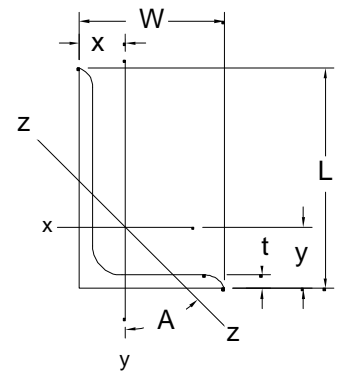
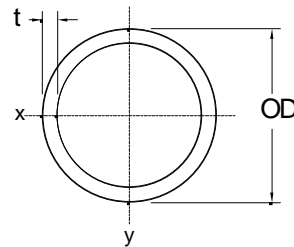
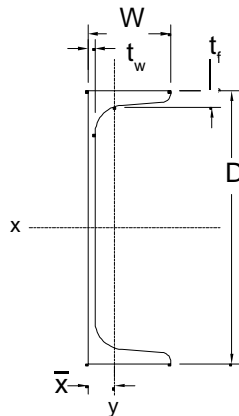
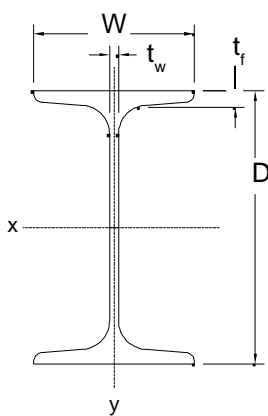
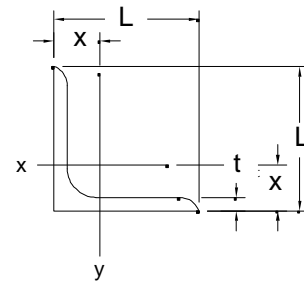
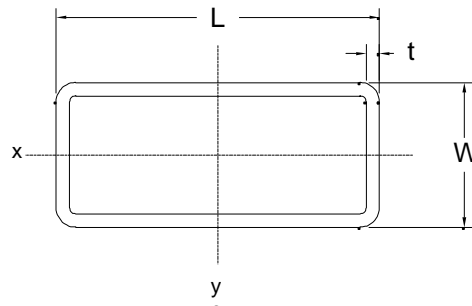
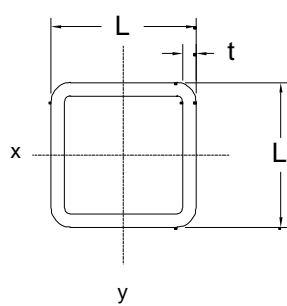


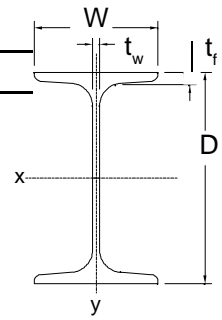
Steel Selection Tables

Compression and Shear Area

- Wide Flange Beams
- S Shapes
- Channels
- Pipe Sizes
- Square Tubing
- Rectangular Tubing
- Angles with Equal Legs
- Angles with Unequal Legs



Wide Flange Beams



Nominal Size	Designation	Comp Area Inches ²	Shear Area Inches ²	D Depth	t _w Web Thick	t _f Flange Thick	W Flange Width
36" x 16.5"	W36 x 300	88.30	34.719	36.74	0.945	1.680	16.655
	W36 x 280	82.40	32.320	36.52	0.885	1.570	16.595
	W36 x 260	76.50	30.458	36.26	0.840	1.440	16.550
	W36 x 245	72.10	28.864	36.08	0.800	1.350	16.510
	W36 x 230	67.60	27.284	35.90	0.760	1.260	16.470
36" x 12"	W36 x 210	61.80	30.453	36.69	0.830	1.360	12.180
	W36 x 194	57.00	27.915	36.49	0.765	1.260	12.115
	W36 x 182	53.60	26.339	36.33	0.725	1.180	12.075
	W36 x 170	50.00	24.596	36.17	0.680	1.100	12.030
	W36 x 160	47.00	23.407	36.01	0.650	1.020	12.000
	W36 x 150	44.20	22.406	35.85	0.625	0.940	11.975
	W36 x 135	39.70	21.330	35.55	0.600	0.790	11.950
33" x 15.75"	W33 x 241	70.90	28.369	34.18	0.830	1.400	15.860
	W33 x 221	65.00	24.296	33.93	0.775	1.275	15.805
	W33 x 201	59.10	24.081	33.68	0.715	1.150	15.745
33" x 11.5"	W33 x 152	44.70	21.266	33.49	0.635	1.055	11.565
	W33 x 141	41.60	20.146	33.30	0.605	0.960	11.535
	W33 x 130	38.30	19.192	33.09	0.580	0.855	11.510
	W33 x 118	34.70	18.073	32.86	0.550	0.740	11.480
30" x 15"	W30 x 211	62.00	23.979	30.94	0.775	1.315	15.105
	W30 x 191	56.10	21.783	30.68	0.710	1.185	15.040
	W30 x 173	50.80	19.938	30.44	0.655	1.065	14.985
30" x 10.5"	W30 x 132	38.90	18.641	30.31	0.615	1.000	10.545
	W30 x 124	36.50	17.649	30.17	0.585	0.930	10.515
	W30 x 116	34.20	16.956	30.01	0.565	0.850	10.495
	W30 x 108	31.70	16.257	29.83	0.545	0.760	10.475
	W30 x 99	29.10	15.418	29.65	0.520	0.670	10.450
27" x 14"	W27 x 178	52.30	20.162	27.81	0.725	1.190	14.085
	W27 x 161	47.40	18.209	27.59	0.660	1.080	14.020
	W27 x 146	42.90	16.565	27.38	0.605	0.975	13.965
27" x 10"	W27 x 114	33.50	15.555	27.29	0.570	0.930	10.070
	W27 x 102	30.00	13.951	27.09	0.515	0.830	10.015
	W27 x 94	27.70	13.191	26.92	0.490	0.745	9.990
	W27 x 84	24.80	12.287	26.71	0.460	0.640	9.960
24" x 12.75"	W24 x 162	47.70	17.625	25.00	0.705	1.220	12.955
	W24 x 146	43.00	16.081	24.74	0.650	1.090	12.900
	W24 x 131	38.50	14.810	24.48	0.605	0.960	12.855
	W24 x 117	34.40	13.343	24.26	0.550	0.850	12.800
	W24 x 104	30.60	12.030	24.06	0.500	0.750	12.750
24" x 9"	W24 x 94	27.70	12.520	24.31	0.515	0.875	9.065
	W24 x 76	22.40	10.525	23.92	0.440	0.680	8.990
	W24 x 68	20.10	9.848	23.73	0.415	0.585	8.965

Steel Selection Tables

Wide Flange Beams

Nominal Size	Designation	Comp Area Inches ²	Shear Area Inches ²	D Depth	t _w Web Thick	t _f Flange Thick	W Flange Width
24" x 7"	W24 x 62	18.20	10.208	23.74	0.430	0.590	7.040
	W24 x 55	16.20	9.310	23.57	0.395	0.505	7.005
21" x 12.25"	W21 x 147	43.20	15.883	22.06	0.720	1.150	12.510
	W21 x 132	38.80	14.190	21.83	0.650	1.035	12.440
	W21 x 111	32.70	11.831	21.51	0.550	0.875	12.340
	W21 x 101	29.80	10.680	21.36	0.500	0.800	12.290
21" x 8.25"	W21 x 93	27.30	12.540	21.62	0.580	0.930	8.420
	W21 x 83	24.30	11.036	21.43	0.515	0.835	8.355
	W21 x 73	21.50	9.664	21.24	0.455	0.740	8.295
	W21 x 68	20.00	9.086	21.13	0.430	0.685	8.270
	W21 x 62	18.30	8.396	20.99	0.400	0.615	8.240
21" x 6.5"	W21 x 57	16.70	8.529	21.06	0.405	0.650	6.555
	W21 x 50	14.70	7.915	20.83	0.380	0.535	6.530
	W21 x 44	13.00	7.231	20.66	0.350	0.450	6.500
18" x 11"	W18 x 119	35.10	12.425	18.97	0.655	1.060	11.265
	W18 x 106	31.10	11.051	18.73	0.590	0.940	11.200
	W18 x 97	28.50	9.945	18.59	0.535	0.870	11.145
	W18 x 86	25.30	8.827	18.39	0.480	0.770	11.090
	W18 x 76	22.30	7.739	18.21	0.425	0.680	11.035
18" x 7.5"	W18 x 71	20.80	9.143	18.47	0.495	0.810	7.635
	W18 x 65	19.10	8.258	18.35	0.450	0.750	7.590
	W18 x 60	17.60	7.570	18.24	0.415	0.695	7.555
	W18 x 55	16.20	7.063	18.11	0.390	0.630	7.530
	W18 x 50	14.70	6.386	17.99	0.355	0.570	7.495
18" x 6"	W18 x 46	13.50	6.502	18.06	0.360	0.605	6.060
	W18 x 40	11.80	5.639	17.90	0.315	0.525	6.015
	W18 x 35	10.30	5.310	17.70	0.300	0.425	6.000
16" x 10.25"	W16 x 100	29.40	9.927	16.97	0.585	0.985	10.425
	W16 x 89	26.20	8.794	16.75	0.525	0.875	10.365
	W16 x 77	22.60	7.517	16.52	0.455	0.760	10.295
	W16 x 67	19.70	6.450	16.33	0.395	0.665	10.235
16" x 7"	W16 x 57	16.80	7.065	16.43	0.430	0.715	7.120
	W16 x 50	14.70	6.179	16.26	0.380	0.630	7.070
	W16 x 40	11.80	4.883	16.01	0.305	0.505	6.995
	W16 x 36	10.60	4.679	15.86	0.295	0.430	6.985
16" x 5.5"	W16 x 31	9.12	4.367	15.88	0.275	0.440	5.525
	W16 x 26	7.68	3.923	15.69	0.250	0.345	5.500
14" x 16"	W14 x 730	215.00	68.829	22.42	3.070	4.910	17.890
	W14 x 665	196.00	61.241	21.64	2.830	4.520	17.650
	W14 x 605	178.00	54.287	20.92	2.595	4.160	17.415
	W14 x 550	162.00	48.171	20.24	2.380	3.820	17.200
	W14 x 500	147.00	42.924	19.60	2.190	3.500	17.010

Steel Selection Tables

Wide Flange Beams

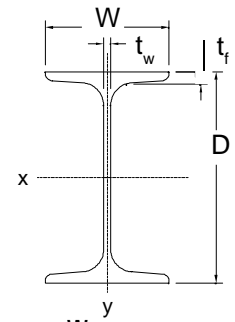
Nominal Size	Designation	Comp Area Inches ²	Shear Area Inches ²	D Depth	t _w Web Thick	t _f Flange Thick	W Flange Width
14" x 16"	W14 x 455	134.00	38.325	19.02	2.015	3.210	16.835
	W14 x 426	125.00	35.006	18.67	1.875	3.035	16.695
	W14 x 398	117.00	32.373	18.29	1.770	2.845	16.590
	W14 x 370	109.00	29.658	17.92	1.655	2.660	16.475
	W14 x 342	101.00	27.012	17.54	1.540	2.470	16.360
	W14 x 311	91.40	24.139	17.12	1.410	2.260	16.230
	W14 x 283	83.30	21.595	16.74	1.290	2.070	16.110
	W14 x 257	75.60	19.247	16.38	1.175	1.890	15.995
	W14 x 233	68.50	17.163	16.04	1.070	1.720	15.890
	W14 x 211	62.00	15.406	15.72	0.980	1.560	15.800
	W14 x 193	56.80	13.777	15.48	0.890	1.440	15.710
	W14 x 176	51.80	12.633	15.22	0.830	1.310	15.650
	W14 x 159	46.70	11.160	14.98	0.745	1.190	15.565
	W14 x 145	42.70	10.050	14.78	0.680	1.090	15.500
14" x 14.5"	W14 x 132	38.80	9.456	14.66	0.645	1.030	14.725
	W14 x 120	35.30	8.543	14.48	0.590	0.940	14.670
	W14 x 109	32.00	7.518	14.32	0.525	0.860	14.605
	W14 x 99	29.10	6.868	14.16	0.485	0.780	14.565
	W14 x 90	26.50	6.169	14.02	0.440	0.710	14.520
14" x 10"	W14 x 82	24.10	7.298	14.31	0.510	0.855	10.130
	W14 x 68	20.00	5.827	14.04	0.415	0.720	10.035
	W14 x 61	17.90	5.209	13.89	0.375	0.645	9.995
14" x 8"	W14 x 53	15.60	5.150	13.92	0.370	0.660	8.060
	W14 x 48	14.10	4.689	13.79	0.340	0.595	8.030
	W14 x 43	12.60	4.166	13.66	0.305	0.530	7.995
14" x 6.75"	W14 x 38	11.20	4.371	14.10	0.310	0.515	6.770
	W14 x 34	10.00	3.984	13.98	0.285	0.455	6.745
	W14 x 30	8.85	3.737	13.84	0.270	0.385	6.730
14" x 5"	W14 x 26	7.69	3.547	13.91	0.255	0.420	5.025
	W14 x 22	6.49	3.160	13.74	0.230	0.335	5.000
12" x 12"	W12 x 190	55.80	15.243	14.38	1.060	1.735	12.670
	W12 x 170	50.00	13.469	14.03	0.960	1.560	12.570
	W12 x 152	44.70	11.928	13.71	0.870	1.400	12.480
	W12 x 136	39.90	10.594	13.41	0.790	1.250	12.400
	W12 x 120	35.30	9.315	13.12	0.710	1.105	12.320
	W12 x 106	31.20	7.863	12.89	0.610	0.990	12.220
	W12 x 96	28.20	6.991	12.71	0.550	0.900	12.160
	W12 x 87	25.60	6.453	12.53	0.515	0.810	12.125
	W12 x 79	23.20	5.819	12.38	0.470	0.735	12.080
	W12 x 72	21.10	5.268	12.25	0.430	0.670	12.040
	W12 x 65	19.10	4.727	12.12	0.390	0.605	12.000
12" x 10"	W12 x 58	17.00	4.388	12.19	0.360	0.640	10.010
	W12 x 53	15.60	4.161	12.06	0.345	0.575	9.995
12" x 8"	W12 x 50	14.70	4.510	12.19	0.370	0.640	8.080
	W12 x 45	13.20	4.040	12.06	0.335	0.575	8.045
	W12 x 40	11.80	3.522	11.94	0.295	0.515	8.005

Steel Selection Tables

Wide Flange Beams

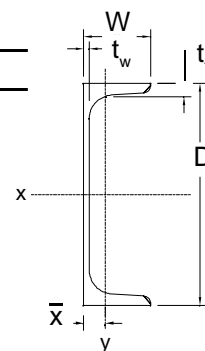
Nominal Size	Designation	Comp Area Inches ²	Shear Area Inches ²	D Depth	t _w Web Thick	t _f Flange Thick	W Flange Width
12" x 6.5"	W12 x 35	10.30	3.750	12.50	0.300	0.520	6.560
	W12 x 30	8.79	3.208	12.34	0.260	0.440	6.520
	W12 x 26	7.65	2.811	12.22	0.230	0.380	6.490
12" x 4"	W12 x 22	6.48	3.201	12.31	0.260	0.425	4.030
	W12 x 19	5.57	2.858	12.16	0.235	0.350	4.005
	W12 x 16	4.71	2.638	11.99	0.220	0.265	3.990
	W12 x 14	4.16	2.382	11.91	0.200	0.225	3.970
10" x 10"	W10 x 112	32.90	8.577	11.36	0.755	1.250	10.415
	W10 x 100	29.40	7.548	11.10	0.680	1.120	10.340
	W10 x 88	25.90	6.558	10.84	0.605	0.990	10.265
	W10 x 77	22.60	5.618	10.60	0.530	0.870	10.190
	W10 x 68	20.00	4.888	10.40	0.470	0.770	10.130
	W10 x 54	15.80	3.733	10.09	0.370	0.615	10.030
	W10 x 49	14.40	3.393	9.98	0.340	0.560	10.000
10" x 8"	W10 x 45	13.30	3.535	10.10	0.350	0.620	8.020
	W10 x 39	11.50	3.125	9.92	0.315	0.530	7.985
	W10 x 33	9.71	2.822	9.73	0.290	0.435	7.960
10" x 5.75"	W10 x 30	8.84	3.141	10.47	0.300	0.510	5.810
	W10 x 26	7.61	2.686	10.33	0.260	0.440	5.770
	W10 x 22	6.49	2.441	10.17	0.240	0.360	5.750
10" x 4"	W10 x 19	5.62	2.560	10.24	0.250	0.395	4.020
	W10 x 17	4.99	2.426	10.11	0.240	0.330	4.010
	W10 x 15	4.41	2.298	9.99	0.230	0.270	4.000
8" x 8"	W8 x 67	19.70	5.130	9.00	0.570	0.935	8.280
	W8 x 58	17.10	4.463	8.75	0.510	0.810	8.220
	W8 x 48	14.10	3.400	8.50	0.400	0.685	8.110
	W8 x 40	11.70	2.970	8.25	0.360	0.560	8.070
	W8 x 35	10.30	2.517	8.12	0.310	0.495	8.020
	W8 x 31	9.13	2.280	8.00	0.285	0.435	7.995
8" x 6.5"	W8 x 28	8.25	2.297	8.06	0.285	0.465	6.535
	W8 x 24	7.08	1.943	7.93	0.245	0.400	6.495
8" x 5.25"	W8 x 21	6.16	2.070	8.28	0.250	0.400	5.270
	W8 x 18	5.26	1.872	8.14	0.230	0.330	5.250
8" x 4"	W8 x 15	4.44	1.987	8.11	0.245	0.315	4.015
	W8 x 13	3.84	1.838	7.99	0.230	0.255	4.000
6" x 6"	W6 x 25	7.34	2.042	6.38	0.320	0.455	6.080
	W6 x 20	5.87	1.612	6.20	0.260	0.365	6.020
	W6 x 15	4.43	1.378	5.99	0.230	0.260	5.990
6" x 4"	W6 x 16	4.74	1.633	6.28	0.260	0.405	4.030
	W6 x 12	3.55	1.387	6.03	0.230	0.280	4.000

S Shapes



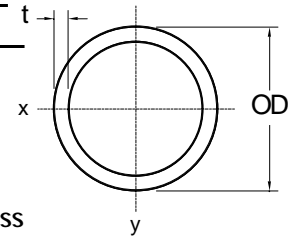
Nominal Size	Designation	Comp Area Inches ²	Shear Area Inches ²	D Depth	t _w Web Thick	t _f Flange Thick	W Flange Width
24" x 7"	S24 x 121	35.60	19.600	24.50	0.800	1.090	8.050
	S24 x 106	31.20	15.190	24.50	0.620	1.090	7.870
	S24 x 100	29.30	17.880	24.00	0.745	0.870	7.245
	S24 x 90	26.50	15.000	24.00	0.625	0.870	7.125
	S24 x 80	23.50	12.000	24.00	0.500	0.870	7.000
20" x 7"	S20 x 96	28.20	16.240	20.30	0.800	0.920	7.200
	S20 x 86	25.30	13.398	20.30	0.660	0.920	7.060
20" x 6.25"	S20 x 75	22.00	12.700	20.00	0.635	0.795	6.385
	S20 x 66	19.40	10.100	20.00	0.505	0.795	6.255
18" x 6"	S18 x 70	20.60	12.798	18.00	0.711	0.691	6.251
	S18 x 54.7	16.10	8.298	18.00	0.461	0.691	6.001
15" x 5.5"	S15 x 50	14.70	8.250	15.00	0.550	0.622	5.640
	S15 x 42.9	12.60	6.165	15.00	0.411	0.622	5.501
12" x 5.25"	S12 x 50	14.70	8.244	12.00	0.687	0.659	5.477
	S12 x 40.8	12.00	5.544	12.00	0.462	0.659	5.252
12" x 5"	S12 x 35	10.30	5.136	12.00	0.428	0.544	5.078
	S12 x 31.8	9.35	4.200	12.00	0.350	0.544	5.000
10" x 4.75"	S10 x 35	10.30	5.940	10.00	0.594	0.491	4.944
	S10 x 25.4	7.46	3.110	10.00	0.311	0.491	4.661
8" x 4"	S8 x 23	6.77	3.528	8.00	0.441	0.426	4.171
	S8 x 18.4	5.41	2.168	8.00	0.271	0.426	4.001
7" x 3.75"	S7 x 20	5.88	3.150	7.00	0.450	0.392	3.860
	S7 x 15.3	4.50	1.764	7.00	0.252	0.392	3.662
6" x 3.5"	S6 x 17.25	5.07	2.790	6.00	0.465	0.359	3.565
	S6 x 12.5	3.67	1.392	6.00	0.232	0.359	3.332
5" x 3"	S5 x 14.75	4.34	2.470	5.00	0.494	0.326	3.284
	S5 x 10	2.94	1.070	5.00	0.214	0.326	3.004
4" x 2.75"	S4 x 9.5	2.79	1.304	4.00	0.326	0.293	2.796
	S4 x 7.7	2.26	0.772	4.00	0.193	0.293	2.663
3" x 2.5"	S3 x 7.5	2.21	1.047	3.00	0.349	0.260	2.509
	S3 x 5.7	1.67	0.510	3.00	0.170	0.260	2.330

Channels



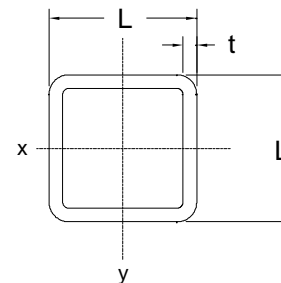
Designation	Comp Area Inches ²	Shear Area Inches ²	D Depth	t _w Web Thick	t _f Flange Thick	W Flange Width	\bar{X} Dimension
C15 x 50	14.70	10.740	15.00	0.716	0.650	3.716	0.798
C15 x 40	11.80	7.800	15.00	0.520	0.650	3.520	0.777
C15 x 33.9	9.96	6.000	15.00	0.400	0.650	3.400	0.787
C12 x 30	8.82	6.120	12.00	0.510	0.501	3.170	0.674
C12 x 25	7.35	4.644	12.00	0.387	0.501	3.047	0.674
C12 x 20.7	6.09	3.384	12.00	0.282	0.501	2.942	0.698
C10 x 30	8.82	6.730	10.00	0.673	0.436	3.033	0.649
C10 x 25	7.35	5.260	10.00	0.526	0.436	2.886	0.617
C10 x 20	5.88	3.790	10.00	0.379	0.436	2.739	0.606
C10 x 15.3	4.49	2.400	10.00	0.240	0.436	2.600	0.634
C9 x 20	5.88	4.032	9.00	0.448	0.413	2.648	0.583
C9 x 15	4.41	2.565	9.00	0.285	0.413	2.485	0.586
C9 x 13.4	3.94	2.097	9.00	0.233	0.413	2.433	0.601
C8 x 18.75	5.51	3.896	8.00	0.487	0.390	2.527	0.565
C8 x 13.75	4.04	2.424	8.00	0.303	0.390	2.343	0.553
C8 x 11.5	3.38	1.760	8.00	0.220	0.390	2.260	0.571
C7 x 14.75	4.33	2.933	7.00	0.419	0.366	2.299	0.532
C7 x 12.25	3.60	2.198	7.00	0.314	0.366	2.194	0.525
C7 x 9.8	2.87	1.470	7.00	0.210	0.366	2.090	0.540
C6 x 13	3.83	2.622	6.00	0.437	0.343	2.157	0.514
C6 x 10.5	3.09	1.884	6.00	0.314	0.343	2.034	0.499
C6 x 8.2	2.40	1.200	6.00	0.200	0.343	1.920	0.511
C5 x 9	2.64	1.625	5.00	0.325	0.320	1.885	0.478
C5 x 6.7	1.97	0.950	5.00	0.190	0.320	1.750	0.484
C4 x 7.25	2.13	1.284	4.00	0.321	0.296	1.721	0.459
C4 x 5.4	1.59	0.736	4.00	0.184	0.296	1.584	0.457
C3 x 6	1.76	1.068	3.00	0.356	0.273	1.596	0.455
C3 x 5	1.47	0.774	3.00	0.258	0.273	1.498	0.438
C3 x 4.1	1.21	0.510	3.00	0.170	0.273	1.410	0.436

Pipe Sizes



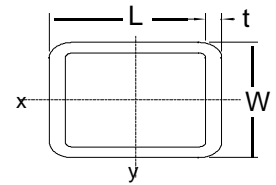
Destination	Comp Area Inches ²	OD Outside Diameter	t Thickness
16" SCH 160	72.14	16.000	1.594
16" SCH 120	56.60	16.000	1.219
16" SCH 100	48.48	16.000	1.031
16" SCH 80	40.19	16.000	0.844
16" SCH 60	31.62	16.000	0.656
16" SCH 40	24.35	16.000	0.500
14" SCH 160	55.63	14.000	1.406
14" SCH 120	44.36	14.000	1.094
14" SCH 100	38.49	14.000	0.938
14" SCH 80	31.22	14.000	0.750
14" SCH 60	25.02	14.000	0.594
14" SCH 40	18.66	14.000	0.438
12" SCH 160	47.14	12.750	1.312
12" SCH 120	36.91	12.750	1.000
12" SCH 100	31.57	12.750	0.844
12" SCH 80	26.07	12.750	0.688
12" SCH 60	21.52	12.750	0.562
12" SCH 40	15.74	12.750	0.406
10" SCH 160	34.02	10.750	1.125
10" SCH 120	26.26	10.750	0.844
10" SCH 100	22.66	10.750	0.719
10" SCH 80	18.95	10.750	0.594
10" SCH 60	16.10	10.750	0.500
10" SCH 40	11.91	10.750	0.365
8" SCH 160	21.97	8.625	0.906
8" SCH 120	17.86	8.625	0.719
8" SCH 100	14.99	8.625	0.594
8" SCH 80	12.76	8.625	0.500
8" SCH 60	10.48	8.625	0.406
8" SCH 40	8.40	8.625	0.322
6" SCH 160	13.34	6.625	0.719
6" SCH 120	10.70	6.625	0.562
6" SCH 80	8.40	6.625	0.432
6" SCH 40	5.58	6.625	0.280
4" SCH 160	6.62	4.500	0.531
4" SCH 120	5.58	4.500	0.438
4" SCH 80	4.40	4.500	0.337
4" SCH 40	3.17	4.500	0.237
3.5" SCH 80	3.68	4.000	0.318
3.5" SCH 40	2.68	4.000	0.226
3" SCH 160	4.21	3.500	0.438
3" SCH 80	3.01	3.500	0.300
3" SCH 40	2.23	3.500	0.216

Square Tubing



Size L x L	t Wall Thickness	Comp Area Inches ²	Size L x L	t Wall Thickness	Comp Area Inches ²
16" x 16"	0.500	30.4	4" x 4"	0.188	2.77
14" x 14"	0.500	26.4		0.250	3.59
12" x 12"	0.250	11.6		0.313	4.36
	0.375	17.1		0.375	5.08
	0.500	22.4		0.500	6.36
10" x 10"	0.250	9.59	3.5" x 3.5"	0.188	2.39
	0.313	11.9		0.250	3.09
	0.375	14.1		0.313	3.73
	0.500	18.4	3" x 3"	0.188	2.02
	0.625	22.4		0.250	2.59
8" x 8"	0.188	5.77		0.313	3.11
	0.250	7.59	2.5" x 2.5"	0.188	1.64
	0.313	9.36		0.250	2.09
	0.375	11.1		0.313	3.11
	0.500	14.4	2" x 2"	0.188	1.27
	0.625	17.4		0.250	1.59
7" x 7"	0.188	5.02		0.313	1.86
	0.250	6.59			
	0.375	9.58			
	0.500	12.4			
6" x 6"	0.188	4.27			
	0.250	5.59			
	0.313	6.86			
	0.375	8.08			
	0.500	10.4			
5" x 5"	0.188	3.52			
	0.250	4.59			
	0.313	5.61			
	0.375	6.58			
	0.500	8.36			
4.5" x 4.5"	0.188	3.14			
	0.250	4.09			

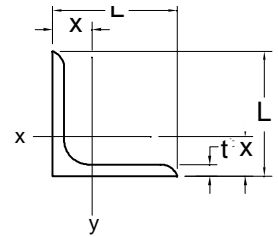
Rectangular Tubing



Size L x W	t Wall Thickness	Comp Area Inches ²
12" x 8"	0.250	9.59
	0.375	14.1
	0.500	18.4
12" x 6"	0.250	8.59
	0.375	12.6
	0.500	16.4
12" x 4"	0.250	7.59
	0.375	11.1
	0.500	14.4
12" x 2"	0.250	6.59
	0.188	5.02
10" x 8"	0.250	8.59
	0.375	12.6
	0.500	16.4
10" x 6"	0.250	7.59
	0.313	9.36
	0.375	11.1
	0.500	14.4
10" x 5"	0.250	7.09
	0.188	5.02
	0.250	6.59
	0.375	9.58
10" x 4"	0.188	5.02
	0.250	6.59
	0.375	9.58
	0.500	12.4
10" x 2"	0.188	4.27
	0.250	5.59
9" x 7"	0.250	7.59
	0.313	9.36
9" x 5"	0.375	9.58
	0.188	5.02
8" x 6"	0.188	5.02
	0.250	6.59
	0.313	8.11
	0.375	9.58
8" x 4"	0.500	12.4
	0.188	4.27
	0.250	5.59
	0.313	6.86
8" x 3"	0.375	8.08
	0.500	10.4
	0.188	3.89
	0.250	5.09
8" x 2"	0.375	7.33
	0.500	9.36
	0.188	3.52

Size L x W	t Wall Thickness	Comp Area Inches ²
8" x 2"	0.188	3.52
	0.250	4.59
	0.313	5.61
	0.375	6.58
7" x 5"	0.188	4.27
	0.250	5.59
	0.375	8.08
	0.500	10.4
7" x 4"	0.188	3.89
	0.250	5.09
	0.375	7.33
7" x 3"	0.375	6.58
	0.188	3.52
6" x 4"	0.250	4.59
	0.313	5.61
	0.375	6.58
	0.500	8.36
6" x 3"	0.188	3.14
	0.250	4.09
	0.313	4.98
	0.375	5.83
6" x 2"	0.188	2.77
	0.250	3.59
	0.313	4.36
5" x 3"	0.188	2.77
	0.250	3.59
	0.313	4.36
	0.375	5.08
5" x 2"	0.500	6.36
	0.188	2.39
	0.250	3.09
	0.313	3.73
4" x 3"	0.188	2.39
	0.250	3.09
	0.313	3.73
	0.188	2.02
4" x 2"	0.250	2.59
	0.313	3.11
	0.188	2.02
3.5" x 2.5"	0.250	2.59
	0.188	1.64
3" x 2"	0.188	1.64
	0.250	2.09

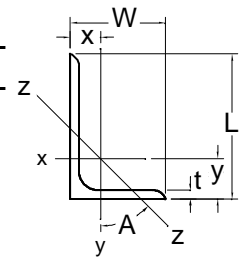
Angles with Equal Legs



Designation L x L	t Thickness	Comp Area Inches ²	x Dimension	Designation L x L	t Thickness	Comp Area Inches ²	x Dimension
8" x 8"	1.125	16.70	2.41	2" x 2"	0.375	1.36	0.64
	1.000	15.00	2.37		0.313	1.15	0.61
	0.875	13.20	2.32		0.250	0.94	0.59
	0.750	11.40	2.28		0.188	0.72	0.57
	0.625	9.61	2.23		0.125	0.48	0.55
	0.563	8.68	2.21	1.75" x 1.75"	0.250	0.81	0.53
	0.500	7.75	2.19		0.188	0.62	0.51
6" x 6"	1.000	11.00	1.86	1.5" x 1.5"	0.250	0.69	0.47
	0.875	9.73	1.82		0.188	0.53	0.44
	0.750	8.44	1.78	1.25" x 1.25"	0.250	0.56	0.40
	0.625	7.11	1.73		0.188	0.43	0.38
	0.563	6.43	1.71	1" x 1"	0.125	0.23	0.30
	0.500	5.75	1.68				
	0.438	5.06	1.66				
	0.375	4.36	1.64				
5" x 5"	0.313	3.65	1.62				
	0.875	7.98	1.57				
	0.750	6.94	1.52				
	0.625	5.86	1.48				
	0.500	4.75	1.43				
	0.438	4.18	1.41				
	0.375	3.61	1.39				
4" x 4"	0.313	3.03	1.37				
	0.750	5.44	1.27				
	0.625	4.61	1.23				
	0.500	3.75	1.18				
	0.438	3.31	1.16				
	0.375	2.86	1.14				
	0.313	2.40	1.12				
3.5" x 3.5"	0.250	1.94	1.09				
	0.500	3.25	1.06				
	0.438	2.87	1.04				
	0.375	2.48	1.01				
	0.313	2.09	0.99				
3" x 3"	0.250	1.69	0.97				
	0.500	2.75	0.93				
	0.438	2.43	0.91				
	0.375	2.11	0.89				
	0.313	1.78	0.87				
	0.250	1.44	0.84				
2.5" x 2.5"	0.188	1.09	0.82				
	0.500	2.25	0.81				
	0.375	1.73	0.76				
	0.313	1.46	0.74				
	0.250	1.19	0.72				

Steel Selection Tables

Angles with Unequal Legs



Designation L x W	t Thickness	Comp Area Inches ²	x Dimension	y Dimension	Tan A
9" x 4"	0.625	7.73	0.86	3.36	0.216
	0.563	7.00	0.83	3.33	0.218
	0.500	6.25	0.81	3.31	0.220
8" x 6"	1.000	13.0	1.65	2.65	0.543
	0.875	11.5	1.61	2.61	0.547
	0.750	9.94	1.56	2.56	0.551
	0.625	8.36	1.52	2.52	0.554
	0.563	7.56	1.50	2.50	0.556
	0.500	6.75	1.47	2.47	0.558
	0.438	5.93	1.45	2.45	0.560
8" x 4"	1.000	11.0	1.05	3.05	0.247
	0.750	8.44	0.95	2.95	0.258
	0.563	6.43	0.88	2.88	0.265
	0.500	5.75	0.86	2.86	0.267
7" x 4"	0.750	7.69	1.01	2.51	0.324
	0.625	6.48	0.96	2.46	0.329
	0.500	5.25	0.92	2.42	0.335
	0.375	3.98	0.87	2.37	0.340
6" x 4"	0.875	7.98	1.12	2.12	0.421
	0.750	6.94	1.08	2.08	0.428
	0.625	5.86	1.03	2.03	0.435
	0.563	5.31	1.01	2.01	0.438
	0.500	4.75	0.99	1.99	0.440
	0.438	4.18	0.96	1.96	0.443
	0.375	3.61	0.94	1.94	0.446
	0.313	3.03	0.92	1.92	0.448
6" x 3.5"	0.500	4.50	0.83	2.08	0.344
	0.375	3.42	0.79	2.04	0.350
	0.313	2.87	0.76	2.01	0.352
5" x 3.5"	0.750	5.81	1.00	1.75	0.464
	0.625	4.92	0.95	1.70	0.472
	0.500	4.00	0.91	1.66	0.479
	0.438	3.53	0.88	1.63	0.482
	0.375	3.05	0.86	1.61	0.486
	0.250	2.06	0.81	1.56	0.492
4" x 3.5"	0.500	3.50	1.00	1.25	0.750
	0.438	3.09	0.98	1.23	0.753
	0.375	2.67	0.96	1.21	0.755
	0.313	2.25	0.93	1.18	0.757
	0.250	1.81	0.91	1.16	0.759

Angles with Unequal Legs

Designation L x W	t Thickness	Comp Area Inches ²	x Dimension	y Dimension	Tan A
3.5" x 3"	0.500	3.00	0.88	1.13	0.714
	0.438	2.65	0.85	1.10	0.718
	0.375	2.30	0.83	1.08	0.721
	0.313	1.93	0.81	1.06	0.724
	0.250	1.56	0.79	1.04	0.727
3.5" x 2.5"	0.500	2.75	0.70	1.20	0.486
	0.438	2.43	0.68	1.18	0.491
	0.375	2.11	0.66	1.16	0.496
	0.313	1.78	0.64	1.14	0.501
	0.250	1.44	0.61	1.11	0.506
3" x 2.5"	0.500	2.50	0.75	1.00	0.667
	0.438	2.21	0.73	0.98	0.672
	0.375	1.92	0.71	0.96	0.676
	0.313	1.62	0.68	0.93	0.680
	0.250	1.31	0.66	0.91	0.684
3" x 2"	0.188	1.00	0.64	0.89	0.688
	0.500	2.25	0.58	1.08	0.414
	0.438	2.00	0.56	1.06	0.421
	0.375	1.73	0.54	1.04	0.428
	0.313	1.46	0.52	1.02	0.435
2.5" x 2"	0.250	1.19	0.49	0.99	0.440
	0.188	0.90	0.47	0.97	0.446
	0.375	1.55	0.58	0.83	0.614
	0.313	1.31	0.56	0.81	0.620
	0.250	1.06	0.54	0.79	0.626
	0.188	0.81	0.51	0.76	0.631



Steel Selection Tables



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