

Section properties and allowable are computed in accordance with AISI North American Specification, 2007 edition

 $\boldsymbol{I}_{\boldsymbol{X}}$ and $\boldsymbol{I}_{\boldsymbol{Y}}$ are for deflection determination

 S_e and S_Y are for bending

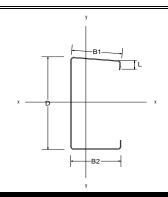
Material is either ASTM A653-06 Gr. 55 or A1011-04 HSLAS Gr. 55 Cl-1

Fy = 55 ksi Fu = 70 ksi



		DIMENS	ONAL PR	OPERTIES	3		ALLOWABLES				AXI	AXIS Y-Y				
Section Name	D x B1 x B2 x Slope (in)	Gage	Thickness (in)	Weight (lb/ft)	Area (in²)	Lip (in)	Positive Ma (k-ft)	Negative Ma (k-ft)	Va (kips)	I _X (in ⁴)	Positive S _{xe} (in ³)	Negative S _{xe} (in ³)	R _X (in)	I _Y (in ⁴)	S _{ye} (in ³)	R _Y (in)
6SSE16	6.0 x 4.0 x 4.0 x 1	16	0.059	2.997	0.881	0.785	3.370	3.370	3.346	5.242	1.228	1.228	2.439	1.903	0.666	1.470
6SSE14	6.0 x 4.0 x 4.0 x 1	14	0.070	3.555	1.046	0.813	4.169	4.177	5.423	6.187	1.519	1.522	2.433	2.257	0.812	1.469
6SSE13	6.0 x 4.0 x 4.0 x 1	13	0.085	4.317	1.270	0.850	5.321	5.349	8.010	7.458	1.939	1.949	2.424	2.740	1.017	1.469
6SSE12	6.0 x 4.0 x 4.0 x 1	12	0.105	5.333	1.568	0.900	6.916	6.989	11.723	9.123	2.520	2.546	2.412	3.382	1.296	1.465
6SSE16	6.0 x 4.0 x 4.0 x 4	16	0.059	2.997	0.881	0.834	3.084	3.138	3.590	4.507	1.124	1.143	2.261	1.816	0.629	1.435
6SSE14	6.0 x 4.0 x 4.0 x 4	14	0.070	3.555	1.046	0.864	3.792	3.884	5.749	5.311	1.382	1.415	2.254	2.152	0.768	1.435
6SSE13	6.0 x 4.0 x 4.0 x 4	13	0.085	4.317	1.270	0.905	4.779	4.954	8.474	6.391	1.741	1.805	2.244	2.611	0.963	1.434
6SSE12	6.0 x 4.0 x 4.0 x 4	12	0.105	5.333	1.568	0.960	6.120	6.454	12.196	7.797	2.230	2.352	2.230	3.219	1.227	1.433
6SSE14	6.0 x 2.75 x 5.0 x 1	14	0.070	3.555	1.046	0.938	4.338	4.279	5.424	6.023	1.581	1.559	2.400	2.769	0.743	1.627
6SSE12	6.0 x 2.75 x 5.0 x 1	12	0.105	5.333	1.568	1.025	7.042	6.739	11.704	8.873	2.566	2.455	2.378	4.150	1.180	1.627
6SSE14	6.0 x 2.75 x 5.0 x 4	14	0.070	3.555	1.046	0.989	3.999	3.907	5.623	5.410	1.457	1.424	2.275	2.763	0.743	1.626
6SSE12	6.0 x 2.75 x 5.0 x 4	12	0.105	5.333	1.568	1.085	6.247	5.992	11.926	7.937	2.276	2.183	2.250	4.145	1.181	1.626
6SSE14	6.0 x 5.0 x 5.0 x 1	14	0.070	4.031	1.186	0.813	4.265	4.244	5.439	7.253	1.554	1.546	2.473	3.903	1.145	1.814
6SSE12	6.0 x 5.0 x 5.0 x 1	12	0.105	6.047	1.778	0.900	7.210	7.241	11.737	10.701	2.627	2.639	2.453	5.853	1.829	1.814
6SSE14	6.0 x 5.0 x 5.0 x 4	14	0.070	4.031	1.186	0.864	3.858	3.871	5.849	6.006	1.406	1.411	2.251	3.727	1.084	1.773
6SSE12	6.0 x 5.0 x 5.0 x 4	12	0.105	6.047	1.778	0.960	6.355	6.599	12.413	8.820	2.316	2.405	2.227	5.582	1.735	1.772

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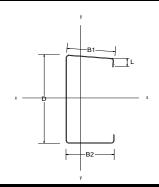
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		DIMENS	IONAL PR	OPERTIES	3		Α	LLOWABLE	ES		AXI	AXIS Y-Y				
Section Name	D x B1 x B2 x Slope (in)	Gage	Thickness (in)	Weight (lb/ft)	Area (in²)	Lip (in)	Positive Ma (k-ft)	Negative Ma (k-ft)	Va (kips)	I _X (in ⁴)	Positive S_{xe} (in ³)	Negative S _{xe} (in ³)	R _X (in)	l _Y (in ⁴)	S _{ye} (in³)	R _Y (in)
7SSE16	7.0 x 4.0 x 4.0 x 1	16	0.059	3.197	0.940	0.785	4.052	4.109	2.828	7.479	1.476	1.497	2.820	2.009	0.668	1.462
7SSE14	7.0 x 4.0 x 4.0 x 1	14	0.070	3.793	1.116	0.813	5.167	5.165	4.740	8.835	1.883	1.882	2.814	2.384	0.816	1.462
7SSE13	7.0 x 4.0 x 4.0 x 1	13	0.085	4.606	1.355	0.850	6.578	6.595	8.004	10.663	2.397	2.403	2.806	2.895	1.023	1.462
7SSE12	7.0 x 4.0 x 4.0 x 1	12	0.105	5.690	1.673	0.900	8.535	8.595	12.214	13.065	3.110	3.132	2.794	3.574	1.306	1.462
7SSE16	7.0 x 4.0 x 4.0 x 4	16	0.059	3.197	0.940	0.834	3.767	3.933	3.002	6.594	1.372	1.433	2.648	1.919	0.632	1.429
7SSE14	7.0 x 4.0 x 4.0 x 4	14	0.070	3.793	1.116	0.864	4.798	4.857	5.034	7.780	1.748	1.770	2.641	2.276	0.772	1.428
7SSE13	7.0 x 4.0 x 4.0 x 4	13	0.085	4.606	1.355	0.905	6.043	6.178	8.396	9.376	2.202	2.251	2.631	2.762	0.969	1.428
7SSE12	7.0 x 4.0 x 4.0 x 4	12	0.105	5.690	1.673	0.960	7.742	8.032	12.807	11.464	2.821	2.926	2.617	3.407	1.239	1.427
7SSE14	7.0 x 2.75 x 5.0 x 1	14	0.070	3.793	1.116	0.938	5.385	5.266	4.734	8.620	1.962	1.919	2.780	2.909	0.747	1.615
7SSE12	7.0 x 2.75 x 5.0 x 1	12	0.105	5.690	1.673	1.025	8.742	8.334	12.198	12.738	3.185	3.037	2.759	4.362	1.193	1.615
7SSE14	7.0 x 2.75 x 5.0 x 4	14	0.070	3.793	1.116	0.989	5.060	4.931	4.940	7.891	1.844	1.797	2.660	2.903	0.748	1.613
7SSE12	7.0 x 2.75 x 5.0 x 4	12	0.105	5.690	1.673	1.085	7.924	7.573	12.566	11.621	2.887	2.759	2.635	4.358	1.193	1.614
7SSE14	7.0 x 5.0 x 5.0 x 1	14	0.070	4.269	1.256	0.813	5.293	5.259	4.745	10.321	1.929	1.916	2.867	4.123	1.150	1.812
7SSE12	7.0 x 5.0 x 5.0 x 1	12	0.105	6.404	1.883	0.900	8.901	8.914	12.227	15.269	3.243	3.248	2.847	6.188	1.844	1.813
7SSE14	7.0 x 5.0 x 5.0 x 4	14	0.070	4.269	1.256	0.864	4.876	4.853	5.108	8.813	1.777	1.768	2.649	3.941	1.089	1.772
7SSE12	7.0 x 5.0 x 5.0 x 4	12	0.105	6.404	1.883	0.960	8.051	8.223	13.000	12.987	2.934	2.996	2.626	5.909	1.750	1.771

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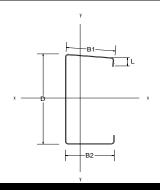
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		DIMENS	IONAL PR	OPERTIES	3		A	LLOWABLE	ES	AXIS X-X					AXIS Y-Y		
Section Name	D x B1 x B2 x Slope (in)	Gage	Thickness (in)	Weight (lb/ft)	Area (in²)	Lip (in)	Positive Ma (k-ft)	Negative Ma (k-ft)	Va (kips)	I _X (in ⁴)	Positive S_{xe} (in ³)	Negative S _{xe} (in ³)	R _X (in)	I _Y (in ⁴)	S _{ye} (in ³)	R _Y (in)	
8SSE16	8.0 x 3.375 x 5.0 x 1	16	0.059	3.598	1.058	1.098	5.248	5.670	2.448	10.778	1.912	2.066	3.191	2.927	0.714	1.663	
8SSE14	8.0 x 3.375 x 5.0 x 1	14	0.070	4.269	1.256	1.125	7.018	6.998	4.101	12.734	2.557	2.550	3.185	3.470	0.878	1.663	
8SSE13	8.0 x 3.375 x 5.0 x 1	13	0.085	5.184	1.525	1.163	8.813	8.821	7.373	15.376	3.211	3.214	3.176	4.211	1.103	1.662	
8SSE12	8.0 x 3.375 x 5.0 x 1	12	0.105	6.404	1.884	1.213	11.535	11.308	12.201	18.848	4.203	4.120	3.163	5.196	1.411	1.661	
8SSE16	8.0 x 3.375 x 5.0 x 4	16	0.059	3.598	1.058	1.146	4.733	5.485	2.559	9.809	1.725	1.998	3.044	2.875	0.688	1.648	
8SSE14	8.0 x 3.375 x 5.0 x 4	14	0.070	4.031	1.186	1.176	6.298	6.612	4.287	10.712	2.295	2.409	3.006	2.262	0.725	1.381	
8SSE13	8.0 x 3.375 x 5.0 x 4	13	0.085	5.183	1.525	1.217	8.145	8.140	7.711	13.963	2.968	2.966	3.026	4.137	1.083	1.647	
8SSE12	8.0 x 3.375 x 5.0 x 4	12	0.105	6.047	1.778	0.772	9.409	9.300	12.616	16.439	3.428	3.389	3.040	4.343	1.144	1.563	
8SSE16	8.0 x 4.0 x 4.0 x 1	16	0.070	3.398	0.999	0.785	4.659	4.708	2.449	10.186	1.698	1.715	3.193	2.103	0.670	1.451	
8SSE14	8.0 x 4.0 x 4.0 x 1	14	0.105	4.031	1.186	0.813	6.213	6.223	4.103	12.040	2.264	2.267	3.187	2.495	0.818	1.451	
8SSE13	8.0 x 4.0 x 4.0 x 1	13	0.070	4.895	1.440	0.850	7.920	7.926	7.377	14.546	2.886	2.888	3.179	3.031	1.027	1.451	
8SSE12	8.0 x 4.0 x 4.0 x 1	12	0.105	6.047	1.778	0.900	10.257	10.305	12.208	17.844	3.737	3.755	3.168	3.744	1.314	1.451	
8SSE16	8.0 x 4.0 x 4.0 x 4	16	0.070	3.398	0.999	0.834	4.401	4.647	2.579	9.151	1.603	1.693	3.026	2.010	0.634	1.418	
8SSE14	8.0 x 4.0 x 4.0 x 4	14	0.105	4.031	1.186	0.864	5.835	5.904	4.322	10.807	2.126	2.151	3.019	2.385	0.775	1.418	
8SSE13	8.0 x 4.0 x 4.0 x 4	13	0.070	4.895	1.440	0.905	7.395	7.493	7.775	13.039	2.694	2.730	3.009	2.895	0.974	1.418	
8SSE12	8.0 x 4.0 x 4.0 x 4	12	0.105	6.047	1.778	0.960	9.472	9.719	12.720	15.967	3.451	3.541	2.996	3.573	1.247	1.418	

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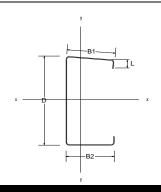
Fy = 55 ksi

Fu = 70 ksi



		DIMENS	IONAL PR	OPERTIES	3		ALLOWABLES				AXI	AXIS Y-Y				
Section Name	D x B1 x B2 x Slope (in)	Gage	Thickness (in)	Weight (lb/ft)	Area (in²)	Lip (in)	Positive Ma (k-ft)	Negative Ma (k-ft)	Va (kips)	I _X (in ⁴)	Positive S_{xe} (in^3)	Negative S _{xe} (in ³)	R _X (in)	l _Y (in ⁴)	S _{ye} (in ³)	R _Y (in)
8SSE14	8.0 x 2.75 x 5.0 x 1	14	0.070	4.031	1.186	0.938	6.237	6.318	4.098	11.772	2.273	2.302	3.151	3.032	0.750	1.599
8SSE12	8.0 x 2.75 x 5.0 x 1	12	0.105	6.047	1.778	1.025	10.550	10.029	12.194	17.434	3.844	3.654	3.131	4.550	1.202	1.600
8SSE14	8.0 x 2.75 x 5.0 x 4	14	0.070	4.031	1.186	0.989	5.937	6.023	4.252	10.927	2.163	2.195	3.036	3.026	0.751	1.598
8SSE12	8.0 x 2.75 x 5.0 x 4	12	0.105	6.047	1.778	1.085	9.716	9.259	12.511	16.136	3.540	3.374	3.012	4.545	1.202	1.599
8SSE14	8.0 x 5.0 x 5.0 x 1	14	0.070	4.507	1.326	0.813	6.116	6.177	4.107	14.017	2.229	2.251	3.252	4.321	1.153	1.805
8SSE12	8.0 x 5.0 x 5.0 x 1	12	0.105	6.761	1.988	0.900	10.699	10.695	12.219	20.779	3.899	3.897	3.233	6.488	1.854	1.806
8SSE14	8.0 x 5.0 x 5.0 x 4	14	0.070	4.507	1.326	0.864	5.714	5.916	4.378	12.246	2.082	2.156	3.039	4.134	1.093	1.766
8SSE12	8.0 x 5.0 x 5.0 x 4	12	0.105	6.761	1.988	0.960	9.861	9.966	12.886	18.096	3.593	3.631	3.017	6.202	1.761	1.766
10SSE14	10.0 x 4.0 x 4.0 x 1	14	0.070	4.507	1.326	0.813	7.786	7.846	3.234	20.265	2.837	2.859	3.910	2.683	0.822	1.423
10SSE13	10.0 x 4.0 x 4.0 x 1	13	0.085	5.473	1.610	0.850	10.850	10.837	5.809	24.512	3.953	3.949	3.902	3.260	1.033	1.423
10SSE12	10.0 x 4.0 x 4.0 x 1	12	0.105	6.761	1.988	0.900	14.004	14.030	10.998	30.121	5.103	5.112	3.892	4.030	1.324	1.424
10SSE14	10.0 x 4.0 x 4.0 x 4	14	0.070	4.507	1.326	0.864	7.477	7.783	3.369	18.673	2.724	2.836	3.753	2.568	0.779	1.392
10SSE13	10.0 x 4.0 x 4.0 x 4	13	0.085	5.473	1.610	0.905	10.352	10.383	6.055	22.565	3.772	3.783	3.744	3.119	0.980	1.392
10SSE12	10.0 x 4.0 x 4.0 x 4	12	0.105	6.761	1.988	0.960	13.245	13.415	11.468	27.693	4.826	4.888	3.732	3.853	1.258	1.392
10SSE14	10.0 x 2.75 x 5.0 x 1	14	0.070	4.507	1.326	0.938	7.885	8.501	3.231	19.882	2.873	3.097	3.873	3.240	0.755	1.563
10SSE12	10.0 x 2.75 x 5.0 x 1	12	0.105	6.761	1.988	1.025	14.484	13.710	10.988	29.536	5.278	4.996	3.854	4.866	1.214	1.564
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Section Name	D x B1 x B2 x Slope (in)	Gage	Thickness (in)	Weight (lb/ft)	Area (in²)	Lip (in)	Positive Ma (k-ft)	Negative Ma (k-ft)	Va (kips)	I _X (in ⁴)	Positive S _{xe} (in ³)	Negative S _{xe} (in ³)	R _X (in)	I _Y (in ⁴)	S _{ye} (in ³)	R _Y (in)
10SSE14	10.0 x 2.75 x 5.0 x 4	14	0.059	4.507	1.326	0.989	7.658	8.407	3.326	18.807	2.790	3.063	3.767	3.233	0.755	1.562
10SSE12	10.0 x 2.75 x 5.0 x 4	12	0.070	6.761	1.988	1.085	13.630	12.934	11.319	27.879	4.966	4.713	3.744	4.860	1.215	1.563
10SSE14	10.0 x 5.0 x 5.0 x 1	14	0.085	4.983	1.466	0.813	7.722	7.762	3.236	23.432	2.814	2.828	3.999	4.659	1.158	1.783
10SSE12	10.0 x 5.0 x 5.0 x 1	12	0.105	7.475	2.198	0.900	14.609	14.572	11.006	34.834	5.323	5.310	3.981	7.002	1.869	1.785
10SSE14	10.0 x 5.0 x 5.0 x 4	14	0.059	4.983	1.466	0.864	7.379	7.624	3.404	21.136	2.689	2.778	3.798	4.463	1.098	1.745
10SSE12	10.0 x 5.0 x 5.0 x 4	12	0.070	7.475	2.198	0.960	13.806	13.791	11.587	31.346	5.030	5.025	3.776	6.704	1.777	1.746

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