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Steel Corporation

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that drive customers success***

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FARWEST STEEL CORPORATION

LOCATIONS

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FARWEST STEEL CORPORATION

INDEX

ANGLE	Bar Size Angle	2
	Structural Angle.....	4
CHANNEL	Bar Size Channel.....	8
	Junior Channel.....	8
	Structural Channel	9
	Ship Channel	10
BEAM	Standard I Beam	12
	Wide Flange Beam	13
	Junior Beam.....	17
ROUND BAR	Hot Rolled Round Bar.....	19
	Cold Drawn and T & P Round Bar	20
	Cold Drawn Round Bar	22
REBAR	Rebar.....	24
	Welded Wire Fabric	25
SQUARE BAR	Hot Rolled Square Bar.....	28
	Cold Drawn Square Bar.....	29
FLAT BAR	Hot Rolled Strip	31
	Hot Rolled Flat Bar	33
	Cold Drawn Flat Bar.....	37
PLATE	Universal Mill Plate	41
	Plate & Plate Grades	41
	Floor Plate	59
SHEET	Hot Rolled Sheet	61
	Cold Rolled Sheet	63
GRATING	Flattened	64
	Raised	65
	Grating	66
	Grip Strut	67
TUBING	Square Tubing	69
	Rectangular Tubing.....	71
	Round Tubing.....	73
PIPE	Pipe	75
USEFUL INFORMATION	Telephone Order Method For:	
	Plate Cutting.....	77
	Saw Cutting	80
	Forming	82
	Rolling.....	85
	Bar Bending	86
	Fraction & Decimal Chart.....	91
	Decimal Conversion	92
	Services	93
	Conversion Factors.....	Inside Back Cover

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Chemical Analysis
Mechanical Properties
Tolerances
Straightness
Sizes
Weights and Measures

Textual Information
Charts and Tables
Schedules
Illustrations and Pictures
Other data described herein

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May, 2021



 FARWEST STEEL CORPORATION

ANGLE — SPECIFICATIONS

Chemical Analysis:

ASTM	Carbon	Phosphorus	Sulphur
A-36	.26 max	.04 max	.05 max

Mechanical Properties:

ASTM	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
A-36	58,000/80,000 ^A	36,000 Min ^A	20 Min ^B

Tolerances:

Size ^C	Thickness Over or Under Inch			Length of Leg	
	To 3 /16	Over 3/16 to 3/8	Over 3/8	Over	Under
To 1"	.008	.010	—	1/32	1/32
Over 1" to 2"	.010	.010	.012	3/64	3/64
Over 2" to, excluding 3"	.012	.015	.015	1/16	1/16
3" to 4", incl.	—	—	—	1/8	3/32
Over 4" to 6", incl.	—	—	—	1/8	1/8
Over 6"	—	—	—	3/16	1/8

Straightness:

Out of square — 1 1/2 degrees per inch of leg

(length in feet)

Camber — 1/4" in any 5" or 1/4" x

5

^A Shapes less than 1 inch square (6.45 mm²) in cross section need not be subject to tension tests by the manufacturer.

^B Shapes less than 5/16 inch (8 mm) in thickness or diameter a deduction from the percentage of elongation in 8 inches (203 mm), of 1.25% shall be made for each decrease of 1/32 inch (0.8 mm) of the specified thickness or diameter below 5/16 inch (8mm).

^C For unequal leg angles, longer leg determines classification.

Standard Lengths — 20', 40'

Size			Weight in Pounds		
			Foot	20'	40'
1/2	x	1/2 x 1/8	.38	7.6	—
5/8	x	5/8 x 1/8	.48	9.6	—
3/4	x	3/4 x 1/8	.59	11.8	—
7/8	x	7/8 x 1/8	.70	14.0	—
1	x	1 x 1/8	.80	16.0	—
		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	1.80	36.0	72.0
		1/4	2.34	46.8	93.6
		5/16	2.86	57.2	—
		3/8	3.35	67.0	—
1 3/4	x	1 3/4 x 1/8	1.23	24.6	—
		3/16	1.80	36.0	—
1 3/4	x	1 3/4 x 1/8	1.44	28.8	57.6
		3/16	2.12	42.4	84.8
		1/4	2.77	55.4	110.8
2	x	1 1/4 x 3/16	1.96	39.2	—
		1/4	2.55	51.0	—
2	x	1 1/2 x 1/8	1.44	28.8	—
		3/16	2.12	42.4	—
		1/4	2.77	55.4	110.8
2	x	2 x 1/8	1.65	33.0	66.0
		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	4.70	94.0	188.0
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

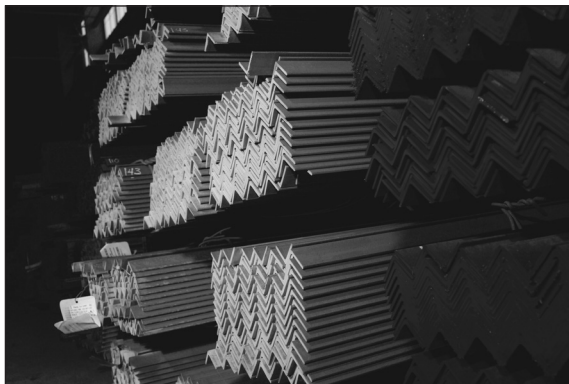
FARWEST STEEL CORPORATION



BAR SIZE ANGLE

Standard Lengths — 20', 40'

Size	Weight in Pounds		
	Foot	20'	40'
2 ¹ / ₂ x 2 x 3 ³ / ₁₆	2.75	55.0	110.0
1 ¹ / ₄	3.62	72.4	144.8
5 ⁵ / ₁₆	4.50	90.0	180.0
3 ³ / ₈	5.30	106.0	212.0
2 ¹ / ₂ x 2 ¹ / ₂ x 3 ³ / ₁₆	3.07	61.4	122.8
1 ¹ / ₄	4.10	82.0	164.0
5 ⁵ / ₁₆	5.00	100.0	200.0
3 ³ / ₈	5.90	118.0	236.0
1 ¹ / ₂	7.70	154.0	308.0



FARWEST STEEL CORPORATION



STRUCTURAL ANGLE

Standard Lengths — 20', 40'

			Weight in Pounds		
Size		Foot	20'	40'	
3	x 2	x 3/16	3.0	61.4	122.8
		1/4	4.1	82.0	164.0
		5/16	5.0	100.0	200.0
		3/8	5.9	118.0	236.0
		1/2	7.7	154.0	308.0
3	x 2 1/2	x 1/4	4.5	90.0	180.0
		5/16	5.6	112.0	224.0
		3/8	6.6	132.0	264.0
		1/2	8.5	170.0	340.0
3	x 3	x 3/16	3.7	74.2	148.4
		1/4	4.9	98.0	196.0
		5/16	6.1	122.0	244.0
		3/8	7.2	144.0	288.0
		1/2	9.4	188.0	376.0
3 1/2	x 2 1/2	x 1/4	4.9	98.0	196.0
		5/16	6.1	122.0	244.0
		3/8	7.2	144.0	288.0
		1/2	9.4	188.0	376.0
3 1/2	x 3	x 1/4	5.4	108.0	216.0
		5/16	6.6	132.0	264.0
		3/8	7.9	158.0	316.0
		7/16	9.1	182.0	364.0
		1/2	10.2	204.0	408.0
3 1/2	x 3 1/2	x 1/4	5.8	116.0	232.0
		5/16	7.2	144.0	288.0
		3/8	8.5	170.0	340.0
		1/2	11.1	222.0	444.0
4	x 3	x 1/4	5.8	116.0	232.0
		5/16	7.2	144.0	288.0
		3/8	8.5	170.0	340.0
		7/16	9.8	196.0	392.0
		1/2	11.1	222.0	444.0
		5/8	13.6	272.0	544.0

FARWEST STEEL CORPORATION



STRUCTURAL ANGLE

Standard Lengths — 20', 40'

Size	Weight in Pounds		
	Foot	20'	40'
4 x 3 ¹ / ₂ x 1 ¹ / ₄	6.2	124.0	248.0
5 ⁵ / ₁₆	7.7	154.0	308.0
3 ³ / ₈	9.1	182.0	364.0
7 ⁷ / ₁₆	10.6	212.0	424.0
1 ¹ / ₂	11.9	238.0	476.0
5 ⁵ / ₈	14.7	294.0	588.0
4 x 4 x 1 ¹ / ₄	6.6	132.0	264.0
5 ⁵ / ₁₆	8.2	164.0	328.0
3 ³ / ₈	9.8	196.0	392.0
7 ⁷ / ₁₆	11.3	226.0	452.0
1 ¹ / ₂	12.8	256.0	512.0
5 ⁵ / ₈	15.7	314.0	628.0
3 ³ / ₄	18.5	370.0	740.0
5 x 3 x 1 ¹ / ₄	6.6	132.0	264.0
5 ⁵ / ₁₆	8.2	164.0	328.0
3 ³ / ₈	9.8	196.0	392.0
1 ¹ / ₂	12.8	256.0	512.0
5 ⁵ / ₈	16.8	336.0	672.0
5 x 3 ¹ / ₂ x 1 ¹ / ₄	7.0	140.0	280.0
5 ⁵ / ₁₆	8.7	174.0	348.0
3 ³ / ₈	10.4	208.0	416.0
7 ⁷ / ₁₆	12.0	240.0	480.0
1 ¹ / ₂	13.6	272.0	544.0
5 ⁵ / ₈	16.8	336.0	672.0
3 ³ / ₄	19.8	396.0	792.0
5 x 5 x 5 ⁵ / ₁₆	10.3	206.0	412.0
3 ³ / ₈	12.3	246.0	492.0
1 ¹ / ₂	16.2	324.0	648.0
5 ⁵ / ₈	20.0	400.0	800.0
3 ³ / ₄	23.6	472.0	944.0
7 ⁷ / ₈	27.2	544.0	1088.0

FARWEST STEEL CORPORATION



STRUCTURAL ANGLE

Standard Lengths — 20', 40'

Size		Weight in Pounds		
		Foot	20'	40'
6 x 4	x $\frac{5}{16}$	10.3	206.0	412.0
	$\frac{3}{8}$	12.3	246.0	492.0
	$\frac{7}{16}$	14.3	286.0	572.0
	$\frac{1}{2}$	16.2	324.0	648.0
	$\frac{5}{8}$	20.0	400.0	800.0
	$\frac{3}{4}$	23.6	472.0	944.0
	$\frac{7}{8}$	27.2	544.0	1088.0
6 x 6	x $\frac{5}{16}$	12.4	248.0	496.0
	$\frac{3}{8}$	14.9	298.0	596.0
	$\frac{7}{16}$	17.2	344.0	688.0
	$\frac{1}{2}$	19.6	392.0	784.0
	$\frac{5}{8}$	24.2	484.0	968.0
	$\frac{3}{4}$	28.7	574.0	1148.0
	$\frac{7}{8}$	33.1	662.0	1324.0
7 x 4	x 1	37.4	748.0	1496.0
	x $\frac{3}{8}$	13.6	272.0	554.0
	$\frac{7}{16}$	15.8	316.0	632.0
	$\frac{1}{2}$	17.9	358.0	716.0
	$\frac{5}{8}$	22.1	442.0	884.0
	$\frac{3}{4}$	26.2	524.0	1048.0
	$\frac{7}{16}$	17.2	344.0	688.0
8 x 4	$\frac{1}{2}$	19.6	392.0	784.0
	$\frac{5}{8}$	24.2	484.0	968.0
	$\frac{3}{4}$	28.7	574.0	1148.0
	1	37.4	748.0	1496.0
	$\frac{1}{2}$	23.0	460.0	920.0
8 x 6	$\frac{9}{16}$	25.7	514.0	1028.0
	$\frac{5}{8}$	28.5	570.0	1140.0
	$\frac{3}{4}$	33.8	676.0	1352.0
	1	44.2	884.0	1768.0
8 x 8	$\frac{1}{2}$	26.4	528.0	1056.0
	$\frac{5}{8}$	32.7	654.0	1308.0
	$\frac{3}{4}$	38.9	778.0	1556.0
	$\frac{7}{8}$	45.0	900.0	1800.0
	1	51.0	1020.0	2040.0
9 x 4	$\frac{1}{2}$	21.3	426.0	852.0
	$\frac{5}{8}$	26.3	526.0	1052.0
	$\frac{3}{4}$	31.3	626.0	1252.0

CHANNEL — SPECIFICATIONS

Chemical Analysis:

ASTM	Carbon	Phosphorus	Sulphur
A-36	.26 max	.04 max	.05 max

Mechanical Properties:

Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
58,000/80,000 ^A	36,000 min ^A	20 min ^B

Tolerances:

Size	Channel Depth		Flange Width		Thickness of Web over or under, Inch	
	over	under	over	under	3/16 and under	over 3/16
To 1 1/2" incl.	±1/32	±1/32	±1/32	±1/32	0.010	0.015
Over 1 1/2" to 3", excl.	±1/16	±1/16	±1/16	±1/16	0.015	0.020
3" to 7", incl.	3/32	1/16	1/8	1/8	—	—
over 7" to 14", incl.	1/8	3/32	1/8	5/32	—	—
over 14"	3/16	1/8	1/8	3/16	—	—

Straightness:

Camber

— For channels under 3" = $\frac{1/4'' \text{ in any 5' or } 1/4'' \times (\text{length in feet})}{5}$

— For channels 3" and over = $\frac{1/8'' \times (\text{length in feet})}{5}$

^A Shapes less than 1 inch square (6.45 mm²) in cross section need not be subject to tension tests by the manufacturer.

^B Shapes less than 5/16 inch (8 mm) in thickness or diameter a deduction from the percentage of elongation in 8 inches (203 mm), of 1.25% shall be made for each decrease of 1/32 inch (0.8 mm) of the specified thickness or diameter below 5/16 inch (8mm).

FARWEST STEEL CORPORATION



BAR SIZE CHANNEL

Standard Length — 20'

Weight in Pounds

Size	Foot	20'
$\frac{3}{4}$ X $\frac{3}{8}$ X $\frac{1}{8}$	.56	11.2
1 X $\frac{3}{8}$ X $\frac{1}{8}$	.68	13.6
1 X $\frac{1}{2}$ X $\frac{1}{8}$	.84	16.8
$1\frac{1}{4}$ X $\frac{1}{2}$ X $\frac{1}{8}$	1.00	20.0
$1\frac{1}{2}$ X $\frac{1}{2}$ X $\frac{1}{8}$	1.12	22.4
$1\frac{1}{2}$ X $\frac{9}{16}$ X $\frac{3}{16}$	1.44	28.8
$1\frac{1}{2}$ X $\frac{3}{4}$ X $\frac{1}{8}$	1.17	23.4
$1\frac{3}{4}$ X $\frac{1}{2}$ X $\frac{3}{16}$	1.55	31.0
2 X $\frac{1}{2}$ X $\frac{1}{8}$	1.43	28.0
2 X $\frac{9}{16}$ X $\frac{3}{16}$	1.76	35.2
2 X 1 X $\frac{1}{8}$	1.60	32.0
2 X 1 X $\frac{3}{16}$	2.32	46.4
$2\frac{1}{2}$ X $\frac{5}{8}$ X $\frac{3}{16}$	2.27	45.4



JUNIOR CHANNEL

(Stair Stringer)

Standard Lengths — 20', 40'

Size	Weight Per Foot	Flange Width	Flange Thickness	Web Thickness	Weight 20'	Weight 40'
8	8.5	1.875	.321	.180	170	340
10	6.5	1.125	.188	.150	130	260
10	8.4	1.500	.250	.170	168	336
12	10.6	1.500	.313	.190	212	424

FARWEST STEEL CORPORATION



STRUCTURAL CHANNEL

Standard Lengths — 20', 40'

Size	Weight Per Foot	Flange Width	Flange Thickness	Web Thickness	Weight 20'	Weight 40'
* 3.....	3.50.....	1.38.....	.246.....	.135.....	70.....	140
	4.10	1.41	.273	.170	82	164
	5.00	1.50	.273	.258	100	200
	6.00	1.60	.273	.356	120	240
* 4.....	4.50.....	1.56.....	.263.....	.140.....	90.....	180
	5.40	1.58	.296	.180	108	216
	6.25	1.65	.296	.247	125	250
	7.25	1.72	.296	.320	145	290
5.....	6.70.....	1.75.....	.320.....	.190.....	134.....	268
	9.00	1.89	.320	.325	180	360
6.....	8.20.....	1.92.....	.343.....	.200.....	164.....	328
	10.50	2.03	.343	.314	210	420
	13.00	2.16	.343	.437	260	520
7.....	9.80.....	2.09.....	.366.....	.210.....	196.....	392
	12.25	2.19	.366	.314	245	490
	14.75	2.30	.366	.419	295	590
8....	11.50.....	2.26.....	.390.....	.220.....	230.....	460
	13.75	2.34	.390	.303	275	550
	18.75	2.53	.390	.487	375	750
9....	13.40.....	2.43.....	.413.....	.230.....	268.....	536
	15.00	2.49	.413	.285	300	600
	20.00	2.65	.413	.448	400	800
10....	15.30.....	2.60.....	.436.....	.240.....	306.....	612
	20.00	2.74	.436	.379	400	800
	25.00	2.89	.436	.526	500	1000
	30.00	3.03	.436	.673	600	1200
12....	20.70.....	2.94.....	.501.....	.280.....	414.....	828
	25.00	3.05	.501	.387	500	1000
	30.00	3.17	.501	.510	600	1200
15....	33.90.....	3.40.....	.650.....	.400.....	678....	1356
	40.00	3.52	.650	.520	800	1600
	50.00	3.72	.650	.716	1000	2000

* Ordered to ASTM A-529 50,000 min yield.

FARWEST STEEL CORPORATION



SHIP CHANNEL

Standard Lengths — 20', 40'

Size	Weight Per Foot	Flange Width	Web Thickness	Weight 20'	Weight 40'
3	7.1	1.94	.312	142	284
	9.0	2.13	.500	180	360
4	13.8	2.51	.510	276	552
6	12.0	2.50	.310	240	480
	15.1	2.94	.313	302	604
	15.3	3.50	.340	306	612
	16.3	3.00	.375	326	652
	18.0	3.50	.379	360	720
7	17.6	3.00	.375	352	704
	19.1	3.45	.352	382	764
	22.7	3.60	.503	454	908
8	18.7	2.99	.353	374	748
	20.0	3.03	.400	400	800
	21.4	3.45	.375	428	856
	22.8	3.50	.427	456	912
9	23.9	3.45	.400	478	956
	25.4	3.50	.450	508	1016
10	22.0	3.32	.290	440	880
	25.0	3.41	.380	500	1000
	28.5	3.95	.425	570	1140
	33.6	4.10	.575	672	1344
	41.1	4.32	.796	822	1644
12	31.0	3.67	.370	620	1240
	35.0	3.77	.465	700	1400
	40.0	3.89	.590	800	1600
	45.0	4.01	.710	900	1800
	50.0	4.14	.835	1000	2000
13	31.8	4.00	.375	636	1272
	35.0	4.07	.447	700	1400
	40.0	4.19	.560	800	1600
	50.0	4.41	.787	1000	2000
18	42.7	3.95	.450	854	1708
	45.8	4.00	.500	916	1832
	51.9	4.10	.600	1038	2076
	58.0	4.20	.700	1160	2320

FARWEST STEEL CORPORATION

BEAM — SPECIFICATIONS

Chemical Analysis:

ASTM	Carbon	Phosphorus	Sulphur
A-992	.23 max	.035 max	.045 max

BEAM

Mechanical Properties:

ASTM	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
A-992	65,000 min	50,000 min	18 min

Tolerances: Wide Flange & Junior

Nominal Depth	Depth	Flange Width	Web off Center	Out of Square Max.	Max. Overall Depth
To 12" incl.	$\pm 1/8$	$+1/4 - 3/16$	$3/16$	$3/16$	$1/4$
Over 12"	$\pm 1/8$	$+1/4 - 3/16$	$3/16$	$5/16$	$1/4$

Tolerances: I Beams

Size	Depth	Flange	Out of Square Parallel per Inch of Flange
3" to 7"	$+3/32 - 1/16$	$\pm 1/8$	$1/32$
Over 7" to 14", inc.	$+1/8 - 3/32$	$\pm 5/32$	$1/32$
Over 14"	$+3/16 - 1/8$	$\pm 1/16$	$1/32$

Straightness:

$$\text{Camber} - \frac{1}{8}'' \times \frac{(\text{total length in feet})}{5}$$

FARWEST STEEL CORPORATION



STANDARD I BEAM

Standard Lengths — 20', 40'

Size	Weight Per Foot	Flange Width	Flange Thickness	Web Thickness	Weight 20'	Weight 40'
3	5.7	2.33	.260	.170	114	228
	7.5	2.51	.260	.349	150	300
4	7.7	2.66	.293	.190	154	308
	9.5	2.80	.293	.326	190	380
5	10.0	3.00	.326	.210	200	400
	14.75	3.28	.326	.494	295	590
6	12.5	3.33	.359	.230	250	500
	17.25	3.57	.359	.465	345	690
7	15.3	3.66	.392	.250	306	612
	20.0	3.86	.392	.450	400	800
8	18.4	4.00	.425	.270	368	736
	23.0	4.17	.425	.441	460	920
10	25.4	4.66	.491	.310	508	1016
	35.0	4.94	.491	.594	700	1400
12	31.8	5.00	.544	.350	636	1272
	35.0	5.08	.544	.428	700	1400
	40.8	5.25	.659	.460	816	1632
	50.0	5.48	.659	.687	1000	2000
15	42.9	5.50	.622	.410	858	1716
	50.0	5.64	.622	.550	1000	2000
18	54.7	6.00	.691	.460	1094	2188
	70.0	6.25	.691	.711	1400	2800
20	66.0	6.26	.795	.505	1320	2640
	75.0	6.39	.795	.635	1500	3000
	86.0	7.06	.920	.660	1720	3440
	96.0	7.20	.920	.800	1920	3840
24	80.0	7.00	.870	.500	1600	3200
	90.0	7.13	.870	.625	1800	3600
	100.0	7.25	.870	.745	2000	4000
	106.0	7.87	1.090	.620	2120	4240
	121.0	8.05	1.090	.800	2420	4840

FARWEST STEEL CORPORATION



WIDE FLANGE BEAM

Standard Lengths: 20' to 60' in 5' mults

(Many sizes in 65')

Size	Weight Per Foot	Depth of Section	Web Thickness	Flange Width	Flange Thickness
4	13.0	4.16	.280	4.060	.345
5	16.0	5.01	.240	5.000	.360
	19.0	5.15	.270	5.030	.430
6	9.0	5.90	.170	3.940	.215
	12.0	6.03	.230	4.000	.280
	16.0	6.28	.260	4.030	.405
6	15.0	5.99	.230	5.990	.260
	20.0	6.20	.260	6.020	.365
	25.0	6.38	.320	6.080	.455
8	10.0	7.89	.170	3.940	.205
	13.0	7.99	.230	4.000	.255
	15.0	8.11	.245	4.015	.315
8	18.0	8.14	.230	5.250	.330
	21.0	8.28	.250	5.270	.400
8	24.0	7.93	.245	6.500	.400
	28.0	8.24	.285	6.540	.465
8	31.0	8.00	.285	7.995	.435
	35.0	8.12	.310	8.020	.495
	40.0	8.25	.360	8.070	.560
	48.0	8.50	.400	8.110	.685
	58.0	8.75	.510	8.220	.810
	67.0	9.00	.570	8.280	.935
10	12.0	9.87	.190	3.960	.210
	15.0	9.99	.230	4.000	.270
	17.0	10.11	.240	4.010	.330
	19.0	10.24	.250	4.020	.395
10	22.0	10.17	.240	5.750	.360
	26.0	10.33	.260	5.770	.440
	30.0	10.47	.300	5.810	.510
10	33.0	9.73	.290	7.960	.435
	39.0	9.92	.315	7.985	.530
	45.0	10.10	.350	8.020	.620
10	49.0	9.98	.340	10.000	.560
	54.0	10.09	.370	10.030	.615
	60.0	10.22	.420	10.080	.680
	68.0	10.40	.470	10.130	.770
	77.0	10.60	.530	10.190	.870
	88.0	10.84	.605	10.265	.990
	100.0	11.10	.680	10.340	1.120
	112.0	11.36	.755	10.415	1.250

FARWEST STEEL CORPORATION



WIDE FLANGE BEAM

Standard Lengths: 20' to 60' in 5' mults
(Many sizes in 65')

Size	Weight Per Foot	Depth of Section	Web Thickness	Flange Width	Flange Thickness
12	14.0	11.91	.200	3.970	.225
	16.0	11.99	.220	3.990	.265
	19.0	12.16	.235	4.005	.350
	22.0	12.31	.260	4.030	.425
12	26.0	12.22	.230	6.490	.380
	30.0	12.34	.260	6.520	.440
	35.0	12.50	.300	6.560	.520
12	40.0	11.94	.295	8.005	.515
	45.0	12.06	.335	8.045	.575
	50.0	12.19	.370	8.080	.640
12	53.0	12.06	.345	9.995	.575
	58.0	12.19	.360	10.010	.640
12	65.0	12.12	.390	12.000	.605
	72.0	12.25	.430	12.040	.670
	79.0	12.38	.470	12.080	.735
	87.0	12.53	.515	12.125	.810
	96.0	12.71	.550	12.160	.900
	106.0	12.89	.610	12.220	.990
	120.0	13.12	.710	12.320	1.105
	136.0	13.41	.790	12.400	1.250
	152.0	13.71	.870	12.480	1.400
	170.0	14.03	.960	12.570	1.560
	190.0	14.38	1.060	12.670	1.735
14	22.0	13.74	.230	5.000	.335
	26.0	13.91	.255	5.025	.420
14	30.0	13.84	.270	6.730	.385
	34.0	13.98	.285	6.745	.455
	38.0	14.10	.310	6.770	.515
14	43.0	13.66	.305	7.995	.530
	48.0	13.79	.340	8.030	.595
	53.0	13.92	.370	8.060	.660
14	61.0	13.89	.375	9.995	.645
	68.0	14.04	.415	10.035	.720
	74.0	14.17	.450	10.070	.785
	82.0	14.31	.510	10.130	.855
14	90.0	14.02	.440	14.520	.710
	99.0	14.16	.485	14.565	.780
	109.0	14.32	.525	14.605	.860
	120.0	14.48	.590	14.670	.940
	132.0	14.66	.645	14.725	1.030

FARWEST STEEL CORPORATION



WIDE FLANGE BEAM

Standard Lengths: 20' to 60' in 5' mults

(Many sizes in 65')

Size	Weight Per Foot	Depth of Section	Web Thickness	Flange Width	Flange Thickness
14	145.0	14.78	.680	15.500	1.090
	159.0	14.98	.745	15.565	1.190
	176.0	15.22	.830	15.650	1.310
	193.0	15.48	.890	15.710	1.440
	211.0	15.72	.980	15.800	1.560
	233.0	16.04	1.070	15.890	1.720
	257.0	16.38	1.175	15.995	1.890
	283.0	16.74	1.290	16.110	2.070
	311.0	17.12	1.410	16.230	2.260
	342.0	17.54	1.540	16.360	2.470
	370.0	17.92	1.655	16.475	2.660
	398.0	18.29	1.770	16.590	2.845
	426.0	18.67	1.875	16.695	3.035
14	455.0	19.02	2.015	16.835	3.210
	500.0	19.60	2.190	17.010	3.500
	550.0	20.24	2.380	17.200	3.820
	605.0	20.92	2.595	17.415	4.160
	665.0	21.64	2.830	17.650	4.520
	730.0	22.42	3.070	17.890	4.910
16	26.0	15.69	.250	5.500	.345
	31.0	15.88	.275	5.525	.440
16	36.0	15.86	.295	6.985	.430
	40.0	16.01	.305	6.995	.505
	45.0	16.13	.345	7.035	.565
	50.0	16.26	.380	7.070	.630
	57.0	16.43	.430	7.120	.715
16	67.0	16.33	.395	10.235	.665
	77.0	16.52	.455	10.295	.760
	89.0	16.75	.525	10.365	.875
	100.0	16.97	.585	10.425	.985
18	35.0	17.70	.300	6.000	.425
	40.0	17.90	.315	6.015	.525
	46.0	18.06	.360	6.060	.605
18	50.0	17.99	.355	7.495	.570
	55.0	18.11	.390	7.530	.630
	60.0	18.24	.415	7.555	.695
	65.0	18.35	.450	7.590	.750
	71.0	18.47	.495	7.635	.810
18	76.0	18.21	.425	11.035	.680
	86.0	18.39	.480	11.090	.770
	97.0	18.59	.535	11.145	.870
	106.0	18.73	.590	11.200	.940
	119.0	18.97	.655	11.265	1.606
	130.0	19.30	.670	11.200	1.200

FARWEST STEEL CORPORATION



WIDE FLANGE BEAM

Standard Lengths: 20' to 60' in 5' mults

(Many sizes in 65')

Size	Weight Per Foot	Depth of Section	Web Thickness	Flange Width	Flange Thickness
21	44.0	20.66	.350	6.500	.450
	50.0	20.83	.380	6.530	.535
	57.0	21.06	.405	6.555	.650
21	48.0	20.60	.350	8.140	.430
	55.0	20.80	.375	8.220	.522
	62.0	20.99	.400	8.240	.615
	68.0	21.13	.430	8.270	.685
	73.0	21.24	.455	8.295	.740
	83.0	21.43	.515	8.355	.835
	93.0	21.62	.580	8.420	.930
21	101.0	21.36	.500	12.290	.800
	111.0	21.51	.550	12.340	.875
	122.0	21.68	.600	12.390	.960
	132.0	21.83	.650	12.440	1.035
	147.0	22.06	.720	12.510	1.150
	166.0	22.50	.750	12.400	1.360
24	55.0	23.57	.395	7.005	.505
	62.0	23.74	.430	7.040	.590
24	68.0	23.73	.415	8.965	.585
	76.0	23.92	.440	8.990	.680
	84.0	24.10	.470	9.020	.770
	94.0	24.31	.515	9.065	.875
	103.0	24.50	.550	9.000	.980
24	104.0	24.06	.500	12.750	.750
	117.0	24.26	.550	12.800	.850
	131.0	24.48	.605	12.855	.960
	146.0	24.74	.650	12.900	1.090
	162.0	25.00	.705	12.955	1.220
	176.0	25.20	.750	12.900	1.340
	192.0	25.50	.810	13.000	1.460
27	84.0	26.71	.460	9.960	.640
	94.0	26.92	.490	9.990	.745
	102.0	27.09	.515	10.015	.830
	114.0	27.29	.570	10.070	.930
	129.0	27.60	.610	10.000	1.10
27	146.0	27.38	.605	13.965	.975
	161.0	27.59	.660	14.020	1.080
	178.0	27.81	.725	14.085	1.190
	194.0	28.10	.750	14.000	1.340
	217.0	28.40	.830	14.100	1.500

FARWEST STEEL CORPORATION



WIDE FLANGE BEAM

Standard Lengths: 20' to 60' in 5' mults
(Many sizes in 65')

Size	Weight Per Foot	Depth of Section	Web Thickness	Flange Width	Flange Thickness
30	90.0	26.40	.470	10.400	.610
	99.0	29.65	.520	10.450	.670
	108.0	29.83	.545	10.475	.760
	116.0	30.01	.565	10.495	.850
	124.0	30.17	.585	10.515	.930
	132.0	30.30	.615	10.545	1.00
	148.0	30.70	.650	10.500	1.08
30	173.0	30.44	.655	14.985	1.065
	191.0	30.68	.710	15.040	1.185
	211.0	30.94	.775	15.105	1.315
	235.0	31.30	.830	15.000	1.500
	261.0	31.60	.930	15.200	1.650
33	118.0	32.86	.550	11.480	.740
	130.0	33.09	.580	11.510	.855
	141.0	33.30	.605	11.535	.960
	152.0	33.49	.635	11.565	1.055
	169.0	33.80	.670	11.500	1.220
33	201.0	33.68	.715	15.745	1.150
	221.0	33.93	.775	15.805	1.275
	241.0	34.18	.830	15.860	1.400
36	135.0	35.55	.600	11.950	.790
	150.0	35.85	.625	11.975	.940
	160.0	36.01	.650	12.000	1.020
	170.0	36.17	.680	12.030	1.100
	182.0	36.33	.725	12.075	1.180
	194.0	36.49	.765	12.115	1.260
	210.0	36.69	.830	12.180	1.360
	232.0	37.10	.870	12.100	1.570
36	231.0	36.50	.760	16.500	1.350
	247.0	36.70	.800	16.550	1.350
	262.0	36.90	.840	16.600	1.440
	282.0	37.10	.885	16.600	1.570
	302.0	37.30	.945	16.700	1.680



JUNIOR BEAM

Standard Lengths — 20', 40'

Size	Weight Per Foot	Web Thickness	Flange Width	Flange Thickness	Weight 20'	Weight 40'
6	4.4	.114	1.84	.171	88	176
8	6.5	.135	2.28	.189	130	260
10	9.0	.155	2.69	.206	180	360
12	11.8	.175	3.06	.225	236	472

FARWEST STEEL CORPORATION

HOT ROLLED ROUND BAR SPECIFICATIONS

Chemical Analysis: ASTM A36

Thickness	Carbon	Manganese	Phosphorus	Sulphur
to $\frac{3}{4}$ "	.26 max	—	.04 max	.05 max
over $\frac{3}{4}$ " to $1\frac{1}{2}$ "	.27 max	.60/.90	.04 max	.05 max
over $1\frac{1}{2}$ " to 4" *	.28 max	.60/.90	.04 max	.05 max
over 4"	.29 max	.60/.90	.04 max	.05 max

Mechanical Properties:

ASTM	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
A-36	58,000/80,000 ^A	36,000 min ^A	20 min ^B

Tolerances:

Size	Variation	Out of Round or Out of Square
$\frac{5}{16}$	$\pm .005$	.008
Over $\frac{5}{16}$ to $\frac{7}{16}$ inc	$\pm .006$	.009
Over $\frac{7}{16}$ to $\frac{5}{8}$ inc.	$\pm .007$	.010
Over $\frac{5}{8}$ to $\frac{7}{8}$ inc.	$\pm .008$	.012
Over $\frac{7}{8}$ to 1 inc.	$\pm .009$	.013
Over 1 to $1\frac{1}{8}$ inc.	$\pm .010$	.015
Over $1\frac{1}{8}$ to $1\frac{1}{4}$ inc.	$\pm .011$	.016
Over $1\frac{1}{4}$ to $1\frac{3}{8}$ inc.	$\pm .012$	.018
Over $1\frac{3}{8}$ to $1\frac{1}{2}$ inc.	$\pm .014$	.021
Over $1\frac{1}{2}$ to 2 inc.	$\pm \frac{1}{64}$	.023
Over 2 to $2\frac{1}{2}$ inc.	$+\frac{1}{32} - 0$	.023
Over $2\frac{1}{2}$ to $3\frac{1}{2}$ inc.	$+\frac{3}{64} - 0$	.035
Over $3\frac{1}{2}$ to $4\frac{1}{2}$ inc.*	$+\frac{1}{16} - 0$	.096
Over $4\frac{1}{2}$ to $5\frac{1}{2}$ inc.	$+\frac{5}{64} - 0$	.058
Over $5\frac{1}{2}$ to $6\frac{1}{2}$ inc.	$+\frac{1}{8} - 0$	.070
Over $6\frac{1}{2}$ to $8\frac{1}{4}$ inc.	$+\frac{5}{32} - 0$	.085
Over $8\frac{1}{4}$ to $9\frac{1}{2}$ inc.	$+\frac{3}{16} - 0$	.100
Over $9\frac{1}{2}$ to 10 inc.	$+\frac{1}{4} - 0$	.120

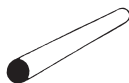
Straightness:

$\frac{1}{4}$ inch in any 5 ft. or $\frac{1}{4}$ x _____ length in feet

5

***Farwest Steel stocks up thru 3" in A36 material.
Larger diameters are stocked in mild steel only.**

FARWEST STEEL CORPORATION



HOT ROLLED ROUND BAR

Standard Length — 20' & Random Length

Theoretical Weight in Pounds			Theoretical Weight in Pounds		
Size	Per Foot	20'	Size	Per Foot	20'
1/4	.167	3.34	4	42.73	854.60
5/16	.261	5.22	4 1/4	48.23	964.60
3/8	.376	7.52	4 1/2	54.08	1081.60
7/16	.511	10.22	4 3/4	60.25	1205.00
1/2	.668	13.36	5	66.76	1335.20
9/16	.845	16.90	5 1/4	73.60	1472.00
5/8	1.04	20.80	5 1/2	80.78	1615.60
3/4	1.50	30.00	5 3/4	88.29	1765.80
7/8	2.04	40.80	6	96.13	1922.60
1	2.67	53.40	6 1/4	104.31	2086.20
1 1/8	3.38	67.60	6 1/2	112.82	2256.40
1 1/4	4.17	83.40	6 3/4	121.67	2433.40
1 3/8	5.05	101.00	7	130.85	2617.00
1 1/2	6.01	120.20	7 1/4	140.36	2807.20
1 5/8	7.05	141.00	7 1/2	150.21	3004.20
1 3/4	8.18	163.60	7 3/4	160.40	3208.00
1 7/8	9.39	187.80	8	170.90	3418.00
2	10.68	213.60	8 1/4	181.75	3635.00
2 1/8	12.06	241.20	8 1/2	192.93	3858.60
2 1/4	13.52	270.40	9	216.30	4326.00
2 3/8	15.06	301.20	9 1/2	241.00	4820.00
2 1/2	16.69	333.80	10	267.04	5340.80
2 5/8	18.40	368.00	10 1/2	294.40	5888.00
2 3/4	20.19	403.80	12	384.53	7690.60
3	24.03	480.60			
3 1/4	28.21	564.20			
3 1/2	32.71	654.20			
3 5/8	35.09	701.80			
3 3/4	37.55	751.00			

ROUND
BAR

Note: To find the weight of a large diameter, multiply the weight of a bar half the diameter by 4.

Farwest Steel will Saw Cut to length Rounds 3" in diameter and larger.

COLD DRAWN SPECIFICATIONS

Chemical Analysis: ASTM A108 Grade 1018

Carbon	Manganese	Sulphur	Phosphorus
.15/.20	.60/.90	.05 max	.04 max

Mechanical Properties: (Approximate)

Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 2"	Reduction of Area	Brinell Hardness
64,000	54,000	15	40%	126

Tolerances:

Size	Diameter Variation
to 1 ¹ / ₂ , incl.	+0, -.002
over 1 ¹ / ₂ to 2 ¹ / ₂ , incl.	+0, -.003
over 2 ¹ / ₂ to 4, incl.	+0, -.004
over 4 to 6, incl.	+0, -.005

COLD FINISHED TG + P ROUND BAR SPECIFICATION

Chemical Analysis: ASTM A108 Grade 1045

Carbon	Manganese	Sulphur	Phosphorus
.43/.50	.60/.90	.05 max	.04 max

Mechanical Properties: (Approximate)

Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 2"	Reduction of Area	Brinell Hardness
82,000	45,000	16	40%	163

Tolerances:

Size	Diameter Variation
to 1 ¹ / ₂ , inclusive	+0, -.0010
over 1 ¹ / ₂ to less than 2 ¹ / ₂	+0, -.0015
2 ¹ / ₂ to 3, inclusive	+0, -.0020
over 3 to 4, inclusive	+0, -.0030

FARWEST STEEL CORPORATION

Chemical Analysis: Stressproof®

Carbon	Manganese	Phosphorus	Sulphur	Silicon	Nitrogen
.40/.48	1.35/1.65	.04 max	.24/.33	.15/.30	.006/.009

Mechanical Properties:

Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation	Reduction of Area
132,300 (mean)	100,000 min	12 (mean)	34 (mean)

Tolerances: Cold drawn-ebony Stressproof®

Size	Diameter Variation
1/4 to 1 1/2, incl.	+0, -.0040
over 1 1/2 to 2 1/2, incl.	+0, -.0050
over 2 1/2 to 4, incl.	+0, -.0060
over 4 to 4 1/2, incl.	+0, -.0070

Tolerances: Cold drawn ground & polished Stressproof®

Size	Diameter Variation
1/4 to 1 1/2, incl.	+0, -.0010
over 1 1/2 to 2 1/2, excl.	+0, -.0015
over 2 1/2 to 3, incl.	+0, -.0020
over 3 to 4, incl.	+0, -.0030

FARWEST STEEL CORPORATION



COLD DRAWN ROUND BAR

Standard Lengths — 20', 24' & Random

Size in inches	Wt. per Ft. in Lbs.	Weight 20'	Size in inches	Wt. per Ft. in Lbs.	Weight 20'
$\frac{1}{8}$	0.042	.840	$\frac{25}{16}$	14.28	285.60
$\frac{5}{32}$	0.065	1.30	$\frac{23}{8}$	15.06	301.20
$\frac{3}{16}$	0.094	1.88	$\frac{27}{16}$	15.87	317.40
$\frac{7}{32}$	0.128	2.56	$\frac{21}{2}$	16.69	333.80
$\frac{1}{4}$	0.167	3.34	$\frac{29}{16}$	17.53	350.60
$\frac{5}{16}$	0.261	5.22	$\frac{25}{8}$	18.40	368.00
$\frac{3}{8}$	0.376	7.52	$\frac{21}{16}$	19.29	385.80
$\frac{7}{16}$	0.511	10.22	$\frac{23}{4}$	20.19	403.80
$\frac{1}{2}$	0.668	13.36	$\frac{213}{16}$	21.13	422.60
$\frac{9}{16}$	0.845	16.90	$\frac{27}{8}$	22.07	441.40
$\frac{5}{8}$	1.043	20.86	$\frac{215}{16}$	23.04	460.80
$\frac{11}{16}$	1.262	25.24	3	24.03	480.60
$\frac{3}{4}$	1.502	30.04	$\frac{31}{16}$	25.05	501.00
$\frac{13}{16}$	1.763	35.26	$\frac{31}{8}$	26.08	521.60
$\frac{7}{8}$	2.045	40.90	$\frac{33}{16}$	27.13	542.60
$\frac{15}{16}$	2.347	46.94	$\frac{31}{4}$	28.21	564.20
1	2.670	53.40	$\frac{35}{16}$	29.30	586.00
$\frac{11}{16}$	3.010	60.20	$\frac{33}{8}$	30.42	608.40
$\frac{11}{8}$	3.380	67.60	$\frac{37}{16}$	31.55	631.00
$\frac{13}{16}$	3.766	75.32	$\frac{31}{2}$	32.71	654.20
$\frac{11}{4}$	4.172	83.44	$\frac{39}{16}$	33.89	677.80
$\frac{15}{16}$	4.600	92.00	$\frac{35}{8}$	35.09	701.80
$\frac{13}{8}$	5.049	100.98	$\frac{311}{16}$	36.31	726.20
$\frac{17}{16}$	5.520	110.40	$\frac{33}{4}$	37.55	751.00
$\frac{11}{2}$	6.010	120.20	$\frac{313}{16}$	38.81	776.20
$\frac{19}{16}$	6.520	130.40	$\frac{37}{8}$	40.10	802.00
$\frac{15}{8}$	7.050	141.00	$\frac{315}{16}$	41.40	828.00
$\frac{111}{16}$	7.600	152.00	4	42.73	854.60
$\frac{13}{4}$	8.180	163.60	$\frac{41}{8}$	45.44	908.80
$\frac{113}{16}$	8.770	175.40	$\frac{43}{16}$	46.83	936.60
$\frac{17}{8}$	9.390	187.80	$\frac{41}{4}$	48.23	964.60
$\frac{115}{16}$	10.020	200.40	$\frac{45}{16}$	49.66	993.20
2	10.680	213.60	$\frac{43}{8}$	51.11	1022.20
$\frac{21}{16}$	11.360	227.20	$\frac{47}{16}$	52.58	1051.60
$\frac{21}{8}$	12.060	241.20	$\frac{41}{2}$	54.07	1081.40
$\frac{23}{16}$	12.780	255.60	$\frac{49}{16}$	55.59	1111.80
$\frac{21}{4}$	13.520	270.40	$\frac{45}{8}$	57.12	1142.40

FARWEST STEEL CORPORATION



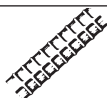
COLD DRAWN ROUND BAR

Standard Lengths — 20', 24' & Random

Size in inches	Wt. per Ft. in Lbs.	Weight 20'	Size in inches	Wt. per Ft. in Lbs.	Weight 20'
4 ¹¹ / ₁₆	58.68	1173.60	6	96.13	1922.60
4 ³ / ₄	60.25	1205.00	6 ¹ / ₄	104.31	2086.20
4 ⁷ / ₈	63.46	1269.20	6 ¹ / ₂	112.82	2256.40
4 ¹⁵ / ₁₆	65.10	1302.00	6 ³ / ₄	121.67	2433.40
5	66.76	1335.20	7	130.85	2617.00
5 ¹ / ₁₆	68.44	1368.80	7 ¹ / ₂	150.21	3004.20
5 ¹ / ₈	70.14	1402.80	8	170.90	3418.00
5 ³ / ₁₆	71.86	1437.20	9	216.30	4326.00
5 ¹ / ₄	73.60	1472.00	10	267.04	5340.80
5 ³ / ₈	77.15	1543.00			
5 ⁷ / ₁₆	78.95	1579.00			
5 ¹ / ₂	80.78	1615.60			
5 ⁵ / ₈	84.49	1689.80			
5 ³ / ₄	88.29	1765.80			
5 ⁷ / ₈	92.17	1843.40			
5 ¹⁵ / ₁₆	94.14	1882.80			



FARWEST STEEL CORPORATION



REBAR

ASTM A615 Grade 60 #3 ~ #18

ASTM A706 Grade 60 #4 ~ #18

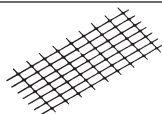
Imperial Standards

Imperial Size	Nom Diam inches	Area in ²	Weight Factors	
			lb/ft	lb/m
3	.375	.11	.376	1.234
4	.500	.20	.668	2.192
5	.625	.31	1.043	3.422
6	.750	.44	1.502	4.928
7	.875	.60	2.044	6.706
8	1.000	.79	2.670	8.760
9	1.128	1.00	3.400	11.155
10	1.270	1.27	4.303	14.117
11	1.410	1.56	5.313	17.431
14	1.693	2.25	7.650	25.098
18	2.257	4.00	13.600	44.619

Soft Metric Standards

Soft Metric Size	Nom Diam mm	Area mm ²	Weight Factors	
			kg/m	kg/ft
10	9.5	71	.560	.171
13	12.7	129	.994	.303
16	15.9	199	1.552	.473
19	19.1	284	2.235	.681
22	22.2	387	3.042	.927
25	25.4	510	3.973	1.211
29	28.7	645	5.060	1.542
32	32.3	819	6.404	1.952
36	35.8	1006	7.907	2.410
43	43.0	1452	11.384	3.470
57	57.3	2581	20.239	6.169

FARWEST STEEL CORPORATION



WELDED WIRE FABRIC

ASTM A 185

New Designation (By W-Number)	Old Designation (By Steel Wire Ga.)	Width	Length	Weight Approx. Lbs. Per 100 S.F.
6 x 6 -W1.4/W1.4	6 x 6 - 10/10	7-6	200-0	21
6 x 6 -W1.4/W1.4	6 x 6 - 10/10	7-6	20-0	21
6 x 6 -W2.9/W2.9	6 x 6 - 6/6	7-6	20-0	42
4 x 4 -W4.0/W4.0	4 x 4 - 4/4	7-0	20-0	85

REBAR

Rolls and Sheets

Special welded wire fabric styles and sizes are available, on special order, in widths up to 9'-0" and any length, with wire spacing from 2" minimum.

Deformed wire welded to meet ASTM A497 specifications also available on special order.

Comparison of Steel Grades

Soft Metric		
Grade	MPa	Psi
300	300	43,511
420	420	60,716
520	520	75,420

Imperial		
Grade	MPa	Psi
40	257.79	40,000
60	413.69	60,000
80	551.58	80,000

Conversion Factors

To Metric	To Imperial
1/8 inch = 3.175 mm	
1 inch = 25.4 mm	1 mm = 0.0394 inches
1 foot = 304.8 mm	1 meter = 3.2808 feet
1000 ft. ² = 92.903 m ²	100 m ² = 1076.39 ft ²
1000 ft. ³ = 28.317 m ³	10 m ³ = 353.14 ft ³
1000 gal. = 3.784 m ³	10 m ³ = 2641.73 gal.
1 pound = 0.4536 kg	1 kg = 2.2046 pounds
1 psf = 4.88243 kg/m ²	10 kg/m ² = 2.048 psf
1 pcf = 16.019 kg/m ³	10 kg/m ³ = 0.624 pcf
short ton = 907.18 kg (2000 lbs.)	0.90718 = 2000 pounds tonne
long ton = 1016 kg (2240 lbs.)	1 tonne = 2204.6 pounds
1000 psi = 6.8948 MPa	1 MPa = 145.0368 psi
Newton (N) = kg·m/s ² = kilograms x 9.80665	
Pascal (Pa) = N/m ²	

FARWEST STEEL CORPORATION

SQUARE BAR - SPECIFICATIONS SQUARE CARBON BARS HOT ROLLED

Chemical Analysis:

ASTM	Thickness	Carbon	Manganese	Phosphorus	Sulphur
A-36	to $\frac{3}{4}$ "	.26 max	—	.04 max	.05 max
	Over $\frac{3}{4}$ " to $1\frac{1}{2}$ "	.27 max	.60/.80	.04 max	.05 max
	Over $1\frac{1}{2}$ " to 4"	.28 max	.60/.80	.04 max	.05 max
	Over 4"	.29 max	.60/.90	.04 max	.05 max

Mechanical Properties:

ASTM	Tensile Strength	Yield Point	% Elongation
A-36	P.S.I.	P.S.I.	in 8"
	58,000/80,000 ^A	36,000 min ^A	20 min ^B

Tolerances:

Size	Variation	Out of Round or Out of Square
$\frac{5}{16}$	$\pm .005$	.008
Over $\frac{5}{16}$ to $\frac{7}{16}$ inc.	$\pm .006$	.009
Over $\frac{7}{16}$ to $\frac{5}{8}$ inc.	$\pm .007$	.010
Over $\frac{5}{8}$ to $\frac{7}{8}$ inc.....	$\pm .008$	.012
Over $\frac{7}{8}$ to 1 inc.	$\pm .009$	.013
Over 1 to $1\frac{1}{8}$ inc.	$\pm .010$	.015
Over $1\frac{1}{8}$ to $1\frac{1}{4}$ inc.	$\pm .011$	.016
Over $1\frac{1}{4}$ to $1\frac{3}{8}$ inc.....	$\pm .012$	.018
Over $1\frac{3}{8}$ to $1\frac{1}{2}$ inc.	$\pm .014$	.021
Over $1\frac{1}{2}$ to 2 inc.	$\pm \frac{1}{64}$	.023
Over 2 to $2\frac{1}{2}$ inc.	$+\frac{1}{32} - 0$	.023
Over $2\frac{1}{2}$ to $3\frac{1}{2}$ inc.....	$+\frac{3}{64} - 0$	.023
Over $3\frac{1}{2}$ to $4\frac{1}{2}$ inc.	$+\frac{1}{16} - 0$	.096
Over $4\frac{1}{2}$ to $5\frac{1}{2}$ inc.	$+\frac{5}{64} - 0$	.058
Over $5\frac{1}{2}$ to $6\frac{1}{2}$ inc.	$+\frac{1}{8} - 0$	.070

Straightness:

$$\frac{1}{4} \text{ inch in any 5 ft. or } \frac{(\frac{1}{4}'' \times \text{length in feet})}{5}$$

^A Shapes less than 1 inch square (6.45 mm²) in cross section need not be subject to tension tests by the manufacturer.

^B Shapes less than $\frac{5}{16}$ inch (8 mm) in thickness or diameter a deduction from the percentage of elongation in 8 inches (203 mm), of 1.25% shall be made for each decrease of $\frac{1}{32}$ inch (0.8 mm) of the specified thickness or diameter below $\frac{5}{16}$ inch (8mm).

COLD-DRAWN SQUARES

Chemical Analysis:

ASTM

A108

Grade 1018

Carbon Manganese Phosphorus Sulphur

.15/.20 .60/.90 .04 max .05 max

Tolerances:

Size	Thickness
to $\frac{3}{4}$, incl.	+0, -.002
over $\frac{3}{4}$ to $1\frac{1}{2}$, incl.	+0, -.003
over $1\frac{1}{2}$ to $2\frac{1}{2}$, incl.	+0, -.004
over $2\frac{1}{2}$ to 4, incl.	+0, -.006

SQUARE
BAR

Do you know how we can save you money on your steel requirements?

In several ways, first by providing fast, one-stop service for all your metal requirements. Second, by giving you the advantage of our technical know-how so that waste is reduced to an absolute minimum. And third, by functioning as your own "steel warehouse," you don't buy steel until you actually need it. Three powerful reasons to use our service and resources for your metal requirements.

FARWEST STEEL CORPORATION



HOT ROLLED SQUARE BAR

Standard Length 20'

Weight in Pounds

Size	Per Foot	20'
$\frac{1}{4}$	.21	4.26
$\frac{5}{16}$	.33	6.64
$\frac{3}{8}$	.47	9.56
$\frac{7}{16}$	.65	13.02
$\frac{1}{2}$	.85	17.00
$\frac{9}{16}$	1.08	21.60
$\frac{5}{8}$	1.33	26.60
$\frac{3}{4}$	1.91	38.20
$\frac{7}{8}$	2.60	52.00
1	3.40	68.00
$1\frac{1}{8}$	4.30	86.00
$1\frac{1}{4}$	5.31	106.20
$1\frac{3}{8}$	6.43	128.60
$1\frac{1}{2}$	7.65	153.00
$1\frac{5}{8}$	8.98	179.60
$1\frac{3}{4}$	10.41	208.20
$1\frac{7}{8}$	11.95	239.00
2*	13.60	272.00
$2\frac{1}{4}$	17.21	344.20
$2\frac{1}{2}$	21.25	425.00
$2\frac{5}{8}$	23.43	468.60
$2\frac{3}{4}$	25.71	514.20
3	30.60	612.00
$3\frac{1}{4}$	35.91	718.20
$3\frac{1}{2}$	41.65	833.00
4	54.40	1088.00
$4\frac{1}{2}$	68.85	1377.00
5	85.00	1700.00
6	122.40	2448.00

*** 2" Carried in Both Square Corner and Round Corner**

FARWEST STEEL CORPORATION



COLD DRAWN SQUARE BAR

Standard Lengths – 12' to 20' Random

Size	Weight in Pounds	
	Per Foot	12'
1/8	.05	.63
3/16	.12	1.44
1/4.....	.21.....	2.55
5/16	.33	3.98
3/8	.47	5.73
7/16	.65	7.81
1/2.....	.85.....	10.20
9/16	1.08	12.96
5/8	1.33	15.96
11/16	1.61	19.32
3/4.....	1.91.....	22.92
13/16	2.24	26.88
7/8	2.60	31.20
15/16	2.99	35.88
1.....	3.40.....	40.80
1 1/16	3.84	46.08
1 1/8.....	4.30.....	51.60
1 3/16	4.80	57.60
1 1/4	5.31	63.72
1 3/8	6.43	77.16
1 1/2.....	7.65.....	91.80
1 3/4	10.41	124.92
2	13.60	163.20
2 1/4	17.21	206.52
2 1/2.....	21.25.....	255.00
2 5/8	23.43	281.16
2 3/4	25.71	308.52
3	30.60	367.20

FARWEST STEEL CORPORATION

HOT ROLLED STRIP — SPECIFICATIONS

Chemical Analysis:

ASTM	Carbon	Manganese	Phosphorus	Sulphur
A-569	.15 max	.60 max	.035 max	.04 max

Mechanical Properties:

ASTM	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
A-569	—	—	—

Tolerances:

Width	Over or Under In Width	Over on Length
To 2", incl.	$\frac{1}{32}$	$\frac{3}{4}$
Over 2" to 5", incl.	$\frac{3}{64}$	$\frac{3}{4}$
5" to 10"	$\frac{1}{16}$	$1\frac{1}{4}$

Straightness:

Up to & incl. $1\frac{1}{2}$ " width — $\frac{1}{2}$ inch in any 8 ft.

Over $1\frac{1}{2}$ " width — $\frac{1}{4}$ inch in any 8 ft.



FARWEST STEEL CORPORATION



HOT ROLLED STRIP

Standard Length – 20'

Weight in Pounds			Weight in Pounds		
Size	Per Foot	20'	Size	Per Foot	20'
$\frac{1}{8}$ x $\frac{3}{8}$159 3.18			$\frac{3}{16}$ x $\frac{3}{8}$239 4.78		
(.125) $\frac{1}{2}$213 4.26			(.1875) $\frac{1}{2}$319 6.38		
$\frac{5}{8}$266 5.32			$\frac{5}{8}$398 7.96		
$\frac{3}{4}$319 6.38			$\frac{3}{4}$478 9.56		
$\frac{7}{8}$372 7.44			$\frac{7}{8}$558 11.16		
1425 8.50			1638 12.76		
$1\frac{1}{4}$531 10.62			$1\frac{1}{4}$797 15.94		
$1\frac{1}{2}$638 12.76			$1\frac{1}{2}$956 19.12		
$1\frac{3}{4}$744 14.88			$1\frac{3}{4}$ 1.120 22.40		
2850 17.00			2 1.280 25.60		
$2\frac{1}{4}$956 19.12			$2\frac{1}{4}$ 1.430 28.60		
$2\frac{1}{2}$ 1.063 21.26			$2\frac{1}{2}$ 1.590 31.80		
$2\frac{3}{4}$ 1.169 23.38			3 1.910 38.20		
3 1.275 25.50			$3\frac{1}{4}$ 2.070 41.40		
$3\frac{1}{4}$ 1.381 27.62			$3\frac{1}{2}$ 2.230 44.60		
$3\frac{1}{2}$ 1.488 29.76			4 2.550 51.00		
4 1.700 34.00			$4\frac{1}{2}$ 2.870 57.40		
$4\frac{1}{2}$ 1.913 38.00			5 3.190 63.80		
5 2.125 42.50			6 3.830 76.60		
$5\frac{1}{2}$ 2.338 46.76			7 4.460 89.20		
6 2.550 51.00			8 5.100 102.00		
8 3.400 68.00			9 5.740 114.80		
10 4.250 85.00			10 6.380 127.60		
12 5.100 102.00			12 7.650 153.00		

FLAT
BAR

FARWEST STEEL CORPORATION

HOT ROLLED FLAT

Chemical Analysis:

ASTM	Thickness	Carbon	Manganese	Phosphorus	Sulphur
A-36	to $\frac{3}{4}$ " incl.	.26 max	—	.04 max	.05 max
	over $\frac{3}{4}$ " to $1\frac{1}{2}$ ", incl.	.27 max	.60/.80	.04 max	.05 max
	over $1\frac{1}{2}$ " to 4", incl.	.28 max	.60/.80	.04 max	.05 max

Mechanical Properties:

ASTM	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
A-36	58,000/80,000 ^A	36,000 min ^A	20 min ^B

^A Shapes less than 1 in.² (6.45 mm²) in cross section and bars, other than flats, less than $\frac{1}{2}$ in. (13 mm) in thickness or diameter need not be subjected to tension tests by the manufacturer.

^B For material under $\frac{5}{16}$ in. (8 mm) in thickness or diameter, a deduction from the percentage of elongation in 8 in. (203 mm), specified in Table 3, of 1.25% shall be made for each decrease of $\frac{1}{32}$ in. (0.8 mm) of the specified thickness or diameter below $\frac{5}{16}$ in.

Tolerances:

Variations from thickness						Width	
Size (Incl.)	Under $\frac{1}{4}$ "	$\frac{1}{4}$ " to $\frac{1}{2}$ " Incl.	Over $\frac{1}{2}$ " thru 1"	Over 1" to 2"	Over 2" to 3"	Over	Under
To 1"	± .007	± .008	±.010	—	—	$\frac{1}{64}$	$\frac{1}{64}$
Over 1" to 2"	± .007	± .012	±.015	± $\frac{1}{32}$	—	$\frac{1}{32}$	$\frac{1}{32}$
Over 2" to 4"	± .008	± .015	±.020	± $\frac{1}{32}$	± $\frac{3}{64}$	$\frac{1}{16}$	$\frac{1}{32}$
Over 4" to 6"	± .009	± .015	±.020	± $\frac{1}{32}$	± $\frac{3}{64}$	$\frac{3}{32}$	$\frac{1}{16}$
Over 6" to 8"	± .015	± .016	±.025	± $\frac{1}{32}$	± $\frac{3}{64}$	$\frac{1}{8}$	$\frac{3}{32}$

Straightness:

Camber — $\frac{1}{4}$ " in 5' or $\frac{(1/4" \times \text{length in feet})}{5}$

FARWEST STEEL CORPORATION



HOT ROLLED FLAT BAR

Standard Length - 20'

Weight in Pounds				Weight in Pounds			
Size		Per Foot	20'	Size		Per Foot	20'
$\frac{1}{4}$ x	$\frac{1}{2}$	0.425	8.50	$\frac{3}{8}$ x	$\frac{1}{2}$	0.638	12.76
	$\frac{5}{8}$	0.531	10.62		$\frac{5}{8}$	0.797	15.94
	$\frac{3}{4}$	0.638	12.76		$\frac{3}{4}$	0.956	19.12
	$\frac{7}{8}$	0.744	14.88		1	1.275	25.50
	1	0.850	17.00		$1\frac{1}{4}$	1.594	31.88
	$1\frac{1}{4}$	1.063	21.26		$1\frac{1}{2}$	1.913	38.26
	$1\frac{1}{2}$	1.276	25.52		$1\frac{3}{4}$	2.231	44.62
	$1\frac{3}{4}$	1.488	29.76		2	2.550	51.00
	2	1.700	34.00		$2\frac{1}{4}$	2.869	57.38
	$2\frac{1}{4}$	1.913	38.26		$2\frac{1}{2}$	3.188	63.76
	$2\frac{1}{2}$	2.125	42.50		$2\frac{3}{4}$	3.506	70.12
	$2\frac{3}{4}$	2.338	46.70		3	3.825	76.50
	3	2.550	51.00		$3\frac{1}{2}$	4.463	89.26
	$3\frac{1}{2}$	2.975	59.50		4	5.100	102.00
	4	3.400	68.00		$4\frac{1}{2}$	5.738	114.76
	$4\frac{1}{2}$	3.825	76.50		5	6.375	127.50
	5	4.250	85.00		$5\frac{1}{2}$	7.013	140.26
	$5\frac{1}{2}$	4.675	93.50		6	7.650	153.00
	6	5.100	102.00		7	8.925	178.50
	7	5.950	119.00		8	10.200	204.00
	8	6.800	136.00	$\frac{1}{2}$ x	$\frac{3}{4}$	1.275	25.50
$\frac{5}{16}$ x	$\frac{1}{2}$	0.531	10.62		1	1.700	34.00
	$\frac{3}{4}$	0.797	15.94		$1\frac{1}{4}$	2.125	42.50
	1	1.063	21.26		$1\frac{1}{2}$	2.550	51.00
	$1\frac{1}{4}$	1.328	26.56		$1\frac{3}{4}$	2.975	59.50
	$1\frac{1}{2}$	1.594	31.88		2	3.400	68.00
	$1\frac{3}{4}$	1.859	37.18		$2\frac{1}{4}$	3.825	76.50
	2	2.125	42.50		$2\frac{1}{2}$	4.250	85.00
	$2\frac{1}{4}$	2.391	47.82		$2\frac{3}{4}$	4.675	93.50
	$2\frac{1}{2}$	2.656	53.12		3	5.100	102.00
	3	3.188	63.76		$3\frac{1}{2}$	5.950	119.00
	$3\frac{1}{2}$	3.719	74.38		4	6.800	136.00
	4	4.250	85.00		$4\frac{1}{2}$	7.650	153.00
	$4\frac{1}{2}$	4.781	95.62		5	8.500	170.00
	5	5.313	106.20		$5\frac{1}{2}$	9.350	187.00
	6	6.375	127.50		6	10.200	204.00
	7	7.438	148.76		7	11.900	238.00
	8	8.500	170.00		8	13.600	272.00

Flats wider than 8" see U.M. Plates - Page 41

FARWEST STEEL CORPORATION



HOT ROLLED FLAT BAR

Standard Length - 20'

Weight in Pounds			Weight in Pounds					
Size		Per Foot	20'	Size		Per Foot	20'	
⁵ / ₈ x	1	2.125	42.50	⁷ / ₈ x	2 ¹ / ₂	7.438	148.8	
	1 ¹ / ₄	2.656	53.12		3	8.925	178.5	
	1 ¹ / ₂	3.188	63.76		3 ¹ / ₂	10.410	208.2	
	1 ³ / ₄	3.719	74.38		4	11.900	238.0	
	2	4.250	85.00		4 ¹ / ₂	13.390	267.8	
	2 ¹ / ₄	4.781	95.62		5	14.880	297.6	
	2 ¹ / ₂	5.313	106.26		6	17.850	357.0	
	3	6.375	127.50		8	23.800	476.0	
	3 ¹ / ₂	7.438	148.76		1 x	1 ¹ / ₄	4.250	85.0
	4	8.500	170.00			1 ¹ / ₂	5.100	102.0
	4 ¹ / ₂	9.563	191.26			1 ³ / ₄	5.950	119.0
	5	10.630	212.60			2	6.800	136.0
6	12.750	255.00	2 ¹ / ₄	7.650		153.0		
7	14.880	297.60	2 ¹ / ₂	8.500		170.0		
8	17.000	340.00	2 ³ / ₄	9.350		187.0		
³ / ₄ x	1	2.550	51.00	3		10.200	204.8	
	1 ¹ / ₄	3.188	63.76	3 ¹ / ₄		11.050	221.0	
	1 ¹ / ₂	3.825	76.50	3 ¹ / ₂		11.900	238.0	
	1 ³ / ₄	4.463	89.26	4		13.600	272.0	
	2	5.100	102.00	4 ¹ / ₂		15.300	306.0	
	2 ¹ / ₄	5.738	114.76	5	17.000	340.0		
	2 ¹ / ₂	6.375	127.50	6	20.400	408.0		
	2 ³ / ₄	7.010	140.20	7	23.800	476.0		
	3	7.650	153.00	8	27.200	544.0		
	3 ¹ / ₂	8.925	178.50	1 ¹ / ₄ x	2	8.500	170.0	
	4	10.200	204.00		2 ¹ / ₂	10.630	212.6	
	4 ¹ / ₂	11.480	229.60		3	12.750	255.0	
5	12.750	255.00	3 ¹ / ₂		14.880	297.6		
5 ¹ / ₂	14.030	280.60	4		17.000	340.0		
6	15.300	306.00	4 ¹ / ₂		19.130	382.6		
7	17.850	357.00	5		21.250	425.0		
8	20.400	408.00	5 ¹ / ₂		23.380	467.6		
⁷ / ₈ x	1 ¹ / ₄	3.719	74.38		6	25.500	510.0	
	1 ¹ / ₂	4.463	89.26		7	29.750	595.0	
	1 ³ / ₄	5.206	104.12		8	34.000	680.0	
	2	5.950	119.00		1 ¹ / ₂ x	2	10.200	204.0
	2 ¹ / ₄	6.694	133.88	2 ¹ / ₂		12.750	255.0	
				3	15.300	306.0		

Flats wider than 8" see U.M. Plates - Page 41

FARWEST STEEL CORPORATION



HOT ROLLED FLAT BAR

Standard Length — 20'

Weight in Pounds			Weight in Pounds		
Size	Per Foot	20'	Size	Per Foot	20'
1 ¹ / ₂ x 3 ¹ / ₂ ...	17.850.....	357.0	2 x 2 ¹ / ₂ ...	17.000.....	340.0
4	20.400	408.0	3	20.400	408.0
4 ¹ / ₂	22.950	459.0	3 ¹ / ₂	23.800	476.0
5	25.500	510.0	4 ...	27.200.....	544.0
6	30.600	612.0	5	34.000	680.0
7	35.700	714.0	6	40.800	816.0
8	40.800	816.0	8	54.400	1088.0
1 ³ / ₄ x 4 ...	23.800.....	476.0	2 ¹ / ₂ x 4 ...	34.000.....	680.0
5	29.750	595.0	6	51.000	1020.0
6	35.700	714.0	8	68.000	1360.0
8	47.600	952.0			

Flats wider than 8" see U.M. Plates – Page 41



FARWEST STEEL CORPORATION

COLD DRAWN FLAT

Chemical Analysis:

ASTM	Carbon	Manganese	Phosphorus	Sulphur
A-108 Grade 1018	.15/.20	.60/.90	.04 max	.05 max

Tolerance:

Width. In.	Thickness & Width Tolerance
to 3/4", incl.	+0, -.003
over 3/4" to 1 1/2", incl.	+0, -.004
over 1 1/2" to 3", incl.	+0, -.005
over 3" to 4, incl.	+0, -.006
over 4" to 6", incl.	+0, -.008
over 6"	+0, -.013



FARWEST STEEL CORPORATION



COLD DRAWN FLAT BAR

Standard Length — 10' to 12' Random

Weight in Pounds			Weight in Pounds		
Size	Per Foot	12'	Size	Per Foot	12'
$\frac{1}{8}$ x $\frac{1}{4}$	.106	1.27	$\frac{3}{16}$ x $\frac{1}{2}$	2.872	34.46
$\frac{5}{16}$	.133	1.60	5	3.191	38.29
$\frac{3}{8}$	.159	1.91	6	3.829	45.95
$\frac{1}{2}$	.213	2.56	8	5.105	61.26
$\frac{5}{8}$	.266	3.19	10	6.381	76.57
$\frac{3}{4}$	.319	3.83	12	7.657	91.88
$\frac{7}{8}$	.372	4.46	$\frac{1}{4}$ x $\frac{5}{16}$	.266	3.19
1	.425	5.10	$\frac{3}{8}$	.319	3.83
$\frac{1}{4}$	.531	6.37	$\frac{1}{2}$	.425	5.10
$\frac{1}{2}$	.639	7.67	$\frac{5}{8}$	.531	6.37
$\frac{3}{4}$	.745	8.94	$\frac{3}{4}$	.639	7.67
2	.851	10.21	$\frac{7}{8}$	.745	8.94
$\frac{2}{4}$	.957	11.48	1	.851	10.21
$\frac{2}{2}$	1.064	12.77	$\frac{1}{4}$	1.064	12.77
$\frac{2}{3}$	1.170	14.04	$\frac{1}{8}$	1.170	14.04
3	1.276	15.31	$\frac{1}{2}$	1.276	15.31
$\frac{3}{2}$	1.489	17.87	$\frac{3}{4}$	1.489	17.87
4	1.702	20.42	2	1.702	20.42
$\frac{4}{2}$	1.915	22.98	$\frac{2}{4}$	1.915	22.98
5	2.127	25.52	$\frac{2}{2}$	2.127	25.52
6	2.552	30.62	$\frac{2}{3}$	2.340	28.08
$\frac{3}{16}$ x $\frac{1}{4}$	.159	1.91	3	2.552	30.62
$\frac{5}{16}$	.199	2.39	$\frac{3}{2}$	2.978	35.74
$\frac{3}{8}$	.239	2.87	4	3.403	40.84
$\frac{1}{2}$	.319	3.83	$\frac{4}{2}$	3.829	45.95
$\frac{5}{8}$	.398	4.78	5	4.254	51.05
$\frac{3}{4}$	.478	5.74	$\frac{5}{2}$	4.679	56.15
$\frac{7}{8}$	.559	6.71	6	5.105	61.26
1	.639	7.67	7	5.956	71.47
$\frac{1}{4}$	.798	9.58	8	6.806	81.67
$\frac{1}{2}$	.957	11.48	10	8.508	102.10
$\frac{3}{4}$	1.117	13.40	12	10.210	122.52
2	1.276	15.31	$\frac{5}{16}$ x $\frac{3}{8}$	.389	4.78
$\frac{2}{4}$	1.435	17.22	$\frac{1}{2}$	.531	6.37
$\frac{2}{2}$	1.596	19.15	$\frac{5}{8}$	.665	7.98
$\frac{2}{3}$	1.755	21.06	$\frac{3}{4}$	.798	9.58
3	1.915	22.98	$\frac{7}{8}$	.931	11.17
$\frac{3}{2}$	2.233	26.80	1	1.064	12.77
4	2.552	30.62			

FARWEST STEEL CORPORATION



COLD DRAWN FLAT BAR

Standard Length — 10' to 12' Random

Size	Weight in Pounds	
	Per Foot	12'
$\frac{5}{16} \times \frac{1}{8}$	1.196	14.35
$\frac{1}{4}$	1.329	15.95
$\frac{1}{2}$	1.596	19.15
$\frac{3}{4}$	1.861	22.33
2.....	2.127.....	25.52
$2\frac{1}{4}$	2.393	28.72
$2\frac{1}{2}$	2.658	31.90
$2\frac{3}{4}$	2.925	35.10
3.....	3.151.....	37.81
$3\frac{1}{2}$	3.723	44.68
4	4.254	51.05
$4\frac{1}{2}$	4.785	57.42
5.....	5.318.....	63.82
$5\frac{1}{2}$	5.850	70.20
6	6.302	75.62
8	8.508	102.10
10	10.635	127.62
12	12.762	153.14
$\frac{3}{8} \times \frac{1}{2}$	.639.....	7.67
$\frac{5}{8}$	.798	9.58
$\frac{3}{4}$	.957	11.48
$\frac{7}{8}$	1.117	13.40
1.....	1.276.....	15.31
$1\frac{1}{4}$	1.596	19.15
$1\frac{1}{2}$	1.915	22.98
$1\frac{3}{4}$	2.233	26.80
2.....	2.552.....	30.62
$2\frac{1}{4}$	2.872	34.46
$2\frac{1}{2}$	3.191	38.29
$2\frac{3}{4}$	3.509	42.11
3.....	3.829.....	45.95
$3\frac{1}{4}$	4.148	49.78
$3\frac{1}{2}$	4.467	53.60
4	5.105	61.26
$4\frac{1}{2}$	5.743	68.92
5.....	6.381.....	76.57
$5\frac{1}{2}$	7.020	84.24
6	7.657	91.88

Size	Weight in Pounds	
	Per Foot	12'
$\frac{3}{8} \times 7$	8.933	107.20
8	10.210	122.52
10	12.762	153.14
12	15.314	183.77
$\frac{7}{16} \times \frac{1}{2}$	.745.....	8.94
$\frac{3}{4}$	1.117	13.40
1.....	1.489.....	17.87
$1\frac{1}{4}$	1.861	22.33
$1\frac{1}{2}$	2.233	26.80
$1\frac{3}{4}$	2.605	31.26
2.....	2.979.....	35.75
$2\frac{1}{4}$	3.350	40.20
$2\frac{1}{2}$	3.721	44.65
3.....	4.467.....	53.60
4	5.956	71.47
$\frac{1}{2} \times \frac{5}{8}$	1.064.....	12.77
$\frac{3}{4}$	1.276	15.31
$\frac{7}{8}$	1.489	17.87
1.....	1.702.....	20.42
$1\frac{1}{4}$	2.127	25.52
$1\frac{1}{2}$	2.552	30.62
2.....	3.403.....	40.84
$2\frac{1}{4}$	3.829	45.95
$2\frac{1}{2}$	4.254	51.05
$2\frac{3}{4}$	4.679	56.15
3.....	5.105.....	61.26
$3\frac{1}{4}$	5.530	66.36
$3\frac{1}{2}$	5.956	71.47
4	6.806	81.67
$4\frac{1}{2}$	7.657	91.88
5.....	8.508.....	102.10
$5\frac{1}{2}$	9.359	112.31
6	10.210	122.52
7	11.911	142.93
8	13.613	163.36
9	15.314	183.77
10	17.016	204.19
12	20.419	245.03

FARWEST STEEL CORPORATION



COLD DRAWN FLAT BAR

Standard Length — 10' to 12' Random

Weight in Pounds			Weight in Pounds		
Size	Per Foot	12'	Size	Per Foot	12'
$\frac{5}{8}$ x $\frac{3}{4}$	.596.....	19.15	$\frac{3}{4}$ x 7	17.867	214.40
$\frac{7}{8}$	1.861	22.33	8	20.419	245.03
1	2.127.....	25.52	10	25.524	306.29
$1\frac{1}{4}$	2.658	31.90	12	30.629	367.55
$1\frac{1}{2}$	3.191	38.29	$\frac{7}{8}$ x 1	2.978.....	35.74
$1\frac{3}{4}$	3.723	44.68	$1\frac{1}{4}$	3.723	44.68
2	4.254.....	51.05	$1\frac{3}{8}$	4.095	49.14
$2\frac{1}{4}$	4.785	57.42	$1\frac{1}{2}$	4.467	53.60
$2\frac{1}{2}$	5.318	63.82	$1\frac{3}{4}$	5.211	62.53
$2\frac{3}{4}$	5.850	70.20	2	5.956.....	71.47
3	6.381.....	76.57	$2\frac{1}{4}$	6.700	80.40
$3\frac{1}{2}$	7.445	89.34	$2\frac{1}{2}$	7.445	89.34
4	8.508	102.10	$2\frac{3}{4}$	8.189	98.27
$4\frac{1}{2}$	9.572	114.86	3	8.933.....	107.20
5	10.640.....	127.68	$3\frac{1}{2}$	10.420	125.04
$5\frac{1}{2}$	11.699	140.39	4	11.911	142.93
6	12.762	153.14	5	14.894.....	178.73
7	14.894	178.73	6	17.867	214.40
8	17.015	204.18	8	23.822	285.86
10	21.280	255.36	12	35.734	428.81
12	25.524	306.29	1 x $1\frac{1}{4}$	4.254.....	51.05
$\frac{3}{4}$ x $\frac{7}{8}$	2.233.....	26.80	$1\frac{1}{2}$	5.105	61.26
1	2.552	30.62	$1\frac{3}{4}$	5.956	71.47
$1\frac{1}{4}$	3.191	38.29	2	6.806.....	81.67
$1\frac{1}{2}$	3.829	45.95	$2\frac{1}{4}$	7.657	91.88
$1\frac{3}{4}$	4.467	53.60	$2\frac{1}{2}$	8.508	102.10
2	5.105.....	61.26	$2\frac{3}{4}$	9.359	112.31
$2\frac{1}{4}$	5.743	68.92	3	10.210.....	122.52
$2\frac{1}{2}$	6.381	76.57	$3\frac{1}{4}$	11.060	132.72
$2\frac{3}{4}$	7.020	84.24	$3\frac{1}{2}$	11.911	142.93
3	7.657.....	91.88	4	13.613	163.36
$3\frac{1}{4}$	9.572	114.86	$4\frac{1}{2}$	15.314	183.77
$3\frac{1}{2}$	8.933	107.20	5	17.016.....	204.19
4	10.210	122.52	$5\frac{1}{2}$	18.718	212.62
$4\frac{1}{2}$	11.491	137.89	6	20.419	245.03
5	12.762.....	153.14	7	23.822	285.86
$5\frac{1}{2}$	14.038	168.46	8	27.226	326.71
6	15.314	183.77			

FARWEST STEEL CORPORATION



COLD DRAWN FLAT BAR

Standard Length — 10' to 12' Random

Weight in Pounds			Weight in Pounds		
Size	Per Foot	12'	Size	Per Foot	12'
1 x 10	34.032	408.38	1 3/4 x 2	11.911	142.93
12	40.838	490.06	2 1/4	13.401	160.81
1 1/4 x 1 1/2	6.381	76.57	2 1/2	14.889	178.67
1 3/4	7.445	89.34	3	17.867	214.67
2	8.508	102.10	3 1/2	20.845	250.14
2 1/4	9.572	114.86	4	23.822	285.86
2 1/2	10.640	127.68	5	29.778	357.34
2 3/4	11.701	140.41	6	35.734	428.81
3	12.762	153.14	8	47.645	571.74
3 1/2	14.894	178.73	2 x 2 1/4	18.317	219.80
4	17.016	204.19	2 1/2	17.016	204.19
4 1/2	19.148	229.78	2 3/4	18.718	224.62
5	21.270	255.24	3	20.419	245.03
6	25.524	306.29	3 1/2	23.822	285.86
8	34.032	408.38	4	27.226	326.71
10	42.540	510.48	4 1/2	30.625	367.50
12	51.048	612.58	5	34.032	408.38
1 1/2 x 1 3/4	8.933	107.20	6	40.838	490.06
2	10.210	122.52	8	54.451	653.41
2 1/4	11.486	137.83	10	68.064	816.77
2 1/2	12.762	153.14	12	81.677	980.12
2 3/4	14.038	168.46			
3	15.314	183.77			
3 1/2	17.867	214.40			
4	20.419	245.03			
4 1/2	22.972	275.66			
5	25.524	306.29			
6	30.629	367.55			
8	40.838	490.06			
10	51.048	612.58			
12	61.258	735.10			

FARWEST STEEL CORPORATION

PLATE — SPECIFICATIONS UNIVERSAL MILL PLATE

"U.M." Plates are over 8" wide and are carried in stock to widths up to 12" wide. They are rolled on a universal mill between horizontal and vertical rolls to a specified width while sheared plates are rolled between horizontal rolls only and are then sheared (or flame cut) to width and length.

Chemical Analysis:

ASTM	Thickness	Carbon	Manganese	Phosphorus	Sulphur
A-36	to $\frac{3}{4}$ "	.25 max	—	.04 max	.05 max
A-36	over $\frac{3}{4}$ " to $1\frac{1}{2}$ "	.25 max	.80/1.20	.04 max	.05 max
A-36	over $1\frac{1}{2}$ " to $2\frac{1}{2}$ "	.25 max	.80/1.20	.04 max	.05 max

Mechanical Properties:

Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
58,000/80,000	36,000 min	20 min ^A

^AFor material under $\frac{5}{16}$ in. (8 mm) in thickness or diameter, a deduction from the percentage of elongation in 8 in. (203 mm), specified in Table 3, of 1.25% shall be made for each decrease of $\frac{1}{32}$ in. (0.8 mm) of the specified thickness or diameter below $\frac{1}{16}$ in.

ASTM A-36

Chemical Analysis:

Thickness	Carbon	Manganese	Phosphorus	Sulphur
$\frac{3}{4}$ " Thick & Under	.25 max	—	.04 max	.05 max
Over $\frac{3}{4}$ " to $1\frac{1}{2}$ " incl.*	.25 max	.80/1.20	.04 max	.05 max
Over $1\frac{1}{2}$ " to $2\frac{1}{2}$ " incl.*	.26 max	.80/1.20	.04 max	.05 max
Over $2\frac{1}{2}$ " to 4" incl.*	.27 max	.85/1.20	.04 max	.05 max
Over 4" *	.29 max	.85/1.20	.04 max	.05 max

*Plates $1\frac{1}{2}$ " and over also require .15/.30 Silicon content.

Mechanical Properties:

ASTM	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"
A-36	58,000/80,000	36,000 min	20 min ^A

Tolerances:

See pages 50, 51

Stock Sizes: 3/16 through 12"

Special widths, lengths, and odd shapes can be quickly cut to your exact specifications.

PLATE

FARWEST STEEL CORPORATION

AMERICAN BUREAU OF SHIPPING [ABS] [PLATE ONLY]

Chemical Analysis:

ASTM	Carbon	Manganese	Sulphur	Silicon
A131 Grade A	.23 ^(A)	^(B)	.05 max	.05 max

^AA maximum carbon content of .26 is acceptable for grade A plates equal to or less than 1/2 in.

^BGrade A plates over 1/2 in. in thickness shall have a minimum manganese content of not less than 2.5 times the carbon content.

Mechanical Properties:

Tensile Strength PSI	Yield Point PSI	% Elongation in 8"
58,000/71,000	34,000 min ^C	21 min

^CFor grade A over 1" in thickness, minimum yield point may be reduced to 32,000.

Tolerances: See pages 50-52

Processing: See pages 93, 94



FARWEST STEEL CORPORATION

AISI 1040/1045 AS ROLLED —

High carbon steel plates have high strength and toughness. These plates will flame or induction harden.

Chemical Analysis:

Carbon	Manganese	Phosphorus	Sulphur
.37/.50	.60/.90	.04 max	.05 max

Mechanical Properties: (Average range of 1" thick plate)

	Tensile P.S.I.	Yield P.S.I.	% Elong in 2"	Reduc. area	Brinell Hard
As Rolled	85,000	48,000	22	48%	179

AISI 4140 AS ROLLED —

Chemical Analysis:

Carbon	Manganese	Phosphorus	Sulphur	Silicon	Chromium	Molybdenum
.38/.43	.25/1.00	.035 max	.04 max	.20/.35	.80/1.10	.15/.25

Mechanical Properties: (Approximate)

Tensile Strength P.S.I.	Yield Point P.S.I.
95,000	60,000

Tolerances: See pages 50-52

Processing: See pages 93, 94

FARWEST STEEL CORPORATION

HIGH STRENGTH — LOW ALLOY

Chemical Analysis:

ASTM	A-572-Gr 50*	A-588 Gr. B	A-656 Type 7
Carbon	.23 max	.20 max	0.180 max
Manganese	1.35 max	.75/1.35	1.650 max
Phosphorus	.04 max	.04 max	0.025 max
Sulphur	.05 max	.05 max	0.035 max
Silicon	.40 max	.15/.50	0.060 max
Vanadium	—	.01/.10	0.005-0.15
Nitrogen	—	—	0.020 max
Columbium	—	—	0.005-0.10
Nickel	—	.50 max	—
Chromium	—	.40/.70	—
Copper	—	.20/.40	—

*A572/50 must also contain the following alloys: Columbium and/or Vanadium and/or Nitrogen. **Thickness Note:** $\leq 4"$ is grade A572/50, $> 4"$ is grade A572/42.

Mechanical Properties: (Approximate)

	Tensile Strength	Yield Point	%
Elongation Type	P.S.I.	P.S.I.	in 8"
A572-Gr 50	65,000 min	50,000 min	18 min ^A
A588 ^B	70,000 min	50,000 min	18 min ^A
A656-Gr 70	80,000 min	70,000 min	14 min ^A
A656-Gr 80	90,000 min	80,000 min	12 min ^A

^AFor plates wider than 24", the elongation requirement is reduced by 2% and 3% points for grade 70 and 80.

^BFor plates 4" thick and under.

Tolerances: See pages 50-52

Processing: See pages 93, 94



FARWEST STEEL CORPORATION

HIGH STRENGTH ALLOY ASTM-514

Chemical Analysis:

A514 Type Alloy

Carbon	.12/.21
Manganese	.70/1.00
Phosphorus	.035 max
Sulphur	.040 max
Silicon	.20/.35
Vanadium	.03/.08
Chromium	.40/.65
Molybdenum	.15/.25
Boron	.0005/.005
Titanium	.01/.03

Mechanical Properties:

Thickness	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 2"
$\frac{3}{16}$ " to $2\frac{1}{2}$ " incl.	110,000/130,000	100,000 min	18 min
Over $2\frac{1}{2}$ " to 6" incl.	110,000/130,000	90,000 min	16 min

Tolerances: See pages 50, 52

ABRASION RESISTING PLATE

AR steel is a medium carbon, high manganese steel. This grade has a Brinell hardness range of 180 - 235.

Chemical Analysis: (Approximate)

Carbon	Manganese	Phosphorus	Sulphur	Silicon
.35/.50	1.2/2.0	.050 max	.055 max	.10/.35

Mechanical Properties: (Approximate)

	Tensile Strength P.S.I.	Yield Point P.S.I.	% Elongation in 8"	Reduction of Area	Brinell Hardness
As Rolled	115,000	70,000	16	35%	235

Tolerances: See pages 50-52

Processing: See pages 93, 94

FARWEST STEEL CORPORATION

FORMABLE 400

Formable 400 is quenched and tempered, abrasion resistant, alloy steel plate. This steel is produced with fine grain practice, ladle-desulfurized, and calcium treated to improve toughness.

PLATE THICKNESS: 3/16, 1/4, 5/16, 1/2, 5/8, 3/4, 1, 1-1/4, 1-1/2, 1-3/4, 2

Chemical Analysis	Max.	Typical Mechanical Properties	Info. Only
Carbon	.17	Yield	160 ksi
Manganese	1.50	Tensile	170-190 ksi
Phosphorus	0.015	Elongation	15% in 2"
Sulphur	0.005	L/TCVN	25/15 ft. lbs @ -40°F
Silicon	0.60		35/25 ft. lbs @ 0°F
Molybdenum	0.40		45/30 ft. lbs @ +32°F
Boron	0.0005	Minimum	

Formable 400 is heat treated to conform to a Brinell hardness range only. Mechanical properties are estimated for informational purposes and are not guaranteed.

Hardness Range	Flatness
363-444 Brinell	ASTM A 6 1/2 Commercial Standard

FLAMECUTTING AND WELDING: Formable 400 has been developed to permit conventional oxy-fuel flame cutting, plasma cutting, and welding with minimal or no preheating as described below:

RECOMMENDED MINIMUM PREHEAT TEMPERATURES combined plate thickness

GRADE	3/4"	3/4" - 1"	1" - 1-1/4"	1-1/4" - 1-1/2"	1-1/2" - 2"
Formable 400	70°F	70°F	70°F	70°F	Refer

Preheat and interpass temperatures should not exceed 400 degrees in order to maintain parent metal plate hardness. Formable grades may be welded using any of the conventional welding methods including fluxcore, SAW, GSAW and SMAW. Weld metal should have a tensile strength to undermatch the strength of the parent metal.

FORMABILITY: Cold forming of 90 degrees or less can be performed on Formable 400. A forming die with a radius of at least three times the thickness of material for transverse (easy way) bends, and four times the thickness of material for longitudinal (hard way) bends. The die opening on transverse bends should be at least 12 times the thickness of material, and 14 times the thickness of material on longitudinal bends. Edge preparation by grinding is required. Burned edges should be tempered at 400° maximum prior to grinding.

Tolerances: See pages 50-52

Processing: See pages 93, 94

FARWEST STEEL CORPORATION

FORMABLE 500

Formable 500 is quenched and tempered, abrasion resistant, alloy steel plate. This steel is vacuum degassed, ladle desulfurized, and calcium treated with inclusion shape control to a .005% maximum sulfur.

PLATE THICKNESS: 3/16, 1/4, 5/16, 1/2, 5/8, 3/4, 1, 1-1/4, 1-1/2, 1-3/4, 2

Chemical Analysis	Max.	Typical Mechanical Properties	Info. Only
Carbon	.30	Yield	210-230 ksi
Manganese	1.15	Tensile	230-255 ksi
Phosphorus	0.015	Elongation	14% in 2"
Sulphur	0.005	L/TCVN	20/15 ft. lbs @ -40°F
Silicon	0.60		23/18 ft. lbs @ 0°F
Chromium	0.65		
Molybdenum	0.40		25/20 ft. lbs @ +32°F
Boron	0.0005	Minimum	

Formable 500 is heat treated to conform to a Brinell hardness range only. Mechanical properties are estimated for informational purposes and are not guaranteed.

Hardness Range	Flatness
3/16" through 1" 477-534 Brinell Over 1" through 2" 444-534 Brinell	ASTM A 6 1/2 Commercial Standard

FLAMECUTTING AND WELDING: Formable 500 requires preheating prior to flame cutting and welding as described by the following:

RECOMMENDED MINIMUM PREHEAT TEMPERATURES combined plate thickness

GRADE	3/4"	3/4" - 1"	1" - 1-1/4"	1-1/4" - 1-1/2"	1-1/2" - 2"
Formable 500	200°F	250°F	300°F	350°F	400°F

Preheat and interpass temperatures should not exceed 400 degrees in order to maintain parent metal plate hardness. Formable grades may be welded using any of the conventional welding methods including fluxcore, SAW, GSAW and SMAW. Weld metal should have a tensile strength to undermatch the strength of the parent metal.

FORMABILITY: Cold forming of 90 degrees or less can be performed on Formable 500. A forming die with a radius of at least five times the thickness of material for transverse (easy way) bends, and six times the thickness of material for longitudinal (hard way) bends. The die opening on transverse bends should be at least 12 times the thickness of material, and 16 times the thickness of material on longitudinal bends. Edge preparation by grinding is required. Burned edges should be tempered at 400° maximum prior to grinding.

Tolerances: See pages 50-52

Processing: See pages 93, 94

FARWEST STEEL CORPORATION

GRADE 100

APPLICATION: Any product where high strength and good bendability can reduce production costs, lower overall weight and increase payload. Typical applications:

- Cranes
- Car, truck and rail industries
- Contractor and agricultural machinery

Chemical Composition

C	Si	Mn	P	S	Al	Cb	Ti
% max	% max	% max	% max	% max	% min	% max	% max
0.12	0.60	2.0	0.025	0.010	0.015	0.06	0.20

Mechanical Properties (acc. to ASTM A6)

Yield Strength Ksi

Min. (MPa)

100 (690)

Tensile Strength Ksi

Min. (MPa)

110 (760)

Elongation (2")%

Minimum

15

Hardness H^B

Approximate

250

Bendability

Minimum inside radius for cold forming in all directions.

.079" - .250"..... 1.6xt

> .250" - .394"..... 1.8xt

Impact Toughness

Guaranteed minimum: 20 ft. lbs. at -40°F.

Bending GRADE 100XF

Approximate press force needed: Ton per foot.

Material Thickness decimal inches	2" Die	3" Die	4" Die
0.1180	8 t/ft	5 t/ft	4 t/ft
0.1575	14 t/ft	9 t/ft	7 t/ft
0.1880	20 t/ft	13 t/ft	10 t/ft
0.2500	34 t/ft	23 t/ft	18 t/ft
0.3125	53 t/ft	35 t/ft	27 t/ft
0.3750	76 t/ft	52 t/ft	39 t/ft

FARWEST STEEL CORPORATION

WELDING CONSUMABLES FOR GRADE 100 XF COLD-FORMING STEEL ACCORDING TO AWS

Manual metal arc welding MMA	Gas shielded metal arc welding MIG/MAG		Submerged arc welding SAW
	Tubular Wire	Solid Wire	Wire/Powder
AWS A5.5 E11018	AWS A5.29 E110Tx-X	AWS A5.28 ER100S-X AWS A5.28 E110C-X	AWS A5.23/ F11A4-EX

$$t^2 = t^1 \sqrt{\frac{YS_1}{YS_2}}$$

t = thickness

YS = yield strength

Subscript 1 indicates the reference steel

Subscript 2 indicates the high strength steel

Example:

$$.25 (t^1 \text{ current thickness}) \times \frac{36 (t^1 \text{ current yield})}{100 (\text{GRADE})} = .150 (t^2 \text{ new thickness})$$

Possible weight reduction if the rule of thumb is used with GRADE 100 XF

Grade								
110	42.8%	36.0%	32.6%	26.1%	20.2%	14.7%	9.5%	4.7%
100	40.0%	32.9%	29.3%	22.5%	16.3%	10.6%	5.1%	0.0%
Grade	36	45	50	60	70	80	80	100

Welding

Low carbon, phosphorus and sulphur levels allow trouble-free welding by all conventional methods. No preheating is required.

Adjacent to the weld, a narrow Heat Affected zone (HAZ) with a slightly decreased hardness is produced. However, with standard welding techniques, the HAZ has no practical significance.

Tensile tests taken transverse to the weld show the same tensile strength as the parent metal.

Practical tests show softer filler metals can be used in most cases. For specific information about filler material, consult SSAB technical support.

Heat Treatment

Stress relieving should be done in temperature ranges of 980° - 1080°F. Heating above this range reduces strength and should be avoided.

Permissible Variations in Thickness for Rectangular, Carbon, High-Strength, Low-Alloy, and Alloy-Steel Plates, 15 in. and Under in Thickness When Ordered to Thickness

NOTE 1 – Tables 1 through 31, inclusive, contain permissible variations in dimensions stated in inch-pound units.

NOTE 2 – Permissible variation under specified thickness, 0.01 in.

NOTE 3 – Thickness to be measured at 3/8 to 3/4 in. from the longitudinal edge.

NOTE 4 – For thickness measured at any location other than that specified in Note 3, the permissible maximum over tolerance shall be increased by 75%, rounded to the nearest 0.01 in.

NOTE 5 – Where “...” appears in this table there is no requirement.

Specified Thickness, in.	Tolerance Over Specified Thickness for Widths Given, in.											
	48 and under	Over 48 to 60, excl	60 to 72, excl	72 to 84, excl	84 to 96, excl	96 to 108, excl	108 to 120, excl	120 to 132, excl	132 to 144, excl	144 to 168, excl	168 to 182, excl	182 and Over
To 1/4, excl	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	...	...	...
1/4 to 5/16, excl	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	...	...	...
5/16 to 3/8, excl	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	...	...
3/8 to 7/16, excl	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.06	...
7/16 to 1/2, excl	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.06	...
1/2 to 5/8, excl	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.06	...
5/8 to 3/4, excl	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.07	...
3/4 to 1, excl	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.07	0.08	0.09
1 to 2, excl	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.10	0.10	0.11	0.13	0.16
2 to 3, excl	0.09	0.09	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.15	...
3 to 4, excl	0.11	0.11	0.11	0.11	0.11	0.13	0.14	0.14	0.14	0.15	0.17	...
4 to 6, excl	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.20	0.20	...
6 to 10, excl	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.27	0.28	...
10 to 12, excl	0.29	0.29	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.35	...
12 to 15, incl	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	...

Permissible Variations From Flatness for Carbon Steel Rectangular Sheared Plates, Universal Mill Plates, and Circular and Sketch Plates (Applies to Carbon Steel Only)

NOTE 1 – When the longer dimension is under 36 in., the permissible variation should not exceed 1/4 in. When the longer dimension is from 36 to 72 in., incl. the permissible variation should not exceed 75% of the tabular amount for the specified width, but in no case less than 1/4 in.

NOTE 2 – These variations apply to plates which have a specified minimum tensile strength of not more than 60 ksi (415 MPa) or comparable chemical composition or hardness. The limits in the table are increased 50% for plates specified to a higher minimum tensile strength or compatible chemistry or hardness.

NOTE 3 – This table and these notes cover the permissible variations for flatness of circular and sketch plates, based on the maximum dimensions of those plates.

Specified Thickness, in.	Specified Weight, lb / ft ²	Permissible Variations from a Flat Surface for Specified Widths, in. ^{a, b}											
		To 36 in. excl	36 to 48 in. excl	48 to 60 in. excl	60 to 72 in. excl	72 to 84 in. excl	84 to 96 in. excl	96 to 108 in. excl	108 to 120 in. excl	120 to 144 in. excl	144 to 168 in. excl	168 and Over	
To 1/4, excl	To 10.2, excl	9/16	3/4	15/16	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	-	-	
1/4 to 3/8, excl	10.2 to 15.3, excl	1/2	5/8	3/4	15/16	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	-	-	
3/8 to 1/2, excl	15.3 to 20.4, excl	1/2	9/16	5/8	3/4	5/8	7/8	1	1 1/8	1 1/4	1 7/8	2 1/8	
1/2 to 3/4, excl	20.4 to 30.6, excl	7/16	1/2	9/16	5/8	5/8	3/4	1	1	1 1/8	1 1/2	2	
3/4 to 1, excl	30.6 to 40.8, excl	7/16	1/2	9/16	5/8	5/8	5/8	3/4	7/8	1	1 3/8	1 3/4	
1 to 2, excl	40.8 to 81.7, excl	3/8	1/2	1/2	9/16	9/16	5/8	5/8	5/8	1 1/16	1 1/8	1 1/2	
2 to 4, excl	81.7 to 163.4, excl	5/16	3/8	7/16	1/2	1/2	1/2	1/2	9/16	5/8	7/8	1 1/8	
4 to 6, excl	163.4 to 245.1, excl	3/8	7/16	1/2	1/2	9/16	9/16	5/8	3/4	7/8	7/8	1	
6 to 8, excl	245.1 to 326.8, excl	7/16	1/2	1/2	5/8	11/16	3/4	7/8	7/8	1	1	1	
8 to 10, excl	326.8 to 409.0, excl	1/2	1/2	5/8	11/16	3/4	13/16	7/8	15/16	1	1	1	
10 to 12, excl	409.0 to 490.1, excl	1/2	5/8	3/4	13/16	7/8	15/16	1	1	1	1	1	
12 to 15, incl	490.1 to 613.0, incl	5/8	3/4	13/16	7/8	15/16	1	1	1	1	1	-	

^a Flatness Variations for Length – The longer dimension specified is considered the length, and permissible variations in flatness along the length should not exceed the tabular amount for the specified width in plates up to 12 ft. in length or in any 12 ft. of longer plates.

^b Flatness Variations for Width – The flatness variations across the width should not exceed the tabular amount for the specified width.

Permissible Variations From Flatness for High-Strength Low-Alloy and Alloy Steel Rectangular Sheared Plates, Universal Mill Plates, and Circular and Sketch Plates, Hot Rolled or Thermally Treated (Not Applicable to Carbon Steel)

NOTE 1 – When the longer dimension is under 36 in., the variation should not exceed 1/8 in. When the larger dimension is from 36 to 72 in., incl. the variation should not exceed 75% of the tabular amount for the specified width.

NOTE 2 – This table and notes cover the tolerances for flatness of circular and sketch plates, based on the maximum dimensions of those plates.

Specified Thickness, in.	Specified Weight, lb / ft ²	Flatness Tolerances for Specified Widths, in. ^{a, b}													
		To 36, excl	36 to 48, excl	48 to 60, excl	60 to 72, excl	72 to 84, excl	84 to 96, excl	96 to 108, excl	108 to 120, excl	120 to 144, excl	144 to 168, excl	168 and Over			
To 1/4, excl	To 10.2, excl	13/16	1 1/8	1 3/8	1 7/8	2	2 1/4	2 3/8	2 5/8	2 3/4	-	-			
1/4 to 3/8, excl	10.2 to 15.3, excl	3/4	15/16	1 1/8	1 3/8	1 3/4	1 7/8	2	2 1/4	2 3/8	-	-			
3/8 to 1/2, excl	15.3 to 20.4, excl	3/4	7/8	15/16	15/16	1 1/8	1 5/16	1 1/2	1 5/8	1 7/8	2 3/4	3 1/8			
1/2 to 3/4, excl	20.4 to 30.6, excl	5/8	3/4	13/16	7/8	1	1 1/8	1 1/4	1 3/8	1 5/8	2 1/4	3			
3/4 to 1, excl	30.6 to 40.8, excl	5/8	3/4	7/8	7/8	15/16	1	1 1/8	1 5/16	1 1/2	2	2 5/8			
1 to 2, excl	40.8 to 81.7, excl	9/16	5/8	3/4	13/16	7/8	15/16	1	1	1	1 5/8	2 1/4			
2 to 4, excl	81.7 to 163.4, excl	1/2	9/16	11/16	3/4	3/4	3/4	3/4	7/8	1	1 1/4	1 5/8			
4 to 6, excl	163.4 to 245.1, excl	9/16	11/16	3/4	3/4	7/8	7/8	15/16	1 1/8	1 1/4	1 1/4	1 1/2			
6 to 8, excl	245.1 to 326.8, excl	5/8	3/4	3/4	15/16	1	1 1/8	1 1/4	1 5/16	1 1/2	1 1/2	1 1/2			
8 to 10, excl	326.8 to 409.0, excl	3/4	13/16	15/16	1	1 1/8	1 1/4	1 5/16	1 3/8	1 1/2	1 1/2	1 1/2			
10 to 12, excl	409.0 to 490.1, excl	3/4	15/16	1 1/8	1 1/4	1 5/16	1 3/8	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2			
12 to 15, incl	490.1 to 613.0, incl	7/8	1	1 3/16	1 5/16	1 3/8	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2			

^a Flatness Variations for Length – The longer dimension specified is considered the length, and variations from a flat surface along the length should not exceed the tabular amount for the specified width in plates up to 12 ft. in length or in any 12 ft. of longer plates.

^b Flatness Variations for Width – The flatness variations across the width should not exceed the tabular amount for the specified width.

FARWEST STEEL CORPORATION



UNIVERSAL MILL PLATE

Standard Length — 20'

Size	Weight in Pounds	
	Per Foot	20'
$\frac{1}{4}$ x 9	7.6572	153.14
$\frac{1}{4}$ x 10	8.5080	170.16
$\frac{1}{4}$ x 12	10.2096	204.19
$\frac{5}{16}$ x 9	9.5715	191.43
$\frac{5}{16}$ x 10	10.6350	212.70
$\frac{5}{16}$ x 12	12.7620	255.24
$\frac{3}{8}$ x 9	11.4858	229.72
$\frac{3}{8}$ x 10	12.7620	255.24
$\frac{3}{8}$ x 12	15.3144	306.29
$\frac{1}{2}$ x 9	15.3144	306.29
$\frac{1}{2}$ x 10	17.0160	340.32
$\frac{1}{2}$ x 12	20.4192	408.38
$\frac{5}{8}$ x 9	19.1430	382.86
$\frac{5}{8}$ x 10	21.2700	425.40
$\frac{5}{8}$ x 12	25.5240	510.48
$\frac{3}{4}$ x 9	22.9716	459.43
$\frac{3}{4}$ x 10	25.5240	510.48
$\frac{3}{4}$ x 12	30.6288	612.57
1 x 9	30.6288	612.58
1 x 10	34.0320	680.64
1 x 12	40.8384	816.77
$1\frac{1}{4}$ x 10	42.5400	850.80
$1\frac{1}{4}$ x 12	51.0480	1020.96
$1\frac{1}{2}$ x 10	51.0480	1020.96
$1\frac{1}{2}$ x 12	61.2576	1225.15

FARWEST STEEL CORPORATION



HOT ROLLED PLATE

Size	Weight Per Plate	Size	Weight Per Plate
3/16 7.6579# / Sq. Ft.			
48 x 96.....	245.05	1/4 72 x 240	1225.15
120	306.32	360	1837.73
144	367.58	84 x 96.....	571.74
240	612.63	120	714.67
60 x 96.....	306.32	144	857.61
120	382.90	240	1429.34
144	459.47	360	2144.02
240	765.79	96 x 120.....	816.77
360	1148.69	144	980.12
72 x 96.....	367.58	240	1633.54
120	459.47	360	2450.30
144	551.37	480	3267.07
240	918.95	120 x 240.....	2041.92
360	1378.42	360	3062.88
84 x 96.....	428.84	480	4083.84
120	536.05	5/16 12.7627# / Sq. Ft.	
144	643.26	48 x 96.....	408.41
240	1072.11	120	510.51
360	1608.16	144	612.61
96 x 120.....	612.63	240	1021.02
144	735.16	60 x 96.....	510.51
240	1225.26	120	638.14
360	1837.90	144	765.76
1/4 10.2096# / Sq. Ft.		240	1276.27
48 x 96.....	326.71	360	1914.41
120	408.38	72 x 96.....	612.61
144	490.06	120	765.76
240	816.77	144	918.92
60 x 96.....	408.38	240	1531.53
120	510.48	360	2297.29
144	612.58	84 x 96.....	714.71
240	1020.96	120	893.39
360	1531.44	144	1072.07
72 x 96.....	490.06	240	1786.78
120	612.58	360	2680.17
144	735.09		

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



HOT ROLLED PLATE

Size	Weight Per Plate	Size	Weight Per Plate	
5/16	96 x 120 1021.02	1/2	20.4192# / Sq. Ft.	
	144 1225.22		48 x 96 653.41	
	240 2042.04		120 816.77	
	360 3063.05		144 980.12	
	480 4084.08		240 1633.54	
	120 x 240 2552.24		60 x 96 816.77	
	360 3828.82		120 1020.96	
	480 5104.48		144 1225.15	
3/8	15.3144# / Sq. Ft.	240 2041.92		
	48 x 96 490.06	360 3062.88		
	120 612.58	72 x 96 980.12		
	144 735.09	120 1225.15		
	240 1225.15	144 1470.18		
	60 x 96 612.58	240 2450.30		
	120 765.72	360 3675.46		
	144 918.86	84 x 96 1143.48		
	240 1531.44	120 1429.34		
	360 2297.16	144 1715.21		
	72 x 96 735.09	240 2858.69		
	120 918.86	360 4288.03		
	144 1102.64	96 x 120 1633.54		
	240 1837.73	144 1960.25		
	360 2756.59	240 3267.07		
	84 x 96 857.61	360 4900.61		
	120 1072.01	480 6534.14		
	144 1286.41	120 x 240 4083.84		
	240 2144.02	360 6125.76		
	360 3216.02	480 8167.68		
	96 x 120 1225.15	9/16	22.9723# / Sq. Ft.	
	144 1470.18		5/8	25.5240# / Sq. Ft.
	240 2450.30			48 x 96 816.77
	360 3675.46			120 1020.96
	480 4900.61	60 x 120 1276.20		
	120 x 240 3062.88	240 2552.40		
	360 4594.32			
	480 6125.76			

7/16 17.8675# / Sq. Ft.

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



HOT ROLLED PLATE

Size	Weight Per Plate	Size	Weight Per Plate
5/8 72 x 120.....	1531.44	13/16 33.1819# / Sq. Ft.	
240	3062.88	7/8 35.7336# / Sq. Ft.	
84 x 120.....	1786.68	48 x 96.....	1143.48
240	3573.36	120	1429.35
96 x 120.....	2041.92	144	1715.21
240	4083.84	240	2858.69
360	6125.76	60 x 96.....	1429.34
11/16 28.0771# / Sq. Ft.		120	1786.68
3/4 30.6288# / Sq. Ft.		144	2144.02
48 x 96.....	980.12	240	3573.36
120	1225.15	72 x 120.....	2144.02
144	1470.18	240	4288.03
240	2450.30	84 x 120.....	2501.35
60 x 96.....	1225.15	240	5002.70
120	1531.44	96 x 120.....	2858.69
144	1837.73	240	5717.38
240	3062.88	360	8576.06
360	4594.32	15/16 38.2867# / Sq. Ft.	
72 x 96.....	1470.18	1 40.8384# / Sq. Ft.	
120	1837.73	48 x 96.....	1306.83
144	2205.27	120	1633.54
240	3675.46	144	1960.24
360	5513.18	240	3267.08
84 x 96.....	1715.22	60 x 96.....	1633.54
120	2144.02	120	2041.92
144	2572.82	144	2450.30
240	4288.03	240	4083.84
360	6432.05	360	6125.76
96 x 120.....	2450.31	72 x 96.....	1960.24
144	2940.36	120	2450.30
240	4900.61	144	2940.36
360	7350.91	240	4900.61
480	9801.22	360	7350.91
120 x 240.....	6125.76		
360	9188.64		
480	12251.52		

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



HOT ROLLED PLATE

Size	Weight Per Plate	Size	Weight Per Plate
1			
84 x 96.....	2286.95	240	7350.91
120	2858.69	84 x 120	4288.03
144	3430.43	240	8576.06
240	5717.38	96 x 120	4900.60
360	8576.06	240	9801.22
96 x 120.....	3267.07	360	14701.80
144	3920.49		
240	6534.14	1-5/8	66.3624# / Sq.Ft.
360	9801.22	1-3/4	71.4672# / Sq.Ft.
480	13068.29	48 x 96	2286.95
120 x 240.....	8167.68	120	2858.68
360	12251.52	60 x 120	3573.36
480	16335.36	240	7146.72
1-1/8	45.9432# / Sq. Ft.	72 x 120	4288.03
1-3/16	48.4956# / Sq. Ft.	240	8576.06
1-1/4	51.0480# / Sq. Ft.	84 x 120	5002.70
48 x 96.....	1633.53	240	10005.41
120	2041.92	96 x 120	5717.37
60 x 120.....	2552.40	240	11434.75
240	5104.80	360	17152.13
72 x 120.....	3062.88		
240	6125.76	1-7/8	76.5720# / Sq.Ft.
84 x 120.....	3573.36	2	81.6768# / Sq.Ft.
240	7146.72	48 x 96	2613.66
96 x 120.....	4083.44	120	3267.07
240	8167.68	60 x 120	4083.84
360	12251.52	240	8167.68
1-3/8	56.1528# / Sq. Ft.	72 x 120	4900.61
1-1/2	61.2576# / Sq. Ft.	240	9801.22
48 x 96.....	1960.24	84 x 120	5717.37
120	2450.30	240	11434.75
60 x 120.....	3062.88	96 x 120	6534.14
240	6125.76	240	13068.29
		360	19602.43
1-1/2	72 x 120		
	3675.45		

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



HOT ROLLED PLATE

Size	wt/sq ft	Size	wt/sq ft
2-1/4	91.8864# / Sq. Ft.	6	245.0304# / Sq. Ft.
2-3/8	96.9912# / Sq. Ft.	6-1/2	265.4496# / Sq. Ft.
2-1/2	102.0960# / Sq. Ft.	7	285.8688# / Sq. Ft.
2-3/4	112.3056# / Sq. Ft.	7-1/2	306.2880# / Sq. Ft.
3	122.5152# / Sq. Ft.	8	326.7072# / Sq. Ft.
3-1/4	132.7248# / Sq. Ft.	8-1/2	347.1264# / Sq. Ft.
3-1/2	142.9344# / Sq. Ft.	9	367.5456# / Sq. Ft.
3-3/4	153.1440# / Sq. Ft.	9-1/2	387.9648# / Sq. Ft.
4	163.3536# / Sq. Ft.	10	408.3840# / Sq. Ft.
4-1/2	183.7728# / Sq. Ft.	10-1/2	428.8032# / Sq. Ft.
5	204.1920# / Sq. Ft.	11	449.2224# / Sq. Ft.
5-1/2	224.6112# / Sq. Ft.	12	490.0608# / Sq. Ft.



Processing: See pages 93, 94

FARWEST STEEL CORPORATION

FLOOR PLATE

Floor Plate is skid resistant regardless of how the plate is laid or whatever angle from which it is approached. Patterns are continuous whether plate is laid end to end, side to side or side to end.

The material provided conforms to an A.S.T.M. A-786 manufacturing standard. All floor plate products are provided to a "Commercial Quality".

Chemical Analysis: (Approximate)

Carbon	Manganese	Phosphorus	Sulphur
.33 max	.30/.70	.05 Approx.	.05 Approx.

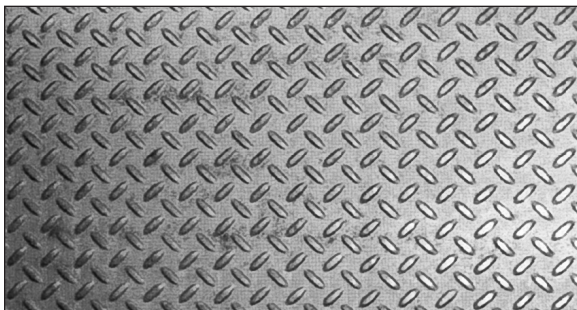
Note: Plates are ordered to chemistry only. ASTM A-36 is subject to mill availability.

Mechanical Properties: (Approximate)

	Tensile Strength	Yield Point	%
Elongation			
	P.S.I. 60,000	P.S.I. 33,000	in 8" 22

Note: Floor Plates normally are not used as main stress-carrying members and are seldom specified to tensile requirement. For this reason the mechanical properties shown above are only approximate.

Permissible Camber is $\frac{3}{8}"$ x $\frac{\text{Length in feet}}{5}$



Processing: See pages 93, 94

FARWEST STEEL CORPORATION



**HOT ROLLED
FLOOR PLATE**

Size	Weight Per Square Foot	Size	Weight Per Square Foot
16 ga.	3.00	5/16"	13.81
14 ga.	3.75	3/8"	16.37
12 ga.	5.25	1/2"	21.47
1/8"	6.16	5/8"	26.58
3/16"	8.71	3/4"	31.68
1/4"	11.26	1"	41.89



Processing: See pages 93, 94

FARWEST STEEL CORPORATION

HOT ROLLED SHEET — SPECIFICATIONS

Chemical Analysis:

ASTM	Carbon	Manganese	Phosphorus	Sulphur
A1011*	.15 max	.60 max	.030 max	.035 max

Chemical Analysis and Mechanical Properties:

ASTM	Carbon	Manganese	Phosphorus	Sulphur
A1011*	.23 max	1.35 max	.040 max	.04 max

ASTM	Thickness	Tensile Strength PSI	Yield Point PSI	% Elongation in 2"
A1011* SS GRADE 30	.0255-.0635	49,000 min	30,000 min	21.0 min
	.0636-.0971			24.0 min
	.0972-.2299			25.0 min
SS GRADE 33	.0255-.0635	52,000 min	33,000 min	18.0 min
	.0636-.0971			22.0 min
	.0972-.2299			23.0 min
SS GRADE 36	.0255-.0635	53,000 min	36,000 min	17.0 min
	.0636-.0971			21.0 min
	.0972-.2299			22.0 min

Thickness Tolerances:

Thickness	Width	Minimum Thickness	Maximum Thickness
10 ga	48"	.1260	.1425
	60"	.1260	.1425
	72"	.1260	.1425
	84"	.1260	.1425
11 ga	48"	.1115	.1276
	60"	.1115	.1276
	72"	.1115	.1276
12 ga	48"	.0966	.1126
	60"	.0966	.1126
	72"	.0966	.1126
14 ga	48"	.0677	.0817
	60"	.0677	.0817
	72"	.0667	.0827
16 ga	48"	.0538	.0658
	60"	.0528	.0668

* Limited sizes in stock

Processing: See pages 93, 94

SHEET

FARWEST STEEL CORPORATION



HOT ROLLED SHEET

Size	Weight Per Sheet	Size	Weight Per Sheet
10 ga. (.1345) 5.625# / Sq. Ft.		12 ga. (.1046) 4.375# / Sq. Ft.	
48 x 96	180.0	48 x 96	140.0
120	225.0	120	175.0
144	270.0	144	210.0
240	450.0	240	350.0
60 x 96	225.0	60 x 96	175.0
120	281.3	120	218.8
144	337.5	144	262.5
240	562.5	240	437.5
72 x 96	270.0	72 x 96	210.0
120	337.5	120	262.5
144	405.0	144	315.0
240	675.0	240	525.0
84 x 120	393.8	14 ga. (.0747) 3.125# / Sq. Ft.	
144	472.5	48 x 96	100.0
240	787.5	120	125.0
11 ga. (.1196) 5.0# / Sq. Ft.		144	150.0
48 x 96	160.0	240	250.0
120	200.0	60 x 96	125.0
144	240.0	120	156.3
240	400.0	144	187.5
60 x 96	200.0	240	312.5
120	250.0	72 x 96	150.0
144	300.0	120	187.5
240	500.0	144	225.0
72 x 96	240.0	16 ga. (.0598) 2.5# / Sq. Ft.	
120	300.0	48 x 96	80.0
144	360.0	120	100.0
240	600.0	144	120.0
		60 x 96	100.0
		60 x 120	125.0
		144	150.0

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



COLD ROLLED SHEET

Size	Weight Per Sheet	Size	Weight Per Sheet
16 ga. (.0598) 2.50# / Sq. Ft.		20 ga. (.0359) 1.50# / Sq. Ft.	
48 x 96.....	80.0	36 x 96.....	36.0
120	100.0	120	45.0
144	120.0	48 x 96.....	48.0
60 x 96.....	100.0	120	60.0
120	125.0	144	72.0
18 ga. (.0478) 2.00# / Sq. Ft.		22 ga. (.0299) 1.25# / Sq. Ft.	
48 x 96.....	64.0	36 x 96.....	30.0
120	80.0	120	37.5
144	96.0	48 x 96.....	40.0
		120	50.0
		24 ga. (.0239) 1.00# / Sq. Ft.	
		36 x 96.....	24.0
		120	30.0
		48 x 96.....	32.0
		120	40.0

Thickness Tolerances of Hot-Rolled Sheet (Carbon Steel) (Coils and Cut Lengths, Including Pickled)

NOTE 1 - Thickness is measured at any point across the width not less than 3/8 in. from a cut edge and not less than 3/4 in. from a mill edge. This table does not apply to the uncropped ends of mill edge coils.

NOTE 2 - The specified thickness range captions also apply when sheet is specified to a nominal thickness, and the tolerances are divided equally over and under.

Specified Width, in.	Thickness Tolerances Over, in. No Tolerance Under					
	Specified Minimum Thickness, In.					
	0.180 to 0.230 excl	Over 0.098 to 0.180 excl	Over 0.071 to 0.098 incl	Over 0.057 to 0.071 incl	Over 0.051 to 0.057 incl	0.044 to 0.051 incl
12 to 20 incl	0.014	0.014	0.012	0.012	0.010	0.010
Over 20 to 40 incl.	0.016	0.014	0.014	0.012	0.010	0.010
Over 40 to 48 incl.	0.018	0.016	0.014	0.012	0.012	0.010
Over 48 to 60 incl.	...	0.016	0.014	0.014	0.012	...
Over 60 to 72 incl.	...	0.016	0.016	0.014	0.014	...
Over 72	...	0.016	0.016	...	...	...

FARWEST STEEL CORPORATION

GRATING



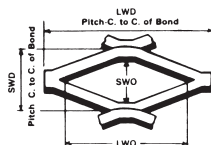
FLATTENED MESH

New Designation**	Size	Wt.	Size of Openings In Inches		Center to Center of Bond In Inches		Size of Strands In Inches	
			Width	Length	Width	Length	Width	Thickness
$\frac{3}{16}$ - 24F -	48		.085	.459	.200	.52	.057	.019
$\frac{3}{16}$ - 22F -	60		.085	.459	.200	.52	.057	.024
$\frac{3}{16}$ - 20F -	72		.085	.459	.200	.52	.057	.029
$\frac{1}{4}$ - 20F -	83		.094	.688	.255	1.03	.086	.030
$\frac{1}{4}$ - 18F -	111		.094	.688	.255	1.03	.086	.040
$\frac{1}{2}$ - 20F -	40		.375	1.000	.500	1.26	.070	.029
$\frac{1}{2}$ - 18F -	66		.281	1.000	.500	1.26	.109	.039
$\frac{1}{2}$ - 16F -	82		.250	1.000	.500	1.26	.103	.050
$\frac{1}{2}$ - 13F -	140		.250	1.000	.500	1.26	.122	.070
$\frac{3}{4}$ - 16F -	51		.750	1.750	.923	2.10	.115	.048
$\frac{3}{4}$ - 14F -	63		.688	1.813	.923	2.12	.119	.061
$\frac{3}{4}$ - 13F -	75		.688	1.782	.923	2.10	.119	.070
$\frac{3}{4}$ - 9F -	171		.563	1.688	.923	2.10	.164	.120
1 - 16F -	41		.875	2.250	1.090	2.56	.115	.048
$1\frac{1}{2}$ - 16F -	38		1.063	2.750	1.330	3.20	.123	.048
$1\frac{1}{2}$ - 14F -	46		1.063	2.750	1.330	3.20	.138	.060
$1\frac{1}{2}$ - 13F -	57		1.063	2.750	1.330	3.20	.138	.070
$1\frac{1}{2}$ - 10F -	114		1.000	2.563	1.330	3.20	.175	.110

** First number is the width of bond.

The second number is the gauge of steel. (F designates flattened)

The third number is the weight per 100 sq. feet.



FARWEST STEEL CORPORATION



GRATING

RAISED MESH

New Designation**		Size of Openings In Inches		Center to Center of Bond In Inches		Size of Strands In Inches	
Size	Wt.	Width - Length		Width - Length		Width - Thickness	
$\frac{3}{16}$ - 24 - 50		.166	.437	.200	.50	.050	.024
$\frac{3}{16}$ - 22 - 62		.166	.437	.200	.50	.050	.030
$\frac{3}{16}$ - 20 - 75		.166	.437	.200	.50	.050	.036
$\frac{1}{4}$ - 20 - 86		.172	.719	.255	1.00	.073	.036
$\frac{1}{4}$ - 18 - 114		.172	.719	.255	1.00	.073	.048
$\frac{1}{2}$ - 20 - 43		.438	.938	.500	1.20	.072	.036
$\frac{1}{2}$ - 18 - 70		.438	.938	.500	1.20	.088	.048
$\frac{1}{2}$ - 16 - 86		.375	.938	.500	1.20	.086	.060
$\frac{1}{2}$ - 13 - 147		.313	.938	.500	1.20	.096	.092
$\frac{3}{4}$ - 16 - 54		.813	1.750	.923	2.00	.099	.060
$\frac{3}{4}$ - 13 - 80		.750	1.688	.923	2.00	.096	.092
$\frac{3}{4}$ - 13 - 120		.750	1.625	.923	2.00	.144	.092
$\frac{3}{4}$ - 9 - 180		.688	1.563	.923	2.00	.148	.134
1 - 16 - 44		1.000	2.063	1.090	2.40	.096	.060
$1\frac{1}{2}$ - 18 - 20		1.313	2.625	1.330	3.00	.067	.048
$1\frac{1}{2}$ - 16 - 40		1.250	2.625	1.330	3.00	.107	.060
$1\frac{1}{2}$ - 13 - 60		1.188	2.500	1.330	3.00	.104	.092
$1\frac{1}{2}$ - 13 - 79		1.188	2.500	1.330	3.00	.137	.092
$1\frac{1}{2}$ - 10 - 120		1.125	2.375	1.330	3.00	.142	.134
$1\frac{1}{2}$ - 6 - 250		1.000	2.313	1.330	3.00	.201	.198
2 - 10 - 68		1.625	3.438	1.850	4.00	.164	.092
2 - 10 - 90		1.563	3.375	1.850	4.00	.149	.134

** First number is the width of bond.
 The second number is the gauge of steel.
 The third number is the weight per 100 sq. feet.

GRATING

FARWEST STEEL CORPORATION



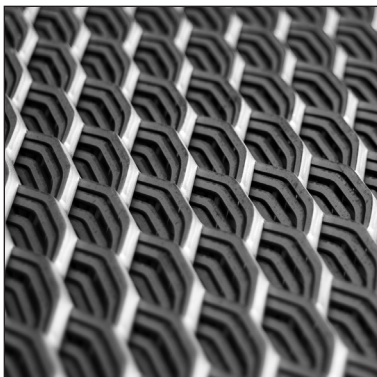
GRATING

EXPANDED METAL GRATING

Style	Size of Openings In Inches		Center to Center of Bond In Inches		Size of Strands In Inches	
	Width - Length		Width - Length		Width - Thickness	
3 lb.	.938	3.438	1.333	5.33	.261	.183
3.14 lb.	1.625	4.875	2.000	6.00	.308	.250
4 lb.	.938	3.438	1.333	5.33	.297	.215
4.27 lb.	1.000	2.875	1.412	4.00	.297	.250
5 lb.	.813	3.375	1.333	5.33	.327	.250
6.25 lb.	.813	3.375	1.412	5.33	.347	.312
7 lb.	.813	3.375	1.412	5.33	.388	.312

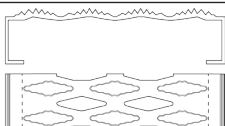
Available with the long way of diamond running the length of the sheet (referred to as DLW).

Available with the long way of diamond running the width of the sheet (often referred to as "catwalk" or DSW).



FARWEST STEEL CORPORATION

GRATING



DIAMOND GRIP SAFETY GRATING

Catalog Numbers and Weight Per Linear Foot

Material	Channel	Width					
		4 ³ / ₄ "	7"	9 ¹ / ₂ "	11 ³ / ₄ "	18 ³ / ₄ "	24"
Steel 14 Gauge	1 ¹ / ₂ "	21514	31514	41514	51514	81514	
		2.3	3.0	3.6	4.2	6.1	
	2"	22014	32014	42014	52014	82014	102014
		2.6	3.2	3.8	4.4	6.3	7.4
	2 ¹ / ₂ "	22514	32514	42514	52514	82514	
		2.8	3.5	4.1	4.7	6.6	
Steel 12 Gauge	1 ¹ / ₂ "	21512	31512	41512	51512	81512	
		3.2	4.1	5.0	5.9	8.5	
	2"	22012	32012	42012	52012	82012	102012
		3.6	4.5	5.4	6.2	8.9	10.4
	2 ¹ / ₂ "	22512	32512	42512	52512	82512	
		4.0	4.9	5.7	6.6	9.2	
	3"		33012	43012	53012	83012	103012
			5.2	6.1	7.0	9.6	11.1

Heavy Duty Grip Strut also available.

FARWEST STEEL CORPORATION

TUBING SPECIFICATIONS

SQUARE & RECTANGULAR

Chemical Analysis:

ASTM	Carbon	Manganese	Phosphorus	Sulphur
A513 Grade A	.02 - .15	.30 - .60	.035 max	.035 max
A500 Grade B & C	.26 max	1.35 max	.035 max	.035 max

Mechanical Properties:

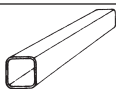
ASTM	Tensile Strength PSI	Yield Strength PSI	% Elongation in 2"
A513 GR A	Not required under A513. If there is a specific requirement for your project please inquire.		
A500 GR B	58,000 min	46,000 min	23 min ^A
A500 GR C	62,000 min	50,000 min	21 min ^A

^A Applies to specified wall thicknesses .120 in. and over. For wall thicknesses under .120 in., the minimum elongation shall be calculated by the formula: % elongation in 2" = 56t + 17.5 where t is the nominal thickness.



Processing: See pages 93, 94

FARWEST STEEL CORPORATION



SQUARE TUBING

Standard Length — 20', 24', 32'*, 40', 48'*, 56'*

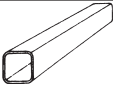
Nominal Size	Wall Thickness	Weight Per Foot	Nominal Size	Wall Thickness	Weight Per Foot
1/2 x 1/2	.049	.283	2 x 2	.065	1.67
	.065	.363		.072	1.84
5/8 x 5/8	.049	.363		.083	2.10
	.065	.470		.095	2.38
3/4 x 3/4	.049	.443		.109	2.70
	.065	.557		.120	2.94
	.072	.649		.180	4.17
	.083	.753		.250	5.40
	.120	1.028	2 1/2 x 2 1/2	.095	3.03
7/8 x 7/8	.065	.716		.109	3.44
1 x 1	.049	.627		.120	3.76
	.065	.814		.180	5.40
	.072	.893		.250	7.10
	.083	1.010	2.53 x 2.53	.238	7.56
	.095	1.140	3 x 3	.095	3.67
	.109	1.250		.109	4.18
	.120	1.390		.120	4.57
1 1/4 x 1 1/4	.049	.762		.180	6.62
	.065	1.040		.250	8.80
	.072	1.140		.313	10.58
	.083	1.300		.375	12.16
	.095	1.470	3 1/2 x 3 1/2	.109	4.92
	.109	1.620		.120	5.39
	.120	1.800		.180	7.84
	.180	2.340		.250	10.50
1 1/2 x 1 1/2	.065	1.260		.313	12.70
	.072	1.380		.375	14.70
	.083	1.580	4 x 4	.095	4.97
	.095	1.790		.109	5.66
	.109	1.990		.120	6.21
	.120	2.210		.180	9.07
	.180	3.130		.250	12.20
	.250	4.250		.313	14.80
1 3/4 x 1 3/4	.095	2.138		.375	17.30
	.120	2.660		.500	21.60
			4 1/2 x 4 1/2	.180	10.29
				.250	13.90

* Available in some sizes only

Processing: See pages 93, 94

TUBING

FARWEST STEEL CORPORATION

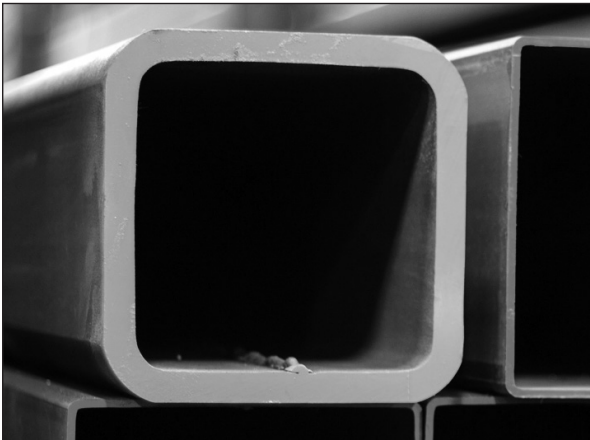


SQUARE TUBING

Standard Length — 20', 24', 32'*, 40', 48'*, 56'*

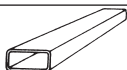
Nominal Size	Wall Thickness	Weight Per Foot	Nominal Size	Wall Thickness	Weight Per Foot
5 x 5.....	.120	7.84	8 x 8	.180	18.90
	.180	11.50		.250	25.80
	.250	15.60		.313	31.80
	.313	19.10		.375	37.70
	.375	22.40		.500	48.80
	.500	28.40	10 x 10	.250	32.60
6 x 6.....	.180	14.00		.313	40.30
	.250	19.00		.375	47.90
	.313	23.30		.500	62.40
	.375	27.50	12 x 12	.250	39.40
	.500	35.20		.313	48.80
7 x 7.....	.180	16.40		.375	58.00
	.250	22.40		.500	76.00
	.313	27.60			
	.375	32.60			
	.500	42.00			

*Available in some sizes only



Processing: See pages 93, 94

FARWEST STEEL CORPORATION



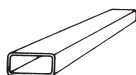
RECTANGULAR TUBING

Standard Length — 20', 24', 40'

Nominal Size	Wall Thickness	Weight Per Foot	Nominal Size	Wall Thickness	Weight Per Foot
1 x 1/2.....	.049	.443	3 x 2.....	.083	2.67
	.065	.577		.095	3.03
1 1/2 x 3/4.....	.065	.898		.109	3.44
	.072	1.020		.120	3.76
	.083	1.160		.180	5.40
	.120	1.640		.250	7.10
1 1/2 x 1.....	.065	1.010	3 1/2 x 2 1/2.....	.180	6.90
	.072	1.140		.250	9.35
	.083	1.300	4 x 1 1/2.....	.120	4.16
	.095	1.470	4 x 2.....	.083	3.23
2 x 1.....	.120	1.800		.095	3.67
	.065	1.260		.109	4.18
	.072	1.380		.120	4.57
	.083	1.580		.180	6.62
	.095	1.790		.250	8.80
	.109	1.990		.313	10.56
2 x 1 1/2.....	.120	2.210		.375	12.16
	.180	2.950	4 x 3.....	.095	4.32
	.065	1.490		.109	4.92
	.095	2.138		.120	5.39
2 1/2 x 1 1/2.....	.120	2.660		.180	7.84
	.083	2.100		.250	10.50
	.095	2.380		.313	12.70
	.109	2.700		.375	14.70
	.120	2.940	5 x 2.....	.109	4.92
	.180	4.320		.120	5.39
3 x 1.....	.065	1.690		.180	7.84
	.072	1.840		.250	10.50
	.083	2.100	5 x 3.....	.313	12.70
	.095	2.380		.375	14.70
	.109	2.700		.120	6.21
	.120	3.050		.180	9.07
3 x 1 1/2.....	.180	4.320		.250	12.20
	.072	2.090		.313	14.80
	.083	2.390	5 x 4.....	.375	17.30
	.095	2.700		.500	21.62
	.109	3.070		.180	10.29
	.120	3.350		.250	14.45
	.180	4.780			
	.250	6.250			

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



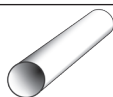
RECTANGULAR TUBING

Standard Length — 20', 24', 40'

Nominal Size	Wall Thickness	Weight Per Foot	Nominal Size	Wall Thickness	Weight Per Foot
6 x 2	.109	5.66	8 x 6	.180	16.40
	.120	6.21		.250	22.40
	.180	9.07		.313	27.60
	.250	12.20		.375	32.60
	.313	14.80		.500	42.00
6 x 3	.375	17.30	9 x 7	.180	19.60
	.120	7.02		.250	26.35
	.180	10.30	10 x 2	.180	13.90
	.250	13.90		.250	19.00
	.313	16.90	10 x 3	.250	20.72
6 x 4	.375	19.80		.180	16.40
	.500	25.03	10 x 4	.250	22.40
	.120	7.84		.313	27.60
	.180	11.50		.375	32.60
	.250	15.60		.500	42.10
7 x 4	.313	19.10	10 x 6	.250	25.80
	.375	22.40		.313	31.80
	.500	28.40		.375	37.60
7 x 5	.180	12.70	10 x 8	.500	48.80
	.250	17.30		.250	29.75
	.313	21.20		.375	43.99
	.375	24.90		.500	57.80
8 x 2	.180	14.00	12 x 2	.180	16.70
	.250	19.00		.250	22.95
	.313	23.30	12 x 4	.180	19.60
	.375	27.50		.250	25.80
	.500	35.20		.313	31.80
8 x 3	.180	11.50	12 x 6	.375	37.70
	.250	15.60		.500	48.90
	.313	19.10		.250	29.20
	.375	22.40		.313	36.10
8 x 4	.180	12.70		.375	42.80
	.250	17.30	12 x 8	.500	55.70
	.313	21.20		.250	32.60
	.375	24.90		.313	40.30
	.180	14.00		.375	47.90
	.250	19.00		.500	62.40
	.313	23.30			
	.375	27.50			
	.500	35.20			

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



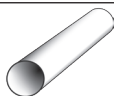
ROUND TUBING

Standard Length — 20', 24'

Nominal Size	Wall Thickness	Weight Per Foot	Nominal Size	Wall Thickness	Weight Per Foot
1/2	.047	.236	1 7/16	.075	1.091
	.065	.302	1 1/2	.034	.548
5/8	.034	.211		.047	.759
	.042	.262		.060	.923
	.047	.301		.075	1.141
	.060	.362		.083	1.256
3/4	.034	.267		.095	1.355
	.042	.318		.120	1.769
	.047	.367	1 5/8	.034	.594
	.060	.442		.047	.825
	.075	.541		.060	1.003
7/8	.034	.314		.075	1.242
	.042	.374		.095	1.475
	.047	.432		.120	1.929
	.060	.522	1 3/4	.047	.890
	.075	.641		.060	1.083
	.083	.702		.075	1.342
1	.034	.361		.083	1.475
	.042	.430		.095	1.596
	.047	.498		.120	2.089
	.060	.602	1 7/8	.047	.956
	.075	.741		.060	1.164
	.083	.813			
	.095	.875			
	.120	1.128			
1 1/8	.047	.563			
	.060	.682			
1 1/4	.034	.454			
	.047	.629			
	.060	.763			
	.075	.941			
	.083	1.034			
	.095	1.115			
	.120	1.448			
1 3/8	.047	.694			
	.060	.843			
	.075	1.041			

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



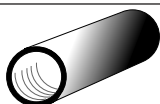
ROUND TUBING

Standard Length — 20', 24'

Nominal Size	Wall Thickness	Weight Per Foot	Nominal Size	Wall Thickness	Weight Per Foot
2.....	.047	1.021	4.....	.065	2.732
	.060	1.243		.120	4.97
	.075	1.542	5.....	.250	12.68
	.083	1.699		.313	15.67
	.095	1.836		.375	18.52
	.120	2.409			
2 ¹ / ₈	.047	1.086	6.....	.188	11.67
	.060	1.323		.250	15.35
				.313	19.02
2 ¹ / ₄	.047	1.152		.375	22.53
	.060	1.403		.500	29.37
	.075	1.740			
	.083	1.921			
	.095	2.183			
	.120	2.730			
2 ³ / ₈	.060	1.485			
2 ¹ / ₂	.047	1.283			
	.060	1.564			
	.075	1.942			
	.083	2.143			
	.120	3.051			
2 ⁵ / ₈	.047	1.30			
	.060	1.779			
3.....	.047	1.544			
	.060	1.884			
	.075	2.343			
	.083	2.586			
	.095	2.797			
	.120	3.691			
3 ¹ / ₄	.047	1.675			
	.065	2.211			
3 ¹ / ₂	.065	2.385			

Processing: See pages 93, 94

FARWEST STEEL CORPORATION



PIPE — SPECIFICATIONS

A53

Chemical Analysis:

ASTM	Carbon	Manganese	Phosphorus	Sulphur
A53 Grade A	.25 max	0.95 max	.05 max	.06 max
A53 Grade B	.30 max	1.20 max	.05 max	.06 max

Mechanical Properties:

ASTM	Tensile Strength PSI	Yield Strength PSI	% Elongation in 2"
A53 Grade A	48,000 min	30,000 min	Varies
A53 Grade B	60,000 min	35,000 min	Varies

STANDARD BUNDLING SCHEDULE

Size	Pieces Per Lift	Size	Pieces Per Lift
1/2"	21' 120	OR	
3/4"	21' 84		
1"	21' 60		
1 1/4"	21' 42		
1 1/2"	21' 36		
2"	21' 26		
2 1/2"	21' 18		
3"	21' 14	3"	40' 7
3 1/2"	21' 11	3 1/2"	40' 6
4"	21' 10	4"	40' 7
5"	21' 7	5"	40' 4
6"	21' 7	6"	40' 4
8"	21' 4	8"	40' 1

PIPE

Processing: See pages 93, 94

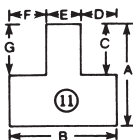
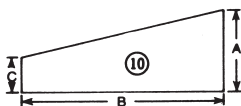
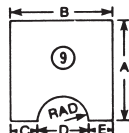
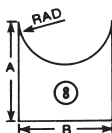
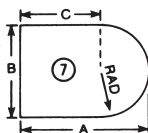
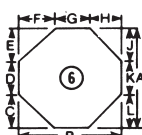
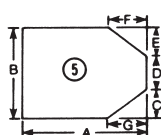
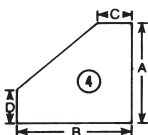
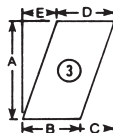
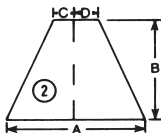
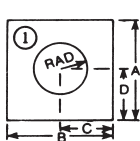
FARWEST STEEL CORPORATION

A.S.A. PIPE SCHEDULE

Pipe Size, Inches	O.D.	5		10		20		30		40		Std.		60		80		E.H.		100		120		140		160		Dbl.		
		Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	Wall	Wt.	
1/8	.405	.035	1383	.049	1863			.068	2447	.068	2447					.095	3145	.095	3145											
1/4	.540	.049	2570	.065	3297			.088	4248	.088	4248					.119	5351	.119	5351											
3/8	.675	.049	3276	.065	4235			.091	5676	.091	5676					.126	7388	.126	7388											
1/2	.840	.065	5380	.083	6710			.109	8510	.109	8510					.147	10888	.147	10888											
3/4	1.050	.065	6838	.083	8572			.113	1131	.113	1131					.154	1474	.154	1474											
1	1.315	.065	8678	.109	1404			.133	1679	.133	1679					.179	2172	.179	2172											
1 1/4	1.660	.065	1107	.109	1806			.140	2273	.140	2273					.191	2997	.191	2997											
1 1/2	1.900	.065	1274	.109	2085			.145	2718	.145	2718					.200	3631	.200	3631											
2	2.375	.065	1604	.109	2638			.154	3653	.154	3653					.218	5022	.218	5022											
2 1/2	2.875	.083	2475	.120	3531			.203	5793	.203	5793					.276	7661	.276	7661											
3	3.500	.083	3029	.120	4332			.216	7576	.216	7576					.300	1025	.300	1025											
3 1/2	4.000	.083	3472	.120	4973			.226	9109	.226	9109					.318	1250	.318	1250											
4	4.500	.083	3915	.120	5613			.237	1079	.237	1079					.337	1498	.337	1498											
4 1/2	5.000							.247	1253																					
5	5.563	.1096	349	.134	7770			.258	1462	.258	1462					.375	2078	.375	2078											
6	6.625	.109	7585	.134	9289			.280	1837	.280	1837					.432	285	.432	285											
7	7.625							.301	2357																					
8	8.625	.109	9914	.148	1340			.322	2855	.322	2855					.500	4339	.500	4339											
9	9.625							.342	3390																					
10	10.750	.134	1519	.165	1870			.365	4048	.365	4048					.5474	593	.5474	593											
11	11.750							.375	4555																					
12	12.750	.165	2218	.180	2420			.406	5353	.375	4956					.7315	687	.8851	500											
14	14.000							.438	6337	.375	5457					.8491	750	1061	500											
16	16.000							.500	8277	.375	6258					.1075	843	1365	500											
18	18.000							.562	1048	.375	7059					.138.2	937	1708	500											
20	20.000							.593	1229	.375	7860					.1664	1031	2089	500											
24	24.000							.687	1712	.375	9462					.968	2381	1218	2964	500										

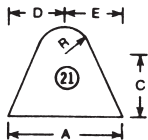
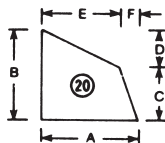
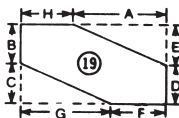
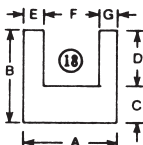
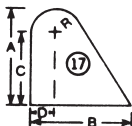
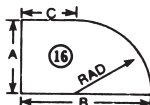
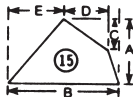
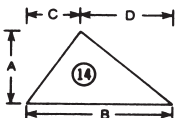
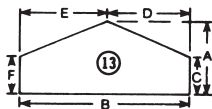
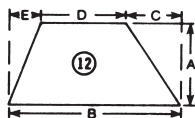
FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR PLATE PATTERN CUTTING



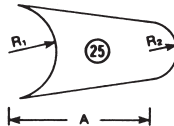
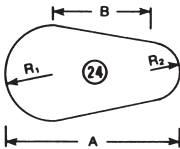
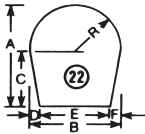
FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR PLATE PATTERN CUTTING



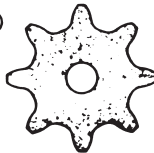
FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR PLATE PATTERN CUTTING



1. CHAIN OR SPROCKET NO
2. PITCH AND ROLL DIA.
3. LENGTH THROUGH BORE

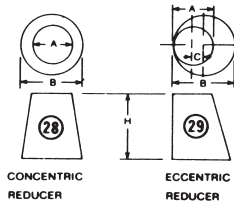
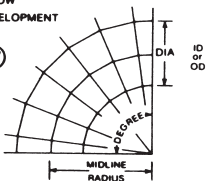
26



4. HUB OD
5. BORE DIAMETER
6. SPROCKET FACE

ELBOW
DEVELOPMENT

27



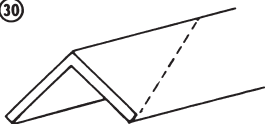
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REDUCER

ECCENTRIC
REDUCER

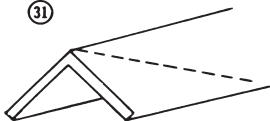
FARWEST STEEL CORPORATION

**TELEPHONE ORDER METHOD
FOR SAW CUTTING**

30

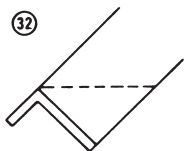


31

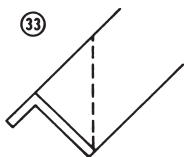


EQUAL LEG ANGLE

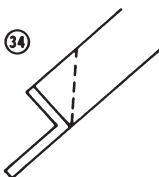
32



33

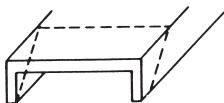


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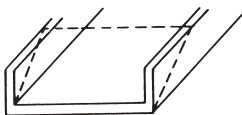


UNEQUAL LEG ANGLE

35

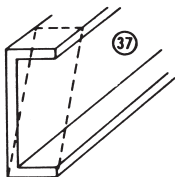


36



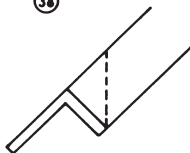
CHANNEL

37



CHANNEL

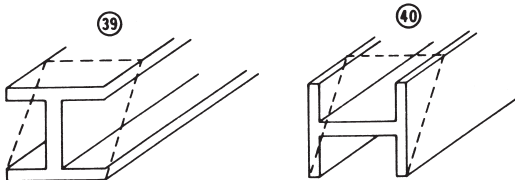
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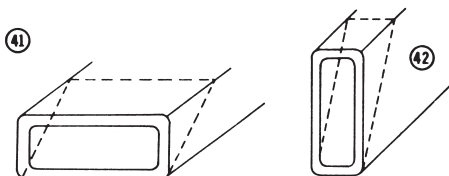
UNEQUAL LEG ANGLE

FARWEST STEEL CORPORATION

**TELEPHONE ORDER METHOD
FOR SAW CUTTING**



W F O R I B E A M

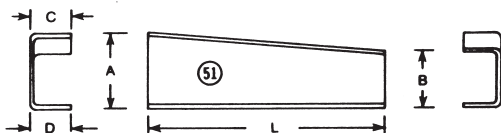
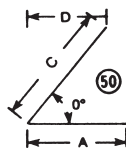
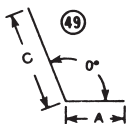
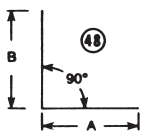
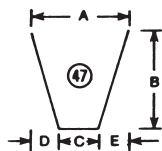
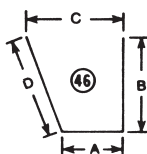
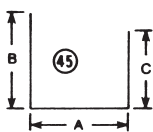
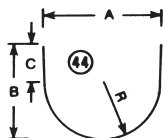
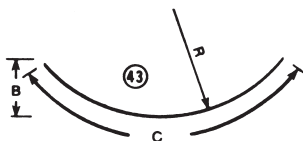


RECTANGULAR TUBE



FARWEST STEEL CORPORATION

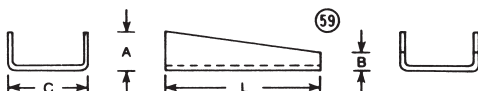
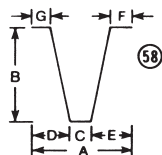
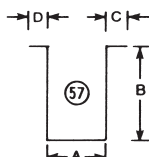
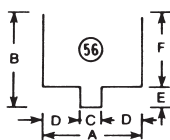
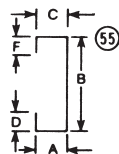
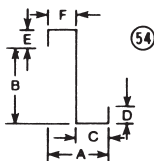
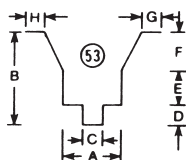
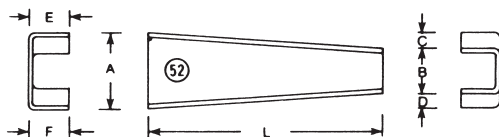
TELEPHONE ORDER METHOD FOR FORMING



Note: Dimension should be given as I.D.

FARWEST STEEL CORPORATION

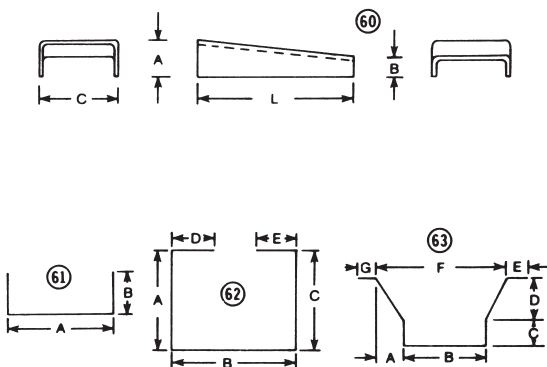
TELEPHONE ORDER METHOD FOR FORMING



Note: Dimension should be given as I.D.

FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR FORMING



Note: Dimension should be given as I.D.

FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR ROLLING

TEES



BEAMS



ANGLES



ANGLES



CHANNELS

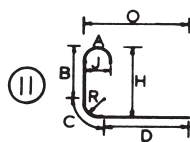
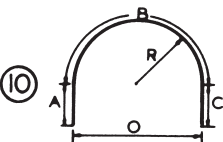
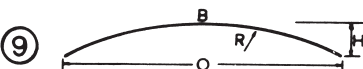
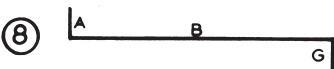
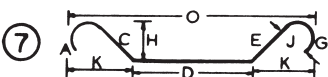
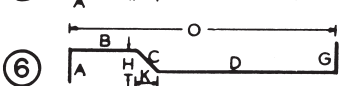
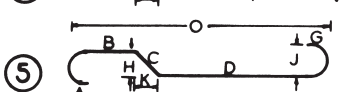
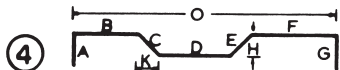
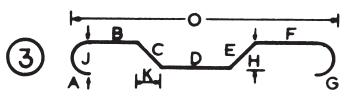
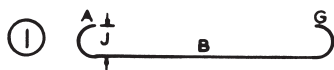


BARS



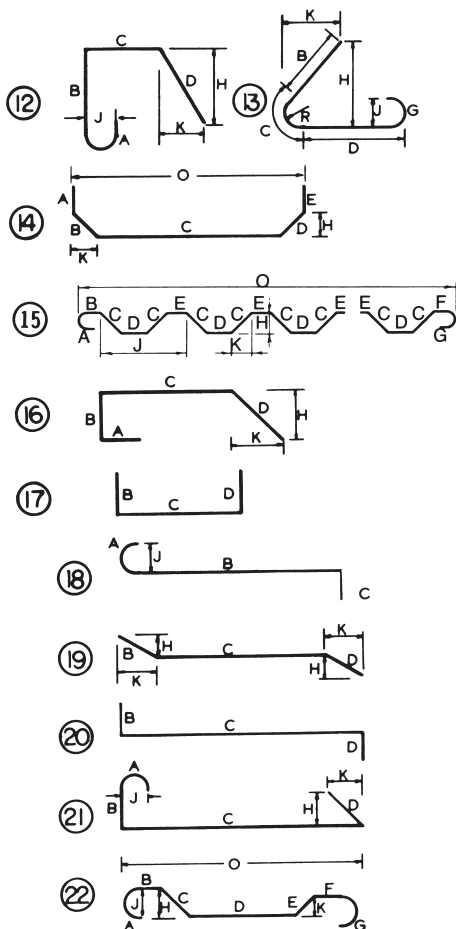
FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR BAR BENDING



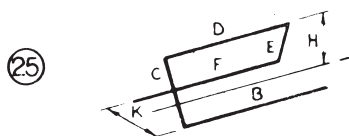
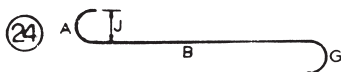
FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR BAR BENDING

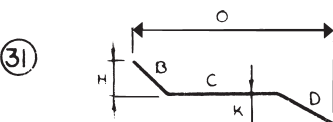
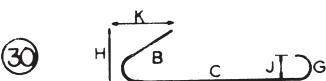
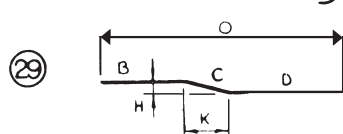
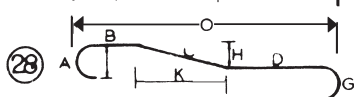
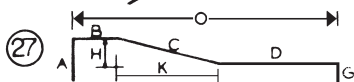
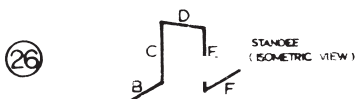


FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR BAR BENDING

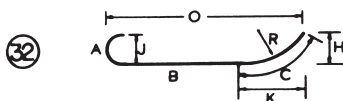


ISOMETRIC VIEW



FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR BAR BENDING



③①



③②



③③



③④



③⑤



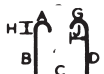
③⑥



③⑦



③⑧



③⑨



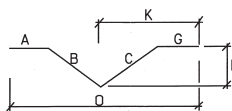
③⑩



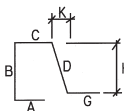
③⑪



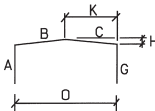
③⑫



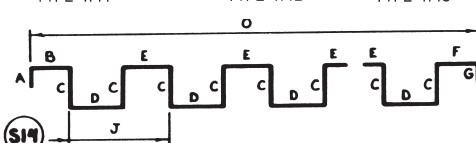
TYPE H41



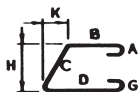
TYPE H42



TYPE H43



③⑭



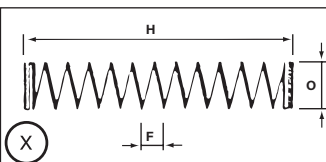
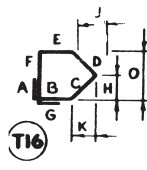
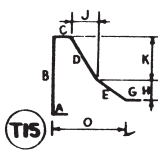
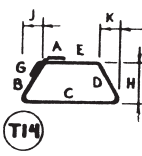
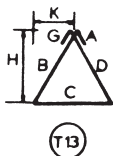
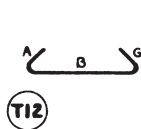
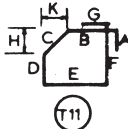
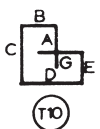
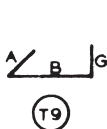
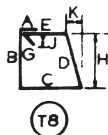
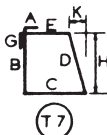
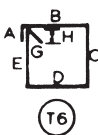
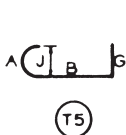
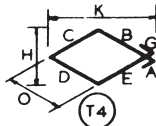
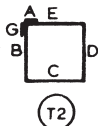
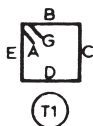
③⑬



③⑮

FARWEST STEEL CORPORATION

TELEPHONE ORDER METHOD FOR BAR BENDING



SPIRAL NOTES:

J = TURNS AT 'F' SPACING

K = EXTRA TURNS (HALF T. & B.)

(XL) PLAIN SPIRAL WITH SPACERS LOOSE.

(XM) PLAIN SPIRAL WITH SPACERS MOUNTED.

FARWEST STEEL CORPORATION

FRACTION AND DECIMAL CHART

$1/64$	.015625	$33/64$	.515625
$1/32$	.03125	$17/32$	.53125
$3/64$	.046875	$35/64$	.546875
$1/16$	.0625	$9/16$	.5625
$5/64$	.078125	$37/64$	.578125
$3/32$	.09375	$19/32$	.59375
$7/64$	.109375	$39/64$	.609375
$1/8$	.125	$5/8$	.625
$9/64$	.140625	$41/64$	.640625
$5/32$	.15625	$21/32$	.65625
$11/64$	.171875	$43/64$	.671875
$3/16$	.1875	$11/16$	.6875
$13/64$	.203125	$45/64$	.703125
$7/32$	.21875	$23/32$	.71875
$15/64$	.234375	$47/64$	.734375
$1/4$	.250	$3/4$...	.750
$17/64$	.265625	$49/64$	.765625
$9/32$	.28125	$25/32$	.78125
$19/64$	.296875	$51/64$	.796875
$5/16$	.3125	$13/16$	.8125
$21/64$	.328125	$53/64$	.828125
$11/32$	.34375	$27/32$	.84375
$23/64$	.359375	$55/64$	.859375
$3/8$	.375	$7/8$	.875
$25/64$	.390625	$57/64$	.890625
$13/32$	.40625	$29/32$	.90625
$27/64$	.421875	$59/64$	.921875
$7/16$	.4375	$15/16$	.9375
$29/64$	.453125	$61/64$	.953125
$15/32$	.46875	$31/32$	.96875
$31/64$	.484375	$63/64$	.984375
$1/2$	.500	1.....	1.000

FARWEST STEEL CORPORATION

CONVERTING INCHES INTO DECIMALS OF A FOOT

Inches	Decimal of a Ft.	Inches	Decimal of a Ft.	Inches	Decimal of a Ft.	Inches	Decimal of a Ft.
0.....	.000000	3".....	.250000	6".....	.500000	9".....	.750000
1/16....	.005208	1/16....	.255208	1/16....	.505208	1/16....	.755208
1/8.....	.010416	1/8.....	.260416	1/8.....	.510416	1/8.....	.760416
3/16....	.015625	3/16....	.265625	3/16....	.515625	3/16....	.765625
1/4.....	.020833	1/4.....	.270833	1/4.....	.520833	1/4.....	.770833
5/16....	.026042	5/16....	.276042	5/16....	.526042	5/16....	.776042
3/8.....	.031250	3/8.....	.281250	3/8.....	.531250	3/8.....	.781250
7/16....	.036458	7/16....	.286458	7/16....	.536458	7/16....	.786458
1/2.....	.041666	1/2.....	.291666	1/2.....	.541666	1/2.....	.791666
9/16....	.046875	9/16....	.296875	9/16....	.546875	9/16....	.796875
5/8.....	.052083	5/8.....	.302083	5/8.....	.552083	5/8.....	.802083
11/16...	.057292	11/16...	.307292	11/16...	.557292	11/16...	.807292
3/4.....	.062500	3/4.....	.312500	3/4.....	.562500	3/4.....	.812500
13/16...	.067708	13/16...	.317708	13/16...	.567708	13/16...	.817708
7/8.....	.072916	7/8.....	.322916	7/8.....	.572916	7/8.....	.822916
15/16...	.078125	15/16...	.328125	15/16...	.578125	15/16...	.828125
1".....	.083333	4".....	.333333	7".....	.583333	10".....	.833333
1/16....	.088542	1/16....	.338542	1/16....	.588542	1/16....	.838542
1/8.....	.093750	1/8.....	.343750	1/8.....	.593750	1/8.....	.843750
3/16....	.098958	3/16....	.348958	3/16....	.598958	3/16....	.848958
1/4.....	.104166	1/4.....	.354166	1/4.....	.604166	1/4.....	.854166
5/16....	.109375	5/16....	.359375	5/16....	.609375	5/16....	.859375
3/8.....	.114583	3/8.....	.364583	3/8.....	.614583	3/8.....	.864583
7/16....	.119792	7/16....	.369792	7/16....	.619792	7/16....	.869792
1/2.....	.125000	1/2.....	.375000	1/2.....	.625000	1/2.....	.875000
9/16....	.130208	9/16....	.380208	9/16....	.630208	9/16....	.880208
5/8.....	.135416	5/8.....	.385416	5/8.....	.635416	5/8.....	.885416
11/16...	.140625	11/16...	.390625	11/16...	.640625	11/16...	.890625
3/4.....	.145833	3/4.....	.395833	3/4.....	.645833	3/4.....	.895833
13/16...	.151042	13/16...	.401042	13/16...	.651042	13/16...	.901042
7/8.....	.156250	7/8.....	.406250	7/8.....	.656250	7/8.....	.906250
15/16...	.161458	15/16...	.411458	15/16...	.661458	15/16...	.911458
2".....	.166666	5".....	.416666	8".....	.666666	11".....	.916666
1/16....	.171875	1/16....	.421875	1/16....	.671875	1/16....	.921875
1/8.....	.177083	1/8.....	.427083	1/8.....	.677083	1/8.....	.927083
3/16....	.182292	3/16....	.432292	3/16....	.682292	3/16....	.932292
1/4.....	.187500	1/4.....	.437500	1/4.....	.687500	1/4.....	.937500
5/16....	.192708	5/16....	.442708	5/16....	.692708	5/16....	.942708
3/8.....	.197906	3/8.....	.447916	3/8.....	.697916	3/8.....	.947916
7/16....	.203175	7/16....	.453125	7/16....	.703125	7/16....	.953125
1/2.....	.208333	1/2.....	.458333	1/2.....	.708323	1/2.....	.958333
9/16....	.213542	9/16....	.463542	9/16....	.713542	9/16....	.963542
5/8.....	.218750	5/8.....	.468750	5/8.....	.718750	5/8.....	.968750
11/16...	.223958	11/16...	.473958	11/16...	.723958	11/16...	.973958
3/4.....	.229166	3/4.....	.479166	3/4.....	.729166	3/4.....	.979166
13/16...	.234375	13/16...	.484375	13/16...	.734375	13/16...	.984375
7/8.....	.239583	7/8.....	.489583	7/8.....	.739583	7/8.....	.989583
15/16...	.244792	15/16...	.494792	15/16...	.744792	15/16...	.994792

SERVICES

HIGH DEFINITION CUTTING



Farwest's HyDefinition Plasma Profiling System is designed to provide customers shorter lead times, increased capacity and larger part sizes while lowering part costs.

CONTOUR HIGH DEFINITION BEVELING

FLAME CUTTING



Oxy Fuel cutting machines enable Farwest Steel to offer a broad range of processed plate products.

Farwest stocks up to 12" thick, with equipment capable of cutting a single piece 83' long, or multiple parts utilizing a 9 torch configuration.

ZINC POWDER MARKING

F/C SPROCKETS

CUT-TO-LENGTH PLATE AND SHEET

(continued)

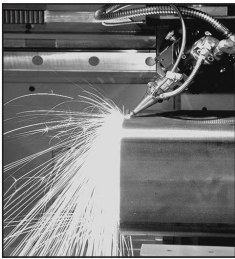
PLASMA PUNCH WITH SERVO DRILL

The CNC programmable Whitney Plasma Punch Fabricating System features a 75-ton hydraulic punch, the Truecut Plasma Cutting System, and a servo drill with tapping capabilities.

SAWCUTTING—MITRE OR SQUARE

Square or Mitre cutting with a 60° tilt capability.

TUBE AND STRUCTURAL LASER PROCESSING



Laser processing of tube, pipe, bar, shapes, custom shapes and extrusions is a cost-saving specialty of Farwest Steel.

3-D Laser Processing replaces multiple operations such as sawing, grinding, machining, drilling and punching with one operation.

FLAT LASER CUTTING

With cutting envelope of 13' x 89'.

AUTOMATED DESLAG & EDGE CONDITIONING

ADVANCED PROCESSING

- Forming (up to 54')
- Welding (including robotic)
- Kitting

PARTS STOCKING PROGRAM

On qualifying parts. Please inquire with your salesperson.

Conversion Factors

To Metric	To Imperial
1/8 inch = 3.175 mm	
1 inch = 25.4 mm	1 mm = 0.0394 inches
1 foot = 304.8 mm	1 meter = 3.2808 feet
1000 ft. ² = 92.903 m ²	100 m ² = 1076.39 ft ²
1000 ft. ³ = 28.317 m ³	10 m ³ = 353.14 ft ³
1000 gal. = 3.784 m ³	10 m ³ = 2641.73 gal.
1 pound = 0.4536 kg	1 kg = 2.2046 pounds
1 psf = 4.88243 kg/m ²	10 kg/m ² = 2.048 psf
1 pcf = 16.019 kg/m ³	10 kg/m ³ = 0.624 pcf
short ton = 907.18 kg (2000 lbs.)	0.90718 = 2000 pounds tonne
long ton = 1016 kg (2240 lbs.)	1 tonne = 2204.6 pounds
1000 psi = 6.8948 MPa	1 MPa = 145.0368 psi
Newton (N) = kg·m/s ² = kilograms x 9.80665 Pascal (Pa) = N/m ²	

