

**Miscellaneous Shapes**  
**Single Angles**  
**CAFCO 300, 300ES, 300SB, 400**

ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour	3-Hour	4-Hour
L 8 x 8 x 1-1/8	1.80	203 x 203 x 29	106.2	73.3	3/8	9/16	3/4	1-1/8	1-7/16
x 1	1.62	x 25	95.6	81.5	3/8	9/16	13/16	1-3/16	1-5/8
x 7/8	1.43	x 22	84.4	92.3	7/16	11/16	7/8	1-5/16	1-3/4
x 3/4	1.24	x 19	73.2	106.5	1/2	3/4	1	1-1/2	1-15/16
x 5/8	1.04	x 16	61.4	126.9	9/16	13/16	1-1/8	1-5/8	2-1/8
x 9/16	0.94	x 14	55.5	140.4	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.84	x 13	49.6	157.1	9/16	13/16	1-1/8	1-5/8	2-1/8
L8 x 6 x 1	1.60	203 x 152 x 25	94.4	82.5	3/8	9/16	13/16	1-3/16	1-5/8
x 7/8	1.41	x 22	83.2	93.6	7/16	11/16	7/8	1-5/16	1-3/4
x 3/4	1.22	x 19	72.0	108.2	1/2	3/4	1	1-1/2	2
x 5/8	1.03	x 16	60.8	128.2	9/16	13/16	1-1/8	1-5/8	2-1/8
x 9/16	0.93	x 14	54.9	141.9	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.83	x 13	49.0	159.0	9/16	13/16	1-1/8	1-5/8	2-1/8
x 7/16	0.73	x 11	43.1	180.8	5/8	15/16	1-1/4	1-13/16	2-5/16
L8 x 4 x 1	1.58	203 x 102 x 25	93.2	83.5	3/8	9/16	13/16	1-1/4	1-5/8
x 7/8	1.40	x 22	82.6	94.3	1/2	11/16	15/16	1-3/8	1-13/16
x 3/4	1.21	x 19	71.4	109.1	1/2	3/4	1	1-1/2	2
x 5/8	1.03	x 16	60.8	128.2	9/16	13/16	1-1/8	1-5/8	2-1/8
x 9/16	0.92	x 14	54.3	143.5	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.82	x 13	48.4	161.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.73	x 11	43.1	180.8	5/8	15/16	1-1/4	1-13/16	2-5/16
L7 x 4 x 3/4	1.20	178 x x102 x 19	70.8	110.0	1/2	3/4	1	1-1/2	2
x 5/8	1.01	x 16	59.6	130.7	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.82	x 13	48.4	161.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.72	x 11	42.5	183.3	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.62	x 9.5	36.6	212.9	11/16	1	1-5/16	1-7/8	2-3/8
L6 x 6 x 1	1.58	152 x 152 x 25	93.2	83.5	3/8	9/16	13/16	1-1/4	1-5/8
x 7/8	1.39	x 22	82.0	95.0	1/2	11/16	15/16	1-3/8	1-13/16
x 3/4	1.21	x 19	71.4	109.1	1/2	3/4	1	1-1/2	2
x 5/8	1.02	x 16	60.2	129.4	9/16	13/16	1-1/8	1-5/8	2-1/8
x 9/16	0.92	x 14	54.3	143.5	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.82	x 13	48.4	161.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.72	x 11	42.5	183.3	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.62	x 9.5	36.6	212.9	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.52	x 7.9	30.7	253.8	13/16	1-1/8	1-7/16	2	2-9/16
L6 x 4 x 7/8	1.37	152 x 102 x 22	80.8	96.4	1/2	11/16	15/16	1-3/8	1-13/16
x 3/4	1.19	x 19	70.2	110.9	1/2	3/4	1	1-1/2	2
x 5/8	1.00	x 16	59.0	132.0	9/16	13/16	1-1/8	1-5/8	2-1/8
x 9/16	0.90	x 14	53.1	146.7	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.80	x 13	47.2	165.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.71	x 11	41.9	185.9	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61	x 9.5	36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
L6 x 3.5 x 1/2	0.81	152 x 89 x 13	47.8	163.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61	x 9.5	36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16

**Miscellaneous Shapes**  
**Single Angles**  
**CAFCO 300, 300ES, 300SB, 400**

ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour	3-Hour	4-Hour
L5 x 5 x 7/8	1.38	127 x 127 x 22	81.4	95.7	1/2	11/16	15/16	1-3/8	1-13/16
x 3/4	1.20	x 19	70.8	110.0	1/2	3/4	1	1-1/2	2
x 5/8	1.02	x 16	60.2	129.4	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.82	x 13	48.4	161.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.72	x 11	42.5	183.3	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.62	x 9.5	36.6	212.9	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.52	x 7.9	30.7	253.8	13/16	1-1/8	1-7/16	2	2-9/16
L5 x 3.5 x 3/4	1.18	127 x 89 x 19	69.6	111.9	1/2	3/4	1	1-1/2	2
x 5/8	1.00	x 16	59.0	132.0	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.81	x 13	47.8	163.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61	x 9.5	36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L5 x 3 x 1/2	0.81	127 x 76 x 13	47.8	163.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.71	x 11	41.9	185.9	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61	x 9.5	36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L4 x 4 x 3/4	1.17	102 x 102 x 19	69.0	112.8	9/16	13/16	1-1/16	1-9/16	2-1/16
x 5/8	0.99	x 16	58.6	132.8	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.80	x 13	47.2	165.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.70	x 11	41.3	188.6	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61	x 9.5	36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L4 x 3.5 x 1/2	0.79	109 x 89 x 13	46.6	167.1	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.60	x 9.5	35.4	220.0	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L4 x 3 x 5/8	0.97	102 x 76 x 16	57.2	136.1	9/16	13/16	1-1/8	1-5/8	2-1/8
x 1/2	0.79	x 13	46.6	167.1	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.60	x 9.8	35.4	220.0	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.50	x 7.9	29.5	264.0	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L3.5 x 3.5 x 1/2	0.80	89 x 89 x 13	47.2	165.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.71	x 11	41.9	185.9	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61	x 9.5	36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.42	x 6.4	24.8	314.3	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L3.5 x 3 x 1/2	0.80	89 x 76 x 13	47.2	165.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.71	x 11	41.9	185.9	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61	x 9.5	36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.52	x 7.9	30.7	253.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.42	x 6.4	24.8	314.3	15/16	1-1/4	1-9/16	2-1/8	2-11/16

**Miscellaneous Shapes**  
**Single Angles**  
**CAFCO 300, 300ES, 300SB, 400**

ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour	3-Hour	4-Hour
L3.5 x 2.5 x 1/2	0.80	89 x 64 x 13	47.2	165.0	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.61		36.0	216.4	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L3 x 3 x 1/2	0.79	76 x 76 x 13	46.6	167.1	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.70	x 11	41.3	188.6	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.60	x 9.5	35.4	220.0	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L3 x 2.5 x 1/2	0.79	76 x 64 x 13	46.6	167.1	5/8	15/16	1-1/4	1-13/16	2-5/16
x 7/16	0.70	x 11	41.3	188.6	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.60	x 9.5	35.4	220.0	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L3 x 2 x 1/2	0.78	76 x 51 x 13	46.0	169.2	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.60	x 9.5	35.4	220.0	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.51	x 7.9	30.1	258.8	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L2.5 x 2.5 x 1/2	0.77	64 x 64 x 13	45.4	171.4	5/8	15/16	1-1/4	1-13/16	2-5/16
x 3/8	0.59	x 9.5	34.8	223.7	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.50	x 7.9	29.5	264.0	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.40	x 6.4	23.6	330.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L2.5 x 2 x 3/8	0.59	64 x 51 x 9.5	34.8	223.7	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.50	x 7.9	29.5	264.0	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.41	x 6.4	24.2	322.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16
L2 x 2 x 3/8	0.58	51 x 51 x 9.5	34.2	227.6	11/16	1	1-5/16	1-7/8	2-3/8
x 5/16	0.49	x 7.9	28.9	269.4	13/16	1-1/8	1-7/16	2	2-9/16
x 1/4	0.40	x 6.4	23.6	330.0	15/16	1-1/4	1-9/16	2-1/8	2-11/16