



STEEL PRODUCT CATALOG

Glosser Steel Service
347 Pomroys Drive
Windber, PA 15963

phone: 814-467-5578
toll-free: 800-732-3295
fax: 814-467-9825

Glosser Steel Service
3802 Industrial Park Road
Camp Hill, PA 17011

phone: 717-737-3484
toll-free: 800-342-0777
fax: 717-737-2549

www.glossersteel.com

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STANDARD AISI AND SAE STEELS

Studies have been made in the steel industry for the purpose of establishing certain "standard" steels and eliminating as much as possible the manufacture of other steels which vary only slightly in composition from the standard steels. These standard steels are selected on the basis of serving the significant metallurgical and engineering needs of fabricators and users of steel products.

For the purpose of identifying standard steels, numbering systems have been developed by the AISI and SAE. The symbols used throughout this book are those of the AISI system. However, as will be noted in the tables on the following pages, whenever there is an SAE grade comparable to an AISI grade of carbon or alloy steel, the SAE symbol is similar to that of the AISI.

STANDARD CARBON STEELS

Definition: By common custom, steel is considered to be carbon steel when no minimum content is specified or required for aluminum, boron, chromium, cobalt, columbium, molybdenum, nickel, titanium, tungsten, vanadium, or zirconium, or for any other element added to obtain a desired alloying effect; when the specified minimum for copper does not exceed 0.40 per cent; or when the maximum content specified for any of the following elements does not exceed the percentages noted: manganese 1.65, silicon 0.60, copper 0.60.

Numbering System: In the AISI system of identification, the prefix "B" is used to designate acid Bessemer steel. The Letter "L" within the grade number is used to identify leaded steels.

A four-numeral series is used to designate graduations of chemical composition of carbon steel, the last two numbers of which are intended to indicate the approximate middle of the carbon range. For example, in the grade designation 1035, 35 represents a carbon range of 0.32 to 0.38 per cent.

It is necessary, however, to deviate from this rule and to interpolate numbers in the case of some carbon ranges and for variations in manganese, phosphorus or sulphur with the same carbon range.

The first two digits of the four-numeral series of the various grades of carbon steel and their meanings are as follows:

- 10xx Nonresulphurized carbon steel grades
- 11xx Resulphurized carbon steel grades
- 12xx Rephosphorized and resulphurized carbon steel grades
- 15xx Nonresulphurized high-manganese carbon steels

AISI STANDARD DESIGNATIONS

Structural Shapes

A designation system for structural shapes has been established by the American Iron and Steel Institute, which has been adopted by steel producers. The AISI Designation is a letter or letters preceding the size and weight per foot of the shape. For example, for a standard structural channel, 3-inch x 4.1 pounds, the AISI Designation would be C3 x 4.1.

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A summary of new designations are as follows:

“W” Shapes - Doubly-symmetric wide flange shapes used as beams or columns whose inside flange surfaces are substantially parallel. A shape having essentially the same nominal weight and dimensions as a “W” shape listed in the tabulation but whose inside flange surfaces are not parallel may be considered a “W” shape having the same nomenclature as the tabulated shape, provided its average flange thickness is essentially the same shape as the flange thickness of the “W” shape.

“S” Shapes - Doubly-symmetric shapes produced in accordance with dimensional standards adopted in 1896 by the Association of American Steel Manufacturers for American Standard beam shapes. The essential part of these standards is that the inside flange surfaces of American Standard beam shapes have approximately a 16 2/3% slope.

“M” Shapes - Doubly-symmetric shapes that cannot be classified as “W”, “S”, or bearing pile shapes. (Although not included in the standard nomenclature tabulation, bearing piles are doubly-symmetric wide flange shapes whose inside flange and web have essentially the same thickness.

“C” Shapes - Channels produced in accordance with dimensional standards adopted in 1896 by the Association of American Steel Manufacturers of American Standard channels. The essential part of these standards is the inside flange surfaces of American Standard channels have approximately 16-2/3% slope.

“MC” Shapes - Channels that cannot be classified as “C” shapes.

HOT ROLLED CARBON STEEL SHAPES

Bar Size and Structural

When the greatest dimension (length excluded) of a shape is less than 3 inches, it is classified as a bar size shape. However, when at least one of its dimensions (length excluded) is 3 inches or greater, it is classed as a structural shape.

These shapes are used for general structural purposes and for riveted, bolted or welded construction on bridges and buildings.

Specifications - Bar Size Shapes: Conform to Specification AISI-M-1020.
Structural Shapes: Conform to Specification ASTM-A-36.

Chemical Composition -

	Carbon	Manganese	Phosphorus	Sulphur
M1020	.17/.24	.25/.60	.04 Max.	.05 Max.
A36	.2604 Max.	.05 Max.

Mechanical Properties -

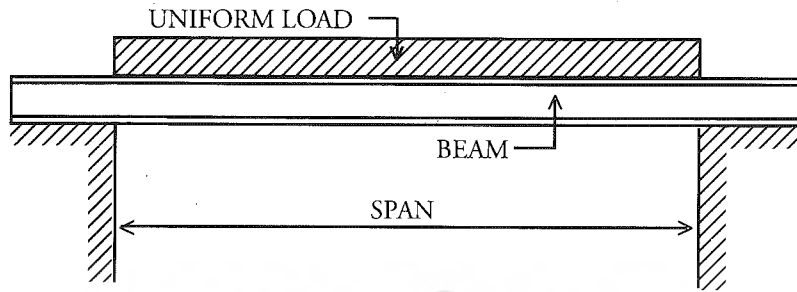
	Tensile Strength	Yield Point	Elongation
	psi	psi	in 2 in.
M1020	63,000	35,000	38%
A36	58,000/80,000	36,000 Min.	23% Min.

Weldability - These shapes can be welded by all welding processes and the results are extremely high quality welds and joints. The design, thickness of section, service requirements, etc., are factors that determine the grade of the welding rod to be used.

NEW MATERIALS

We are constantly adding metals to our inventories.
If you do not see the material listed you are looking for, call us.
We may have it in stock or
We will order it for you at the best possible prices.
Use our telephone facilities.
Our inside salesmen are specially trained to service your orders.

WIDE FLANGE BEAM SELECTION CHART

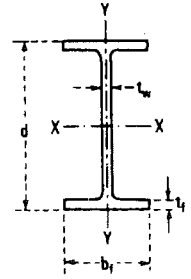


This chart may only be used for wide flange selection if the following criteria is adhered to:

1. Uniform load on entire beam
2. A-36 steel (normal structural steel)
3. Top flange must be laterally supported
4. Use loads required by American Standard building code
5. Loads below give maximum deflection of 0.37"

		SPAN (FEET)							
		10'	12'	14'	16'	18'	20'	22'	24'
TOTAL LOAD (POUNDS)	6,000	W8 x 13	W8 x 13	W8 x 13	W8 x 18	W10 x 19	W10 x 22	W10 x 33	W12 x 40
	8,000	W8 x 13	W8 x 13	W8 x 13	W8 x 18	W10 x 22	W10 x 26	W12 x 26	W12 x 40
	10,000	W8 x 13	W8 x 13	W8 x 21	W8 x 31	W10 x 26	W10 x 33	W12 x 40	W12 x 53
	12,000	W8 x 13	W8 x 15	W8 x 24	W8 x 31	W10 x 33	W12 x 40	W12 x 40	W12 x 53
	14,000	W8 x 13	W8 x 18	W8 x 24	W10 x 26	W10 x 33	W12 x 40	W12 x 40	W12 x 53
	16,000	W8 x 15	W8 x 21	W8 x 31	W10 x 33	W12 x 26	W12 x 40	W12 x 53	—
	18,000	W8 x 15	W8 x 21	W8 x 31	W10 x 33	W12 x 40	W12 x 40	W12 x 53	—
	20,000	W8 x 18	W8 x 24	W10 x 26	W12 x 26	W12 x 40	W12 x 53	—	—
	22,000	W8 x 18	W8 x 24	W10 x 33	W12 x 40	W12 x 40	W12 x 53	—	—
	24,000	W8 x 21	W8 x 31	W10 x 33	W12 x 40	W12 x 40	W12 x 53	—	—
	26,000	W8 x 21	W8 x 31	W10 x 33	W12 x 40	W12 x 53	—	—	—
	28,000	W8 x 24	W8 x 31	W10 x 33	W12 x 40	W12 x 53	—	—	—
	30,000	W8 x 24	W10 x 26	W12 x 26	W12 x 40	W12 x 53	—	—	—
	32,000	W8 x 24	W10 x 26	W12 x 26	W12 x 40	W12 x 53	—	—	—

WIDE FLANGE SHAPES

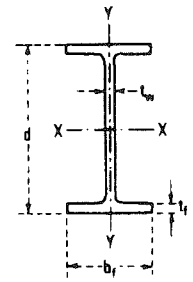


Theoretical Dimensions and Properties for Designing

Section Number	Weight Per Ft.	Area of Section A	Depth of Section d	Flange		Web
				Width b _f	Thickness t _f	Thickness t _w
				in.	in.	in.
W36 x 36 X 16½	300	88.3	36.74	16.655	1.680	0.945
	280	82.4	36.52	16.595	1.570	0.885
	260	76.5	36.26	16.550	1.440	0.840
	245	72.1	36.08	16.510	1.350	0.800
	230	67.6	35.90	16.470	1.260	0.760
W36 x 36 x 12	210	61.8	36.69	12.180	1.360	0.830
	194	57.0	36.49	12.115	1.260	0.765
	182	53.6	36.33	12.075	1.180	0.725
	170	50.0	36.17	12.030	1.100	0.680
	160	47.0	36.01	12.000	1.020	0.650
	150	44.2	35.85	11.975	0.940	0.625
	135	39.7	35.55	11.950	0.790	0.600
W33 x 33 x 15¾	241	70.9	34.18	15.860	1.400	0.830
	221	65.0	33.93	15.805	1.275	0.775
	201	59.1	33.68	15.745	1.150	0.715
W33 x 33 x 11½	152	44.7	33.49	11.565	1.055	0.635
	141	41.6	33.30	11.535	0.960	0.605
	130	38.3	33.09	11.510	0.855	0.580
	118	34.7	32.86	11.480	0.740	0.550
W30 x 30 x 15	211	62.0	30.94	15.105	1.315	0.775
	191	56.1	30.68	15.040	1.185	0.710
	173	50.8	30.44	14.985	1.065	0.655
W30 x 30 x 10½	132	38.9	30.31	10.545	1.000	0.615
	124	36.5	30.17	10.515	0.930	0.585
	116	34.2	30.01	10.495	0.850	0.565
	108	31.7	29.83	10.475	0.760	0.545
	99	29.1	29.65	10.450	0.670	0.520

Section Number	Weight Per Ft.	Area of Section A	Depth of Section d	Flange		Web
				Width b _f	Thickness t _f	Thickness t _w
				in.	in.	in.
W27 x 27 x 14	178	52.3	27.81	14.085	1.190	0.725
	161	47.4	27.59	14.020	1.080	0.660
	146	42.9	27.38	13.965	0.975	0.605
W27 x 27 x 10	114	33.5	27.29	10.070	0.930	0.570
	102	30.0	27.09	10.015	0.830	0.515
	94	27.7	26.92	9.990	0.745	0.490
	84	24.8	26.71	9.960	0.640	0.460
W24 x 24 x 12¾	162	47.7	25.00	12.955	1.220	0.705
	146	43.0	24.74	12.900	1.090	0.650
	131	38.5	24.48	12.855	0.960	0.605
	117	34.4	24.26	12.800	0.850	0.550
	104	30.6	24.06	12.750	0.750	0.500
W24 x 24 x 9	94	27.7	24.31	9.065	0.875	0.515
	84	24.7	24.10	9.020	0.770	0.470
	76	22.4	23.92	8.990	0.680	0.440
	68	20.1	23.73	8.965	0.585	0.415
W24 x 24 x 7	62	18.2	23.74	7.040	0.590	0.430
	55	16.2	23.57	7.005	0.505	0.395
W21 x 21 x 12¼	147	43.2	22.06	12.510	1.150	0.720
	132	38.8	21.83	12.440	1.035	0.650
	122	35.9	21.68	12.390	0.960	0.600
	111	32.7	21.51	12.340	0.875	0.550
	101	29.8	21.36	12.290	0.800	0.500
W21 x 21 x 8¼	93	27.3	21.62	8.420	0.930	0.580
	83	24.3	21.43	8.355	0.835	0.515
	73	21.5	21.24	8.295	0.740	0.455
	68	20.0	21.13	8.270	0.685	0.430
	62	18.3	20.99	8.240	0.615	0.400
W21 x 21 x 6½	57	16.7	21.06	6.555	0.650	0.405
	50	14.7	20.83	6.530	0.535	0.380
	44	13.0	20.66	6.500	0.450	0.350

WIDE FLANGE SHAPES

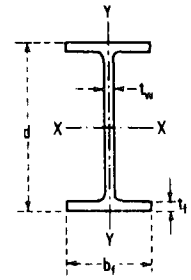


Theoretical Dimensions and Properties for Designing

Section Number	Weight Per Ft.	Area of Section A	Depth of Section d	Flange		Web
				Width	Thickness	Thickness
				b _f	t _f	t _w
	lb.	in. ²	in.	in.	in.	in.
W18 x 18 x 11	119	35.1	18.97	11.265	1.060	0.655
	106	31.1	18.73	11.200	0.940	0.590
	97	28.5	18.59	11.145	0.870	0.535
	86	25.3	18.39	11.090	0.770	0.480
	76	22.3	18.21	11.035	0.680	0.425
W18 x 18 x 7½	71	20.8	18.47	7.635	0.810	0.495
	65	19.1	18.35	7.590	0.750	0.450
	60	17.6	18.24	7.555	0.695	0.415
	55	16.2	18.11	7.530	0.630	0.390
	50	14.7	17.99	7.495	0.570	0.355
W18 x 18 x 6	46	13.5	18.06	6.060	0.605	0.360
	40	11.8	17.90	6.015	0.525	0.315
	35	10.3	17.70	6.000	0.425	0.300
W16 x 16 x 10¼	100	29.4	16.97	10.425	0.985	0.585
	89	26.2	16.75	10.365	0.875	0.525
	77	22.6	16.52	10.295	0.760	0.455
	67	19.7	16.33	10.235	0.665	0.395
W16 x 16 x 7	57	16.8	16.43	7.120	0.715	0.430
	50	14.7	16.26	7.070	0.630	0.380
	45	13.3	16.13	7.035	0.565	0.345
	40	11.8	16.01	6.995	0.505	0.305
	36	10.6	15.86	6.985	0.430	0.295
W16 x 16 x 5½	31	9.12	15.88	5.525	0.440	0.275
	26	7.68	15.69	5.500	0.345	0.250
W14 x 14 x 16	730	215	22.42	17.890	4.910	3.070
	665	196	21.64	17.650	4.520	2.830
	605	178	20.92	17.415	4.160	2.595
	550	162	20.24	17.200	3.820	2.380
	500	147	19.60	17.010	3.500	2.190
	455	134	19.02	16.835	3.210	2.015

Section Number	Weight per ft.	Area of Section A	Depth of Section d	Flange		Web
				Width	Thickness	Thickness
				b _f	t _f	t _w
	lb.	in. ²	in.	in.	in.	in.
W14 x 14 x 16	426	125	18.67	16.695	3.035	1.875
	398	117	18.29	16.590	2.845	1.770
	370	109	17.92	16.475	2.660	1.655
	342	101	17.54	16.360	2.470	1.540
	311	91.4	17.12	16.230	2.260	1.410
	283	83.3	16.74	16.110	2.070	1.290
	257	75.6	16.38	15.995	1.890	1.175
	233	68.5	16.04	15.890	1.720	1.070
	211	62.0	15.72	15.800	1.560	0.980
	193	56.8	15.48	15.710	1.440	0.890
	176	51.8	15.22	15.650	1.310	0.830
	159	46.7	14.98	15.565	1.190	0.745
	145	42.7	14.78	15.500	1.090	0.680
W14 x 14 x 14½	132	38.8	14.66	14.725	1.030	0.645
	120	35.3	14.48	14.670	0.940	0.590
	109	32.0	14.32	14.605	0.860	0.525
	99	29.1	14.16	14.565	0.780	0.485
	90	26.5	14.02	14.520	0.710	0.440
W14 x 14 x 10	82	24.1	14.31	10.130	0.855	0.510
	74	21.8	14.17	10.070	0.785	0.450
	68	20.0	14.04	10.035	0.720	0.415
	61	17.9	13.89	9.995	0.645	0.375
W14 x 14 x 8	53	15.6	13.92	8.060	0.660	0.370
	48	14.1	13.79	8.030	0.595	0.340
	43	12.6	13.66	7.995	0.530	0.305
W14 x 14 x 6¾	38	11.2	14.10	6.770	0.515	0.310
	34	10.0	13.98	6.745	0.455	0.285
	30	8.85	13.84	6.730	0.385	0.270
W14 x 14 x 5	26	7.69	13.91	5.025	0.420	0.255
	22	6.49	13.74	5.000	0.335	0.230

WIDE FLANGE SHAPES



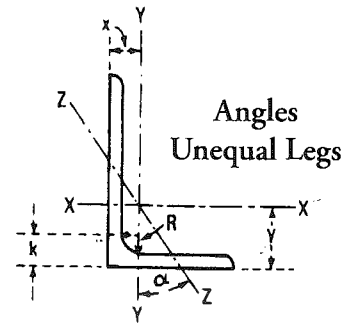
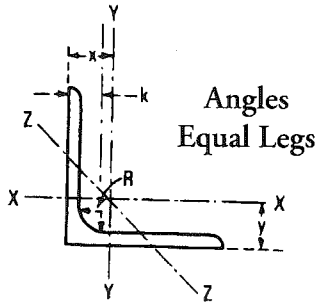
Theoretical Dimensions and Properties for Designing

Section Number	Weight Per Ft.	Area of Section A	Depth of Section d	Flange		Web
				Width b_f	Thickness t_f	Thickness t_w
				in.	in.	in.
W12 x 12	190	55.8	14.38	12.670	1.735	1.060
	170	50.0	14.03	12.570	1.560	0.960
	152	44.7	13.71	12.480	1.400	0.870
	136	39.9	13.41	12.400	1.250	0.790
	120	35.3	13.12	12.320	1.105	0.710
	106	31.2	12.89	12.220	0.990	0.610
	96	28.2	12.71	12.160	0.900	0.550
	87	25.6	12.53	12.125	0.810	0.515
	79	23.2	12.38	12.080	0.735	0.470
	72	21.1	12.25	12.040	0.670	0.430
	65	19.1	12.12	12.000	0.605	0.390
W12 x 12	58	17.0	12.19	10.010	0.640	0.360
W12 x 10	53	15.6	12.06	9.995	0.575	0.345
W12 x 12	50	14.7	12.19	8.080	0.640	0.370
W12 x 8	45	13.2	12.06	8.045	0.575	0.335
	40	11.8	11.94	8.005	0.515	0.295
W12 x 12	35	10.3	12.50	6.560	0.520	0.300
W12 x 6½	30	8.79	12.34	6.520	0.440	0.260
	26	7.65	12.22	6.490	0.380	0.230
W12 x 12	22	6.48	12.31	4.030	0.425	0.260
W12 x 4	19	5.57	12.16	4.005	0.350	0.235
	16	4.71	11.99	3.990	0.265	0.220
	14	4.16	11.91	3.970	0.225	0.200
W10 x 10	112	32.9	11.36	10.415	1.250	0.755
	100	29.4	11.10	10.340	1.120	0.680
	88	25.9	10.84	10.265	0.990	0.605
	77	22.6	10.60	10.190	0.870	0.530
	68	20.0	10.40	10.130	0.770	0.470
	60	17.6	10.22	10.080	0.680	0.420
	54	15.8	10.09	10.030	0.615	0.370
	49	14.4	9.98	10.000	0.560	0.340

Section Number	Weight Per Ft.	Area of Section A	Depth of Section d	Flange		Web
				Width b_f	Thickness t_f	Thickness t_w
				in.	in.	in.
W10 x 10	45	13.3	10.10	8.020	0.620	0.350
W10 x 8	39	11.5	9.92	7.985	0.530	0.315
	33	9.71	9.73	7.960	0.435	0.290
W10 x 10	30	8.84	10.47	5.810	0.510	0.300
W10 x 5¾	26	7.61	10.33	5.770	0.440	0.260
	22	6.49	10.17	5.750	0.360	0.240
W10 x 10	19	5.62	10.24	4.020	0.395	0.250
W10 x 4	17	4.99	10.11	4.010	0.330	0.240
	15	4.41	9.99	4.000	0.270	0.230
	12	3.54	9.87	3.960	0.210	0.190
W8 x 8	67	19.7	9.00	8.280	0.935	0.570
	58	17.1	8.75	8.220	0.810	0.510
	48	14.1	8.50	8.110	0.685	0.400
	40	11.7	8.25	8.070	0.560	0.360
	35	10.3	8.12	8.020	0.495	0.310
	31	9.13	8.00	7.995	0.435	0.285
W8 x 8	28	8.25	8.06	6.535	0.465	0.285
W8 x 6½	24	7.08	7.93	6.495	0.400	0.245
W8 x 8	21	6.16	8.28	5.270	0.400	0.250
W8 x 5¾	18	5.26	8.14	5.250	0.330	0.230
W8 x 8	15	4.44	8.11	4.015	0.315	0.245
W8 x 4	13	3.84	7.99	4.000	0.255	0.230
	10	2.96	7.89	3.940	0.205	0.170
W6 x 6	25	7.34	6.38	6.080	0.455	0.320
	20	5.87	6.20	6.020	0.365	0.260
	15	4.43	5.99	5.990	0.260	0.230
W6 x 6	16	4.74	6.28	4.030	0.405	0.260
W6 x 4	12	3.55	6.03	4.000	0.280	0.230
	9	2.68	5.90	3.940	0.215	0.170
W5 x 5	19	5.54	5.15	5.030	0.430	0.270
	16	4.68	5.01	5.000	0.360	0.240
†W4 x 4	13	3.83	4.16	4.060	0.345	0.280
†M5 x 5	18.9	5.55	5.00	5.003	0.416	0.316

†W4 x 13 & †M5 x 18.9 have flange slopes of 2.0 & 7.4 pct. respectively. Flange thickness shown for these sections are average. Properties are the same as if flanges are parallel. All other shapes are parallel-faced flanges.

ANGLES



Theoretical Dimensions and Properties for Designing

Theoretical Dimensions and Properties for Designing

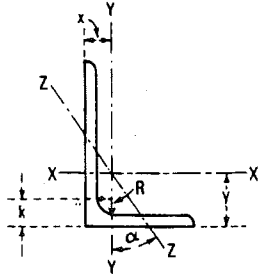
Section Number and Size	Thickness	Weight per Foot
in.	in.	lb.
L8 x 8 x R=5/8	1 1/8	56.9
	1	51.0
	7/8	45.0
	3/4	38.9
	5/8	32.7
	9/16	29.6
	1/2	26.4
L6 x 6 x R=1/2	1	37.4
	7/8	33.1
	3/4	28.7
	5/8	24.2
	9/16	21.9
	1/2	19.6
	7/16	17.2
3/8	14.9	
L5 x 5 x R=1/2	7/8	27.2
	3/4	23.6
	5/8	20.0
	1/2	16.2
	7/16	14.3
	3/8	12.3
	5/16	10.3
L4 x 4 x R=3/8	3/4	18.5
	5/8	15.7
	1/2	12.8
	7/16	11.3
	3/8	9.8
	5/16	8.2
	1/4	6.6
L3 1/2 x 3 1/2 R=3/8	1/2	11.1
	3/8	8.5
	5/16	7.2
	1/4	5.8

Section Number and Size	Thickness	Weight per Foot
in.	in.	lb.
L3 x 3 x R=5/16	1/2	9.4
	7/16	8.3
	3/8	7.2
	5/16	6.1
	1/4	4.9
	3/16	3.71
L2 1/2 x 2 1/2 x R=1/4	1/2	7.7
	3/8	5.9
	5/16	5.0
	1/4	4.1
	3/16	3.07
L2 x 2 x R=9/32	3/8	4.7
	5/16	3.92
	1/4	3.19
	3/16	2.44
	1/8	1.65
L1 3/4 x 1 3/4 x R=1/4	1/4	2.77
	3/16	2.12
	1/8	1.44
L1 1/2 x 1 1/2 x R=3/16	1/4	2.34
	3/16	1.80
	5/32	1.52
	1/8	1.23
L1 1/4 x 1 1/4 x R=3/16	1/4	1.92
	3/16	1.48
	1/8	1.01
L1 x 1 x R=1/8	1/4	1.49
	3/16	1.16
	1/8	0.80
L3/4 x 3/4	1/8	.59
L1/2 x 1/2	1/8	.38

Section Number and Size	Thickness	Weight per Foot
in.	in.	lb.
L9 x 4 x	1	40.8
	7/8	36.1
	3/4	31.3
	5/8	26.3
	9/16	23.8
	1/2	21.3
L8 x 6 x	1	44.2
	7/8	39.1
	3/4	33.8
	5/8	28.5
	9/16	25.7
	1/2	23.0
	7/16	20.2
L8 x 4 x	1	37.4
	7/8	33.1
	3/4	28.7
	5/8	24.2
	9/16	21.9
	1/2	19.6
	7/16	17.2
L7 x 4 x	7/8	30.2
	3/4	26.2
	5/8	22.1
	9/16	20.0
	1/2	17.9
	7/16	15.8
	3/8	13.6

ANGLES

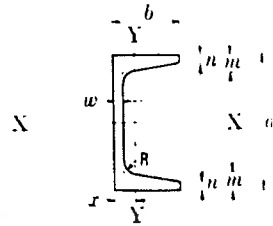
Unequal Legs



Theoretical Dimensions and Properties for Designing

Section Number and Size	Thickness	Weight per Foot	Section Number and Size	Thickness	Weight per Foot
in.	in.	lb.	in.	in.	lb.
L6 x 4 x	7/8	27.2	L3 1/2 x 3 x	1/2	10.2
	3/4	23.6		7/16	9.1
	5/8	20.0		3/8	7.9
	9/16	18.1		5/16	6.6
	1/2	16.2	1/4	5.4	L3 1/2 x 2 1/2 x
	7/16	14.3	1/2	9.4	
	3/8	12.3	7/16	8.3	
	5/16	10.3	3/8	7.2	
L6 x 3 1/2 x	1/4	8.3	5/16	6.1	L3 x 2 1/2 x
	1/2	15.3	1/4	4.9	
	3/8	11.7	1/2	8.5	
	5/16	9.8	7/16	7.6	
L5 x 3 1/2 x	1/4	7.9	3/8	6.6	L3 x 2 x
	3/4	19.8	5/16	5.6	
	5/8	16.8	1/4	4.5	
	1/2	13.6	3/16	3.39	
	7/16	12.0	1/2	7.7	L2 1/2 x 2 x
	3/8	10.4	7/16	6.8	
L5 x 3 x	5/16	8.7	3/8	5.9	L2 1/2 x 1 1/2 x
	1/4	7.0	5/16	5.0	
	1/2	12.8	1/4	4.1	L2 x 1 1/2 x
	7/16	11.3	3/16	3.07	
L4 x 3 1/2 x	3/8	9.8	3/8	5.3	L2 x 1 1/4 x
	5/16	8.2	5/16	4.5	
	1/4	6.6	1/4	3.62	L1 3/4 x 1 1/4 x
	5/8	14.7	3/16	2.75	
	1/2	11.9	5/16	3.92	
L4 x 3 x	7/16	10.6	1/4	3.19	L1 3/4 x 1 1/4 x
	3/8	9.1	3/16	2.44	
	5/16	7.7	1/8	1.44	L1 3/4 x 1 1/4 x
	1/4	6.2	1/4	2.55	
	5/8	13.6	3/16	1.96	
L4 x 3 x	1/2	11.1	1/4	2.34	L1 3/4 x 1 1/4 x
	7/16	9.8	3/16	1.80	
	3/8	8.5	1/8	1.23	L1 3/4 x 1 1/4 x
	5/16	7.2			
	1/4	5.8			

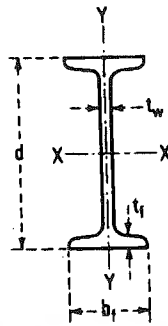
BAR SIZE CHANNELS



Theoretical Dimensions and Properties for Designing

Designation and Nominal Size	Weight per Foot	Area	Depth d	Flange		Web Thickness w
				Width b	Thickness	
In.	Lbs.	In. ²	In.	In.	In.	In.
C2 1/2 2 1/2 x 3/8 x 3/16	2.27	.668	2 1/2	5/8	21/64	3/16
C2 2 x 1 x 3/16 2 x 1 x 1/8	2.32 1.61	.683 .473	2 2	1 1	3/16 1/8	3/16 1/8
C2 2 x 5/8 x 1/4	2.18	.641	2	5/8	15/64	1/4
C2 2 x 5/8 x 1/4 2 x 7/16 x 3/16 2 x 1/2 x 1/8	2.28 1.86 1.43	.670 .545 .420	2 2 2	5/8 9/16 1/2	5/16 5/16 5/16	1/4 3/16 1/8
C1 1/2 1 1/2 x 3/4 x 1/8	1.17	.348	1 1/2	3/4	1/8	1/8
C1 1/2 1 1/2 x 9/16 x 3/16 1 1/2 x 1/2 x 1/8	1.44 1.12	.423 .329	1 1/2 1 1/2	9/16 1/2	1/4 1/4	1/8 1/8
C1 1/4 1 1/4 x 1/2 x 1/8	1.01	.297	1 1/4	1/2	1/4	1/8
C1 1/8 1 1/8 x 9/16 x 3/16	1.20	.340	1 1/8	9/16	7/32	1/8
C1 1 x 1/2 x 1/8	.83	.242	1	1/2	13/64	1/8
C1 1 x 3/8 x 1/8	.68	.199	1	3/8	3/16	1/8
C7/8 7/8 x 3/8 x 1/8	.65	.191	7/8	3/8	7/32	1/8
C3/4 3/4 x 3/8 x 1/8	.56	.164	3/4	3/8	3/16	3/32

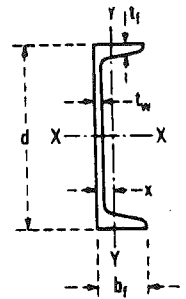
AMERICAN
STANDARD
SHAPES



Theoretical Dimensions and Properties for Designing

Section Number	Weight per Foot	Area of Section A	Depth of Section d	Flanges		Web Thickness t _w
				Width b _f	Average Thickness t _f	
				Lbs.	In. ²	In.
S24 x	121.0	35.6	24.50	8.050	1.090	0.800
24 x 7 ⁷ / ₈	106.0	31.2	24.50	7.870	1.090	0.620
S24 x	100.0	29.3	24.00	7.245	0.870	0.745
24 x 7	90.0	26.5	24.00	7.125	0.870	0.625
	80.0	23.5	24.00	7.000	0.870	0.500
S20 x	96.0	28.2	20.30	7.200	0.920	0.800
20 x 7	86.0	25.3	20.30	7.060	0.920	0.660
S20 x	75.0	22.0	20.00	6.385	0.795	0.635
20 x 6 ¹ / ₄	66.0	19.4	20.00	6.255	0.795	0.505
S18 x	70.0	20.6	18.00	6.251	0.691	0.711
18 x 6	54.7	16.1	18.00	6.001	0.691	0.461
S15 x	50.0	14.7	15.00	5.640	0.622	0.550
15 x 5 ¹ / ₂	42.9	12.6	15.00	5.501	0.622	0.411
S12 x	50.0	14.7	12.00	5.477	0.659	0.687
12 x 5 ¹ / ₄	40.8	12.0	12.00	5.252	0.659	0.462
S12 x	35.0	10.3	12.00	5.078	0.544	0.428
12 x 5	31.8	9.35	12.00	5.000	0.544	0.350
S10 x	35.0	10.3	10.00	4.944	0.491	0.594
10 x 4 ⁵ / ₈	25.4	7.46	10.00	4.661	0.491	0.311
S8 x	23.0	6.77	8.00	4.171	0.425	0.441
8 x 4	18.4	5.41	8.00	4.001	0.425	0.271
S7 x	15.3	4.50	7.00	3.662	0.392	0.252
7 x 3 ⁵ / ₈						
S6 x	17.25	5.07	6.00	3.565	0.359	0.465
6 x 3 ³ / ₈	12.5	3.67	6.00	3.332	0.359	0.232
S5 x	10.0	2.94	5.00	3.004	0.326	0.214
5 x 3						
S4 x	9.5	2.79	4.00	2.796	0.293	0.326
4 x 2 ⁵ / ₈	7.7	2.26	4.00	2.663	0.293	0.193
S3 x	7.5	2.21	3.00	2.509	0.260	0.349
3 x 2 ³ / ₈	5.7	1.67	3.00	2.330	0.260	0.170

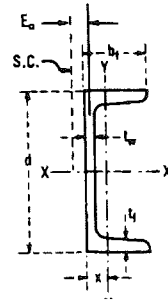
AMERICAN
STANDARD
CHANNELS



Theoretical Dimensions and Properties for Designing

Section Number and Nominal Size	Weight per Foot	Area of Section A	Depth of Section d	Flanges		Web Thickness t _w
				Width b _f	Average Thickness t _f	
				In.	Lbs.	In. ²
C15 x	50.0	14.7	15.00	3.716	0.650	0.716
15 x 3 ³ / ₈	40.0	11.8	15.00	3.520	0.650	0.520
	33.9	9.96	15.00	3.400	0.650	0.400
C12 x	30.0	8.82	12.00	3.170	0.501	0.510
12 x 3	25.0	7.35	12.00	3.047	0.501	0.387
	20.7	6.09	12.00	2.942	0.501	0.282
C10 x	30.0	8.82	10.00	3.033	0.436	0.673
10 x 2 ⁵ / ₈	25.0	7.35	10.00	2.886	0.436	0.526
	20.0	5.88	10.00	2.739	0.436	0.379
	15.3	4.49	10.00	2.600	0.436	0.240
C9 x	20.0	5.88	9.00	2.648	0.413	0.448
9 x 2 ¹ / ₂	15.0	4.41	9.00	2.485	0.413	0.285
	13.4	3.94	9.00	2.433	0.413	0.233
C8 x	18.75	5.51	8.00	2.527	0.390	0.487
8 x 2 ¹ / ₄	13.75	4.04	8.00	2.343	0.390	0.303
	11.5	3.38	8.00	2.260	0.390	0.220
C7 x	14.75	4.33	7.00	2.299	0.366	0.419
7 x 2 ¹ / ₈	12.25	3.60	7.00	2.194	0.366	0.314
	9.8	2.87	7.00	2.090	0.366	0.210
C6 x	13.0	3.83	6.00	2.157	0.343	0.437
6 x 2	10.5	3.09	6.00	2.034	0.343	0.314
	8.2	2.40	6.00	1.920	0.343	0.200
C5 x	9.0	2.64	5.00	1.885	0.320	0.325
5 x 1 ³ / ₄	6.7	1.97	5.00	1.750	0.320	0.190
C4 x	7.25	2.13	4.00	1.721	0.296	0.321
4 x 1 ¹ / ₂	5.4	1.59	4.00	1.584	0.296	0.184
C3x	6.0	1.76	3.00	1.596	0.273	0.356
3 x 1 ¹ / ₂	5.0	1.47	3.00	1.498	0.273	0.258
	4.1	1.21	3.00	1.410	0.273	0.170

MISCELLANEOUS CHANNELS



Theoretical Dimensions and Properties for Designing

Section Number	Weight per Foot	Area of Section A	Depth of Section d	Flanges		Web Thickness t_w
				Width b_f	Average Thickness t_f	
				In.	In.	
MC18 x 18 x 4	58.0 51.9 45.8 42.7	17.1 15.3 13.5 12.6	18.0 18.0 18.0 18.0	4.200 4.100 4.000 3.950	0.625 0.625 0.625 0.625	0.700 0.600 0.500 0.450
MC13 x 13 x 4	50.0 40.0 35.0 31.8	14.7 11.8 10.3 9.35	13.0 13.0 13.0 13.0	4.412 4.185 4.072 4.000	0.610 0.610 0.610 0.610	0.787 0.560 0.447 0.375
MC12 x 12 x 4	50.0 45.0 40.0 35.0	14.7 13.2 11.8 10.3	12.0 12.0 12.0 12.0	4.135 4.012 3.890 3.767	0.700 0.700 0.700 0.700	0.835 0.712 0.590 0.467
MC12 x 12 x 3½	37.0 32.9 30.9	10.9 9.67 9.07	12.0 12.0 12.0	3.600 3.500 3.450	0.600 0.600 0.600	0.600 0.500 0.450
MC10 x 10 x 4	41.1 33.6 28.5	12.1 9.87 8.37	10.0 10.0 10.0	4.321 4.100 3.950	0.575 0.575 0.575	0.796 0.575 0.425
MC10 x 10 x 3½	28.3 24.9	8.32 7.32	10.0 10.0	3.502 3.402	0.575 0.575	0.477 0.377

Section Number	Weight per Foot	Area of Section A	Depth of Section d	Flanges		Web Thickness t_w
				Width b_f	Average Thickness t_f	
				In.	In.	
MC10 x 10 x 3½	25.3 21.9	7.43 6.43	10.00 10.00	3.550 3.450	0.500 0.500	0.425 0.325
MC9 x 9 x 3½	25.4 23.9	7.47 7.02	9.00 9.00	3.500 3.450	0.550 0.550	0.450 0.400
MC8 x 8 x 3½	22.8 21.4	6.70 6.28	8.00 8.00	3.502 3.450	0.525 0.525	0.427 0.375
MC8 x 8 x 3	20.0 18.7	5.88 5.50	8.00 8.00	3.025 2.978	0.500 0.500	0.400 0.353
MC7 x 7 x 3½	22.7 19.1 17.6	6.67 5.61 5.17	7.00 7.00 7.00	3.603 3.452 3.000	0.500 0.500 0.475	0.503 0.352 0.375
MC6 x 6 x 3½	18.0	5.29	6.00	3.504	0.475	0.379
MC6 x 6 x 3	15.3	4.50	6.00	3.500	0.385	0.340
MC6 x 6 x 3	16.3 15.1	4.79 4.44	6.00 6.00	3.000 2.941	0.475 0.475	0.375 0.316
MC6 x 6 x 2½	12.0	3.53	6.00	2.497	0.375	0.310
MC4 x 4 x 2½	13.8		4.00	2.500	0.500	0.500
MC3 x 3 x 1⅞	9.0 7.1	2.65 2.09	3.00 3.00	2.122 1.938	0.351 0.351	0.497 0.312

I

J & L Junior Beams

Latest Revisions of A.S.T.M. Specification A-36

Size in Inches	Weight per Foot Pounds	Nominal Web Thickness	Nominal Flange Width
6	4.4	.114	1.84
8	6.5	.135	2.28
10	9.0	.155	2.69
12	11.8	.175	3.06

Rolled Stair Stringer Channels "Junior Channels"

Latest Revisions of A.S.T.M. Specification A-36

Size in Inches	Weight per Foot Pounds	Nominal Web Thickness	Nominal Flange Width
10	6.5 8.4	.150 .170	1.125 1.500
12	10.6	.190	1.500

HOT ROLLED RODS AND BARS

M1020

A general-purpose mild steel, which is easily fabricated by the usual structural methods. It is a low-carbon open hearth grade with good mechanical properties.

It is used in non-critical applications involving mild cold bending, mild hot forming, punching, and welding. Also, where seams and other surface imperfections can be tolerated. A few of the many applications are parts for machinery, transportation equipment, agricultural implements, etc.

ASTM - A 36

A structural quality carbon steel used in general fabrication work. ASTM-A36 steel can be used in welded, bolted, or riveted construction of bridges and buildings. Minimum physical properties of 36,000 PSI yield strength and 58,000 PSI tensile strength are required. Stronger than AISI M1020, A36 steel can be used to design lighter weight structures and equipment with good weldability. This grade has become the standard of the steel industry.

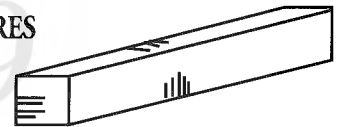
ASTM A36 & AISI M1020 HOT ROLLED ROUNDS



Stock Lengths: 20 Feet

Size Inches	Est. Lbs. Per		Size Inches	Est. Lbs. Per		Size Inches	Est. Lbs. Per	
	Foot	20Ft.		Foot	20Ft.		Foot	20Ft.
1/4	.167	3.34	7/8	2.04	40.88	1 7/8	9.38	187.8
5/16	.261	5.22	1 ↓	2.67	53.40	2	10.7	213.6
3/8	.376	7.52	1 1/8	3.38	67.58	2 1/8	12.1	241.2
7/16	.511	10.22	1 1/4	4.17	83.44	2 1/4	13.5	270.4
1/2	.668	13.36	1 3/8	5.05	101.0	2 1/2	16.7	333.8
9/16	.845	16.90	1 1/2	6.01	120.2	2 3/4	20.2	404.0
5/8	1.04	20.86	1 5/8	7.05	141.0			
3/4	1.50	30.04	1 3/4	8.17	163.6			

HOT ROLLED ASTM A36, AISI M1020 SQUARES AND COLD ROLLED C1018 SQUARES



Stock Lengths: Hot Rolled-20 Feet & Cold Rolled-12 Feet

Size Inches	Est. Lbs. Per		Size Inches	Est. Lbs. Per		Size Inches	Est. Lbs. Per	
	Foot	20Ft.		Foot	20Ft.		Foot	20Ft.
1/4	.213	4.26	7/8	2.60	52.06	2†	13.60	272.0
3/8	.478	9.56	1	3.40	68.00	2 1/4†	17.21	344.3
7/16	.651	13.02	1 1/8	4.30	86.06	2 1/2†	21.25	425.0
1/2	.850	17.00	1 1/4†	5.31	106.3	3†	30.60	612.0
5/8	1.33	26.56	1 1/2†	7.65	153.0	3 1/2†	41.65	833.0
3/4	1.91	38.26	1 3/4†	10.41	208.3	4†	54.40	1088

† Hot Rolled sizes 1 1/4 inches and larger are "round cornered" squares

ROUND DEFORMED REINFORCING BARS

Deformed steel reinforcement bars are for use as reinforcement in concrete construction. Small lugs are provided on the surface of the bar which inhibits longitudinal movement of the bar relative to the concrete which surrounds it.

Mechanical Properties

Grade 40 - 40,000 Minimum Yield Point psi

Grade 60 - 60,000 Minimum Yield Point psi

Bend Test Requirements

Under ¾" diameter: Will bend 90° around a pin three times own diameter

¾" diameter & over: Will bend 90° around a pin four times own diameter

Specifications

ASTM A6125 - Grade 40 and Grade 60.



Round Deformed Reinforcing Bars

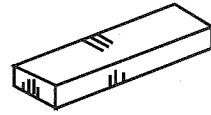
Grade 40 & Grade 60

Stock Sizes: Available in 20' to 60' lengths

Bar No.	Unit Wt. Lbs. Per Foot	Diameter Inches	Cross-Section Area Square Inches	Perimeter In Inches
2	0.167	0.250	0.05	0.786
3	0.376	0.375	0.11	1.178
4	0.668	0.500	0.20	1.571
5	1.043	0.625	0.31	1.963
6	1.502	0.750	0.44	2.356
7	2.044	0.875	0.60	2.749
8	2.670	1.000	0.79	3.142
9	3.400	1.128	1.00	3.540
10	4.300	1.270	1.27	3.990
11	5.310	1.410	1.56	4.620
14	7.650	1.693	2.25	5.320
18	13.600	2.257	4.00	7.090

FLAT SQUARE EDGE MILD STEEL BARS

ASTM A36 & AISI M1020



Size in Inches	Weight per Foot in Lbs.	Size in Inches	Weight per Foot in Lbs.	Size in Inches	Weight per Foot in Lbs.	Size in Inches	Weight per Foot in Lbs.
* 1/8 x 1/2	.2125	1/4 x 4	3.40	1/2 x 1 1/2	2.55	3/4 x 2 3/4	7.01
3/4	.3188	4 1/2	3.83	1 3/4	2.98	3	7.65
1	.4250	5	4.25	2	3.40	3 1/4	8.29
1 1/4	.5313	5 1/2	4.68	2 1/4	3.83	3 1/2	8.93
1 1/2	.6375	6	5.10	2 1/2	4.25	3 3/4	9.56
1 3/4	.7438	7	5.95	2 3/4	4.68	4	10.20
2	.850	8	6.80	3	5.10	4 1/2	11.48
2 1/2	1.0625	5/16 x 1	1.06	3 1/4	5.53	5	12.75
3	1.275	1 1/4	1.33	3 1/2	5.95	5 1/2	14.03
3 1/2	1.4875	1 1/2	1.59	3 3/4	6.38	6	15.30
4	1.7	1 3/4	1.86	4	6.80	7	17.85
4 1/2	1.9125	2	2.13	4 1/4	7.22	8	20.40
5	2.125	2 1/4	2.39	4 1/2	7.65	7/8 x 1 1/4	3.72
5 1/2	2.338	2 1/2	2.66	5	8.50	1 1/2	4.45
6	2.55	2 3/4	2.92	5 1/2	9.35	1 3/4	5.21
* 3/16 x 1/2	.319	3	3.19	6	10.20	2	5.95
5/8	.398	3 1/2	3.72	7	11.90	2 1/2	7.44
3/4	.478	4	4.25	8	13.60	3	8.93
1	.638	5	5.31	5/8 x 1	2.13	3 1/2	10.41
1 1/4	.797	6	6.38	1 1/4	2.66	4	11.90
1 1/2	.956	7	7.44	1 1/2	3.19	5	14.88
1 3/4	1.12	8	8.50	1 3/4	3.72	6	17.85
2	1.28	3/8 x 3/4	.956	2	4.25	7	20.83
2 1/2	1.59	1	1.28	2 1/4	4.78	8	23.80
3	1.91	1 1/4	1.59	2 1/2	5.31	1 x 1 1/4	4.25
3 1/2	2.23	1 1/2	1.91	3	6.38	1 1/2	5.1
4	2.56	1 3/4	2.23	3 1/2	7.44	1 3/4	5.95
4 1/2	2.87	2	2.55	4	8.50	2	6.8
5	3.19	2 1/4	2.87	4 1/2	9.56	2 1/4	7.65
5 1/2	3.51	2 1/2	3.19	5	10.63	2 1/2	8.5
6	3.83	3	3.83	5 1/2	11.69	2 3/4	9.35
1/4 x 1/2	.425	3 1/4	4.14	6	12.75	3	10.2
3/4	.637	3 1/2	4.46	7	14.88	3 1/4	11.05
1	.85	4	5.10	8	17.00	3 1/2	11.9
1 1/4	1.06	4 1/2	5.74	3/4 x 1	2.55	4	13.6
1 1/2	1.28	5	6.38	1 1/4	3.19	4 1/2	15.3
1 3/4	1.49	5 1/2	7.01	1 1/2	3.83	5	17.0
2	1.70	6	7.65	1 3/4	4.46	5 1/2	18.7
2 1/4	1.91	7	8.93	2	5.10	6	20.4
2 1/2	2.13	8	10.20	2 1/4	5.74	7	23.8
3	2.55	1/2 x 1	1.70	2 1/2	6.38	8	27.2
3 1/2	2.98	1 1/4	2.12				

* Sometimes referred to as "strips" or "band iron."

M. GLOSSER & SONS, INC.

UNIVERSAL MILL AND SHEARED STEEL PLATES

GRADE ASTM A36

Size in Inches	Weight Per Ft. in Lbs.	Size in Inches	Weight Per Ft. in Lbs.	Size in Inches	Weight Per Ft. in Lbs.
3/16" (7.66 Lb. Per Sq. Ft.)		7/8" (35.74 Lb. Per Sq. Ft.)		3" (122.52 Lb. Per Sq. Ft.)	
84	53.62	48	142.96	72	735.12
96	61.28	60	178.70	84	857.64
120	76.6	72	214.44	96	980.16
1/4" (10.21 Lb. Per Sq. Ft.)		84	250.18	3 1/4" (132.73 Lb. Per Sq. Ft.)	
36	30.63	96	285.92	84	929.11
48	40.84	1" (40.84 Lb. Per Sq. Ft.)		96	1061.84
60	51.05	48	163.36	3 1/2" (142.94 Lb. Per Sq. Ft.)	
72	61.26	60	204.20	60	714.20
84	71.47	72	245.04	84	1000.58
96	81.68	84	285.88	96	1143.52
120	102.10	96	326.72	3 3/4" (153.15 Lb. Per Sq. Ft.)	
5/16" (12.76 Lb. Per Sq. Ft.)		1 1/8" (45.95 Lb. Per Sq. Ft.)		84	1072.05
36	38.28	48	183.80	4" (163.36 Lb. Per Sq. Ft.)	
48	51.04	84	321.65	84	1143.52
60	63.80	96	367.60	96	1306.88
72	76.56	1 1/4" (51.05 Lb. Per Sq. Ft.)		4 1/4" (173.57 Lb. Per Sq. Ft.)	
84	89.32	48	204.20	84	1214.99
96	102.80	60	255.25	4 1/2" (183.78 Lb. Per Sq. Ft.)	
3/8" (15.32 Lb. Per Sq. Ft.)		72	306.30	84	1286.46
36	45.96	84	357.35	96	1470.24
48	61.28	96	408.40	4 3/4" (193.99 Lb. Per Sq. Ft.)	
60	76.60	1 3/8" (56.16 Lb. Per Sq. Ft.)		84	1357.93
72	91.92	84	393.12	84	1429.40
84	107.24	96	449.28	96	1633.60
96	122.56	1 1/2" (61.26 Lb. Per Sq. Ft.)		5 1/2" (224.62 Lb. Per Sq. Ft.)	
120	153.20	60	306.30	84	1572.34
7/16" (17.87 Lb. Per Sq. Ft.)		72	367.56	84	1715.28
60	89.35	84	428.82	6" (245.04 Lb. Per Sq. Ft.)	
84	125.09	96	490.08	84	1715.28
96	142.96	1 5/8" (66.37 Lb. Per Sq. Ft.)		84	1715.28
1/2" (20.42 Lb. Per Sq. Ft.)		84	464.59	6 1/2" (265.46 Lb. Per Sq. Ft.)	
36	61.26	96	530.96	84	1858.22
48	81.68	1 3/4" (71.47 Lb. Per Sq. Ft.)		84	1858.22
60	102.10	84	500.29	7" (285.88 Lb. Per Sq. Ft.)	
72	122.52	96	571.76	84	2001.16
84	142.94	2" (81.68 Lb. Per Sq. Ft.)		7 1/2" (306.30 Lb. Per Sq. Ft.)	
96	163.36	48	326.72	84	2144.10
120	204.20	60	408.40	8" (326.72 Lb. Per Sq. Ft.)	
9/16" (22.97 Lb. Per Sq. Ft.)		72	490.78	84	2287.04
60	114.85	84	571.76	9" (367.56 Lb. Per Sq. Ft.)	
84	160.79	96	653.44	60	1837.80
5/8" (25.53 Lb. Per Sq. Ft.)		2 1/8" (86.79 Lb. Per Sq. Ft.)		84	2572.90
36	76.59	96	694.32	10" (408.40 Lb. Per Sq. Ft.)	
48	102.12	2 1/4" (91.89 Lb. Per Sq. Ft.)		60	2042.00
60	127.65	84	643.23	72	2450.40
72	153.18	96	735.12	84	2858.80
84	178.71	2 1/2" (102.10 Lb. Per Sq. Ft.)		11" (449.24 Lb. Per Sq. Ft.)	
96	209.24	48	408.40	60	2246.20
3/4" (30.63 Lb. Per Sq. Ft.)		84	714.70	72	2695.44
36	91.89	96	816.80	12" (490.08 Lb. Per Sq. Ft.)	
48	122.52	2 3/4" (112.31 Lb. Per Sq. Ft.)		60	2450.40
60	153.15	72	673.86	72	2940.48
72	183.78	84	786.17		
84	214.41	96	898.48		
96	245.04				

COLD FINISHED ROUNDS

AISI-C1018 & AISI-C1045

C1018 is a low-carbon, open-hearth steel with good case hardening qualities. A general purpose grade with good welding and brazing characteristics.

C1045 has a higher carbon content which increases the strength. Response to heat treatment is excellent. The mechanic properties which can be obtained permit wide usage in the production of machinery parts and shafts.

Due to size limitations of the cold-drawing process, large diameter bars are turned and polished to size and have finer finishes and lack the internal stresses. Turned and polished rounds are available upon request.

Chemical Composition

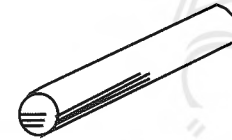
	Carbon	Manganese	Phosphorus	Sulphur
C1018	.15/.20	.60/.90	.04 Max.	.05 Max.
C1045	.43/.50	.60/90	.04 Max.	.05 Max.

Mechanical Properties - The following values are for average 1-inch cold-drawn rounds and may be considered as a representative grade:

	Tensile Strength	Yield Point	% Elong. 2"	% Red. Area	Brinell Hardness	Machinability Rate-Surface Foot Per Min.
C1018	65,000	55,000	16	40	126	130
C1045	90,000	80,000	11	30	179	95

Weldability - Welded by all processes. Grade of welding rod depends on thickness of section, design, service required, etc.

COLD FINISHED ROUNDS
AISI-C1018 & AISI-C1045



Stock Lengths: 12 Feet & 20 Feet

Size	Lb./Ft.	Size	Lb./Ft.	Size	Lb./Ft.	Size	Lb./Ft.	Size	Lb./Ft.	Size	Lb./Ft.
1/8	.042	3/4	1.50	1 13/16	8.77	3	24.03	4 3/16	46.83	5 7/16	78.95
5/32	.065	25/32	1.63	1 7/8	9.39	3 1/16	25.05	4 1/4	48.23	5 1/2	80.78
3/16	.094	13/16	1.76	1 15/16	10.02	3 1/8	26.08	4 5/16	49.66	5 5/8	84.49
7/32	.128	7/8	2.04	2	10.68	3 3/16	27.13	4 3/8	51.11	5 3/4	88.29
1/4	.167	57/64	2.12	2 1/16	11.36	3 1/4	28.21	4 7/16	52.58	5 7/8	92.17
9/32	.211	29/32	2.19	2 1/8	12.06	3 5/16	29.30	4 1/2	54.08	5 15/16	94.14
5/16	.261	15/16	2.35	2 3/16	12.78	3 3/8	30.42	4 9/16	55.59	6	96.13
11/32	.316	1	2.67	2 1/4	13.52	3 7/16	31.55	4 5/8	57.12	6 1/4	104.31
3/8	.376	1 1/16	3.01	2 5/16	14.28	3 1/2	32.71	4 11/16	58.68	6 1/2	112.82
13/32	.441	1 1/8	3.38	2 3/8	15.06	3 9/16	33.89	4 3/4	60.25	6 3/4	121.67
7/16	.511	1 3/16	3.77	2 7/16	15.87	3 5/8	35.09	4 7/8	63.46	7	130.85
15/32	.587	1 1/4	4.17	2 1/2	16.69	3 11/16	36.31	4 15/16	65.10	7 1/2	150.21
1/2	.668	1 5/16	4.60	2 9/16	17.53	3 3/4	37.55	5	66.76	8	170.90
33/64	.710	1 3/8	5.05	2 5/8	18.40	3 13/16	38.81	5 1/16	68.44	8 1/2	192.93
17/32	.754	1 7/16	5.52	2 11/16	19.29	3 7/8	40.10	5 1/8	70.14	9	216.30
9/16	.845	1 1/2	6.01	2 3/4	20.19	3 15/16	41.40	5 3/16	71.86	10	267.04
19/32	.941	1 9/16	6.52	2 13/16	21.12	4	42.73	5 1/4	73.60		
5/8	1.04	1 5/8	7.05	2 7/8	22.07	4 1/16	44.07	5 5/16	75.36		
11/16	1.26	1 11/16	7.60	2 15/16	23.04	4 1/8	45.44	5 3/8	77.15		
23/32	1.32	1 3/4	8.18								

**HOT ROLLED PLATE
ASTM A-36**

- A-36 - This specification covers plates of structural quality up to 8" in thickness for use in the construction of bridges and buildings.
- Strength - A-36 has an increased yield point of 36,000 psi, and is approximately 10 percent stronger than A7 and A573. The higher yield point will allow increased design stresses using the same factors of safety.
- Economy - The substantial increase in yield point for A-36 makes it a real bargain in strength-to-weight ratio at a very nominal cost. Weight saved by designing with A-36 steel will result in even greater economy for steel construction.
- Availability - A-36 can be furnished from our large stocks in all plate thicknesses up to 8".

Mechanical Properties

Yield Point min. psi	36,000
Tensile strength, psi (plates to 8" thick)	58,000 to 80,000
Elongation in 8" min. percent	20
Elongation in 2" min. percent	23

**ABRASION RESISTANT PLATE
BRINELL HARDNESS 235 - 500**

AR-235 is an as-rolled plate with high carbon content, developed primarily to supply a low-cost material for high-abrasion applications

<u>Analysis and Availability -</u>	Carbon	Manganese	Phosphorus	Sulphur	Silicon
	.35/.50	1.40/2.00	.05 max.	.05 max.	.15/.30

AR-235 abrasion-resisting steel plates may be furnished from sheared or universal mills, 3/16" to 15" thick, in a size range similar to that for standard plates up to 40,000 lb. per piece limitation

Strength - Although abrasion-resisting steels are not sold to specific strength levels, the following table offered for general information purposes, shows the approximate tensile strength for the various hardness levels:

Brinell Hardness Number	Approximate Tensile Strength, psi
235	114,000
321	154,000
340	164,000
360	177,000
400	202,000
500	264,000

Another Consideration-Fabricability - When selecting a grade for a particular application, consideration must be given to the fabricating characteristics of abrasion-resisting steels, as well as their hardness and toughness.

M. GLOSSER & SONS, INC.

"T-1" TYPES A & B ABRASION RESISTANT OR CONSTRUCTIONAL QUENCHED AND TEMPERED ALLOY STEEL PLATES

Description

USS "T-1" type A Constructional Alloy Steel is a low carbon, quenched and tempered grade which provides, in thicknesses thru 1¼ inches (32 mm), the same strength as USS "T-1" Steel. A lower alloy modification of the original "T-1" Steel composition, type A is therefore lower priced.

USS "T-1" type A Steel plate is furnished to the chemical composition and the heat-treated mechanical properties shown in the tables below.

When so ordered "T-1" type A Steel plates can be produced to : ASTM A514, ASTM A709, ASTM A517, AASHTO M244

USS "T-1" Type A Steel Chemical Composition, Percent (cast or heat analysis)

C†	Mn	P	S	Si
0.12/0.21	0.70/1.00	0.035 max	0.040 max.	0.20/0.35
Cr	Mo	V	Ti	B
0.40/0.65	0.15/0.25	0.03/0.08	0.01/0.03	0.0005/0.005

When added corrosion resistance is desired, 0.20/0.40 Cu may be specified.

† Carbon 0.15/0.21 will be furnished when ordered to ASTM A517, Grade B or ASME SA517 Grade B.

USS "T-1" Type A Steel Mechanical Properties - Plate

Thickness, inches (mm)	Thru 1¼ (32)	
Yield Strength, min ksi (MPa)	100 (690)	
Tensile Strength, ksi (Mpa)	115/135 ⁽¹⁾ (790/930)	
	Long.	Trans.
Elongation in 2" (50 mm), min,%	18	16
Reduction of Area, min, %		
¾" (19 mm) and under	40 ⁽³⁾	35 ⁽³⁾
over ¾" (19 mm)	50 ⁽²⁾	45 ⁽²⁾

Test specimens, procedures and elongation modifications conform to ASTM specifications.

(1) Range lowered 5 ksi (30 MPa) in ASTM A514, Type B.

(2) Measured on 1/2" (12.7 mm), diameter specimen (Fig. 6 of ASTM 370).

(3) Applies to plates. Measured on 1 1/2" (38 mm), wide full thickness rectangular specimens (Fig. 4 ASTM A370), which is mandatory for thickness 3/4" (19 mm), and under.

Impact Values, Min Ft/Lb (J), Charpy V-Notch, Avg. 3 Specimens

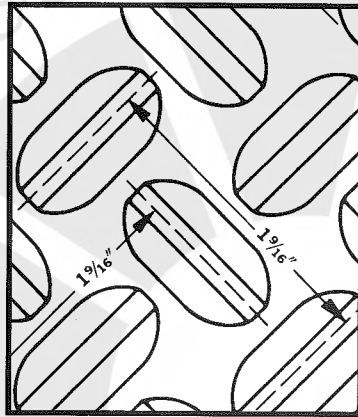
Thickness, inches (mm)	7/16 thru 1 1/4 (11.1 thru 32)
Temperature, °F (°C)	50 (46) or higher
Min Ft-Lb (J) Long.	15 (20)
Min Ft-Lb (J) Trans.	15 (20)

Modified values are applicable for thicknesses under 7/16"

HOT ROLLED STEEL FLOOR PLATES

Hot rolled floor plate provides improved footing and traction in all directions over other metal plates. This floor plate is ideal for areas where foot traffic or wheeled industrial traffic requires a skid-resistant surface. The unique design is easy to clean with a broom or running water, and the wear resistance causes minimal deterioration. It has a continuous pattern design which matches easily end to end, side to side, or end to side in a neat, inconspicuous manner at minimum cost. The specific lug pattern varies from mill to mill. Some dissimilar patterns will not mate with a cosmetic appeal.

Floor plate is available under 48" wide on inquiry only. Floor plate over 3/4" thick and over 480" long may require special shearing or gas cutting at extra cost. Floor plate requiring gas cutting is to be submitted for inquiry.



**USS MULTIGRIP
SECTION - S400
(TYPICAL)**

Gage/ Thickness Inches	Pounds Per Sq. Ft.	Width, Inches								
		Over 9	24	32	48	60	72	76	84	90
		Thru 24	32	48	60	72	76	84	90	96
Length, Inches										
16 Ga	3.00	—	240	240	—	—	—	—	—	—
14 Ga	3.75	—	240	240	—	—	—	—	—	—
13 Ga	4.50	—	240	240	240	—	—	—	—	—
12 Ga	5.25	—	240	240	240	—	—	—	—	—
1/8	6.15	144	240	480	480	480	—	—	—	—
3/16	8.70	144	488	600	600	720	600	600	—	—
1/4	11.25	144	488	600	720	720	720	720	520	520
5/16	13.80	144	488	600	720	720	720	720	520	520
3/8	16.35	144	488	600	720	720	720	720	600	600
7/16	18.90	120	488	600	720	720	720	720	600	600
1/2	21.45	120	488	600	720	720	720	720	600	600
9/16	24.00	120	360	600	720	720	720	720	600	480
5/8	26.55	120	360	600	600	600	600	600	480	480
3/4	31.65	—	360	600	600	600	600	552	480	480
7/8	36.75	—	360	480	480	480	480	480	360	360
1	41.85	—	360	480	480	480	480	480	360	360

HOT ROLLED SHEETS

Hot Rolled Sheets are produced of low carbon steel. Sheets of this quality produce good forming and welding characteristics because they are reduced to thickness above the temperature at which mill oxides form. The result may have a scale of varying degrees of adherence, color and type. These sheets are low cost and are ideal for jobs where finish is not of prime importance. These sheets are dry, not oiled.

Hot Rolled Pickled Sheets are pickled in a dilute acid solution which loosens and detaches the oxide scale. Oiled Sheet Steel are coated in oil which temporarily protects the sheet from rust. Both Hot Rolled Pickled Sheets and Oiled Sheet Steel are available upon request.

U.S.S. Revised or Mfg. Gage	Weight per Sheet Pounds	U.S.S. Revised or Mfg. Gage	Weight per Sheet Pounds	U.S.S. Revised or Mfg. Gage	Weight per Sheet Pounds
#7 Ga. (.179") - 7.50 lbs. per sq. ft.		48 x 144	270.0	#13 Ga. (.0897") - 3.750 lbs. per sq. ft.	
36 x 96	180.0	60 x 96	225.0	36 x 96	90.0
36 x 120	225.0	60 x 120	281.3	48 x 96	120.0
36 x 144	270.0	60 x 144	337.5	48 x 120	150.0
48 x 96	240.0	72 x 120	337.5	72 x 144	270.0
48 x 120	300.0	72 x 144	405.0		
48 x 144	360.0			#14 Ga. (.0747") - 3.125 lbs. per sq. ft.	
48 x 240	600.0	#11 Ga. (.1196") - 5.00 lbs. per sq. ft.		36 x 96	75.0
60 x 96	300.0	36 x 96	120.0	36 x 120	93.8
60 x 120	375.0	36 x 120	150.0	48 x 96	100.0
60 x 144	450.0	36 x 144	180.0	48 x 120	125.0
72 x 120	450.0	48 x 96	160.0	48 x 144	150.0
72 x 144	540.0	48 x 120	200.0	60 x 96	125.0
72 x 240	900.0	48 x 144	240.0	60 x 120	156.3
		60 x 96	200.0	60 x 144	187.5
#8 Ga. (.1644") - 6.875 lbs. per sq. ft.		60 x 120	250.0		
48 x 96	220.0	60 x 144	300.0	#16 Ga. (.0598") - 2.500 lbs. per sq. ft.	
48 x 120	275.0	72 x 96	240.0	36 x 96	60.0
48 x 144	330.0	72 x 120	300.0	36 x 120	75.0
60 x 120	343.8	72 x 144	360.0	36 x 144	90.0
72 x 120	412.5	84 x 120	350.0	48 x 96	80.0
72 x 144	495.0	84 x 144	420.0	48 x 120	100.0
84 x 120	481.3			48 x 144	120.0
84 x 144	577.5	#12 Ga. (.1046") - 4.375 lbs. per sq. ft.		60 x 96	100.0
		36 x 96	105.0	60 x 120	125.0
#9 Ga. (.1495") - 6.250 lbs. per sq. ft.		36 x 120	131.3	60 x 144	150.0
72 x 120	375.0	48 x 96	140.0		
72 x 144	450.0	48 x 120	175.0	#18 Ga. (.0478") - 2.000 lbs. per sq. ft.	
84 x 120	437.5	48 x 144	210.0	36 x 96	48.0
84 x 144	525.0	60 x 96	175.0	36 x 120	60.0
		60 x 120	218.8	48 x 96	64.0
#10 Ga. (.1345") - 5.625 lbs. per sq. ft.		60 x 144	262.5	48 x 120	80.0
36 x 96	135.0	72 x 120	262.5		
36 x 120	168.8	72 x 144	315.0		
36 x 144	202.5				
48 x 96	180.0				
48 x 120	225.0				

GALVANIZED SHEETS

Galvanized is a term used to describe steel sheets coated with zinc. It is usually associated with the hot dipped process but can also be applied by electroplating. Galvanized sheets can be formed, welded, or soldered without flaking or peeling.

Electrogalvanized sheets are cold rolled sheets that are zinc coated by electrolytic deposition. These sheets should be painted if subject to outdoor exposure. The surface has been treated (phosphatized) for painting with synthetic enameled or lacquered paint. Electrogalvanized sheets have the same gauge thickness as cold rolled sheets. This type of sheet is ideal for cabinets, signs, light fixtures, etc., where the finish is of prime importance.

Both galvanized and electrogalvanized sheets retain their protective qualities when stamped, cold-drawn, double-seamed, braked or roll-formed.

CORRUGATED GALVANIZED SHEETS

Standard 2½" Corrugations

Gage & Width (in Inches) Length (in Feet)	Est. Weight per Sheet	Weight per Square (100 S.F.)	Sq. Ft. per Sheet
16 Ga. x 27½ 8'-0"	53.1#	290#	18.33
10'-0"	66.4	290	22.92
12'-0"	79.7	290	27.50
18 Ga. x 27½ 8'-0"	43.1	235	18.33
10'-0"	53.9	235	22.92
12'-0"	64.6	235	27.50
20 Ga. x 27½ 8'-0"	33.1	181	18.33
10'-0"	41.4	181	22.92
12'-0"	49.8	181	27.50
22 Ga. x 27½ 8'-0"	28.1	153	18.33
10'-0"	35.2	153	22.92
12'-0"	42.1	153	27.50
24 Ga. x 27½ 8'-0"	23.1	126	18.33
10'-0"	28.9	126	22.92
12'-0"	34.7	126	27.50
26 Ga. x 27½ 8'-0"	18.1	99	18.33
10'-0"	22.7	99	22.92
12'-0"	27.2	99	27.50

Mfrs. Std. Gauge & Size	Hot Dipped Prime Galv.	Est Wt Per Sheet	Mfrs. Std. Gauge & Size	Hot Dipped Prime Galv.	Est Wt Per Sheet
#10	(.1382")	5.781#/Sq.Ft.	#22	(.0336")	1.406#/Sq. Ft.
36 x 96	X	138.8	28 x 96	X	26.2
36 x 120	X	173.4	28 x 120	X	32.8
48 x 96	X	185.0	28 x 144	X	39.4
48 x 120	X	231.2	30 x 96	X	28.1
			30 x 120	X	35.2
#11			36 x 96	X	33.8
48 x 96		165.0	36 x 120	X	42.2
48 x 120		206.2	48 x 96	X	45.0
			48 x 120	X	56.2
#12	(.1084")	4.531#/Sq. Ft.	48 x 144		
30 x 120	X	113.3	#24	(.0276")	1.156#/Sq. Ft.
36 x 96	X	108.8	28 x 96	X	21.6
36 x 120	X	135.9	28 x 120	X	27.0
48 x 96	X	145.0	28 x 144	X	32.4
48 x 120	X	181.2	30 x 96	X	23.1
#14	(.0785")	3.281#/Sq. Ft.	30 x 120	X	28.9
30 x 120	X	82.0	36 x 96	X	24.0
36 x 96	X	78.8	36 x 120	X	34.7
36 x 120	X	98.4	48 x 96	X	37.0
48 x 96	X	105.0	48 x 120	X	46.2
48 x 120	X	131.2			
#16	(.0635")	2.656#/Sq. Ft.	#26	(.0217")	.906#/Sq. Ft.
30 x 96	X	53.1	28 x 96	X	16.9
30 x 120	X	66.4	28 x 120	X	21.1
36 x 96	X	63.8	28 x 144	X	25.4
36 x 120	X	79.9	30 x 96	X	18.1
48 x 96	X	85.0	30 x 120	X	22.7
48 x 120	X	106.2	36 x 96	X	21.8
48 x 144	X	120.0	36 x 120	X	27.2
			42 x 96	X	25.4
#18	(.0516")	2.156#/Sq. Ft.	42 x 120	X	31.7
28 x 120	X	50.3	48 x 96	X	29.0
30 x 96	X	43.1	48 x 120	X	36.2
30 x 120	X	53.9			
36 x 96	X	51.8	#28	(.0187")	.781#/Sq. Ft.
36 x 120	X	64.7	30 x 96	X	15.6
48 x 96	X	69.0	30 x 120	X	19.5
48 x 120	X	86.2	32 x 96	X	16.7
			36 x 96	X	18.8
#20	(.0376")	1.656#/Sq. Ft.	36 x 120	X	23.4
28 x 96	X	30.9			
28 x 120	X	38.6	#30	(.0157")	.656#/Sq. Ft.
28 x 144	X	46.4	30 x 96	X	13.1
30 x 96	X	33.1	36 x 96	X	15.8
30 x 120	X	41.4	36 x 120	X	19.7
36 x 96	X	39.8			
36 x 120	X	49.7			
48 x 96	X	53.0			
48 x 120	X	66.2			

COLD ROLLED SHEETS

Cold Rolled Sheets are a low-carbon (Commercial Quality) product of a continuous mill which assures uniform quality and gauge. The smooth deoxidized matte finish gives an excellent base for paint, lacquer and enamel. Box annealing and the absence of scale permit stamping and moderate drawing operations. Commercial Quality Cold Rolled Sheets will stamp, spin, and take shallow draws and will also hem flat on itself without cracking. Oiling protects the surface against rust. The carbon content is held to .10 maximum (instead of .15 maximum as the specifications permit) for improved welding and forming. Among the many applications are refrigerators, ranges, washing machines, truck-bodies, signs, panels, etc.

Gage and Sheet Size in Inches	Est. Weight per Sheet Pounds	Gage and Sheet Size in Inches	Est. Weight per Sheet Pounds	Gage and Sheet Size in Inches	Est. Weight per Sheet Pounds
10 Ga. - (.1345)	5.625 Lbs. Sq. Ft.	48 x 96	120.0	20 Ga. - (.0359)	1.500 Lbs. Sq. Ft.
24 x 96	90.0	48 x 120	150.0	24 x 96	24.0
24 x 120	112.5	60 x 120	187.5	24 x 120	30.0
36 x 96	135.0			36 x 96	36.0
36 x 120	168.8	14 Ga. - (.0747)	3.125 Lbs. Sq. Ft.	36 x 120	45.0
48 x 96	180.0	24 x 96	50.0	48 x 96	48.0
48 x 120	225.0	24 x 120	62.5	48 x 120	60.0
48 x 144	270.0	36 x 96	75.0	48 x 144	72.0
60 x 120	281.3	36 x 120	93.8	60 x 96	60.0
72 x 120	337.5	48 x 96	100.0	60 x 120	75.0
		48 x 120	125.0	60 x 144	90.0
		60 x 120	156.3		
11 Ga. - (.1196)	5.000 Lbs. Sq. Ft.	60 x 144	187.5	22 Ga. - (.0299)	1.250 Lbs. Sq. Ft.
24 x 96	80.0	72 x 120	187.5	24 x 96	20.0
24 x 120	100.0			24 x 120	25.0
36 x 96	120.0	16 Ga. - (.0598)	2.50 Lbs. Sq. Ft.	36 x 96	30.0
36 x 120	150.0	24 x 96	40.0	36 x 120	37.5
48 x 96	160.0	24 x 120	50.0	48 x 96	40.0
48 x 120	200.0	36 x 96	60.0	48 x 120	50.0
48 x 144	240.0	36 x 120	75.0	48 x 144	60.0
60 x 120	250.0	48 x 96	80.0		
60 x 144	300.0	48 x 120	100.0	24 Ga. - (.0239)	1.000 Lbs. Sq. Ft.
72 x 120	300.0	60 x 96	100.0	24 x 96	16.0
		60 x 120	125.0	24 x 120	20.0
				36 x 96	24.0
12 Ga. - (.1046)	4.375 Lbs. Sq. Ft.	18 Ga. - (.0478)	2.000 Lbs. Sq. Ft.	36 x 120	30.0
24 x 96	70.0	24 x 96	32.0	48 x 96	32.0
24 x 120	87.5	24 x 120	40.0	48 x 120	40.0
36 x 96	105.0	36 x 96	48.0		
36 x 120	131.3	36 x 120	60.0	26 Ga. - (.0179)	.7500 Lbs. Sq. Ft.
48 x 96	140.0	48 x 96	64.0	24 x 96	12.0
48 x 120	175.0	48 x 120	80.0	30 x 96	15.0
48 x 144	210.0			30 x 120	18.8
60 x 120	218.8	19 Ga. - (.0418)	1.750 Lbs. Sq. Ft.	36 x 96	18.0
60 x 144	262.5	24 x 96	28.0	48 x 96	24.0
72 x 120	262.5	24 x 120	35.0	54 x 96	27.0
72 x 144	315.0	36 x 96	42.0		
		36 x 120	52.5	28 Ga. - (.0149)	.6250 Lbs. Sq. Ft.
13 Ga. - (.0897)	3.750 Lbs. Sq. Ft.	48 x 96	56.0	24 x 96	10.0
24 x 96	60.0	48 x 120	70.0	36 x 96	15.0
24 x 120	75.0			36 x 120	18.8
36 x 96	90.0				
36 x 120	112.5				

M. GLOSSER & SONS, INC.

CARBON STEEL PIPE

Produced as a welded or seamless product. Grades of ASTM-A-53 Type A,B, or F available upon request. Untested structural grades can also be obtained. The desired specification must be stated at time of order.

Pipe Sizes	O.Din Inches	ANSI PIPE SCHEDULES														
		5	10	20	30	40	STD	60	80	E.H.	100	120	140	160	DBLE. E.H.	
1/8	* .405	.035	.049			.068	.068			.095	.095					
	#	.1383	.1863			.2447	.2447			.3145	.3145					
1/4	* .540	.049	.065			.088	.088			.119	.119					
	#	.2570	.3297			.4248	.4248			.5351	.5351					
3/8	* .675	.049	.065			.091	.091			.126	.126					
	#	.3276	.4235			.5676	.5676			.7388	.7388					
1/2	* .840	.065	.083			.109	.109			.147	.147					.187
	#	.5383	.6710			.8510	.8510			1.088	1.088				1.304	1.714
3/4	* 1.050	.065	.083			.113	.113			.154	.154				.218	.308
	#	.6838	.8572			1.131	1.131			1.474	1.474				1.937	2.441
1	* 1.315	.065	.109			.133	.133			.179	.179				.250	.358
	#	.8678	1.404			1.679	1.679			2.172	2.172				2.844	3.659
1 1/4	* 1.660	.065	.109			.140	.140			.191	.191				.250	.382
	#	1.107	1.806			2.273	2.273			2.997	2.997				3.765	5.214
1 1/2	* 1.900	.065	.109			.145	.145			.200	.200				.281	.400
	#	1.274	2.085			2.718	2.718			3.631	3.631				4.859	6.408
2	* 2.375	.065	.109			.154	.154			.218	.218				.343	.436
	#	1.604	2.638			3.653	3.653			5.022	5.022				7.444	9.029
2 1/2	* 2.875	.083	.120			.203	.203			.276	.276				.375	.552
	#	2.475	3.531			5.793	5.793			7.661	7.661				10.01	13.70
3	* 3.5	.083	.120			.216	.216			.300	.300				.437	.600
	#	3.029	4.332			7.576	7.576			10.25	10.25				14.32	18.58
3 1/2	* 4.0	.083	.120			.226	.226			.318	.318					.636
	#	3.472	4.973			9.109	9.109			12.51	12.51					22.85
4	* 4.50	.083	.120			.237	.237		.281	.337	.337		4.37		.531	.674
	#	3.915	5.613			10.79	10.79	12.66	14.98	14.98	14.98		19.01		22.51	27.54
4 1/2	* 5.0															.710
	#															32.53
5	* 5.563	.109	.134			.258	.258			.375	.375		.500		.625	.750
	#	6.349	7.770			14.62	14.62			20.78	20.78		27.04		32.96	38.55
6	* 6.625	.109	.134			.280	.280			.432	.432		.562		.718	.864
	#	7.585	9.289			18.97	18.97			28.57	28.57		36.39		45.30	53.16
7	* 7.625															.875
	#															63.08
8	* 8.625	.109	.148	.250	.277	.322	.322	.406	.500	.500	.500	.593	.718	.812	.906	.875
	#	9.914	13.40	22.36	24.70	28.55	28.55	35.64	43.39	43.39	43.39	50.87	60.93	67.76	74.69	72.42
9	* 9.625															
	#															
10	* 10.75	.134	.165	.250	.307	.365	.365	.500	.593	.500	.500	.718	.843	1.000	1.125	
	#	15.19	18.70	28.04	34.24	40.48	40.48	54.74	64.33	64.33	64.33	76.93	89.20	104.1	115.7	
11	* 11.75															
	#															
12	* 12.75	.165	.180	.250	.330	.406	.375	.562	.687	.500	.500	.843	1.000	1.125	1.312	
	#	22.18	24.20	33.38	43.77	53.53	49.56	73.16	88.51	65.42	107.2	125.5	139.7	160.3		
14	* 14.0		.250	.312	.375	.437	.375	.593	.750	.500	.937	1.093	1.250	1.406		
	#		36.71	45.68	54.57	63.37	54.57	84.91	106.1	72.09	130.7	150.7	170.2	189.1		
16	* 16.0		.250	.312	.375	.500	.375	.656	.843	.500	1.031	1.218	1.437	1.593		
	#		42.05	52.36	62.58	82.77	62.58	107.5	136.5	82.77	164.8	192.3	223.5	245.1		
18	* 18.0		.250	.312	.437	.562	.375	.750	.937	.500	1.156	1.375	1.562	1.781		
	#		47.39	59.03	82.06	104.8	70.59	138.2	170.8	93.45	208.0	244.1	274.2	308.5		

* Wall Thickness In Inches

Wt. Per Ft. In Pounds

HOT ROLLED STRUCTURAL STEEL TUBING

Structural Steel Tubing is a low cost product with a high strength-to-weight ratio. It is easily welded, formed, punched, and drilled. The hollow shape provides protection and concealment for wires, pipes, moving parts, etc. and it can be left exposed.

Hot Rolled Structural Steel Tubing is one of the lowest cost square or rectangular tubes. It is especially suited for a wide variety of applications where the surface finish is not of primary importance. This product can be used as a light structural member in heavy equipment, farm equipment, etc. Sizes smaller than 2" are ornamental, rather than structural.

HOT ROLLED SQUARE TUBING

Stock Lengths: 20 Feet, 24 Feet, & 40 Feet.

O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.
	1/2" x 1/2"		1 1/2 x 1 1/2	.083	1.599			
1/2 x 1/2	.049	.301	1 1/2 x 1 1/2	.095	1.815	3 x 3	.188	6.870
1/2 x 1/2	.065	.384	1 1/2 x 1 1/2	.109	2.062	3 x 3	.250	8.810
	5/8" x 5/8"		1 1/2 x 1 1/2	.120	2.252	3 x 3	.313	10.580
5/8 x 5/8	.065	.495	1 1/2 x 1 1/2	.134	2.330	3 x 3	.375	12.170
	3/4" x 3/4"		1 1/2 x 1 1/2	.145	2.530		3 1/2" x 3 1/2"	
3/4 x 3/4	.049	.467	1 1/2 x 1 1/2	.188	3.350	3 1/2 x 3 1/2	.120	5.610
3/4 x 3/4	.065	.605	* 1 1/2 x 1 1/2	.250	4.000	3 1/2 x 3 1/2	.188	8.150
3/4 x 3/4	.083	.753		1 3/4" x 1 3/4"		3 1/2 x 3 1/2	.250	10.510
3/4 x 3/4	.120	1.028	1 3/4 x 1 3/4	.065	1.489	3 1/2 x 3 1/2	.313	12.700
	7/8" x 7/8"		1 3/4 x 1 3/4	.083	1.881		4" x 4"	
7/8 x 7/8	.065	.716	1 3/4 x 1 3/4	.109	2.433	4 x 4	.083	4.420
	1" x 1"		1 3/4 x 1 3/4	.120	2.660	4 x 4	.120	6.460
1 x 1	.049	.634	1 3/4 x 1 3/4	.188	3.680	4 x 4	.188	9.420
1 x 1	.065	.827		2" x 2"		4 x 4	.250	12.210
1 x 1	.072	.909	2 x 2	.065	1.710	4 x 4	.313	14.830
1 x 1	.083	1.035	2 x 2	.083	2.164	4 x 4	.375	17.270
1 x 1	.095	1.169	2 x 2	.095	2.461	4 x 4	.500	21.630
1 x 1	.109	1.320	2 x 2	.109	2.802		4 1/2" x 4 1/2"	
1 x 1	.120	1.436	2 x 2	.120	3.050	4 1/2 x 4 1/2	.188	10.700
	1 1/4" x 1 1/4"		2 x 2	.188	4.320	4 1/2 x 4 1/2	.250	13.910
1 1/4 x 1 1/4	.049	.800	2 x 2	.250	5.410		5" x 5"	
1 1/4 x 1 1/4	.065	1.047		2 1/4" x 2 1/4"		5 x 5	.120	7.800
1 1/4 x 1 1/4	.083	1.317	2 1/4 x 2 1/4	.120	3.480	5 x 5	.188	11.970
1 1/4 x 1 1/4	.095	1.492		2 1/2" x 2 1/2"		5 x 5	.250	15.620
1 1/4 x 1 1/4	.109	1.691	2 1/2 x 2 1/2	.083	2.730	5 x 5	.313	19.080
1 1/4 x 1 1/4	.120	1.844	2 1/2 x 2 1/2	.120	3.900	5 x 5	.375	22.370
1 1/4 x 1 1/4	.125	1.884	2 1/2 x 2 1/2	.188	5.590	5 x 5	.500	28.430
* 1 1/4 x 1 1/4	.188	2.400	2 1/2 x 2 1/2	.250	7.110		5 1/2" x 5 1/2"	
	1 15/16" x 1 15/16"			2.530" x 2.530"		5 1/2 x 5 1/2	.188	13.270
1 15/16 x 1 15/16	.120	1.950	2.530 x 2.530	.250	7.210			
	1 1/2" x 1 1/2"			3" x 3"				
1 1/2 x 1 1/2	.049	.967	3 x 3	.083	3.290			
1 1/2 x 1 1/2	.065	1.268	3 x 3	.120	4.750			

* Buttwelded items are not produced to ASTM-A-500

M. GLOSSER & SONS, INC.

HOT ROLLED SQUARE TUBING (CONT.)

O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.
6" x 6"			8" x 8"			10 x 10	.500	62.460
6 x 6	.120	9.860	8 x 8	.188	19.630	10 x 10	.625	76.330
6 x 6	.188	14.530	8 x 8	.250	25.820	12" x 12"		
6 x 6	.250	19.020	8 x 8	.313	31.840	12 x 12	.250	39.430
6 x 6	.313	23.340	8 x 8	.375	37.690	12 x 12	.313	48.860
6 x 6	.375	27.480	8 x 8	.500	48.850	12 x 12	.375	58.100
6 x 6	.500	35.240	8 x 8	.625	59.320	12 x 12	.500	76.070
7" x 7"			10" x 10"			14" x 14"		
7 x 7	.188	17.080	10 x 10	.188	24.730	14 x 14	.375	68.310
7 x 7	.250	22.420	10 x 10	.250	32.630	14 x 14	.500	89.680
7 x 7	.313	27.590	10 x 10	.313	40.350	16" x 16"		
7 x 7	.375	32.580	10 x 10	.375	47.900	16 x 16	.500	103.300
7 x 7	.500	42.050						

HOT ROLLED RECTANGULAR TUBING

O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.
½" x 1"			1¼" x 2"			2" x 4"		
½ x 1	.065	.605	1¼ x 2	.083	1.741	2 x 4	.083	3.290
½" x 1½"			1¼ x 2	.120	2.456	2 x 4	.120	4.750
½ x 1½	.065	.827	1½" x 2½"			2 x 4	.188	6.870
¾" x 1"			1¼ x 2½	.083	2.023	2 x 4	.250	8.810
¾ x 1	.120	1.240	1½" x 2"			2 x 4	.313	10.580
¾" x 1½"			1½ x 2	.065	1.489	2" x 5"		
¾ x 1½	.065	.937	1½ x 2	.083	1.881	2 x 5	.120	5.610
¾ x 1½	.083	1.176	1½ x 2	.120	2.660	2 x 5	.188	8.150
¾ x 1½	.120	1.640	1½" x 2½"			2 x 5	.250	10.510
¾" x 2"			1½ x 2½	.083	2.164	2 x 5	.313	12.700
¾ x 2	.083	1.169	1½ x 2½	.120	3.050	2" x 6"		
¾ x 2	.095	1.715	1½ x 2½	.188	4.320	2 x 6	.120	6.460
1" x 1¼"			1½ x 2½	.250	5.410	2 x 6	.188	9.240
1 x 1¼	.120	1.640	1½" x 3"			2 x 6	.250	12.210
1" x 1½"			1½ x 3	.065	1.890	2 x 6	.313	14.830
1 x 1½	.065	1.047	1½ x 3	.083	2.450	2 x 6	.375	17.270
1 x 1½	.083	1.317	1½ x 3	.120	3.480	2" x 8"		
1 x 1½	.120	1.844	1½ x 3	.188	4.960	2 x 8	.188	11.970
1" x 2"			1½" x 4"			2 x 8	.250	15.620
1 x 2	.065	1.268	1½ x 4	.083	3.006	2 x 8	.313	19.080
1 x 2	.083	1.599	1½ x 4	.120	4.330	2 x 8	.375	22.370
1 x 2	.095	1.815	1½ x 4	.188	6.240	2" x 10"		
1 x 2	.120	2.252	2" x 3"			2 x 10	.188	14.530
1" x 2½"			2 x 3	.083	2.730	2 x 10	.250	19.020
1 x 2½	.083	1.881	2 x 3	.120	3.900	2" x 12"		
1 x 2½	.120	2.660	2 x 3	.188	5.590	2 x 12	.188	17.080
1" x 3"			2 x 3	.250	7.110	2 x 12	.250	22.420
1 x 3	.065	1.710	2 x 3	.313	8.450	2½" x 3"		
1 x 3	.083	2.164	2½" x 3½"			2½ x 3	.120	4.330
1 x 3	.120	3.050	2½ x 3½	.188	6.870	2½" x 3½"		
			2½ x 3½	.250	8.810	2½ x 3½	.188	6.870
						2½ x 3½	.250	8.810

M. GLOSSER & SONS, INC.

HOT ROLLED RECTANGULAR TUBING (CONT.)

O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.	O.D./In.	Wall/In.	Wt./Ft.
	2½" x 4"		4 x 6	.250	15.620	6 x 10	.250	25.820
2½ x 4	.120	5.180	4 x 6	.313	19.080	6 x 10	.313	31.840
2½ x 4	.188	7.482	4 x 6	.375	22.370	6 x 10	.375	37.690
	2½" x 5"		4 x 6	.500	28.430	6 x 10	.500	48.850
2½ x 5	.120	6.030		4" x 7"			6" x 12"	
2½ x 5	.188	8.780	4 x 7	.188	13.250	6 x 12	.188	22.180
2½ x 5	.250	11.360	4 x 7	.250	17.320	6 x 12	.250	29.230
	3" x 4"		4 x 7	.313	21.210	6 x 12	.313	36.100
3 x 4	.120	5.610	4 x 7	.375	24.930	6 x 12	.375	42.790
3 x 4	.188	8.150		4" x 8"		6 x 12	.500	55.660
3 x 4	.250	10.510	4 x 8	.188	14.530		6" x 14"	
3 x 4	.313	12.700	4 x 8	.250	19.020	6 x 14	.250	32.630
	3" x 5"		4 x 8	.313	23.340	6 x 14	.375	47.900
3 x 5	.120	6.460	4 x 8	.375	27.480	6 x 14	.500	62.460
3 x 5	.188	9.420	4 x 8	.500	35.240		6" x 18"	
3 x 5	.250	12.210		4" x 10"		6 x 18"	.375	58.100
3 x 5	.313	14.830	4 x 10	.188	17.080	6 x 18	.500	76.070
3 x 5	.375	17.270	4 x 10	.250	22.420		7" x 9"	
3 x 5	.500	21.630	4 x 10	.313	27.590	7 x 9	.188	19.630
	3" x 6"		4 x 10	.375	32.580	7 x 9	.250	25.820
3 x 6	.120	7.310	4 x 10	.500	42.050	7 x 9	.500	48.850
3 x 6	.188	10.700		4" x 12"			8" x 10"	
3 x 6	.250	13.910	4 x 12	.188	19.630	8 x 10	.188	22.180
3 x 6	.313	16.960	4 x 12	.250	25.820	8 x 10	.250	29.230
3 x 6	.375	19.820	4 x 12	.313	31.840	8 x 10	.313	36.100
3 x 6	.500	25.030	4 x 12	.375	37.690	8 x 10	.375	42.790
	3" x 7"		4 x 12	.500	48.850	8 x 10	.500	55.660
3 x 7	.188	11.970		4" x 14"			8" x 12"	
3 x 7	.250	15.620	4 x 14	.250	29.230	8 x 12	.188	24.730
3 x 7	.313	19.080		4" x 16"		8 x 12	.250	32.630
3 x 7	.375	22.370	4 x 16	.313	40.350	8 x 12	.313	40.350
	3" x 8"			5" x 7"		8 x 12	.375	47.900
3 x 8	.188	13.250	5 x 7	.188	14.530	8 x 12	.500	62.460
3 x 8	.250	17.320	5 x 7	.250	19.020		8" x 16"	
3 x 8	.313	21.210	5 x 7	.313	23.340	8 x 16	.313	48.860
3 x 8	.375	24.930	5 x 7	.375	27.480	8 x 16	.375	58.100
3 x 8	.500	31.840	5 x 7	.500	35.240	8 x 16	.500	76.070
	3" x 10"			5" x 10"			8" x 20"	
3 x 10	.188	15.800	5 x 10	.250	24.120	8 x 20	.375	68.310
3 x 10	.250	20.720		6" x 8"		8 x 20	.500	89.680
	3" x 12"		6 x 8	.188	17.080		10" x 14"	
3 x 12	.250	24.120	6 x 8	.250	22.420	10 x 14	.313	48.860
	4" x 5"		6 x 8	.313	27.590	10 x 14	.375	58.100
4 x 5	.188	10.700	6 x 8	.375	32.580	10 x 14	.500	76.070
4 x 5	.250	13.910	6 x 8	.500	42.050		12" x 16"	
	4" x 6"			6" x 10"		12 x 16	.375	68.310
4 x 6	.120	7.964	6 x 10	.188	19.630			
4 x 6	.188	11.970						

FLATTENED EXPANDED METALS

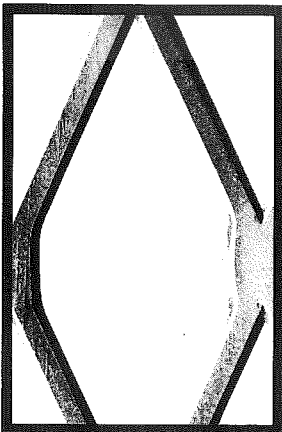
Flattened Expanded Metal is made by passing the standard expanded metal between pressure rolls which flattens the material so that the strands and bonds are in the same plane. It has no sharp edges which makes it ideal for trays, shelves, baskets, screens, or metal furniture.

CARBON STEEL 1/4" - 2" DIAMOND

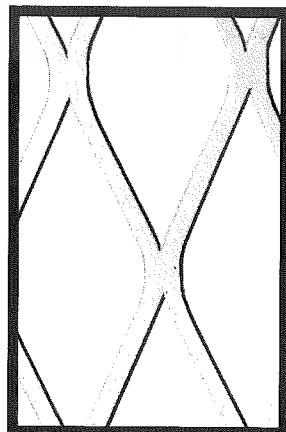
Style	Lbs. Per 100 Sq. Ft.		Standard Sheet Size (Feet)		Design Sizes (Inches)		Opening Size (Inches)		Strand Size (Inches)		Overall Thickness (Inches)
	Plain	Galv. Wt.	Width	Length	SWD	LWD	SWO	LWO	Width	Thickness	
1/4" - #20	82	—	3&4	8	.250	1.05	.084	.715	.079	.030	.030
1/4" - #18	108	—	3&4	8	.250	1.05	.075	.715	.080	.040	.040
1/2" - #20	40	51	3&4	8	.500	1.25	.375	1.00	.079	.029	.029
1/2" - #40 (18 ga.)	38	—	4	8	.500	1.25	.380	1.00	.056	.040	.040
1/2" - #18	66	83	3&4	8&10	.500	1.25	.312	1.00	.097	.039	.039
1/2" - #16	82	98	3&4	8&10	.500	1.25	.312	1.00	.096	.050	.050
1/2" - #13	140	161	3&4	8&10	.500	1.25	.265	1.00	.107	.070	.070
3/4" - #16	51	57	3&4	8&10	.923	2.10	.750	1.750	.111	.048	.048
3/4" - #14	63	74	3&4	8&10	.923	2.10	.688	1.813	.105	.061	.061
3/4" - #13	75	88	3&4	8,10&12	.923	2.10	.688	1.781	.106	.070	.070
3/4" - #10 (13 ga.)	114	128	4	8	.923	2.10	.637	1.755	.160	.070	.070
3/4" - #9 (10 ga.)	171	188	3&4	8,10&12	.923	2.10	.563	1.688	.165	.120	.120
1" - #16	41	50	3&4	8	1.00	2.50	.813	2.250	.098	.050	.050
1 1/2" - #16 (Lt.)	29	—	4	8	1.33	3.20	1.175	2.620	.093	.050	.050
1 1/2" - #16	38	46	3&4	8	1.33	3.20	1.062	2.750	.119	.048	.048
1 1/2" - #14	46	54	3&4	8	1.33	3.20	1.062	2.750	.134	.060	.060
1 1/2" - #13	57	66	3&4	8&10	1.33	3.20	1.062	2.750	.116	.070	.070
1 1/2" - #19 (10 ga.)	114	125	3&4-4	8&10-12	1.33	3.20	1.0	2.563	.158	.110	.110

It is also available in aluminum and stainless steel upon request.

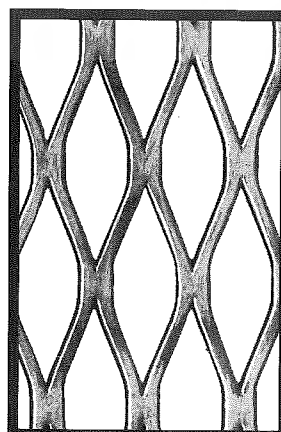
Flattened 1 1/2" - #9



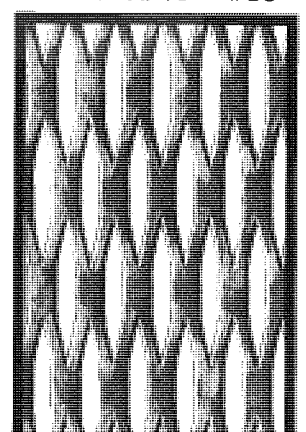
Flattened 3/4" - #13



Flattened 1/2" - #16



Flattened 1/4" - #18



STANDARD EXPANDED METALS

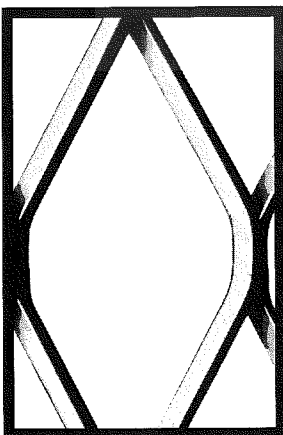
Expanded Metal is produced by slitting and expanding solid sheets of metal up to ten times its original width. This process produces a product which is lighter in weight and offers a greater resistance to bending than the solid steel from which it was made. In Standard Expanded Metal, the strands are set in a sharp angle to the plane of the sheet. It can be cut without raveling, formed or welded. Standard Expanded Metal is ideally suited for window or machine guards, partitions, non-skid surfacing, or grillwork.

CARBON STEEL 1/4" - 2" DIAMOND

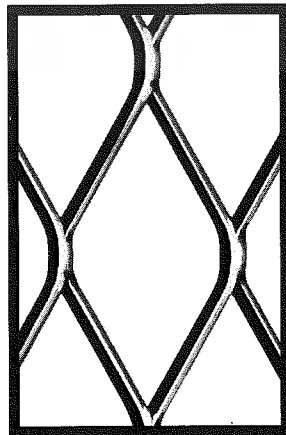
Style	Lbs. Per 100 Sq. Ft.		Standard Sheet Size (Feet)		Design Sizes (Inches)		Opening Size (Inches)		Strand Size (Inches)		Overall Thickness (Inches)
	Plain	Galv. Wt.	Width	Length	SWD	LWD	SWO	LWO	Width	Thickness	
1/4" - #20	86	—	4	8	.250	1.00	.125	.718	.072	.036	.135
1/4" - #18	114	—	4	8	.250	1.00	.110	.718	.072	.048	.147
1/2" - #20	43	—	4	8	.500	1.20	.438	.938	.072	.036	.140
1/2" - #40 (18 ga.)	40	—	4	8	.500	1.20	.440	.938	.051	.048	.110
1/2" - #18	70	88	4&6	8&10	.500	1.20	.438	.938	.088	.048	.172
1/2" - #16	86	104	4&6	8&10	.500	1.20	.375	.938	.087	.060	.175
1/2" - #13	147	174	4&6	8&10	.500	1.20	.312	.938	.096	.092	.204
3/4" - #16	54	61	4&6	8&10	.923	2.00	.813	1.750	.101	.060	.210
3/4" - #13	80	94	4&6	8&10	.923	2.00	.750	1.688	.096	.092	.205
3/4" - #10 (13 ga.)	120	134	4&6	8&10	.923	2.00	.750	1.625	.144	.092	.290
3/4" - #9 (10 ga.)	180	198	4&6	8,10&12	.923	2.00	.688	1.562	.150	.134	.312
1" - #16	44	51	4	8	1.00	2.40	.938	2.062	.087	.060	.192
1 1/2" - #18	20	—	4	8	1.33	3.00	1.313	2.625	.068	.048	.140
1 1/2" - #16	40	48	4	8	1.33	3.00	1.250	2.625	.108	.060	.230
1 1/2" - #13	60	68	4&6	8&10	1.33	3.00	1.188	2.500	.105	.092	.242
1 1/2" - #10 (13 ga.)	79	90	4&6	8&10	1.33	3.00	1.188	2.500	.138	.092	.284
1 1/2" - #9 (10 ga.)	120	144	4&6	8,10&12	1.33	3.00	1.125	2.375	.144	.134	.312
1 1/2" - #6 (6 ga.)	250	275	4&6	8&12	1.33	3.00	1.110	2.313	.203	.198	.433
2" - #10 (13 ga.)	68	81	*	*	1.85	4.00	1.625	3.438	.164	.092	.327
2" - #9 (10 ga.)	90	99	4	8	1.85	4.00	1.563	3.375	.149	.134	.312

It is also available in aluminum and stainless steel upon request.

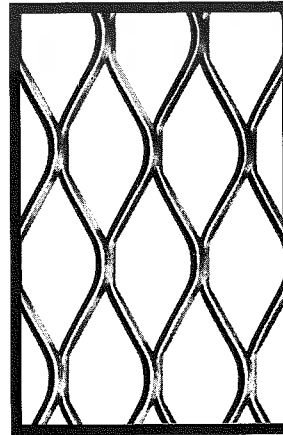
Standard 1 1/2" - #9



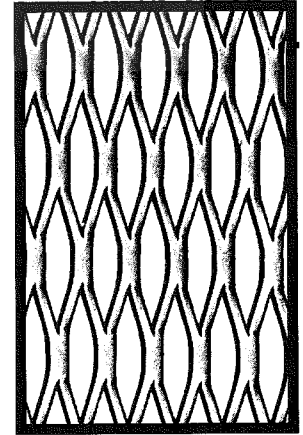
Standard 3/4" - #13



Standard 1/2" - #16



Standard 1/4" - #18

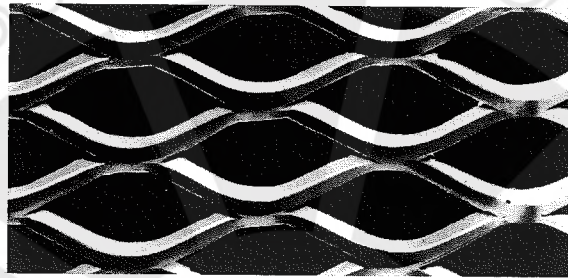


EXPANDED METAL GRATING

Structural Grating is designed primarily for use in catwalks and walk-ways where normal loading can be used without reinforcing to 36 inch clear span. It is also ideal for installation directly on top of concrete or wood floors as a non-slip surface, or for use in construction of platforms upon which workers in plants may stand in order to avoid being in water while they work.

This product is available in both flattened and standard patterns, and is easily sheared, hacksawed, or cut by a torch to fit various shapes and irregular outlines.

It is also available in aluminum and stainless steel upon request.

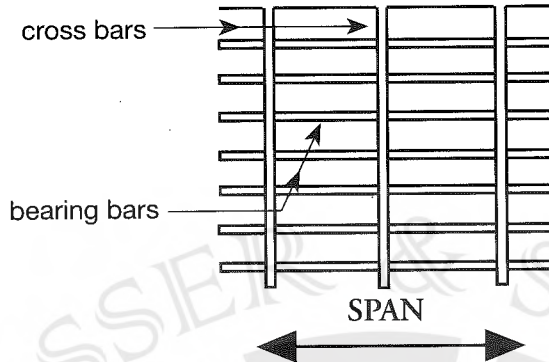


CARBON STEEL STANDARD EXPANDED GRATING

Style	Lbs. Per Sq. Ft.		Standard Sheet Size (Feet)		Design Size (Inches)		Opening Size (Inches)		Strand Size (Inches)		Overall Thickness (Inches)
	Plain	Galv. Wt.	Width SWD	Length LWD	SWD	LWD	SWO	LWO	Width	Thickness	
3.0 lbs	3.0	3.15	4&6	8,10,&12	1.33	5.33	.940	3.44	.264	.183	.540
3.14 lbs	3.14	3.30	4-4&6	8-10	2.00	6.00	1.625	4.88	.312	.250	.656
4.0 lbs	4.0	4.18	4,5&6	8&10	1.33	5.33	.940	3.44	.300	.215	.618
4.27 lbs.	4.27	4.46	4&6	8&10	1.41	4.00	1.00	2.88	.300	.250	.625
5.0 lbs	5.0	5.20	4,5&6	8&10	1.33	5.33	.813	3.38	.331	.250	.655
6.25 lbs.	6.25	6.47	4&6	8&12	1.41	5.33	.813	3.38	.350	.312	.715
7.0 lbs.	7.0	7.25	4	8	1.41	5.33	.813	3.38	.391	.312	.740

BAR GRATING

Welded Steel Grating Weights
Also available in stainless steel & aluminum



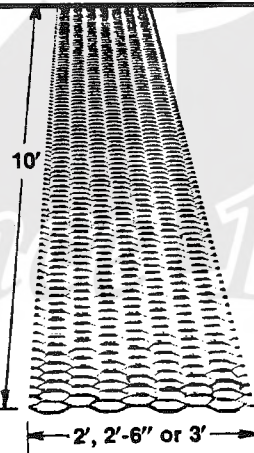
Main Bar Size	Standard Mesh Wt. Lbs. Sq. Ft.	Galvanized Standard Mesh Wt. Lbs. Sq. Ft.	Close Mesh Wt. Lbs. Sq. Ft.	Galvanized Close Mesh Wt. Lbs. Sq. Ft.	Sidewalk Mesh Wt. Lbs. Sq. Ft.	Galvanized Sidewalk Mesh Wt. Lbs. Sq. Ft.
3/4" x 1/8"	3.9	4.4	4.9	5.4	6.3	6.8
3/4" x 3/16"	5.9	6.7	7.3	8.2	9.5	10.3
1" x 1/8"	5.0	5.6	6.3	6.8	8.2	8.8
1" x 3/16"	7.6	8.4	9.5	10.3	12.3	13.2
1 1/4" x 1/8"	6.1	6.7	7.7	8.3	10.1	10.7
1 1/4" x 3/16"	9.2	10.1	11.6	12.5	15.2	16.1
1 1/2" x 1/8"	7.3	7.8	9.2	9.7	11.8	12.4
1 1/2" x 3/16"	10.9	11.8	13.8	14.6	18.1	18.9
1 3/4" x 3/16"	12.6	13.4	15.9	16.8	21.0	21.8
2" x 3/16"	14.3	15.1	18.0	18.9	23.8	24.7
2 1/4" x 3/16"	15.9	16.8	20.2	21.1	26.7	27.5
2 1/2" x 3/16"	17.6	18.5	22.4	23.2	29.6	30.4

Also available in stainless steel & aluminum

CATWALK

10' sections of grating designed primarily for platforms and pedestrian walkways.

Advantages: Economy. Strength. Ease of Fabrication and Field Handling.



Standard Sheet Size and Weight

Style	Lbs. Per Sq. Ft.	10' x 2'	10' x 2' 6"	10' x 3'
3		60 lbs.	75 lbs.	90 lbs.
3.14		63 lbs.	79 lbs.	94 lbs.
4		80 lbs.	100 lbs.	120 lbs.
4.27		85 lbs.	107 lbs.	128 lbs.
5		100 lbs.	125 lbs.	150 lbs.

UNITREAD®

U.S. Pat. No. 3,496,688

A one-piece fabricated stair-tread furnished with red oxide paint.

Advantages: Economy. Ease of installation. Strength. Maintenance Free.

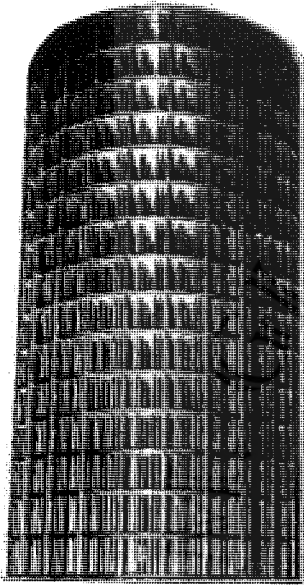


Standard Size and Weights

Style	Size	Approximate Shipping Wt.
#4 Niles Unitread	8 1/2" x 24"	10.7 lbs.
#4 Niles Unitread	8 1/2" x 30"	12.9 lbs.
#5 Niles Unitread	9 3/4" x 30"	16.2 lbs.

WELDED WIRE REINFORCING FABRIC

Available in flat mats as 5' x 10', and 8' x 20' panel sizes, or rolls 60" wide in lengths 150 ft.



Style	Wgt. (csf)
6 x 6 - 10/10	21#
6 x 6 - 8/8	30#
6 x 6 - 6/6	42#
6 x 6 - 5/5	49#
6 x 6 - 4/4	58#
6 x 6 - 3/3	68#
6 x 6 - 2/2	78#
6 x 6 - 1/1	91#
6 x 6 - 0/0	107#
4 x 4 - 10/10	31#
4 x 4 - 8/8	44#
4 x 4 - 6/6	62#
4 x 4 - 4/4	85#
3 x 3 - 10/10	41#
2 x 2 - 10/10	60#
4 x 12 - 10/12	19#
4 x 12 - 9/12	22#
4 x 12 - 8/12	25#

RE-BAR TIE WIRE



16 gage annealed approximately 3½ lb. coils, packed 20 coils to the carton, available for immediate delivery. Other gages, annealed or soft galvanized, can be furnished on special order. All fit standard belt dispensers.

Since 1899