

## Physical Structural Properties--6" C Studs

CODE	GAGE	Flange (in.)	Lip (in.)	Design Thickness (in.)	Minimum Delivered Thickness (in.)	Weight (lb./ft.)	Area (in. <sup>2</sup> )	I <sub>x</sub> (in. <sup>4</sup> )	S <sub>x</sub> (in. <sup>3</sup> )	R <sub>x</sub> (in.)	I <sub>y</sub> (in. <sup>4</sup> )	S <sub>y</sub> (in. <sup>3</sup> )	R <sub>y</sub> (in.)	EFFECTIVE SECTION PROPERTIES						TORSIONAL PROPERTIES				
														33 KSI		50 KSI		I <sub>x</sub> (in. <sup>4</sup> )	S <sub>x</sub> (in. <sup>3</sup> )	I <sub>y</sub> (in. <sup>4</sup> )	S <sub>y</sub> (in. <sup>3</sup> )	M <sub>x</sub> (in.-lb.)	I <sub>x</sub> (in. <sup>4</sup> )	S <sub>x</sub> (in. <sup>3</sup> )
CWN		20	1-3/8	3/8	0.0346	0.0329	1.047	0.320	1.597	2.234	0.070	0.065	0.466	1.597	0.513	10145	-0.820							
		18	1-3/8	3/8	0.0451	0.0428	1.351	0.413	2.043	2.224	0.087	0.082	0.480	2.043	0.681	15016	-0.812	0.279	0.625	2.412	0.887			
		16	1-3/8	3/8	0.0566	0.0538	1.682	0.514	2.519	2.214	0.105	0.098	0.452	2.519	0.940	18991	-0.804	0.550	0.758	2.398	0.888			
		14	1-3/8	3/8	0.0713	0.0677	2.091	0.639	3.094	2.200	0.125	0.117	0.443	3.094	1.031	24034	-0.793	1.082	0.911	2.380	0.889			
CSJ		20	1-5/8	1/2	0.0346	0.0329	1.132	0.346	1.808	2.286	0.118	0.097	0.583	1.808	0.538	11516	-1.088	0.138	0.855	2.598	0.825			
		18	1-5/8	1/2	0.0451	0.0428	1.461	0.447	2.316	2.277	0.148	0.123	0.577	2.316	0.772	16764	-1.080	0.302	1.082	2.585	0.826			
		16	1-5/8	1/2	0.0566	0.0538	1.821	0.557	2.862	2.268	0.181	0.149	0.570	2.862	0.954	21175	-1.071	0.595	1.318	2.572	0.826			
		14	1-5/8	1/2	0.0713	0.0677	2.266	0.693	3.524	2.255	0.218	0.180	0.561	3.524	1.174	26767	-1.061	1.173	1.595	2.555	0.828			
CSW		20	2-1/2	5/8	0.0346	0.0329	1.359	0.415	2.399	2.403	0.359	0.206	0.930	2.267	0.636	12577	-1.474	0.152	1.583	2.867	0.736			
		18	2-1/2	5/8	0.0451	0.0428	1.756	0.537	3.082	2.396	0.458	0.283	0.923	3.064	0.918	18149	-1.467	0.333	2.011	2.855	0.736			
		16	2-1/2	5/8	0.0566	0.0538	2.192	0.670	3.822	2.389	0.563	0.323	0.917	3.822	1.159	22909	-1.459	0.656	2.462	2.842	0.737			
		14	2-1/2	5/8	0.0713	0.0677	2.733	0.835	4.726	2.379	0.688	0.395	0.908	4.726	1.522	33141	-1.448	1.293	2.995	2.826	0.737			
CSE		20	2-1/2	5/8	0.0346	0.0329	1.359	0.415	2.399	2.403	0.359	0.206	0.930	2.267	0.636	12577	-1.905	0.166	1.583	3.204	0.647			
		18	2-1/2	5/8	0.0451	0.0428	1.756	0.537	3.082	2.396	0.458	0.283	0.923	3.064	0.918	18149	-1.897	0.363	2.011	3.193	0.647			
		16	2-1/2	5/8	0.0566	0.0538	2.192	0.670	3.822	2.389	0.563	0.323	0.917	3.822	1.159	22909	-1.889	0.716	2.462	3.180	0.647			
		14	2-1/2	5/8	0.0713	0.0677	2.733	0.835	4.726	2.379	0.688	0.395	0.908	4.726	1.522	33141	-1.878	1.414	3.068	3.164	0.648			
CSS		20	3	1	0.0346	0.0329	1.557	0.476	2.831	2.439	0.656	0.340	1.174	2.489	0.634	12533	-2.619	0.190	5.724	3.767	0.516			
		18	3	1	0.0451	0.0428	2.014	0.616	3.644	2.433	0.841	0.435	1.169	3.436	0.997	19704	-2.613	0.417	7.317	3.756	0.516			
		16	3	1	0.0566	0.0538	2.516	0.769	4.526	2.426	1.039	0.537	1.162	4.486	1.366	26999	-2.605	0.822	9.020	3.745	0.516			
		14	3	1	0.0713	0.0677	3.141	0.960	5.608	2.417	1.279	0.661	1.154	5.608	1.841	36376	-2.596	1.625	11.072	3.730	0.516			
CSX		20	3-1/2	1	0.0346	0.0329	1.670	0.511	3.139	2.480	0.939	0.423	1.356	2.661	0.652	12876	-3.085	0.204	8.130	4.184	0.456			
		18	3-1/2	1	0.0451	0.0428	2.162	0.661	4.043	2.474	1.205	0.543	1.351	3.697	1.044	20634	-3.079	0.447	10.408	4.174	0.456			
		16	3-1/2	1	0.0566	0.0538	2.701	0.826	5.026	2.467	1.482	0.671	1.344	4.863	1.442	28491	-3.071	0.883	12.851	4.163	0.456			
		14	3-1/2	1	0.0713	0.0677	3.374	1.031	6.234	2.459	1.840	0.827	1.336	6.234	1.947	39465	-3.062	1.746	15.806	4.148	0.456			
6" Track		20	1-1/4" LEG	0.0346	0.0329	0.956	0.292	1.393	0.459	2.183	0.034	0.032	0.340	1.239	0.326	6435	-0.524	0.117	0.231	2.271	0.947			
		18	1-1/4" LEG	0.0451	0.0428	1.242	0.379	1.808	0.594	2.183	0.043	0.041	0.338	1.688	0.505	9970	-0.522	0.257	0.298	2.270	0.947			
		16	1-1/4" LEG	0.0566	0.0538	1.557	0.476	2.267	0.742	2.183	0.054	0.052	0.336	2.066	0.671	12827	-0.520	0.509	0.371	2.269	0.948			
		14	1-1/4" LEG	0.0713	0.0677	1.953	0.597	2.843	0.926	2.182	0.067	0.064	0.334	2.843	0.891	17611	-0.517	1.011	0.461	2.267	0.948			
		12	1-1/4" LEG	0.1017	0.0966	2.778	0.849	4.050	1.306	2.184	0.092	0.089	0.328	4.050	1.305	28867	-0.509	2.926	-0.643	2.267	0.950			
		10	1-1/4" LEG	0.1242	0.1180	3.389	1.036	4.955	1.586	2.187	0.109	0.107	0.324	4.955	1.585	36426	-0.501	5.327	0.773	2.267	0.951			

NOTE: Reference typical notes on page 4.