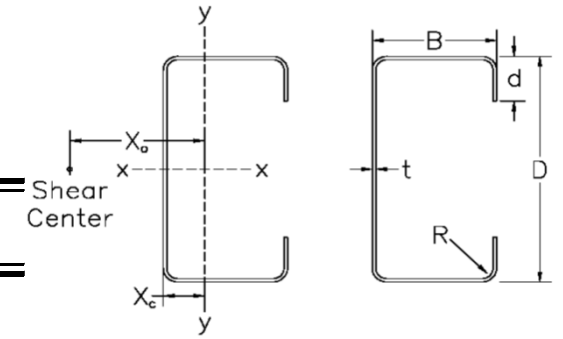




Cee Sections: Effective Section Properties



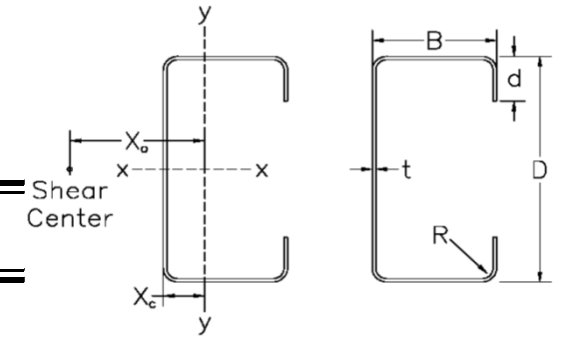
Member	Ga.	Effective Section Properties																				Web Crippling		
		Compression		Tension	Shear		Positive Moment (X Axis)				Negative Moment (X Axis)				Positive Moment (Y Axis)				Negative Moment (Y Axis)				End	Interior
		A _e (in ²)	P _a (kip)	T _a (kip)	V _{ay} (kip)	V _{ax} (kip)	M _{ax} (kip-in)	I _x (in ⁴)	S _e TOP (in ³)	S _e BOT (in ³)	M _{ax} (kip-in)	I _x (in ⁴)	S _e TOP (in ³)	S _e BOT (in ³)	M _{ay} (kip-in)	I _y (in ⁴)	S _e LEFT (in ³)	S _e RIGHT (in ³)	M _{ay} (kip-in)	I _y (in ⁴)	S _e LEFT (in ³)	S _e RIGHT (in ³)	P _a (kip)	P _a (kip)
1 3/4" Cee	16	0.298	9.11	11.44	2.66	2.57	9.30	0.321	0.252	0.261	9.30	0.321	0.261	0.252	3.68	0.082	0.172	0.092	3.68	0.082	0.172	0.092	1.22	2.14
4 x 2	12	0.921	28.13	32.85	7.40	6.13	43.06	2.278	1.139	1.139	43.06	2.278	1.139	1.139	17.08	0.550	0.720	0.445	17.08	0.550	0.720	0.445	3.15	5.82
4 x 2	14	0.555	16.97	21.66	5.03	4.29	28.46	1.564	0.782	0.782	28.46	1.564	0.782	0.782	10.96	0.371	0.501	0.295	9.54	0.352	0.448	0.290	1.49	2.53
4 x 2	16	0.442	13.51	18.13	3.84	3.67	21.70	1.323	0.659	0.664	21.70	1.323	0.659	0.664	9.10	0.314	0.428	0.248	7.88	0.283	0.345	0.239	1.08	1.77
4 x 2.5	12	1.026	31.34	36.52	7.40	8.29	49.37	2.676	1.338	1.338	49.37	2.676	1.338	1.338	23.70	0.938	0.956	0.617	23.70	0.938	0.956	0.617	3.15	5.82
4 x 2.5	14	0.549	16.78	23.97	5.03	5.73	27.34	1.733	0.830	0.907	27.34	1.733	0.830	0.907	15.18	0.630	0.659	0.408	13.14	0.592	0.583	0.399	1.49	2.53
4 x 2.5	16	0.426	13.03	20.07	3.84	4.89	22.17	1.431	0.673	0.763	22.17	1.431	0.673	0.763	12.58	0.533	0.561	0.343	10.84	0.476	0.452	0.329	1.08	1.77
4 x 3.5	12	1.054	32.19	43.50	7.40	12.63	50.08	3.224	1.521	1.715	50.08	3.224	1.521	1.715	39.23	2.112	1.474	1.022	39.23	2.112	1.474	1.022	3.15	5.82
4 x 3.5	14	0.571	17.45	28.58	5.03	8.62	29.76	2.018	0.904	1.142	29.76	2.018	0.904	1.142	25.09	1.414	1.006	0.675	21.59	1.318	0.885	0.655	1.49	2.53
4 x 3.5	16	0.442	13.50	23.96	3.84	7.32	24.03	1.659	0.730	0.961	24.03	1.659	0.730	0.961	20.80	1.193	0.854	0.567	17.77	1.061	0.692	0.540	1.08	1.77
4 x 4	12	1.069	32.66	46.96	7.40	14.79	51.62	3.426	1.567	1.889	51.62	3.426	1.567	1.889	48.10	2.926	1.758	1.253	48.10	2.926	1.758	1.253	3.15	5.82
4 x 4	14	0.575	17.58	30.88	5.03	10.06	30.45	2.131	0.925	1.257	30.45	2.131	0.925	1.257	30.76	1.957	1.197	0.828	26.41	1.820	1.053	0.802	1.49	2.53
4 x 4	16	0.442	13.50	25.90	3.84	7.69	24.41	1.742	0.741	1.056	24.41	1.742	0.741	1.056	25.50	1.651	1.015	0.695	21.74	1.468	0.826	0.660	1.08	1.77
6 x 2.5	12	1.079	32.97	43.50	11.73	8.29	84.98	6.909	2.303	2.303	84.98	6.909	2.303	2.303	24.96	1.089	1.318	0.650	21.14	1.048	1.209	0.642	3.05	5.73
6 x 2.5	14	0.564	17.25	28.58	5.41	5.73	46.67	4.422	1.417	1.536	46.67	4.422	1.417	1.536	15.96	0.729	0.909	0.430	13.37	0.620	0.638	0.406	1.42	2.48
6 x 2.5	16	0.436	13.31	23.96	3.32	4.89	38.04	3.654	1.155	1.289	38.04	3.654	1.155	1.289	13.23	0.616	0.775	0.361	10.98	0.493	0.482	0.334	1.03	1.73
6 x 3	12	1.112	33.97	46.96	11.73	10.46	86.10	7.611	2.482	2.595	86.10	7.611	2.482	2.595	32.88	1.690	1.646	0.856	27.74	1.613	1.488	0.842	3.05	5.73
6 x 3	14	0.575	17.58	30.88	5.41	7.18	48.68	4.757	1.478	1.710	48.68	4.757	1.478	1.710	21.01	1.130	1.128	0.565	17.46	0.951	0.789	0.530	1.42	2.48
6 x 3	16	0.445	13.60	25.90	3.32	6.10	39.76	3.935	1.207	1.436	39.76	3.935	1.207	1.436	17.41	0.953	0.959	0.475	14.33	0.757	0.601	0.435	1.03	1.73
6 x 3.5	12	1.107	33.82	50.42	11.73	12.63	84.05	8.085	2.552	2.855	84.05	8.085	2.552	2.855	41.61	2.455	1.988	1.084	34.98	2.327	1.778	1.062	3.05	5.73
6 x 3.5	14	0.586	17.92	33.19	5.41	8.62	50.53	5.074	1.534	1.884	50.53	5.074	1.534	1.884	26.59	1.639	1.356	0.715	21.95	1.372	0.951	0.667	1.42	2.48
6 x 3.5	16	0.451	13.78	27.85	3.32	7.32	41.02	4.179	1.246	1.580	41.02	4.179	1.580	1.246	22.03	1.382	1.152	0.601	18.00	1.093	0.729	0.547	1.03	1.73
6 x 4	12	1.122	34.29	53.88	11.73	14.79	86.59	8.554	2.629	3.115	86.59	8.554	2.629	3.115	51.14	3.399	2.347	1.332	42.85	3.203	2.083	1.301	3.05	5.73
6 x 4	14	0.591	18.04	35.49	5.41	10.06	51.70	5.338	1.570	2.053	51.70	5.338	1.570	2.053	32.68	2.268	1.596	0.879	26.85	1.890	1.124	0.815	1.42	2.48
6 x 4	16	0.451	13.78	29.79	3.32	7.69	41.71	4.376	1.266	1.720	41.71	4.376	1.266	1.720	24.16	1.903	1.354	0.734	22.01	1.509	0.866	0.668	1.03	1.73
7 x 2	12	0.988	30.20	43.50	12.17	6.13	93.90	8.691	2.483	2.483	93.90	8.691	2.483	2.483	18.16	0.670	1.145	0.473	15.34	0.635	0.998	0.466	3.00	5.69
7 x 2	14	0.575	17.57	28.58	4.71	4.29	61.15	5.881	1.680	1.680	61.15	5.881	1.680	1.680	11.64	0.450	0.798	0.313	9.74	0.374	0.510	0.296	1.40	2.46
7 x 2	16	0.454	13.86	23.96	2.81	3.67	46.46	4.953	1.411	1.420	46.46	4.953	1.411	1.411	9.65	0.380	0.683	0.263	8.01	0.296	0.379	0.243	1.01	1.71
7 x 2.5	12	1.093	33.41	46.96	12.17	8.29	104.78	9.939	2.840	2.840	104.78	9.939	2.840	2.840	25.38	1.147	1.497	0.661	21.31	1.073	1.275	0.647	3.00	5.69
7 x 2.5	14	0.569	17.37	30.88	4.71	5.73	57.53	6.346	1.747	1.885	57.53	6.346	1.747	1.885	16.23	0.767	1.033	0.437	13.43	0.628	0.654	0.408	1.40	2.46
7 x 2.5	16	0.438	13.38	25.90	2.81	4.89	46.99	5.249	1.427	1.580	46.99	5.249	1.580	1.427	13.45	0.647	0.880	0.367	11.02	0.497	0.491	0.335	1.01	1.71
7 x 3	12	1.126	34.40	50.42	12.17	10.46	105.27	10.877	3.042	3.176	105.27	10.877	3.176	3.042	33.49	1.782	1.863	0.872	27.95	1.648	1.558	0.849	3.00	5.69
7 x 3	14	0.580	17.71	33.19	4.71	7.18	59.94	6.804	1.820	2.086	59.94	6.804	1.820	2.086	21.40	1.190	1.277	0.576	17.54	0.963	0.807	0.533	1.40	2.46
7 x 3	16	0.448	13.68	27.85	2.81	6.10	49.05	5.633	1.489	1.750	49.05	5.633	1.750	1.489	17.73	1.004	1.086	0.484	14.38	0.764	0.611	0.437	1.01	1.71
7 x 3.5	12	1.121	34.26	53.88	12.17	12.63	102.88	11.517	3.124	3.476	102.88	11.517	3.476	3.124	42.45	2.592	2.243	1.106	35.25	2.375	1.854	1.070	3.00	5.69

- Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
- Material: A1011 HSLAS Grade 55 Class 1 Steel or A653 SS Grade 55 Steel
- Strength Increase due to Cold Working has been applied where applicable

- Web Crippling values are based on a 4 inch bearing length, one flange fastened to support
- Appropriate factors of safety have been applied for Allowable Stress Design (ASD)
- Strength calculations based on a fully braced condition
- Consult with an engineering professional before using the above design aids



Cee Sections: Effective Section Properties



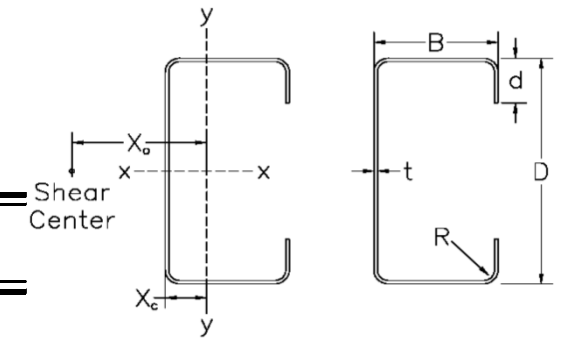
Member	Ga.	Effective Section Properties																				Web Crippling		
		Compression		Tension	Shear		Positive Moment (X Axis)				Negative Moment (X Axis)				Positive Moment (Y Axis)				Negative Moment (Y Axis)				End	Interior
		A _e (in ²)	P _a (kip)	T _a (kip)	V _{ay} (kip)	V _{ax} (kip)	M _{ax} (kip-in)	I _x (in ⁴)	S _{e TOP} (in ³)	S _{e BOT} (in ³)	M _{ax} (kip-in)	I _x (in ⁴)	S _{e TOP} (in ³)	S _{e BOT} (in ³)	M _{ay} (kip-in)	I _y (in ⁴)	S _{e LEFT} (in ³)	S _{e RIGHT} (in ³)	M _{ay} (kip-in)	I _y (in ⁴)	S _{e LEFT} (in ³)	S _{e RIGHT} (in ³)	P _a (kip)	P _a (kip)
7 x 3.5	14	0.591	18.04	35.49	4.71	8.62	62.17	7.240	1.888	2.288	62.17	7.240	1.888	2.288	27.12	1.729	1.530	0.730	22.05	1.387	0.971	0.670	1.40	2.46
7 x 3.5	16	0.453	13.85	29.79	2.81	7.32	50.19	5.944	1.524	1.917	50.19	5.944	1.917	1.524	22.47	1.457	1.299	0.613	18.07	1.102	0.739	0.549	1.01	1.71
7 x 4	12	1.136	34.72	57.34	12.17	14.79	105.95	12.162	3.217	3.778	105.95	12.162	3.778	3.217	52.24	3.591	2.639	1.361	43.19	3.266	2.165	1.311	3.00	5.69
7 x 4	14	0.595	18.17	37.80	4.71	10.06	63.60	7.605	1.931	2.484	63.60	7.605	1.931	2.484	33.37	2.394	1.794	0.898	26.97	1.909	1.145	0.819	1.40	2.46
7 x 4	16	0.453	13.85	31.73	2.81	7.69	49.88	6.137	1.515	2.082	49.88	6.137	1.515	2.082	24.45	1.997	1.524	0.743	22.09	1.520	0.877	0.671	1.01	1.71
8 x 2	12	0.999	30.52	46.96	12.17	6.13	113.56	12.012	3.003	3.003	113.56	12.012	3.003	3.003	18.38	0.697	1.282	0.479	15.41	0.646	1.041	0.468	2.96	5.65
8 x 2	14	0.578	17.66	30.88	4.08	4.29	73.77	8.109	2.027	2.027	73.77	8.109	2.027	2.027	11.77	0.468	0.895	0.317	9.77	0.378	0.520	0.297	1.37	2.44
8 x 2	16	0.455	13.92	25.90	2.44	3.67	56.01	6.824	1.701	1.711	56.01	6.824	1.711	1.701	9.76	0.395	0.766	0.266	8.03	0.299	0.385	0.244	0.99	1.70
8 x 2.5	12	1.104	33.72	50.42	12.17	8.29	125.91	13.649	3.412	3.412	125.91	13.649	3.412	3.412	25.72	1.196	1.674	0.670	21.42	1.090	1.323	0.650	2.96	5.65
8 x 2.5	14	0.572	17.47	33.19	4.08	5.73	69.19	8.704	2.101	2.257	69.19	8.704	2.257	2.101	16.44	0.800	1.156	0.442	13.47	0.633	0.665	0.409	1.37	2.44
8 x 2.5	16	0.440	13.44	27.85	2.44	4.89	55.79	7.147	1.694	1.891	55.79	7.147	1.891	1.694	13.63	0.675	0.985	0.372	11.05	0.501	0.497	0.336	0.99	1.70
8 x 3	12	1.136	34.18	53.88	12.17	10.46	125.67	14.855	3.638	3.793	125.67	14.855	3.793	3.638	33.99	1.862	2.078	0.885	28.11	1.675	1.613	0.854	2.96	5.65
8 x 3	14	0.583	17.80	35.49	4.08	7.18	72.00	9.305	2.186	2.485	72.00	9.305	2.485	2.186	21.71	1.243	1.425	0.584	17.59	0.970	0.820	0.534	1.37	2.44
8 x 3	16	0.449	13.73	29.79	2.44	6.10	56.78	7.548	1.724	2.084	56.78	7.548	1.724	2.084	17.99	1.048	1.212	0.491	14.41	0.768	0.617	0.438	0.99	1.70
8 x 3.5	12	1.132	34.57	57.34	12.17	12.63	122.91	15.686	3.732	4.131	122.91	15.686	4.131	3.732	43.14	2.712	2.496	1.124	35.45	2.412	1.914	1.077	2.96	5.65
8 x 3.5	14	0.594	18.14	37.80	4.08	8.62	74.62	9.879	2.266	2.714	74.62	9.879	2.714	2.266	27.55	1.808	1.704	0.741	22.13	1.398	0.985	0.672	1.37	2.44
8 x 3.5	16	0.455	13.91	31.73	2.44	7.32	57.27	7.886	1.739	2.276	57.27	7.886	1.739	2.276	22.82	1.523	1.446	0.623	18.11	1.108	0.747	0.550	0.99	1.70
8 x 4	12	1.147	35.04	60.79	12.17	14.79	126.54	16.537	3.842	4.474	126.54	16.537	4.474	3.842	53.14	3.760	2.929	1.384	43.44	3.314	2.228	1.319	2.96	5.65
8 x 4	14	0.598	18.26	40.10	4.08	10.06	76.19	10.352	2.314	2.936	76.19	10.352	2.936	2.314	33.94	2.505	1.992	0.913	27.06	1.924	1.160	0.822	1.37	2.44
9 x 2	12	1.007	30.76	50.42	12.17	6.13	116.03	15.939	3.523	3.561	116.03	15.939	3.561	3.523	18.55	0.721	1.417	0.483	15.48	0.654	1.078	0.470	2.92	5.62
9 x 2	14	0.580	17.73	33.19	3.60	4.29	72.24	10.344	2.193	2.415	72.24	10.344	2.415	2.193	11.88	0.483	0.991	0.320	9.79	0.381	0.529	0.297	1.35	2.43
9 x 2	16	0.457	13.96	27.85	2.15	3.67	58.28	8.532	1.770	2.042	58.28	8.532	1.770	2.042	9.85	0.408	0.848	0.269	8.05	0.300	0.390	0.244	0.97	1.69
9 x 2.5	12	1.112	33.97	53.88	12.17	8.29	148.33	18.090	4.020	4.020	148.33	18.090	4.020	4.020	26.00	1.239	1.849	0.677	21.51	1.104	1.364	0.653	2.92	5.62
9 x 2.5	14	0.574	17.54	35.49	3.60	5.73	81.63	11.530	2.479	2.652	81.63	11.530	2.652	2.479	16.62	0.828	1.278	0.447	13.51	0.638	0.675	0.410	1.35	2.43
9 x 2.5	16	0.441	13.48	29.79	2.15	4.89	62.32	9.189	1.892	2.218	62.32	9.189	1.892	2.218	13.77	0.698	1.090	0.376	11.07	0.503	0.502	0.336	0.97	1.69
9 x 3	12	1.144	34.96	57.34	12.17	10.46	147.27	19.599	4.270	4.444	147.27	19.599	4.444	4.270	34.40	1.933	2.292	0.896	28.23	1.695	1.657	0.857	2.92	5.62
9 x 3	14	0.585	17.87	37.80	3.60	7.18	84.37	12.255	2.562	2.907	84.37	12.255	2.907	2.562	21.97	1.289	1.573	0.591	17.64	0.977	0.830	0.536	1.35	2.43
9 x 3	16	0.451	13.78	31.73	2.15	6.10	63.61	9.697	1.931	2.437	63.61	9.697	1.931	2.437	18.21	1.086	1.338	0.497	14.44	0.772	0.623	0.438	0.97	1.69
9 x 3.5	12	1.139	34.82	60.79	12.17	12.63	144.14	20.647	4.377	4.821	144.14	20.647	4.821	4.377	43.72	2.818	2.748	1.139	35.61	2.440	1.962	1.081	2.92	5.62
9 x 3.5	14	0.596	18.21	40.10	3.60	8.62	85.42	12.824	2.594	3.162	85.42	12.824	3.162	2.594	27.91	1.877	1.876	0.751	22.18	1.406	0.995	0.673	1.35	2.43
9 x 4	12	1.155	35.28	64.25	12.17	14.79	148.34	21.732	4.504	5.205	148.34	21.732	5.205	4.504	53.91	3.910	3.219	1.404	43.63	3.351	2.279	1.325	2.92	5.62
9 x 4	14	0.600	18.33	42.41	3.60	10.06	85.53	13.273	2.597	3.413	85.53	13.273	3.413	2.597	34.43	2.604	2.189	0.926	27.12	1.934	1.171	0.823	1.35	2.43
10 x 2	12	1.013	30.95	53.88	10.94	6.13	132.35	20.434	4.019	4.157	132.35	20.434	4.157	4.019	18.69	0.741	1.551	0.487	15.52	0.661	1.108	0.471	2.89	5.58
10 x 2	14	0.582	17.78	35.49	3.22	4.29	81.47	13.162	2.474	2.813	81.47	13.162	2.813	2.474	11.97	0.497	1.086	0.322	9.81	0.383	0.536	0.298	1.33	2.41
10 x 2	16	0.458	13.99	29.79	1.92	3.67	65.51	10.827	1.989	2.376	65.51	10.827	1.989	2.376	9.92	0.419	0.930	0.271	8.06	0.302	0.394	0.245	0.95	1.67

- Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
- Material: A1011 HSLAS Grade 55 Class 1 Steel or A653 SS Grade 55 Steel
- Strength Increase due to Cold Working has been applied where applicable

- Web Crippling values are based on a 4 inch bearing length, one flange fastened to support
- Appropriate factors of safety have been applied for Allowable Stress Design (ASD)
- Strength calculations based on a fully braced condition
- Consult with an engineering professional before using the above design aids



Cee Sections: Effective Section Properties



Member	Ga.	Effective Section Properties																				Web Crippling		
		Compression		Tension	Shear		Positive Moment (X Axis)				Negative Moment (X Axis)				Positive Moment (Y Axis)				Negative Moment (Y Axis)				End	Interior
		A_e (in ²)	P_a (kip)	T_a (kip)	V_{ay} (kip)	V_{ax} (kip)	M_{ax} (kip-in)	I_x (in ⁴)	$S_{e TOP}$ (in ³)	$S_{e BOT}$ (in ³)	M_{ax} (kip-in)	I_x (in ⁴)	$S_{e TOP}$ (in ³)	$S_{e BOT}$ (in ³)	M_{ay} (kip-in)	I_y (in ⁴)	$S_{e LEFT}$ (in ³)	$S_{e RIGHT}$ (in ³)	M_{ay} (kip-in)	I_y (in ⁴)	$S_{e LEFT}$ (in ³)	$S_{e RIGHT}$ (in ³)	P_a (kip)	P_a (kip)
10 x 2.5	12	1.118	34.16	57.34	10.94	8.29	172.06	23.316	4.663	4.663	172.06	23.316	4.663	4.663	26.24	1.277	2.022	0.683	21.58	1.115	1.398	0.655	2.89	5.58
10 x 2.5	14	0.576	17.59	37.80	3.22	5.73	91.81	14.598	2.788	3.065	91.81	14.598	3.065	2.788	16.77	0.853	1.399	0.451	13.53	0.641	0.683	0.411	1.33	2.41
10 x 2.5	16	0.442	13.51	31.73	1.92	4.89	68.88	11.519	2.091	2.564	68.88	11.519	2.564	2.091	13.89	0.719	1.193	0.379	11.09	0.506	0.506	0.337	0.95	1.67
10 x 3	12	1.150	35.15	60.79	10.94	10.46	170.10	25.159	4.938	5.129	170.10	25.159	5.129	4.938	34.75	1.995	2.504	0.905	28.33	1.711	1.694	0.860	2.89	5.58
10 x 3	14	0.587	17.93	40.10	3.22	7.18	93.07	15.322	2.826	3.347	93.07	15.322	3.347	2.826	22.19	1.330	1.719	0.597	17.67	0.982	0.838	0.537	1.33	2.41
10 x 3.5	12	1.146	35.01	64.25	10.94	12.63	166.55	26.450	5.057	5.545	166.55	26.450	5.545	5.057	44.20	2.912	2.998	1.151	35.73	2.462	2.001	1.085	2.89	5.58
10 x 3.5	14	0.598	18.26	42.41	3.22	8.62	94.48	16.029	2.869	3.632	94.48	16.029	3.632	2.869	28.22	1.939	2.048	0.759	22.22	1.413	1.004	0.675	1.33	2.41
10 x 4	12	1.161	35.47	67.71	10.94	14.79	171.35	27.799	5.203	5.969	171.35	27.799	5.969	5.203	54.56	4.045	3.506	1.421	43.78	3.380	2.320	1.329	2.89	5.58
10 x 4	14	0.602	18.39	44.72	3.22	10.06	94.80	16.584	2.879	3.913	94.80	16.584	3.913	2.879	34.27	2.692	2.386	0.937	27.17	1.943	1.181	0.825	1.33	2.41
12 x 2.5	12	1.127	34.44	64.25	9.02	8.29	185.29	35.076	5.626	6.084	185.29	35.076	6.084	5.626	26.61	1.340	2.363	0.693	21.68	1.131	1.447	0.658	2.82	5.53
12 x 2.5	14	0.578	17.67	42.41	2.66	5.73	101.30	20.896	3.076	4.014	101.30	20.896	4.014	3.076	17.00	0.894	1.639	0.457	13.57	0.646	0.694	0.412	1.29	2.38
12 x 3	12	1.160	35.43	67.71	9.02	10.46	219.33	38.942	6.379	6.605	219.33	38.942	6.605	6.379	35.31	2.099	2.923	0.920	28.46	1.734	1.747	0.864	2.82	5.53
12 x 3	14	0.589	18.01	44.72	2.66	7.18	110.59	22.614	3.358	4.295	110.59	22.614	4.295	3.358	22.54	1.398	2.010	0.607	17.72	0.989	0.851	0.538	1.29	2.38
12 x 3.5	12	1.155	35.29	71.17	9.02	12.63	214.92	40.796	6.526	7.097	214.92	40.796	7.097	6.526	44.99	3.071	3.494	1.172	35.90	2.494	2.057	1.090	2.82	5.53
12 x 4	12	1.170	35.75	74.63	9.02	14.79	220.94	42.761	6.709	7.601	220.94	42.761	7.601	6.709	55.61	4.275	4.078	1.449	43.99	3.422	2.380	1.336	2.82	5.53

1. Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
 2. Material: A1011 HSLAS Grade 55 Class 1 Steel or A653 SS Grade 55 Steel
 3. Strength Increase due to Cold Working has been applied where applicable

4. Web Crippling values are based on a 4 inch bearing length, one flange fastened to support
 5. Appropriate factors of safety have been applied for Allowable Stress Design (ASD)
 6. Strength calculations based on a fully braced condition
 7. Consult with an engineering professional before using the above design aids