hundreds of pieces to your specifications. Ordering your material to length from the mill for those special, large projects is also an option. Our sawing equipment range from small diameter precision cold saws to band saws up to 25" x 30". Check with us; we are always adding new equipment.

SHEARING: Our shears and ironworkers accurately cut everything from light gage sheets to 3/4" plates. We also shear flat bars, angles, rounds and rebar to close tolerance. Depending on thickness and alloy, shearing widths up to 18 feet.

PUNCHING: Our 150 tons of punching ability includes punching round, oval, oblong, rectangular, and square shapes.

DRILLING: For the times when a punched hole just won't do, we will be happy to drill clean, precisely located holes ready for your next step. Our radial arm drills will put holes in plate too thick or too far from the edge to punch. Remember, if it can't be punched or drilled, it can probably be HD plasma burned.

SPLITTING: Most structural items, primarily beams, can be split to your specifications. If natural warpage occurs, we have the abilities to straighten most items.

FORMING: With press brakes up to 400 tons and 22 feet in length, we can form just about anything you require. Heavier tonnage and longer units coming soon!

ROLLING SHEETS AND PLATES: With rolls having a capacity of 3/4" x 120" (2" x 24") down to 10 gage x 50" (smaller gages possible), we can roll a variety of materials to your specifications.

ROLLING STRUCTURALS AND PIPE: We can roll up to 4" on most shapes and larger by special order. Talk to our sales people about the specifics of your project.

FADAL VERTICAL MACHINING CENTER: Some of the most practical and versatile machines are the Fadal VMC. These machining centers are completely computer operated using programs such as AutoCAD and SolidWorks, while the human operator keeps an eye on the project to prevent any mistakes. These machines can mill, drill, and tap blocks of metal 80" x 30" and as long of length as necessary. It also has the capability to do custom engraving.

Drafting Services

We do all of our drafting in-house, using 3-D software to effectively create layouts for custom work. We can accept any file format supported by SolidWorks or AutoCAD. If you need help, from generating shop drawings for submittal purposes to laying out a custom project, please, give us a call.

Gerlinger Store

In addition to our fully stocked metals warehouse, we also carry a full line of machinery, industrial tools and supplies. This includes, but is not limited to: abrasives, blades, chains, cutting tools, fasteners, gloves, pipe fittings – slip, weld-on and threaded, and welding supplies. We also carry a full line of ornamental iron – perfect for gates, railings, and however else you would choose to use them. These come imported from Italy and are available at a very affordable price. To compliment that, we also carry a full metal finishes line. We sell machinery, both new and used.

This was just a brief overview of the capabilities and services provided by Gerlinger Steel. Please feel free to give us a call, email us, or drop by for any specific questions you may have. And don't forget to check out our website!

ROUND BAR & SHAFTING

ASTM A36 Mild (low-carbon) steel		
Minimum Properties	Ultimate Tensile Strength, psi	58,000 - 79,000
	Yield Strength, psi	36,000
	Elongation	20.0%

A36 - ASTM A36 steel is the most commonly available of the hot-rolled steels. It is generally available in round rod, square bar, rectangle bar, as well as steel shapes such as I-Beams, H-beams, angles, and channels. The hot roll process means that the surface on this steel will be somewhat rough.

C1018 is the most commonly available of the cold-rolled steels. It is gener-

1018 Mild (low-carbon) steel		
Minimum Properties	Ultimate Tensile Strength, psi	63,000
	Yield Strength, psi	53,000
	Elongation	15.0%
	Rockwell Hardness	B71

ally available in round rod, square bar, and rectangle bar. Chemically similar to A36 Hot Rolled steel, but the cold rolling process creates a better surface finish and better properties.

1045 (medium-carbon)		
Minimum Properties	Ultimate Tensile Strength, psi	82,000
	Yield Strength, psi	45,000
	Elongation	16.0%
	Rockwell Hardness	B84

C1045

- Medium carbon hot or cold rolled steel. Often provided in TG&P (turned, ground, and polished) condition. Commonly used in shafting applications, 1045 is heat treatable as well.

ROUND BAR & SHAFTING

1144 (Stressproof) steel		
Minimum Properties	Ultimate Tensile Strength, psi	115,000
	Yield Strength, psi	100,000
	Elongation	8.0%
	Rockwell Hardness	B95 / C17

C1144 (Stressproof) This material is a higher-strength alloy than 1018 or A36, but in addition has improved ductility as well. Low distortion or warpage after machining due to a combination of its chemistry, method of manufacture, and heat treatment. 1144 is relatively easy to machine.

12L14 free machining steel		
Minimum Properties	Ultimate Tensile Strength, psi	78,300
	Yield Strength, psi	60,200
	Elongation	10.0%
	Rockwell Hardness	B84

12L14 free machining steel

This alloy has lead added to the mix in order to enhance its machinability. The addition of lead does, however, reduce the strength of this alloy, although it is generally stronger than 1018.

12 - SQUARE BAR

ROUND BAR & SHAFTING 20' LENGTHS

INDEX

Round

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

EXPANDED

STAINLESS

ALUMINUM

USEFUL INFO

HOT ROLL ROUND BAR			HOT ROLL ROUND BAR		
Size in Inches	Lb/foot	Lb/20'	Size in Inches	Lb/foot	Lb/20'
3/16	0.09	1.80	6	96.13	1922.6
1/4	0.17	3.40	6 1/4	104.31	2086.2
5/16	0.26	5.20	6 1/2	112.82	2256.4
3/8	0.38	7.60	6 3/4	121.67	2433.4
7/16	0.51	10.20	7	130.85	2617
1/2	0.67	13.40	7 1/4	140.36	2807.2
9/16	0.85	17.00	7 1/2	150.21	3004.2
5/8	1.04	20.80	7 3/4	160.4	3208
3/4	1.5	30.00	8	170.9	3418
7/8	2.04	40.80	8 1/2	192.93	3858.6
1	2.67	53.4	9	216.3	4326
1 1/8	3.38	67.60	9 1/2	241	4820
1 1/4	4.17	83.44	10	267.04	5340.8
1 3/8	5.05	101			
1 1/2	6.01	120.2			
1 5/8	7.05	141			
1 3/4	8.17	163.4			
1 7/8	9.38	187.6			
2	10.7	214.0			
2 1/8	12.1	242.0			
2 1/4	13.5	270.0			
2 1/2	16.7	334.0			
2 3/4	20.2	404			
3	24.03	480.6			
3 1/4	28.21	564.2			
3 1/2	32.71	654.2			
3 5/8	35.09	701.8			
3 3/4	37.55	751			
4	42.73	854.6			
4 1/4	48.23	964.6			
4 1/2	54.08	1081.6			
4 3/4	60.25	1205			
5	66.76	1335.2			
5 1/4	73.6	1472			
5 1/2	80.78	1615.6			
5 3/4	88.29	1765.8			



ROUND BAR & SHAFTING 20' LENGTHS (continued)

CR Round C1018			CR Round C1018			Round
Size in Inches	Lb/foot	Lb/20'	Size in Inches	Lb/foot	Lb/20'	
1/8	0.04	0.8	2	10.7	214	SQUARE
3/16	0.09	1.8	2 1/8	12.1	242	FLAT
1/4	0.17	3.4	2 3/16	12.78	255.6	
5/16	0.26	5.2	2 1/4	13.5	270	ANGLE
3/8	0.38	7.6	2 5/16	14.28	285.6	
7/16	0.51	10.2	2 1/2	16.7	334	CHANNEL
1/2	0.67	13.4	2 5/8	18.41	368.2	
9/16	0.85	17	2 11/16	19.29	385.8	BEAM
5/8	1.04	20.8	2 15/16	23.04	460.8	
11/16	1.26	25.2	3	24.03	480.6	TUBE
3/4	1.5	30	3 3/16	27.13	542.6	
13/16	1.76	35.2	3 1/4	28.21	564.2	PIPE
7/8	2.04	40.8	3 3/8	30.42	608.4	
15/16	2.35	47	3 7/16	31.55	631	REBAR
1	2.67	53.4	3 11/16	36.31	726.2	
1 1/16	3.02	60.4	3 3/4	37.55	751	PLATE
1 1/8	3.38	67.6	3 15/16	41.4	828	
1 3/16	3.77	75.4	4	42.73	854.6	EXPANDED
1 1/4	4.17	83.4	4 1/4	48.23	964.6	
1 5/16	4.6	92	4 7/16	52.58	1051.6	STAINLESS
1 3/8	5.05	101	4 1/2	54.08	1081.6	
1 7/16	5.52	110.4	4 15/16	65.1	1302	ALUMINUM
1 1/2	6.01	120.2	5	66.76	1335.2	
1 9/16	6.52	130.4	5 7/16	78.95	1579	INFO
1 5/8	7.05	141	5 15/16	94.14	1882.8	
1 11/16	7.6	152	6	96.13	1922.6	ALUMINUM
1 3/4	8.17	163.4	6 7/16	110.66	2213.2	
1 13/16	8.77	175.4	6 1/2	112.82	2256.4	
1 7/8	9.38	187.6				
1 15/16	10.02	200.4				

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INDEX

14 - SQUARE BAR

ROUND BAR & SHAFTING 20' LENGTHS



INDEX	Round	C1045 TG&P		
		Size in Inches	Lb/foot	Lb/20'
		1/2	0.67	13.4
		5/8	1.04	20.8
	SQUARE	11/16	1.26	25.2
		3/4	1.5	30
		13/16	1.76	35.2
	FLAT	7/8	2.04	40.8
		15/16	2.35	47
		1	2.67	53.4
	ANGLE	1 1/16	3.02	60.4
		1 1/8	3.38	67.6
		1 3/16	3.77	75.4
	CHANNEL	1 1/4	4.17	83.4
		1 3/8	5.05	101
		1 7/16	5.52	110.4
	BEAM	1 1/2	6.01	120.2
		1 5/8	7.05	141
		1 11/16	7.6	152
	TUBE	1 3/4	8.17	163.4
		1 13/16	8.77	175.4
		1 7/8	9.38	187.6
	PIPE	1 15/16	10.02	200.4
		2	10.7	214
		2 1/8	12.1	242
	REBAR	2 3/16	12.78	255.6
		2 1/4	13.5	270
		2 7/16	15.87	317.4
	PLATE	2 1/2	16.7	334
		2 11/16	19.29	385.8
		2 3/4	20.2	404
	EXPANDED	2 15/16	23.04	460.8
		3	24.03	480.6
	STAINLESS	3 3/16	27.13	542.6
		3 1/4	28.21	564.2
		3 7/16	31.55	631
		3 1/2	32.71	654.2
	ALUMINUM	3 3/4	37.55	751
		3 15/16	41.4	828
	USEFUL INFO	4	42.73	854.6
		4 7/16	52.58	1051.6
		4 1/2	54.08	1081.6
		4 15/16	65.1	1302

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HEX BAR- 15

SHAFTING 12' Random Lengths

INDEX

1144 Stress Proof			1144 Stress Proof		
Size in Inches	Lb/foot	Lb/12'	Size in Inches	Lb/foot	Lb/12'
1/8	0.042	0.5	2	10.68	128.16
5/32	0.065	0.78	2 3/16	12.78	153.4
3/16	0.094	1.13	2 1/4	13.52	162.2
7/32	0.128	1.54	2 7/16	15.87	190.4
1/4	0.167	2	2 1/2	16.69	200.3
9/32	0.211	2.53	2 11/16	19.29	231.5
5/16	0.261	3.13	2 3/4	20.2	242.4
11/32	0.316	3.79	3	24.03	288.4
3/8	0.375	4.5	3 1/4	28.21	338.5
13/32	0.441	5.29	3 7/16	31.55	378.6
7/16	0.511	6.13	3 1/2	32.71	392.5
1/2	0.668	8.02	3 15/16	41.4	496.8
17/32	0.754	9.05	4	42.73	512.8
9/16	0.845	10.14	4 7/16	52.58	631.0
5/8	1.043	12.52	4 1/2	54.08	649.0
11/16	1.262	15.14	4 15/16	65.1	781.2
3/4	1.502	18.02	5	66.76	801.1
13/16	1.763	21.16	5 1/2	80.78	969.4
7/8	2.044	24.53			
15/16	2.347	28.16			
1	2.67	32.04			
1 1/16	3.014	36.17			
1 1/8	3.379	40.55			
1 3/16	3.766	45.19			
1 1/4	4.173	50.08			
1 5/16	4.6	55.2			
1 3/8	5.049	60.59			
1 7/16	5.518	66.22			
1 1/2	6.008	72.1			
1 9/16	6.52	78.24			
1 5/8	7.051	84.61			
1 11/16	7.604	91.25			
1 3/4	8.178	98.14			
1 13/16	8.773	105.28			
1 7/8	9.388	112.66			
1 15/16	10.02	120.24			

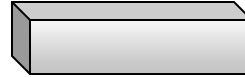
Round
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM

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16 - SQUARE BAR

INDEX



Round

A36 HR SQUARE BAR 20' Lengths

SQUARE

FLAT

ANGLE

CHANNEL

Size inches	Est lb foot	Est lb 20'	Size inches	Est lb foot	Est lb 20'
1/4	0.21	4.2	1 1/2	7.65	153.0
3/8	0.48	9.6	1 3/4	10.41	208.2
1/2	0.85	17.0	2	13.60	272.0
5/8	1.33	26.6	2 1/4	17.21	344.2
3/4	1.91	38.2	2 1/2	21.25	425.00
7/8	2.60	52.0	3	30.60	612.00
1	3.40	68.0	3 1/2	41.65	833.00
1 1/8	4.30	86.0	4	54.40	1088.00
1 1/4	5.31	106.2			

BEAM

CF 1018 SQUARE BAR 12' Lengths



TUBE

PIPE

REBAR

PLATE

EXPANDED

STAINLESS

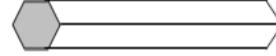
ALUMINUM

USEFUL INFO

Size inches	Est lb foot	Est lb 12'	Size inches	Est lb foot	Est lb 12'
1/8	0.05	0.60	2	13.6	163.2
3/16	0.12	1.44	2 1/8	15.35	184.2
1/4	0.21	2.52	2 1/4	17.21	206.52
5/16	0.33	3.96	2 3/8	19.2	230.4
3/8	0.48	5.76	2 1/2	21.25	255
7/16	0.65	7.80	2 3/4	25.71	308.52
1/2	0.85	10.20	3	30.6	367.2
9/16	1.08	12.96	3 1/4	35.91	430.92
5/8	1.33	15.96	3 1/2	41.65	499.8
11/16	1.61	19.32	3 3/4	47.81	573.72
3/4	1.91	22.92	4	54.4	652.8
7/8	2.6	31.2	4 1/4	61.41	736.92
1	3.4	40.8	4 1/2	68.85	826.2
1 1/8	4.3	51.6	5	85	1020
1 1/4	5.31	63.72	5 1/2	102.9	1234.8
1 1/2	7.65	91.8	6	122.4	1468.8
1 3/4	10.41	124.92			

HEX BAR- 17

CF 1018, 1144, & 12L14 HEX



Size inches	Est lb foot	Est lb 12'	Size inches	Est lb foot	Est lb 12'
3/16	0.10	1.20	1	2.94	35.28
1/4	0.19	2.28	1 1/8	3.73	44.76
5/16	0.29	3.48	1 1/4	4.60	55.20
3/8	0.41	4.92	1 3/8	5.57	66.84
7/16	0.56	6.72	1 7/16	6.09	73.08
1/2	0.74	8.88	1 1/2	6.63	79.56
9/16	0.93	11.16	1 5/8	7.78	93.36
5/8	1.15	13.80	1 3/4	9.02	108.24
11/16	1.39	16.68	2	11.78	141.36
3/4	1.66	19.92	2 1/4	14.91	178.92
7/8	2.25	27.00	2 1/2	18.40	220.80

INDEX

Round

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

EXPANDED

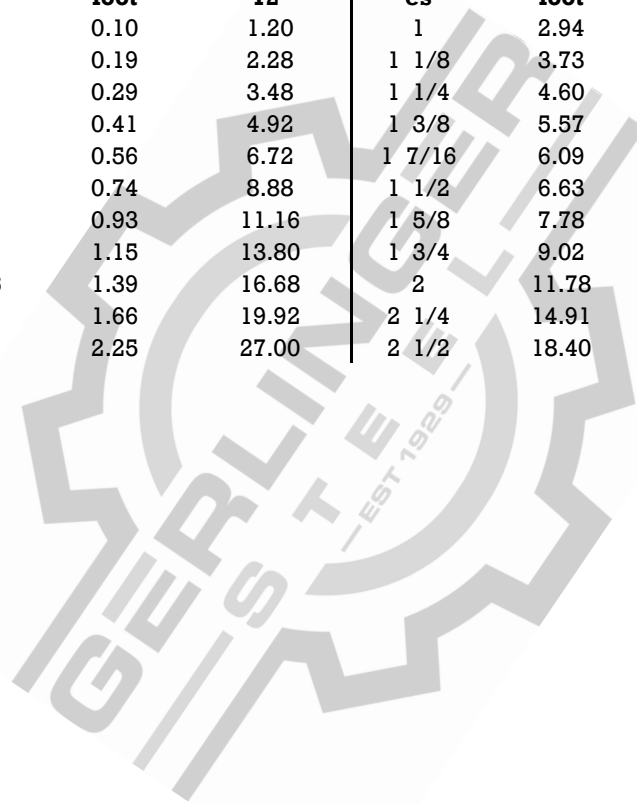
STAINLESS

ALUMINUM

USEFUL INFO

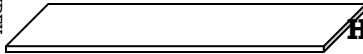
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18 - FLAT BAR

INDEX



HR A36 FLAT & UM

	Size	inch-	Est lb	Est lb	Size	inch-	Est lb	Est lb				
	es		foot	20'	es		foot	20'				
ROUND	1/8	x	3/8	0.16	3.18	3/16	x	9	5.74	114.80		
			1/2	0.21	4.26			10	6.38	127.60		
	Square			5/8	0.27	5.32			12	7.65	153.00	
				3/4	0.32	6.38	1/4	x	1/2	0.43	8.50	
				7/8	0.37	7.44			5/8	0.53	10.62	
				1	0.43	8.50	3/4	0.64	12.76			
		FLAT			1 1/8	0.48	9.56			1	0.85	17.00
					1 1/4	0.53	10.62	1 1/4	1.06	21.26		
					1 1/2	0.64	12.76	1 1/2	1.28	25.50		
					1 3/4	0.74	14.88	1 3/4	1.49	29.76		
ANGLE			2	0.85	17.00			2	1.70	34.00		
			2 1/2	1.06	21.26	2 1/4	1.91	38.26				
CHANNEL			2 3/4	1.17	23.38	2 1/2	2.13	42.50				
			3	1.28	25.50	2 3/4	2.34	46.76				
BEAM			3 1/2	1.49	29.76	3	2.55	51.00				
			4	1.70	34.00	3 1/2	2.98	59.50				
TUBE			4 1/2	1.91	38.26	4	3.40	68.00				
			5	2.13	42.50	4 1/2	3.83	76.50				
PIPE			6	2.55	51.00	5	4.25	85.00				
			8	3.40	68.00	6	5.10	102.00				
REBAR			10	4.25	85.00	7	5.95	119.00				
			12	5.10	102.00	8	6.80	136.00				
PLATE	3/16	x	3/8	0.24	4.78	9	7.65	153.00				
			1/2	0.32	6.38	10	8.50	170.00				
EXPANDED			5/8	0.40	7.96	12	10.20	204.00				
			3/4	0.48	9.56	5/16	x	1/2	0.53	10.62		
STAINLESS			7/8	0.56	11.16			3/4	0.80	15.94		
			1	0.64	12.76	1	1.06	21.26				
ALUMINUM			1 1/4	0.80	15.94	1 1/4	1.33	26.56				
			1 1/2	0.96	19.12	1 1/2	1.59	31.88				
USEFUL INFO			1 3/4	1.12	22.32	1 3/4	1.86	37.18				
			2	1.28	25.50	2	2.13	42.50				
			2 1/4	1.43	28.68	2 1/4	2.39	47.82				
			2 1/2	1.59	31.88	2 1/2	2.66	53.12				
			3	1.91	38.26	3	3.19	63.76				
			3 1/4	2.07	41.40	3 1/4	3.45	69.00				
			3 1/2	2.23	44.62	3 1/2	3.72	74.38				
			4	2.55	51.00	4	4.25	85.00				
			4 1/2	2.87	57.38	5	5.31	106.80				
			5	3.19	63.76	5 1/2	5.84	116.80				
			6	3.83	76.50	6	6.38	127.50				
			8	5.10	102.00	8	8.50	170.00				

HR A36 FLAT & UM continue

Size	es	inch-	Est lb	Est Lb	Size	es	inch-	Est lb	Est lb	
			foot	20'				foot	20'	
5/16	x	9	9.56	191.20	1/2	x	8	13.60	272.00	ROUND
		10	10.63	212.60			9	15.31	306.20	SQUARE
		12	12.75	255.00			10	17.00	340.00	SQUARE
3/8	x	1/2	0.64	12.76	5/8	x	12	20.40	408.00	Flat
		5/8	0.80	15.94			1	2.13	42.50	
		3/4	0.96	19.12			1 1/4	2.66	53.12	
		1	1.28	25.50			1 1/2	3.19	63.76	
		1 1/4	1.59	31.88			2	4.25	85.00	
		1 1/2	1.91	38.26			2 1/2	5.31	106.30	
		1 3/4	2.23	44.62			2 3/4	5.84	116.90	
		2	2.55	51.00			3	6.38	127.50	
		2 1/4	2.87	57.38			3 1/2	7.44	148.80	
		2 1/2	3.19	63.76			4	8.50	170.00	
		3	3.88	76.50			4 1/2	9.56	191.30	
		3 1/2	4.46	89.26			5	10.60	212.60	
		4	5.10	102.00			5 1/2	11.69	233.80	
		4 1/2	5.74	114.80			6	12.80	255.00	
		5	6.38	127.50			7	14.90	297.60	
5 1/2	7.01	140.20	8	17.00	340.00					
6	7.65	153.00	9	19.13	382.60					
7	8.93	178.60	10	21.25	425.00					
8	10.20	204.00	12	25.50	510.00					
9	11.48	229.60	3/4	x	1	2.55	51.00	ANGLE		
10	12.75	255.00			1 1/4	3.19	63.76	ANGLE		
12	15.30	306.00			1 1/2	3.83	76.50	ANGLE		
1/2	x	3/4			1.28	25.50	1 3/4	4.46	89.26	CHANNEL
		1			1.70	34.00	2	5.10	102.00	CHANNEL
		1 1/4			2.13	42.50	2 1/2	6.38	127.50	CHANNEL
		1 1/2	2.55	51.00	3	7.65	153.00	CHANNEL		
		1 3/4	2.98	59.50	3 1/2	8.93	178.50	CHANNEL		
		2	3.40	68.00	4	10.20	204.00	CHANNEL		
		2 1/4	3.83	76.50	4 1/2	11.50	229.60	CHANNEL		
		2 1/2	4.25	85.00	5	12.80	255.00	CHANNEL		
		2 3/4	4.68	93.50	5 1/2	14.00	280.60	CHANNEL		
		3	5.10	102.00	6	15.30	306.00	CHANNEL		
		3 1/2	5.95	119.00	7	17.90	357.00	CHANNEL		
		4	6.80	136.00	8	20.40	408.00	CHANNEL		
		4 1/2	7.65	153.00	9	22.95	459.00	CHANNEL		
		5	8.50	170.00	10	25.50	510.00	CHANNEL		
		5 1/2	9.35	187.00	12	30.60	612.00	CHANNEL		
6	10.20	204.00	7/8	x	1	2.98	59.50	BEAM		
7	11.90	238.00			1 1/4	3.72	74.38	BEAM		

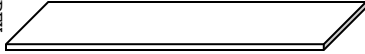
Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
Flat
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM

20 - FLAT BAR

INDEX



HR A36 FLAT & UM continued

ROUND	Size	es	inch-	Est lb	Est lb	Size	es	inch-	Est lb	Est lb		
				foot	20'				foot	20'		
SQUARE	7/8	x	1 1/2	4.46	89.26	1 1/4	x	6	25.50	510.00		
			1 3/4	5.21	104.10			8	34.00	680.00		
			2	5.95	119.00			10	42.50	850.00		
	Flat	1	x	2 1/4	6.69	133.90	1 1/2	x	2	10.20	204.00	
				2 1/2	7.44	148.80			2 1/2	12.80	255.00	
				3	8.93	178.50			3	15.30	306.00	
		ANGLE	1	x	3 1/2	10.41	208.20	1 3/4	x	3 1/2	17.80	356.00
					4	11.90	238.00			4	20.40	408.00
					5	14.80	297.60			4 1/2	22.95	459.00
			CHANNEL	1	x	6	17.85	357.00	2	x	5	25.50
7						20.83	416.40	6			30.60	612.00
8						23.80	476.00	8			40.80	816.00
BEAM				1	x	1 1/4	4.25	85.00	1 3/4	x	2 1/2	14.88
	1 1/2					5.10	102.00	3			17.85	357.00
	1 3/4					5.95	119.00	3 1/2			20.83	416.00
	TUBE			1	x	2	6.80	136.00	2	x	4	23.80
		2 1/4				7.65	153.00	5			29.75	595.00
		2 1/2				8.50	170.00	6			35.70	714.00
		PIPE		1	x	3	10.20	204.00	2 1/4	x	3 1/2	26.78
			3 1/2			11.90	238.00	4			27.20	544.00
			4			13.60	272.00	5			34.00	680.00
			REBAR	1	x	4 1/2	15.30	306.00	3	x	6	40.80
5						17.00	340.00	8			47.60	952.00
6						20.40	408.00	2			17.00	340.00
PLATE				1	x	7	23.80	476.00	2 1/4	x	3	25.50
	8					27.20	544.00	4			34.00	680.00
	9					30.60	612.00	5			42.50	850.00
	EXPANDED			1	x	10	34.00	680.00	3 1/2	x	6	51.00
		12				40.80	816.00	4			40.80	816.00
		1 1/4				8.50	170.00	5			51.00	1020.00
		STAINLESS		1	x	2 1/2	10.60	212.60	3	x	4	40.80
			3			12.80	255.00	5			51.00	1020.00
			3 1/2			14.88	297.60	6			61.20	1224.00
			ALUMINUM	1	x	4	17.00	340.00	3	x	4	40.80
4 1/2						19.10	382.50	5			51.00	1020.00
5						21.30	425.00	6			61.20	1224.00

NOTES



INDEX
ROUND
SQUARE
Flat
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

22 - FLAT BAR



CF C1018 FLAT

INDEX
ROUND
SQUARE
Flat
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

Size	inch-	Est lb	Est lb	Size	inch-	Est lb	Est lb
	es	foot	12'		es	foot	12'
1/8 x	1/4	0.106	1.27	1/4 x	5/16	0.266	3.19
	5/16	0.133	1.60		3/8	0.319	3.83
	3/8	0.159	1.91		1/2	0.425	5.10
	1/2	0.213	2.56		9/16	0.478	5.74
	5/8	0.266	3.19		5/8	0.531	6.37
	3/4	0.319	3.83		3/4	0.638	7.66
	7/8	0.372	4.46		7/8	0.744	8.93
	1	0.425	5.10		1	0.850	10.20
	1 1/8	0.478	5.74		1 1/8	0.956	11.47
	1 1/4	0.531	6.37		1 1/4	1.063	12.76
	1 1/2	0.638	7.66		1 1/2	1.275	15.30
	1 3/4	0.744	8.93		1 5/8	1.381	16.57
	2	0.850	10.20		1 3/4	1.488	17.86
	2 1/4	0.956	11.47		2	1.700	20.40
	2 1/2	1.063	12.76		2 1/4	1.913	22.96
	2 3/4	1.169	14.03		2 1/2	2.125	25.50
3	1.275	15.30	2 3/4	2.338	28.06		
3 1/2	1.488	17.86	3	2.550	30.60		
4	1.700	20.40	3 1/4	2.763	33.16		
4 1/2	1.913	22.96	3 1/2	2.975	35.70		
5	2.125	25.50	4	3.400	40.80		
6	2.550	30.60	4 1/2	3.825	45.90		
3/16 x	1/4	0.160	1.92	5	4.250	51.00	
	5/16	0.199	2.39	5 1/2	4.675	56.10	
	3/8	0.239	2.87	6	5.100	61.20	
	7/16	0.279	3.35	8	6.800	81.60	
	1/2	0.319	3.83	10	8.500	102.00	
	5/8	0.398	4.78	12	10.200	122.40	
	3/4	0.478	5.74	5/16 x	3/8	0.398	4.78
	7/8	0.558	6.70		1/2	0.531	6.37
	1	0.638	7.66		5/8	0.644	7.73
	1 1/8	0.717	8.60		3/4	0.797	9.56
	1 1/4	0.797	9.56		7/8	0.930	11.16
	1 1/2	0.956	11.47		1	1.063	12.76
	1 3/4	1.116	13.39		1 1/8	1.195	14.34
	2	1.275	15.30		1 1/4	1.328	15.94
	2 1/4	1.434	17.21		1 1/2	1.594	19.13
	2 1/2	1.594	19.13		1 3/4	1.859	22.31
2 3/4	1.753	21.04	2		2.125	25.50	
3	1.913	22.96	2 1/4		2.391	28.69	
3 1/2	2.231	26.77	2 1/2		2.656	31.87	
4	2.550	30.60	2 3/4		2.922	35.06	
4 1/2	2.869	34.43	3		3.188	38.26	
5	3.188	38.26	3 1/2		3.719	44.63	
6	3.825	45.90					

CF C1018 FLAT continued

Size	es	inch-	Est lb	Est lb	Size	Est lb	Est lb			
			foot	12'	inches	foot	12'			
5/16	x	4	4.250	51.00	1/2	x	2	3.400	40.80	
		4 1/2	4.781	57.37			2 1/4	3.825	45.90	
		5	5.313	63.76			2 1/2	4.250	51.00	
		6	6.375	76.50			2 3/4	4.675	56.10	
		8	8.500	102.00			3	5.100	61.20	
		10	10.630	127.56			3 1/4	5.525	66.30	
3/8	x	12	12.750	153.00	3 1/2	5.950	71.40			
		7/16	0.588	7.06	4	6.800	81.60			
		1/2	0.638	7.66	4 1/4	7.224	86.69			
		5/8	0.797	9.56	4 1/2	7.650	91.80			
		3/4	0.956	11.47	5	8.500	102.00			
		7/8	1.116	13.39	5 1/2	9.350	112.20			
		1	1.275	15.30	6	10.200	122.40			
		1 1/8	1.434	17.21	8	13.600	163.20			
		1 1/4	1.594	19.13	10	17.000	204.00			
		1 3/8	1.753	21.04	12	20.400	244.80			
		1 1/2	1.913	22.96	5/8	x	3/4	1.594	19.13	
		1 5/8	2.072	24.86			7/8	1.859	22.31	
1 3/4	2.231	26.77	1	2.125			25.50			
2	2.550	30.60	1 1/8	2.391			28.69			
2 1/4	2.869	34.43	1 1/4	2.660			31.92			
2 1/2	3.188	38.26	1 1/2	3.190			38.28			
2 3/4	3.506	42.07	2	4.250			51.00			
3	3.825	45.90	2 1/2	5.310			63.72			
3 1/4	4.144	49.73	2 3/4	5.844			70.13			
3 3/8	4.303	51.64	3	6.380			76.56			
3 1/2	4.463	53.56	3 1/2	7.440			89.28			
4	5.100	61.20	4	8.500			102.00			
4 1/2	5.738	68.86	4 1/2	9.560	114.72					
5	6.375	76.50	5	10.600	127.20					
5 1/2	7.013	84.16	5 1/2	11.690	140.28					
6	7.650	91.80	6	12.800	153.60					
8	10.200	122.40	7	14.900	178.80					
10	12.750	153.00	8	17.000	204.00					
12	15.300	183.60	9	19.130	229.56					
1/2	x	9/16	0.970	11.64	10	21.250	255.00			
		5/8	1.063	12.76	12	25.500	306.00			
		3/4	1.275	15.30	3/4	x	1	2.550	30.60	
		7/8	1.488	17.86			1 1/4	3.190	38.28	
		1	1.700	20.40			1 1/2	3.830	45.96	
		1 1/8	1.913	22.96			1 3/4	4.460	53.52	
		1 1/4	2.125	25.50			2	5.100	61.20	
		1 1/2	2.550	30.60			2 1/2	6.380	76.56	
		1 3/4	2.975	35.70			3	7.650	91.80	

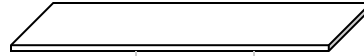
Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE Flat CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM USEFUL INFO

24 - FLAT BAR

CF C1018 FLAT continued



INDEX
ROUND
SQUARE
Flat
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

Size	inches	Est lb foot	Est lb 12'	Size	inches	Est lb foot	Est lb 12'
3/4 x	3 1/2	8.930	107.16	1 1/4 x	2	8.500	102.00
	4	10.200	122.40		2 1/2	10.600	127.20
	4 1/2	11.500	138.00		3	12.800	153.60
	5	12.800	153.60		3 1/2	14.880	178.56
	5 1/2	14.000	168.00		4	17.000	204.00
	6	15.300	183.60		4 1/2	19.100	229.20
	7	17.900	214.80		5	21.300	255.60
	8	20.400	244.80		6	25.500	306.00
	9	22.950	275.40		8	34.000	408.00
	10	25.500	306.00		10	42.500	510.00
	12	30.600	367.20		12	51.000	612.00
7/8 x	1	2.975	35.70	1 1/2 x	2	10.200	122.40
	1 1/4	3.719	44.63		2 1/2	12.800	153.60
	1 1/2	4.463	53.56		3	15.300	183.60
	1 3/4	5.206	62.47		3 1/2	17.800	213.60
	2	5.950	71.40		4	20.400	244.80
	2 1/4	6.694	80.33		4 1/2	22.950	275.40
	2 1/2	7.440	89.28		5	25.500	306.00
	3	8.925	107.10		6	30.600	367.20
	3 1/2	10.410	124.92		8	40.800	489.60
	4	11.900	142.80		10	51.000	612.00
	5	14.800	177.60		12	61.200	734.40
	6	17.850	214.20	1 3/4 x	2 1/2	14.880	178.56
	7	20.830	249.96		3	17.850	214.20
	8	23.800	285.60		3 1/2	20.830	249.96
1 x	1 1/4	4.250	51.00		4	23.800	285.60
	1 1/2	5.100	61.20		4 1/2	26.780	321.36
	1 3/4	5.950	71.40		5	29.750	357.00
	2	6.800	81.60		6	35.700	428.40
	2 1/4	7.650	91.80		8	47.600	571.20
	2 1/2	8.500	102.00	2 x	2 1/2	17.000	204.00
	3	10.200	122.40		3	20.400	244.80
	3 1/2	11.900	142.80		4	27.200	326.40
	4	13.600	163.20		5	34.000	408.00
	4 1/2	15.300	183.60		6	40.800	489.60
	5	17.000	204.00	2 1/4 x	3	25.500	306.00
	6	20.400	244.80		4	34.000	408.00
	7	23.800	285.60		5	42.500	510.00
	8	27.200	326.40		6	51.000	612.00
	9	30.600	367.20	3 x	4	40.800	489.60
	10	34.000	408.00		5	51.000	612.00
	12	40.800	489.60		6	61.200	734.40

NOTES

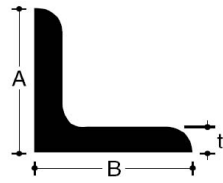
BAR SIZE ANGLE

A36 - ASTM A36 steel is the most commonly available of the hot-rolled steels. It is generally available in round rod, square bar, rectangle bar, as well as steel shapes such as I-Beams, H-beams, angles, and channels. The hot roll process means that the surface on this steel will be somewhat rough.

ASTM A36 Mild (low-carbon) steel		
Minimum Properties	Ultimate Tensile Strength, psi	58,000 - 79,000
	Yield Strength, psi	36,000
	Elongation	20.0%

A992/A572 is a high strength low alloy steel plate used in a variety of structural applications. It is produced in Grades 42, 50, 60 & 65—the grades representing the yield strength. The most common Grade 50 is produced up to 4" thick. Anything over 4" is made to a Grade 42.

ASTM A992/A572 / A 572M - 07 High strength low alloy steel plate		
Minimum Properties	Ultimate Tensile Strength, psi	60,000
	Yield Strength, psi	50,000
	Elongation	16.00%
	Rockwell Hardness	B74



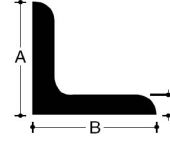
BAR SIZE ANGLE A36

A		B		t	Est lb foot	Est lb 20'	Est lb 40'
1/2	x	1/2	x	1/8	0.38	7.6	
3/4	x	3/4	x	1/8	0.59	11.8	
1	x	1	x	1/8	0.8	16	
				3/16	1.16	23.2	
				1/4	1.49	29.8	
1 1/4	x	1 1/4	x	1/8	1.01	20.2	
				3/16	1.48	29.6	
				1/4	1.92	38.4	
1 1/2	x	1 1/2	x	1/8	1.23	24.6	
				3/16	1.8	36.0	
				1/4	2.34	46.8	
				5/16	2.86	57.2	
				3/8	3.35	67	
1 3/4	x	1 3/4	x	1/8	1.44	28.8	
				3/16	2.12	42.4	
				1/4	2.77	55.4	
2	x	1 1/2	x	1/8	1.44	28.8	
				3/16	2.12	42.4	
				1/4	2.77	55.4	
2	x	2	x	1/8	1.65	33	66
				3/16	2.44	48.8	97.6
				1/4	3.19	63.8	127.6
				5/16	3.92	78.4	156.8
				3/8	4.7	94	188
2 1/2	x	1 1/2	x	3/16	2.44	48.8	97.6
				1/4	3.19	63.8	127.6
				5/16	3.92	78.4	156.8
2 1/2	x	2	x	3/16	2.75	55	110
				1/4	3.62	72.4	144.8
				5/16	4.5	90	180
				3/8	5.3	106	212
2 1/2	x	2 1/2	x	3/16	3.07	61.4	122.8
				1/4	4.1	82	164
				5/16	5	100	200
				3/8	5.9	118	236
				1/2	7.7	154	308

INDEX
ROUND
SQUARE
FLAT
Angle
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM

28 - ANGLE

STRUCTURAL ANGLE A36



INDEX	ROUND	A	x	B	x	t	Est lb foot	Est lb 20'	Est lb 40'	
SQUARE	FLAT	3	x	2 1/2	x	3/16	3.40	68.00	136.00	
						1/4	4.50	90.00	180.00	
						5/16	5.60	112.00	224.00	
						3/8	6.60	132.00	264.00	
						1/2	7.70	154.00	308.00	
						3/8	5.90	118.00	236.00	
	ANGLE	3	x	3	x	3/16	3.70	74.00	148.00	
						1/4	4.90	98.00	196.00	
						5/16	6.10	122.00	244.00	
						3/8	7.20	144.00	288.00	
						1/2	8.50	170.00	340.00	
						3/8	6.60	132.00	264.00	
CHANNEL	BEAM	3 1/2	x	2 1/2	x	3/16	4.90	98.00	196.00	
						1/4	5.40	108.00	216.00	
						5/16	6.60	132.00	264.00	
						3/8	7.20	144.00	288.00	
						1/2	8.50	170.00	340.00	
						3/8	7.20	144.00	288.00	
	TUBE	PIPE	3 1/2	x	3 1/2	x	1/4	5.80	116.00	232.00
							5/16	7.20	144.00	288.00
							3/8	8.50	170.00	340.00
							1/2	11.10	222.00	444.00
							1/2	10.20	204.00	408.00
							3/8	7.90	158.00	316.00
REBAR	PLATE	4	x	3	x	1/4	5.80	116.00	232.00	
						5/16	7.20	144.00	288.00	
						3/8	8.50	170.00	340.00	
						1/2	11.10	222.00	444.00	
						1/4	6.20	124.00	248.00	
						5/16	7.70	154.00	308.00	
	EXPANDED	STAINLESS	4	x	4	x	1/4	6.60	132.00	264.00
							5/16	8.20	164.00	328.00
							3/8	9.80	196.00	392.00
							1/2	12.80	256.00	512.00
							5/8	15.70	314.00	628.00
							3/4	18.50	370.00	740.00
ALUMINUM	USEFUL INFO	5	x	3	x	1/4	6.60	132.00	264.00	
						5/16	8.20	164.00	328.00	
						3/8	9.80	196.00	392.00	
						1/2	12.80	256.00	512.00	
						5/8	15.70	314.00	628.00	

STRUCTURAL ANGLE A36 continued

A	B	t	Est lb foot	Est lb 20'	Est lb 40'
5	x 3 1/2 x	1/4	7.00	140.00	280.00
		5/16	8.70	174.00	348.00
		3/8	10.40	208.00	416.00
		1/2	13.60	272.00	544.00
		5/8	16.80	336.00	672.00
5	x 5 x	3/4	19.80	396.00	792.00
		5/16	10.30	206.00	412.00
		3/8	12.30	246.00	492.00
		1/2	16.20	324.00	648.00
6	x 3 1/2 x	5/8	20.00	400.00	800.00
		5/16	9.80	196.00	392.00
		3/8	11.70	234.00	468.00
6	x 4 x	1/2	15.30	306.00	612.00
		5/16	10.30	206.00	412.00
		3/8	12.30	246.00	492.00
6	x 6 x	7/16	14.30	286.00	572.00
		1/2	16.20	324.00	648.00
		5/8	20.00	400.00	800.00
		3/4	23.60	472.00	944.00
		7/8	27.20	544.00	1088.00
		5/16	12.50	250.00	500.00
		3/8	14.90	298.00	596.00
7	x 4 x	1/2	19.60	392.00	784.00
		5/8	24.20	484.00	968.00
		3/4	28.70	574.00	1148.00
		1	37.40	748.00	1496.00
		3/8	13.60	272.00	544.00
		7/16	15.80	316.00	632.00
8	x 4 x	1/2	17.90	358.00	716.00
		5/8	22.10	442.00	884.00
		3/4	26.20	524.00	1048.00
		1/2	19.60	392.00	784.00
		5/8	24.20	484.00	968.00
8	x 6 x	3/4	28.70	574.00	1148.00
		1	37.435	748.70	1497.40
		7/16	20.20	404.00	808.00
		1/2	23.00	460.00	920.00
8	x 8 x	5/8	28.50	570.00	1140.00
		3/4	33.80	676.00	1352.00
		1	44.20	884.00	1768.00
		1/2	26.40	528.00	1056.00
9	x 4 x	5/8	32.70	654.00	1308.00
		3/4	38.90	778.00	1556.00
		1	51.00	1020.00	2040.00
9	x 4 x	1/2	21.30	426.00	852.00
		5/8	26.325	526.50	1053.00

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM USEFUL INFO

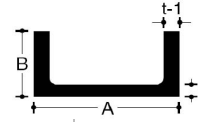
Redding 530.243.1053

Woodland/Sacramento 530.406.0492

30 - CHANNEL

INDEX

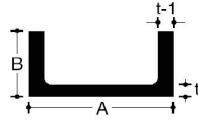
BAR SIZE CHANNEL A36



ROUND	A=Width		B=Flange		t=Web	Est lb foot	Est lb 20'
	3/4	x	3/8	x	1/8	0.56	11.2
	1	x	1/2	x	1/8	0.83	16.6
SQUARE	1 1/4	x	1/2	x	1/8	1.01	20.2
	1 1/2	x	1/2	x	1/8	1.12	22.4
	1 1/2	x	3/4	x	1/8	1.17	23.4
FLAT	1 3/4	x	1/2	x	3/16	1.55	31
	2	x	1/2	x	1/8	1.43	28.6
	2	x	9/16	x	3/16	1.86	37.2
ANGLE	2	x	1	x	1/8	1.59	31.8
	2	x	1	x	3/16	2.32	46.4

STRUCTURAL CHANNEL A36 & A572

Channel	Designation	A=Width	Lbs Foot	B=Flange	t=Web Thickness	Est lb 20'	Est lb 40'
BEAM	3	x	4.100	1.410	0.170	82	164
			5.000	1.498	0.258	100	200
			6.000	1.596	0.356	120	240
TUBE	4	x	5.400	1.580	0.180	108	216
			6.250	1.647	0.247	125	250
			7.250	1.720	0.320	145	290
PIPE	5	x	6.700	1.750	0.190	134	268
			9.000	1.885	0.325	180	360
			8.200	1.920	0.200	164	328
REBAR	6	x	10.500	2.034	0.314	210	420
			13.000	2.157	0.437	260	520
			9.800	2.090	0.210	196	392
PLATE	7	x	12.250	2.194	0.314	245	490
			14.750	2.299	0.419	295	590
			11.500	2.260	0.220	230	460
EXPANDED	8	x	13.750	2.343	0.303	275	550
			18.750	2.527	0.487	375	750
			13.400	2.430	0.230	268	536
STAINLESS	9	x	15.000	2.485	0.285	300	600
			20.000	2.648	0.448	400	800
			15.300	2.600	0.240	306	612
ALUMINUM	10	x	20.000	2.739	0.379	400	800
			25.000	2.886	0.526	500	1000
			30.000	3.033	0.673	600	1200
USEFUL INFO	12	x	20.700	2.940	0.280	414	828
			25.000	3.047	0.387	500	1000
			30.000	3.170	0.510	600	1200
	15	x	33.900	3.400	0.400	678	1356
			40.000	3.520	0.520	800	1600
			50.000	3.716	0.716	1000	2000



JUNIOR CHANNEL A36

A=Width		B=Flange		t=Web	Est lb foot	Est lb 20'
8	x	1.875	x	3/16	8.5	170
10	x	1.127	x	3/16	6.5	130
10	x	1.500	x	3/16	8.4	168
12	x	1.500	x	3/16	10.6	212

MC— SHIP/CAR CHANNEL A36 & A572

Designation	A=Width	Lib foot	B=Flange	t=Web thickness	Est lb 20'	Est lb 40'
3 x		7.1	1.938	0.312	142	284
		9	2.125	0.500	180	360
4 x		13.8	2.500	0.500	276	552
	6 x		12	2.500	0.313	240
		15.1	2.940	0.313	302	604
		15.3	3.500	0.340	306	612
		16.3	3.000	0.375	326	652
		18	3.500	0.375	360	720
7 x		17.6	3.000	0.375	352	704
		19.1	3.450	0.350	382	764
		22.7	3.606	0.500	454	908
8 x		18.7	2.978	0.353	374	748
		20	3.025	0.400	400	800
		21.4	3.450	0.375	428	856
		22.8	3.500	0.427	456	912
9 x		23.9	3.450	0.400	478	956
		25.4	3.500	0.450	508	1016
	10 x		22	3.315	0.290	438
		25	3.405	0.380	498	996
		28.5	3.950	0.425	570	1140
		33.6	4.100	0.575	672	1344
12 x		41.1	4.321	0.796	822	1644
		31	3.625	0.370	618	1236
		35	3.767	0.467	700	1400
		40	3.890	0.590	800	1600
		45	4.012	0.712	900	1800
13 x		50	4.135	0.835	1000	2000
		31.8	4.000	0.375	636	1272
		35	4.072	0.447	700	1400
		40	4.185	0.560	800	1600
18 x		50	4.412	0.787	1000	2000
		42.7	3.950	0.450	854	1708
		45.8	4.000	0.500	916	1832
		51.9	4.100	0.600	1038	2076
	58	4.200	0.700	1160	2320	

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE FLAT ANGLE Channel BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM USEFUL INFO

32 - BEAM

INDEX

ROUND

SQUARE

FLAT

ANGLE

CHANNEL

Beam

TUBE

PIPE

REBAR

PLATE

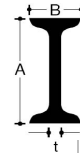
EXPANDED

STAINLESS

ALUMINUM

USEFUL INFO

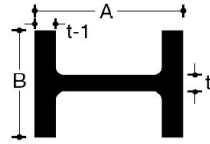
STANDARD I BEAM A36 & A572



Designation		B=Flange	t=Web	Average	Est lb 20'	Est lb 40'	
A=Depth	Lb foot	width	thickness	flange thickness			
3	x	5.7	2.330	0.170	0.260	114	228
		7.5	2.509	0.349	0.260	150	300
4	x	7.7	2.663	0.190	0.293	154	308
		9.5	2.796	0.326	0.293	190	380
5	x	10	3.004	0.210	0.326	200	400
		14.75	3.284	0.494	0.326	295	590
6	x	12.5	3.330	0.230	0.359	250	500
		17.25	3.565	0.465	0.359	345	690
7	x	15.3	3.660	0.250	0.392	306	612
		20	3.860	0.450	0.392	400	800
8	x	18.4	4.000	0.270	0.425	368	736
		23	4.171	0.441	0.425	460	920
10	x	25.4	4.660	0.310	0.491	508	1016
		35	4.944	0.594	0.491	700	1400
12	x	31.8	5.000	0.350	0.544	636	1272
		35	5.078	0.428	0.544	700	1400
15	x	40.8	5.250	0.460	0.659	816	1632
		50	5.477	0.687	0.659	1000	2000
18	x	42.9	5.500	0.410	0.622	858	1716
		50	5.640	0.550	0.622	1000	2000
20	x	54.7	6.000	0.460	0.691	1094	2188
		70	6.251	0.711	0.691	1400	2800
24	x	66	6.255	0.505	0.795	1320	2640
		75	6.391	0.635	0.920	1500	3000
24	x	86	7.060	0.660	0.920	1720	3440
		96	7.200	0.800	0.920	1920	3840
24	x	79.9	7.000	0.500	0.870	1598	3196
		90	7.125	0.625	0.870	1800	3600
24	x	100	7.245	0.745	0.870	2000	4000
		106	7.870	0.620	1.090	2120	4240
24	x	121	8.050	0.800	1.125	2420	4840

JUNIOR BEAM A36

Designation		B=Flange	t=Web	Est lb 20'	Est lb 40'
A=Depth	Lb foot	width	thickness		
6	x	4.4	1 7/8	88.00	176.00
8	x	6.5	2 1/4	130.00	260.00
10	x	9.0	2 5/8	180.00	360.00
12	x	11.8	3	236.00	472.00



WIDE FLANGE BEAM A992/A572

Designation	Lb	A= Depth	B= Flange width	t-1 = Flange thickness	t= Web thickness	Est lb 20'	Est lb 40'
4 x	13	4.160	4.060	0.345	0.280	260	520
5 x	16	5.010	5.000	0.360	0.240	320	640
	19	5.150	5.030	0.430	0.270	380	760
6 x	9	5.900	3.940	0.215	0.170	180	360
	12	6.030	4.000	0.280	0.230	240	480
	16	6.280	4.030	0.405	0.260	320	640
	15	5.990	5.990	0.260	0.230	300	600
	20	6.200	6.020	0.365	0.260	400	800
	25	6.380	6.080	0.455	0.320	500	1000
8 x	10	7.890	3.940	0.205	0.170	200	400
	13	7.990	4.000	0.255	0.230	260	520
	15	8.110	4.015	0.315	0.245	300	600
	18	8.140	5.250	0.330	0.230	360	720
	21	8.280	5.270	0.400	0.250	420	840
	24	7.930	6.495	0.400	0.245	480	960
	28	8.060	6.535	0.465	0.285	560	1120
	31	8.000	7.995	0.435	0.285	620	1240
	35	8.120	8.020	0.495	0.310	700	1400
	40	8.250	8.070	0.560	0.360	800	1600
	48	8.500	8.110	0.685	0.400	960	1920
	58	8.750	8.220	0.810	0.510	1160	2320
	67	9.000	8.280	0.935	0.570	1340	2680
10 x	12	9.870	3.960	0.210	0.190	240	480
	15	9.990	4.000	0.270	0.230	300	600
	17	10.110	4.010	0.330	0.240	340	680
	19	10.240	4.020	0.395	0.250	380	760
	22	10.170	5.750	0.360	0.240	440	880
	26	10.330	5.770	0.440	0.260	520	1040
	30	10.470	5.810	0.510	0.300	600	1200
	33	9.730	7.960	0.435	0.290	660	1320
	39	9.920	7.985	0.530	0.315	780	1560
	45	10.100	8.020	0.620	0.350	900	1800
	49	9.980	10.000	0.560	0.340	980	1960
	54	10.090	10.030	0.615	0.370	1080	2160
	60	10.220	10.080	0.680	0.420	1200	2400
	68	10.400	10.130	0.770	0.470	1360	2720
	77	10.600	10.190	0.870	0.530	1540	3080
	88	10.840	10.265	0.990	0.605	1760	3520
	100	11.100	10.340	1.120	0.680	2000	4000
	112	11.360	10.415	1.250	0.775	2240	4480

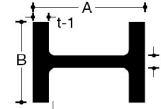
Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE FLAT ANGLE CHANNEL Tube PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM

34 - BEAM

WIDE FLANGE BEAM A992/A572 continued



INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
Beam
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

Designation	Lb	B= Flange	t-1 = Flange	t= Web	Est lb 20'	Est lb 40'
foot	A= Depth	width	thickness	thickness		
12 x 14	11.910	3.970	0.225	0.200	280	560
16	11.990	3.990	0.265	0.220	320	640
19	12.160	4.005	0.350	0.235	380	760
26	12.220	6.490	0.380	0.230	520	1040
30	12.340	6.520	0.440	0.260	600	1200
35	12.500	6.560	0.530	0.300	700	1400
40	11.940	8.005	0.515	0.295	800	1600
45	12.060	8.045	0.575	0.335	900	1800
50	12.190	8.080	0.640	0.370	1000	2000
53	12.060	9.995	0.575	0.345	1060	2120
58	12.190	10.010	0.640	0.360	1160	2320
65	12.120	12.000	0.605	0.390	1300	2600
72	12.250	12.040	0.670	0.430	1440	2880
79	12.380	12.080	0.735	0.470	1580	3160
87	12.530	12.125	0.810	0.515	1740	3480
96	12.710	12.160	0.900	0.550	1920	3840
106	12.890	12.220	0.990	0.610	2120	4240
120	13.120	12.320	1.105	0.710	2400	4800
136	13.410	12.400	1.250	0.790	2720	5440
152	13.710	12.480	1.400	0.870	3040	6080
170	14.030	12.570	1.560	0.960	3400	6800
190	14.380	12.670	1.735	1.060	3800	7600
14 x 22	13.740	5.000	0.335	0.230	440	880
26	13.910	5.025	0.420	0.225	520	1040
30	13.840	6.730	0.385	0.270	600	1200
34	13.980	6.745	0.455	0.285	680	1360
38	14.100	6.770	0.515	0.310	760	1520
43	13.660	7.995	0.530	0.305	860	1720
48	13.790	8.030	0.595	0.340	960	1920
53	13.920	8.060	0.660	0.370	1060	2120
61	13.890	9.995	0.645	0.375	1220	2440
68	14.040	10.035	0.720	0.415	1360	2720
74	14.170	10.070	0.785	0.450	1480	2960
82	14.310	10.130	0.855	0.510	1640	3280
90	14.020	14.520	0.710	0.440	1800	3600
99	14.160	14.565	0.780	0.485	1980	3960
109	14.320	14.605	0.860	0.525	2180	4360
120	14.480	14.670	0.940	0.590	2400	4800
132	14.660	14.725	1.030	0.645	2640	5280
145	14.780	15.500	1.090	0.680	2900	5800
159	14.980	15.565	1.190	0.745	3180	6360
176	15.220	15.650	1.310	0.830	3520	7040
193	15.480	15.710	1.440	0.890	3860	7720
211	15.720	15.800	1.560	0.980	4220	8440

WIDE FLANGE BEAM A992/A572 continued

Designation	Lb foot	A= Depth	B= Flange		t-l = Flange		t= Web		Est lb 20'	Est lb 40'
			width	thickness	thickness	thickness				
14 x	233	16.040	15.890	1.720	1.070	4660	9320			
	257	16.380	15.995	1.890	1.175	5140	10280			
	283	16.740	16.110	2.070	1.290	5660	11320			
	311	17.120	16.230	2.260	1.410	6220	12440			
	342	17.540	16.360	2.470	1.540	6840	13680			
	370	17.920	16.475	2.660	1.655	7400	14800			
	398	18.290	16.590	2.845	1.770	7960	15920			
	426	18.670	16.695	3.035	1.875	8520	17040			
	455	19.020	16.835	3.200	2.015	9100	18200			
	500	19.600	17.101	3.500	2.190	10000	20000			
	550	20.240	17.200	3.820	2.380	11000	22000			
	605	20.920	17.415	4.160	2.595	12100	24200			
	665	21.640	17.650	4.520	2.830	13300	26600			
	730	22.420	17.890	4.910	3.070	14600	29200			
16 x	26	15.690	5.500	0.345	0.250	520	1040			
	31	15.880	5.525	0.440	0.275	620	1240			
	36	15.860	6.985	0.430	0.295	720	1440			
	40	16.010	6.995	0.505	0.305	800	1600			
	45	16.130	7.035	0.565	0.345	900	1800			
	50	16.260	7.070	0.630	0.380	1000	2000			
	57	16.430	7.120	0.715	0.430	1140	2280			
	67	16.330	10.235	0.665	0.395	1340	2680			
	77	16.520	10.295	0.760	0.455	1540	3080			
	89	16.750	10.365	0.875	0.525	1780	3560			
18 x	100	16.970	10.425	0.985	0.585	2000	4000			
	35	17.700	6.000	0.425	0.300	700	1400			
	40	17.900	6.015	0.525	0.315	800	1600			
	46	18.060	6.060	0.605	0.360	920	1840			
	50	17.990	7.495	0.570	0.355	1000	2000			
	55	18.110	7.530	0.630	0.390	1100	2200			
	60	18.240	7.555	0.695	0.415	1200	2400			
	65	18.350	7.590	0.750	0.450	1300	2600			
	71	18.470	7.635	0.810	0.495	1420	2840			
	76	18.210	11.035	0.680	0.425	1520	3040			
21 x	86	18.390	11.090	0.770	0.480	1720	3440			
	97	18.590	11.145	0.870	0.535	1940	3880			
	106	18.730	11.200	0.940	0.590	2120	4240			
	119	18.870	11.265	1.060	0.655	2380	4760			
	44	20.660	6.500	0.450	0.350	880	1760			
	50	20.830	6.530	0.535	0.380	1000	2000			
	57	21.060	6.555	0.650	0.405	1140	2280			
	62	20.990	8.420	0.615	0.400	1240	2480			
	68	21.130	8.270	0.685	0.430	1360	2720			
	73	21.240	8.295	0.740	0.455	1460	2920			
21 x	83	21.430	8.355	0.835	0.515	1660	3320			
	93	21.620	8.420	0.930	0.580	1860	3720			
	101	21.360	12.290	0.800	0.500	2020	4040			
	111	21.510	12.340	0.875	0.550	2220	4440			

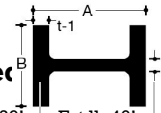
Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE FLAT ANGLE CHANNEL Tube PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM

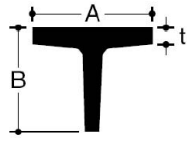
36 - BEAM

WIDE FLANGE BEAM A992/A572continued



INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 Beam
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

Designation	Lib foot	A= Depth	B= Flange width	t-1 = Flange thickness	t= Web thickness	Est lb 20'	Est lb 40'
21 x	122	21.68	12.390	0.960	0.600	2440	4880
	132	21.83	12.440	1.035	0.650	2640	5280
	147	22.06	12.510	1.150	0.720	2940	5880
24 x	55	23.57	7.005	0.505	0.395	1100	2200
	62	23.74	7.040	0.590	0.430	1240	2480
	68	23.73	8.965	0.585	0.415	1360	2720
	76	23.92	8.990	0.680	0.440	1520	3040
	84	24.10	9.020	0.770	0.470	1680	3360
	94	24.31	9.065	0.875	0.515	1880	3760
	104	24.06	12.750	0.750	0.500	2080	4160
27 x	117	24.26	12.800	0.850	0.550	2340	4680
	131	24.48	12.855	0.960	0.695	2620	5240
	146	24.74	12.900	1.090	0.650	2920	5840
	162	25.00	12.955	1.220	0.705	3240	6480
	84	26.71	9.960	0.640	0.460	1680	3360
	94	26.92	9.990	0.745	0.490	1880	3760
30 x	102	27.09	10.015	0.830	0.505	2040	4080
	114	27.29	10.070	0.930	0.570	2280	4560
	146	27.38	13.965	0.975	0.605	2920	5840
	161	27.59	14.020	1.080	0.660	3220	6440
	178	27.81	14.085	1.190	0.725	3560	7120
	99	29.65	10.450	0.670	0.520	1980	3960
	108	29.83	10.475	0.760	0.545	2160	4320
33 x	116	30.01	10.495	0.850	0.565	2320	4640
	124	30.17	10.515	0.930	0.585	2480	4960
	132	30.31	10.545	1.000	0.615	2640	5280
	173	30.44	14.985	1.065	0.655	3460	6920
	191	30.68	15.040	1.185	0.710	3820	7640
	211	30.94	15.105	1.135	0.775	4220	8440
	118	32.86	11.480	0.740	0.550	2360	4720
36 x	130	33.09	11.510	0.855	0.580	2600	5200
	141	33.30	11.535	0.960	0.605	2820	5640
	152	33.49	11.565	1.055	0.635	3040	6080
	201	33.68	15.745	1.150	0.715	4020	8040
	221	33.93	15.805	1.275	0.775	4420	8840
	241	34.18	15.860	1.400	0.830	4820	9640
	135	35.55	11.950	0.790	0.600	2700	5400
36 x	150	35.85	11.975	0.940	0.625	3000	6000
	160	36.01	12.000	1.020	0.650	3200	6400
	170	36.17	12.030	1.100	0.680	3400	6800
	182	36.33	12.075	1.180	0.725	3640	7280
	194	36.49	12.115	1.260	0.765	3880	7760
	210	36.69	12.180	1.360	0.830	4200	8400
	231	36.49	16.470	0.760	1.260	4600	9200
	245	36.08	16.510	1.350	0.800	4900	9800
	262	36.85	16.550	0.840	1.440	5200	10400
	282	37.11	16.595	0.885	1.570	5600	11200
302	37.33	16.655	0.945	1.680	6000	12000	



BEAM - 37

BAR & STRUCTURAL TEE

BAR TEES						
A		B		T	LBS/FT	LBS/20'
3/4	X	3/4	X	1/8	0.620	12.400
1	X	1	X	1/8	0.851	17.020
1 1/4	X	1 1/4	X	1/8	1.091	21.820
1 1/4	X	1 1/4	X	3/16	1.551	31.020
1 1/2	X	1 1/2	X	3/16	1.902	38.040
1 1/2	X	1 1/2	X	1/4	2.432	48.640
1 3/4	X	1 3/4	X	3/16	2.262	45.240
2	X	2	X	1/4	3.563	71.260
2	X	2	X	5/16	4.304	86.080
2 1/2	X	2 1/2	X	1/4	4.604	92.080
2 1/2	X	2 1/2	X	5/16	5.505	110.100
2 1/2	X	2 1/2	X	3/8	6.406	128.120

STRUCTURAL TEES

Gerlinger Steel can Plasma-Cut Wide Flange Beams to Tees On our High Definition Plasma Table.

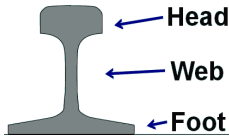
Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
Beam
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

38 - BEAM

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
Beam
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO



RAILS

	Lbs yard	Lbs foot	Height inch- es	Base width inch- es	Head width inch- es
	16	5.3	2 3/8	2 3/8	1 11/64
	20	6.7	2 5/8	2 5/8	1 11/32
	25	8.3	2 3/4	2 3/4	1 1/2
	30	10.0	3 1/8	3 1/8	1 11/16
	35	11.7	3 5/16	3 5/16	1 3/4
	40	13.3	3 1/2	3 1/2	1 7/8
	45	15.0	3 11/16	3 11/16	2
	50	16.7	3 7/8	3 7/8	2 1/8
	52	17.3	3 15/16	3 7/8	2 3/16
	55	18.3	4 1/16	4 1/16	2 1/4
	56	18.7	4 1/16	4	2 7/32
	56	18.7	4 1/4	4 13/16	2 9/64
	60	20.0	4 1/4	4 1/16	2 5/16
	60	20.0	4 1/4	4 1/4	2 3/8
	65	21.7	4 7/16	4 7/16	2 13/32
	70	23.3	4 5/8	4 5/8	2 7/16
	75	25.0	4 13/16	4 13/16	2 15/32
	80	26.7	5 1/8	5	2 21/32
	80	26.7	4 15/16	4 7/16	2 7/16
	80	26.7	5	5	2 1/2
	85	28.3	5 1/8	4 5/8	2 1/2
	85	28.3	5	5	2 9/16
	85	28.3	5 3/16	5 3/16	2 9/16
	90	30.0	5 5/8	5 1/8	2 9/16
	90	30.0	5 17/64	4 49/64	2 9/16
	90	30.0	5 3/8	5 3/8	2 5/8
	100	33.3	6	5 1/2	2 3/4
	100	33.3	6	5 3/8	2 11/16
	100	33.3	5 11/64	5 9/64	2 21/32
	100	33.3	5 11/16	5	2 43/64
	100	33.3	5 3/4	5 3/4	2 3/4
	105	35.0	6	5 1/2	3
	110	36.7	6 1/4	5 1/2	2 25/32
	130	43.3	6 5/8	5 1/2	3

TUBING & PIPE

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 Beam
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

A513 (alloy 1020-1026) Steel		
This alloy is generally used for DOM tubing. Its higher carbon content means higher strength, but lower weldability and machinability.		
A513 alloys 1020 - 1026 Mild (low-carbon) steel		
Minimum Properties	Ultimate Tensile Strength, psi	87,000
	Yield Strength, psi	72,000
	Elongation	10.00%
	Rockwell Hardness	B89

A500 B Cold formed, electric resistance welded tubing. Has a high strength-to-weight ratio, is relatively low in cost and is easily welded, formed, and ease of maintenance. OD flash removed on all sizes. ID is flash-in.		
A500 B Cold formed, electric resistance welded tubing.		
Minimum Properties	Ultimate Tensile Strength, psi	58,000
	Yield Strength, psi	45,200
	Elongation	23.00%
	Rockwell Hardness	B119

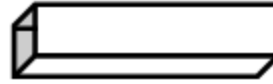
A53 Tube/Pipe. Seamless carbon and Alloy Steel Mechanical Tubing for mechanical and pressure use, and also for transporting steam, water, gas etc.		
A53 Tube/Pipe. Seamless carbon and Alloy Steel Mechanical Tubing		
Minimum Properties	Ultimate Tensile Strength, psi	60,000
	Yield Strength, psi	35,000
	Elongation	20.00%

40 - TUBE

INDEX ROUND SQUARE SQUARE FLAT ANGLE CHANNEL BEAM Tube PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM USEFUL INFO

SQUARE TUBE

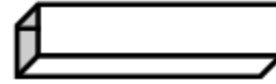
A513 Mechanical / A500 Structural



Height	Width	Wall thickness	Lb foot	Lb 20'	Height	Width	Wall thickness	Lb foot	Lb 20'
1/2	x 1/2	x	0.049	0.301	2	x 2	x	0.065	1.690
			0.065	0.385			x	0.083	2.160
5/8	x 5/8	x	0.049	0.367	2 1/4	x 2 1/4	x	0.095	2.460
			0.065	0.495			x	0.120	3.070
3/4	x 3/4	x	0.049	0.460	2 1/2	x 2 1/2	x	0.188	4.320
			0.065	0.607			x	0.250	5.410
7/8	x 7/8	x	0.083	0.750	3	x 3	x	0.188	5.070
			0.095	0.840			x	0.250	7.010
			0.120	1.030			x	0.120	3.890
1	x 1	x	0.049	0.520	3 1/2	x 3 1/2	x	0.188	5.590
			0.065	0.680			x	0.250	7.110
			0.083	0.890			x	0.120	4.700
			0.095	0.980			x	0.188	6.870
1 1/4	x 1 1/4	x	0.120	1.230	4	x 4	x	0.250	8.810
			0.049	0.630			x	0.313	10.580
			0.065	0.830			x	0.375	12.170
			0.083	1.104			x	0.120	5.610
			0.095	1.170			x	0.188	8.150
1 1/2	x 1 1/2	x	0.109	1.320	4 1/2	x 4 1/2	x	0.250	10.510
			0.120	1.430			x	0.313	12.700
			0.049	0.800			x	0.375	14.700
			0.065	1.050			x	0.120	6.340
			0.083	1.320			x	0.188	9.420
1 3/4	x 1 3/4	x	0.095	1.490	5	x 5	x	0.250	12.210
			0.109	1.690			x	0.313	14.830
			0.120	1.840			x	0.375	17.270
			0.188	2.750			x	0.500	21.630
			0.049	0.950			x	0.188	10.700
2	x 2	x	0.065	1.270	6	x 6	x	0.250	13.910
			0.083	1.600			x	0.120	7.960
			0.095	1.810			x	0.188	11.970
			0.109	2.060			x	0.250	15.620
			0.120	2.250			x	0.313	19.080
2 1/2	x 2 1/2	x	0.188	3.540	5	x 5	x	0.375	22.370
			0.250	4.110			x	0.500	28.430
			0.065	1.490			x	0.188	14.530
			0.083	1.880			x	0.250	19.020
			0.095	2.140			x	0.313	23.340
3	x 3	x	0.120	2.660	6	x 6	x	0.375	27.480
			0.188	3.680			x	0.500	35.240
			0.065	1.490			x	0.188	14.530
			0.083	1.880			x	0.250	19.020
			0.095	2.140			x	0.313	23.340

SQUARE TUBE continued

A513 Mechanical / A500 Structural



Height	Width	Wall thickness	Lb foot	Lb 20'	Height	Width	Wall thickness	Lb foot	Lb 20'		
7	x 7	x	0.188	17.080	341.60	10	x 10	x	0.250	32.630	652.60
			0.250	22.420	448.40				0.313	40.350	807.00
			0.313	27.590	551.80				0.375	47.900	958.00
			0.375	32.580	651.60				0.500	62.460	1249.20
			0.500	42.050	841.00				0.625	76.330	1526.60
8	x 8	x	0.188	19.630	392.60	12	x 12	x	0.250	39.430	788.60
			0.250	25.820	516.40				0.313	48.860	977.20
			0.313	31.840	636.80				0.375	58.100	1162.00
			0.375	37.690	753.80				0.500	76.070	1521.40
			0.500	48.850	977.00				0.625	93.340	1866.80
16	x 16	x	0.625	59.320	1186.40	14	x 14	x	0.375	68.310	1366.20
									0.500	89.680	1793.60
									0.500	103.300	2066.00

RECTANGULAR TUBE

A513 Mechanical / A500 Structural

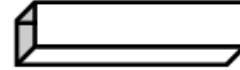
Height	Width	Wall thickness	Lb foot	Lb 20'	Height	Width	Wall thickness	Lb foot	Lb 20'		
1	x 1/2	x	0.049	0.450	9.00	2 1/2	x 1 1/2	x	0.065	1.69	33.8
			0.065	0.605	12.10				0.083	2.16	43.2
1 1/2	x 1/2	x	0.065	0.826	16.52	3	x 1	x	0.065	1.71	34.2
			0.083	1.180	23.60				0.083	2.16	43.2
1 1/2	x 3/4	x	0.065	0.937	18.74	3	x 1 1/2	x	0.065	1.93	38.6
			0.083	1.180	23.60				0.083	2.45	49
			0.120	1.640	32.80				0.120	3.48	69.6
			0.120	1.640	32.80				0.120	3.05	61
			0.120	1.850	37.00				0.188	4.97	99.4
2	x 1	x	0.065	1.270	25.40	3	x 2	x	0.065	2.17	43.4
			0.083	1.600	32.00				0.083	2.73	54.6
			0.095	1.820	36.40				0.120	3.93	78.6
			0.120	2.250	45.00				0.188	5.59	111.8
			0.188	3.360	67.20				0.250	7.11	142.2
2	x 1 1/4	x	0.083	1.740	34.80	4	x 1 1/2	x	0.120	4.29	85.8
			0.095	1.980	39.60				0.188	6.21	124.2
			0.120	2.660	53.20				0.250	8.81	176.2
2	x 1 1/2	x	0.065	1.490	29.80	4	x 2	x	0.120	4.7	94
			0.083	1.880	37.60				0.188	7.04	140.8
			0.095	2.140	42.80				0.250	8.81	176.2
			0.120	2.660	53.20				0.120	5.52	110.4
2 1/2	x 1	x	0.065	1.490	29.80	4	x 3	x	0.188	8.15	163
			0.120	2.660	53.20				0.250	10.51	210.2
			0.313	12.7	254				0.375	14.71	294.2

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM

RECTANGULAR TUBE



A513 Mechanical / A500 Structural

INDEX	ROUND	Height	Width	Wall thickness	Lb foot	Lb 20'	Height	Width	Wall Thickness	Lb foot	Lb 20'
		5	x 2	x 0.120	5.520	110.40	8	x 3	x 0.375	24.93	498.6
				0.188	8.150	163.00			0.500	31.84	636.8
				0.250	10.510	210.20	8	x 4	x 0.188	14.54	290.8
		5	x 3	x 0.120	6.330	126.60			0.250	19.02	380.4
				0.188	9.420	188.40			0.313	23.34	466.8
				0.250	12.210	244.20			0.375	27.48	549.6
				0.313	14.830	296.60			0.500	35.24	704.8
				0.375	17.270	345.40	8	x 6	x 0.188	17.08	341.6
				0.500	21.630	432.60			0.250	22.42	448.4
		6	x 2	x 0.120	6.330	126.60			0.313	27.59	551.8
				0.188	9.420	188.40			0.375	32.58	651.6
				0.250	12.210	244.20			0.500	42.05	841
				0.313	14.830	296.60	10	x 2	x 0.188	14.65	293
				0.375	17.270	345.40			0.250	19.02	380.4
		6	x 3	x 0.120	7.500	150.00	10	x 3	x 0.188	15.8	316
				0.188	10.700	214.00			0.250	20.72	414.4
				0.250	13.910	278.20	10	x 4	x 0.188	17.08	341.6
				0.313	16.960	339.20			0.250	22.42	448.4
				0.375	19.820	396.40			0.250	22.42	448.4
				0.500	25.030	500.60			0.313	27.59	551.8
		6	x 4	x 0.188	11.970	239.40			0.375	32.58	651.6
				0.250	15.620	312.40			0.500	42.05	841
				0.313	19.080	381.60	10	x 5	x 0.250	24.12	482.4
				0.375	22.370	447.40	10	x 6	x 0.188	19.63	392.6
				0.500	28.430	568.60			0.250	25.82	516.4
		7	x 3	x 0.188	11.970	239.40			0.313	31.84	636.8
				0.250	15.620	312.40			0.375	37.69	753.8
				0.375	22.370	447.40			0.500	48.85	977
		7	x 4	x 0.188	13.250	265.00	10	x 8	x 0.188	22.18	443.6
				0.250	17.320	346.40			0.250	29.23	548.6
				0.313	21.210	424.20			0.313	36.1	722
				0.375	24.930	498.60			0.375	42.79	855.8
		7	x 5	x 0.188	14.530	290.60			0.500	55.66	1113.2
				0.250	19.020	380.40	12	x 2	x 0.188	17.08	341.6
				0.313	23.340	466.80			0.250	22.42	448.4
				0.375	27.480	549.60			0.250	22.42	448.4
				0.500	35.240	704.80	12	x 3	x 0.188	18.35	367
		8	x 2	x 0.188	11.970	239.40			0.250	24.12	482.4
				0.250	15.620	312.40			0.250	24.12	482.4
				0.313	19.080	381.60	12	x 4	x 0.188	19.63	392.6
				0.375	22.370	447.40			0.250	25.82	516.4
				0.500	28.430	568.60			0.313	31.84	636.8
		8	x 3	x 0.188	13.250	265.00			0.375	37.69	753.8
				0.250	17.320	346.40			0.500	48.85	977
				0.313	21.210	424.20			0.625	59.32	1186.4

RECTANGLE TUBE continued

A513 Mechanical / A500 Structural

Height	Width	Wall thickness	Lb foot	Lb 20'	Height	Width	Wall thickness	Lb foot	Lb 20'		
12	x 6	x 0.188	22.180	443.60	14	x 10	x 0.375	58.100	1162.00		
		x 0.250	29.230	584.60			x 0.500	76.070	1521.40		
		x 0.313	36.100	722.00			16	x 4	x 0.313	40.350	807.00
		x 0.375	42.790	855.80					x 0.375	47.900	958.00
		x 0.500	55.660	1113.20					x 0.500	62.460	1249.20
12	x 8	x 0.188	24.730	494.60	16	x 8	x 0.313	48.860	977.20		
		x 0.250	32.630	652.60			x 0.375	58.100	1162.00		
		x 0.313	40.350	807.00			x 0.500	76.070	1521.40		
		x 0.375	47.900	958.00			16	x 12	x 0.313	57.360	1147.20
		x 0.500	62.460	1249.20					x 0.375	68.310	1366.20
14	x 4	x 0.250	29.230	584.60	18	x 6	x 0.313	48.860	977.20		
		x 0.313	36.100	722.00			x 0.375	58.100	1162.00		
		x 0.375	42.790	855.80			x 0.500	76.070	1521.40		
		x 0.500	55.660	1113.20			20	x 4	x 0.375	58.100	1162.00
		x 0.625	76.330	1526.60					x 0.500	76.070	1521.40
14	x 6	x 0.250	32.630	652.60	20	x 8	x 0.375	68.310	1366.20		
		x 0.313	40.350	807.00			x 0.500	89.680	1793.60		
		x 0.375	47.900	958.00			20	x 8	x 0.375	68.310	1366.20
		x 0.500	62.460	1249.20					x 0.500	89.680	1793.60

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM

ROUND TUBE—HREW/CREW

A513



OD	Wall thickness	Lb foot	Lb 20'	OD	Wall thickness	Lb foot	Lb 20'
3/8	x 0.049	0.17	3.40	1 1/2	x 0.049	0.76	15.20
	x 0.065	0.30	6.00		x 0.065	1.00	20.00
	x 0.083	0.39	7.80		x 0.083	1.26	25.20
5/8	x 0.049	0.28	5.60	1 3/4	x 0.095	1.43	28.60
	x 0.065	0.39	7.80		x 0.120	1.77	35.40
	x 0.083	0.59	11.80		x 0.065	1.17	23.40
3/4	x 0.049	0.37	7.40	2	x 0.083	1.48	29.60
	x 0.065	0.48	9.60		x 0.095	1.68	33.60
	x 0.083	0.59	11.80		x 0.120	2.09	41.80
7/8	x 0.120	0.81	16.20	2 1/4	x 0.065	1.34	26.80
	x 0.049	0.43	8.60		x 0.083	1.70	34.00
	x 0.065	0.56	11.20		x 0.095	1.93	38.60
1	x 0.083	0.70	14.00	2 1/2	x 0.120	2.41	48.20
	x 0.049	0.50	10.00		x 0.049	1.15	23.00
	x 0.065	0.65	13.00		x 0.065	1.52	30.40
1 1/4	x 0.083	0.81	16.20	2 1/2	x 0.083	1.92	38.40
	x 0.095	0.92	18.40		x 0.120	2.73	54.60
	x 0.120	1.13	22.60		x 0.065	1.69	33.80
1 1/4	x 0.049	0.63	12.60	2 1/2	x 0.083	2.14	42.80
	x 0.065	0.82	16.40				
	x 0.083	1.03	20.60				
1 1/4	x 0.095	1.17	23.40				
	x 0.120	1.45	29.00				

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
Tube
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

ROUND TUBE continued



	OD	Wall Thickness	Lb foot	Lb 20'	OD	Wall Thickness	Lb foot	Lb 20'	
2 1/2 x	x	0.095	2.44	48.80	5 x	0.065	3.43	68.60	
		0.120	3.05	61.00		0.083	4.20	84.00	
3 x	x	0.065	2.04	40.80	6 x	0.109	5.70	114.00	
		0.083	2.59	51.80		0.134	7.30	146.00	
		0.109	3.43	68.60		0.188	9.66	193.20	
		0.120	3.69	73.80		8 x	0.083	4.90	98.00
0.134	4.40	88.00	0.109	6.70	134.00				
3 1/2 x	x	0.065	2.39	47.80	10 x	0.134	8.60	172.00	
		0.083	2.90	58.00		0.188	12.10	242.00	
		0.109	4.00	80.00		12 x	0.083	6.50	130.00
		0.120	4.33	86.60			0.109	9.00	180.00
4 x	x	0.134	5.10	102.00	10 x	0.134	11.60	232.00	
		0.065	2.73	54.60		0.188	16.10	322.00	
		0.083	3.20	64.00		12 x	0.109	11.34	226.80
		0.109	4.50	90.00			0.134	14.50	290.00
4 1/2 x	x	0.120	4.97	99.40	12 x	0.188	20.20	404.00	
		0.134	5.70	114.00		0.109	13.60	272.00	
		0.188	7.35	147.00		0.134	17.50	350.00	
		0.083	3.60	72.00		0.188	24.30	486.00	
		0.109	5.09	101.80					
		0.134	6.40	128.00					

Need it cut, rolled, threaded, or fabricated? We can help.

We carry a full line of fittings– threaded, weld, and slip. We do valves, too!



PIPE—CARBON STEEL

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
Pipe
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

<p>A53 Tube/Pipe. Available in Continuous Buttweld and Electric Resistance Welded (ERW)* - The Continuous Buttweld pipe is a general purpose pipe for use in steam, gas and air lines. The ERW is suitable for welding, coiling, bending flaring, and flanging.</p>		
<p>A53 Tube/Pipe. Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing</p>		
Minimum Properties	Ultimate Tensile Strength, psi	60,000
	Yield Strength, psi	35,000
	Elongation	20.00%
<p>* PIPE SIZE ERW - A structural purpose pipe sized tube, ordered to ASTM A500 specs. Compared to pipe, this product offers higher strength, better straightness as well as a superior finish and usually costs less.</p>		

STANDARD PIPE CHART



Black: Plain and Threaded & Coupled
Galvanized: Threaded & Coupled

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
Pipe
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

Pipe Size	OD	Class	Schdl.	Ave. Wall	ID INCH	Lbs per Ft	Lbs Per 21 ft
1/8	0.405	STD	40	0.068	0.269	0.24	5.12
	0.405	XH	80	0.095	0.215	0.31	6.59
1/4	0.540	STD	40	0.088	0.364	0.42	8.90
	0.540	XH	80	0.119	0.302	0.54	11.24
3/8	0.675	STD	40	0.091	0.493	0.57	11.91
	0.675	XH	80	0.126	0.423	0.74	15.50
1/2	0.840	STD	40	0.109	0.622	0.85	17.87
	0.840	XH	80	0.147	0.546	1.09	22.85
	0.840		160	0.187	0.466	1.30	27.38
3/4	0.840	XXH		0.294	0.252	1.71	35.99
	1.050	STD	40	0.113	0.824	1.13	23.75
	1.050	XH	80	0.154	0.742	0.74	15.58
	1.050		160	0.208	0.614	2.18	43.60
1	1.050	XXH		0.308	0.434	2.44	51.26
	1.315	STD	40	0.133	1.049	1.68	35.26
	1.315	XH	80	0.179	0.957	2.17	45.61
	1.315		160	0.250	0.815	2.84	59.72
1 1/4	1.315	XXH		0.382	0.599	3.66	76.84
	1.688		10	0.109	1.442	1.91	40.03
	1.688	STD	40	0.140	1.380	2.27	47.73
	1.688	XH	80	0.191	1.278	3.00	62.94
	1.688		160	0.250	1.160	3.77	79.07
1 1/2	1.688	XXH		0.382	0.896	5.21	109.49
	1.875		10	0.109	1.682	2.09	43.79
	1.875	STD	40	0.145	1.610	2.72	57.08
	1.875	XH	80	0.200	1.500	3.63	76.25
	1.875		160	0.281	1.338	4.86	102.04
2	1.875	XXH		0.400	1.100	6.41	134.57
	2.375		10	0.109	2.157	2.68	56.34
	2.375	STD	40	0.154	2.067	3.65	76.71
	2.375	XH	80	0.218	1.939	5.02	105.46
	2.375		160	0.343	1.689	7.44	156.32
2 1/2	2.375	XXH		0.436	1.503	9.03	189.61
	2.875		10	0.120	2.635	3.53	74.15
	2.875	STD	40	0.203	2.469	5.79	121.65
	2.875	XH	80	0.276	2.323	7.66	160.88
	2.875		160	0.375	2.125	10.01	210.21
	2.875	XXH		0.552	1.771	13.69	287.49

Continued on next page

STANDARD PIPE CHART continued

Black: Plain and Threaded & Coupled

Pipe Size	OD	Class	Schdl.	Ave. Wall	ID INCH	Lbs per Ft	Lbs Per 21 ft
3	3.500		10	0.120	3.206	4.33	90.97
	3.500	STD	40	0.216	3.068	7.58	159.10
	3.500	XH	80	0.300	2.900	10.25	215.25
	3.500		160	0.438	2.624	14.32	300.72
	3.500	XXH		0.600	2.300	18.58	390.18
3 1/2	4.000		10	0.120	3.760	4.97	104.43
	4.000	STD	40	0.230	3.548	9.11	191.29
	4.000	XH	80	0.318	3.364	12.51	262.71
	4.000	XXH		0.636	2.728	22.85	479.85
4	4.500		10	0.120	4.260	5.61	117.87
	4.500	STD	40	0.237	4.026	10.79	226.59
	4.500		60	0.281	3.938	12.66	265.86
	4.500	XH	80	0.337	3.826	14.98	314.58
	4.500		120	0.438	3.624	19.00	399.00
	4.500		160	0.531	3.438	22.51	472.71
	4.500	XXH		0.674	3.152	27.54	578.34
4 1/2	5.000	STD	40	0.247	4.506	12.53	263.13
	5.000	XH	80	0.355	4.290	17.61	369.81
	5.000	XXH		0.710	3.580	32.53	683.13
5	5.563		10	0.134	5.295	7.77	163.17
	5.563	STD	40	0.258	5.047	14.62	307.02
	5.563	XH	80	0.375	4.813	20.78	436.38
	5.563		120	0.500	4.563	27.04	567.84
	5.563		160	0.625	4.313	32.96	692.16
	5.563	XXH		0.750	4.063	38.55	809.55
6	6.625		10	0.134	6.357	9.29	195.07
	6.625	STD	40	0.280	6.065	18.97	398.37
	6.625	XH	80	0.432	5.761	28.57	599.97
	6.625		120	0.562	5.501	36.39	764.19
	6.625		160	0.718	5.189	43.50	913.50
	6.625	XXH		0.864	4.897	53.16	1116.36
8	8.625		10	0.148	8.329	22.36	469.56
	8.625		20	0.250	8.125	13.40	281.40
	8.625		30	0.277	8.071	24.70	518.70
	8.625	STD	40	0.322	7.981	28.55	599.55
	8.625		60	0.406	7.813	35.64	748.44
	8.625	XH	80	0.500	7.625	43.39	911.19
	8.625		100	0.593	7.439	50.87	1068.27
	8.625		120	0.718	7.189	60.63	1273.23

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
Pipe
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM

STANDARD PIPE CHART continued



Black: Plain and Threaded & Coupled
Galvanized: Threaded & Coupled

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 Pipe
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

Pipe Size	OD	Class	Schd	Ave. Wall	ID INCH	Lbs per Ft	Lbs Per 21 ft	
8	8.625		140	0.812	7.001	67.76	1422.96	
	8.625	XXH		0.875	6.875	72.42	1520.82	
	8.625		160	0.906	6.813	74.69	1568.49	
10	10.750		10	0.165	10.420	18.70	392.70	
	10.750		20	0.250	10.250	28.04	588.84	
	10.750	STD	40	0.365	10.020	40.48	850.08	
	10.750	XH	60	0.500	9.750	54.74	1149.54	
	10.750		80	0.593	9.564	64.33	1350.93	
	10.750		100	0.718	9.314	76.93	1615.53	
	10.750		120	0.843	9.064	89.20	1873.20	
	10.750		140	1.000	8.750	104.10	2186.10	
11	11.750	STD	40	0.375	11.000	45.55	956.55	
	11.750	XH	80	0.500	10.750	60.07	1261.47	
	12.750		10	0.180	12.390	24.20	508.20	
	12.750		20	0.250	12.250	33.38	700.98	
	12.750		30	0.330	12.090	43.77	919.17	
	12.750	STD		0.375	12.000	49.56	1040.76	
	12.750		40	0.406	11.938	53.53	1124.13	
	12.750		60	0.562	11.626	73.16	1536.36	
12	12.750	XH		0.500	11.750	65.42	1373.82	
	12.750		80	0.678	11.376	88.51	1858.71	
	12.750		100	0.843	11.064	107.20	2251.20	
	12.750		120	1.000	10.750	125.50	2635.50	
	12.750		140	1.125	10.500	139.70	2933.70	
	12.750		160	1.312	10.126	160.30	3366.30	
	14	14.000		10	0.250	13.500	36.71	770.91
		14.000		20	0.312	13.376	45.68	959.28
14.000		STD	30	0.375	13.250	54.57	1145.97	
14.000			40	0.437	13.126	63.37	1330.77	
14.000			60	0.593	12.814	84.91	1783.11	
14.000		XH		0.500	13.000	72.09	1513.89	
14.000			80	0.750	12.500	106.10	2228.10	
14.000			100	0.937	12.126	130.70	2744.70	
14.000			120	1.093	11.814	150.70	3164.70	
14.000			140	1.250	11.500	170.20	3574.20	
	14.000		160	1.406	11.188	189.10	3971.10	

Continued on next page



STANDARD PIPE CHART continued

Black: Plain and Threaded & Coupled
Galvanized: Threaded & Coupled

Pipe Size	OD	Class	Schdl.	Ave. Wall	ID INCH	Lbs per	Lbs Per 21	
16	16.000		10	0.250	15.500	42.05	883.05	
	16.000		20	0.312	15.376	52.36	1099.56	
	16.000	STD	30	0.375	15.250	62.58	1314.18	
	16.000		40	0.500	15.000	82.77	1738.17	
	16.000		60	0.656	14.688	107.50	2257.50	
	16.000	XH		0.500	15.000	82.77	1738.17	
	16.000		80	0.843	14.314	136.50	2866.50	
	16.000		100	1.031	13.938	164.80	3460.80	
	16.000		120	1.218	13.564	192.50	4042.50	
	16.000		140	1.437	13.126	223.50	4693.50	
	16.000		160	1.593	12.814	245.10	5147.10	
	18	18.000		10	0.250	17.500	47.39	995.19
		18.000	STD		0.375	17.250	70.59	1482.39
		18.000		40	0.562	16.876	104.80	2200.80
		18.000		60	0.750	16.500	138.20	2902.20
		18.000	XH		0.500	17.000	93.45	1962.45
18.000			100	1.156	15.688	208.00	4368.00	
18.000			120	1.375	15.250	244.10	5126.10	
18.000			140	1.562	14.876	274.20	5758.20	
20	20.000		10	0.250	19.500	52.73	1107.33	
	20.000	STD		0.375	19.250	78.60	1650.60	
	20.000		40	0.593	18.814	122.90	2580.90	
	20.000		60	0.812	18.376	166.40	3494.40	
	20.000	XH		0.500	19.000	104.10	2186.10	
	20.000		80	1.031	17.938	208.90	4386.90	
	20.000		100	1.280	17.440	256.10	5378.10	
	20.000		120	1.500	17.000	296.40	6224.40	
	20.000		140	1.750	16.500	341.10	7163.10	
	20.000		160	1.968	16.064	379.00	7959.00	
	22	22.000		10	0.250	21.500	58.07	1219.47
		22.000	STD	20	0.375	21.250	86.61	1818.81
22.000		XH	30	0.500	21.000	114.81	2411.00	
22.000			60	0.875	20.250	197.41	4145.61	
22.000			80	1.125	19.750	250.81	5267.01	
22.000			100	1.375	19.250	302.88	6360.48	
22.000			120	1.625	18.750	353.61	7425.81	
22.000			140	1.875	18.250	403.00	8463.00	
22.000			160	2.125	17.750	451.06	9472.26	

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INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 Pipe
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM

50 - PIPE

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
Pipe
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO



STANDARD PIPE CHART continued

Black: Plain and Threaded & Coupled
Galvanized: Threaded & Coupled

	Pipe Size	OD	Class	Schdl.	Ave. Wall	ID INCH	Lbs per Ft	Lbs Per 21
24		24.000		10	0.250	23.500	63.41	1331.61
		24.000	STD		0.375	23.250	94.62	1987.02
24		24.000		40	0.687	22.626	171.20	3595.20
		24.000		60	0.968	22.064	238.10	5000.10
		24.000	XH		0.500	23.000	125.50	2635.50
24		24.000		80	1.218	21.564	296.40	6224.40
		24.000		100	1.531	20.938	367.40	7715.40
		24.000		120	1.812	20.376	429.40	9017.40
		24.000		140	2.062	19.876	483.10	10145.10
24		24.000		160	2.344	19.312	542.13	11384.73
	26	26.000		10	0.312	25.376	85.60	1797.60
26		26.000	STD	40	0.375	25.250	102.63	2155.23
		26.000	XH	80	0.500	25.000	136.17	2859.57
28		28.000		10	0.312	27.376	92.26	1937.46
		28.000	STD	40	0.375	27.250	110.64	2323.44
30		30.000		10	0.312	29.376	98.93	2077.53
		30.000	STD	40	0.375	29.250	118.65	2491.65
		30.000	XH	80	0.500	29.000	157.53	3308.13
32		32.000		10	0.312	31.376	105.59	2217.39
		32.000	STD	40	0.375	31.250	126.66	2659.86
		32.000		40	0.688	30.624	230.08	4831.68
		32.000	XH	80	0.500	31.000	168.21	3532.41
34		34.000		10	0.312	33.376	112.25	2357.25
		34.000	STD		0.375	33.250	134.67	2828.07
		34.000		40	0.688	32.624	244.77	5140.17
36		36.000		10	0.312	35.376	118.92	2497.32
		36.000	STD		0.625	34.750	236.13	4958.73
		36.000		40	0.750	34.500	282.35	5929.35
		36.000	XH	80	0.500	35.000	189.57	3980.97

NOTES

52 - REBAR

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
Rebar
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

REBAR (Reinforcing Bar)			
Rebar is a structural member that is cast into concrete and masonry to provide strength and reinforcement			
Mechanics Properties (ASTM A615)			
Grade	40	60	75
Min. Yield Strength (ksi)	40	60	75
Min. Tensile Strength (ksi)	70	90	100
Mechanics Properties (ASTM A706)			
Grade		60	
Min. Yield Strength (ksi)		60	
Min. Tensile Strength (ksi)		80	



REBAR
Grade 40 and Grade 60
A706 (weldable)

Bar #	Diameter/ In.	Lbs/Ft.	Lbs 20/ Ft	Diam. Inch	Cross Sec- tional Area Sq. In.	Perimeter Inches	Sq. In. Bond- ing area Foot of Bar	Approximate Lift Quantities in Pieces
3	3/8	0.375	7.500	0.375	0.110	1.178	14.137	266
4	1/2	0.668	13.360	0.500	0.200	1.571	18.850	150
5	5/8	1.043	20.860	0.625	0.310	1.963	23.562	96
6	3/4	1.502	30.040	0.750	0.440	2.356	28.274	67
7	7/8	2.044	40.880	0.875	0.600	2.749	32.987	48
8	1	2.670	53.400	1.000	0.790	3.140	37.700	37
9	1 1/8	3.400	68.000	1.128	1.000	3.540	42.411	29
10	1 1/4	4.303	86.060	1.270	1.270	3.990	47.123	23
11	1 3/8	5.313	106.260	1.410	1.560	4.430	51.836	19
14	1 3/4	7.650	153.000	1.693	2.250	5.320	65.972	13
18	2 1/4	13.600	272.000	2.257	4.000	7.090	84.822	8

We can custom cut, bend, or roll rebar to your specifications. We do cages, too!

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INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
Rebar
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 INFO

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 Plate
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

HOT ROLL SHEET/PLATE

A1011 High Strength / Low Alloy Sheets have much higher minimum yield strengths, good formability and weldability. Lend themselves to applications where weight reduction is a consideration. Typical applications: formed poles, auto parts, trailers.

ASTM A1011 High-Strength low-alloy		
Minimum Properties	Ultimate Tensile Strength, psi	65,000
	Yield Strength, psi	36,000
	Elongation	25.00%
	Rockwell Hardness	B87

A36 - ASTM A36 steel is the most commonly available of the hot-rolled steels. It is generally available in round rod, square bar, rectangle bar, as well as steel shapes such as I-Beams, H-beams, and channels. The hot roll process means that the surface on this steel will be somewhat rough.

ASTM A36 Mild (low-carbon) steel		
Minimum Properties	Ultimate Tensile Strength, psi	58,000 - 79,000
	Yield Strength, psi	36,000
	Elongation	20.00%

A572 is a high strength low alloy steel plate used in a variety of structural applications. It is produced in Grades 42, 50, 60 & 65—the grades representing the yield strength. The most common Grade 50 is produced up to 4" thick. Anything over 4" is made to a Grade 42.

ASTM A572 / A 572M - 07 High strength low alloy steel plate		
Minimum Properties	Ultimate Tensile Strength, psi	60,000
	Yield Strength, psi	50,000
	Elongation	16.00%
	Rockwell Hardness	B74

HOT ROLL SHEET/PLATE

AR360 / AR400 Alloy & Abrasion Resistant Steel Plate

AR400 and AR360 are quenched & tempered through hardened wear resistant grades of abrasion resistant steel plate used for high impact and abrasion. Both AR360 and AR400 have a minimum brinell of 360.

Minimum Properties	Ultimate Tensile Strength, psi	200,000
	Yield Strength, psi	140,000
	Elongation	14.80%
	Rockwell Hardness	B113

AR360 / AR400 Alloy & Abrasion Resistant Steel Plate

AR400 and AR360 are quenched & tempered through hardened wear resistant grades of abrasion resistant steel plate used for high impact and abrasion. Both AR360 and AR400 have a minimum brinell of 360.

Minimum Properties	Ultimate Tensile Strength, psi	200,000
	Yield Strength, psi	140,000
	Elongation	14.80%
	Rockwell Hardness	B113

AR500 Alloy & Abrasion Resistant Steel Plate

AR500 is a quenched & tempered through hardened wear resistant grade of abrasion resistant steel plate used for severe impact and abrasion.

Minimum Properties	Ultimate Tensile Strength, psi	247,000
	Yield Strength, psi	187,000
	Elongation	11.10%
	Rockwell Hardness	B119

INDEX

HOT ROLL SHEET/PLATE

ROUND

A514/T1 A quenched and tempered high strength steel used in structural applications where high strength and low weight are critical

SQUARE

A514/T1 severe impact and abrasion plate.

FLAT

Minimum Properties	Ultimate Tensile Strength, psi	130,000
	Yield Strength, psi	100,000
	Elongation	18.00%
	Rockwell Hardness	B106

ANGLE

A1008 Closer thickness tolerances and better surface than pickled and oiled. The matte finish is ideal for paints, enamels and lacquers. Soft enough to bend flat on itself in any direction without cracking - ductile enough for many moderate drawing applications. Can be electroplated. Surface is protected from rust by a light oil

CHANNEL

BEAM

A1008 Cold Rolled Sheet

TUBE

Minimum Properties	Ultimate Tensile Strength, psi	49,000
	Yield Strength, psi	41,500
	Elongation	20.00%
	Rockwell Hardness	B55

PIPE

REBAR

Plate

A653 Galvanized sheets are continuously hot dip coated with a durable protective coating of zinc. Can be formed without flaking or peeling. Stamping, cold drawing, double seaming and brake or roll forming will not impair their protective qualities. Can be welded and soldered.

EXPANDED

A653 Galvanized sheets

STAINLESS

Minimum Properties	Ultimate Tensile Strength, psi	58 - 79000
	Yield Strength, psi	36,300
	Elongation	20.00%

ALUMINUM

USEFUL INFO

HOT ROLL SHEET/PLATE

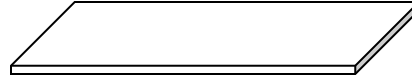
A786 Carbon Steel Diamond Plate - Also referred to as floor or tread plate, diamond plate is distinguished by a raised, evenly dispersed angular pattern embossed onto the surface of steel sheet or plate. These pattern lugs allow for self draining and is easily cleaned. Diamond plate is an economical alternative for solid floors where skid resistance is required. Its raised lug 4 way pattern is designed to resist skidding and slipping in any direction and makes possible safer and faster movement of people and materials. Diamond plate is rolled from open hearth steel and will not burn, warp, splinter or chip. Patterns are continuous on full plates in any direction subsequent plates are joined. This benefit, however, is lost once full plates are sheared to less than full plate size requirements

A786 Carbon Steel Diamond Plate.

Minimum Properties	Ultimate Tensile Strength, psi	60,000
	Yield Strength, psi	33,000
	Elongation	22.00%

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
Plate
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

HOT ROLLED SHEET A1011



INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
Plate
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

Gage	Width inches	Length inches	Lb sheet	Gage	Width inches	Length inches	Lb sheet		
16 2.5 lb sq ft	48 x	96	80	11 5 lbs sq ft	48 x	96	160		
		120	100			120	200		
		144	120			144	240		
	60 x	120	125		60 x	96	240	400	
		144	150			120	250		
		144	150			144	300		
	14 3.125 lb sq ft	48 x	96		100	10 5.625 lbs sq ft	72 x	96	240
			120		125			120	300
			144		150			144	360
		60 x	120		250		48 x	96	180
144			250	120	225				
144			250	144	270				
12 4.375 lbs sq ft		72 x	96	150	60 x		96	225	450
			120	187.5			120	281.3	
			144	187.5			144	337.5	
		72 x	144	312.5			72 x	96	270
	240		312.5	120		337.5			
	240		312.5	144		405			
	48 x	96	140	72 x		96	210	675	
		120	175			120	393.8		
		144	210			144	472.5		
		240	350			240	787.5		
240		350							
240		525							

HOT ROLLED PLATE A36 & A572

Thick-ness	Width	Length	Length	Thick-ness	Width	Length	Length				
inches	inches	inches	Lb sheet	inches	inches	inches	Lb sheet				
3/16 7.66 lb sq ft	48	x	96	245.12	1/4 10.21 lb sq ft	84	x	240	1429.4		
			120	306.4				360	2144.1		
			144	367.68				120	816.8		
			240	612.8				144	980.16		
			288	735.36				240	1633.6		
			360	919.2				288	1960.32		
	60	x	96	306.4			360	2450.4			
			120	383		120	x	240	2042		
			144	459.6		360		360	3063		
			240	766		5/16 12.76 lb sq	48	x	96	408.32	
			288	919.2					120	510.4	
			360	1149					144	612.48	
	120	459.6		240	1020.8						
	72	x	144	551.52			288	1224.96			
			240	919.2		360	1531.2				
			288	1103.04		60	x	96	510.4		
			360	1378.8				120	638		
			240	1072.4				144	765.6		
			360	1608.6				240	1276		
	84	x	120	612.8				288	1531.2		
			144	735.36				360	1914		
			240	1225.6		72	x	120	765.6		
			288	1470.72				144	918.72		
			360	1838.4				240	1531.2		
120			x	240	1532				288	1837.44	
	360	2298			360			2296.8			
	1/4 10.21 lb sq	48		x	96			326.72		84	x
					120	408.4				360	2679.6
					144	490.08		96	x	120	1020.8
					240	816.8				144	1224.96
288			980.16			240	2041.6				
360			1225.2			288	2449.92				
60	x	96	408.4			360	3062.4				
		120	510.5		120	x	240			2552	
		144	612.6				360	3828			
		240	1021								
		288	1225.2								
		360	1531.5								
72	x	120	612.6								
		144	735.12								
		240	1225.2								
		288	1470.24								
		360	1837.8								

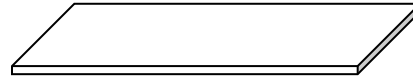
INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
Plate
EXPANDED
STAINLESS
ALUMINUM

Redding 530.243.1053

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60 - PLATE & SHEET

HR PLATE A36 & A572 continued



INDEX	Thick-ness	Width inches	Length inches	Lb sheet	Thick-ness	Width inches	Length inches	Lb sheet						
ROUND	3/8	48	x 96	489.92		72	x 120	1225.2						
SQUARE	15.31 lb sq ft		120	612.4			144	1470.24						
			144	734.88			240	2450.4						
			240	1224.8			288	2940.48						
			288	1469.76			360	3675.6						
FLAT	60	x	360	1837.2	84	x	240	2858.8						
			96	612.4			360	4288.2						
			120	765.5			96	1633.6						
			144	918.6			144	1960.32						
ANGLE	72	x	240	1531	120	x	240	3267.2						
			288	1837.2			288	3920.64						
			360	2296.5			360	4900.8						
			120	918.6			240	4084						
CHANNEL	72	x	144	1102.32	48	x	96	735.04						
			240	1837.2			22.97 lb sq ft	360	6126					
			288	2204.64										
			360	2755.8			5/8	x	96	816.64				
240	2143.4	25.52 lb sq ft												
360	3215.1													
120	1224.8		60	x	96	1020.8								
144	1469.76						120	1020.8						
240	2449.6	144							1531.2					
288	2939.52									240	2552			
360	3674.4		288	3062.4										
120	3062				360	3828								
360	4593	360					3828							
REBAR	7/16							96	x	240	2859.2	288	3062.4	
			17.87 lb sq ft	120										1276
					144	1531.2								
		240					2552							
Plate	1/2							48	x	96	653.44	72	x	
			20.42 lb sq ft	120										816.8
					144	980.16								
		240					1633.6							
288	1960.32													
			360	2450.4				84	x	240	3572.8			
					60	x						96	816.8	
		120					1021							
144	1225.2													
			240	2042										
					288	2450.4		96	x	120	2041.6			
		360					3063					144	2449.92	
240	4083.2													
			288	4899.84										
					360	6124.8								
		120					x	240	5104					
360	7656													

HR PLATE A36 & A572					continued					INDEX		
Thick-ness	Width inches	Length inches	Lb sheet	Thick-ness	Width inches	Length inches	Lb sheet	Thick-ness	Width inches		Length inches	Lb sheet
11/16 28.08 lb sq ft	48	x	288	2695.68	7/8 35.73 lb sq ft	72	x	120	2143.8	144	2572.56	ROUND
3/4 30.63 lb sq ft	48	x	96	980.16	7/8 35.73 lb sq ft	72	x	144	2572.56	144	2572.56	SQUARE
			120	1225.2				240	4287.6		FLAT	
			144	1470.24				240	5002.2		FLAT	
			240	2450.4				360	7503.3		FLAT	
			288	2940.48				360	7503.3		FLAT	
			360	3675.6				360	7503.3		FLAT	
	60	x	96	1225.2	7/8 35.73 lb sq ft	72	x	120	2858.4	144	3430.08	ANGLE
			120	1531.5				240	5716.8		ANGLE	
			144	1837.8				288	6860.16		ANGLE	
			144	1837.8				360	8575.2		ANGLE	
			240	3063				360	8575.2		ANGLE	
			288	3675.6				360	8575.2		ANGLE	
72	x	120	1837.8	7/8 35.73 lb sq ft	72	x	240	7146	360	10719	CHANNEL	
		144	2205.36				360	10719		CHANNEL		
		240	3675.6				360	10719		CHANNEL		
		288	4410.72				360	10719		CHANNEL		
		360	5513.4				360	10719		CHANNEL		
		360	5513.4				360	10719		CHANNEL		
84	x	240	4288.2	1 40.84 lb	48	x	96	1306.88	120	1633.6	BEAM	
		360	6432.3				144	1960.32		BEAM		
		360	6432.3				240	3267.2		BEAM		
		360	6432.3				288	3920.64		BEAM		
		360	6432.3				288	3920.64		BEAM		
		360	6432.3				288	3920.64		BEAM		
96	x	120	2450.4	1 40.84 lb	48	x	96	1306.88	120	1633.6	TUBE	
		144	2940.48				144	1960.32		TUBE		
		240	4900.8				144	1960.32		TUBE		
		240	4900.8				240	3267.2		TUBE		
		288	5880.96				288	3920.64		TUBE		
		360	7351.2				288	3920.64		TUBE		
120	x	240	6126	1 40.84 lb	48	x	96	1306.88	120	1633.6	PIPE	
		360	9189				144	1960.32		PIPE		
		360	9189				144	1960.32		PIPE		
		360	9189				240	4084		PIPE		
		360	9189				240	4084		PIPE		
		360	9189				288	4900.8		PIPE		
7/8 35.73 lb sq ft	48	x	96	1143.36	1 40.84 lb	48	x	96	1306.88	120	1633.6	REBAR
			120	1429.2				144	1960.32		REBAR	
			144	1715.04				144	1960.32		REBAR	
			240	2858.4				144	1960.32		REBAR	
			288	3430.08				144	1960.32		REBAR	
			360	4287.6				144	1960.32		REBAR	
	60	x	96	1429.2	1 40.84 lb	48	x	96	1306.88	120	1633.6	Plate
			120	1786.5				144	2143.8		Plate	
			144	2143.8				144	2143.8		Plate	
			240	3573				144	2143.8		Plate	
			288	4287.6				144	2143.8		Plate	
			360	5359.5				144	2143.8		Plate	

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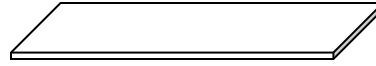
Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
Plate
EXPANDED
STAINLESS
ALUMINUM

62 - PLATE & SHEET

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
Plate
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

HR PLATE A36 & A572 continued



Thickness	Width	Length	Lb sheet	Thickness	Width	Length	Lb sheet
inches	inches	inches		inches	inches	inches	
1	96	x 144	3920.64	1 1/2	48	x 96	1960.32
40.84 lb sq ft		240	6534.4	61.26 lb sq ft		120	2450.4
		288	7841.28			144	2940.48
		360	9801.6			240	4900.8
	120	x 240	8168			288	5880.96
		360	12252			360	7351.2
1 1/8	96	x 240	7350.4		60	x 96	2450.4
45.94 lb sq ft						120	3063
						144	3675.6
1 1/4	48	x 96	1633.6			240	6126
51.05 lb sq ft						288	7351.2
		120	2042	1 1/2	60	x 360	9189
		144	2450.4	61.26 lb sq ft	72	x 120	3675.6
		240	4084			144	4410.72
		288	4900.8			240	7351.2
	60	x 96	2042			288	8821.44
		120	2552.5			360	11026.8
		144	3063		84	x 240	8576.4
		240	5105			360	12864.6
		288	6126		96	x 120	4900.8
		360	7657.5			144	5880.96
	72	x 120	3063			240	9801.6
		144	3675.6			288	11761.92
		240	6126			360	14702.4
		288	7351.2		120	x 240	12252
		360	9189			360	18378
	84	x 240	7147	1 5/8	96	x 240	10617.6
		360	10720.5	66.36 lb sq ft			
	96	x 120	4084				
		144	4900.8				
		240	8168				
		288	9801.6				
		360	12252				
	120	x 240	10210				
		360	15315				
1 3/8	96	x 240	8985.6				
56.16 lb sq ft							

For piece weight on thicker material, find the desired thickness, then multiply the "Lb sq ft" times the length and width.
Lb sq ft x width x length

HR PLATE A36 & A572 continued

Thickness	Width inches		Length inches	Lb sheet	Thickness	Width inches		Length inches	Lb sheet
1 3/4	48	x	96	2287.04	2	72	x	120	4900.8
71.47 lb sq ft			120	2858.8	81.68 lb sq ft			144	5880.96
			144	3430.56				240	9801.6
			240	5717.6				288	11761.92
			288	6861.12				360	14702.4
			360	8576.4		84	x	240	11435.2
	60	x	96	2858.8		96	x	120	6534.4
			120	3573.5				144	7841.28
			144	4288.2				240	13068.8
			240	7147				288	15682.56
			288	8576.4				360	19603.2
			360	10720.5				360	19603.2
	72	x	120	4288.2		120	x	240	16336
			144	5145.84				360	24504
			240	8576.4					
			288	10291.7					
			360	12864.6					
	84	x	240	10005.8					
			360	15008.7					
	96	x	120	5717.6					
			144	6861.12					
			240	11435.2					
			288	13722.2					
			360	17152.8					
	120	x	240	14294					
			360	21441					
1 7/8	96	x	240	12251.2					
76.57 lb sq ft									
2	48	x	96	2613.76					
81.68 lb sq ft			120	3267.2					
			144	3920.64					
			240	6534.4					
			288	7841.28					
			360	9801.6					
	60	x	96	3267.2					
			120	4084					
			144	4900.8					
			240	8168					
			288	9801.6					
			360	12252					

Thickness Lb sq ft

- 3 1/4 **132.72**
- 3 1/2 **142.93**
- 3 3/4 **153.14**
- 4 **163.35**
- 4 1/4 **173.56**
- 4 1/2 **183.77**
- 5 **204.19**
- 5 1/2 **224.61**
- 6 **245.03**
- 6 1/2 **265.45**
- 7 **285.87**
- 7 1/2 **306.29**
- 8 **326.71**
- 8 1/2 **347.13**
- 9 **367.55**
- 10 **408.38**
- 12 **490.06**

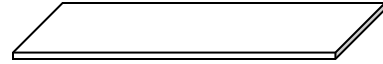
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INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR ALUMINUM STAINLESS EXPANDED Plate

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
Plate
 EXPANDED
 STAINLESS
 ALUMINUM
 USEFUL INFO

PLATE—ABRASION / ALLOY



**ABRASION RESISTANT PLATE
 AR, AR400F, AR500**

**ALLOY PLATE
 A514 T1**

	Thickness	Width inches	Length inches	Lb sheet	Thickness	Width inches	Length inches	Lb sheet
	3/16	96	x 288	1470	3/16	96	x 240	1225
	1/4	96	x 288	1960	1/4	96	x 240	1634
	5/16	96	x 288	2450	5/16	96	x 240	2042
	3/8	96	x 288	2940	3/8	96	x 240	2450
	1/2	96	x 288	3920	1/2	96	x 240	3267
	5/8	96	x 288	4901	5/8	96	x 240	4084
	3/4	96	x 288	5881	3/4	96	x 240	4901
	7/8	96	x 288	6861	7/8	96	x 240	5717
	1	96	x 288	7841	1	96	x 240	6534
	1 1/8	96	x 288	8821	1 1/8	96	x 240	7351
	1 1/4	96	x 288	9801	1 1/4	96	x 240	8168
	1 1/2	96	x 288	11761	1 1/2	96	x 240	9801
	1 3/4	96	x 288	13722	1 3/4	96	x 240	11435
	2	96	x 288	15682	2	96	x 240	13068
	2 1/4	96	x 240	14701	2 1/4	96	x 240	14702
	2 1/2	96	x 240	16335	2 1/2	96	x 240	16335
	2 3/4	96	x 240	17969				
	3	96	x 240	19602				
	3 1/4	96	x 240	21236				
	3 1/2	96	x 240	22870				
	3 3/4	96	x 240	24503				
	4	96	x 240	26137				

COLD ROLLED SHEET A1008 *

Gage	Width Inches	Length Inches	Lb sq ft	Lb Sheet	Gage	Width Inches	Length Inches	Lb sq ft	Lb Sheet	INDEX
28	36	96	0.63	15.0	16	36 x	96	2.50	60.0	ROUND
		120	0.63	18.8			120	2.50	75.0	SQUARE
26	36	96	0.75	18.0		48 x	96	2.50	80.0	FLAT
		120	0.75	22.5			120	2.50	100.0	SQUARE
24	36	96	1.00	24.0	14	36 x	96	3.13	75.0	ANGLE
		120	1.00	30.0			120	3.13	93.8	ANGLE
	48	96	1.00	32.0		48 x	96	3.13	100.0	CHANNEL
		120	1.00	40.0			120	3.13	125.0	CHANNEL
22	36 x	96	1.25	30.0	12	36 x	96	4.38	105.0	BEAM
		120	1.25	37.5			120	4.38	131.3	BEAM
	48 x	96	1.25	40.0		48 x	96	4.38	140.0	TUBE
		120	1.25	50.0			120	4.38	175.0	TUBE
20	36 x	96	1.50	36.0		60 x	120	4.38	218.8	PIPE
		120	1.50	45.0			11	36 x	96	5.00
	48 x	96	1.50	48.0		48 x			96	5.00
		120	1.50	60.0			120	5.00	200.0	REBAR
18	36 x	96	2.00	48.0		60 x	96	5.00	200.0	EXPANDED
		120	2.00	60.0			120	5.00	250.0	EXPANDED
	48 x	96	2.00	64.0	10	36 x	96	5.63	135.0	STAINLESS
		120	2.00	80.0			120	5.63	168.8	STAINLESS
						48 x	96	5.63	180.0	ALUMINUM
							120	5.63	225.0	ALUMINUM
						60 x	120	5.63	281.3	ALUMINUM

* 144" Length also available in some sizes, ask your sales representative.

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Plate

EXPANDED

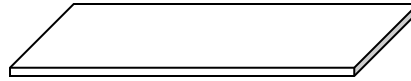
STAINLESS

ALUMINUM

ALUMINUM

USEFUL INFO

GALVANIZED SHEET A653*

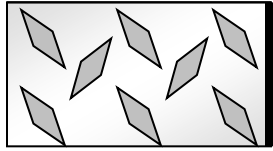


INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
Plate
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

Gage	Width Inches	Length Inches	Lb sq ft	Lb Sheet
30	36	96	0.656	15.7
		120	0.656	19.7
28	30	96	0.781	15.6
		120	0.781	19.5
	36	96	0.781	18.7
		120	0.781	23.4
26	30	96	0.906	18.1
		120	0.906	22.7
	36	96	0.906	21.7
		120	0.906	27.2
	48	96	0.906	29.0
		120	0.906	36.2
24	30	96	1.156	23.1
		120	1.156	28.9
	36	96	1.156	27.7
		120	1.156	34.7
	48	96	1.156	37.0
		120	1.156	46.2
22	30	96	1.406	28.1
		120	1.406	35.2
	36	96	1.406	33.7
		120	1.406	42.2
	48	96	1.406	45.0
		120	1.406	56.2
	60	120	1.406	70.3
20	30	96	1.656	33.1
		120	1.656	41.4
	36	96	1.656	39.7
		120	1.656	49.7
	48	96	1.656	53.0
		120	1.656	66.2
	60	120	1.656	82.8

Gage	Width Inches	Length Inches	Lb sq ft	Lb Sheet
18	30	96	2.156	43.1
		120	2.156	53.9
	36	96	2.156	51.7
		120	2.156	64.7
	48	96	2.156	69.0
		120	2.156	86.2
	60	120	2.156	107.8
16	30	96	2.656	53.1
		120	2.656	66.4
	36	96	2.656	63.7
		120	2.656	79.7
	48	96	2.656	85.0
		120	2.656	106.2
	60	120	2.656	132.8
14	30	96	3.281	65.6
		120	3.281	82.0
	36	96	3.281	78.7
		120	3.281	98.4
	48	96	3.281	105.0
		120	3.281	131.2
	60	120	3.281	164.1
12	30	96	4.531	90.6
		120	4.531	113.3
	36	96	4.531	108.7
		120	4.531	135.9
	48	96	4.531	145.0
		120	4.531	181.2
10	30	96	5.781	115.6
		120	5.781	144.5
	36	96	5.781	138.7
		120	5.781	173.4
	48	96	5.781	185.0
		120	5.781	231.2
	60	96	5.781	231.2
		120	5.781	289.1

* 144" Length also available , ask your sales representative.



DIAMOND / FLOOR PLATE

A786

Thick- ness	Width inches	Length inches	Lb sq		Thick- ness	Width inches	Length inches	Lb sq ft	Lbs sheet	
			ft	Lbs sheet						
16 GA	48	96	3.00	96.0	1/4	48	96	11.26	360.3	SQUARE
		120	3.00	120.0		48	120	11.26	450.4	
	144	3.00	144.0	48		144	11.26	540.5	FLAT	
14 GA	48	96	3.75	120.0	1/4	60	120	11.26		563.0
		120	3.75	150.0		60	144	11.26	675.6	
12 GA	48	96	5.25	168.0	1/4	72	120	11.26	675.6	ANGLE
		120	5.25	210.0		72	144	11.26	810.7	
	144	5.25	252.0	96		240	11.26	1801.6		
1/8	48	96	6.15	196.8	5/16	48	96	13.81	441.9	CHANNEL
		120	6.15	246.0		48	120	13.81	552.4	
	48	144	6.15	295.2	5/16	48	144	13.81	662.9	CHANNEL
		60	120	5.25		262.5	60	120	13.81	
	60	144	5.25	315.0	5/16	60	144	13.81	828.6	BEAM
			72	120		6.15	196.8	72	120	
3/16	48	96	8.71	278.7	3/8	48	96	16.37	523.8	PIPE
		120	8.71	348.4		48	120	16.37	654.8	
	48	144	8.71	442.8	3/8	48	144	16.37	785.8	PIPE
		60	120	6.15		307.5	60	120	16.37	
	60	144	6.15	369.0	3/8	60	144	16.37	982.2	REBAR
			72	120		6.15	369.0	72	120	
3/16	48	96	8.71	278.7	3/8	72	144	16.37	1178.6	REBAR
		120	8.71	348.4		72	144	16.37	1178.6	
	48	144	8.71	442.8	3/8	72	144	16.37	1178.6	REBAR
		60	96	8.71		348.4	96	240	16.37	
	60	120	8.71	435.5	1/2	48	96	21.47	687.0	EXPANDED
			48	120		21.47	858.8	48	120	
60	144	8.71	522.6	1/2	48	144	21.47	1030.6	EXPANDED	
		60	120		8.71	435.5	60	120		21.47
72	120	8.71	522.6	1/2	60	144	21.47	1288.2	STAINLESS	
		60	144		8.71	522.6	72	120		21.47
72	144	8.71	627.12	1/2	72	144	21.47	1545.8	ALUMINUM	
		60	120		8.71	435.5	96	240		21.47

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INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
Plate
EXPANDED
STAINLESS
ALUMINUM

68 - EXPANDED

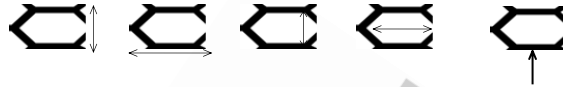
EXPANDED METAL - RAISED



INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
Expanded
STAINLESS
ALUMINUM
USEFUL INFO

STYLE #.	% OPEN AREA	GAGE	LBS Sq Ft	◇ Size Short Way	◇ Size Long Way	Opening Size Short Way	Opening Size Long Way	Strand (W)	Strand (T)	Overall Thickness
1/4 - 20	40	20	0.86	0.26	1	0.13	0.69	0.076	0.036	0.125
18	40	18	1.14	0.26	1	0.13	0.69	0.076	0.047	0.125
1/2 - 20	71	20	0.43	0.46	1.2	0.38	0.88	0.066	0.036	0.134
18	65	18	0.7	0.51	1.2	0.38	0.95	0.089	0.047	0.161
16	65	16	0.86	0.51	1.2	0.38	0.89	0.089	0.059	0.159
13	61	13	1.47	0.5	1.2	0.35	0.9	0.098	0.089	0.199
3/4 - 16	76	16	0.54	0.88	2	0.7	1.64	0.095	0.059	0.183
13	76	13	0.8	0.88	2	0.76	1.64	0.095	0.089	0.185
10	69	10	1.2	0.89	2	0.68	1.56	0.141	0.089	0.277
9	68	9	1.8	0.86	2	0.6	1.45	0.137	0.134	0.29
1 - 16	82	16	0.47	1.01	2.38	0.88	1.94	0.095	0.059	0.21
1 1/2 - 16	85	16	0.4	1.35	3	1.18	2.6	0.112	0.059	0.21
13	85	13	0.6	1.35	3	1.2	2.6	0.112	0.089	0.213
10	81	10	0.79	1.35	3	1.16	2.52	0.14	0.089	0.248
9	76	9	1.19	1.33	3	1.14	2.43	0.141	0.134	0.289
6	70	6	2.5	1.33	3	1	2.31	0.203	0.198	0.41

EXPANDED METAL - FLAT



STYLE #	% OPEN AREA	GAGE	LBS Sq Ft	◇ Size Short Way	◇ Size Long Way	Opening Size Short Way	Opening Size Long Way	Strand (W)	Strand (T)	Overall Thickness
1/4- 20	34	20	0.83	0.26	1.03	0.09	0.7	0.086	0.031	0.031
18	34	18	1.11	0.26	1.03	0.09	0.7	0.086	0.042	0.042
1/2- 20	64	20	0.41	0.44	1.25	0.31	0.94	0.07	0.032	0.32
18	58	18	0.66	0.51	1.26	0.29	1	0.109	0.038	0.038
16	60	16	0.82	0.51	1.26	0.3	1	0.103	0.05	0.05
13	52	13	1.38	0.5	1.26	0.26	0.97	0.122	0.07	0.07
3/4 - 16	74	16	0.51	0.88	2	0.65	1.75	0.115	0.048	0.048
13	73	13	0.76	0.88	2	0.64	1.75	0.119	0.07	0.07
10	69	10	1.2	0.89	2	0.68	1.56	0.141	0.089	0.07
9	62	9	1.71	0.86	2.1	0.53	1.63	0.164	0.11	0.11
1- 16	78	16	0.45	1.01	2.5	0.78	2.06	0.115	0.048	0.048
1 1/2- 16	85	16	0.38	1.35	3.19	1.13	2.69	0.123	0.048	0.048
13	80	13	0.57	1.35	3.15	1.07	2.68	0.138	0.07	0.07
9	74	9	1.13	1.33	3.25	1	2.62	0.175	0.106	0.11

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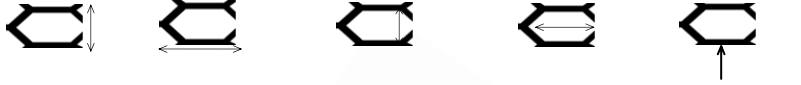
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INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
Expanded
STAINLESS
ALUMINUM

70 - EXPANDED

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE

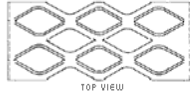
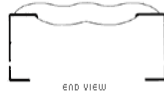
GRATE-X



STYLE	% OPEN AREA	MATERIAL THICKNESS	LBS Sq Ft	◇ Size Short Way	◇ Size Long Way	Opening Size Short Way	Opening Size Long Way	Strand (W)	Strand (T)	Overall Thickness
3.0 lb	60	3/16	3	1.33	5.33	0.95	3.5	0.264	0.183	9/16
3.12 lb	69	1/4	3.12	2	6	1.63	4.88	0.312	0.25	11/16
4.0 lb	62	7/32	4	1.33	5.33	0.83	3.3	0.3	0.215	5/8
4.27 lb	58	1/4	4.27	1.41	4	1	2.88	0.3	0.25	5/8
5.0 lb	57	1/4	5	1.33	5.33	0.76	3.2	0.331	0.25	11/16
6.25 lb	53	5/16	6.25	1.41	5.33	0.75	3.1	0.35	0.312	3/4
7.0 lb	49	5/16	7	1.41	5.33	0.69	3.05	0.391	0.312	3/4

Expanded

STAINLESS
ALUMINUM
USEFUL INFO



**GRIP STRUT STYLE® DIAMOND
PLANK SAFETY GRATING 10 & 12'**

Width	Diamond	Gage	Channel Height Inches	Lbs. Foot	
4 3/4	2	14	1 1/2	2.3	
			2	2.6	
			2 1/2	2.8	
			1 1/2	3.2	
			2	3.6	
			2 1/2	4.0	
	7	3	14	1 1/2	3.0
				2	3.2
				2 1/2	3.5
				1 1/2	4.1
				2	4.5
				2 1/2	4.9
9 1/2	4	14	3	5.2	
			1 1/2	3.6	
			2	3.8	
			2 1/2	4.1	
			1 1/2	5.0	
			2	5.4	
	11 3/4	5	14	2 1/2	5.7
				3	6.1
				1 1/2	4.2
				2	4.4
				2 1/2	4.7
				1 1/2	5.9
18 3/4	8	14	2	6.2	
			2 1/2	6.6	
			3	7.0	
			1 1/2	6.1	
			2	6.3	
			2 1/2	6.6	
24	10	14	1 1/2	8.5	
			2	8.9	
			2 1/2	9.2	
			3	9.6	
			2	7.4	
			3	7.9	
12	14	2	10.4		
		3	11.1		
		3	11.1		

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INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
Expanded
STAINLESS
ALUMINUM

72 - STAINLESS



INDEX

STAINLESS ROUND BAR & SHAFTING

12' RANDOM LENGTHS 303, 304, 304L, 316, 316L, 17-4

ROUND

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

EXPANDED

Stainless

ALUMINUM

Useful Info

Size inches	Est lb foot	Est lb 12'	Size inches	Est lb foot	Est lb 12'
1/8	0.04	0.50	2 1/2	16.69	200.28
3/16	0.09	1.13	2 9/16	17.53	210.36
1/4	0.17	2.00	2 5/8	18.40	220.80
5/16	0.26	3.13	2 11/16	19.29	231.48
3/8	0.38	4.51	2 3/4	20.20	242.40
7/16	0.51	6.13	2 13/16	21.12	253.44
1/2	0.67	8.04	2 7/8	22.08	264.96
9/16	0.85	10.20	2 15/16	23.04	276.48
5/8	1.04	12.48	3	24.03	288.36
11/16	1.26	15.14	3 1/16	25.05	300.60
3/4	1.50	18.00	3 1/8	26.08	312.96
13/16	1.76	21.16	3 3/16	27.13	325.56
7/8	2.04	24.48	3 1/4	28.21	338.52
15/16	2.35	28.16	3 5/16	29.30	351.60
1	2.67	32.04	3 3/8	30.42	365.04
1 1/16	3.01	36.17	3 7/16	31.55	378.60
1 1/8	3.38	40.55	3 1/2	32.71	392.52
1 3/16	3.77	45.19	3 5/8	35.09	421.08
1 1/4	4.17	50.08	3 11/16	36.31	435.72
1 15/16	4.60	55.20	3 3/4	37.55	450.60
1 3/8	5.05	60.59	3 7/8	40.10	481.20
1 7/16	5.52	66.22	3 15/16	41.40	496.80
1 1/2	6.01	72.06	4	42.73	512.76
1 9/16	6.52	78.24	4 1/8	45.40	544.80
1 5/8	7.05	84.61	4 1/4	48.23	578.76
1 11/16	7.60	91.25	4 3/8	51.11	613.32
1 3/4	8.18	98.14	4 7/16	52.58	630.96
1 13/16	8.77	105.28	4 1/2	54.08	648.96
1 7/8	9.34	112.06	4 5/8	57.12	685.44
1 15/16	10.02	120.24	4 3/4	60.25	723.00
2	10.68	128.16	4 7/8	63.48	761.76
2 1/16	11.36	136.32	4 15/16	65.10	781.20
2 1/8	12.06	144.72	5	66.76	801.12
2 3/16	12.78	153.36	5 1/8	70.10	841.20
2 1/4	13.52	162.24	5 1/4	73.60	883.20
2 5/16	14.28	171.36	5 3/8	77.15	925.80
2 3/8	15.06	180.72	5 7/16	78.95	947.40
2 7/16	15.87	190.44	5 1/2	80.78	969.36
			5 5/8	84.48	1013.76

STAINLESS ROUND BAR & SHAFTING

12' RANDOM LENGTHS 303, 304, 304L, 316, 316L, 17-4

Size inches	Est lb foot	Est lb 12'	Size inches	Est lb foot	Est lb 12'
5 3/4	88.29	1059.48	9	216.30	2595.60
5 15/16	94.14	1129.68	9 1/4	228.50	2742.00
6	96.13	1153.56	9 1/2	241.00	2892.00
6 1/8	100.20	1202.40	9 3/4	253.80	3045.60
6 1/4	104.30	1251.60	10	267.00	3204.00
6 1/2	112.80	1353.60	10 1/2	295.20	3542.40
6 3/4	121.70	1460.40	11	324.00	3888.00
7	130.90	1570.80	11 1/2	354.00	4248.00
7 1/4	140.10	1681.20	12	385.56	4626.72
7 1/2	150.20	1802.40	12 1/2	420.00	5040.00
7 3/4	160.40	1924.80	13	451.29	5415.48
8	170.90	2050.80	13 1/2	487.00	5844.00
8 1/4	182.70	2192.40	14	523.32	6279.84
8 1/2	192.90	2314.80	15	601.00	7212.00
8 3/4	204.50	2454.00	16	684.00	8208.00



STAINLESS SQUARE BAR

12' RANDOM LENGTHS 304, 316

Size inches	Est lbs ft	Est lbs 12'	Size inches	Est lbs ft	Est lbs 12'
1/8	0.05	0.64	1	3.40	40.80
3/16	0.12	1.44	1 1/16	3.84	46.08
1/4	0.23	2.77	1 1/8	4.30	51.64
5/16	0.33	3.98	1 3/16	4.80	57.54
3/8	0.48	5.74	1 1/4	5.31	63.76
7/16	0.65	7.81	1 3/8	6.43	77.14
1/2	0.85	10.20	1 1/2	7.65	91.80
9/16	1.08	12.91	1 3/4	10.41	124.92
5/8	1.33	15.94	1 7/8	11.95	143.40
11/16	1.61	19.28	2	13.60	163.20
3/4	1.91	22.96	2 1/2	21.25	255.00
7/8	2.60	31.24	3	30.60	367.20
15/16	2.99	35.86	3 1/2	41.65	499.80
			4	54.40	652.80

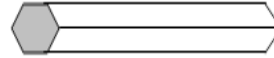
Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED ALUMINUM

Stainless

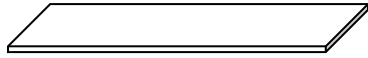
74 - STAINLESS



STAINLESS HEX BAR 12' RANDOM LENGTH 304, 316

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 Stainless
 ALUMINUM
 Useful Info

Size in inches	Est lb ft	Est lb 12'
1/8	0.046	0.552
3/16	0.104	1.248
15/64	0.163	1.956
1/4	0.184	2.208
5/16	0.288	3.456
3/8	0.414	4.968
25/64	0.449	5.388
7/16	0.564	6.768
1/2	0.736	8.832
9/16	0.932	11.184
5/8	1.15	13.8
11/16	1.392	16.704
3/4	1.656	19.872
13/16	1.94	23.28
7/8	2.254	27.048
15/16	2.588	31.056
1	2.945	35.34
1 1/16	3.324	39.888
1 1/8	3.727	44.724
1 3/16	4.152	49.824
1 1/4	4.601	55.212
1 5/16	5.073	60.876
1 3/8	5.57	66.84
1 1/2	6.625	79.5
1 5/8	7.78	93.36
1 3/4	9.02	108.24
1 13/16	9.673	116.076
1 7/8	10.4	124.8
2	11.78	141.36
2 1/4	14.91	178.92
2 1/2	18.4	220.8
3	26.5	318



STAINLESS - 75

STAINLESS STEEL FLAT BAR
12' RANDOM LENGTH 304, 316

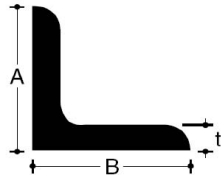
Size in inches		Est lb ft	Est lb 12'	Size in inches		Est lb ft	Est lb 12'	
1/8 x	1/4	0.11	1.27	1/4 x	3/8	0.32	3.83	
	3/8	0.16	1.91		1/2	0.43	5.10	
	1/2	0.21	2.56		5/8	0.53	6.37	
	5/8	0.27	3.19		3/4	0.64	7.66	
	3/4	0.32	3.83		7/8	0.74	8.93	
	7/8	0.37	4.46		1	0.85	10.20	
	1	0.43	5.10		1 1/4	1.06	12.76	
	1 1/4	0.53	6.37		1 1/2	1.28	15.30	
	1 1/2	0.64	7.66		1 3/4	1.49	17.86	
	1 3/4	0.74	8.93		2	1.70	20.40	
	2	0.85	10.20		2 1/4	1.91	22.96	
	2 1/4	0.96	11.47		2 1/2	2.13	25.50	
	2 1/2	1.06	12.76		2 3/4	2.34	28.06	
	3	1.28	15.30		3	2.55	30.60	
	3 1/4	1.38	16.57		3 1/4	2.76	33.12	
	3 1/2	1.49	17.88		3 1/2	2.98	35.70	
	4	1.70	20.40		3 3/4	3.19	38.28	
	3/16 x	5	2.13		25.50	4	3.34	40.08
5 1/2		2.34	28.06	4 1/4	3.61	43.36		
6		2.55	30.60	4 1/2	3.83	45.90		
3/8 x		3/8	0.24	2.87	5	4.25	51.00	
		1/2	0.32	3.83	5 1/2	4.68	56.10	
		5/8	0.40	4.78	6	5.10	61.20	
		3/4	0.48	5.74	7	5.95	71.40	
		7/8	0.56	6.70	3/8 x	1/2	0.64	7.66
		1	0.64	7.66		5/8	0.80	9.56
		1 1/4	0.80	9.56		3/4	0.96	11.47
		1 1/2	0.96	11.47		7/8	1.12	13.39
		1 3/4	1.12	13.39		1	1.28	15.30
		2	1.28	15.30		1 1/4	1.59	19.13
		2 1/4	1.43	17.21		1 1/2	1.91	22.96
		2 1/2	1.59	19.13		1 3/4	2.23	26.77
		2 3/4	1.75	21.04		2	2.55	30.60
		3	1.91	22.96		2 1/4	2.87	34.43
		3 1/2	2.23	26.77		2 1/2	3.19	38.26
	4	2.55	30.60	2 3/4		3.51	42.07	
	4 1/2	2.87	34.43	3		3.83	45.96	
	5	3.19	38.26	3 1/4		4.14	49.73	
6	3.83	45.90	3 1/2	4.47		53.64		
			4	5.10		61.20		
			4 1/2	5.74		68.86		

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED ALUMINUM

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

Stainless



STAINLESS STEEL ANGLE
 20' RANDOM LENGTH
 304, 316

A		B		t	Est lb ft	Est lb 20'
3/4	x	3/4	x	1/8	0.59	11.80
1	x	1	x	1/8	0.80	16.00
				3/16	1.16	23.20
				1/4	1.49	29.80
1 1/4	x	1 1/4	x	1/8	1.01	20.20
				3/16	1.48	29.60
				1/4	1.92	38.40
1 1/2	x	1 1/2	x	1/8	1.23	24.60
				3/16	1.80	36.00
				1/4	2.34	46.80
2	x	2	x	1/8	1.65	33.00
				3/16	2.44	48.80
				1/4	3.19	63.80
				3/8	4.70	94.00
2 1/2	x	2 1/2	x	3/16	3.07	61.40
				1/4	4.10	82.00
				3/8	5.90	118.00
3	x	2	x	3/16	3.07	61.40
				1/4	4.10	82.00
				3/8	5.90	118.00
3	x	3	x	3/16	3.71	74.20
				1/4	4.90	98.00
				3/8	7.20	144.00
				1/2	9.40	188.00
4	x	3	x	1/4	5.75	115.00
				3/8	8.48	169.60
4	x	4	x	1/4	6.60	132.00
				5/16	8.20	164.00
				3/8	9.80	196.00
				1/2	12.80	256.00
5	x	3	x	3/8	9.85	197.00
		5	x	3/8	12.30	246.00
6	x	3	x	3/8	11.02	220.40
6	x	4	x	1/4	9.21	184.20
				3/8	12.30	246.00
6	x	6	x	3/8	14.90	298.00

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 Stainless
 ALUMINUM
 USEFUL INFO

78 - STAINLESS

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
Stainless
ALUMINUM
Useful Info

STAINLESS STEEL CHANNEL

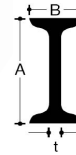
20' RANDOM LENGTH 304, 316



A		B		t	Est lb ft	Est lb 20'
1 1/2	x	3/4	x	1/8	1.2	24
2	x	1	x	1/8	1.53	30.6
2	x	1	x	1/4	3.15	63
3	x	1 3/8	x	3/16	4.19	83.8
3	x	1 1/2	x	1/4	4.7	94
4	x	1 3/4	x	1/4	6.69	133.8
5	x	1 7/8	x	3/8	10.43	208.6
6	x	1.9	x	0.343	8.3	166
8	x	2.53	x	0.39	18.8	376

STAINLESS STEEL BEAM

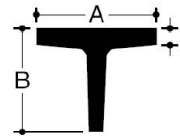
20' RANDOM LENGTH 304, 316



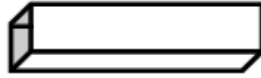
A		B		t	Est lb ft	Est lb 20'
3	x	2 3/8	x	1/4	6.6	132
4	x	2 3/4	x	1/4	8.44	168.8
5	x	3	x	1/3	11.37	227.4
6	x	3.33	x	1/3	14.9	298

STAINLESS STEEL TEE

20' RANDOM LENGTH 304, 316



A		B		t	Est lb ft	Est lb 20'
2	x	2	x	1/4	3.19	63.8
2 1/2	x	2 1/2	x	1/4	4.09	81.8
3	x	3	x	1/4	4.97	99.4
4	x	4	x	3/8	9.74	194.8



STAINLESS STEEL SQUARE TUBE
20' RANDOM LENGTH 304, 316

Height		Width		Wall Thickness	Est lb ft	Est lb 20'
1/2	x	1/2	x	0.065	0.389	7.77
3/4	x	3/4	x	0.062	0.58	11.6
1	x	1	x	0.049	0.63	12.6
				0.065	0.827	16.54
				0.083	1.04	20.8
				0.109	1.32	26.4
				0.120	1.436	28.72
1 1/4	x	1 1/4	x	0.065	1.05	21
				0.083	1.317	26.34
				0.109	1.69	33.8
				0.120	1.844	36.88
1 1/2	x	1 1/2	x	0.065	1.27	25.4
				0.083	1.61	32.2
				0.109	2.06	41.2
				0.120	2.255	45.1
				0.180	3.63	72.6
1 3/4	x	1 3/4	x	0.083	1.88	37.6
				0.062	1.64	32.8
				0.065	1.71	34.2
				0.083	2.164	43.28
				0.109	2.8	56
2	x	2	x	0.120	3.068	61.36
				0.180	4.455	89.1
				0.188	4.46	89.2
				0.250	5.95	119
				0.120	3.89	77.8
2 1/2	x	2 1/2	x	0.180	5.68	113.6
				0.083	3.293	65.86
				0.120	4.7	94
				0.180	6.903	138.06
3	x	3	x	0.188	6.9	138
				0.250	9.35	187
				0.120	6.33	126.6
				0.180	9.35	187
				0.188	11.9	238
4	x	4	x	0.250	16.35	327
				0.375	23.53	470.6
				0.250	12.75	255
				0.250	18.77	375.4
5	x	5	x	0.375	38.89	777.8

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

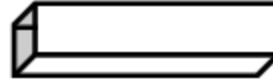
INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
Stainless
ALUMINUM
USEFUL INFO

80 - STAINLESS

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
Stainless
ALUMINUM
Useful Info

STAINLESS STEEL RECTANGLE TUBE

20' RANDOM LENGTH 304, 316



Width		Height		Wall Thickness	Est lb ft	Est lb 20'
1 1/2	x	1	x	0.12	1.929	38.58
2	x	1	x	0.065	1.27	25.4
				0.12	2.252	45.04
3	x	1 1/2	x	0.12	3.48	69.6
3	x	2	x	0.12	3.884	77.68
				0.18	5.679	113.58
4	x	2	x	0.12	4.7	94
				0.18	6.903	138.06
				0.25	9.35	187
6	x	2	x	0.18	9.27	185.4
				0.25	12.68	253.6
4	x	3	x	0.18	8.127	162.54
				0.25	10.89	217.8
5	x	3	x	0.18	9.27	185.4
				0.25	12.68	253.6
6	x	3	x	0.18	10.52	210.4
6	x	4	x	0.18	11.9	238
				0.25	16.35	327
8	x	4	x	0.25	18.77	375.4
				0.375	28.69	573.8

STAINLESS STEEL ROUND TUBE

20' RANDOM LENGTH 304

OD	GA	WALL	ID	WT/FT	OD	GA	WALL	ID	WT/FT
1/8	22	0.028	0.069	0.029	1/2	22	0.028	0.444	0.141
1/8	20	0.035	0.055	0.034	1/2	20	0.035	0.430	0.174
3/16	22	0.028	0.132	0.048	1/2	18	0.049	0.402	0.236
3/16	20	0.035	0.118	0.057	1/2	16	0.065	0.370	0.302
1/4	22	0.028	0.194	0.066	1/2	13	0.095	0.310	0.411
1/4	20	0.035	0.180	0.080	5/8	22	0.028	0.569	0.179
1/4	18	0.049	0.152	0.105	5/8	20	0.035	0.555	0.221
1/4	16	0.065	0.120	0.128	5/8	18	0.049	0.527	0.301
5/16	22	0.028	0.257	0.085	5/8	16	0.065	0.495	0.389
5/16	20	0.035	0.243	0.104	5/8	14	0.083	0.459	0.481
5/16	18	0.049	0.215	0.138	5/8	11	0.120	0.385	0.647
5/16	16	0.065	0.183	0.172	3/4	20	0.035	0.680	0.267
3/8	22	0.028	0.319	0.104	3/4	18	0.049	0.652	0.367
3/8	20	0.035	0.305	0.127	3/4	16	0.065	0.620	0.476
3/8	18	0.049	0.277	0.171	3/4	13	0.095	0.560	0.665
3/8	16	0.065	0.245	0.215	3/4	11	0.120	0.510	0.807
7/16	20	0.035	0.368	0.151	7/8	20	0.035	0.805	0.314
7/16	18	0.049	0.340	0.204	7/8	18	0.049	0.777	0.432
7/16	16	0.065	0.308	0.259	7/8	16	0.065	0.745	0.562
					7/8	11	0.120	0.635	0.968

STAINLESS STEEL ROUND TUBE

20' RANDOM LENGTH 304

OD	GA	WALL	ID	WT/FT	OD	GA	WALL	ID	WT/FT	INDEX	
1	20	0.035	0.930	0.361	2	20	0.035	1.930	0.733	ROUND	
1	18	0.049	0.902	0.498	2	18	0.049	1.903	1.021	ROUND	
1	16	0.065	0.870	0.649	2	16	0.065	1.870	1.343	SQUARE	
1	14	0.083	0.834	0.813	2	14	0.083	1.834	1.699	SQUARE	
1	13	0.095	0.810	0.918	2	11	0.120	1.760	2.409	FLAT	
1	11	0.120	0.760	1.126	2	3/16	0.188	1.625	3.638	FLAT	
1	3/16	0.188	0.625	1.630	2	1/4	0.250	1.500	4.673	FLAT	
1	1/4	0.250	0.500	2.003	2	1/4	16	0.065	2.120	1.517	ANGLE
1	1/4	20	0.035	1.180	2	1/4	3/16	0.188	1.874	4.140	ANGLE
1	1/4	18	0.049	1.152	2	1/4	1/4	0.250	1.750	5.340	ANGLE
1	1/4	16	0.065	1.120	2	1/2	18	0.049	2.402	1.283	CHANNEL
1	1/4	14	0.083	1.084	2	1/2	0.065	0.065	2.370	1.690	CHANNEL
1	1/4	11	0.120	1.010	2	1/2	14	0.083	2.334	2.143	CHANNEL
1	1/4	3/16	0.188	0.874	2	1/2	11	0.120	2.260	3.050	CHANNEL
1	1/4	1/4	0.250	0.750	2	1/2	1/4	0.250	2.000	6.008	CHANNEL
1	1/2	20	0.035	1.430	2	3/4	11	0.120	2.510	3.371	BEAM
1	1/2	18	0.049	1.402	3	16	0.065	2.870	2.037	BEAM	
1	1/2	16	0.065	1.370	3	14	0.083	2.834	2.586	TUBE	
1	1/2	14	0.083	1.334	3	0.109	0.109	2.782	3.365	TUBE	
1	1/2	11	0.120	1.260	3	11	0.120	2.760	3.691	TUBE	
1	1/2	3/16	0.188	1.124	3	3/16	0.188	2.624	5.646	PIPE	
1	1/2	1/4	0.250	1.000	3	1/4	0.250	2.500	7.343	PIPE	
1	3/4	20	0.035	1.680	3	1/4	11	0.120	3.010	4.011	PIPE
1	3/4	18	0.049	1.652	3	1/2	16	0.065	3.370	2.385	REBAR
1	3/4	16	0.065	1.620	3	1/2	11	0.120	3.260	4.332	REBAR
1	3/4	11	0.120	1.510	4	16	0.065	3.870	2.732	REBAR	
1	3/4	3/16	0.188	1.375	4	14	0.083	3.834	3.472	PLATE	
1	7/8	13	0.095	1.685	4	11	0.120	3.760	4.973	PLATE	
					5	11	0.120	1.760	6.254	EXPANDED	
					6	11	0.120	5.760	7.536	EXPANDED	

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED

Stainless

USEFUL INFO ALUMINUM

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

82 - STAINLESS

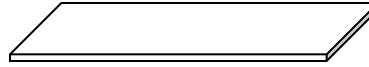
STAINLESS STEEL PIPE 304, 316

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
Stainless
ALUMINUM
Useful Info

Size	Schd	OD	WALL	ID	Size	Sched	OD	WALL	ID
1/8	10s	0.405	0.049	0.307	3	5s	3.500	0.083	3.334
	40s		0.068	0.269		10s		0.120	3.260
	80s		0.095	0.215		40s		0.216	3.068
1/4	10s	0.540	0.065	0.410	4	5s	4.500	0.083	4.334
	40s		0.088	0.364		10s		0.120	4.260
	80s		0.119	0.302		40s		0.237	4.026
3/8	10s	0.675	0.065	0.545	5	5s	5.563	0.109	5.345
	40s		0.091	0.493		10s		0.134	5.295
	80s		0.126	0.423		40s		0.258	5.047
1/2	5s	0.840	0.065	0.710	6	5s	6.625	0.109	6.407
	10s		0.083	0.674		10s		0.134	6.357
	40s		0.109	0.622		40s		0.280	6.065
3/4	5s	1.050	0.065	0.920	8	5s	8.625	0.109	8.407
	10s		0.083	0.884		10s		0.148	8.329
	40s		0.113	0.824		40s		0.322	7.981
1	5s	1.315	0.065	1.185	10	5s	10.750	0.134	10.482
	10s		0.109	1.097		10s		0.165	10.420
	40s		0.133	1.049		40s		0.365	10.020
1 1/4	5s	1.660	0.065	1.530	12	5s	12.750	0.165	12.420
	10s		0.109	1.442		10s		0.180	12.390
	40s		0.140	1.380		40s		0.375	12.000
1 1/2	5s	1.900	0.065	1.770	12	5s	12.750	0.165	12.420
	10s		0.109	1.682		10s		0.180	12.390
	40s		0.145	1.610		40s		0.375	12.000
2	5s	2.375	0.065	2.245	12	5s	12.750	0.165	12.420
	10s		0.109	2.157		10s		0.180	12.390
	40s		0.154	2.067		40s		0.375	12.000
2 1/2	5s	2.875	0.083	2.609	12	5s	12.750	0.165	12.420
	10s		0.120	2.635		10s		0.180	12.390
	40s		0.203	2.469		40s		0.375	12.000
	80s		0.276	2.323		80s		0.500	11.750

STAINLESS STEEL SHEET

304, 316 2B, #4, and #8 finish



Gage (inches)	Length (inches)	Width (inches)	Lb sq ft	Lb Sheet	Gage (inches)	Length (inches)	Width (inches)	Lb sq ft	Lb Sheet
26 (.0180)	36	x 120	0.755	22.65	14 (.0750)	36	x 120	3.154	94.62
	48	x 120	0.755	30.2		36	x 144	3.154	113.54
24 (.0240)	36	x 96	1.007	24.17	48	x 96	3.154	100.93	
	36	x 120	1.007	30.21	48	x 120	3.154	126.16	
	36	x 144	1.007	36.25	48	x 144	3.154	151.39	
	48	x 120	1.007	40.28	60	x 96	3.154	126.16	
22 (.0300)	48	x 144	1.007	48.34	60	x 120	3.154	157.7	
	36	x 120	1.26	37.8	60	x 144	3.154	189.24	
	48	x 96	1.26	40.32	72	x 144	3.154	227.09	
	48	x 120	1.26	50.4	12 (.1050)	36	x 120	4.41	132.3
48	x 144	1.26	60.48	36		x 144	4.41	158.76	
20 (.0360)	36	x 96	1.51	36.24	48	x 96	4.41	141.12	
	36	x 120	1.51	45.3	48	x 120	4.41	176.4	
	36	x 144	1.51	54.36	48	x 144	4.41	211.68	
	48	x 96	1.51	48.32	60	x 96	4.41	176.4	
	48	x 120	1.51	60.4	60	x 120	4.41	220.5	
	48	x 144	1.51	72.48	60	x 144	4.41	264.6	
	60	x 120	1.51	75.5	72	x 96	4.41	211.68	
	60	x 144	1.51	90.54	72	x 120	4.41	264.6	
18 (.0480)	60	x 144	2.015	120.9	72	x 144	4.41	317.52	
	36	x 96	2.015	48.36	11 (.1200)	36	x 120	5.04	151.2
	36	x 120	2.015	60.45		48	x 96	5.04	161.28
	36	x 144	2.015	72.54	48	x 120	5.04	201.6	
	48	x 96	2.015	64.48	48	x 144	5.04	241.92	
	48	x 120	2.015	80.6	60	x 96	5.04	201.6	
	48	x 144	2.015	96.72	60	x 120	5.04	252	
	60	x 96	2.015	80.6	60	x 144	5.04	302.4	
	60	x 120	2.015	100.75	72	x 96	5.04	241.92	
	60	x 144	2.015	120.9	72	x 120	5.04	302.4	
16 (.0600)	36	x 120	2.52	75.6	72	x 144	5.04	362.88	
	36	x 144	2.52	90.72	10 (.1350)	36	x 96	5.67	136.08
	48	x 96	2.52	80.64		36	x 120	5.67	226.8
	48	x 120	2.52	100.8	36	x 144	5.67	272.16	
	48	x 144	2.52	120.96	48	x 96	5.67	181.44	
	60	x 96	2.52	100.8	48	x 120	5.67	226.8	
	60	x 120	2.52	126	48	x 144	5.67	272.16	
	60	x 144	2.52	151.2	60	x 96	5.67	226.8	
					60	x 120	5.67	283.5	
					60	x 144	5.67	340.2	
					72	x 96	5.67	272.16	
					72	x 120	5.67	340.2	

Redding 530.243.1053

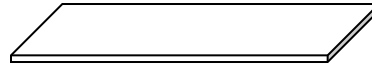
Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM

84 - STAINLESS

STAINLESS STEEL PLATE 304, 316

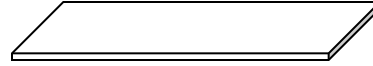
2b, #4, and #8 finish



INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
Stainless
ALUMINUM
Useful Info

Thickness	Width inches		Length inches	Lb sheet	Thickness	Width inches		Length inches	Lb sheet
3/16	48	x	96	275	3/8	48	x	96	528
8.579 lb sq ft	48		120	343	16.496 lb sq ft	48		120	660
	48		144	412		48		144	792
	48		240	686		48		240	1320
	60		96	343		60		96	660
	60		120	429		60		120	825
	60		144	515		60		144	990
	60		240	858		60		240	1650
	72		120	515		72		120	990
	72		144	618		72		144	1188
	72		240	1029		72		240	1980
	96		240	1373		96		240	2639
1/4	48	x	96	357	1/2	48	x	96	693
11.162 lb sq ft	48		120	446	21.663 lb sq ft	48		120	867
	48		144	536		48		144	1040
	48		240	893		48		240	1733
	60		96	446		60		96	867
	60		120	558		60		120	1083
	60		144	670		60		144	1300
	60		240	1116		60		240	2166
	72		120	670		72		120	1300
	72		144	804		72		144	1560
	72		240	1339		72		240	2600
	96		240	1786		96		240	3466
5/16	48	x	96	440		120		240	4333
13.745 lb sq ft	48		120	550	5/8	48	x	96	859
	48		144	660	26.831 lb sq ft	48		120	1073
	48		240	1100		48		144	1288
60		96	550	48			240	2146	
	60		120	687		60		96	1073
	60		144	825		60		120	1342
	60		240	1375		60		144	1610
	72		120	825		60		240	2683
	72		144	990		72		120	1610
	72		240	1649		72		144	1932
	96		240	2199		72		240	3220

STAINLESS STEEL PLATE 304, 316
2b, #4, and #8 finish



Thickness	Width	Length	Lb sheet	Thickness	Width	Length	Lb sheet
	inches	inches			inches	inches	
3/4 29.334 lb sq ft	48	x 96	939	1 1/8 47.833 lb sq ft	48	x 96	1531
	48	120	1173		48	120	1913
	48	144	1408		48	144	2296
	48	240	2347		48	240	3827
	60	96	1173		60	96	1913
	60	120	1467		60	120	2392
	60	144	1760		60	144	2870
	60	240	2933		60	240	4783
	72	120	1760		72	120	2870
	72	144	2112		72	144	3444
	72	240	3520		72	240	5740
	96	240	4693		96	240	7653
120	240	5867	120	240	9567		
7/8 32.123 lb sq ft	48	x 96	1028	1 1/4 53.001 lb per sq ft	48	x 96	1696
	48	120	1285		48	120	2120
	48	144	1542		48	144	2544
	48	240	2570		48	240	4240
	60	96	1285		60	96	2120
	60	120	1606		60	120	2650
	60	144	1927		60	144	3180
	60	240	3212		60	240	5300
	72	120	1927		72	120	3180
	72	144	2313		72	144	3816
	72	240	3855		72	240	6360
	96	240	5140		96	240	8480
120	240	6425	120	240	10600		
1 37.291 lb sq ft	48	x 96	1193	1 3/8 58.667 lb per sq ft	48	x 96	1877
	48	120	1492		48	120	2347
	48	144	1790		48	144	2816
	48	240	2983		48	240	4693
	60	96	1492		60	96	2347
	60	120	1865		60	120	2933
	60	144	2237		60	144	3520
	60	240	3729		60	240	5867
	72	120	2237		72	120	3520
	72	144	2685		72	144	4224

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED ALUMINUM

Redding 530.243.1053

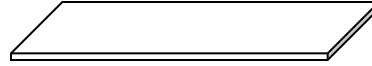
Woodland/Sacramento 530.406.0492

Stainless

86 - STAINLESS

STAINLESS STEEL PLATE 304, 316

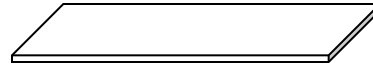
2b, #4, and #8 finish



INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
Stainless
ALUMINUM
Useful Info

Thickness	Width inches	Length inches	Lb sheet	Thickness	Width inches	Length inches	Lb sheet
1 1/2	48	x 96	2027	2	48	x 96	2688
63.337 lb per sq ft	48	120	2533	84.01 lb per sq ft	48	120	3360
	48	144	3040		48	144	4032
	48	240	5067		48	240	6721
	60	96	2533		60	96	3360
	60	120	3167		60	120	4201
	60	144	3800		60	144	5041
	60	240	6334		60	240	8401
	72	120	3800		72	120	5041
	72	144	4560		72	144	6049
	72	240	7600		72	240	10081
	96	240	10134		96	240	13442
	120	240	12667		120	240	16802
1 5/8	48	x 96	2219	2 1/4	48	x 96	3033
69.334 lb per sq ft	48	120	2773	94.78 lb per sq ft	48	120	3791
	48	144	3328		48	144	4549
	48	240	5547		48	240	7582
	60	96	2773		60	96	3791
	60	120	3467		60	120	4739
	60	144	4160		60	144	5687
	60	240	6933		60	240	9478
	72	120	4160		72	120	5687
	72	144	4992		72	144	6824
	72	240	8320		72	240	11374
	96	240	11093		96	240	15165
	120	240	13867		120	240	18956
1 3/4	48	x 96	2358	2 1/2	48	x 96	3363
73.672 lb per sq ft	48	120	2947	105.1 lb per sq ft	48	120	4204
	48	144	3536		48	144	5045
	48	240	5894		48	240	8408
	60	96	2947		60	96	4204
	60	120	3684		60	120	5255
	60	144	4420		60	144	6306
	60	240	7367		60	240	10510
	72	120	4420		72	120	6306
	72	144	5304		72	144	7567

STAINLESS STEEL PLATE 304, 316
2b, #4, and #8 finish



Thickness	Width		Length	Lb	Thickness	Width		Length	Lb
inches	inches		inches	sheet	inches	inches		inches	sheet
3 126.3 lb per sq ft	48	x	96	4042	3 3/4 157.3 lb per sq ft	48	x	96	4042
	48		120	5052		48		120	5052
	48		144	6062		48		144	6062
	48		240	10104		48		240	10104
	60		96	5052		60		96	5052
	60		120	6315		60		120	6315
	60		144	7578		60		144	7578
	60		240	12630		60		240	12630
	72		120	7578		72		120	7578
	72		144	9094		72		144	9094
	72		240	15156		72		240	15156
	96		240	20208		96		240	20208
	120		240	25260		120		240	25260
	3 1/4 136.6 lb per sq ft	48	x	96		4371	4 167.6 lb per sq ft	48	x
48			120	5464	48			120	5464
48			144	6557	48			144	6557
48			240	10928	48			240	10928
60			96	5464	60			96	5464
60			120	6830	60			120	6830
60			144	8196	60			144	8196
60			240	13660	60			240	13660
72			120	8196	72			120	8196
72			144	9835	72			144	9835
72			240	16392	72			240	16392
96			240	21856	96			240	21856
120			240	27320	120			240	27320
3 1/2 147.0 lb per sq ft		48	x	96	4704				
	48		120	5880					
	48		144	7056					
	48		240	11760					
	60		96	5880					
	60		120	7350					
	60		144	8820					
	60		240	14700					
	72		120	8820					
	72		144	10584					

INDEX

ROUND

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

EXPANDED

ALUMINUM

USEFUL INFO

Stainless

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX

ALUMINUM ROUND BAR 12' LENGTH

6061



ROUND	Size in Inches	Est Lb Ft	Est lb 12'	Size in Inches	Est Lb Ft	Est lb 12'
	1/8	0.015	0.18	2 1/2	5.77	69.24
	3/16	0.032	0.384	2 9/16	6.06	72.72
SQUARE	1/4	0.058	0.696	2 5/8	6.36	76.32
	5/16	0.09	1.08	2 3/4	6.98	83.76
	3/8	0.13	1.56	2 7/8	7.63	91.56
	7/16	0.177	2.124	3	8.3	99.6
FLAT	1/2	0.231	2.772	3 1/4	9.75	117
	9/16	0.292	3.504	3 3/8	10.52	126.24
	5/8	0.36	4.32	3 1/2	11.3	135.6
ANGLE	11/16	0.436	5.232	3 3/4	12.98	155.76
	3/4	0.519	6.228	4	14.76	177.12
	13/16	0.609	7.308	4 1/4	16.67	200.04
CHANNEL	7/8	0.706	8.472	4 1/2	18.68	224.16
	15/16	0.811	9.732	4 3/4	20.82	249.84
	1	0.923	11.076	5	23.07	276.84
BEAM	1 1/16	1.04	12.48	5 1/4	25.43	305.16
	1 1/8	1.17	14.04	5 3/8	26.68	320.16
	1 3/16	1.3	15.6	5 1/2	28	336
	1 1/4	1.44	17.28	5 5/8	29.22	350.64
	1 5/16	1.59	19.08	5 3/4	30.51	366.12
TUBE	1 3/8	1.75	21	6	33.22	398.64
	1 7/16	1.91	22.92	6 1/4	34.96	419.52
	1 1/2	2.08	24.96	6 1/2	38.98	467.76
PIPE	1 9/16	2.25	27	6 3/4	42.04	504.48
	1 5/8	2.44	29.28	7	45.21	542.52
	1 3/4	2.83	33.96	7 1/2	51.9	622.8
	1 13/16	3.03	36.36	8	59.05	708.6
REBAR	1 7/8	3.24	38.88	8 1/2	66.7	800.4
	2	3.69	44.28	9	74.78	897.36
	2 1/8	4.17	50.04	10.13	94.73	1136.76
	2 1/4	4.67	56.04	11	111.7	1340.4
PLATE	2 3/8	5.21	62.52	12	132.9	1594.8

ALUMINUM SQUARE BAR 12' LENGTH 6061, 6063



EXPANDED	Size in Inch-	Est Lb Ft	Est lb 12'	Size in Inch-	Est Lb Ft	Est lb 12'
	es			es		
	3/8	0.166	1.992	1 3/4	3.6	43.20
	1/2	0.294	3.528	2	4.7	56.40
	5/8	0.459	5.508	2 1/2	7.34	88.08
	3/4	0.66	7.92	3	10.57	126.84
	1	1.18	14.16	3 1/2	14.39	172.68
	1 1/8	1.49	17.88	4	18.8	225.60
	1 1/4	1.84	22.08	5	29.38	352.56
	1 1/2	2.65	31.80	6	42.36	508.32

Aluminum

USEFUL INFO



ALUMINUM FLAT BAR 12' LENGTH

6061, 6063

Length inches	Width inches	Est lb ft	Est lb 12'	Length inches	Width inches	Est lb ft	Est lb 12'	ROUND	
1/8	x	1/2	0.075	0.90	3/8	x	1/2	0.221	2.65
		3/4	0.110	1.32			3/4	0.331	3.97
	1	0.147	1.76	1		0.441	5.29		
	1 1/4	0.183	2.20	1 1/4		0.550	6.60		
	1 1/2	0.222	2.66	1 1/2		0.661	7.93		
	2	0.294	3.53	2		0.882	10.58		
	2 1/2	0.368	4.42	2 1/2		1.100	13.20		
	3	0.441	5.29	3		1.320	15.84		
	3 1/2	0.515	6.18	4		1.760	21.12		
	4	0.588	7.06	5		2.200	26.40		
3/16	x	1/2	0.111	1.33	1/2	x	5/8	0.368	4.42
		3/4	0.166	1.99			3/4	0.440	5.28
	1	0.222	2.66	1		0.588	7.06		
	1 1/4	0.275	3.30	1 1/4		0.735	8.82		
	1 1/2	0.330	3.96	1 1/2		0.864	10.37		
	2	0.441	5.29	1 3/4		1.030	12.36		
	2 1/2	0.552	6.62	2		1.180	14.16		
	1/4	x	1/2	0.147		1.76	2 1/2	1.490	17.88
	5/8		0.184	2.21		3	1.760	21.12	
	3/4		0.222	2.66		4	2.350	28.20	
1	0.294		3.53	4 1/2	2.640	31.68			
1 1/4	0.369		4.43	5	2.940	35.28			
1 1/2	0.441		5.29	5 1/2	3.250	39.00			
1 3/4	0.516		6.19	6	3.530	42.36			
2	0.570		6.84	8	4.700	56.40			
2 1/4	0.653		7.84	10	5.880	70.56			
2 1/2	0.735		8.82	12	7.060	84.72			
3	0.882	10.58	14	8.240	98.88				
3 1/2	1.010	12.12	5/8	x	1	0.734	8.81		
4	1.140	13.68			1 1/4	0.917	11.00		
5	1.450	17.40		1 1/2	1.100	13.20			
6	1.760	21.12		2	1.470	17.64			
7	2.020	24.24		3/4	x	1	0.881	10.57	
8	2.330	27.96				1 1/4	1.100	13.20	
10	2.900	34.80			1 1/2	1.290	15.48		
12	3.470	41.64			1 3/4	1.530	18.36		
5/16	x	1			0.368	4.42	2	1.760	21.12
		1 1/2			0.550	6.60	2 1/2	2.200	26.40
	2	0.713	8.56						
	2 3/4	1.000	12.00						
	3	1.080	12.96						

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
Aluminum
USEFUL INFO

ALUMINUM RECTANGLE BAR continued

12' LENGTH 6061, 6063



INDEX

ROUND

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

EXPANDED

STAINLESS

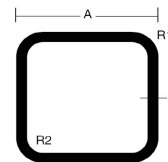
Aluminum

USEFUL INFO

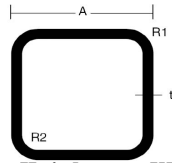
Length inches	Width inches	Est lb ft	Est lb 12'	Length inches	Width inches	Est lb ft	Est lb 12'
3/4 x	3	2.650	31.80	1 1/2 x	3	5.290	63.48
	3 1/2	3.090	37.08		4	7.050	84.60
	4	3.520	42.24		5 1/2	9.700	116.40
	5	4.410	52.92		6	10.570	126.84
1 x	6	5.290	63.48	1 3/4 x	2	4.198	50.37
	1 1/4	1.470	17.64		2 1/2	5.250	63.00
	1 1/2	1.780	21.36		3	6.299	75.58
	1 3/4	2.070	24.84		4	8.400	100.80
	2	2.350	28.20	4 1/2	9.240	110.88	
	2 1/2	2.940	35.28	5	10.900	114.36	
	3	3.530	42.36	2 x	2 1/2	5.880	70.56
	3 1/2	4.130	49.56		3	7.060	84.72
4	4.700	56.40	4		9.400	112.80	
6	7.060	84.72	5		11.760	141.12	
1 1/4 x	8	9.400	112.80	6	14.120	169.44	
	10	11.750	141.00	6 1/2	15.300	183.60	
	12	14.120	169.44	2 1/2 x	3	8.820	105.84
	1 1/2	2.200	26.40		4	11.750	141.00
	2	2.940	35.28		5	14.700	176.40
	2 1/2	3.670	44.04		6	18.000	216.00
	3	4.400	52.80	3 x	3 1/2	12.350	148.20
	3 3/4	5.500	66.00		4	14.100	169.20
4	5.880	70.56	4 1/2		15.860	190.32	
4 1/2	6.600	79.20	5		17.610	211.32	
1 1/2 x	5 1/2	8.070	96.84	6	21.150	253.80	
	6	9.000	108.00				
	2 1/2	4.410	52.92				

ALUMINUM SQUARE TUBE - RADIUS CORNERS

20' LENGTH 6061



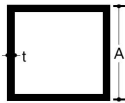
Height inches (A)	Width inches (A)	Wall thickness (t)	R1	R2	Est lb ft	Est lb 20'
1.000 x	1.000 x	.125	.125	.062	.512	10.24
			.250	.125	.476	9.52
1.250 x	1.250 x	.125	.125	.062	.662	13.24
			.125	.062	.809	16.18
1.500 x	1.500 x	.125	.125	.062	1.036	20.72
			.250	.125	1.036	20.72
			.250	.125	2.120	42.4
2.000 x	2.000 x	.125	.250	.125	2.051	41.02
			.250	.250	2.051	41.02



ALUMINUM SQUARE TUBE - RADIUS CORNERS

24' LENGTH 6063

Height inches (A)	Width inches (A)	Wall thickness (t)	R1	R2	Est lb ft	Est lb 24'
1.000	x 1.000	x .125	.125	.010	.512	12.288
1.250	x 1.250	x .125	.188	.010	.676	16.224
1.500	x 1.500	x .125	.125	.010	.809	19.416
2.000	x 2.000	x .125	.125	.015	1.125	27



ALUMINUM SQUARE TUBE - SHARP CORNERS

20' LENGTH 6061

Height inches (A)	Width inches (A)	Wall thickness (t)	Est lb ft	Est lb 20'
.750	x .750	x .062	.205	4.10
1.000	x 1.000	x .062	.280	5.60
		.125	.524	10.48
1.250	x 1.250	x .125	.674	13.48
1.500	x 1.500	x .062	.428	8.56
		.125	.825	16.50
		.188	1.180	23.60
		.250	1.470	29.40
1.750	x .125	x .125	.920	18.40
2.000	x 2.000	x .125	1.126	22.52
		.188	1.640	32.80
		.250	2.100	42.00
2.500	x 2.500	x .125	1.426	28.52
		.188	2.084	41.68
		.250	2.700	54.00
3.000	x 3.000	x .125	1.730	34.60
		.188	2.531	50.62
		.250	3.300	66.00
3.500	x 3.500	x .125	1.970	39.40
		.250	3.822	76.44
4.000	x 4.000	x .125	2.326	46.52
		.188	3.371	67.42
		.250	4.500	90.00
		.375	6.526	130.52
		.500	8.400	168.00
5.000	x 5.000	x .250	5.390	107.80
6.000	x 6.000	x .188	5.245	104.90
		.250	6.760	135.20
		.500	13.200	264.00
8.000	x 8.000	x .250	9.021	180.42
		.375	13.450	269.00
		.500	17.640	352.80

Redding 530.243.1053

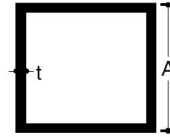
Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
Aluminum

92 - ALUMINUM

ALUMINUM SQUARE TUBE - SHARP CORNERS

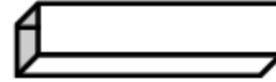
24' LENGTH 6063



INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
ALUMINUM
 USEFUL INFO

Height inches (A)	Width inches (A)	Wall thickness (t)	Est lb ft	Est lb 24'
.500	x .500	x .063	.130	3.12
.750	x .750	x .063	.208	4.99
		.125	.374	8.98
1.000	x 1.000	x .062	.280	6.72
		.125	.524	12.58
1.250	x 1.250	x .062	.354	8.50
		.125	.674	16.18
1.500	x 1.500	x .125	.824	19.78
1.750	x 1.750	x .125	.974	23.38
2.000	x 2.000	x .125	1.126	27.02
		.250	2.100	50.40
2.500	x 2.500	x .125	1.426	34.22
3.000	x 3.000	x .125	1.725	41.40
		.250	3.300	79.20
4.000	x 4.000	x .125	2.326	55.82
		.188	3.400	81.60
		.250	4.500	108.00
4.500	x 4.500	x .188	3.892	93.41
5.000	x 5.000	x .125	2.926	70.22
		.188	4.342	104.21
6.000	x 6.000	x .125	3.530	84.72
		.188	5.240	125.76
		.250	6.760	162.24
8.000	x 8.000	x .188	7.050	169.20

ALUMINUM RECTANGULAR TUBE - SHARP CORNERS



Height inches		Width inches		Wall thickness	Est lb ft	Est lb 20'	
1	x	1 1/2	x	0.125	0.674	13.480	FLAT
1	x	2	x	0.062	0.428	8.560	FLAT
1	x	2	x	0.125	0.826	16.520	ANGLE
1	x	3	x	0.125	1.126	22.520	ANGLE
1 1/2	x	3	x	0.125	1.275	25.500	CHANNEL
1 1/2	x	4	x	0.125	1.576	31.520	CHANNEL
2	x	3	x	0.125	1.426	28.520	BEAM
2	x	3	x	0.250	2.700	54.000	BEAM
2	x	4	x	0.125	1.690	33.800	TUBE
2	x	4	x	0.188	2.537	50.740	TUBE
2	x	4	x	0.250	3.300	66.000	PIPE
2	x	6	x	0.125	2.279	45.580	REBAR
2	x	6	x	0.188	3.451	69.020	REBAR
2	x	6	x	0.250	4.480	89.600	REBAR
3	x	4	x	0.250	3.900	78.000	PLATE
3	x	5	x	0.125	2.325	46.500	EXPANDED
3	x	6	x	0.250	4.998	99.960	EXPANDED
4	x	6	x	0.250	5.700	114.000	EXPANDED
4	x	6	x	0.500	10.584	211.680	STAINLESS
4	x	8	x	0.250	6.900	138.000	ALUMINUM
4	x	8	x	0.500	12.936	258.720	ALUMINUM

Redding 530.243.1053

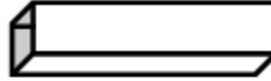
Woodland/Sacramento 530.406.0492

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM
USEFUL INFO

94 - ALUMINUM

ALUMINUM RECTANGULAR TUBE - SHARP CORNERS

24' LENGTH 6063-T52

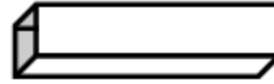


INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
Aluminum
USERFUL INFO

	Height inches		Width inches		Wall thickness	Est lb ft	Est lb 24'
	1/2	x	1	x	0.065	0.240	5.760
	1/2	x	1	x	0.125	0.374	8.976
	3/4	x	1 1/2	x	0.125	0.600	14.400
	1	x	1 1/2	x	0.062	0.354	8.496
	1	x	1 1/2	x	0.125	0.674	16.176
	1	x	2	x	0.062	0.428	10.272
	1	x	2	x	0.125	0.824	19.776
	1	x	3	x	0.125	1.130	27.120
	1	x	4	x	0.125	1.426	34.224
	1	x	6	x	0.125	2.025	48.600
	1 1/4	x	2 1/2	x	0.125	1.050	25.200
	1 1/2	x	2	x	0.125	0.974	23.376
	1 1/2	x	2 1/2	x	0.125	1.125	27.000
	1 1/2	x	3	x	0.125	1.274	30.576
	1 1/2	x	6	x	0.125	2.174	52.176
	1 3/4	x	3	x	0.125	1.350	32.400
	1 3/4	x	3 1/2	x	0.125	1.500	36.000
	1 3/4	x	4	x	0.125	1.650	39.600
	1 3/4	x	4 1/2	x	0.125	1.800	43.200
	1 3/4	x	5	x	0.125	1.900	46.800
	2	x	3	x	0.125	1.426	34.224
	3	x	3	x	0.250	2.700	64.800
	2	x	4	x	0.125	1.726	41.424
	2	x	4	x	0.250	3.300	79.200
	2	x	4 1/2	x	0.125	1.876	45.024

ALUMINUM RECTANGULAR TUBE - SHARP CORNERS

24' LENGTH 6063-T52



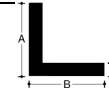
Height inches		Width inches		Wall thickness	Est lb ft	Est lb 24'	
2	x	5	x	0.125	2.025	48.600	SQUARE
2	x	6	x	0.125	2.325	55.800	FLAT
2	x	6	x	0.250	4.500	108.000	ANGLE
2	x	8	x	0.125	2.930	70.320	CHANNEL
2 1/2	x	8	x	0.125	3.076	73.824	BEAM
3	x	4	x	0.125	1.985	47.640	TUBE
3	x	5	x	0.125	2.325	55.800	PIPE
3	x	5	x	0.188	3.440	82.560	REBAR
3	x	6	x	0.188	3.891	93.384	PLATE
4	x	6	x	0.125	3.080	73.920	EXPANDED
4	x	6	x	0.250	5.700	136.800	STAINLESS

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

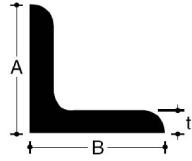
USEFUL INFO Aluminum

ALUMINUM ANGLE 16' LENGTH 6063



INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
Aluminum
USEFUL INFO

	A	B	t	Est lb ft	Est lb 16'	A	B	t	Est lb ft	Est lb 16'
FLAT	1/2	x 1/2	x 1/16	.068	1.088	1 1/2	x 1 1/2	x 1/8	.422	6.752
ANGLE			1/8	.128	2.048			3/16	.619	9.904
ANGLE	5/8	x 5/8	x 1/8	.166	2.656					
CHANNEL	3/4	x 3/4	x 1/16	.107	1.712	1 3/4	x 1 3/4	x 1/8	.496	7.936
BEAM			1/8	.202	3.232	2	x 1	x 1/8	.422	6.752
TUBE	1	x 1/2	x 1/8	.202	3.232	1 1/2	x 3/16		.728	11.648
PIPE	1	x 3/4	x 1/8	.239	3.824	2	x 1/8		.569	9.104
PIPE	1	x 1	x 1/16	.141	2.256			3/16	.841	13.456
REBAR			1/8	.275	4.4			1/4	1.100	17.6
PLATE			3/16	.400	6.4	2 1/2	x 1 1/2	x 1/8	.560	8.96
EXPANDED	1 1/4	x 1/2	x 1/8	.239	3.824	2 1/2	x 1/8		.700	11.2
EXPANDED	1 1/4	x 1 1/4	x 1/8	.348	5.568	3	x 2	x 1/8	.700	11.2
STAINLESS			3/16	.511	8.176	3	x 3/16		1.250	20
Aluminum	1 1/2	x 3/4	x 1/8	.313	5.008			1/4	1.640	26.24
Aluminum	1 1/2	x 1	x 1/8	.349	5.584					



ALUMINUM - 97

ALUMINUM ANGLE 25' LENGTH 6061-T6

A	B	t	Est lb ft	Est lb 25'	A	B	t	Est lb ft	Est lb 25'
3/4	x 3/4	x 1/8	.201	5.025	3	x 2	x 3/16	1.07	26.75
1	x 1	x 1/8	.275	6.875			1/4	1.40	35
		3/16	.400	10			3/8	2.05	51.25
		1/4	.514	12.85	3	x 2 1/2	x 1/4	1.68	42
1 1/4	x 1 1/4	x 1/8	.343	8.575	3	x 3	x 3/16	1.28	32
		3/16	.510	12.75			1/4	1.68	42
		1/4	.656	16.4			5/16	2.08	52
1 1/2	x 1 1/4	x 1/8	.387	9.675			3/8	2.47	61.75
		3/16	.566	14.15			1/2	3.23	80.75
1 1/2	x 1 1/2	x 1/8	.423	10.575	3 1/2	x 2 1/2	x 1/4	1.68	42
		3/16	.619	15.475			3/8	2.93	73.25
		1/4	.809	20.225			1/2	3.83	95.75
1 3/4	x 1 1/4	x 1/8	.421	10.525	4	x 3	x 1/4	1.99	49.75
1 3/4	x 1 3/4	x 1/8	.497	12.425			3/8	2.93	73.25
		3/16	.731	18.275	4	x 4	x 1/4	2.28	57
		1/4	.956	23.9			3/8	3.37	84.25
2	x 1 1/2	x 1/8	.496	12.4			1/2	4.41	110.25
		3/16	.731	18.275	5	x 3	x 1/4	2.28	57
		1/4	.956	23.9			3/8	3.35	83.75
2	x 2	x 1/8	.577	14.425	5	x 3 1/2	x 1/2	4.70	117.5
		3/16	.850	21.25	5	x 5	x 3/8	4.24	106
		1/4	1.11	27.75	6	x 4	x 3/8	4.24	106
		5/16	1.36	34			1/2	5.58	139.5
		3/8	1.61	40.25	6	x 6	x 3/8	5.12	128
2 1/2	x 1 1/2	x 3/16	.805	20.13			1/2	6.75	168.75
2 1/2	x 2	x 3/16	.961	24.025	8	x 8	x 1/2	9.14	228.5
		1/4	1.26	31.5					
2 1/2	x 2 1/2	x 3/16	1.07	26.75					
		1/4	1.40	35					
		3/8	2.05	51.25					

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
EXPANDED
STAINLESS
Aluminum

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

USEFUL INFO

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM USEFUL INFO

98 - ALUMINUM

ALUMINUM CHANNEL 25' LENGTHS 6061-T6



A	t	B	Est lb ft	Est lb 25'	A	t	B	Est lb ft	Est lb 25'	
3	.170	1.41	1.42	35.50	6	.200	1.92	2.83	70.75	
	.258	1.50	1.73	43.25		.225	1.95	3.00	75.00	
	.356	1.60	2.07	51.75		.314	2.03	3.63	90.75	
4	.180	1.58	1.85	46.25	8	.250	2.29	4.25	106.25	
	.247	1.65	2.16	54.00		10	.240	2.60	5.28	132.00
	.320	1.72	2.50	62.50			12	.300	2.96	7.41
5	.190	1.75	2.30	57.50						
	.325	1.89	3.11	77.75						

ALUMINUM CHANNEL 16' LENGTHS 6063-T52



A	B	t	Est lb ft	Est lb 16'	A	B	t	Est lb ft	Est lb 16'	
1/2	.375	.125	.150	2.400	1 1/2	1.500	.125	.637	10.192	
	.500	.062	.103	1.648		1.500	.250	1.270	20.320	
	.500	.094	.148	2.368		1.75	.500	.125	.374	5.984
	.500	.125	.187	2.992			.750	.125	.450	7.200
5/8	.625	.125	.243	3.888	2	1.000	.125	.526	8.416	
	3/4	.375	.125	.187		2.992	2	.500	.125	.413
.500		.125	.224	3.584	1.000	.125		.563	9.008	
.750		.125	.300	4.800	2.000	.125		.863	13.808	
1	1.500	.125	.527	8.432	2	2.000	.250	1.650	26.400	
	.500	.125	.262	4.192		2.25	.875	.125	.563	9.008
	.750	.125	.337	5.392			2.5	1.000	.125	.637
	1.000	.062	.214	3.424		1.500		.125	.787	12.592
1 1/4	1.000	.125	.413	6.608	3	2.000	.125	.937	14.992	
	1.500	.125	.564	9.024		3	.500	.125	.563	9.008
	.750	.125	.376	6.016			1.000	.125	.713	11.408
1 1/2	1.250	.125	.526	8.416	4	1.500	.188	1.266	20.256	
	.500	.125	.336	5.376		4	2.000	.125	1.013	16.208
	.750	.125	.413	6.608			5	3.000	.125	1.313
	1.000	.125	.487	7.792		5		1.000	.125	.863
					2.000		.188	1.950	31.120	



INDEX

ALUMINUM ROUND TUBE 6061-T6 / 20' LENGTHS

OD	Wall thickness	Lib foot	Lb 20'	OD	Wall thickness	Lib foot	Lb 20'
3/4	x 0.063	0.158	3.160	3	x 0.063	0.686	13.720
3/4	x 0.125	0.288	5.760	3	x 0.125	1.355	27.100
7/8	x 0.125	0.346	6.920	3	x 0.188	1.993	39.860
1	x 0.062	0.219	4.380	3	x 0.250	2.540	50.800
1	x 0.083	0.281	5.620	3	x 0.375	3.711	74.220
1	x 0.125	0.413	8.260	3	x 0.500	4.618	92.360
1	x 0.188	0.576	11.520	3 1/4	x 0.250	2.827	56.540
1	x 0.250	0.693	13.860	3 1/2	x 0.125	1.500	30.000
1 1/8	x 0.250	0.808	16.160	3 1/2	x 0.188	2.349	46.980
1 1/4	x 0.065	0.285	5.700	3 1/2	x 0.250	3.064	61.280
1 1/4	x 0.125	0.530	10.600	3 1/2	x 0.375	4.330	86.600
1 1/4	x 0.188	0.736	14.720	4	x 0.065	0.945	18.900
1 3/8	x 0.188	0.841	16.820	4	x 0.125	1.790	35.800
1 1/2	x 0.065	0.345	6.900	4	x 0.250	3.463	69.260
1 1/2	x 0.125	0.648	12.960	4	x 0.375	5.125	102.500
1 1/2	x 0.188	0.911	18.220	4	x 0.500	6.464	129.280
1 1/2	x 0.250	1.178	23.560	4	x 0.750	9.189	183.780
1 3/4	x 0.065	0.412	8.240	4 1/4	x 0.250	3.695	73.900
1 3/4	x 0.125	0.730	14.600	4 1/2	x 0.500	7.390	147.800
1 3/4	x 0.188	1.084	21.680	5	x 0.125	2.251	45.020
1 3/4	x 0.250	1.385	27.700	5	x 0.188	3.410	68.200
1 7/8	x 0.250	1.501	30.020	5	x 0.250	4.388	87.760
2	x 0.063	0.443	8.860	5	x 0.500	8.312	166.240
2	x 0.125	0.870	17.400	5 1/2	x 0.125	2.532	50.640
2	x 0.188	1.270	25.400	5 1/2	x 0.500	9.236	184.720
2	x 0.250	1.650	33.000	6	x 0.125	2.768	55.360
2	x 0.375	2.251	45.020	6	x 0.250	5.311	106.220
2	x 0.500	2.771	55.420	6	x 0.375	7.792	155.840
2 1/4	x 0.065	0.525	10.500	6 1/2	x 0.250	5.772	115.440
2 1/4	x 0.125	0.981	19.620	8	x 0.125	3.637	72.740
2 1/4	x 0.250	1.885	37.700	8	x 0.250	7.158	143.160
2 1/2	x 0.065	0.584	11.680				
2 1/2	x 0.125	1.097	21.940				
2 1/2	x 0.188	1.639	32.780				
2 1/2	x 0.250	2.080	41.600				
2 3/4	x 0.125	1.212	24.240				
2 3/4	x 0.250	2.350	47.000				

ROUND

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

EXPANDED

STAINLESS

Aluminum

USEFUL INFO

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX

ALUMINUM PIPE SCHEDULE 40 6061—T6 / 20'



ROUND

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

EXPANDED

STAINLESS

ALUMINUM

USEFUL INFO

Pipe Size	OD	ID	Ave. Wall	Lbs per Ft	Lbs Per Piece
3/8	0.68	0.49	0.09	0.20	4.00
1/2	0.84	0.62	0.11	0.30	6.00
3/4	1.05	0.82	0.11	0.39	7.82
1	1.32	1.05	0.13	0.59	11.68
1 1/4	1.66	1.39	0.14	0.80	16.04
1 1/2	1.90	1.61	0.15	0.96	19.18
2	2.38	2.07	0.15	1.29	25.78
2 1/2	2.88	2.47	0.20	2.05	40.90
3	3.50	3.07	0.22	2.62	52.40
3 1/2	4.00	3.55	0.23	3.15	63.00
4	4.50	4.03	0.24	3.73	74.60
5	5.56	5.05	0.26	5.16	103.20
6	6.63	6.06	0.28	6.55	131.00
8	8.63	7.98	0.32	9.88	197.56

ALUMINUM PIPE SCHEDULE 80 6061—T6 / 20'

Pipe Size	OD	ID	Ave. Wall	Lbs per Ft	Lbs Per Piece
1/2	0.840	0.546	0.147	0.380	7.600
3/4	1.050	0.742	0.154	0.521	10.420
1	1.315	0.957	0.179	0.751	15.020
1 1/4	1.660	1.278	0.191	1.036	20.720
1 1/2	1.900	1.500	0.200	1.256	25.120
2	2.375	1.939	0.218	1.787	35.740
3	3.465	2.865	0.300	3.547	70.940



ALUMINUM SHEET 5052, 6061*

Thick- ness	Width inches	Length inches	Lb sq ft	Lb sheet	Thick ness	Width inches	Length inches	Lb sq ft	Lb sheet
0.025	48	x 96	0.353	11.296	0.100	48	x 96	1.397	44.704
0.025	48	x 120	0.353	14.120	0.100	48	x 120	1.397	55.880
0.025	48	x 144	0.353	16.944	0.100	48	x 144	1.397	67.056
0.032	48	96	0.447	14.304	0.100	60	x 144	1.397	83.820
0.032	48	x 120	0.447	17.880	0.125	48	x 96	1.746	55.872
0.032	48	x 144	0.447	21.456	0.125	48	x 120	1.746	69.840
0.040	48	x 96	0.558	17.856	0.125	48	x 144	1.746	83.808
0.040	48	x 120	0.558	22.320	0.125	60	x 96	1.746	69.840
0.040	48	x 144	0.558	26.784	0.125	60	x 120	1.746	87.300
0.050	48	x 96	0.698	22.336	0.125	60	x 144	1.746	104.760
0.050	48	x 120	0.698	27.920	0.160	48	x 96	2.394	76.608
0.050	48	x 144	0.698	33.504	0.160	48	x 120	2.394	95.760
0.050	60	x 144	0.698	41.880	0.160	48	x 144	2.394	114.912
0.630	48	x 96	0.879	28.128	0.190	48	x 96	2.657	85.024
0.630	48	x 120	0.879	35.160	0.190	48	x 120	2.657	106.280
0.063	48	x 144	0.879	42.192	0.190	48	x 144	2.657	127.536
0.063	60	x 96	0.879	35.160	0.190	60	x 120	2.657	132.850
0.063	60	x 120	0.879	43.950	0.190	60	x 144	2.657	159.420
0.063	60	x 144	0.879	52.740					
0.080	48	x 96	1.115	35.680					
0.080	48	x 120	1.115	44.600					
0.080	48	x 144	1.115	53.520					
0.808	60	x 96	1.115	44.600					
0.080	60	x 120	1.115	55.750					
0.080	60	x 144	1.115	66.900					
0.090	48	x 96	1.261	40.352					
0.090	48	x 120	1.261	50.440					
0.090	48	x 144	1.261	60.528					
0.090	60	x 96	1.261	50.440					
0.090	60	x 120	1.261	63.050					
0.090	60	x 144	1.261	75.660					

* Additional sizes (36, 72, etc.) are available in some sizes, please consult our sales staff for further information.

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX

ROUND

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

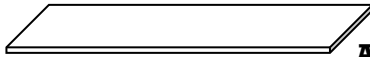
PLATE

EXPANDED

STAINLESS

Aluminum

USEFUL INFO



ALUMINUM PLATE 5052

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
Aluminum
USEFUL INFO

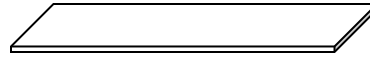
Thickness inches	Width inches	Length inches	Lb sheet	Thickness inches	Width inches	Length inches	Lb sheet
.250	3.492 lb sq ft	36 x 96	83.81	.250	3.492 lb sq ft	72 x 144	251.4
		48 x 120	139.7			96 x 240	558.7
		48 x 144	167.6			.375	5.238 lb sq ft
60 x 120	174.6	72 x 240	628.6				
.500	6.984 lb sq ft	144 x 240	209.5	.500	6.984 lb sq ft	48 x 144	335.2
		240 x 349.2	72 x 240			72 x 240	838.1
						.750	10.48 lb sq ft

ALUMINUM PLATE 6061

Thickness inches	Width inches	Length inches	Lb sheet	Thickness inches	Width inches	Length inches	Lb sheet				
.250	3.528 lb sq ft	36 1/2 x 96 1/2	114.7	.750	10.91 lb sq ft	36 1/2 x 96 1/2	258.8				
		48 1/2 x 144 1/2	171.7			48 1/2 x 144 1/2	514.9				
		60 1/2 x 120 1/2	178.6			60 1/2 x 144 1/2	642.3				
		144 1/2 x 214.2	72 x 144			72 x 144	761.8				
		72 x 144				254.0	.875	12.35 lb sq ft	48 1/2 x 144 1/2	601.1	
.3125	4.41 lb sq ft	84 x 240	423.4	1.000	14.11 lb sq ft	36 1/2 x 96 1/2			345.1		
		84 x 240	493.9			48 1/2 x 144 1/2	686.7				
		96 x 240	564.5			60 1/2 x 144 1/2	856.6				
.375	5.292 lb sq ft	36 1/2 x 96 1/2	107.9	1.250	17.64 lb sq ft	72 x 144	1016.0				
		48 1/2 x 144 1/2	214.6			36 1/2 x 96 1/2	431.5				
		84 x 240	617.4			48 1/2 x 144 1/2	858.5				
.500	7.056 lb sq ft	60 1/2 x 144 1/2	428.4	1.500	21.17 lb sq ft	60 1/2 x 144 1/2	1071.0				
		72 x 144	381.0			36 1/2 x 96 1/2	517.8				
		240 x 740.9	48 1/2 x 144 1/2			48 1/2 x 144 1/2	1030.0				
		96 x 240				846.7	60 1/2 x 144 1/2	1285.0			
		.625	8.82 lb sq ft			72 x 144	508.0	1.750	24.7 lb sq ft	72 x 144	1524.0
240 x 846.7	36 1/2 x 96 1/2			36 1/2 x 96 1/2	604.2						
96 x 240				1129.0	48 1/2 x 144 1/2	1202.0					
.750	10.48 lb sq ft			36 1/2 x 96 1/2	172.6	2.000	28.22 lb sq ft			36 1/2 x 96 1/2	690.3
				48 1/2 x 96 1/2	229.3					48 1/2 x 144 1/2	1373.0
		144 1/2 x 343.4	60 1/2 x 144 1/2	60 1/2 x 144 1/2	1713.0						
60 1/2 x 144 1/2	428.4	72 x 144		2032.0							
.875	12.35 lb sq ft	60 x 240	705.6	2.250	31.75 lb sq ft	36 1/2 x 96 1/2	776.6				
		72 x 144	508.0			48 1/2 x 144 1/2	1545.0				
		240 x 846.7	36 1/2 x 96 1/2			36 1/2 x 96 1/2	863.0				
96 x 240	1129.0	48 1/2 x 144 1/2		1717.0							
1.000	14.11 lb sq ft	36 1/2 x 96 1/2	215.7	2.500	35.28 lb sq ft	36 1/2 x 96 1/2	863.0				
		48 1/2 x 144 1/2	429.3			48 1/2 x 144 1/2	1717.0				
		60 1/2 x 120 1/2	446.5			3.000	42.34 lb sq ft	36 1/2 x 96 1/2	1036.0		
.750	10.48 lb sq ft	48 1/2 x 144 1/2	429.3	48 1/2 x 144 1/2	2061.0						
		60 1/2 x 120 1/2	446.5								

ALUMINUM PLATE continued

6061



Thickness inches	Width inches	Length inches	Lb sheet	Thickness inches	Width inches	Length inches	Lb sheet
3.500				6.000			
49.39 lb sq ft	48 1/2	x 144 1/2	2404.0	84.67 lb sq ft	48 1/2	x 144 1/2	4121.0
4.000					60 1/2	x 144 1/2	5140.0
56.45 lb sq ft	36 1/2	x 96 1/2	1381.0	7.000			
	48 1/2	x 144 1/2	2747.0	98.78 lb sq ft	56	x 144 1/2	5551.0
4.500				8.000			
63.5 lb sq ft	48 1/2	x 144 1/2	3090.0	112.9 lb sq ft	56	x 144 1/2	6344.0
5.000				10.000			
70.56 lb sq ft	48 1/2	x 144 1/2	3434.0	141.1 lb sq ft	42 1/2	x 144 1/2	6018.0
	60 1/2	x 144 1/2	4284.0	12.000			
5.500				169.3 lb sq ft	60 1/2	x 144 1/2	10278.0
77.62 lb sq ft	48 1/2	x 144 1/2	3778.0				

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
Aluminum

Redding 530.243.1053

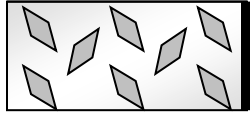
Woodland/Sacramento 530.406.0492

USEFUL INFO

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 Aluminum
 USEFUL INFO

ALUMINUM EXPANDED

Style Designation	Diamond Size/In	Opening Size/In	Overall Thickness/In	Wt. per 100 sq ft
STANDARD Sheet: 48 x 96				
1/2 - 0.051	.50 x 1.20	.41 x .94	0.158	0.270
1/2 - 0.081	.50 x 1.20	.34 x .88	0.186	0.440
3/4 - 0.081 Hvy.	.92 x 2.00	.73 x 1.6	0.300	0.410
3/4 - 0.125	.92 x 2.00	.70 x 1.5	0.305	0.650
FLATTENED Sheet Size: 48 x 96				
1/2 - 0.051	.50 x 1.25	.30 x 1.0	0.040	0.260
1/2 - 0.081	.50 x 1.25	.28 x .94	0.060	0.420
3/4 - 0.081 Lt.	.92 x 2.10	.64 x 1.8	0.070	0.300
3/4 - 0.125	.92 x 2.10	.56 x 1.8	0.095	0.620
1 1/2 - 0.125	1.33 x 3.20	.98 x 2.5	0.086	0.410



ALUMINUM - 105

ALUMINUM DIAMOND TREAD PLATE

3003, 6061 Bright and Mill finish

Thickness inches	Width inches	Length inches	Lb sheet	
.063 1.00 lb sq ft	48	x 96	32.0	
		x 120	40.0	
		x 144	48.0	
	60	x 96	40.0	
		x 120	50.0	
		x 144	60.0	
	.100 1.57 lb sq ft	48	x 96	50.24
			x 120	62.8
			x 144	75.36
		60	x 96	62.8
			x 120	78.5
			x 144	94.2
.125 1.92 lb sq ft	48	x 96	61.44	
		x 120	76.8	
		x 144	92.16	
	60	x 120	115.2	
		x 144	122.88	
		x 180	153.6	
	.188 2.82 lb sq ft	48	x 120	112.8
			x 144	135.36
			x 192	180.48
		60	x 144	169.2
			x 192	225.6
			x 225	271.5
.250 3.7 lb sq ft	36	x 144	133.2	
		x 180	177.6	
		x 225	236.8	
	48	x 144	177.6	
		x 180	236.8	
		x 225	296	
	.375 5.49 lb sq ft	48	x 144	263.52
			x 180	351.36
			x 225	439.2
		60	x 180	439.2
			x 225	527.04
			x 270	614.88
.500 7.27 lb sq ft	48	x 192	465.28	
		x 240	581.6	
		x 288	697.92	
	60	x 240	581.6	
		x 300	727.2	
		x 360	872.8	

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
Aluminum

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

USEFUL INFO

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM

Availability of Shapes, Plates, and Bars
 According to ASTM Structural Steel Specifications
 (Please ask if we stock or can get it for you.)

Steel	ASTM Specification	Grade	Minimum Yield Stress (ksi)	Minimum Tensile Stress (ksi)	Shape	
					Round	Square & Rectangle
Electric-resistance welded	A53 Type E	B	35	60		
Seamless	Type S	B	35	60		
Cold formed	A500	A	33	45		
		B	42	58		
		C	46	62		
		A	39	45		
		B	46	58		
		C	50	62		
Hot formed	A501	-	36	58		
High-strength Low-alloy	A618	I	50	70		
		II	50	70		
		III	50	65		

Available
 Not Available

Useful Info

Availability of Shapes, Plates, and Bars
 According to ASTM Structural Steel Specifications
 (Please ask if we stock or can get it for you.)

Steel Types	ASTM Designation	Minimum Yield Stress (ksi)	Minimum Tensile Stress (ksi)
Carbon	A36	32	58-80
		36	58-80
	A529	42	60-85
High strength-Low alloy	A441	40	60
		42	63
		46	67
		50	70
	A572-42	42	60
	A572-50	50	65
	A572-60	60	57
	A572-65	65	80
Corrosion resistant High strength Low alloy	A242	42	63
		46	67
		50	70
	A588	42	63
		46	67
		50	70
Quenched & Tempered Low alloy	A582*	70	90-110
Quenched & Tempered alloy	A514*	90	100-130
		100	110-130

* Plates only.

Selected ASTM Specifications for Carbon and Low-Alloy Steels

(Please ask if we stock or can get it for you.)

ASTM #	DESCRIPTION
A6	Roller steel structural plate, shapes, sheet, and bars
A20	Plate for pressure vessels
A29	Carbon and alloy bars, hot rolled and cold finished
A36	Carbon steel plates, bars, and shapes
A108	Standard quality cold-finished carbon bars
A131	Carbon & HSLA steel plates, bars, and shapes
A238	Carbon steel plates of low or intermediate strength
A242	HSLA steel, plates, bars, and shapes
A284	Carbon-Si plates for machine parts and general construction
A304	Alloy bars having hardenability requirements
A322	Hot-rolled alloy bars
A331	Cold-finished alloy bars
A434	Hot-rolled or cold-finished quenched-and-tempered bars
A440	Carbon steel plates, bars, and shapes of high strength
A441	Mn-V HSLA steel plates, bars, and shapes
A505	Hot-rolled and cold-rolled alloy steel sheet and strip
A506	Regular quality hot- and cold-rolled alloy sheet and strip
A507	Drawing quality hot- and cold-rolled alloy sheet and strip
A510	Carbon wire rods and coarse round wire
A514	Quenched & tempered alloy steel plates of high strength
A534	Carburizing steels for antifriction bearings
A535	Specialty quality ball and rolling bearing steel
A545	Cold heading quality carbon wire for machine screws
A546	Cold heading quality medium carbon wire for hexagonal bolts
A547	Cold heading quality alloy wire for hexagonal head bolts
A548	Cold heading quality carbon wire for tapping or sheet screws
A549	Cold heading quality carbon steel for wood screws
A568	Carbon and HSLA hot- and cold-rolled sheet and strip
A572	Nb-V HSLA steel plates, bars, and shapes
A573	Carbon steel plates requiring toughness at ambient temp.
A575	Merchant quality hot-rolled carbon steel bars
A576	Special quality hot-rolled carbon steel bars
A588	HSLA steel plates with 345 Mpa (50 ksi) yield strength
A633	HSLA normalized steel plates, bars and shapes
A656	V-Al-N and Ti-Al HSLA steel plates
A659	Commercial quality hot-rolled carbon sheet and strip
A689	Carbon and alloy steel bars for springs

Characteristics of the Carbon and Low Alloy Steels

Machinability Ratings

ALLOY TYPE	YIELD STRENGTH ksi	ADVANTAGES	DIS-ADVANTAGES
Hot-rolled 10xx 11xx			
As rolled	58-140	Low cost, good formability, weldability, availability	Low strength
Normalized	58-101	Low cost, good formability, weldability, availability	Low strength
Annealed	56-94	Low cost, good formability, weldability, availability	Low strength
Quenched & tempered	85-232	Wide range of strengths and toughness, high temp. strength	High cost, poor weld-ability
Cold finished 10xx, 11xx			
	58-112	Good surface finish, Machinability	Low toughness
HSLA			
As rolled	40-50	High strength & toughness	Usually plate & sheet
Micro alloyed controlled rolled	47-80	High strength & toughness	High cost
Normalized	43-80	High strength & toughness	
Hardened & tempered	58-94	High strength & toughness	High cost, poor weld-ability
Low alloy			
Hardened	58-268	Wide range of strengths and toughness, high temp. strength	High cost, poor weld-ability

AISI #	Hardness Brinell	Machinability Rating	AISI #	Hardness Brinell	Machinability Rating
1212	175	100	4130	187-229	70
1010	105	55	4140	187-229	65
1019	131	70	4150	187-240	55
1040	170	60	4340	187-240	50
1050	197	45	5130	174-212	70
1075	192	48	5140	179-217	65
1541	207	45	8645	184-217	65
			8470	184-217	65

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM

Useful Info

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM

SHAPES

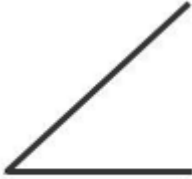

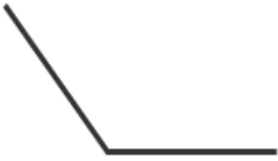
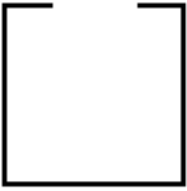
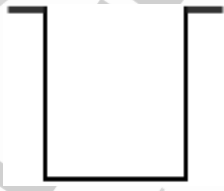
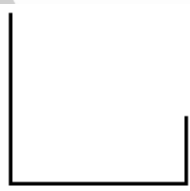

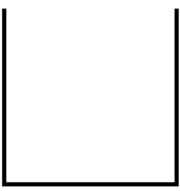
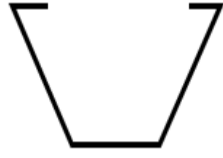



We can roll **tubing, angle, channel, beam, solids, bar stock, and plate.**

The next 3 pages give you some examples of common shapes and bends. If you want something different, just ask. Fax or email your drawings with dimensions.

How tightly something can be rolled or formed depends on the dimensions and composition of the material being used. Please ask us about your particular project.

	ANGLES	BEAMS	CHANNELS	TEES
	LEG OUT 	EASY WAY 	EASY WAY, FLANGES OUT 	STEM OUT 
	Specify inside diameter and if unequal, which leg is out	Specify diameter of web center line	Specify I.D.	Specify I.D.
	LEG IN 	HARD WAY 	EASY WAY, FLANGES IN 	STEM IN 
	Specify outside diameter and if unequal, which leg is in	Specify I.D. or O.D.	Specify I.D. or O.D.	Specify I.D. or O.D.
	HEEL OUT 	BARS EASY WAY 	HARD WAY OF WEB 	STEM UP 
	Specify I.D.	Specify I.D. or O.D.	Specify I.D. or O.D.	Specify diameter of stem center line
	HEEL IN 	HARD WAY 		
	Specify I.D. or O.D.	Specify I.D. or O.D.		

FORMED SHAPES continued

 Acute Angle	 90° Angle	 Obtuse Angle
 "C" Channel	 Hat Channel	 "J" or Unequal-leg Channel
 "Z" Channel	 Trough or Channel	 "C" Trough
 "V" Crimp (1", 2", or 3" opening)	 Hat Trough	 Rub Rail

INDEX

ROUND

SQUARE

FLAT

ANGLE

CHANNEL

BEAM

TUBE

PIPE

REBAR

PLATE

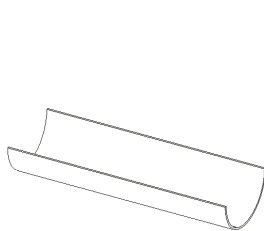
EXPANDED

STAINLESS

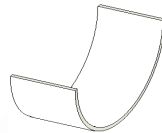
ALUMINUM

FORMED SHAPES continued

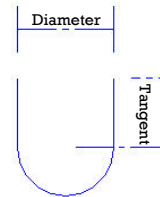
INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM



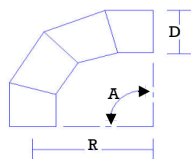
Long side into roll (LSIR)



Short side into roll (SSIR)

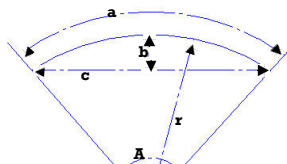


Auger Trough



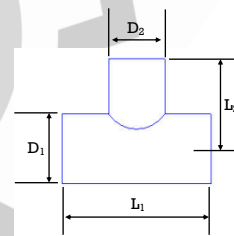
Mitered Elbow
(4 piece 90° shown)

A = angle
 D = diameter
 R = center-to-face radius



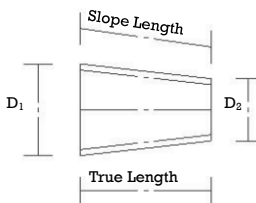
Rolled Segment

a = arc length
 c = chord length
 A = angle
 b = rise
 r = radius

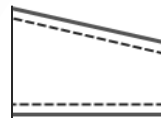


Reducing Tee

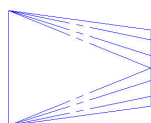
D₁ = major diameter
 D₂ = minor diameter
 L₁ = run length
 L₂ = outlet length from center



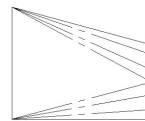
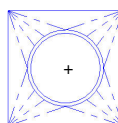
Cone: Concentric with common center



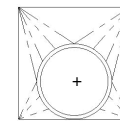
Cone: Eccentric with common flowline



Square-to-round



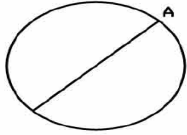
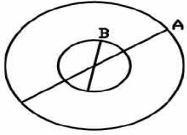
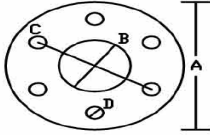
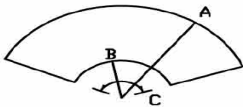
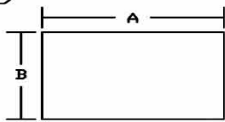
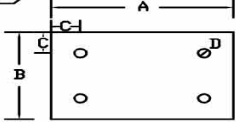
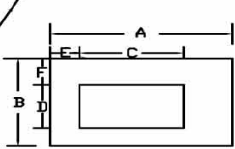
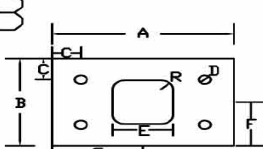
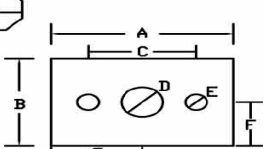
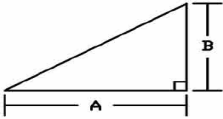
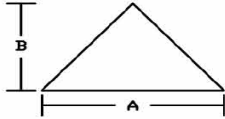
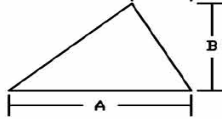
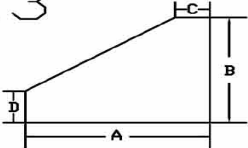
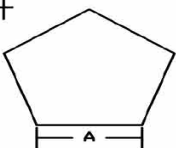
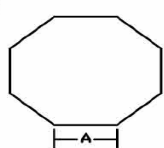
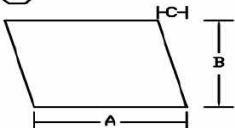
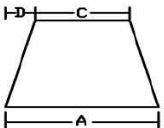
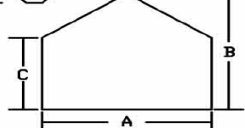
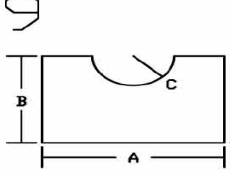
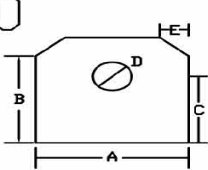
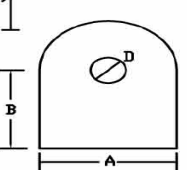
Square-to-round with offset



Useful Info

STANDARD BURNED SHAPES

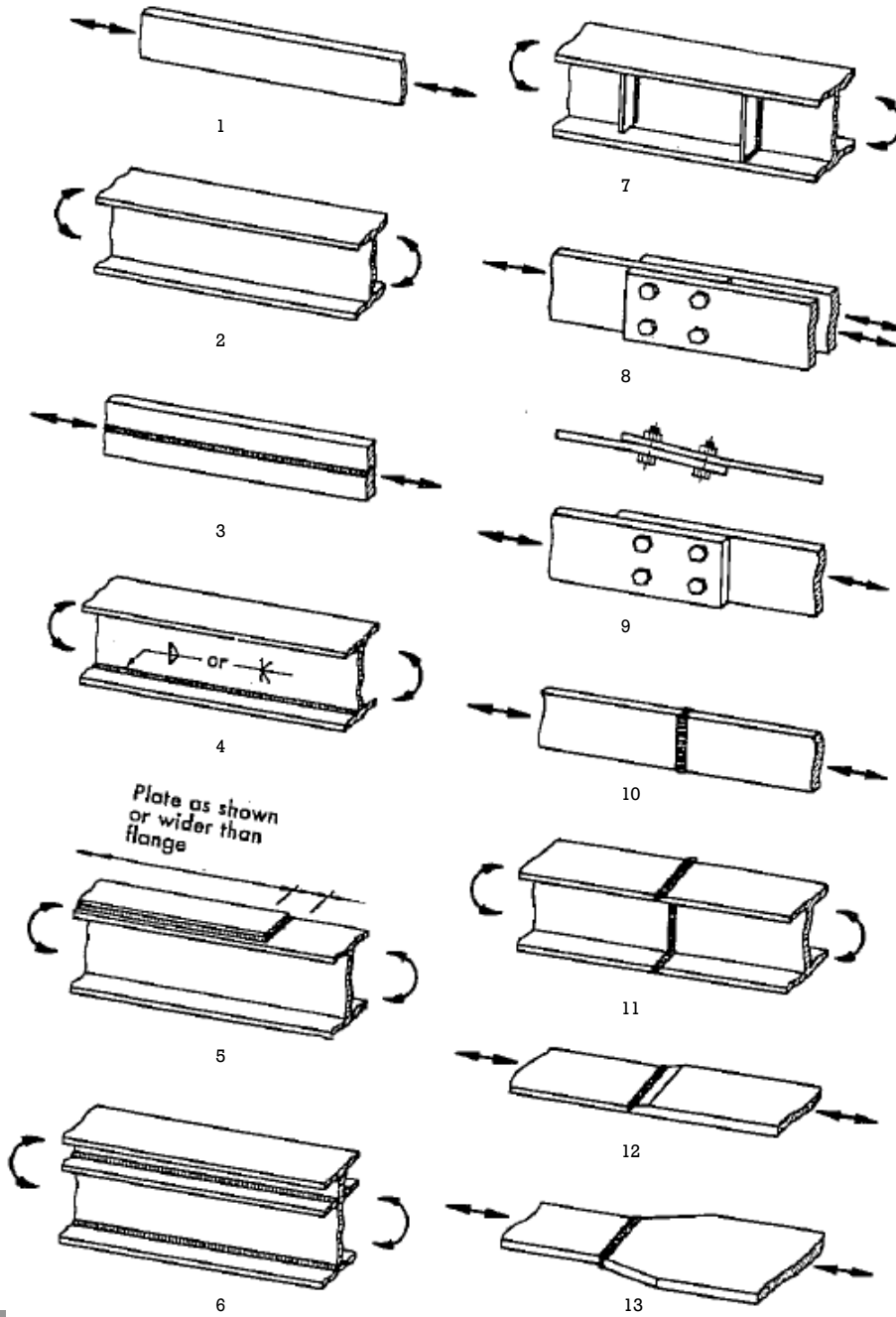
These shapes are available through our shape library.
For custom shapes, call our estimating department

1 	2 	3 	INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM
4 	5 	6 	
7 	8 	9 	
10 	11 	12 	
13 	14 	15 	
16 	17 	18 	
19 	20 	21 	

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM

STRENGTH DESIGN CONSIDERATIONS

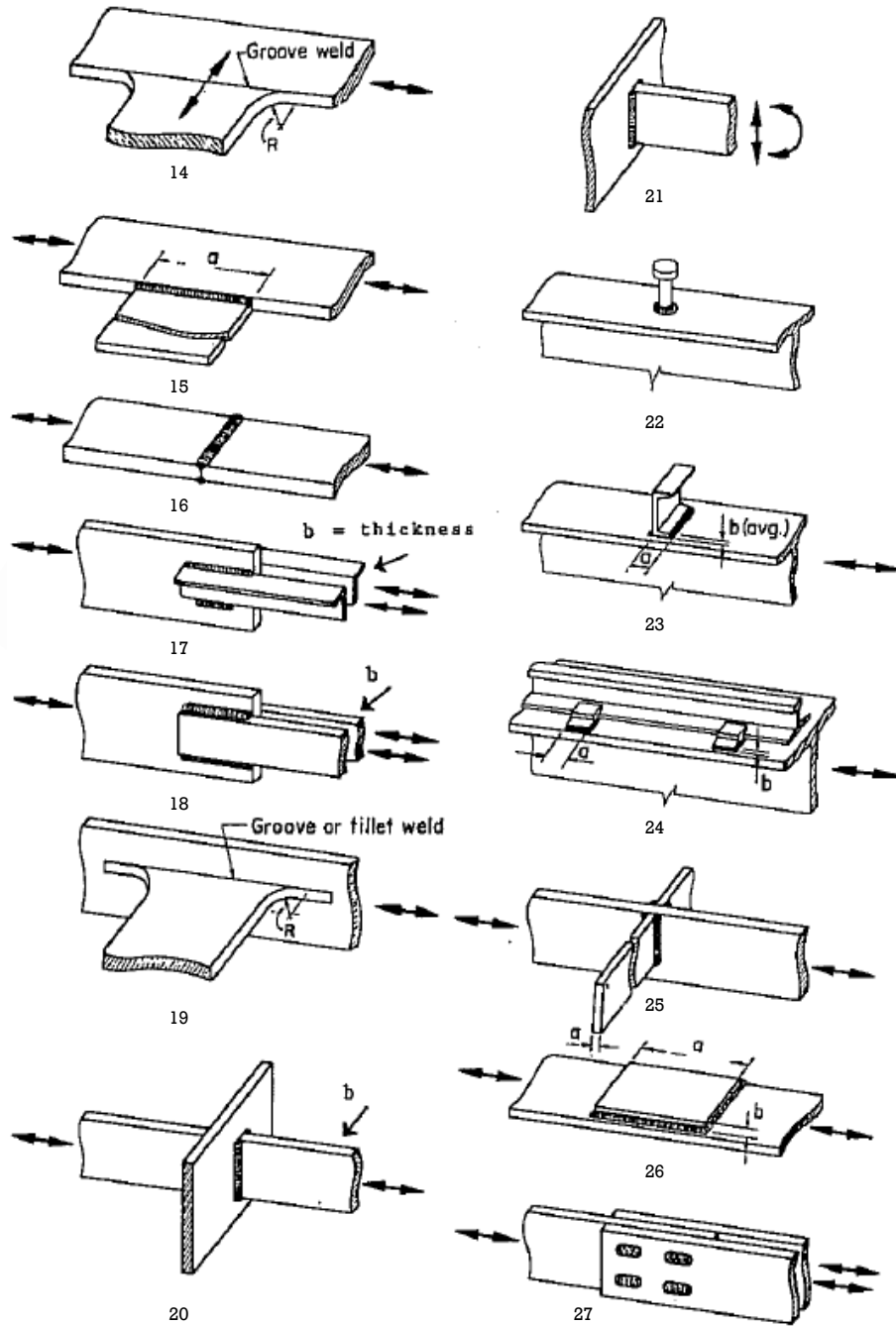
Examples



Useful Info

STRENGTH DESIGN CONSIDERATIONS

Examples (continued)



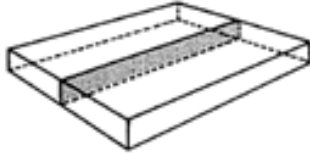
INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM

INDEX

APPLICABLE WELDS

ROUND

Butt Joint



Square Groove
V-Groove
Bevel Groove
U-Groove
Braze

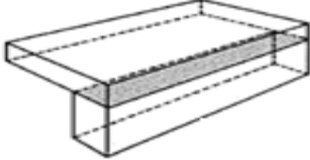
J-Groove
Flare V-Groove
Flare Bevel Groove
Edge-Flange

SQUARE

FLAT

ANGLE

Corner Joint



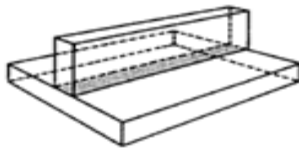
Fillet
Square Groove
V-Groove
Bevel Groove
U-Groove
J-Groove
Flare V-Groove

Flare Bevel Groove
Edge Flange
Corner Flange
Spot
Projection
Seam
Braze

CHANNEL

BEAM

T-Joint



Fillet
Plug
Slot
Square Groove
Bevel Groove
Braze

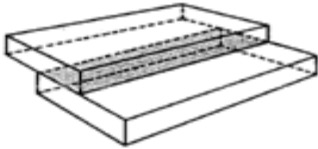
J-Groove
Flare Bevel Groove
Spot
Projection
Seam

TUBE

PIPE

REBAR

Lap Joint



Fillet
Plug
Slot
Bevel Groove
Seam

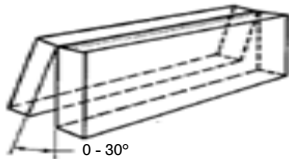
J-Groove
Flare Bevel Groove
Spot
Projection
Braze

PLATE

EXPANDED

STAINLESS

Edge Joint



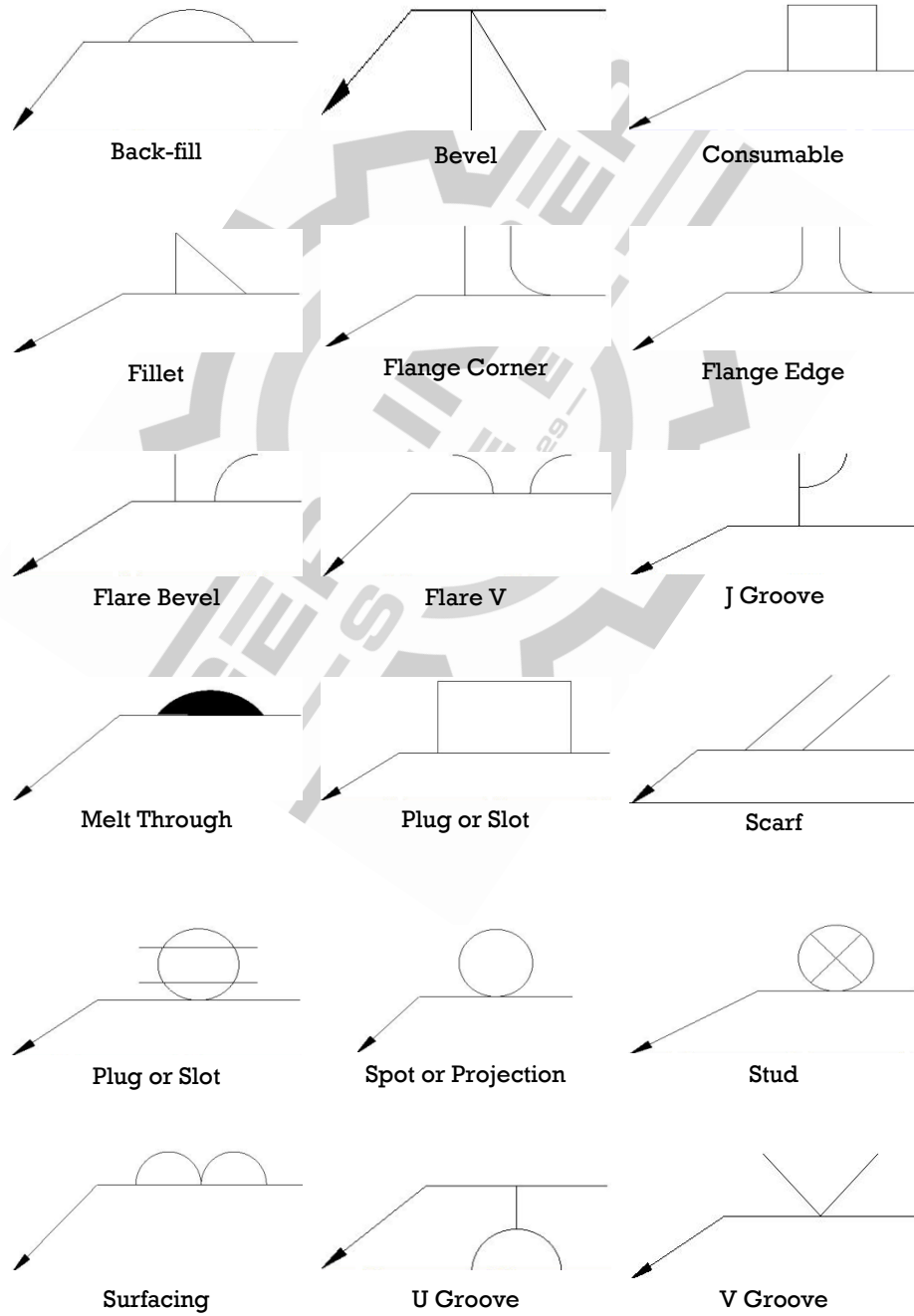
Square Groove
Bevel Groove
V-Groove
U-Groove
J-Groove

Edge Flange
Corner Flange
Seam
Edge

ALUMINUM

Useful Info

STANDARD WELDING SYMBOLS
per American Welding Society, Inc.



Redding 530.243.1053

Woodland/Sacramento 530.406.0492

Useful Info

118 - USEFUL INFORMATION

FRACTION—DECIMAL—MILIMETER CONVERSION TABLE

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM

fraction	decimal	mm
1/64	0.0156	0.3969
1/32	0.0313	0.7938
3/64	0.0469	1.1906
1/16	0.0625	1.5875
5/64	0.0781	1.9844
3/32	0.0938	2.3813
7/64	0.1094	2.7781
1/8	0.125	3.175
9/64	0.1406	3.5719
5/32	0.1563	3.9688
11/64	0.1719	4.3656
3/16	0.1875	4.7625
13/64	0.2031	5.1594
7/32	0.2188	5.5563
15/64	0.2344	5.9531
1/4	0.25	6.35
17/64	0.2656	6.7469
9/32	0.2813	7.1438
19/64	0.2969	7.5406
5/16	0.3125	7.9375
21/64	0.3281	8.3344
11/32	0.3438	8.7313
23/64	0.3594	9.1281
3/8	0.375	9.525
25/64	0.3906	9.9219
13/32	0.4063	10.3188
27/64	0.4219	10.7156
7/16	0.4375	11.1125
29/64	0.4531	11.5094
15/32	0.4688	11.9063
31/64	0.4844	12.3031
1/2	0.5	12.7
33/64	0.5156	13.0969
17/32	0.5313	13.4938
35/64	0.5469	13.8906
9/16	0.5625	14.2875
37/64	0.5781	14.6844
19/32	0.5938	15.0813
39/64	0.6094	15.4781
5/8	0.625	15.875
41/64	0.6406	16.2719
21/32	0.6563	16.6688
43/64	0.6719	17.0656
11/16	0.6875	17.4625
45/64	0.7031	17.8594
23/32	0.7188	18.2563
47/64	0.7344	18.6531
3/4	0.75	19.05
49/64	0.7656	19.4469

fraction	decimal	mm
25/32	0.7813	19.8438
51/64	0.7969	20.2406
13/16	0.8125	20.6375
53/64	0.8281	21.0344
27/32	0.8438	21.4313
55/64	0.8594	21.8281
7/8	0.875	22.225
57/64	0.8906	22.6219
29/32	0.9063	23.0188
59/64	0.9219	23.4156
15/16	0.9375	23.8125
61/64	0.9531	24.2094
31/32	0.9688	24.6063
63/64	0.9844	25.0031
1	1	25.4
1 1/64	1.0156	25.7969
1 1/32	1.0313	26.1938
1 3/64	1.0469	26.5906
1 1/16	1.0625	26.9875
1 5/64	1.0781	27.3844
1 3/32	1.0938	27.7813
1 7/64	1.1094	28.1781
1 1/8	1.125	28.575
1 9/64	1.1406	28.9719
1 5/32	1.1563	29.3688
1 11/64	1.1719	29.7656
1 3/16	1.1875	30.1625
1 13/64	1.2031	30.5594
1 7/32	1.2188	30.9563
1 15/64	1.2344	31.3531
1 1/4	1.25	31.75
1 17/64	1.2656	32.1469
1 9/32	1.2813	32.5438
1 19/64	1.2969	32.9406
1 5/16	1.3125	33.3375
1 21/64	1.3281	33.7344
1 11/32	1.3438	34.1313
1 23/64	1.3594	34.5281
1 3/8	1.375	34.925
1 25/64	1.3906	35.3219
1 13/32	1.4063	35.7188
1 27/64	1.4219	36.1156
1 7/16	1.4375	36.5125
1 29/64	1.4531	36.9094
1 15/32	1.4688	37.3063
1 31/64	1.4844	37.7031
1 1/2	1.5	38.1
1 33/64	1.5156	38.4969
1 17/32	1.5313	38.8938

Useful Info

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Email: sales@gerlanger.com

FRACTION—DECIMAL—MILIMETER CONVERSION TABLE cont'd

fraction	decimal	mm	fraction	decimal	mm
1 35/64	1.5469	39.2906	2 9/32	2.2813	57.9438
1 9/16	1.5625	39.6875	2 19/64	2.2969	58.3406
1 37/64	1.5781	40.0844	2 5/16	2.3125	58.7375
1 19/32	1.5938	40.4813	2 21/64	2.3281	59.1344
1 39/64	1.6094	40.8781	2 11/32	2.3438	59.5313
1 5/8	1.625	41.275	2 23/64	2.3594	59.9281
1 41/64	1.6406	41.6719	2 3/8	2.375	60.325
1 21/32	1.6563	42.0688	2 25/64	2.3906	60.7219
1 43/64	1.6719	42.4656	2 13/32	2.4063	61.1188
1 11/16	1.6875	42.8625	2 27/64	2.4219	61.5156
1 45/64	1.7031	43.2594	2 7/16	2.4375	61.9125
1 23/32	1.7188	43.6563	2 29/64	2.4531	62.3094
1 47/64	1.7344	44.0531	2 15/32	2.4688	62.7063
1 3/4	1.75	44.45	2 31/64	2.4844	63.1031
1 49/64	1.7656	44.8469	2 1/2	2.5	63.5
1 25/32	1.7813	45.2438	2 33/64	2.5156	63.8969
1 51/64	1.7969	45.6406	2 17/32	2.5313	64.2938
1 13/16	1.8125	46.0375	2 35/64	2.5469	64.6906
1 53/64	1.8281	46.4344	2 9/16	2.5625	65.0875
1 27/32	1.8438	46.8313	2 37/64	2.5781	65.4844
1 55/64	1.8594	47.2281	2 19/32	2.5938	65.8813
1 7/8	1.875	47.625	2 39/64	2.6094	66.2781
1 57/64	1.8906	48.0219	2 5/8	2.625	66.675
1 29/32	1.9063	48.4188	2 41/64	2.6406	67.0719
1 59/64	1.9219	48.8156	2 21/32	2.6563	67.4688
1 15/16	1.9375	49.2125	2 43/64	2.6719	67.8656
1 61/64	1.9531	49.6094	2 11/16	2.6875	68.2625
1 31/32	1.9688	50.0063	2 45/64	2.7031	68.6594
1 63/64	1.9844	50.4031	2 23/32	2.7188	69.0563
2	2	50.8	2 47/64	2.7344	69.4531
2 1/64	2.0156	51.1969	2 3/4	2.75	69.85
2 1/32	2.0313	51.5938	2 49/64	2.7656	70.2469
2 3/64	2.0469	51.9906	2 25/32	2.7813	70.6438
2 1/16	2.0625	52.3875	2 51/64	2.7969	71.0406
2 5/64	2.0781	52.7844	2 13/16	2.8125	71.4375
2 3/32	2.0938	53.1813	2 53/64	2.8281	71.8344
2 7/64	2.1094	53.5781	2 27/32	2.8438	72.2313
2 1/8	2.125	53.975	2 55/64	2.8594	72.6281
2 9/64	2.1406	54.3719	2 7/8	2.875	73.025
2 5/32	2.1563	54.7688	2 57/64	2.8906	73.4219
2 11/64	2.1719	55.1656	2 29/32	2.9063	73.8188
2 3/16	2.1875	55.5625	2 59/64	2.9219	74.2156
2 13/64	2.2031	55.9594	2 15/16	2.9375	74.6125
2 7/32	2.2188	56.3563	2 61/64	2.9531	75.0094
2 15/64	2.2344	56.7531	2 31/32	2.9688	75.4063
2 1/4	2.25	57.15	2 63/64	2.9844	75.8031
2 17/64	2.2656	57.5469	3	3	76.2

INDEX ROUND SQUARE FLAT ANGLE CHANNEL BEAM TUBE PIPE REBAR PLATE EXPANDED STAINLESS ALUMINUM Useful Info

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

120 - USEFUL INFORMATION

INDEX
ROUND
SQUARE
FLAT
ANGLE
CHANNEL
BEAM
TUBE
PIPE
REBAR
PLATE
EXPANDED
STAINLESS
ALUMINUM

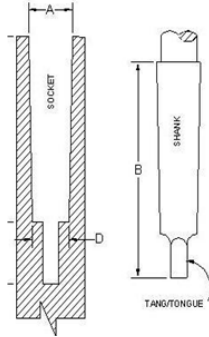
TAP AND DRILL CHART

Based on approximately 75% maximum threads.

Check manufacturer for recommendations on specific sizes for alloy, non-ferrous materials, lubricant, and when tapping under power.

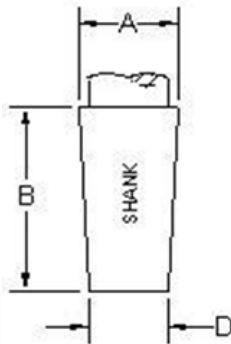
FRACTIONAL SIZES				NUMBER SIZES			TAPER PIPE SIZES			
Tap size #	Threads per inch	Tap drill size, inch		Tap size #	Threads per inch	Tap drill size, inch	Tap size #	Threads per inch	Tap drill size, inch	
1/4	20	8 -	13/64	0	80	3/64	1/8	27	Q -	21/64
1/4	28	3 -	7/32	1	64	53	1/4	18	7/16	
5/16	18	F -	17/64	1	72	53	3/8	18		9/16
5/16	24		17/64	2	56	51	1/2	14	45/64	
3/8	16	I -	5/16	2	64	50	3/4	14		29/32
3/8	24	Q -	21/64	3	48	47 5/64	1	11 1/2		1 9/64
7/16	14	U -	23/64	3	56	46	1 1/4	11 1/2		1 31/64
7/16	20	W -	25/64	4	40	43	1 1/2	11 1/2		1 47/64
1/2	13		27/64	4	48	42	2	11 1/2		2 13/64
1/2	20		29/64	5	40	39	2 1/2	8		2 5/8
9/16	12		31/64	5	44	37	3	8		3 1/4
9/16	18		33/64	6	32	36	3 1/2	8		3 3/4
5/8	11		17/32	6	40	33	4	8		4 1/4
5/8	18		37/64	8	32	29	4 1/2	8		4 11/16
3/4	10		21/32	8	36	29	5	8		5 9/32
3/4	16		11/16	10	24	25	6	8		6 11/32
7/8	9		49/64	10	32	21	STRAIGHT PIPE			
7/8	14		13/16	12	24	17				
1	8		7/8	12	28	15	1/8	27		11/32
1	14		15/16				1/4	18		7/16
1 1/8	7		63/64				3/8	18		37/64
1 1/8	12		1 3/64				1/2	14		23/32
1 1/4	7		1 7/64				3/4	14		59/64
1 1/4	12		1 11/64				1	11 1/2		1 5/32
1 1/2	6		1 11/32				1 1/4	11 1/2		1 1/2
1 1/2	12		1 27/64				1 1/2	11 1/2		1 3/4
1 3/4	5		1 9/16				2	11 1/2		2 7/32
1 3/4	12		1 43/64				2 1/2	8		2 21/32
2	4 1/2		1 25/32				3	8		3 9/32
2	12		1 59/64				3 1/2	8		3 25/32
2 1/4	4 1/2		2 1/32				4	8		4 9/32
2 1/2	4		2 1/4				4 1/2	8		4 25/32
2 3/4	4		2 1/2				5	8		5 11/32
3	4		2 3/4				6	8		6 13/32

MORSE TAPER DIMENSION REFERENCE (Inches)



Taper #	A	D	K	L	B
0	0.3561	0.2520	1.9375	0.5625	2.3438
1	0.4750	0.3690	2.0625	0.7500	2.5625
2	0.7000	0.5720	2.5000	0.8750	3.1250
3	0.9380	0.7780	3.0625	1.1875	3.8750
4	1.2310	1.0200	3.8750	1.2500	4.8750
5	1.7480	1.4750	4.9375	1.5000	6.1250
6	2.4940	2.1160	7.0000	1.7500	8.5625
7	3.2700	2.7500	9.5000	2.6250	11.6250

JACOBS TAPER DIMENSION REFERENCE (Inches)



Taper #	A	D	B
0	0.2500	0.2284	0.4375
1	0.3840	0.3334	0.6563
2	0.5590	0.4876	0.8750
2A	0.5488	0.4876	0.7500
3	0.8110	0.7461	1.2100
4	1.1240	1.0372	1.6563
5	1.4130	1.3161	1.8750
6	0.6760	0.6241	1.0000
33	0.6240	0.5605	1.0000

SAE BOLT DESIGNATIONS

SAE Grade #	Size range	Tensile strength, ksi	Material	Head marking
1	1/4 thru 1-1/2	60	Low or medium carbon steel	
2	1/4 thru 3/4 7/8 thru 1-1/2	74 60		
5	1/4 thru 1 1-1/8 thru 1-1/2	120 105	Medium carbon steel, quenched & tempered	
5.2	1/4 thru 1	120	Low carbon, matensite steel, quenched & tempered	
7	1/4 thru 1-1/2	133	Medium carbon alloy steel, quenched & tempered	
8	1/4 thru 1-1/2	150	Medium carbon alloy steel, quenched & tempered	
8.2	1/4 thru 1	150	Low carbon, matensite steel, quenched & tempered	

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM

WEIGHTS

Weights for pressed bar and all other weights in this book are theoretical. They are calculated on the basis of rolled or forged steel weighing 489.6 pounds per cubic foot and on the assumption that the bar will be an exact size.

Hot rolled and pressed (forged) products, especially in the heavier sections, are generally produced to tolerances on the plus side and will run oversize. Therefore, they will also run over the theoretical weights shown in this book, which are based on exact size. Any reference to these weights should be for estimating purposes only.

WEIGHT FORMULAS

- **Steel weights are based on .2833 lb. per cubic inch.**
- **Stainless steel weights are based on .298 lb. per cubic inch.**
- **Aluminum weights are based on .0979 lb. per cubic inch, which applies to 1100 alloy.**

ROUNDS

Steel: Pounds per lineal foot = $2.67036 \times \text{Diameter}^2$
 Stainless: Pounds per lineal foot = $2.80892 \times \text{Diameter}^2$
 Aluminum: Pounds per lineal foot = $.9227 \times \text{Diameter}^2$

FLATS

Steel: Pounds per lineal foot = $3.4 \times \text{Thickness inches} \times \text{Width inches}$
 Stainless: Pounds per lineal foot = $3.576 \times \text{Thickness inches} \times \text{Width inches}$
 Aluminum: Pounds per lineal foot = $1.1748 \times \text{Thickness inches} \times \text{Width inches}$

SQUARES

Steel: Pounds per lineal foot = $3.4 \times \text{Side}^2 \text{ inches}$
 Stainless: Pounds per lineal foot = $3.576 \times \text{Side}^2 \text{ inches}$
 Aluminum: Pounds per lineal foot = $1.1748 \times \text{Side}^2 \text{ inches}$

ROUND TUBING

Steel: Pounds per lineal foot = $10.68 \times (\text{OD} - \text{Wall thickness}) \times \text{Wall thickness}$
 Stainless: Pounds per lineal foot = $11.234 \times (\text{OD} - \text{Wall thickness}) \times \text{Wall thickness}$
 Aluminum: Pounds per lineal foot = $3.6904 \times (\text{OD} - \text{Wall thickness}) \times \text{Wall thickness}$

SQUARE TUBING

Steel: Pounds per lineal foot = $13.6 \times (\text{OD} - \text{Wall thickness}) \times \text{Wall thickness}$
 Stainless: Pounds per lineal foot = $14.3 \times (\text{OD} - \text{Wall thickness}) \times \text{Wall thickness}$
 Aluminum: Pounds per lineal foot = $4.7 \times (\text{OD} - \text{Wall thickness}) \times \text{Wall thickness}$

HEXAGONS

Steel: Pounds per lineal foot = $2.9446 \times \text{Diameter}^2$
 Stainless: Pounds per lineal foot = $3.0974 \times \text{Diameter}^2$
 Aluminum: Pounds per lineal foot = $1.0175 \times \text{Diameter}^2$

CIRCLES

Steel: Weight of circle in lbs = $.22253 \times \text{Thickness inches} \times \text{Diameter}^2$
 Stainless: Weight of circle in lbs = $.23408 \times \text{Thickness inches} \times \text{Diameter}^2$
 Aluminum: Pounds per lineal foot = $.07690 \times \text{Thickness inches} \times \text{Diameter}^2$

RINGS

Steel: Weight of ring in lbs = $.22253 \times \text{Thickness inches} \times (\text{OD}^2 - \text{ID}^2)$
 Stainless: Weight of ring in lbs = $.23408 \times \text{Thickness inches} \times (\text{OD}^2 - \text{ID}^2)$
 Aluminum: Pounds per lineal foot = $.07690 \times \text{Thickness inches} \times (\text{OD}^2 - \text{ID}^2)$

GEOMETRIC FORMULAS

Circle

Area = Diameter² x .7854 or Radius² x 3.1416
 Circumference = Diameter x 3.1416
 Diameter = Circumference x 3.183

Square

Area = Side²
 Diagonal = Side x 1.4142
 Side = Diagonal x .7071

Square inscribed in a Circle

Side of square = Diameter of circle x .7071 or Circumference of circle x .2251
 Diameter of circle = Side of square x 1.4142
 Circumference of circle = Side of square x 4.4429

Rectangle

Area = Length x Width
 Diagonal = Square root of sum of squares of width and length

Triangle

Area = Base x 1/2 of perpendicular height

Hexagon (Equal sides and angles)

Area = Distance across flats² x .866 or Side² x 2.598
 Side = 1/2 of Diagonal or Distance across flats x .577
 Diagonal = Distance across flats x 1.082 or Side x 2.613

Octagon (Equal sides and angles)

Area = Distance across flats² x .828 or Side² x 4.828
 Side = Diagonal x .383 or Distance across flats x .414
 Diagonal = Distance across flats x 1.082 or Side x 2.613

Sphere

Area of surface = Diameter² x 3.1416
 Volume = Diameter³ x .5326

Cube

Area of surface = Side² x 6
 Volume = Side³
 Diagonal = Side x 1.732

Cylinder

Area of curved surface = Diameter x length x 3.1416
 Volume = Diameter² x length x .7854

Cone

Area of curved surface = Diameter of base x slant height x 1.5708
 Volume = Diameter of base² x perpendicular height x .2618 or
 Area of base x 1/3 perpendicular height

Pyramid

Lateral surface area (not incl. base) = Perimeter of base x 1/2 slant height
 Volume = Area of base x 1/3 perpendicular height

Redding 530.243.1053

Woodland/Sacramento 530.406.0492

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM
 Useful Info

INDEX
 ROUND
 SQUARE
 FLAT
 ANGLE
 CHANNEL
 BEAM
 TUBE
 PIPE
 REBAR
 PLATE
 EXPANDED
 STAINLESS
 ALUMINUM

STANDARD CONVERSIONS

1 foot	= 12 inches	
1 yard	= 3 feet	= 36 inches
1 mile	= 1,760 yards	= 5,280 feet
1 ton	= 2,000 pounds (lb)	

METRIC CONVERSIONS

Linear Measure

10 mm (millimeter)	= 1 cm (centimeter)	= 0.3937 inches
10 cm (centimeter)	= 1 dm (decimeter)	= 3.937 inches
10 dm (decimeter)	= 1 meter	= 39.37 inches

WATER and AIR CALCULATIONS

- A **gallon** of water (U.S. Standard) weighs 8 1/3 lbs. and contains 231 cubic inches.
- A **cubic foot** of water contains 7 1/2 gallons, 1728 cubic inches, and weighs 62 1/2 pounds.
- To find the **pressure** in pounds per square inch of a column of water multiply the height of the column in feet by .434.
- **Steam** rising from water at its boiling point (212 degrees) has a pressure equal to the atmosphere (14.7 pounds to the square inch).
- A Standard **horse-power**. The evaporation of 30 lbs of water per hour from a feed water temperature of 100°F into steam at 70 lbs gauge pressure.
- To find the capacity (U.S. gallons) of **cylindrical tanks**, square the diameter expressed in inches, multiply by the length and by .0034.
- To ascertain **heating surface in tubular boilers** multiply % the circumference of boiler by length of boiler in inches and add to it the area of all the tubes.
- One-sixth of tensile strength of plate multiplied by thickness of plate and divided by one-half the diameter of boiler gives **safe working pressure for tubular boilers**.
- For **marine boiler**, add 20 percent for drilled holes.
- To find the **capacity of an air compressor** in cubic feet of free air per minute: Multiply the area of low pressure cylinder (on compound compressor), or area of simple compressor cylinder in square inches, by the stroke in inches and divide by 1728; and multiply this result:
 - (a) In single acting, simple or compound, by the R.P.M.
 - (b) Double acting, simple or compound, by 2 x R.P.M.
 - (c) Duplex double acting, by 4 x R.P.M.

Useful Info

Timeline

Early 1900's - The Redding machine and weld shop building was built and later was operated as Johnson Machine Works.

Late 1920's - Shop building was partially destroyed by arson.

1929 - Fred W. Gerlinger and son, Bert, purchased the facility, rebuilt, and opened for business.

1930 - Gerlinger Foundry and Machine Works established and incorporated.

1935 - Gerlinger Foundry begins selling steel.

1936 - First electric welder purchased and put in to use.

1937 - First iconic Redding red brick warehouse building, now called "Bay 2," finished construction.

1940 - The County Shop is purchased and has since been renamed "Bay 4."

1940's-1960's - Materials provided to Shasta Dam and other Hydro-Electric projects.

1946 - Second Redding warehouse building, Bay 1, built.

1952 - Redding Office completed construction.

1955 - Final Redding warehouse building, Bay 3, built. Delivery range now extends West to Eureka, CA, and south to the San Francisco Bay.

1963 - Fred W. Gerlinger Sr. passed away, leaving the business to Bert and his other two sons, Fred Jr. and Frank. Second floor of Redding Office completed construction.

1964 - Redding truck yard on South St. purchased from PG&E.

1965 - Redding Wholesale Store completed construction.

1968 - Foundry division of the business was shut down.

1970's - Gerlinger Steel sells materials to support projects including the Trinity/Whiskeytown and Oroville Dams, irrigation and canal systems throughout the Sacramento Valley, as well as construction of Interstates 5 and 80.

1980 - Now doing business as Gerlinger Steel & Supply, active heavy metal-working machine sales begin.

1982 - Pre-fabrication processing begins, including: shearing, forming, rolling, and flame burning.

1987 - E.E. "Bert" Gerlinger passes away.

1992 - Sacramento, CA branch opened by purchasing the metals processing operations from Sacramento Pipe Works. Delivery range now extends south through the San Joaquin Valley.

1995 - Bert's son, Fred M. Gerlinger (3rd generation), becomes CEO.

1999 - Nevada City Machinery branch opens. Delivery range now extends East to Reno and Carson City, NV.

2005 - Tim Gerlinger (4th generation) becomes the company Vice President and the Facility Manager of the Sacramento location.

2007 - Sacramento branch sales office relocated to place it in nearer proximity to processing operations.

2008 - Redding installs bundle-cutting 25 x 30 HydMech Vertical Miter Saw.

2011 - Sacramento processing now includes Amada CO2 laser.

2013 - Woodland, CA facility purchased. Sacramento and Nevada City locations merged to single new facility.

2015 - Woodland installs 11' x 60' High Def CNC Bevel Plasma Table.

2016-2018 - Both facilities install multiple new Amada flat lasers. Woodland installs 16" Mazak tube laser.

2019 - We celebrated our 90th year in business!



DISCLAIMER:

The information and data in this book are correct to the best of our knowledge, but are intended for general information only. Like everyone, we also make mistakes from time to time, and have done our best to limit those. The publishers of this book make no express or implied warranties and take no responsibility for errors or omissions. We have attempted to list the most general and commonly used metals. For information on items or sizes not listed, please contact our sales office.