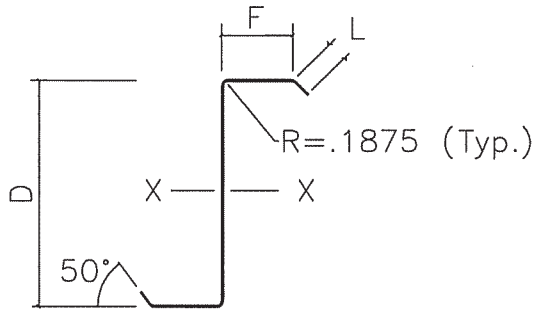
"Z" Shape Effective Section Properties

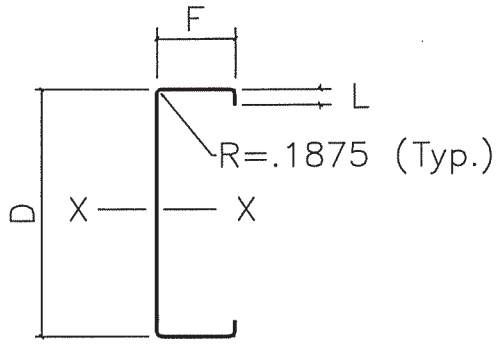


Section Size (D×F)	Ga.	L in	Weight lb/ft	Area in²	Properties of Fully Braced Section					
					I_x	S_e	R_x	I_y	S_y	R_y
4×2.5	16	.71	1.91	0.56	1.36	0.62	1.65	1.11	0.38	1.40
4×2.5	14	.75	2.52	0.74	1.83	0.86	1.64	1.49	0.51	1.42
6×2.5	16	.71	2.29	0.67	3.45	1.07	2.40	1.11	0.38	1.28
6×2.5	14	.75	3.02	0.89	4.65	1.46	2.39	1.49	0.51	1.29
8×2.5	16	.71	2.67	0.78	6.58	1.51	3.10	1.11	0.38	1.19
8×2.5	14	.75	3.53	1.04	9.14	2.17	3.09	1.49	0.51	1.20
8×2.5	12	.80	4.86	1.43	13.35	3.35	3.08	2.09	0.70	1.21
8×3.5	16	.71	3.05	0.90	7.17	1.52	3.22	2.59	0.66	1.70
8×3.5	14	.75	4.03	1.18	10.44	2.37	3.21	3.46	0.88	1.71
8×3.5	12	.80	5.55	1.63	15.04	3.51	3.20	4.83	1.22	1.72
10×2.5	16	.71	3.05	0.90	10.60	1.87	3.78	1.11	0.38	1.11
10×2.5	14	.75	4.03	1.18	15.40	2.91	3.77	1.49	0.51	1.12
10×2.5	12	.80	5.55	1.63	22.95	4.56	3.76	2.08	0.70	1.13
10×3.5	14	.75	4.53	1.33	17.05	3.04	3.92	3.46	0.88	1.61
10×3.5	12	.80	6.25	1.84	25.36	4.77	3.91	4.83	1.22	1.62
12×2.5	14	.75	4.53	1.33	22.70	3.44	4.43	1.49	0.51	1.06
12×2.5	12	.80	6.25	1.84	35.65	5.90	4.42	2.08	0.70	1.06
12×3.5	14	.75	5.04	1.48	25.10	3.64	4.60	3.46	0.88	1.53
12×3.5	12	.80	6.94	2.04	39.13	6.16	4.59	4.83	1.22	1.54
14×3.0	14	.75	5.29	1.55	33.53	4.14	5.18	2.34	0.68	1.23
14×3.0	12	.80	7.29	2.14	53.27	7.27	5.17	2.72	0.94	1.23

Notes:
1) Properties are computed in accordance with the 1986 edition of the AISI specification.
2) I_x is for deflection determination, S_e is for bending, S_y and I_y are for full section.

Effective Date: February 10, 1998

"C" Shape Effective Section Properties



Section Size (D×F)	Ga.	L in	Weight lb/ft	Area in²	Properties of Fully Braced Section					
					I_x	S_e	R_x	I_y	S_y	R_y
4×2.5	16	.83	1.91	0.56	1.38	0.65	1.63	0.52	0.34	0.96
4×2.5	14	.88	2.52	0.74	1.89	0.93	1.61	0.68	0.45	0.96
6×2.5	16	.83	2.29	0.67	3.54	1.12	2.37	0.60	0.35	0.94
6×2.5	14	.88	3.02	0.89	4.84	1.58	2.36	0.79	0.47	0.94
8×2.5	16	.83	2.67	0.78	6.86	1.62	3.08	0.66	0.36	0.91
8×2.5	14	.88	3.53	1.04	9.53	2.33	3.07	0.87	0.48	0.91
8×2.5	12	.96	4.86	1.43	13.43	3.36	3.05	1.19	0.67	0.91
8×3.5	16	.83	3.05	0.90	7.54	1.66	3.20	1.48	0.61	1.28
8×3.5	14	.88	4.03	1.18	10.72	2.48	3.19	1.97	0.81	1.28
8×3.5	12	.96	5.55	1.63	15.16	3.57	3.17	2.69	1.12	1.28
10×2.5	16	.83	3.05	0.90	11.08	2.01	3.76	0.70	0.37	0.88
10×2.5	14	.88	4.03	1.18	16.25	3.19	3.75	0.93	0.49	0.88
10×2.5	12	.96	5.55	1.63	22.94	4.59	3.73	1.28	0.69	0.88
10×3.5	14	.88	4.53	1.33	17.70	3.24	3.90	2.10	0.83	1.25
10×3.5	12	.96	6.25	1.84	25.60	4.86	3.88	2.89	1.15	1.25
12×3.5	14	.88	5.04	1.48	26.09	3.86	4.58	2.21	0.84	1.22
12×3.5	12	.96	6.94	2.04	39.51	6.27	4.57	3.06	1.17	1.22
14×3.0	14	.88	5.29	1.55	34.71	4.38	5.16	1.59	0.67	1.01
14×3.0	12	.95	7.29	2.14	56.09	7.92	5.14	2.17	0.93	1.01

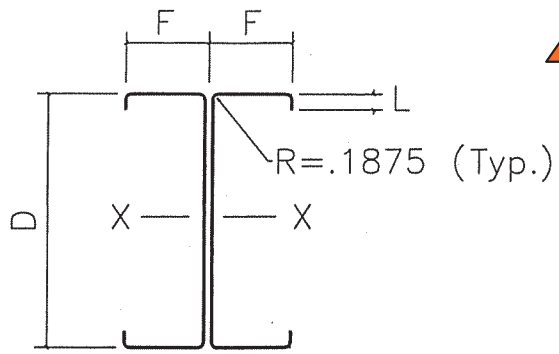
Notes:

1) Properties are computed in accordance with the 1986 edition of the AISI specification.

2) I_x is for deflection determination, S_e is for bending, S_y and I_y are for full section.

Effective Date: February 10, 1998

"Double C" Shape
Effective Section Properties

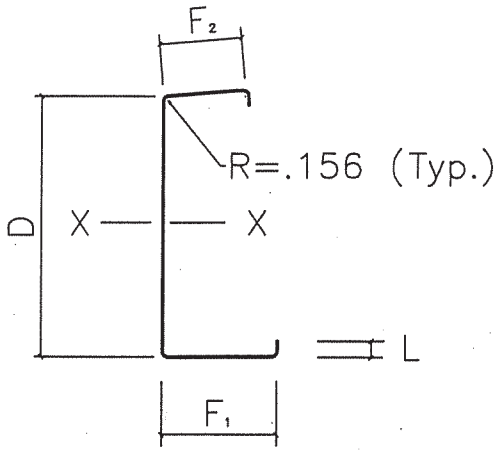


Section Size (D×F)	Ga.	L in	Weight lb/ft	Area in²	Properties of Fully Braced Section					
					I_x	S_e	R_x	I_y	S_y	R_y
4×2.5	16	.83	3.81	1.12	2.76	1.31	1.63	2.08	0.83	1.36
4×2.5	14	.88	5.04	1.48	3.79	1.85	1.61	2.78	1.11	1.37
6×2.5	16	.83	4.57	1.34	7.08	2.25	2.37	2.08	0.83	1.24
6×2.5	14	.88	6.05	1.78	9.69	3.16	2.36	2.78	1.11	1.25
8×2.5	16	.83	5.34	1.57	13.72	3.24	3.08	2.08	0.83	1.15
8×2.5	14	.88	7.05	2.07	19.06	4.67	3.07	2.78	1.11	1.16
8×2.5	12	.96	9.72	2.86	26.87	6.72	3.05	3.91	1.56	1.17
8×3.5	16	.83	6.10	1.79	15.08	3.31	3.20	5.00	1.43	1.67
8×3.5	14	.88	8.06	2.37	21.44	4.96	3.19	6.68	1.91	1.68
8×3.5	12	.96	11.11	3.26	30.33	7.15	3.17	9.37	2.68	1.69
10×2.5	16	.83	6.10	1.79	22.15	4.02	3.76	2.08	0.83	1.08
10×2.5	14	.88	8.06	2.37	32.50	6.38	3.75	2.78	1.11	1.08
10×2.5	12	.96	11.11	3.26	45.89	9.18	3.73	3.91	1.56	1.09
10×3.5	14	.88	9.07	2.66	35.41	6.49	3.90	6.68	1.91	1.58
10×3.5	12	.96	12.50	3.67	51.19	9.71	3.88	9.38	2.68	1.60
12×3.5	14	.88	10.07	2.96	52.17	7.72	4.58	6.68	1.91	1.50
12×3.5	12	.96	13.89	4.08	79.01	12.54	4.57	9.38	2.68	1.51
14×3.0	14	.88	10.58	3.10	69.48	8.77	5.16	4.44	1.48	1.19
14×3.0	12	.95	14.58	4.28	112.17	15.84	5.14	6.23	2.07	1.20

Notes:
1) Properties are computed in accordance with the 1986 edition of the AISI specification.
2) I_x is for deflection determination, S_e is for bending, S_y and I_y are for full section.

Effective Date: February 10, 1998

Eave Strut Effective Section Properties



Section Size ($D \times F_1 \times F_2$)	Ga.	L in	Weight lb/ft	Area in²	Properties of Fully Braced Section					
					I_x	S_e	R_x	I_y	S_y	R_y
1/12 Slope on top flange										
6.25×5×3	14	1.09	3.99	1.17	6.526	1.968	2.605	3.246	0.943	1.662
8.25×5×3	14	1.09	4.50	1.32	12.271	2.853	3.353	3.551	0.983	1.638
8.25×5×3	12	1.16	6.20	1.82	17.773	4.069	3.338	4.889	1.361	1.638
10.25×5×3	14	1.09	5.00	1.47	20.099	3.557	4.074	3.794	1.013	1.606
10.25×5×3	12	1.16	6.89	2.03	29.273	5.457	4.060	5.228	1.402	1.606
12.25×5×2.5	14	0.90	5.28	1.55	26.372	4.054	4.698	3.538	0.892	1.509
12.25×5×2.5	12	0.97	7.28	2.14	40.440	6.297	4.685	4.882	1.237	1.510
4/12 Slope on top flange										
6.25×5×3	14	1.07	3.99	1.17	7.473	1.895	2.755	3.220	0.930	1.656
8.25×5×3	14	1.07	4.50	1.32	13.503	2.749	3.489	3.516	0.969	1.630
8.25×5×3	12	1.13	6.20	1.82	19.527	3.957	3.476	4.841	1.340	1.629
10.25×5×3	14	1.07	5.00	1.47	21.571	3.502	4.198	3.752	0.997	1.597
10.25×5×3	12	1.13	6.89	2.03	31.444	5.294	4.186	5.169	1.380	1.597
12.25×5×2.5	14	.88	5.28	1.55	27.152	3.669	4.783	3.503	0.881	1.501
12.25×5×2.5	12	.95	7.28	2.14	42.245	6.119	4.773	4.832	1.220	1.502

Notes:
1) Properties are computed in accordance with the 1986 edition of the AISI specification.
2) I_x is for deflection determination, S_e is for bending, S_y and I_y are for full section.

Effective Date: February 10, 1998