

# Section Properties

## Structural (S) Stud Section Properties

Member	Design Thickness (in)	F <sub>y</sub> (ksi)	Area (in <sup>2</sup> )	Weight (lb/ft)	Gross Properties					Effective Properties						Torsional Properties						
					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> )	R <sub>y</sub> (in)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	M <sub>a</sub> (in-k)	M <sub>ad</sub> (in-k)	V <sub>a</sub> (lb)	V <sub>a,net</sub> (lb)	J x 1000 (in <sup>6</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>0</sub> (in)	m (in)	R <sub>0</sub> (in)	L <sub>u</sub> (in)	
250S137-33	0.0346	33	0.197	0.67	0.203	0.163	1.015	0.052	0.515	0.203	0.158	3.11	3.09	975	399	0.079	0.076	-1.141	0.677	1.612	0.499	35.6
250S137-43	0.0451	33	0.255	0.87	0.261	0.208	1.011	0.067	0.511	0.261	0.205	4.53	4.60	1265	394	0.173	0.096	-1.129	0.670	1.599	0.501	33.6
250S137-54	0.0566	33	0.316	1.07	0.318	0.255	1.004	0.080	0.504	0.318	0.255	5.76	5.76	1553	373	0.337	0.115	-1.115	0.663	1.583	0.504	33.4
250S137-54	0.0566	50	0.316	1.07	0.318	0.255	1.004	0.080	0.504	0.318	0.244	8.22	8.34	2353	565	0.337	0.115	-1.115	0.663	1.583	0.504	27.1
250S137-68	0.0713	33	0.390	1.33	0.386	0.309	0.995	0.096	0.495	0.386	0.309	7.20	7.20	1891	342	0.661	0.138	-1.096	0.653	1.561	0.507	33.1
250S137-68	0.0713	50	0.390	1.33	0.386	0.309	0.995	0.096	0.495	0.386	0.308	10.66	10.68	2866	519	0.661	0.138	-1.096	0.653	1.561	0.507	26.8
250S162-33	0.0346	33	0.223	0.76	0.235	0.188	1.027	0.087	0.624	0.235	0.180	3.55	3.56	975	399	0.089	0.146	-1.470	0.859	1.898	0.401	44.1
250S162-43	0.0451	33	0.289	0.98	0.302	0.242	1.022	0.111	0.620	0.302	0.240	5.22	5.25	1265	394	0.196	0.184	-1.457	0.852	1.885	0.402	42.1
250S162-54	0.0566	33	0.358	1.22	0.370	0.296	1.016	0.135	0.613	0.370	0.296	6.57	6.57	1553	373	0.383	0.223	-1.443	0.845	1.868	0.404	41.8
250S162-54	0.0566	50	0.358	1.22	0.370	0.296	1.016	0.135	0.613	0.370	0.284	9.42	9.46	2353	565	0.383	0.223	-1.443	0.845	1.868	0.404	33.9
250S162-68	0.0713	33	0.443	1.51	0.450	0.360	1.008	0.162	0.605	0.450	0.360	8.21	8.21	1891	342	0.752	0.268	-1.424	0.835	1.847	0.405	41.7
250S162-68	0.0713	50	0.443	1.51	0.450	0.360	1.008	0.162	0.605	0.450	0.357	12.11	12.21	2866	519	0.752	0.268	-1.424	0.835	1.847	0.405	33.7
350S162-33	0.0346	33	0.258	0.88	0.508	0.291	1.404	0.098	0.617	0.508	0.257	5.09	5.22	1024	487	0.103	0.277	-1.324	0.796	2.026	0.573	42.7
350S162-43	0.0451	33	0.334	1.14	0.655	0.374	1.400	0.125	0.612	0.654	0.357	7.05	7.31	1739	631	0.227	0.350	-1.312	0.789	2.014	0.575	42.6
350S162-54	0.0566	33	0.415	1.41	0.805	0.460	1.393	0.152	0.606	0.804	0.447	8.83	9.08	2253	633	0.443	0.426	-1.298	0.782	1.998	0.578	42.7
350S162-54	0.0566	50	0.415	1.41	0.805	0.460	1.393	0.152	0.606	0.804	0.426	12.74	13.05	3372	947	0.443	0.426	-1.298	0.782	1.998	0.578	34.5
350S162-68	0.0713	33	0.515	1.75	0.985	0.563	1.383	0.184	0.597	0.985	0.551	12.57	12.83	2774	592	0.872	0.514	-1.280	0.772	1.977	0.581	39.7
350S162-68	0.0713	50	0.515	1.75	0.985	0.563	1.383	0.184	0.597	0.985	0.549	16.44	16.85	4203	897	0.872	0.514	-1.280	0.772	1.977	0.581	34.5
350S162-97	0.1017	33	0.711	2.42	1.321	0.755	1.363	0.238	0.579	1.321	0.739	17.72	14.92	3765	511	2.452	0.672	-1.242	0.752	1.932	0.587	43.6
350S162-97	0.1017	50	0.711	2.42	1.321	0.755	1.363	0.238	0.579	1.321	0.739	26.20	22.60	5705	775	2.452	0.672	-1.242	0.752	1.932	0.587	34.7
350S200-43	0.0451	33	0.379	1.29	0.771	0.441	1.426	0.224	0.768	0.771	0.410	8.09	8.36	1739	631	0.257	0.687	-1.748	1.032	2.383	0.462	53.7
350S200-54	0.0566	33	0.471	1.60	0.950	0.543	1.420	0.274	0.762	0.950	0.530	10.48	10.73	2253	633	0.503	0.838	-1.733	1.024	2.367	0.464	53.8
350S200-54	0.0566	50	0.471	1.60	0.950	0.543	1.420	0.274	0.762	0.950	0.470	14.07	14.87	3372	947	0.503	0.838	-1.733	1.024	2.367	0.464	43.5
350S200-68	0.0713	33	0.586	1.99	1.167	0.667	1.411	0.333	0.754	1.167	0.655	14.59	13.18	2774	592	0.993	1.018	-1.715	1.014	2.345	0.465	54.1
350S200-68	0.0713	50	0.586	1.99	1.167	0.667	1.411	0.333	0.754	1.167	0.638	19.11	19.68	4203	897	0.993	1.018	-1.715	1.014	2.345	0.465	43.5
350S200-97	0.1017	33	0.813	2.77	1.577	0.901	1.393	0.440	0.736	1.577	0.885	20.58	17.81	3765	511	2.803	1.347	-1.676	0.994	2.300	0.469	55.0
350S200-97	0.1017	50	0.813	2.77	1.577	0.901	1.393	0.440	0.736	1.577	0.885	30.53	26.98	5705	775	2.803	1.347	-1.676	0.994	2.300	0.469	43.9
362S137-33	0.0346	33	0.236	0.80	0.479	0.264	1.424	0.059	0.501	0.479	0.232	4.59	4.73	1024	521	0.094	0.165	-1.003	0.615	1.813	0.694	34.7
362S137-43	0.0451	33	0.306	1.04	0.616	0.340	1.419	0.075	0.497	0.616	0.320	6.33	6.66	1739	676	0.207	0.208	-0.991	0.608	1.801	0.697	34.6
362S137-54	0.0566	33	0.379	1.29	0.756	0.417	1.412	0.091	0.490	0.756	0.402	7.95	8.24	2341	705	0.405	0.251	-0.978	0.601	1.786	0.700	34.6
362S137-54	0.0566	50	0.379	1.29	0.756	0.417	1.412	0.091	0.490	0.756	0.382	11.42	11.91	3372	1016	0.405	0.251	-0.978	0.601	1.786	0.700	27.9
362S137-68	0.0713	33	0.470	1.60	0.923	0.509	1.401	0.109	0.481	0.923	0.498	9.84	10.06	2884	662	0.797	0.302	-0.959	0.592	1.765	0.704	34.6
362S137-68	0.0713	50	0.470	1.60	0.923	0.509	1.401	0.109	0.481	0.923	0.493	14.77	15.24	4370	1004	0.797	0.302	-0.959	0.592	1.765	0.704	27.8
362S162-33	0.0346	33	0.262	0.89	0.551	0.304	1.450	0.099	0.616	0.551	0.268	5.29	5.43	1024	521	0.105	0.297	-1.308	0.789	2.048	0.592	42.6
362S162-43	0.0451	33	0.340	1.16	0.710	0.392	1.445	0.127	0.611	0.710	0.372	7.34	7.62	1739	676	0.230	0.376	-1.297	0.782	2.036	0.594	42.5
362S162-54	0.0566	33	0.422	1.44	0.873	0.482	1.438	0.154	0.605	0.873	0.467	9.22	9.52	2341	705	0.451	0.457	-1.283	0.774	2.020	0.597	42.5
362S162-54	0.0566	50	0.422	1.44	0.873	0.482	1.438	0.154	0.605	0.873	0.444	13.28	13.60	3372	1016	0.451	0.457	-1.283	0.774	2.020	0.597	34.4
362S162-68	0.0713	33	0.524	1.78	1.069	0.590	1.429	0.186	0.596	1.069	0.579	11.43	11.65	2884	662	0.887	0.552	-1.264	0.765	1.999	0.600	42.7
362S162-68	0.0713	50	0.524	1.78	1.069	0.590	1.429	0.186	0.596	1.069	0.574	17.19	17.66	4370	1004	0.887	0.552	-1.264	0.765	1.999	0.600	34.4
362S162-97	0.1017	33	0.724	2.46	1.436	0.792	1.408	0.241	0.577	1.436	0.776	18.63	15.65	3922	577	2.496	0.723	-1.226	0.745	1.954	0.606	43.3
362S162-97	0.1017	50	0.724	2.46	1.436	0.792	1.408	0.241	0.577	1.436	0.776	27.54	23.71	5943	875	2.496	0.723	-1.226	0.745	1.954	0.606	34.5
362S200-33	0.0346	33	0.297	1.01	0.648	0.358	1.478	0.177	0.772	0.642	0.294	5.81	6.19	1024	521	0.118	0.577	-1.741	1.030	2.411	0.478	53.6
362S200-43	0.0451	33	0.385	1.31	0.836	0.461	1.474	0.227	0.767	0.836	0.427	8.43	8.70	1739	676	0.261	0.734	-1.729	1.024	2.398	0.480	53.5
362S200-54	0.0566	33	0.479	1.63	1.030	0.568	1.467	0.277	0.761	1.030	0.553	10.93	11.23	2341	705	0.511	0.896	-1.715	1.016	2.382	0.482	53.6
362S200-54	0.0566	50	0.479	1.63	1.030	0.568	1.467	0.277	0.761	1.030	0.490	14.66	15.48	3372	1016	0.511	0.896	-1.715	1.016	2.382	0.482	43.3
362S200-68	0.0713	33	0.595	2.02	1.266	0.698	1.458	0.337	0.753	1.266	0.687	15.29	15.54	2884	662	1.008	1.089	-1.696	1.006	2.360	0.484	50.6
362S200-68	0.0713	50	0.595	2.02	1.266	0.698	1.458	0.337	0.753	1.266	0.666	19.95	20.52	4370	1004	1.008	1.089	-1.696	1.006	2.360	0.484	43.3
362S200-97	0.1017	33	0.826	2.81	1.712	0.945	1.440	0.446	0.735	1.712	0.929	21.60	18.66	3922	577	2.847	1.441	-1.658	0.986	2.316	0.487	54.7
362S200-97	0.1017	50	0.826	2.81	1.712	0.945	1.440	0.446	0.735	1.712	0.929	32.04	28.28	5943	875	2.847	1.441	-1.658	0.986	2.316	0.487	43.6
362S250-332	0.0346	33	0.331	1.13	0.760	0.419	1.514	0.299	0.951			6.59	1024	521	0.132	0.965	-2.211	1.284	2.844	0.395	64.2	
362S250-43	0.0451	33	0.430	1.46	0.980	0.541	1.510	0.385	0.946	0.980	0.449	8.88	9.36	1739	676	0.292	1.230	-2.199</				