

## STRUCTURAL STUD SECTION PROPERTIES

Section	Design Thickness (in)	Fy (Yield) (ksi)	Gross Properties						Effective Properties							Torsional Properties						
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ixx (in <sup>4</sup> )	Rx (in)	Iyy (in <sup>4</sup> )	Ry (in)	Ixx (in <sup>4</sup> )	Sxx (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KØc (in-lb/)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)
250S137-33	0.0346	33	0.197	0.67	0.203	1.015	0.052	0.515	0.203	0.158	3.11	3.09	6.7	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	1.01	0.067	0.511	0.261	0.205	4.53	4.6	0.00	1265	394	0.173	0.096	-1.129	0.67	1.599	0.501	33.6
250S137-54	0.0566	33	0.316	1.07	0.318	1.004	0.08	0.504	0.318	0.255	5.76	5.76	0.00	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	1.004	0.08	0.504	0.318	0.244	8.22	8.34	0.00	2353	565	0.337	0.115	-1.115	0.663	1.583	0.504	27.1
250S137-68	0.0713	33	0.39	1.33	0.386	0.994	0.095	0.495	0.386	0.309	7.19	7.19	0.00	1891	342	0.661	0.138	-1.096	0.653	1.561	0.507	33.1
250S137-68	0.0713	50	0.39	1.33	0.386	0.994	0.095	0.495	0.386	0.308	10.65	10.67	0.00	2866	519	0.661	0.138	-1.096	0.653	1.561	0.507	26.8
250S137-97	0.1017	33	0.533	1.81	0.506	0.975	0.12	0.475	0.506	0.405	10.01	10.01	0.00	2506	283	1.839	0.176	-1.057	0.633	1.514	0.513	33.1
250S137-97	0.1017	50	0.533	1.81	0.506	0.975	0.12	0.475	0.506	0.405	14.75	14.75	0.00	3798	429	1.839	0.176	-1.057	0.633	1.514	0.513	26.5
250S162-33	0.0346	33	0.223	0.76	0.235	1.027	0.087	0.624	0.235	0.18	3.55	3.56	0.00	975	399	0.089	0.146	-1.47	0.859	1.898	0.401	44.1
250S162-43	0.0451	33	0.289	0.98	0.302	1.022	0.111	0.62	0.302	0.24	5.22	5.25	0.00	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	0.37	1.016	0.135	0.613	0.37	0.296	6.57	6.57	0.00	1553	373	0.383	0.223	-1.443	0.845	1.868	0.403	41.8
250S162-54	0.0566	50	0.358	1.22	0.37	1.016	0.135	0.613	0.37	0.284	9.42	9.46	0.00	2353	565	0.383	0.223	-1.443	0.845	1.868	0.403	33.9
250S162-68	0.0713	33	0.443	1.51	0.45	1.007	0.162	0.605	0.45	0.36	8.21	8.21	0.00	1891	342	0.752	0.268	-1.424	0.835	1.846	0.405	41.7
250S162-68	0.0713	50	0.443	1.51	0.45	1.007	0.162	0.605	0.45	0.357	12.11	12.21	0.00	2866	519	0.752	0.268	-1.424	0.835	1.846	0.405	33.7
250S162-97	0.1017	33	0.61	2.07	0.596	0.989	0.209	0.586	0.596	0.477	11.45	11.45	0.00	2506	283	2.102	0.346	-1.386	0.815	1.801	0.408	41.9
250S162-97	0.1017	50	0.61	2.07	0.596	0.989	0.209	0.586	0.596	0.477	16.93	16.93	0.00	3798	429	2.102	0.346	-1.386	0.815	1.801	0.408	33.5
250S200-33	0.0346	33	0.258	0.88	0.279	1.04	0.154	0.773	0.265	0.182	5.44	5.41	3.8	1260	515	0.103	0.302	-1.926	1.108	2.321	0.312	45.3
250S200-43	0.0451	33	0.334	1.14	0.358	1.036	0.198	0.769	0.358	0.252	7.56	7.64	0.00	1917	597	0.227	0.382	-1.914	1.101	2.308	0.312	45.3
250S200-54	0.0566	33	0.415	1.41	0.44	1.03	0.241	0.763	0.44	0.352	7.65	7.65	0.00	1553	373	0.443	0.464	-1.899	1.093	2.291	0.313	53.7
250S200-54	0.0566	50	0.415	1.41	0.44	1.03	0.241	0.763	0.44	0.321	9.6	10.11	0.00	2353	565	0.443	0.464	-1.899	1.093	2.291	0.313	45.5
250S200-68	0.0713	33	0.515	1.75	0.537	1.022	0.293	0.754	0.537	0.43	9.57	9.57	0.00	1891	342	0.872	0.561	-1.881	1.084	2.27	0.313	53.7
250S200-68	0.0713	50	0.515	1.75	0.537	1.022	0.293	0.754	0.537	0.417	13.84	14.27	0.00	2866	519	0.872	0.561	-1.881	1.084	2.27	0.313	43.4
250S200-97	0.1017	33	0.711	2.42	0.718	1.005	0.386	0.736	0.718	0.575	13.36	13.36	0.00	2506	283	2.452	0.735	-1.843	1.063	2.224	0.314	54.2
250S200-97	0.1017	50	0.711	2.42	0.718	1.005	0.386	0.736	0.718	0.575	19.82	19.82	0.00	3798	429	2.452	0.735	-1.843	1.063	2.224	0.314	43.4
250S250-43	0.0451	33	0.379	1.29	0.426	1.06	0.336	0.941	0.426	0.297	5.87	6.24	0.00	1265	394	0.257	0.638	-2.404	1.359	2.791	0.258	66.8
250S250-54	0.0566	33	0.471	1.6	0.524	1.055	0.412	0.935	0.524	0.379	7.49	8.22	0.00	1553	373	0.503	0.778	-2.389	1.351	2.774	0.258	67.3
250S250-54	0.0566	50	0.471	1.6	0.524	1.055	0.412	0.935	0.521	0.341	10.22	11.02	0.00	2353	565	0.503	0.778	-2.389	1.351	2.774	0.258	54.1
250S250-68	0.0713	33	0.586	1.99	0.643	1.047	0.503	0.926	0.643	0.495	10.79	11.19	0.00	1891	342	0.993	0.944	-2.371	1.341	2.752	0.258	64.6
250S250-68	0.0713	50	0.586	1.99	0.643	1.047	0.503	0.926	0.643	0.446	13.35	15.59	0.00	2866	519	0.993	0.944	-2.371	1.341	2.752	0.258	54.5
250S250-97	0.1017	33	0.813	2.77	0.864	1.031	0.67	0.908	0.864	0.69	15.6	15.62	0.00	2506	283	2.803	1.245	-2.332	1.32	2.707	0.258	65.6
250S250-97	0.1017	50	0.813	2.77	0.864	1.031	0.67	0.908	0.864	0.663	22.31	23.26	0.00	3798	429	2.803	1.245	-2.332	1.32	2.707	0.258	52.4
350S137-33	0.0346	33	0.232	0.79	0.441	1.38	0.059	0.503	0.441	0.223	4.41	4.54	0.00	1024	487	0.093	0.153	-1.016	0.621	1.786	0.676	34.8
350S137-33	0.0346	33	0.232	0.79	0.441	1.38	0.059	0.503	0.441	0.223	4.41	4.54	0.00	1024	487	0.093	0.153	-1.016	0.621	1.786	0.676	34.8
350S137-43	0.0451	33	0.3	1.02	0.568	1.375	0.075	0.498	0.568	0.307	6.07	6.38	0.00	1739	631	0.204	0.193	-1.005	0.615	1.774	0.679	34.7
350S137-54	0.0566	33	0.372	1.27	0.696	1.367	0.09	0.492	0.696	0.385	7.61	7.86	0.00	2253	633	0.398	0.233	-0.991	0.607	1.759	0.683	34.7
350S137-54	0.0566	50	0.372	1.27	0.696	1.367	0.09	0.492	0.696	0.366	10.95	11.42	0.00	3372	947	0.398	0.233	-0.991	0.607	1.759	0.683	28
350S137-68	0.0713	33	0.461	1.57	0.849	1.357	0.107	0.482	0.849	0.474	11.04	11.31	0.00	2774	592	0.782	0.28	-0.973	0.598	1.738	0.687	31.8
350S137-68	0.0713	50	0.461	1.57	0.849	1.357	0.107	0.482	0.849	0.472	14.12	14.53	0.00	4202	897	0.782	0.28	-0.973	0.598	1.738	0.687	27.9
350S137-97	0.1017	33	0.635	2.16	1.13	1.334	0.136	0.462	1.13	0.629	15.54	15.95	0.00	3765	511	2.189	0.361	-0.935	0.579	1.693	0.695	31.1
350S137-97	0.1017	50	0.635	2.16	1.13	1.334	0.136	0.462	1.13	0.629	22.9	23.49	0.00	5704	775	2.189	0.361	-0.935	0.579	1.693	0.695	25.2
350S162-33	0.0346	33	0.258	0.88	0.508	1.404	0.098	0.617	0.508	0.257	5.08	5.22	0.00	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	0.654	1.4	0.125	0.612	0.654	0.357	7.05	7.31	0.00	1739	631	0.227	0.35	-1.312	0.789	2.014	0.575	42.6
350S162-54	0.0566	33	0.415	1.41	0.804	1.392	0.152	0.606	0.804	0.447	8.83	9.08	0.00	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	0.804	1.392	0.152	0.606	0.804	0.426	12.74	13.05	0.00	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	1.383	0.184	0.597	0.985	0.551	12.56	12.83	0.00	2774	592	0.872	0.514	-1.28	0.772	1.977	0.581	39.7
350S162-68	0.0713	50	0.515	1.75	0.985	1.383	0.184	0.597	0.985	0.549	16.44	16.84	0.00	4202	897	0.872	0.514	-1.28	0.772	1.977	0.581	34.5
350S162-97	0.1017	33	0.711	2.42	1.32	1.362	0.238	0.578	1.32	0.738	17.71	18.11	0.00	3765	511	2.452	0.672	-1.242	0.752	1.932	0.587	39.1
350S162-97	0.1017	50	0.711	2.42	1.32	1.362	0.238	0.578	1.32	0.738	26.18	26.76	0.00	5704	775	2.452	0.672	-1.242	0.752	1.932	0.587	31.7
350S200-33	0.0346	33	0.292	0.99	0.598	1.431	0.175	0.773	0.597	0.283	5.59	5.95	0.00	1024	487	0.117	0.541	-1.76	1.039	2.396	0.461	53.7
350S200-43	0.0451	33	0.379	1.29	0.771	1.426	0.224	0.768	0.771	0.41	8.09	8.36	0.00	1739	631	0.257	0.687	-1.748	1.032	2.383	0.462	53.7
350S200-54	0.0566	33	0.471	1.6	0.95	1.42	0.274	0.762	0.95	0.53	10.47	10.73	0.00	2253	633	0.503	0.838	-1.733	1.024	2.367	0.464	53.8
350S200-54	0.0566	50	0.471	1.6	0.95	1.42	0.274	0.762	0.95	0.47	14.07	14.86	0.00	3372	947	0.503	0.838	-1.733	1.024			

# STRUCTURAL STUD SECTION PROPERTIES

Section	Gross Properties									Effective Properties							Torsional Properties					
	Design Thickness (in)	Fy (Yield) (ksi)	Area (in <sup>2</sup> )	Weight (lb/ft)	Ixx (in <sup>4</sup> )	Rx (in)	Iyy (in <sup>4</sup> )	Ry (in)	Ixx (in <sup>4</sup> )	Sxx (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KΦc (in-lb/)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)
<b>350S250-54</b>	0.0566	50	0.528	1.8	1.118	1.455	0.467	0.94	1.113	0.494	14.78	15.92	0.00	3372	947	0.564	1.409	-2.205	1.278	2.804	0.382	52.1
<b>350S250-68</b>	0.0713	33	0.657	2.24	1.376	1.447	0.57	0.931	1.376	0.739	16.1	16.99	0.00	2774	592	1.114	1.718	-2.186	1.268	2.782	0.383	61.6
<b>350S250-68</b>	0.0713	50	0.657	2.24	1.376	1.447	0.57	0.931	1.376	0.661	19.78	21.31	0.00	4202	897	1.114	1.718	-2.186	1.268	2.782	0.383	52.2
<b>350S250-97</b>	0.1017	33	0.915	3.11	1.87	1.43	0.762	0.913	1.87	1.05	23.72	24.14	0.00	3765	511	3.154	2.291	-2.147	1.248	2.736	0.384	61.4
<b>350S250-97</b>	0.1017	50	0.915	3.11	1.87	1.43	0.762	0.913	1.87	0.998	33.58	35.43	0.00	5704	775	3.154	2.291	-2.147	1.248	2.736	0.384	49.5
<b>350S300-54</b>	0.0566	33	0.585	1.99	1.286	1.483	0.724	1.113	1.279	0.582	11.51	12.73	0.00	2253	633	0.624	2.166	-2.682	1.531	3.261	0.323	64.7
<b>350S300-54</b>	0.0566	50	0.585	1.99	1.286	1.483	0.724	1.113	1.213	0.508	15.2	16.71	0.00	3372	947	0.624	2.166	-2.682	1.531	3.261	0.323	70.4
<b>350S300-68</b>	0.0713	33	0.729	2.48	1.586	1.475	0.888	1.104	1.586	0.775	15.31	16.97	0.00	2774	592	1.235	2.649	-2.663	1.521	3.238	0.324	75.1
<b>350S300-68</b>	0.0713	50	0.729	2.48	1.586	1.475	0.888	1.104	1.557	0.687	20.56	22.55	0.00	4202	897	1.235	2.649	-2.663	1.521	3.238	0.324	60.5
<b>350S300-97</b>	0.1017	33	1.016	3.46	2.164	1.459	1.197	1.085	2.164	1.164	25.76	27.37	0.00	3765	511	3.504	3.552	-2.623	1.5	3.192	0.325	71.9
<b>350S300-97</b>	0.1017	50	1.016	3.46	2.164	1.459	1.197	1.085	2.144	1.098	32.89	34.99	0.00	5704	775	3.504	3.552	-2.623	1.5	3.192	0.325	61.1
<b>362S137-33</b>	0.0346	33	0.236	0.8	0.479	1.424	0.059	0.501	0.479	0.232	4.59	4.73	0.00	1024	521	0.094	0.165	-1.003	0.615	1.813	0.694	34.7
<b>362S137-43</b>	0.0451	33	0.306	1.04	0.616	1.419	0.075	0.497	0.616	0.32	6.32	6.65	0.00	1739	676	0.207	0.208	-0.991	0.608	1.801	0.697	34.6
<b>362S137-54</b>	0.0566	33	0.379	1.29	0.756	1.411	0.091	0.49	0.756	0.402	7.94	8.24	0.00	2341	705	0.405	0.251	-0.978	0.601	1.785	0.7	34.6
<b>362S137-54</b>	0.0566	50	0.379	1.29	0.756	1.411	0.091	0.49	0.756	0.381	11.42	11.91	0.00	3372	1016	0.405	0.251	-0.978	0.601	1.785	0.7	27.9
<b>362S137-68</b>	0.0713	33	0.47	1.6	0.922	1.401	0.109	0.48	0.922	0.498	9.84	10.06	0.00	2884	662	0.797	0.302	-0.959	0.592	1.764	0.704	34.6
<b>362S137-68</b>	0.0713	50	0.47	1.6	0.922	1.401	0.109	0.48	0.922	0.493	14.77	15.24	0.00	4370	1004	0.797	0.302	-0.959	0.592	1.764	0.704	27.8
<b>362S137-97</b>	0.1017	33	0.648	2.2	1.229	1.377	0.137	0.46	1.229	0.662	16.36	16.75	0.00	3922	577	2.233	0.39	-0.922	0.573	1.72	0.713	30.9
<b>362S137-97</b>	0.1017	50	0.648	2.2	1.229	1.377	0.137	0.46	1.229	0.662	24.1	24.67	0.00	5943	875	2.233	0.39	-0.922	0.573	1.72	0.713	25.1
<b>362S162-33</b>	0.0346	33	0.262	0.89	0.551	1.45	0.099	0.616	0.551	0.268	5.29	5.43	0.00	1024	521	0.105	0.297	-1.308	0.789	2.048	0.592	42.6
<b>362S162-43</b>	0.0451	33	0.34	1.16	0.71	1.445	0.127	0.611	0.71	0.372	7.34	7.62	0.00	1739	676	0.23	0.376	-1.297	0.782	2.036	0.594	42.5
<b>362S162-54</b>	0.0566	33	0.422	1.44	0.873	1.438	0.154	0.604	0.873	0.466	9.22	9.51	0.00	2341	705	0.451	0.457	-1.283	0.774	2.02	0.597	42.5
<b>362S162-54</b>	0.0566	50	0.422	1.44	0.873	1.438	0.154	0.604	0.873	0.444	13.28	13.59	0.00	3372	1016	0.451	0.457	-1.283	0.774	2.02	0.597	34.4
<b>362S162-68</b>	0.0713	33	0.524	1.78	1.069	1.429	0.186	0.596	1.069	0.579	11.43	11.65	0.00	2884	662	0.887	0.552	-1.264	0.765	1.998	0.6	42.7
<b>362S162-68</b>	0.0713	50	0.524	1.78	1.069	1.429	0.186	0.596	1.069	0.574	17.18	17.65	0.00	4370	1004	0.887	0.552	-1.264	0.765	1.998	0.6	34.3
<b>362S162-97</b>	0.1017	33	0.724	2.46	1.435	1.408	0.241	0.577	1.435	0.776	18.62	19	0.00	3922	577	2.496	0.723	-1.226	0.745	1.954	0.606	38.9
<b>362S162-97</b>	0.1017	50	0.724	2.46	1.435	1.408	0.241	0.577	1.435	0.776	27.52	28.08	0.00	5943	875	2.496	0.723	-1.226	0.745	1.954	0.606	31.5
<b>362S162-118</b>	0.1242	50	0.863	2.94	1.672	1.392	0.273	0.562	1.672	0.903	33.05	33.76	0.00	6996	784	4.440	0.827	-1.198	0.731	1.920	0.611	31.1
<b>362S200-33</b>	0.0346	33	0.297	1.01	0.648	1.478	0.177	0.772	0.647	0.294	5.81	6.18	0.00	1024	521	0.118	0.577	-1.741	1.03	2.411	0.478	53.6
<b>362S200-43</b>	0.0451	33	0.385	1.31	0.836	1.474	0.227	0.767	0.836	0.427	8.43	8.7	0.00	1739	676	0.261	0.734	-1.729	1.024	2.398	0.48	53.5
<b>362S200-54</b>	0.0566	33	0.479	1.63	1.03	1.467	0.277	0.761	1.03	0.553	10.93	11.23	0.00	2341	705	0.511	0.896	-1.715	1.016	2.382	0.482	53.6
<b>362S200-54</b>	0.0566	50	0.479	1.63	1.03	1.467	0.277	0.761	1.03	0.49	14.66	15.47	0.00	3372	1016	0.511	0.896	-1.715	1.016	2.382	0.482	43.3
<b>362S200-68</b>	0.0713	33	0.595	2.02	1.265	1.458	0.337	0.753	1.265	0.687	15.29	15.54	0.00	2884	662	1.008	1.089	-1.696	1.006	2.36	0.484	50.6
<b>362S200-68</b>	0.0713	50	0.595	2.02	1.265	1.458	0.337	0.753	1.265	0.666	19.95	20.51	0.00	4370	1004	1.008	1.089	-1.696	1.006	2.36	0.484	43.3
<b>362S200-97</b>	0.1017	33	0.826	2.81	1.711	1.44	0.446	0.735	1.711	0.928	21.59	21.95	0.00	3922	577	2.847	1.441	-1.658	0.986	2.315	0.487	50
<b>362S200-97</b>	0.1017	50	0.826	2.81	1.711	1.44	0.446	0.735	1.711	0.928	32.03	32.57	0.00	5943	875	2.847	1.441	-1.658	0.986	2.315	0.487	40.5
<b>362S200-118</b>	0.1242	50	0.988	3.36	2.006	1.425	0.513	0.721	2.006	1.088	38.54	39.22	0.00	6996	784	5.078	1.664	-1.629	0.971	2.281	0.490	40.2
<b>362S250-33</b>	0.0346	33	0.331	1.13	0.76	1.514	0.299	0.951	0.331	0.132	0.965	-2.211	1.284	2.844	0.395							
<b>362S250-43</b>	0.0451	33	0.43	1.46	0.98	1.51	0.385	0.946	0.98	0.449	8.88	9.35	0.00	1739	676	0.292	1.23	-2.199	1.277	2.83	0.396	64.2
<b>362S250-54</b>	0.0566	33	0.535	1.82	1.21	1.504	0.473	0.94	1.21	0.582	11.51	12.46	0.00	2341	705	0.571	1.506	-2.184	1.269	2.813	0.397	64.3
<b>362S250-54</b>	0.0566	50	0.535	1.82	1.21	1.504	0.473	0.94	1.205	0.514	15.4	16.54	0.00	3372	1016	0.571	1.506	-2.184	1.269	2.813	0.397	52
<b>362S250-68</b>	0.0713	33	0.666	2.27	1.49	1.496	0.578	0.931	1.49	0.774	16.85	17.68	0.00	2884	662	1.129	1.837	-2.165	1.259	2.791	0.398	61.4
<b>362S250-68</b>	0.0713	50	0.666	2.27	1.49	1.496	0.578	0.931	1.49	0.689	20.63	22.17	0.00	4370	1004	1.129	1.837	-2.165	1.259	2.791	0.398	52
<b>362S250-97</b>	0.1017	33	0.927	3.16	2.027	1.478	0.772	0.912	2.027	1.1	24.85	25.26	0.00	3922	577	3.197	2.452	-2.126	1.239	2.746	0.4	61
<b>362S250-97</b>	0.1017	50	0.927	3.16	2.027	1.478	0.772	0.912	2.027	1.046	35.17	36.93	0.00	5943	875	3.197	2.452	-2.126	1.239	2.746	0.4	49.3
<b>362S250-118</b>	0.1242	50	1.112	3.78	2.387	1.465	0.897	0.898	2.387	1.258	43.29	45.30	0.00	6996	784	5.717	2.849	-2.097	1.224	2.711	0.402	49.1
<b>362S300-54</b>	0.0566	33	0.592	2.01	1.39	1.533	0.734	1.114	1.383	0.607	11.99	13.22	0.00	2341	705	0.632	2.316	-2.659	1.522	3.265	0.337	74.5
<b>362S300-54</b>	0.0566	50	0.592	2.01	1.39	1.533	0.734	1.114	1.312	0.529	15.83	17.34	0.00	3372	1016	0.632	2.316	-2.659	1.522	3.265	0.337	60.2
<b>362S300-68</b>	0.0713	33	0.738	2.51	1.716	1.525	0.9	1.105	1.716	0.811	16.02	17.65	0.00	2884	662	1.25	2.833	-2.64	1.512	3.243	0.337	74.9
<b>362S300-68</b>	0.0713	50	0.738	2.51	1.716	1.525	0.9	1.105	1.684	0.716	21.44	23.42	0.00	4370	1004	1.25	2.833	-2.64	1.512	3.243	0.337	60.4
<b>362S300-97</b>	0.1017	33	1.029	3.5	2.343	1.509	1.213	1.086	2.343	1.217	26.95	28.61	0.00	3922	577	3.548	3.803	-2.6	1.491	3.196	0.338	71.6
<b>362S30</b>																						

# STRUCTURAL STUD SECTION PROPERTIES

Section	Design Thickness (in)	Fy (Yield) (ksi)	Gross Properties										Effective Properties					Torsional Properties				
			Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>xx</sub> (in <sup>4</sup> )	R <sub>x</sub> (in)	I <sub>yy</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	K $\phi$ c (in-lb/)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)
400S137-43	0.0451	33	0.323	1.10	0.776	1.551	0.078	0.491	0.776	0.359	7.09	7.47	0.00	1739	810	0.219	0.257	-0.954	0.591	1.885	0.744	34.3
400S137-54	0.0566	33	0.401	1.36	0.953	1.542	0.094	0.484	0.953	0.453	8.96	9.42	0.00	2603	944	0.428	0.311	-0.940	0.583	1.870	0.747	34.3
400S137-54	0.0566	50	0.401	1.36	0.953	1.542	0.094	0.484	0.953	0.428	12.82	13.38	0.00	3372	1223	0.428	0.311	-0.940	0.583	1.870	0.747	27.7
400S137-68	0.0713	33	0.497	1.69	1.165	1.531	0.112	0.475	1.165	0.567	11.21	11.51	0.00	3215	895	0.842	0.375	-0.922	0.574	1.849	0.751	34.2
400S137-68	0.0713	50	0.497	1.69	1.165	1.531	0.112	0.475	1.165	0.558	16.70	17.44	0.00	4871	1356	0.842	0.375	-0.922	0.574	1.849	0.751	27.6
400S162-33	0.0346	33	0.275	0.94	0.692	1.586	0.103	0.611	0.692	0.299	5.91	6.07	0.00	976	595	0.110	0.363	-1.263	0.768	2.118	0.644	42.3
400S162-43	0.0451	33	0.357	1.21	0.892	1.581	0.131	0.606	0.892	0.417	8.23	8.54	0.00	1739	810	0.242	0.460	-1.252	0.761	2.106	0.647	42.2
400S162-54	0.0566	33	0.443	1.51	1.098	1.574	0.159	0.600	1.098	0.526	10.39	10.85	0.00	2603	944	0.473	0.560	-1.238	0.754	2.090	0.649	42.2
400S162-54	0.0566	50	0.443	1.51	1.098	1.574	0.159	0.600	1.098	0.498	14.90	15.25	0.00	3372	1223	0.473	0.560	-1.238	0.754	2.090	0.649	34.1
400S162-68	0.0713	33	0.550	1.87	1.346	1.564	0.192	0.591	1.346	0.658	13.00	13.30	0.00	3215	895	0.933	0.677	-1.220	0.745	2.069	0.653	42.2
400S162-68	0.0713	50	0.550	1.87	1.346	1.564	0.192	0.591	1.346	0.648	19.41	20.15	0.00	4871	1356	0.933	0.677	-1.220	0.745	2.069	0.653	34.0
400S162-97	0.1017	33	0.762	2.59	1.812	1.542	0.249	0.572	1.812	0.892	21.4	21.75	0.00	4394	797	2.628	0.889	-1.182	0.725	2.025	0.659	38.3
400S162-97	0.1017	50	0.762	2.59	1.812	1.542	0.249	0.572	1.812	0.892	31.64	32.15	0.00	6658	1207	2.628	0.889	-1.182	0.725	2.025	0.659	31.1
400S162-118	0.1242	50	0.910	3.10	2.118	1.525	0.282	0.557	2.118	1.041	38.10	38.74	0.00	7869	1102	4.679	1.020	-1.154	0.711	1.992	0.664	30.6
400S200-33	0.0346	33	0.31	1.05	0.812	1.619	0.183	0.769	0.812	0.328	6.49	6.9	0.00	976	595	0.124	0.697	-1.688	1.007	2.462	0.53	53.1
400S200-43	0.0451	33	0.402	1.37	1.047	1.615	0.235	0.764	1.047	0.478	9.45	9.74	0.00	1739	810	0.272	0.886	-1.676	1	2.449	0.532	53
400S200-54	0.0566	33	0.5	1.7	1.292	1.608	0.287	0.758	1.292	0.623	12.3	12.77	0.00	2603	944	0.534	1.083	-1.662	0.993	2.433	0.534	53
400S200-54	0.0566	50	0.5	1.7	1.292	1.608	0.287	0.758	1.292	0.549	16.43	17.31	0.00	3372	1223	0.534	1.083	-1.662	0.993	2.433	0.534	42.9
400S200-68	0.0713	33	0.622	2.12	1.589	1.599	0.349	0.75	1.589	0.78	15.4	15.7	0.00	3215	895	1.054	1.318	-1.643	0.983	2.412	0.536	53.2
400S200-68	0.0713	50	0.622	2.12	1.589	1.599	0.349	0.75	1.589	0.751	22.48	23.03	0.00	4871	1356	1.054	1.318	-1.643	0.983	2.412	0.536	42.9
400S200-97	0.1017	33	0.864	2.94	2.155	1.579	0.462	0.731	2.155	1.063	24.72	25.05	0.00	4394	797	2.978	1.749	-1.605	0.963	2.368	0.54	49.3
400S200-97	0.1017	50	0.864	2.94	2.155	1.579	0.462	0.731	2.155	1.063	36.68	37.17	0.00	6658	1207	2.978	1.749	-1.605	0.963	2.368	0.54	39.9
400S200-118	0.1242	50	1.034	3.52	2.532	1.565	0.532	0.717	2.532	1.248	44.23	44.85	0.00	7869	1102	5.318	2.024	-1.577	0.948	2.334	0.544	39.5
400S250-33	0.0346	33	0.344	1.17	0.948	1.659	0.31	0.949								0.137	1.165	-2.151	1.259	2.878	0.441	
400S250-43	0.0451	33	0.447	1.52	1.224	1.655	0.399	0.945	1.224	0.503	9.93	10.41	0.00	1739	810	0.303	1.486	-2.139	1.252	2.864	0.443	63.7
400S250-54	0.0566	33	0.556	1.89	1.512	1.649	0.49	0.938	1.512	0.653	12.9	13.91	0.00	2603	944	0.594	1.821	-2.124	1.244	2.848	0.444	63.8
400S250-54	0.0566	50	0.556	1.89	1.512	1.649	0.49	0.938	1.506	0.576	17.24	18.42	0.00	3372	1223	0.594	1.821	-2.124	1.244	2.848	0.444	51.6
400S250-68	0.0713	33	0.693	2.36	1.864	1.64	0.599	0.929	1.864	0.883	17.45	18.42	0.00	3215	895	1.174	2.225	-2.105	1.235	2.826	0.445	64
400S250-68	0.0713	50	0.693	2.36	1.864	1.64	0.599	0.929	1.864	0.775	23.19	24.76	0.00	4871	1356	1.174	2.225	-2.105	1.235	2.826	0.445	51.6
400S250-97	0.1017	33	0.966	3.29	2.541	1.622	0.801	0.911	2.541	1.253	28.31	28.7	0.00	4394	797	3.329	2.978	-2.066	1.214	2.78	0.448	60.3
400S250-97	0.1017	50	0.966	3.29	2.541	1.622	0.801	0.911	2.541	1.191	40.06	41.47	0.00	6658	1207	3.329	2.978	-2.066	1.214	2.78	0.448	48.8
400S250-118	0.1242	50	1.158	3.94	2.998	1.609	0.931	0.897	2.998	1.436	49.40	51.57	0.00	7869	1102	5.956	3.467	-2.037	1.199	2.746	0.450	48.5
400S300-54	0.0566	33	0.613	2.09	1.732	1.681	0.76	1.114	1.723	0.68	13.44	14.7	0.00	2603	944	0.655	2.802	-2.594	1.496	3.285	0.377	74
400S300-54	0.0566	50	0.613	2.09	1.732	1.681	0.76	1.114	1.637	0.592	17.72	19.24	0.00	3372	1223	0.655	2.802	-2.594	1.496	3.285	0.377	59.9
400S300-68	0.0713	33	0.764	2.6	2.139	1.673	0.933	1.105	2.139	0.914	18.06	19.68	0.00	3215	895	1.295	3.432	-2.574	1.486	3.263	0.378	74.3
400S300-68	0.0713	50	0.764	2.6	2.139	1.673	0.933	1.105	2.099	0.805	24.09	26.05	0.00	4871	1356	1.295	3.432	-2.574	1.486	3.263	0.378	60
400S300-97	0.1017	33	1.067	3.63	2.928	1.656	1.258	1.086	2.928	1.381	30.58	32.4	0.00	4394	797	3.679	4.619	-2.535	1.465	3.216	0.379	70.8
400S300-97	0.1017	50	1.067	3.63	2.928	1.656	1.258	1.086	2.897	1.307	39.12	40.72	0.00	6658	1207	3.679	4.619	-2.535	1.465	3.216	0.379	60.3
400S300-118	0.1242	50	1.283	4.36	3.464	1.644	1.472	1.071	3.444	1.632	54.98	56.23	0.00	7869	1102	6.595	5.401	-2.505	1.450	3.182	0.380	57.1
400S350-54	0.0566	50	0.712	2.42	2.012	1.681	1.286	1.344	1.899	0.735	22.01	23.68	0.00	3372	1223	0.760	6.333	-3.375	1.927	4.003	0.289	77.6
400S350-68	0.0713	50	0.889	3.03	2.491	1.674	1.586	1.336	2.474	1.007	30.16	31.88	0.00	4871	1356	1.507	7.786	-3.357	1.917	3.982	0.289	77.8
400S350-97	0.1017	50	1.245	4.24	3.422	1.658	2.164	1.318	3.422	1.520	45.50	49.33	0.00	6658	1207	4.293	10.555	-3.319	1.897	3.937	0.289	78.3
400S350-118	0.1242	50	1.500	5.10	4.063	1.646	2.555	1.305	4.063	1.923	63.80	67.06	0.00	7869	1102	7.712	12.410	-3.290	1.882	3.904	0.290	74.7
550S137-33	0.0346	33	0.301	1.02	1.283	2.064	0.067	0.472	1.283	0.453	8.95	7.48	114.3	699	699	0.12	0.411	-0.841	0.536	2.278	0.864	33.7
550S137-43	0.0451	33	0.391	1.33	1.655	2.059	0.085	0.467	1.655	0.592	13.08	11.6	174.5	1550	1199	0.265	0.52	-0.83	0.53	2.268	0.866	31.7
550S137-54	0.0566	33	0.486	1.65	2.039	2.049	0.103	0.46	2.039	0.741	16.77	15.9	157.9	2739	1666	0.519	0.632	-0.817	0.523	2.254	0.868	31.1
550S137-54	0.0566	50	0.486	1.65	2.039	2.049	0.103	0.46	2.039	0.714	24.03	20.88	419.4	3093	1881	0.519	0.632	-0.817	0.523	2.254	0.868	25.4
550S137-68	0.0713	33	0.604	2.05	2.503	2.036	0.123	0.451	2.503	0.91	21.22	21.22	0.00	4347	2057	1.023	0.764	-0.801	0.514	2.234	0.871	30.4
550S137-68	0.0713	50	0.604	2.05	2.503	2.036	0.123	0.451	2.503	0.909	31.42	28.89	545.9	5350	2532	1.023	0.764	-0.801	0.514	2.234	0.871	24.9
550S137-97	0.1017	33	0.838	2.85	3.38	2.008	0.155	0.43	3.38	1.229	30.35	30.35	0.00	6282	1997	2.891	0.997	-0.766	0.497	2.192	0.878	29.2
550S137-97	0.1017	50	0.838	2.85	3.38	2.008	0.155	0.43	3.38	1.229	44.72	44.72	0.00	9518	3026	2.891	0.997	-0.766	0.497	2.192	0.878	23.9
550S162-33	0.0346	33	0.327	1.11	1.458	2.112	0.113	0.589	1.458	0												

# STRUCTURAL STUD SECTION PROPERTIES

Section	Design Thickness (in)	Fy (Yield) (ksi)	Gross Properties						Effective Properties						Torsional Properties							
			Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>xx</sub> (in <sup>4</sup> )	R <sub>x</sub> (in)	I <sub>yy</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KΦc (in-lb)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>o</sub> (in)	m (in)	R <sub>o</sub> (in)	b	Lu (in)
5505162-97	0.1017	50	0.915	3.11	3.886	2.061	0.276	0.549	3.886	1.413	50.13	50.13	0.00	9518	3026	3.154	1.775	-1.037	0.656	2.372	0.809	30
5505200-33	0.0346	33	0.362	1.23	1.694	2.164	0.204	0.751	1.678	0.559	11.05	9.8	58.5	699	699	0.144	1.326	-1.508	0.925	2.742	0.698	51.9
5505200-43	0.0451	33	0.469	1.6	2.189	2.159	0.261	0.746	2.189	0.776	15.33	13.96	112.2	1550	1199	0.318	1.691	-1.496	0.918	2.731	0.7	51.7
5505200-54	0.0566	33	0.585	1.99	2.706	2.152	0.32	0.739	2.706	0.984	21.41	19.98	173.9	2739	1666	0.624	2.072	-1.483	0.911	2.716	0.702	49.2
5505200-54	0.0566	50	0.585	1.99	2.706	2.152	0.32	0.739	2.706	0.901	26.98	24.84	180.4	3093	1881	0.624	2.072	-1.483	0.911	2.716	0.702	41.8
5505200-68	0.0713	33	0.729	2.48	3.341	2.141	0.389	0.731	3.341	1.215	27.03	27.03	0.00	4347	2057	1.235	2.531	-1.465	0.902	2.695	0.705	48.5
5505200-68	0.0713	50	0.729	2.48	3.341	2.141	0.389	0.731	3.341	1.17	38.83	35.92	380.3	5350	2532	1.235	2.531	-1.465	0.902	2.695	0.705	39.6
5505200-97	0.1017	33	1.016	3.46	4.563	2.119	0.515	0.712	4.563	1.659	38.58	38.58	0.00	6282	1997	3.504	3.384	-1.428	0.882	2.652	0.71	47.4
5505200-97	0.1017	50	1.016	3.46	4.563	2.119	0.515	0.712	4.563	1.659	57.25	57.25	0.00	9518	3026	3.504	3.384	-1.428	0.882	2.652	0.71	38.6
5505250-33	0.0346	33	0.396	1.35	1.952	2.22	0.346	0.935					0.00			0.158	2.219	-1.945	1.169	3.095	0.605	
5505250-43	0.0451	33	0.515	1.75	2.524	2.215	0.445	0.93	2.524	0.817	16.15	14.74	94.1	1550	1199	0.349	2.837	-1.933	1.163	3.083	0.607	62.6
5505250-54	0.0566	33	0.641	2.18	3.126	2.208	0.547	0.923	3.126	1.033	20.4	19.87	53.3	2739	1666	0.685	3.486	-1.919	1.155	3.067	0.609	62.6
5505250-54	0.0566	50	0.641	2.18	3.126	2.208	0.547	0.923	3.084	0.95	28.44	26.11	166.4	3093	1881	0.685	3.486	-1.919	1.155	3.067	0.609	50.7
5505250-68	0.0713	33	0.8	2.72	3.866	2.198	0.669	0.914	3.866	1.345	29.28	28.52	117.8	4347	2057	1.356	4.274	-1.9	1.146	3.046	0.611	59.5
5505250-68	0.0713	50	0.8	2.72	3.866	2.198	0.669	0.914	3.864	1.233	36.91	35.43	164.4	5350	2532	1.356	4.274	-1.9	1.146	3.046	0.611	50.6
5505250-97	0.1017	33	1.118	3.8	5.304	2.178	0.897	0.895	5.304	1.925	43.47	43.57	0.00	6282	1997	3.855	5.761	-1.862	1.126	3.002	0.615	58.4
5505250-97	0.1017	50	1.118	3.8	5.304	2.178	0.897	0.895	5.304	1.837	61.77	60.32	328	9518	3026	3.855	5.761	-1.862	1.126	3.002	0.615	47.6
5505300-54	0.0566	33	0.698	2.37	3.545	2.254	0.85	1.104	3.505	1.08	21.34	20.74	51.4	2739	1666	0.745	5.364	-2.365	1.401	3.449	0.53	73
5505300-54	0.0566	50	0.698	2.37	3.545	2.254	0.85	1.104	3.295	0.983	29.44	27	156.5	3093	1881	0.745	5.364	-2.365	1.401	3.449	0.53	59.2
5505300-68	0.0713	33	0.871	2.96	4.391	2.245	1.044	1.095	4.384	1.411	27.88	28.03	0.00	4347	2057	1.476	6.594	-2.346	1.391	3.427	0.531	73.1
5505300-68	0.0713	50	0.871	2.96	4.391	2.245	1.044	1.095	4.285	1.287	38.53	36.85	164.5	5350	2532	1.476	6.594	-2.346	1.391	3.427	0.531	59.1
5505300-97	0.1017	33	1.22	4.15	6.045	2.226	1.411	1.075	6.045	2.101	46.52	47.35	0.00	6282	1997	4.205	8.937	-2.307	1.371	3.381	0.535	69.1
5505300-97	0.1017	50	1.22	4.15	6.045	2.226	1.411	1.075	5.964	2.005	60.02	58.54	315.2	9518	3026	4.205	8.937	-2.307	1.371	3.381	0.535	59.1
6005137-33	0.0346	33	0.318	1.08	1.582	2.229	0.069	0.464	1.548	0.455	8.98	8.18	43.2	638	638	0.127	0.5	-0.807	0.519	2.416	0.889	33.5
6005137-33	0.0346	33	0.318	1.08	1.582	2.229	0.069	0.464	1.548	0.455	8.98	8.18	43.2	638	638	0.127	0.500	-0.807	0.519	2.416	0.889	33.5
6005137-43	0.0451	33	0.413	1.41	2.042	2.223	0.087	0.459	2.041	0.645	12.74	11.82	90.2	1416	1240	0.28	0.633	-0.796	0.513	2.406	0.89	33.3
6005137-43	0.0451	33	0.413	1.41	2.042	2.223	0.087	0.459	2.041	0.645	12.74	11.82	90.2	1416	1240	0.280	0.633	-0.796	0.513	2.406	0.890	33.3
6005137-54	0.0566	33	0.514	1.75	2.518	2.213	0.105	0.452	2.518	0.832	16.44	15.95	82	2739	1890	0.549	0.769	-0.784	0.506	2.391	0.893	33
6005137-54	0.0566	50	0.514	1.75	2.518	2.213	0.105	0.452	2.518	0.777	23.26	21.24	226.8	2823	1947	0.549	0.769	-0.784	0.506	2.391	0.893	26.8
6005137-68	0.0713	33	0.64	2.18	3.094	2.2	0.125	0.443	3.094	1.031	24.05	24.05	0.00	4347	2339	1.084	0.93	-0.768	0.497	2.371	0.895	30.1
6005137-68	0.0713	50	0.64	2.18	3.094	2.2	0.125	0.443	3.094	1.03	30.84	28.89	394.7	5350	2879	1.084	0.93	-0.768	0.497	2.371	0.895	26.5
6005137-97	0.1017	33	0.889	3.03	4.188	2.17	0.159	0.422	4.188	1.396	34.48	34.48	0.00	6911	2512	3.066	1.216	-0.734	0.48	2.33	0.901	28.8
6005137-97	0.1017	50	0.889	3.03	4.188	2.17	0.159	0.422	4.188	1.396	50.8	50.8	0.00	10472	3805	3.066	1.216	-0.734	0.48	2.33	0.901	23.6
6005162-33	0.0346	33	0.344	1.17	1.793	2.282	0.116	0.581	1.793	0.577	11.41	9.47	102.4	638	638	0.137	0.861	-1.072	0.677	2.587	0.828	41.1
6005162-43	0.0451	33	0.447	1.52	2.316	2.276	0.148	0.576	2.316	0.767	16.68	14.46	182.3	1416	1240	0.303	1.095	-1.062	0.67	2.577	0.83	39
6005162-54	0.0566	33	0.556	1.89	2.86	2.267	0.18	0.57	2.86	0.953	21.17	19.75	173.3	2739	1890	0.594	1.337	-1.049	0.663	2.562	0.832	38.4
6005162-54	0.0566	50	0.556	1.89	2.86	2.267	0.18	0.57	2.86	0.916	30.33	25.9	396.6	2823	1947	0.594	1.337	-1.049	0.663	2.562	0.832	31.4
6005162-68	0.0713	33	0.693	2.36	3.525	2.255	0.218	0.56	3.525	1.175	26.79	26.79	0.00	4347	2339	1.174	1.626	-1.032	0.655	2.543	0.835	37.7
6005162-68	0.0713	50	0.693	2.36	3.525	2.255	0.218	0.56	3.525	1.164	39.47	35.7	534.3	5350	2879	1.174	1.626	-1.032	0.655	2.543	0.835	30.8
6005162-97	0.1017	33	0.966	3.29	4.797	2.229	0.283	0.541	4.797	1.599	38.37	38.37	0.00	6911	2512	3.329	2.153	-0.997	0.636	2.501	0.841	36.4
6005162-97	0.1017	50	0.966	3.29	4.797	2.229	0.283	0.541	4.797	1.599	56.73	56.73	0.00	10472	3805	3.329	2.153	-0.997	0.636	2.501	0.841	29.8
6005162-118	0.1242	50	1.158	3.94	5.652	2.209	0.321	0.526	5.652	1.884	68.94	68.94	0.00	12526	3622	5.956	2.487	-0.971	0.623	2.470	0.845	29.1
6005200-33	0.0346	33	0.379	1.29	2.075	2.34	0.209	0.743	2.058	0.621	12.28	10.76	58.8	638	638	0.151	1.593	-1.457	0.901	2.855	0.74	51.6
6005200-43	0.0451	33	0.492	1.67	2.683	2.335	0.268	0.739	2.683	0.873	17.24	15.39	128.7	1416	1240	0.334	2.033	-1.446	0.894	2.844	0.742	51.4
6005200-54	0.0566	33	0.613	2.09	3.319	2.327	0.328	0.732	3.319	1.106	24.07	22.07	205.1	2739	1890	0.655	2.493	-1.432	0.887	2.829	0.744	48.9
6005200-54	0.0566	50	0.613	2.09	3.319	2.327	0.328	0.732	3.319	1.015	30.4	27.38	216.3	2823	1947	0.655	2.493	-1.432	0.887	2.829	0.744	41.6
6005200-68	0.0713	33	0.764	2.6	4.101	2.316	0.4	0.723	4.101	1.367	30.42	29.97	69.1	4347	2339	1.295	3.047	-1.415	0.878	2.809	0.746	48.2
6005200-68	0.0713	50	0.764	2.6	4.101	2.316	0.4	0.723	4.101	1.317	43.71	39.69	443.7	5350	2879	1.295	3.047	-1.415	0.878	2.809	0.746	39.3
6005200-97	0.1017	33	1.067	3.63	5.612	2.293	0.53	0.705	5.612	1.871	43.49	43.49	0.00	6911	2512	3.679	4.08	-1.378	0.859	2.767	0.752	46.9
6005200-97	0.1017	50	1.067	3.63	5.612	2.293	0.53	0.705	5.612	1.871	64.53	63.67	196.7	10472	3805	3.679	4.08	-1.378	0.859	2.767	0.752	38.3
6005200-118	0.1242	50	1.283	4.36	6.641	2.275	0.611	0.690	6.641	2.214	78.44	78.44	0.00	12526	3622	6.595	4.753	-1.351	0.845	2.735	0.756	37.6
6005250-33	0.0346	33	0.413	1.41	2.383	2.401	0.356	0														



# STRUCTURAL STUD SECTION PROPERTIES

Section	Design Thickness (in)	Fy (Yield) (ksi)	Gross Properties						Effective Properties							Torsional Properties						
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ixx (in <sup>4</sup> )	Rx (in)	Iyy (in <sup>4</sup> )	Ry (in)	Ixx (in <sup>4</sup> )	Sxx (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KΦc (in-lb/ft)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)
600S250-97	0.1017	50	1.169	3.98	6.496	2.357	0.923	0.889	6.496	2.063	69.38	66.81	488.5	10472	3805	4.03	6.947	-1.803	1.1	3.098	0.661	47.3
600S250-118	0.1242	50	1.407	4.79	7.713	2.342	1.075	0.874	7.713	2.498	85.92	86.83	0.00	12526	3622	7.234	8.142	-1.775	1.085	3.066	0.665	46.6
600S300-54	0.0566	33	0.726	2.47	4.319	2.439	0.875	1.098	4.269	1.211	23.93	22.8	83.5	2739	1890	0.775	6.452	-2.299	1.372	3.527	0.575	72.8
600S300-54	0.0566	50	0.726	2.47	4.319	2.439	0.875	1.098	4.014	1.106	33.13	29.62	192.1	2823	1947	0.775	6.452	-2.299	1.372	3.527	0.575	59.1
600S300-68	0.0713	33	0.907	3.09	5.354	2.43	1.075	1.089	5.344	1.581	31.23	30.88	40.7	4347	2339	1.537	7.937	-2.28	1.363	3.505	0.577	72.8
600S300-68	0.0713	50	0.907	3.09	5.354	2.43	1.075	1.089	5.221	1.446	43.3	40.53	231.4	5350	2879	1.537	7.937	-2.28	1.363	3.505	0.577	59
600S300-97	0.1017	33	1.271	4.32	7.381	2.41	1.454	1.07	7.381	2.352	52.07	52.4	0.00	6911	2512	4.381	10.776	-2.241	1.343	3.461	0.581	68.8
600S300-97	0.1017	50	1.271	4.32	7.381	2.41	1.454	1.07	7.28	2.247	67.28	64.67	471.1	10472	3805	4.381	10.776	-2.241	1.343	3.461	0.581	58.8
600S300-118	0.1242	50	1.531	5.21	8.785	2.395	1.704	1.055	8.713	2.797	94.24	90.37	0.00	12526	3622	7.872	12.683	-2.212	1.328	3.427	0.583	55.3
600S350-54	0.0566	50	0.825	2.81	5.022	2.467	1.491	1.344	4.721	1.335	39.97	36.56	0.00	2823	1947	0.881	12.942	-3.037	1.787	4.137	0.461	74.4
600S350-68	0.0713	50	1.032	3.51	6.237	2.459	1.841	1.336	6.166	1.771	53.01	49.70	0.00	5350	2879	1.748	15.968	-3.018	1.777	4.115	0.462	74.4
600S350-97	0.1017	50	1.449	4.93	8.631	2.441	2.518	1.318	8.631	2.593	77.64	78.36	0.00	10472	3805	4.994	21.811	-2.979	1.757	4.071	0.464	74.4
600S350-118	0.1242	50	1.748	5.95	10.304	2.428	2.978	1.305	10.304	3.268	108.43	107.66	0.00	12526	3622	8.990	25.791	-2.951	1.742	4.038	0.466	70.6
725S125-33 <sup>1</sup>	0.0346	33	0.34	1.16	2.251	2.573	0.043	0.357	2.114	0.456	9	7.55	92.7	525	525	0.136	0.464	-0.549	0.366	2.655	0.957	27
725S125-43	0.0451	33	0.441	1.5	2.905	2.566	0.055	0.352	2.835	0.691	13.65	11.46	255.9	1163	1163	0.299	0.586	-0.54	0.361	2.646	0.958	26.7
725S125-54	0.0566	33	0.549	1.87	3.582	2.554	0.065	0.344	3.582	0.92	18.17	16.18	378.4	2316	2072	0.587	0.708	-0.528	0.354	2.631	0.96	26.4
725S125-54	0.0566	50	0.549	1.87	3.582	2.554	0.065	0.344	3.504	0.841	25.18	21.1	558	2316	2072	0.587	0.708	-0.528	0.354	2.631	0.96	21.4
725S125-68	0.0713	33	0.684	2.33	4.403	2.537	0.076	0.334	4.396	1.21	23.91	22.63	420.9	4347	3044	1.159	0.851	-0.514	0.347	2.61	0.961	26
725S125-68	0.0713	50	0.684	2.33	4.403	2.537	0.076	0.334	4.396	1.141	34.15	30.02	946.3	4680	3278	1.159	0.851	-0.514	0.347	2.61	0.961	21.1
725S137-33 <sup>1</sup>	0.0346	33	0.362	1.23	2.509	2.634	0.072	0.445	2.392	0.559	11.05	9.82	45.8	525	525	0.144	0.766	-0.733	0.48	2.77	0.93	32.9
725S137-43	0.0451	33	0.469	1.6	3.241	2.628	0.091	0.441	3.178	0.802	15.84	14.36	97.3	1163	1163	0.318	0.971	-0.724	0.474	2.761	0.931	32.6
725S137-54	0.0566	33	0.585	1.99	4.003	2.617	0.11	0.434	4.003	1.048	20.72	19.64	116.6	2316	2072	0.624	1.181	-0.712	0.468	2.746	0.933	32.4
725S137-54	0.0566	50	0.585	1.99	4.003	2.617	0.11	0.434	3.945	0.968	28.99	25.88	237.8	2316	2072	0.624	1.181	-0.712	0.468	2.746	0.933	26.2
725S137-68	0.0713	33	0.729	2.48	4.932	2.602	0.131	0.424	4.932	1.359	26.86	26.63	42.4	4347	3044	1.235	1.43	-0.697	0.46	2.726	0.935	32.1
725S137-68	0.0713	50	0.729	2.48	4.932	2.602	0.131	0.424	4.932	1.304	39.03	35.69	448.5	4680	3278	1.235	1.43	-0.697	0.46	2.726	0.935	26
725S137-97	0.1017	33	1.016	3.46	6.71	2.569	0.166	0.404	6.71	1.851	36.58	36.58	0.00	8484	4049	3.504	1.875	-0.665	0.443	2.685	0.939	31.5
725S137-97	0.1017	50	1.016	3.46	6.71	2.569	0.166	0.404	6.71	1.851	55.42	55.42	0.00	10885	5195	3.504	1.875	-0.665	0.443	2.685	0.939	25.4
725S162-33 <sup>1</sup>	0.0346	33	0.388	1.32	2.822	2.698	0.122	0.562	2.706	0.638	12.61	11.48	32.8	525	525	0.155	1.309	-0.982	0.631	2.926	0.887	40.5
725S162-43	0.0451	33	0.503	1.71	3.648	2.692	0.156	0.557	3.585	0.913	18.04	16.6	73.8	1163	1163	0.341	1.666	-0.972	0.625	2.916	0.889	40.2
725S162-54	0.0566	33	0.627	2.13	4.513	2.683	0.19	0.55	4.513	1.188	23.48	22.49	82.6	2316	2072	0.67	2.036	-0.96	0.618	2.902	0.891	40
725S162-54	0.0566	50	0.627	2.13	4.513	2.683	0.19	0.55	4.455	1.1	32.93	29.69	189.1	2316	2072	0.67	2.036	-0.96	0.618	2.902	0.891	32.5
725S162-68	0.0713	33	0.782	2.66	5.572	2.669	0.229	0.541	5.572	1.536	30.35	30.24	15.7	4347	3044	1.325	2.479	-0.944	0.61	2.882	0.893	39.8
725S162-68	0.0713	50	0.782	2.66	5.572	2.669	0.229	0.541	5.572	1.479	44.29	40.57	378.5	4680	3278	1.325	2.479	-0.944	0.61	2.882	0.893	32.2
725S162-97	0.1017	33	1.093	3.72	7.618	2.64	0.297	0.522	7.618	2.101	50.43	50.43	0.00	8484	4049	3.767	3.293	-0.911	0.592	2.841	0.897	35.6
725S162-97	0.1017	50	1.093	3.72	7.618	2.64	0.297	0.522	7.618	2.101	74.54	72.43	418.2	10885	5195	3.767	3.293	-0.911	0.592	2.841	0.897	29.1
725S200-33 <sup>1</sup>	0.0346	33	0.422	1.44	3.241	2.771	0.221	0.724	3.234	0.743	14.67	13.14	37.4	525	525	0.168	2.395	-1.346	0.847	3.164	0.819	50.9
725S200-43	0.0451	33	0.548	1.87	4.193	2.765	0.284	0.719	4.193	1.131	22.34	18.92	167.9	1163	1163	0.372	3.059	-1.335	0.84	3.154	0.821	50.7
725S200-54	0.0566	33	0.684	2.33	5.195	2.756	0.347	0.713	5.195	1.433	31.18	27.29	278.5	2316	2072	0.73	3.755	-1.322	0.833	3.139	0.823	48.1
725S200-54	0.0566	50	0.684	2.33	5.195	2.756	0.347	0.713	5.195	1.321	39.55	33.68	301.7	2316	2072	0.73	3.755	-1.322	0.833	3.139	0.823	41
725S200-68	0.0713	33	0.853	2.9	6.428	2.744	0.423	0.704	6.428	1.773	39.46	37.37	222.1	4347	3044	1.446	4.596	-1.305	0.824	3.119	0.825	47.4
725S200-68	0.0713	50	0.853	2.9	6.428	2.744	0.423	0.704	6.428	1.71	56.77	49.12	597.1	4680	3278	1.446	4.596	-1.305	0.824	3.119	0.825	38.7
725S200-97	0.1017	33	1.194	4.06	8.831	2.719	0.561	0.685	8.831	2.436	56.64	56.64	0.00	8484	4049	4.118	6.175	-1.27	0.806	3.078	0.83	46
725S200-97	0.1017	50	1.194	4.06	8.831	2.719	0.561	0.685	8.831	2.436	84.04	79.95	643.8	10885	5195	4.118	6.175	-1.27	0.806	3.078	0.83	37.6
725S250-43	0.0451	33	0.593	2.02	4.778	2.838	0.486	0.905	4.778	1.186	23.44	19.88	144.7	1163	1163	0.402	5.134	-1.744	1.076	3.451	0.745	61.8
725S250-54	0.0566	33	0.74	2.52	5.927	2.829	0.597	0.898	5.927	1.495	29.55	27	151.7	2316	2072	0.791	6.319	-1.73	1.069	3.436	0.747	61.7
725S250-54	0.0566	50	0.74	2.52	5.927	2.829	0.597	0.898	5.837	1.388	41.55	35.24	277.3	2316	2072	0.791	6.319	-1.73	1.069	3.436	0.747	50
725S250-68	0.0713	33	0.925	3.15	7.347	2.819	0.73	0.889	7.347	1.942	42.27	39.07	292.7	4347	3044	1.567	7.765	-1.712	1.059	3.415	0.749	58.6
725S250-68	0.0713	50	0.925	3.15	7.347	2.819	0.73	0.889	7.334	1.795	53.75	48.25	370.9	4680	3278	1.567	7.765	-1.712	1.059	3.415	0.749	49.9
725S250-97	0.1017	33	1.296	4.41	10.13	2.796	0.98	0.869	10.13	2.788	62.98	62.87	21.1	8484	4049	4.468	10.516	-1.675	1.04	3.373	0.753	57.2
725S250-97	0.1017	50	1.296	4.41	10.13	2.796	0.98	0.869	10.13	2.666	89.66	83.36	838	10885	5195	4.468	10.516	-1.675	1.04	3.373	0.753	46.7
725S300-54	0.0566	33	0.797	2.71	6.659	2.891	0.931	1.081	6.575	1.561	30.84	27.99	149.4	2316	2072	0.851	9.721	-2.152	1.307	3.762	0.673	72.4
725S300-54	0.0566	50	0.797																			

# STRUCTURAL STUD SECTION PROPERTIES

## Gross Properties

## Effective Properties

## Torsional Properties

Section	Design Thickness (in)	Fy (Yield) (ksi)	Gross Properties					Effective Properties								Torsional Properties						
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ixx (in <sup>4</sup> )	Rx (in)	Iyy (in <sup>4</sup> )	Ry (in)	Ixx (in <sup>4</sup> )	Sxx (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KØc (in-lb)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)
8005137-54	0.0566	33	0.627	2.13	5.11	2.855	0.112	0.423	5.077	1.179	23.29	21.74	137.1	2091	2091	0.67	1.478	-0.676	0.448	2.964	0.948	32
8005137-54	0.0566	50	0.627	2.13	5.11	2.855	0.112	0.423	4.974	1.083	32.42	28.47	251	2091	2091	0.67	1.478	-0.676	0.448	2.964	0.948	25.9
8005137-68	0.0713	33	0.782	2.66	6.303	2.839	0.134	0.414	6.303	1.541	30.45	29.75	107.5	4221	3367	1.325	1.789	-0.661	0.44	2.944	0.95	31.6
8005137-68	0.0713	50	0.782	2.66	6.303	2.839	0.134	0.414	6.285	1.468	43.96	39.57	482.1	4221	3367	1.325	1.789	-0.661	0.44	2.944	0.95	25.6
8005137-97	0.1017	33	1.093	3.72	8.597	2.805	0.169	0.394	8.597	2.149	53.09	53.09	0.00	8843	4824	3.767	2.349	-0.63	0.423	2.902	0.953	27.6
8005137-97	0.1017	50	1.093	3.72	8.597	2.805	0.169	0.394	8.597	2.149	64.35	63.91	113	10885	5938	3.767	2.349	-0.63	0.423	2.902	0.953	25
8005162-33 <sup>1</sup>	0.0346	33	0.413	1.41	3.582	2.943	0.125	0.55	3.384	0.71	14.03	12.61	33.8	474	474	0.165	1.63	-0.936	0.607	3.137	0.911	40.1
8005162-43	0.0451	33	0.537	1.83	4.633	2.937	0.16	0.546	4.5	1.019	20.14	18.33	75.3	1051	1051	0.364	2.076	-0.926	0.601	3.128	0.912	39.8
8005162-54	0.0566	33	0.67	2.28	5.736	2.927	0.194	0.539	5.702	1.334	26.36	24.98	91.9	2091	2091	0.715	2.539	-0.914	0.594	3.113	0.914	39.6
8005162-54	0.0566	50	0.67	2.28	5.736	2.927	0.194	0.539	5.6	1.229	36.79	32.81	189.8	2091	2091	0.715	2.539	-0.914	0.594	3.113	0.914	32.1
8005162-68	0.0713	33	0.836	2.84	7.089	2.913	0.235	0.53	7.089	1.737	34.32	33.84	55.2	4221	3367	1.416	3.093	-0.899	0.586	3.094	0.916	39.3
8005162-68	0.0713	50	0.836	2.84	7.089	2.913	0.235	0.53	7.07	1.663	49.8	45.11	384.9	4221	3367	1.416	3.093	-0.899	0.586	3.094	0.916	31.9
8005162-97	0.1017	33	1.169	3.98	9.713	2.883	0.305	0.51	9.713	2.428	58.27	58.27	0.00	8843	4824	4.03	4.114	-0.866	0.568	3.053	0.919	35.1
8005162-97	0.1017	50	1.169	3.98	9.713	2.883	0.305	0.51	9.713	2.428	72.7	71.94	143	10885	5938	4.03	4.114	-0.866	0.568	3.053	0.919	31.4
8005162-118	0.1242	50	1.407	4.79	11.504	2.860	0.345	0.496	11.504	2.876	105.23	105.23	0.00	16235	7115	7.234	4.766	-0.842	0.556	3.022	0.922	28.0
8005200-33 <sup>1</sup>	0.0346	33	0.448	1.52	4.096	3.023	0.227	0.712	4.096	0.816	16.12	14.52	31.2	474	474	0.179	2.971	-1.288	0.817	3.363	0.853	50.6
8005200-43	0.0451	33	0.582	1.98	5.302	3.018	0.292	0.708	5.302	1.293	25.54	20.99	186.8	1051	1051	0.395	3.797	-1.277	0.811	3.353	0.855	50.3
8005200-54	0.0566	33	0.726	2.47	6.573	3.009	0.357	0.701	6.573	1.643	35.75	30.37	323	2091	2091	0.775	4.663	-1.265	0.804	3.338	0.856	47.8
8005200-54	0.0566	50	0.726	2.47	6.573	3.009	0.357	0.701	6.573	1.499	44.87	37.37	318.9	2091	2091	0.775	4.663	-1.265	0.804	3.338	0.856	40.7
8005200-68	0.0713	33	0.907	3.09	8.14	2.996	0.435	0.692	8.14	2.035	45.29	41.79	309.3	4221	3367	1.537	5.712	-1.248	0.796	3.319	0.859	47
8005200-68	0.0713	50	0.907	3.09	8.14	2.996	0.435	0.692	8.14	1.964	65.21	54.7	691.9	4221	3367	1.537	5.712	-1.248	0.796	3.319	0.859	38.4
8005200-97	0.1017	33	1.271	4.32	11.203	2.969	0.576	0.673	11.203	2.801	65.12	65.12	0.00	8843	4824	4.381	7.684	-1.214	0.777	3.278	0.863	45.5
8005200-97	0.1017	50	1.271	4.32	11.203	2.969	0.576	0.673	11.203	2.801	96.63	89.76	901.1	10885	5938	4.381	7.684	-1.214	0.777	3.278	0.863	37.2
8005200-118	0.1242	50	1.531	5.21	13.316	2.949	0.665	0.659	13.316	3.329	117.95	117.55	0.00	16235	7115	7.872	8.981	-1.188	0.764	3.247	0.866	36.5
8005250-33 <sup>1</sup>	0.0346	33	0.483	1.64	4.645	3.102	0.389	0.897	4.645	1.212	17.38	15.72	33.8	474	474	0.193	4.974	-1.686	1.049	3.643	0.786	
8005250-43	0.0451	33	0.627	2.13	6.015	3.097	0.5	0.893	6.015	1.313	25.95	22.06	126.1	1051	1051	0.425	6.374	-1.675	1.043	3.632	0.787	61.5
8005250-54	0.0566	33	0.783	2.66	7.465	3.088	0.614	0.886	7.465	1.712	33.82	30.06	188.2	2091	2091	0.836	7.85	-1.661	1.036	3.617	0.789	61.4
8005250-54	0.0566	50	0.783	2.66	7.465	3.088	0.614	0.886	7.378	1.525	45.66	39.13	228.2	2091	2091	0.836	7.85	-1.661	1.036	3.617	0.789	49.8
8005250-68	0.0713	33	0.978	3.33	9.261	3.077	0.752	0.877	9.261	2.22	48.33	43.63	358.5	4221	3367	1.658	9.652	-1.644	1.027	3.597	0.791	58.2
8005250-68	0.0713	50	0.978	3.33	9.261	3.077	0.752	0.877	9.24	2.059	61.65	53.75	448.8	4221	3367	1.658	9.652	-1.644	1.027	3.597	0.791	49.6
8005250-97	0.1017	33	1.372	4.67	12.789	3.053	1.009	0.857	12.789	3.191	72.07	70.72	211.4	8843	4824	4.731	13.091	-1.607	1.008	3.555	0.796	56.8
8005250-97	0.1017	50	1.372	4.67	12.789	3.053	1.009	0.857	12.789	3.054	102.7	93.42	1031.6	10885	5938	4.731	13.091	-1.607	1.008	3.555	0.796	46.4
8005250-118	0.1242	50	1.655	5.63	15.242	3.035	1.175	0.843	15.242	3.707	127.51	122.92	0	16235	7115	8.511	15.395	-1.580	0.994	3.524	0.799	45.6
8005300-54	0.0566	33	0.839	2.86	8.358	3.156	0.96	1.069	8.249	1.785	35.28	31.13	183.1	2091	2091	0.896	12.076	-2.073	1.271	3.924	0.721	72.2
8005300-54	0.0566	50	0.839	2.86	8.358	3.156	0.96	1.069	7.862	1.535	45.96	40.22	176.4	2091	2091	0.896	12.076	-2.073	1.271	3.924	0.721	58.6
8005300-68	0.0713	33	1.05	3.57	10.382	3.145	1.179	1.06	10.351	2.321	45.86	42.54	227.2	4221	3367	1.779	14.888	-2.055	1.262	3.903	0.723	72
8005300-68	0.0713	50	1.05	3.57	10.382	3.145	1.179	1.06	10.082	2.145	64.21	55.47	442	4221	3367	1.779	14.888	-2.055	1.262	3.903	0.723	58.4
8005300-97	0.1017	33	1.474	5.02	14.375	3.123	1.595	1.04	14.375	3.443	76.21	73.25	400.5	8843	4824	5.082	20.304	-2.017	1.243	3.86	0.727	67.7
8005300-97	0.1017	50	1.474	5.02	14.375	3.123	1.595	1.04	14.17	3.304	98.92	89.88	958.5	10885	5938	5.082	20.304	-2.017	1.243	3.86	0.727	58.1
8005300-118	0.1242	50	1.779	6.05	17.167	3.106	1.871	1.025	17.022	4.108	138.41	126.69	0	16235	7115	9.149	23.979	-1.989	1.229	3.828	0.730	54.5
8005350-54	0.0566	50	0.938	3.19	9.683	3.212	1.646	1.325	9.191	1.869	55.96	49.74	0	2091	2091	1.002	22.897	-2.766	1.668	4.441	0.612	73.1
8005350-68	0.0713	50	1.174	4.00	12.046	3.203	2.034	1.316	11.909	2.596	77.73	68.05	0	4221	3367	1.990	28.308	-2.748	1.658	4.421	0.614	72.9
8005350-97	0.1017	50	1.652	5.62	16.737	3.183	2.784	1.298	16.737	3.785	113.34	108.67	0	10885	5938	5.696	38.834	-2.710	1.639	4.377	0.617	72.7
8005350-118	0.1242	50	1.997	6.79	20.041	3.168	3.295	1.285	20.041	4.762	158.02	150.37	0	16235	7115	10.267	46.068	-2.682	1.624	4.345	0.619	68.9
9255137-43	0.0451	33	0.56	1.9	5.941	3.258	0.096	0.414	5.612	1.053	20.8	17.93	120.5	905	905	0.379	1.688	-0.633	0.424	3.345	0.964	31.6
9255137-54	0.0566	33	0.698	2.37	7.352	3.246	0.116	0.407	7.175	1.396	27.58	24.98	173.7	1800	1800	0.745	2.055	-0.623	0.418	3.33	0.965	31.3
9255137-54	0.0566	50	0.698	2.37	7.352	3.246	0.116	0.407	6.993	1.274	38.15	32.44	281.6	1800	1800	0.745	2.055	-0.623	0.418	3.33	0.965	25.4
9255137-68	0.0713	33	0.871	2.96	9.084	3.229	0.138	0.398	9.084	1.846	36.47	34.66	204.2	3628	3483	1.476	2.491	-0.609	0.41	3.31	0.966	30.9
9255137-68	0.0713	50	0.871	2.96	9.084	3.229	0.138	0.398	8.905	1.743	52.19	45.61	548.3	3628	3483	1.476	2.491	-0.609	0.41	3.31	0.966	25.1
9255137-97	0.1017	33	1.22	4.15	12.437	3.193	0.174	0.378	12.437	2.689	66.42	65.59	191.2	8843	5830	4.205	3.275	-0.58	0.394	3.267	0.968	26.9
9255137-97	0.1017	50	1.22	4.15	12.437	3.193	0.174	0.378	12.													

# STRUCTURAL STUD SECTION PROPERTIES

Section	Design Thickness (in)	Fy (Yield) (ksi)	Gross Properties							Effective Properties							Torsional Properties						
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ixx (in <sup>4</sup> )	Rx (in)	Iyy (in <sup>4</sup> )	Ry (in)	Ixx (in <sup>4</sup> )	Sxx (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KØc (in-lb)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)	
925S200-43	0.0451	33	0.639	2.17	7.519	3.431	0.303	0.689	7.204	1.351	26.7	24.28	58.8	905	905	0.433	5.24	-1.193	0.767	3.697	0.896	49.7	
925S200-54	0.0566	33	0.797	2.71	9.329	3.422	0.371	0.682	9.147	1.818	35.92	33.17	108.9	1800	1800	0.851	6.438	-1.18	0.761	3.683	0.897	49.5	
925S200-54	0.0566	50	0.797	2.71	9.329	3.422	0.371	0.682	9.009	1.567	46.91	43.27	96.7	1800	1800	0.851	6.438	-1.18	0.761	3.683	0.897	40.1	
925S200-68	0.0713	33	0.996	3.39	11.568	3.408	0.451	0.673	11.568	2.379	47	45.16	120	3628	3483	1.688	7.893	-1.164	0.752	3.664	0.899	49.2	
925S200-68	0.0713	50	0.996	3.39	11.568	3.408	0.451	0.673	11.398	2.217	66.36	59.62	311.6	3628	3483	1.688	7.893	-1.164	0.752	3.664	0.899	39.9	
925S200-97	0.1017	33	1.398	4.76	15.963	3.379	0.598	0.654	15.963	3.451	68.2	68.2	0	8843	5830	4.819	10.637	-1.131	0.735	3.623	0.902	48.7	
925S200-97	0.1017	50	1.398	4.76	15.963	3.379	0.598	0.654	15.963	3.397	101.71	96.01	604.2	10710	7061	4.819	10.637	-1.131	0.735	3.623	0.902	39.4	
925S250-43	0.0451	33	0.684	2.33	8.474	3.521	0.52	0.872	8.474	1.502	29.69	25.61	93.6	905	905	0.464	8.801	-1.573	0.993	3.953	0.842	61	
925S250-54	0.0566	33	0.853	2.9	10.525	3.512	0.64	0.866	10.525	2.096	41.42	35.09	247.8	1800	1800	0.911	10.847	-1.559	0.986	3.939	0.843	60.8	
925S250-54	0.0566	50	0.853	2.9	10.525	3.512	0.64	0.866	10.469	1.746	52.27	45.48	170.9	1800	1800	0.911	10.847	-1.559	0.986	3.939	0.843	49.3	
925S250-68	0.0713	33	1.067	3.63	13.07	3.499	0.783	0.856	13.07	2.714	59.09	51.17	466.9	3628	3483	1.809	13.349	-1.542	0.977	3.919	0.845	57.7	
925S250-68	0.0713	50	1.067	3.63	13.07	3.499	0.783	0.856	13.031	2.529	75.73	62.82	577.3	3628	3483	1.809	13.349	-1.542	0.977	3.919	0.845	49.1	
925S250-97	0.1017	33	1.499	5.1	18.09	3.473	1.05	0.837	18.09	3.903	88.17	83.89	508.7	8843	5830	5.17	18.137	-1.507	0.959	3.878	0.849	56.2	
925S250-97	0.1017	50	1.499	5.1	18.09	3.473	1.05	0.837	18.09	3.742	125.86	110.18	1352.2	10710	7061	5.17	18.137	-1.507	0.959	3.878	0.849	45.9	
925S300-54	0.0566	33	0.91	3.1	11.721	3.589	1.001	1.049	11.573	2.155	42.57	36.33	211	1800	1800	0.972	16.691	-1.956	1.216	4.219	0.785	71.8	
925S300-54	0.0566	50	0.91	3.1	11.721	3.589	1.001	1.049	11.135	1.764	52.83	46.81	135.2	1800	1800	0.972	16.691	-1.956	1.216	4.219	0.785	58.3	
925S300-68	0.0713	33	1.139	3.87	14.572	3.577	1.231	1.04	14.52	2.833	55.98	49.9	322.6	3628	3483	1.93	20.596	-1.938	1.207	4.199	0.787	71.6	
925S300-68	0.0713	50	1.139	3.87	14.572	3.577	1.231	1.04	14.158	2.61	78.14	64.83	522.4	3628	3483	1.93	20.596	-1.938	1.207	4.199	0.787	58	
925S300-97	0.1017	33	1.601	5.45	20.218	3.553	1.665	1.02	20.218	4.194	92.84	86.63	642.6	8843	5830	5.52	28.138	-1.901	1.188	4.157	0.791	67.2	
925S300-97	0.1017	50	1.601	5.45	20.218	3.553	1.665	1.02	19.928	4.035	120.79	105.96	1218	10710	7061	5.52	28.138	-1.901	1.188	4.157	0.791	57.6	
925S137-43	0.0451	33	0.56	1.9	5.941	3.258	0.096	0.414	5.612	1.053	20.8	17.93	120.5	905	905	0.379	1.688	-0.633	0.424	3.345	0.964	31.6	
925S137-54	0.0566	33	0.698	2.37	7.352	3.246	0.116	0.407	7.175	1.396	27.58	24.98	173.7	1800	1800	0.745	2.055	-0.623	0.418	3.33	0.965	31.3	
925S137-54	0.0566	50	0.698	2.37	7.352	3.246	0.116	0.407	6.993	1.274	38.15	32.44	281.6	1800	1800	0.745	2.055	-0.623	0.418	3.33	0.965	25.4	
925S137-68	0.0713	33	0.871	2.96	9.084	3.229	0.138	0.398	9.084	1.846	36.47	34.66	204.2	3628	3483	1.476	2.491	-0.609	0.41	3.31	0.966	30.9	
925S137-68	0.0713	50	0.871	2.96	9.084	3.229	0.138	0.398	8.905	1.743	52.19	45.61	548.3	3628	3483	1.476	2.491	-0.609	0.41	3.31	0.966	25.1	
925S137-97	0.1017	33	1.22	4.15	12.437	3.193	0.174	0.378	12.437	2.689	66.42	65.59	191.2	8843	5830	4.205	3.275	-0.58	0.394	3.267	0.968	26.9	
925S137-97	0.1017	50	1.22	4.15	12.437	3.193	0.174	0.378	12.437	2.637	78.95	75.31	698.6	10710	7061	4.205	3.275	-0.58	0.394	3.267	0.968	24.4	
925S162-43	0.0451	33	0.593	2.02	6.616	3.339	0.165	0.528	6.288	1.196	23.64	21.01	82	905	905	0.402	2.877	-0.859	0.564	3.488	0.939	39.2	
925S162-54	0.0566	33	0.74	2.52	8.198	3.328	0.201	0.521	8.019	1.576	31.15	28.91	110.6	1800	1800	0.791	3.521	-0.848	0.558	3.473	0.94	38.9	
925S162-54	0.0566	50	0.74	2.52	8.198	3.328	0.201	0.521	7.841	1.443	43.22	37.67	200.2	1800	1800	0.791	3.521	-0.848	0.558	3.473	0.94	31.6	
925S162-68	0.0713	33	0.925	3.15	10.148	3.313	0.242	0.512	10.148	2.074	40.98	39.62	112.4	3628	3483	1.567	4.293	-0.833	0.55	3.454	0.942	38.6	
925S162-68	0.0713	50	0.925	3.15	10.148	3.313	0.242	0.512	9.965	1.97	58.99	52.3	407.3	3628	3483	1.567	4.293	-0.833	0.55	3.454	0.942	31.3	
925S162-97	0.1017	33	1.296	4.41	13.947	3.28	0.315	0.493	13.947	3.016	59.59	59.59	0	8843	5830	4.468	5.719	-0.802	0.533	3.413	0.945	38	
925S162-97	0.1017	50	1.296	4.41	13.947	3.28	0.315	0.493	13.947	2.962	88.7	85.01	511.8	10710	7061	4.468	5.719	-0.802	0.533	3.413	0.945	30.8	
1000S137-33 <sup>1</sup>	0.0346	33	0.457	1.55	5.589	3.498	0.077	0.409					0.00			0.182	1.587	-0.614	0.413	3.575	0.971		
1000S137-43 <sup>1</sup>	0.0451	33	0.593	2.02	7.232	3.491	0.097	0.405	6.727	1.147	22.66	19.09	131.6	836	836	0.402	2.014	-0.605	0.408	3.566	0.971	31.2	
1000S137-54	0.0566	33	0.74	2.52	8.956	3.478	0.117	0.398	8.636	1.526	30.15	26.78	197	1661	1661	0.791	2.454	-0.595	0.402	3.551	0.972	30.9	
1000S137-54	0.0566	50	0.74	2.52	8.956	3.478	0.117	0.398	8.393	1.389	41.58	34.61	303.5	1661	1661	0.791	2.454	-0.595	0.402	3.551	0.972	25.1	
1000S137-68	0.0713	33	0.925	3.15	11.076	3.461	0.14	0.389	11.01	2.029	40.09	37.42	259.3	3345	3345	1.567	2.975	-0.581	0.394	3.531	0.973	30.5	
1000S137-68	0.0713	50	0.925	3.15	11.076	3.461	0.14	0.389	10.732	1.908	57.13	48.96	593.2	3345	3345	1.567	2.975	-0.581	0.394	3.531	0.973	24.8	
1000S137-97	0.1017	33	1.296	4.41	15.192	3.424	0.177	0.369	15.192	3.038	60.04	60.04	0.00	8843	6434	4.468	3.913	-0.554	0.379	3.488	0.975	29.8	
1000S137-97	0.1017	50	1.296	4.41	15.192	3.424	0.177	0.369	15.192	2.917	87.32	81.79	900.4	9864	7177	4.468	3.913	-0.554	0.379	3.488	0.975	24.1	
1000S162-33 <sup>1</sup>	0.0346	33	0.483	1.64	6.198	3.583	0.132	0.522					0.193			0.2692	2.692	-0.833	0.55	3.716	0.95		
1000S162-43 <sup>1</sup>	0.0451	33	0.627	2.13	8.025	3.577	0.168	0.518	7.523	1.302	25.74	22.49	87.8	836	836	0.425	3.43	-0.823	0.545	3.707	0.951	38.8	
1000S162-54	0.0566	33	0.783	2.66	9.95	3.565	0.204	0.511	9.627	1.722	34.02	31.11	123.7	1661	1661	0.836	4.198	-0.812	0.538	3.692	0.952	38.6	
1000S162-54	0.0566	50	0.783	2.66	9.95	3.565	0.204	0.511	9.391	1.572	47.07	40.37	210.7	1661	1661	0.836	4.198	-0.812	0.538	3.692	0.952	31.3	
1000S162-68	0.0713	33	0.978	3.33	12.325	3.55	0.246	0.502	12.256	2.276	44.98	42.91	145.3	3345	3345	1.658	5.121	-0.798	0.531	3.673	0.953	38.2	
1000S162-68	0.0713	50	0.978	3.33	12.325	3.55	0.246	0.502	11.978	2.154	64.51	56.35	427.6	3345	3345	1.658	5.121	-0.798	0.531	3.673	0.953	31	
1000S162-97	0.1017	33	1.372	4.67	16.967	3.516	0.32	0.483	16.967	3.393	67.06	67.06	0.00	8843	6434	4.731	6.827	-0.768	0.514	3.631	0.955	37.5	
1000S162-97	0.1017	50	1.372	4.67	16.967	3.516	0.32	0.483	16.967	3.269	97.89	92.55	625.9	9864	7177	4.731	6.827	-0.768	0.514	3.631	0.955	30.4	
1000S162-118	0.1242	50	1.655	5.63	20.169	3.491	0.363	0.468	20.169	4.034	120.77	120.34	0.00	16235	9536	8.511	7.924	-0.746	0.502	3.600	0.957	30.0	
1000S200-33 <sup>1</sup>	0.0346	33																					

# STRUCTURAL STUD SECTION PROPERTIES

Section	Gross Properties									Effective Properties						Torsional Properties						
	Design Thickness (in)	Fy (Yield) (ksi)	Area (in <sup>2</sup> )	Weight (lb/ft)	Ixx (in <sup>4</sup> )	Rx (in)	Iyy (in <sup>4</sup> )	Ry (in)	Ixx (in <sup>4</sup> )	Sxx (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KΦc (in-lb)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)
1000S200-97	0.1017	33	1.474	5.02	19.336	3.622	0.609	0.643	19.336	3.867	76.42	76.42	0.00	8843	6434	5.082	12.679	-1.088	0.711	3.836	0.92	48.2
1000S200-97	0.1017	50	1.474	5.02	19.336	3.622	0.609	0.643	19.336	3.741	112	104.73	648	9864	7177	5.082	12.679	-1.088	0.711	3.836	0.92	39
1000S200-118	0.1242	50	1.779	6.05	23.052	3.599	0.703	0.629	23.052	4.610	138.04	135.75	0.00	16235	9536	9.149	14.848	-1.064	0.699	3.805	0.922	38.7
1000S250-33 <sup>1</sup>	0.0346	33	0.552	1.88	7.872	3.777	0.413	0.865								0.22	8.173	-1.528	0.971	4.165	0.865	
1000S250-43 <sup>1</sup>	0.0451	33	0.717	2.44	10.203	3.771	0.531	0.86	10.203	1.617	31.95	27.67	82.5	836	836	0.486	10.481	-1.518	0.965	4.155	0.867	60.7
1000S250-54	0.0566	33	0.896	3.05	12.677	3.762	0.653	0.854	12.677	2.277	44.99	38.02	228.6	1661	1661	0.957	12.922	-1.505	0.958	4.14	0.868	60.5
1000S250-54	0.0566	50	0.896	3.05	12.677	3.762	0.653	0.854	12.666	1.879	56.26	49.16	151.1	1661	1661	0.957	12.922	-1.505	0.958	4.14	0.868	49.1
1000S250-68	0.0713	33	1.121	3.81	15.751	3.749	0.799	0.844	15.751	3.028	65.93	55.62	533.9	3345	3345	1.899	15.909	-1.488	0.95	4.121	0.87	57.3
1000S250-68	0.0713	50	1.121	3.81	15.751	3.749	0.799	0.844	15.741	2.768	82.89	68.13	563.4	3345	3345	1.899	15.909	-1.488	0.95	4.121	0.87	48.8
1000S250-97	0.1017	33	1.576	5.36	21.827	3.722	1.072	0.825	21.827	4.357	98.41	91.77	684.2	8843	6434	5.433	21.632	-1.454	0.932	4.08	0.873	55.8
1000S250-97	0.1017	50	1.576	5.36	21.827	3.722	1.072	0.825	21.827	4.181	140.63	120.13	1551.1	9864	7177	5.433	21.632	-1.454	0.932	4.08	0.873	45.6
1000S250-118	0.1242	50	1.904	6.48	26.080	3.701	1.249	0.810	26.080	5.082	174.84	159.80	0.00	16235	9536	9.788	25.490	-1.428	0.918	4.049	0.876	44.8
1000S300-54	0.0566	33	0.953	3.24	14.076	3.844	1.024	1.037	13.938	2.312	45.69	39.41	176.4	1661	1661	1.017	19.888	-1.892	1.185	4.408	0.816	71.5
1000S300-54	0.0566	50	0.953	3.24	14.076	3.844	1.024	1.037	13.44	1.902	56.96	50.69	119.5	1661	1661	1.017	19.888	-1.892	1.185	4.408	0.816	58.1
1000S300-68	0.0713	33	1.192	4.06	17.509	3.832	1.258	1.027	17.441	3.158	62.41	54.29	377.6	3345	3345	2.02	24.551	-1.874	1.176	4.388	0.818	71.3
1000S300-68	0.0713	50	1.192	4.06	17.509	3.832	1.258	1.027	17.099	2.802	83.89	70.39	442.2	3345	3345	2.02	24.551	-1.874	1.176	4.388	0.818	57.8
1000S300-97	0.1017	33	1.677	5.71	24.318	3.808	1.702	1.007	24.318	4.671	103.39	94.7	781.7	8843	6434	5.783	33.57	-1.838	1.158	4.346	0.821	66.9
1000S300-97	0.1017	50	1.677	5.71	24.318	3.808	1.702	1.007	23.97	4.499	134.69	115.62	1371.3	9864	7177	5.783	33.57	-1.838	1.158	4.346	0.821	57.4
1000S300-118	0.1242	50	2.028	6.90	29.109	3.789	1.997	0.992	28.861	5.586	188.23	164.18	0.00	16235	9536	10.427	39.725	-1.811	1.144	4.315	0.824	53.8
1000S350-54	0.0566	50	1.052	3.58	16.220	3.927	1.768	1.297	15.577	2.328	69.69	62.97	0.00	1661	1661	1.123	36.575	-2.546	1.566	4.857	0.725	72.2
1000S350-68	0.0713	50	1.317	4.48	20.204	3.917	2.185	1.288	20.026	3.417	102.32	86.60	0.00	3345	3345	2.232	45.277	-2.529	1.557	4.837	0.727	72.0
1000S350-97	0.1017	50	1.855	6.31	28.148	3.895	2.992	1.270	28.148	5.118	153.25	139.74	0.00	9864	7177	6.397	62.280	-2.492	1.538	4.795	0.730	71.6
1000S350-118	0.1242	50	2.245	7.64	33.772	3.878	3.543	1.256	33.772	6.427	213.25	194.46	0.00	16235	9536	11.544	74.030	-2.465	1.524	4.764	0.732	67.8
1150S137-43 <sup>1</sup>	0.0451	33	0.661	2.25	10.325	3.952	0.1	0.388	9.301	1.334	26.36	21.19	155.6	725	725	0.448	2.764	-0.556	0.379	4.01	0.981	30.5
1150S137-54	0.0566	33	0.825	2.81	12.8	3.938	0.12	0.381	12.025	1.786	35.3	30.04	245.3	1439	1439	0.881	3.369	-0.546	0.373	3.994	0.981	30.2
1150S137-54	0.0566	50	0.825	2.81	12.8	3.938	0.12	0.381	11.627	1.617	48.43	38.54	352	1439	1439	0.881	3.369	-0.546	0.373	3.994	0.981	24.5
1150S137-68	0.0713	33	1.032	3.51	15.854	3.92	0.143	0.372	15.463	2.396	47.34	42.51	365.8	2895	2895	1.748	4.085	-0.534	0.366	3.974	0.982	29.8
1150S137-68	0.0713	50	1.032	3.51	15.854	3.92	0.143	0.372	14.977	2.238	67.01	55.1	689.8	2895	2895	1.748	4.085	-0.534	0.366	3.974	0.982	24.2
1150S137-97	0.1017	33	1.449	4.93	21.817	3.881	0.181	0.353	21.817	3.687	72.87	70.77	365.9	8518	7361	4.994	5.379	-0.508	0.352	3.93	0.983	28.9
1150S137-97	0.1017	50	1.449	4.93	21.817	3.881	0.181	0.353	21.738	3.478	104.13	93.92	1261	8518	7361	4.994	5.379	-0.508	0.352	3.93	0.983	23.5
1150S162-43 <sup>1</sup>	0.0451	33	0.695	2.36	11.383	4.047	0.173	0.499	10.366	1.514	29.92	25.15	102.1	725	725	0.471	4.703	-0.761	0.509	4.148	0.966	38.1
1150S162-54	0.0566	33	0.868	2.95	14.126	4.035	0.21	0.492	13.35	2.012	39.76	35.14	153.2	1439	1439	0.927	5.759	-0.75	0.503	4.134	0.967	37.8
1150S162-54	0.0566	50	0.868	2.95	14.126	4.035	0.21	0.492	12.964	1.829	54.75	45.26	237.9	1439	1439	0.927	5.759	-0.75	0.503	4.134	0.967	30.7
1150S162-68	0.0713	33	1.085	3.69	17.521	4.018	0.253	0.483	17.124	2.681	52.99	49.05	211.6	2895	2895	1.839	7.028	-0.737	0.496	4.114	0.968	37.4
1150S162-68	0.0713	50	1.085	3.69	17.521	4.018	0.253	0.483	16.642	2.523	75.52	63.83	479.7	2895	2895	1.839	7.028	-0.737	0.496	4.114	0.968	30.4
1150S162-97	0.1017	33	1.525	5.19	24.186	3.983	0.329	0.464	24.186	4.098	80.97	80.16	101.5	8518	7361	5.257	9.379	-0.709	0.48	4.072	0.97	36.7
1150S162-97	0.1017	50	1.525	5.19	24.186	3.983	0.329	0.464	24.098	3.885	116.33	106.81	843.5	8518	7361	5.257	9.379	-0.709	0.48	4.072	0.97	29.7
1150S200-43 <sup>1</sup>	0.0451	33	0.74	2.52	12.796	4.158	0.319	0.656	11.815	1.708	33.75	29.59	66.8	725	725	0.502	8.534	-1.067	0.7	4.343	0.94	48.6
1150S200-54	0.0566	33	0.924	3.14	15.896	4.147	0.39	0.65	15.121	2.315	45.75	40.9	123.6	1439	1439	0.987	10.494	-1.056	0.694	4.328	0.941	48.3
1150S200-54	0.0566	50	0.924	3.14	15.896	4.147	0.39	0.65	14.823	1.981	59.31	52.82	115.6	1439	1439	0.987	10.494	-1.056	0.694	4.328	0.941	39.2
1150S200-68	0.0713	33	1.156	3.94	19.747	4.132	0.475	0.641	19.342	3.063	60.53	56.49	165.4	2895	2895	1.96	12.878	-1.041	0.686	4.309	0.942	48
1150S200-68	0.0713	50	1.156	3.94	19.747	4.132	0.475	0.641	18.904	2.827	84.65	73.68	330.5	2895	2895	1.96	12.878	-1.041	0.686	4.309	0.942	38.9
1150S200-97	0.1017	33	1.627	5.53	27.348	4.1	0.629	0.622	27.348	4.645	91.79	91.1	64.7	8518	7361	5.608	17.39	-1.01	0.669	4.268	0.944	47.3
1150S200-97	0.1017	50	1.627	5.53	27.348	4.1	0.629	0.622	27.25	4.43	132.63	121.51	737.5	8518	7361	5.608	17.39	-1.01	0.669	4.268	0.944	38.3
1150S250-43 <sup>1</sup>	0.0451	33	0.785	2.67	14.275	4.264	0.55	0.837	13.394	1.766	34.9	31.58	45.5	725	725	0.532	14.361	-1.419	0.915	4.571	0.904	60
1150S250-54	0.0566	33	0.981	3.34	17.749	4.254	0.676	0.83	17.089	2.371	46.85	43.64	67.6	1439	1439	1.047	17.713	-1.407	0.908	4.557	0.905	59.8
1150S250-54	0.0566	50	0.981	3.34	17.749	4.254	0.676	0.83	16.736	2.054	61.5	56.18	81.8	1439	1439	1.047	17.713	-1.407	0.908	4.557	0.905	48.5
1150S250-68	0.0713	33	1.228	4.18	22.075	4.24	0.827	0.821	21.712	3.334	65.87	60.33	198.7	2895	2895	2.081	21.822	-1.391	0.9	4.537	0.906	59.5
1150S250-68	0.0713	50	1.228	4.18	22.075	4.24	0.827	0.821	21.38	2.871	85.97	78.34	188.2	2895	2895	2.081	21.822	-1.391	0.9	4.537	0.906	48.3
1150S250-97	0.1017	33	1.728	5.88	30.651	4.211	1.1	0.801	30.651	5.217	103.1	97.82	440.4	8518	7361	5.959	29.711	-1.358	0.882	4.497	0.909	58.9
1150S250-97	0.1017	50	1.728	5.88	30.651	4.211	1.1	0.801	30.602	4.794	143.54	129.										



# STRUCTURAL STUD SECTION PROPERTIES

Section	Gross Properties								Effective Properties							Torsional Properties						
	Design Thickness (in)	Fy (Yield) (ksi)	Area (in <sup>2</sup> )	Weight (lb/ft)	Ixx (in <sup>4</sup> )	Rx (in)	Iyy (in <sup>4</sup> )	Ry (in)	Ixx (in <sup>4</sup> )	Sxx (in <sup>3</sup> )	Ma-L (in-k)	Ma-D (in-k)	KΦc (in-lb/)	Vag (lb)	VaNet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	m (in)	Ro (in)	b	Lu (in)
12005137-33 <sup>1</sup>	0.0346	33	0.526	1.79	8.893	4.112	0.079	0.387							0.21	2.398	-0.549	0.375	4.167	0.983		
12005137-43 <sup>1</sup>	0.0451	33	0.684	2.33	11.517	4.104	0.1	0.383							0.464	3.043	-0.542	0.37	4.158	0.983		30
12005137-54 <sup>1</sup>	0.0566	33	0.853	2.9	14.283	4.091	0.121	0.376	13.296	1.873	37.01	31.04	261.6	1377	1377	0.911	3.709	-0.532	0.365	4.142	0.984	24.3
12005137-54 <sup>1</sup>	0.0566	50	0.853	2.9	14.283	4.091	0.121	0.376	12.836	1.694	50.71	39.74	368.8	1377	1377	0.911	3.709	-0.532	0.365	4.142	0.984	24.3
12005137-68	0.0713	33	1.067	3.63	17.698	4.072	0.144	0.367	17.142	2.518	49.76	44.09	400.1	2771	2771	1.809	4.499	-0.52	0.358	4.121	0.984	29.5
12005137-68	0.0713	50	1.067	3.63	17.698	4.072	0.144	0.367	16.572	2.348	70.3	56.99	722.8	2771	2771	1.809	4.499	-0.52	0.358	4.121	0.984	24
12005137-97	0.1017	33	1.499	5.1	24.379	4.032	0.182	0.348	24.379	3.899	77.04	73.94	493.8	8147	7411	5.17	5.925	-0.494	0.343	4.077	0.985	28.7
12005137-97	0.1017	50	1.499	5.1	24.379	4.032	0.182	0.348	24.161	3.666	109.75	97.73	1369.7	8147	7411	5.17	5.925	-0.494	0.343	4.077	0.985	23.2
12005162-33 <sup>1</sup>	0.0346	33	0.552	1.88	9.78	4.21	0.136	0.497							0.22	4.061	-0.751	0.504	4.305	0.97		
12005162-43 <sup>1</sup>	0.0451	33	0.717	2.44	12.672	4.203	0.174	0.493							0.486	5.177	-0.742	0.499	4.296	0.97		
12005162-54 <sup>1</sup>	0.0566	33	0.896	3.05	15.73	4.19	0.212	0.486	14.743	2.109	41.68	36.38	163.7	1377	1377	0.957	6.34	-0.732	0.493	4.281	0.971	37.5
12005162-54 <sup>1</sup>	0.0566	50	0.896	3.05	15.73	4.19	0.212	0.486	14.298	1.914	57.31	46.76	248.3	1377	1377	0.957	6.34	-0.732	0.493	4.281	0.971	30.5
12005162-68	0.0713	33	1.121	3.81	19.518	4.173	0.255	0.477	18.955	2.817	55.66	50.96	233.9	2771	2771	1.899	7.739	-0.719	0.485	4.261	0.972	37.2
12005162-68	0.0713	50	1.121	3.81	19.518	4.173	0.255	0.477	18.39	2.645	79.19	66.14	499.5	2771	2771	1.899	7.739	-0.719	0.485	4.261	0.972	30.2
12005162-97	0.1017	33	1.576	5.36	26.966	4.137	0.331	0.459	26.966	4.327	85.51	83.86	188.7	8147	7411	5.433	10.331	-0.691	0.47	4.219	0.973	36.4
12005162-97	0.1017	50	1.576	5.36	26.966	4.137	0.331	0.459	26.735	4.091	122.49	111.3	915	8147	7411	5.433	10.331	-0.691	0.47	4.219	0.973	29.5
12005162-118	0.1242	50	1.904	6.48	32.145	4.109	0.376	0.444	32.145	5.168	154.74	147.23	0.00	14986	11037	9.788	12.002	-0.670	0.459	4.187	0.974	29.0
12005200-33 <sup>1</sup>	0.0346	33	0.586	2	10.965	4.324	0.251	0.654							0.234	7.338	-1.052	0.693	4.498	0.945		
12005200-43 <sup>1</sup>	0.0451	33	0.763	2.59	14.214	4.317	0.322	0.649							0.517	9.391	-1.043	0.687	4.489	0.946		
12005200-54 <sup>1</sup>	0.0566	33	0.953	3.24	17.662	4.306	0.393	0.643	16.678	2.425	47.93	42.46	128.6	1377	1377	1.017	11.55	-1.032	0.681	4.474	0.947	48
12005200-54 <sup>1</sup>	0.0566	50	0.953	3.24	17.662	4.306	0.393	0.643	16.334	2.073	62.07	54.74	121.4	1377	1377	1.017	11.55	-1.032	0.681	4.474	0.947	39
12005200-68	0.0713	33	1.192	4.06	21.947	4.291	0.479	0.634	21.376	3.215	63.54	58.83	177.1	2771	2771	2.02	14.176	-1.017	0.673	4.455	0.948	47.7
12005200-68	0.0713	50	1.192	4.06	21.947	4.291	0.479	0.634	20.864	2.963	88.71	76.55	339.1	2771	2771	2.02	14.176	-1.017	0.673	4.455	0.948	38.7
12005200-97	0.1017	33	1.677	5.71	30.417	4.258	0.635	0.615	30.417	4.899	96.81	95.43	116.8	8147	7411	5.783	19.15	-0.987	0.656	4.414	0.95	47
12005200-97	0.1017	50	1.677	5.71	30.417	4.258	0.635	0.615	30.175	4.66	139.51	126.87	770.1	8147	7411	5.783	19.15	-0.987	0.656	4.414	0.95	38.1
12005200-118	0.1242	50	2.028	6.90	36.347	4.234	0.732	0.601	36.347	5.865	175.59	166.80	0.00	14986	11037	10.427	22.451	-0.964	0.644	4.384	0.952	37.7
12005250-33 <sup>1</sup>	0.0346	33	0.621	2.11	12.203	4.433	0.432	0.834							0.248	12.322	-1.4	0.905	4.723	0.912		
12005250-43 <sup>1</sup>	0.0451	33	0.808	2.75	15.825	4.426	0.556	0.829							0.548	15.812	-1.39	0.899	4.713	0.913		
12005250-54 <sup>1</sup>	0.0566	33	1.009	3.43	19.681	4.416	0.683	0.823	18.832	2.482	49.05	45.43	70.3	1377	1377	1.078	19.505	-1.378	0.892	4.699	0.914	59.6
12005250-54 <sup>1</sup>	0.0566	50	1.009	3.43	19.681	4.416	0.683	0.823	18.433	2.149	64.34	58.39	84.6	1377	1377	1.078	19.505	-1.378	0.892	4.699	0.914	48.3
12005250-68	0.0713	33	1.263	4.3	24.484	4.402	0.836	0.813	23.963	3.496	69.08	62.95	201.9	2771	2771	2.141	24.034	-1.362	0.884	4.679	0.915	59.2
12005250-68	0.0713	50	1.263	4.3	24.484	4.402	0.836	0.813	23.575	3.007	90.04	81.59	192.6	2771	2771	2.141	24.034	-1.362	0.884	4.679	0.915	48.1
12005250-97	0.1017	33	1.779	6.05	34.016	4.373	1.121	0.794	34.016	5.496	108.6	102.52	461.6	8147	7411	6.134	32.734	-1.329	0.867	4.639	0.918	58.6
12005250-97	0.1017	50	1.779	6.05	34.016	4.373	1.121	0.794	33.835	5.037	150.82	135.37	801.7	8147	7411	6.134	32.734	-1.329	0.867	4.639	0.918	47.5
12005250-118	0.1242	50	2.152	7.32	40.726	4.350	1.307	0.779	40.726	6.541	195.84	178.57	0.00	14986	11037	11.065	38.619	-1.305	0.854	4.608	0.920	47.1
12005300-54 <sup>1</sup>	0.0566	33	1.066	3.63	21.699	4.512	1.074	1.004	21.648	2.736	54.06	47.36	125.6	1377	1377	1.138	30.051	-1.743	1.111	4.94	0.876	70.8
12005300-54 <sup>1</sup>	0.0566	50	1.066	3.63	21.699	4.512	1.074	1.004	21.043	2.272	68.04	60.65	98	1377	1377	1.138	30.051	-1.743	1.111	4.94	0.876	57.4
12005300-68	0.0713	33	1.335	4.54	27.02	4.499	1.32	0.994	26.918	4.064	80.3	65.72	500.9	2771	2771	2.262	37.126	-1.726	1.103	4.921	0.877	70.5
12005300-68	0.0713	50	1.335	4.54	27.02	4.499	1.32	0.994	26.51	3.317	99.32	84.79	320	2771	2771	2.262	37.126	-1.726	1.103	4.921	0.877	57.2
12005300-97	0.1017	33	1.881	6.4	37.616	4.472	1.786	0.974	37.616	6.035	133.59	116.06	1156.6	8147	7411	6.484	50.853	-1.691	1.085	4.88	0.88	66
12005300-97	0.1017	50	1.881	6.4	37.616	4.472	1.786	0.974	37.085	5.831	174.57	141.05	1798.3	8147	7411	6.484	50.853	-1.691	1.085	4.88	0.88	56.7
12005300-118	0.1242	50	2.276	7.75	45.106	4.452	2.095	0.959	44.727	7.232	243.67	201.68	0.00	14986	11037	11.704	60.251	-1.666	1.071	4.849	0.882	53.0
12005350-54 <sup>1</sup>	0.0566	50	1.165	3.96	24.860	4.620	1.866	1.266	24.087	2.787	83.46	75.91	0.00	1377	1377	1.244	54.279	-2.363	1.478	5.341	0.804	71.4
12005350-68	0.0713	50	1.460	4.97	30.996	4.608	2.306	1.257	30.916	4.061	121.59	104.89	0.00	2771	2771	2.473	67.251	-2.346	1.469	5.322	0.806	71.2
12005350-97	0.1017	50	2.059	7.01	43.269	4.584	3.159	1.239	43.269	6.590	197.31	170.84	0.00	8147	7411	7.098	92.672	-2.310	1.450	5.281	0.809	70.8
12005350-118	0.1242	50	2.494	8.48	51.992	4.566	3.741	1.225	51.992	8.660	274.07	238.96	0.00	14986	11037	12.821	110.302	-2.284	1.436	5.250	0.811	66.9
13505137-54 <sup>1</sup>	0.0566	33	0.938	3.19	19.386	4.545	0.123	0.362	17.546	2.133	42.14	33.82	309.7	1221	1221	1.002	4.839	-0.493	0.341	4.586	0.988	29.3
13505137-54 <sup>1</sup>	0.0566	50	0.938	3.19	19.386	4.545	0.123	0.362	16.866	1.922	57.54	43.07	419.8	1221	1221	1.002	4.839	-0.493	0.341	4.586	0.988	23.8
13505137-68	0.0713	33	1.174	4	24.05	4.526	0.147	0.353	22.783	2.885	57.02	48.52	498	2455	2455	1.99	5.87	-0.482	0.334	4.565	0.989	28.8
13505137-68	0.0713	50	1.174	4	24.05	4.526	0.147	0.353	21.907	2.677	80.15	62.28	820.1	2455	2455	1.99	5.87	-0.482	0.334	4.565	0.989	23.4
13505137-97	0.1017	33	1.652	5.62	33.215	4.484	0.185	0.335	33.215	4.535	89.62	82.98	828.3	7206	7206	5.696	7.735	-0.458	0.321	4.52	0.99	27.9
13505137-97	0.1017	50	1.652	5.62	33.215	4.484	0.185	0.335														

# STRUCTURAL STUD SECTION PROPERTIES

Section	Gross Properties								Effective Properties								Torsional Properties					
	Design Thickness (in)	Fy (Yield) (ksi)	Area (in2)	Weight (lb/ft)	Ixx (in4)	Rx (in)	Iyy (in4)	Ry (in)	Ixx (in4)	Sxx (in3)	Ma-L (in-k)	Ma-D (in-k)	KØc (in-lb)	Vag (lb)	VaNet (lb)	Jx1000 (in4)	Cw (in6)	Xo (in)	m (in)	Ro (in)	b	Lu (in)
1350S137-68	0.0713	33	1.174	4	24.05	4.526	0.147	0.353	22.783	2.885	57.02	48.52	498	2455	2455	1.99	5.87	-0.482	0.334	4.565	0.989	28.8
1350S137-68	0.0713	50	1.174	4	24.05	4.526	0.147	0.353	21.907	2.677	80.15	62.28	820.1	2455	2455	1.99	5.87	-0.482	0.334	4.565	0.989	23.4
1350S137-97	0.1017	33	1.652	5.62	33.215	4.484	0.185	0.335	33.215	4.535	89.62	82.98	828.3	7206	7206	5.696	7.735	-0.458	0.321	4.52	0.99	27.9
1350S137-97	0.1017	50	1.652	5.62	33.215	4.484	0.185	0.335	32.333	4.229	126.61	108.55	1660.4	7206	7206	5.696	7.735	-0.458	0.321	4.52	0.99	22.7
1350S162-54 <sup>1</sup>	0.0566	33	0.981	3.34	21.228	4.652	0.216	0.469	19.394	2.399	47.41	39.8	196.2	1221	1221	1.047	8.273	-0.682	0.463	4.725	0.979	36.8
1350S162-54 <sup>1</sup>	0.0566	50	0.981	3.34	21.228	4.652	0.216	0.469	18.737	2.17	64.98	50.87	281.7	1221	1221	1.047	8.273	-0.682	0.463	4.725	0.979	29.9
1350S162-68	0.0713	33	1.228	4.18	26.368	4.634	0.261	0.461	25.092	3.222	63.66	56.3	301	2455	2455	2.081	10.101	-0.669	0.456	4.705	0.98	36.4
1350S162-68	0.0713	50	1.228	4.18	26.368	4.634	0.261	0.461	24.228	3.012	90.19	72.57	563.6	2455	2455	2.081	10.101	-0.669	0.456	4.705	0.98	29.6
1350S162-97	0.1017	33	1.728	5.88	36.51	4.596	0.338	0.442	36.51	5.018	99.15	94.38	431.4	7206	7206	5.959	13.494	-0.643	0.441	4.662	0.981	35.6
1350S162-97	0.1017	50	1.728	5.88	36.51	4.596	0.338	0.442	35.611	4.709	140.98	123.98	1127.1	7206	7206	5.959	13.494	-0.643	0.441	4.662	0.981	28.9
1350S200-54 <sup>1</sup>	0.0566	33	1.037	3.53	23.688	4.778	0.403	0.623	21.864	2.756	54.46	46.83	146.3	1221	1221	1.108	15.066	-0.966	0.644	4.915	0.961	47.3
1350S200-54 <sup>1</sup>	0.0566	50	1.037	3.53	23.688	4.778	0.403	0.623	21.358	2.348	70.31	60.04	141.4	1221	1221	1.108	15.066	-0.966	0.644	4.915	0.961	38.4
1350S200-68	0.0713	33	1.299	4.42	29.461	4.762	0.491	0.615	28.18	3.672	72.55	65.43	215.1	2455	2455	2.201	18.498	-0.952	0.636	4.895	0.962	46.9
1350S200-68	0.0713	50	1.299	4.42	29.461	4.762	0.491	0.615	27.397	3.369	100.88	84.6	371.7	2455	2455	2.201	18.498	-0.952	0.636	4.895	0.962	38.1
1350S200-97	0.1017	33	1.83	6.23	40.907	4.728	0.65	0.596	40.905	5.662	111.89	107.9	263.9	7206	7206	6.309	25.008	-0.923	0.62	4.854	0.964	46.2
1350S200-97	0.1017	50	1.83	6.23	40.907	4.728	0.65	0.596	39.991	5.35	160.18	142.15	877	7206	7206	6.309	25.008	-0.923	0.62	4.854	0.964	37.5
1350S250-54 <sup>1</sup>	0.0566	33	1.094	3.72	26.245	4.898	0.701	0.801	24.632	2.816	55.64	50.5	80.8	1221	1221	1.168	25.48	-1.296	0.849	5.129	0.936	58.8
1350S250-54 <sup>1</sup>	0.0566	50	1.094	3.72	26.245	4.898	0.701	0.801	24.075	2.432	72.82	64.64	95.4	1221	1221	1.168	25.48	-1.296	0.849	5.129	0.936	47.8
1350S250-68	0.0713	33	1.37	4.66	32.675	4.883	0.858	0.791	31.477	3.983	78.7	70.45	216.7	2455	2455	2.322	31.409	-1.281	0.841	5.11	0.937	58.5
1350S250-68	0.0713	50	1.37	4.66	32.675	4.883	0.858	0.791	30.883	3.415	102.23	90.87	210.6	2455	2455	2.322	31.409	-1.281	0.841	5.11	0.937	47.5
1350S250-97	0.1017	33	1.932	6.57	45.471	4.852	1.151	0.772	45.457	6.332	125.12	116.23	525.4	7206	7206	6.66	42.816	-1.25	0.824	5.069	0.939	57.8
1350S250-97	0.1017	50	1.932	6.57	45.471	4.852	1.151	0.772	44.659	5.767	172.67	152.47	834.7	7206	7206	6.66	42.816	-1.25	0.824	5.069	0.939	46.9
1350S300-54 <sup>1</sup>	0.0566	33	1.151	3.92	28.803	5.003	1.106	0.98	27.24	2.905	57.41	52.96	62.2	1221	1221	1.229	39.293	-1.647	1.062	5.358	0.906	70.1
1350S300-54 <sup>1</sup>	0.0566	50	1.151	3.92	28.803	5.003	1.106	0.98	25.104	2.484	74.37	67.61	70.4	1221	1221	1.229	39.293	-1.647	1.062	5.358	0.906	57
1350S300-68	0.0713	33	1.442	4.91	35.89	4.989	1.358	0.971	34.869	4.072	80.46	73.89	148.7	2455	2455	2.443	48.565	-1.631	1.053	5.338	0.907	69.8
1350S300-68	0.0713	50	1.442	4.91	35.89	4.989	1.358	0.971	33.417	3.516	105.27	94.99	169.3	2455	2455	2.443	48.565	-1.631	1.053	5.338	0.907	56.7
1350S300-97	0.1017	33	2.033	6.92	50.035	4.961	1.838	0.951	50.035	6.743	133.25	122.23	568.7	7206	7206	7.01	66.58	-1.597	1.036	5.297	0.909	69.2
1350S300-97	0.1017	50	2.033	6.92	50.035	4.961	1.838	0.951	48.895	6.117	183.16	159.48	872.5	7206	7206	7.01	66.58	-1.597	1.036	5.297	0.909	56.1
1400S162-54 <sup>1</sup>	0.0566	33	1.009	3.43	23.302	4.805	0.218	0.464	21.103	2.496	49.32	40.86	207.3	1177	1177	1.078	8.98	-0.667	0.454	4.873	0.981	36.6
1400S162-54 <sup>1</sup>	0.0566	50	1.009	3.43	23.302	4.805	0.218	0.464	20.365	2.256	67.54	52.13	293.4	1177	1177	1.078	8.98	-0.667	0.454	4.873	0.981	29.7
1400S162-68	0.0713	33	1.263	4.3	28.952	4.787	0.262	0.456	27.357	3.357	66.33	57.96	323.3	2365	2365	2.141	10.966	-0.654	0.447	4.853	0.982	36.2
1400S162-68	0.0713	50	1.263	4.3	28.952	4.787	0.262	0.456	26.375	3.135	93.85	74.56	586	2365	2365	2.141	10.966	-0.654	0.447	4.853	0.982	29.4
1400S162-97	0.1017	33	1.779	6.05	40.115	4.748	0.34	0.437	39.965	5.248	103.71	97.7	507.2	6939	6939	6.134	14.651	-0.628	0.433	4.81	0.983	35.3
1400S162-97	0.1017	50	1.779	6.05	40.115	4.748	0.34	0.437	38.897	4.915	147.14	127.96	1196.5	6939	6939	6.134	14.651	-0.628	0.433	4.81	0.983	28.7
1400S162-118	0.1242	50	2.152	7.32	47.928	4.719	0.385	0.423	47.772	6.282	188.07	171.63	0.00	12745	11287	11.065	17.032	-0.609	0.422	4.777	0.984	28.1
1400S200-54 <sup>1</sup>	0.0566	33	1.066	3.63	25.951	4.935	0.406	0.617	23.767	2.866	56.63	48.18	152.9	1177	1177	1.138	16.355	-0.946	0.633	5.062	0.965	47
1400S200-54 <sup>1</sup>	0.0566	50	1.066	3.63	25.951	4.935	0.406	0.617	23.199	2.44	73.05	61.67	148.6	1177	1177	1.138	16.355	-0.946	0.633	5.062	0.965	38.2
1400S200-68	0.0713	33	1.335	4.54	32.284	4.918	0.494	0.608	30.684	3.824	75.56	67.5	228.5	2365	2365	2.262	20.083	-0.932	0.625	5.043	0.966	46.7
1400S200-68	0.0713	50	1.335	4.54	32.284	4.918	0.494	0.608	29.797	3.505	104.93	87.1	384.3	2365	2365	2.262	20.083	-0.932	0.625	5.043	0.966	37.9
1400S200-97	0.1017	33	1.881	6.4	44.853	4.883	0.655	0.59	44.683	5.917	116.93	111.87	311.1	6939	6939	6.484	27.156	-0.904	0.609	5.001	0.967	45.9
1400S200-97	0.1017	50	1.881	6.4	44.853	4.883	0.655	0.59	43.616	5.58	167.07	146.98	915.4	6939	6939	6.484	27.156	-0.904	0.609	5.001	0.967	37.3
1400S200-118	0.1242	50	2.276	7.75	53.698	4.857	0.755	0.576	53.520	7.096	212.47	195.62	0.00	12745	11287	11.704	31.861	-0.883	0.598	4.970	0.968	36.8
1400S250-54 <sup>1</sup>	0.0566	33	1.122	3.82	28.702	5.057	0.707	0.794	26.758	2.927	57.83	52.08	84.9	1177	1177	1.198	27.675	-1.272	0.835	5.275	0.942	58.6
1400S250-54 <sup>1</sup>	0.0566	50	1.122	3.82	28.702	5.057	0.707	0.794	26.141	2.527	75.65	66.58	99.7	1177	1177	1.198	27.675	-1.272	0.835	5.275	0.942	47.6
1400S250-68	0.0713	33	1.406	4.78	35.743	5.042	0.865	0.784	34.239	4.145	81.9	72.82	223.1	2365	2365	2.383	34.118	-1.257	0.827	5.255	0.943	58.3
1400S250-68	0.0713	50	1.406	4.78	35.743	5.042	0.865	0.784	33.565	3.55	106.29	93.79	218	2365	2365	2.383	34.118	-1.257	0.827	5.255	0.943	47.3
1600S200-68 <sup>1</sup>	0.0713	50	1.477	5.03	45.291	5.537	0.506	0.585	40.523	4.045	121.11	96.27	0.00	2062	2062	2.503	27.155	-0.862	0.584	5.634	0.977	37.1
1600S200-97	0.1017	50	2.084	7.09	63.050	5.500	0.670	0.567	59.933	6.500	194.61	164.99	0.00	6043	6043	7.186	36.744	-0.835	0.569	5.592	0.978	36.4
1600S200-118	0.1242	50	2.525	8.59	75.601	5.472	0.773	0.553	74.084	8.331	249.44	221.86	0.00	11088	11088	12.981	43.132	-0.815	0.558	5.560	0.979	35.9
1600S250-68 <sup>1</sup>	0.0713	50	1.549	5.29	49.814	5.672	0.889	0.758	45.550	4.092	122.51	104.63	0.00	2062	2062	2.624	46.230	-1.167	0.778	5.840	0.960	4