

Light Steel Framing Members

Section Properties Table Notes

1. The centerline bend radius is based on inside corner radii shown in thickness table on page 2.
2. Web Depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius.
3. Hems on non-structural track sections are ignored.
4. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
5. For deflection calculations, use the effective moment of inertia.
6. 18, 27 and 30 mil track material considered non-structural, based on ASTM C645.
7. See page 2 for additional notes.

Track Section Properties

Complies with 2009 & 2012 International Building Code (IBC)

Section	Design Thickness (in)	F _y (ksi)	Gross Properties							Effective Properties				Torsional					
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _{xe} (in ⁴)	S _{xe} (in ³)	M _a (in-k)	V _{ag} (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in)	β
162T125-18	0.0188	33	0.077	0.26	0.041	0.047	0.733	0.013	0.411	0.030	0.025	0.50	302	0.009	0.007	-0.878	0.503	1.215	0.478
162T125-27	0.0283	33	0.117	0.40	0.063	0.072	0.735	0.020	0.410	0.050	0.044	0.87	541	0.031	0.010	-0.872	0.501	1.211	0.482
162T125-30	0.0312	33	0.129	0.44	0.070	0.079	0.735	0.022	0.409	0.057	0.050	1.00	597	0.042	0.012	-0.870	0.500	1.210	0.483
162T125-33	0.0346	33	0.143	0.49	0.077	0.087	0.736	0.024	0.408	0.066	0.058	1.15	663	0.057	0.013	-0.868	0.499	1.209	0.484
250T125-18	0.0188	33	0.094	0.32	0.103	0.079	1.051	0.015	0.400	0.078	0.045	0.90	249	0.011	0.018	-0.769	0.460	1.362	0.681
250T125-27	0.0283	33	0.141	0.48	0.157	0.119	1.053	0.022	0.398	0.129	0.079	1.56	685	0.038	0.027	-0.763	0.457	1.360	0.685
250T125-30	0.0312	33	0.156	0.53	0.173	0.131	1.053	0.025	0.397	0.145	0.090	1.77	832	0.051	0.030	-0.762	0.456	1.359	0.686
250T125-33	0.0346	33	0.173	0.59	0.192	0.145	1.054	0.027	0.397	0.166	0.103	2.03	1,024	0.069	0.033	-0.760	0.456	1.358	0.687
250T125-43	0.0451	33	0.225	0.77	0.250	0.188	1.055	0.035	0.395	0.231	0.147	2.91	1,356	0.153	0.042	-0.755	0.453	1.356	0.690
250T125-54	0.0566	33	0.282	0.96	0.318	0.236	1.062	0.043	0.392	0.310	0.203	4.01	1,692	0.301	0.054	-0.749	0.449	1.357	0.696
250T125-54	0.0566	50	0.282	0.96	0.318	0.236	1.062	0.043	0.392	0.297	0.188	5.64	2,563	0.301	0.054	-0.749	0.449	1.357	0.696
250T125-68	0.0713	33	0.355	1.21	0.408	0.297	1.072	0.054	0.389	0.408	0.281	5.56	2,111	0.602	0.069	-0.740	0.444	1.360	0.704
250T125-68	0.0713	50	0.355	1.21	0.408	0.297	1.072	0.054	0.389	0.402	0.262	7.85	3,199	0.602	0.069	-0.740	0.444	1.360	0.704
250T150-27	0.0283	33	0.156	0.53	0.181	0.137	1.078	0.037	0.486	0.139	0.082	1.61	685	0.042	0.044	-0.976	0.575	1.534	0.595
250T150-30	0.0312	33	0.172	0.58	0.199	0.151	1.078	0.040	0.486	0.157	0.093	1.83	832	0.056	0.049	-0.975	0.574	1.533	0.595
250T150-33	0.0346	33	0.190	0.65	0.221	0.167	1.079	0.045	0.485	0.179	0.107	2.11	1,024	0.076	0.054	-0.973	0.573	1.532	0.596
250T150-43	0.0451	33	0.248	0.84	0.289	0.217	1.080	0.058	0.483	0.252	0.154	3.03	1,356	0.168	0.070	-0.968	0.570	1.529	0.599
250T150-54	0.0566	33	0.311	1.06	0.368	0.273	1.088	0.072	0.481	0.342	0.213	4.22	1,692	0.332	0.089	-0.961	0.566	1.529	0.605
250T150-54	0.0566	50	0.311	1.06	0.368	0.273	1.088	0.072	0.481	0.325	0.197	5.89	2,563	0.332	0.089	-0.961	0.566	1.529	0.605
250T150-68	0.0713	33	0.391	1.33	0.472	0.344	1.099	0.089	0.478	0.465	0.299	5.92	2,111	0.663	0.114	-0.953	0.561	1.531	0.613
250T150-68	0.0713	50	0.391	1.33	0.472	0.344	1.099	0.089	0.478	0.445	0.276	8.27	3,199	0.663	0.114	-0.953	0.561	1.531	0.613
250T200-33	0.0346	33	0.225	0.76	0.280	0.212	1.117	0.097	0.658	0.203	0.112	2.22	1,024	0.090	0.118	-1.418	0.813	1.921	0.455
250T200-43	0.0451	33	0.293	1.00	0.366	0.275	1.118	0.126	0.657	0.288	0.163	3.21	1,356	0.198	0.153	-1.413	0.810	1.918	0.457
250T200-54	0.0566	33	0.367	1.25	0.466	0.346	1.127	0.157	0.654	0.396	0.228	4.51	1,692	0.392	0.195	-1.405	0.806	1.917	0.462
250T200-54	0.0566	50	0.367	1.25	0.466	0.346	1.127	0.157	0.654	0.371	0.209	6.25	2,563	0.392	0.195	-1.405	0.806	1.917	0.462
250T200-68	0.0713	33	0.462	1.57	0.600	0.437	1.139	0.196	0.652	0.548	0.324	6.41	2,111	0.783	0.251	-1.396	0.800	1.916	0.469
250T200-68	0.0713	50	0.462	1.57	0.600	0.437	1.139	0.196	0.652	0.517	0.296	8.86	3,199	0.783	0.251	-1.396	0.800	1.916	0.469
350T125-18	0.0188	33	0.113	0.38	0.219	0.121	1.394	0.016	0.383	0.174	0.063	1.25	175	0.013	0.038	-0.675	0.418	1.595	0.821
350T125-27	0.0283	33	0.170	0.58	0.331	0.182	1.396	0.025	0.381	0.277	0.128	2.53	590	0.045	0.057	-0.670	0.416	1.595	0.823
350T125-30	0.0312	33	0.187	0.64	0.365	0.200	1.396	0.027	0.38	0.312	0.145	2.86	790	0.061	0.063	-0.669	0.415	1.594	0.824
350T125-33	0.0346	33	0.207	0.71	0.405	0.222	1.397	0.030	0.379	0.354	0.165	3.27	1,024	0.083	0.070	-0.668	0.414	1.594	0.824
350T125-43	0.0451	33	0.270	0.92	0.528	0.288	1.397	0.038	0.377	0.490	0.233	4.61	1,739	0.183	0.090	-0.663	0.412	1.592	0.826
350T125-54	0.0566	33	0.339	1.15	0.668	0.361	1.404	0.048	0.375	0.651	0.317	6.26	2,392	0.362	0.114	-0.658	0.408	1.595	0.830
350T125-54	0.0566	50	0.339	1.15	0.668	0.361	1.404	0.048	0.375	0.626	0.297	8.89	3,372	0.362	0.114	-0.658	0.408	1.595	0.830
350T125-68	0.0713	33	0.427	1.45	0.851	0.454	1.412	0.059	0.372	0.851	0.433	8.55	2,994	0.723	0.144	-0.650	0.403	1.599	0.835
350T125-68	0.0713	50	0.427	1.45	0.851	0.454	1.412	0.059	0.372	0.839	0.407	12.18	4,536	0.723	0.144	-0.650	0.403	1.599	0.835
350T150-27	0.0283	33	0.184	0.63	0.377	0.207	1.431	0.041	0.470	0.298	0.132	2.62	590	0.049	0.094	-0.869	0.529	1.739	0.750
350T150-30	0.0312	33	0.203	0.69	0.416	0.228	1.432	0.045	0.469	0.336	0.150	2.96	790	0.066	0.103	-0.867	0.528	1.739	0.751
350T150-33	0.0346	33	0.225	0.76	0.461	0.253	1.432	0.049	0.469	0.382	0.171	3.39	1,024	0.090	0.114	-0.866	0.527	1.738	0.752
350T150-43	0.0451	33	0.293	1.00	0.601	0.328	1.433	0.064	0.467	0.531	0.243	4.80	1,739	0.198	0.148	-0.861	0.525	1.736	0.754
350T150-54	0.0566	33	0.367	1.25	0.761	0.412	1.440	0.079	0.465	0.712	0.332	6.57	2,392	0.392	0.187	-0.855	0.521	1.738	0.758
350T150-54	0.0566	50	0.367	1.25	0.761	0.412	1.440	0.079	0.465	0.679	0.310	9.28	3,372	0.392	0.187	-0.855	0.521	1.738	0.758
350T150-68	0.0713	33	0.462	1.57	0.972	0.518	1.450	0.099	0.462	0.957	0.459	9.07	2,994	0.783	0.238	-0.847	0.516	1.741	0.763
350T150-68	0.0713	50	0.462	1.57	0.972	0.518	1.450	0.099	0.462	0.919	0.428	12.81	4,536	0.783	0.238	-0.847	0.516	1.741	0.763
350T200-33	0.0346	33	0.259	0.88	0.574	0.315	1.487	0.108	0.647	0.428	0.181	3.57	1,024	0.103	0.249	-1.285	0.761	2.069	0.614
350T200-43	0.0451	33	0.338	1.15	0.749	0.409	1.489	0.140	0.645	0.600	0.257	5.09	1,739	0.229	0.323	-1.280	0.758	2.066	0.616
350T200-54	0.0566	33	0.424	1.44	0.949	0.513	1.496	0.175	0.642	0.814	0.355	7.01	2,392	0.453	0.409	-1.273	0.754	2.067	0.621
350T200-54	0.0566	50	0.424	1.44	0.949	0.513	1.496	0.175	0.642	0.770	0.329	9.85	3,372	0.453	0.409	-1.273	0.754	2.067	0.621
350T200-68	0.0713	33	0.534	1.82	1.213	0.647	1.508	0.218	0.639	1.112	0.496	9.80	2,994	0.904	0.522	-1.264	0.749	2.069	0.626
350T200-68	0.0713	50	0.534	1.82	1.213	0.647	1.508	0.218	0.639	1.054	0.458	13.71	4,536	0.904	0.522	-1.264	0.749	2.069	0.626

¹ Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

* Allowable moment includes cold-work of forming.

Light Steel Framing Members

See Section Properties Table Notes on page 11.

Track Section Properties

Complies with 2009 & 2012 International Building Code (IBC)

Section	Design Thickness (in)	F _y (ksi)	Gross Properties							Effective Properties				Torsional					
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _{xe} (in ⁴)	S _{xe} (in ³)	M _s (in-k)	V _{sg} (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _c (in)	m (in)	R _c (in)	β
362T125-18	0.0188	33	0.115	0.39	0.237	0.126	1.435	0.017	0.38	0.189	0.065	1.29	169	0.014	0.042	-0.665	0.413	1.627	0.833
362T125-27	0.0283	33	0.173	0.59	0.358	0.191	1.438	0.025	0.378	0.301	0.135	2.66	569	0.046	0.062	-0.661	0.411	1.627	0.835
362T125-30	0.0312	33	0.191	0.65	0.395	0.210	1.438	0.027	0.378	0.339	0.152	3.01	762	0.062	0.068	-0.659	0.410	1.626	0.836
362T125-33	0.0346	33	0.212	0.72	0.438	0.232	1.438	0.030	0.377	0.384	0.174	3.44	1,024	0.085	0.076	-0.658	0.409	1.626	0.836
362T125-43	0.0451	33	0.276	0.94	0.571	0.302	1.439	0.039	0.375	0.531	0.245	4.84	1,739	0.187	0.098	-0.654	0.407	1.625	0.838
362T125-54	0.0566	33	0.346	1.18	0.723	0.378	1.445	0.048	0.373	0.705	0.332	6.57	2,480	0.369	0.123	-0.648	0.404	1.627	0.841
362T125-54	0.0566	50	0.346	1.18	0.723	0.378	1.445	0.048	0.373	0.678	0.312	9.34	3,372	0.369	0.123	-0.648	0.404	1.627	0.841
362T125-68	0.0713	33	0.436	1.48	0.921	0.475	1.454	0.060	0.370	0.921	0.453	8.95	3,104	0.738	0.156	-0.641	0.399	1.631	0.846
362T125-68	0.0713	50	0.436	1.48	0.921	0.475	1.454	0.060	0.370	0.907	0.427	12.78	4,703	0.738	0.156	-0.641	0.399	1.631	0.846
362T150-27	0.0283	33	0.187	0.64	0.408	0.217	1.475	0.041	0.468	0.323	0.140	2.76	569	0.050	0.102	-0.857	0.524	1.769	0.765
362T150-30	0.0312	33	0.207	0.70	0.449	0.239	1.475	0.045	0.467	0.364	0.158	3.12	762	0.067	0.112	-0.856	0.523	1.768	0.766
362T150-33	0.0346	33	0.229	0.78	0.499	0.264	1.475	0.050	0.467	0.414	0.180	3.56	1,024	0.091	0.124	-0.854	0.522	1.767	0.766
362T150-43	0.0451	33	0.298	1.02	0.650	0.343	1.476	0.064	0.465	0.574	0.255	5.04	1,739	0.202	0.160	-0.850	0.519	1.766	0.768
362T150-54	0.0566	33	0.374	1.27	0.823	0.431	1.483	0.080	0.462	0.769	0.349	6.89	2,480	0.400	0.202	-0.844	0.516	1.768	0.772
362T150-54	0.0566	50	0.374	1.27	0.823	0.431	1.483	0.080	0.462	0.735	0.325	9.74	3,372	0.400	0.202	-0.844	0.516	1.768	0.772
362T150-68	0.0713	33	0.471	1.60	1.050	0.542	1.492	0.099	0.459	1.034	0.480	9.49	3,104	0.799	0.257	-0.836	0.511	1.771	0.777
362T150-68	0.0713	50	0.471	1.60	1.050	0.542	1.492	0.099	0.459	0.993	0.449	13.43	4,703	0.799	0.257	-0.836	0.511	1.771	0.777
362T200-33	0.0346	33	0.264	0.90	0.619	0.328	1.532	0.110	0.645	0.464	0.190	3.76	1,024	0.105	0.269	-1.270	0.754	2.092	0.631
362T200-43	0.0451	33	0.343	1.17	0.808	0.427	1.534	0.142	0.643	0.649	0.270	5.34	1,739	0.233	0.35	-1.265	0.752	2.090	0.633
362T200-54	0.0566	33	0.431	1.47	1.024	0.536	1.541	0.177	0.64	0.879	0.372	7.35	2,480	0.460	0.442	-1.259	0.748	2.091	0.637
362T200-54	0.0566	50	0.431	1.47	1.024	0.536	1.541	0.177	0.64	0.832	0.345	10.34	3,372	0.460	0.442	-1.259	0.748	2.091	0.637
362T200-68	0.0713	33	0.543	1.85	1.307	0.675	1.552	0.221	0.638	1.199	0.519	10.26	3,104	0.919	0.564	-1.250	0.743	2.093	0.643
362T200-68	0.0713	50	0.543	1.85	1.307	0.675	1.552	0.221	0.638	1.138	0.480	14.37	4,703	0.919	0.564	-1.250	0.743	2.093	0.643
400T125-18 ¹	0.0188	33	0.122	0.41	0.297	0.144	1.560	0.017	0.374	0.241	0.072	1.42	153	0.014	0.052	-0.637	0.400	1.726	0.864
400T125-27	0.0283	33	0.184	0.63	0.449	0.217	1.562	0.025	0.372	0.380	0.156	3.08	515	0.049	0.078	-0.633	0.398	1.726	0.866
400T125-30	0.0312	33	0.203	0.69	0.495	0.239	1.562	0.028	0.371	0.427	0.176	3.49	689	0.066	0.085	-0.632	0.397	1.726	0.866
400T125-33	0.0346	33	0.225	0.76	0.549	0.265	1.563	0.031	0.371	0.484	0.201	3.97	940	0.090	0.095	-0.630	0.396	1.725	0.867
400T125-43	0.0451	33	0.293	1.00	0.716	0.344	1.563	0.040	0.369	0.666	0.282	5.57	1,739	0.198	0.122	-0.626	0.394	1.724	0.868
400T125-54	0.0566	33	0.367	1.25	0.904	0.431	1.569	0.049	0.366	0.882	0.381	7.53	2,739	0.392	0.154	-0.621	0.390	1.727	0.871
400T125-54	0.0566	50	0.367	1.25	0.904	0.431	1.569	0.049	0.366	0.849	0.359	10.74	3,372	0.392	0.154	-0.621	0.390	1.727	0.871
400T125-68	0.0713	33	0.462	1.57	1.150	0.541	1.577	0.061	0.363	1.150	0.517	10.22	3,435	0.783	0.194	-0.614	0.386	1.731	0.874
400T125-68	0.0713	50	0.462	1.57	1.150	0.541	1.577	0.061	0.363	1.134	0.488	14.62	5,205	0.783	0.194	-0.614	0.386	1.731	0.874
400T150-27	0.0283	33	0.198	0.67	0.509	0.246	1.602	0.042	0.461	0.409	0.154	3.04	515	0.053	0.127	-0.824	0.509	1.860	0.804
400T150-30	0.0312	33	0.218	0.74	0.561	0.271	1.603	0.046	0.461	0.458	0.183	3.61	689	0.071	0.140	-0.823	0.508	1.859	0.804
400T150-33	0.0346	33	0.242	0.82	0.622	0.300	1.603	0.051	0.460	0.519	0.208	4.12	940	0.097	0.155	-0.821	0.507	1.859	0.805
400T150-43	0.0451	33	0.315	1.07	0.811	0.390	1.604	0.066	0.458	0.719	0.293	5.80	1,739	0.214	0.200	-0.817	0.504	1.857	0.807
400T150-54	0.0566	33	0.396	1.35	1.025	0.489	1.610	0.082	0.456	0.960	0.399	7.89	2,739	0.422	0.252	-0.811	0.501	1.860	0.810
400T150-54	0.0566	50	0.396	1.35	1.025	0.489	1.610	0.082	0.456	0.918	0.374	11.19	3,372	0.422	0.252	-0.811	0.501	1.860	0.810
400T150-68	0.0713	33	0.498	1.69	1.306	0.615	1.619	0.102	0.453	1.286	0.548	10.82	3,435	0.844	0.320	-0.804	0.496	1.864	0.814
400T150-68	0.0713	50	0.498	1.69	1.306	0.615	1.619	0.102	0.453	1.237	0.513	15.35	5,205	0.844	0.320	-0.804	0.496	1.864	0.814
400T200-33	0.0346	33	0.277	0.94	0.768	0.371	1.666	0.113	0.639	0.581	0.220	4.34	940	0.110	0.336	-1.229	0.737	2.166	0.678
400T200-43	0.0451	33	0.360	1.23	1.002	0.482	1.668	0.146	0.637	0.811	0.311	6.14	1,739	0.244	0.436	-1.224	0.734	2.164	0.680
400T200-54	0.0566	33	0.452	1.54	1.268	0.604	1.675	0.182	0.635	1.093	0.426	8.42	2,739	0.483	0.551	-1.217	0.730	2.165	0.684
400T200-54	0.0566	50	0.452	1.54	1.268	0.604	1.675	0.182	0.635	1.037	0.397	11.88	3,372	0.483	0.551	-1.217	0.730	2.165	0.684
400T200-68	0.0713	33	0.569	1.94	1.617	0.761	1.685	0.227	0.632	1.485	0.591	11.68	3,435	0.965	0.702	-1.209	0.725	2.168	0.689
400T200-68	0.0713	50	0.569	1.94	1.617	0.761	1.685	0.227	0.632	1.412	0.549	16.42	5,205	0.965	0.702	-1.209	0.725	2.168	0.689
550T125-18 ^{1,3}	0.0188	33	0.150	0.51	0.627	0.223	2.044	0.018	0.349					0.018	0.108	-0.547	0.354	2.144	0.935
550T125-27	0.0283	33	0.226	0.77	0.948	0.336	2.046	0.027	0.348	0.786	0.192	3.79	372	0.060	0.16	-0.543	0.352	2.145	0.936
550T125-30	0.0312	33	0.250	0.85	1.045	0.370	2.046	0.030	0.347	0.897	0.226	4.47	499	0.081	0.176	-0.542	0.351	2.145	0.936
550T125-33	0.0346	33	0.277	0.94	1.159	0.410	2.046	0.033	0.346	1.029	0.270	5.33	680	0.110	0.195	-0.541	0.350	2.145	0.936
550T125-43	0.0451	33	0.360	1.23	1.510	0.533	2.047	0.043	0.344	1.428	0.416	8.23	1,504	0.244	0.252	-0.537	0.348	2.144	0.937
550T125-54	0.0566	33	0.452	1.54	1.903	0.668	2.052	0.053	0.342	1.862	0.597	11.80	2,739	0.483	0.315	-0.532	0.345	2.147	0.939
550T125-54	0.0566	50	0.452	1.54	1.903	0.668	2.052	0.053	0.342	1.811	0.535	16.01	2,980	0.483	0.315	-0.532	0.345	2.147	0.939
550T125-68	0.0713	33	0.569	1.94	2.412	0.839	2.058	0.066	0.339	2.412	0.807	15.95	4,347	0.965	0.397	-0.526	0.341	2.152	0.940
550T125-68	0.0713	50	0.569	1.94	2.412	0.839	2.058	0.066	0.339	2.379	0.769	23.02	5,350	0.965	0.397	-0.526	0.341	2.152	0.940
550T150-27	0.0283	33	0.241	0.82	1.059	0.376	2.098	0.046	0.436	0.893	0.207	4.10	372	0.064	0.263	-0.716	0.456	2.259	0.900
550T150-30	0.0312	33	0.265	0.90	1.168	0.414	2.098	0.05	0.435	0.995	0.251	4.96	499	0.086	0.289	-0.715	0.455	2.259	0.900
550T150-33	0.0346	33	0.294	1.00	1.295	0.459	2.099	0.055	0.434	1.115	0.310	6.12	680	0.117	0.320	-0.714	0.455	2.25	

Light Steel Framing Members

See Section Properties Table Notes on page 11.

Track Section Properties

Complies with 2009 & 2012 International Building Code (IBC)

Section	Design Thickness (in)	F _y (ksi)	Gross Properties							Effective Properties				Torsional					
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _{xe} (in ⁴)	S _{xe} (in ³)	M _{xe} (in-k)	V _{se} (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in)	β
550T200-33	0.0346	33	0.329	1.12	1.567	0.555	2.184	0.123	0.613	1.246	0.307	6.06	680	0.131	0.694	-1.088	0.674	2.516	0.813
550T200-43	0.0451	33	0.428	1.46	2.043	0.722	2.185	0.160	0.611	1.690	0.495	9.79	1,504	0.290	0.900	-1.083	0.671	2.514	0.814
550T200-54	0.0566	33	0.537	1.83	2.578	0.905	2.191	0.199	0.609	2.253	0.669	13.21	2,739	0.573	1.133	-1.077	0.668	2.517	0.817
550T200-54	0.0566	50	0.537	1.83	2.578	0.905	2.191	0.199	0.609	2.153	0.630	18.86	2,980	0.573	1.133	-1.077	0.668	2.517	0.817
550T200-68	0.0713	33	0.676	2.30	3.274	1.139	2.200	0.248	0.606	3.027	0.914	18.06	4,347	1.146	1.434	-1.070	0.663	2.521	0.820
550T200-68	0.0713	50	0.676	2.30	3.274	1.139	2.200	0.248	0.606	2.894	0.857	25.67	5,350	1.146	1.434	-1.070	0.663	2.521	0.820
600T125-18' ³	0.0188	33	0.160	0.54	0.776	0.254	2.204	0.019	0.342					0.019	0.132	-0.528	0.347	2.292	0.947
600T125-27' ¹	0.0283	33	0.241	0.82	1.168	0.381	2.204	0.028	0.340	0.958	0.210	4.16	341	0.064	0.196	-0.519	0.339	2.290	0.949
600T125-30	0.0312	33	0.265	0.90	1.288	0.419	2.204	0.031	0.340	1.095	0.249	4.92	456	0.086	0.215	-0.518	0.338	2.289	0.949
600T125-33	0.0346	33	0.294	1.00	1.428	0.465	2.204	0.034	0.339	1.258	0.297	5.87	622	0.117	0.238	-0.516	0.337	2.289	0.949
600T125-43	0.0451	33	0.383	1.30	1.861	0.604	2.205	0.044	0.337	1.768	0.461	9.11	1,377	0.260	0.307	-0.513	0.335	2.288	0.950
600T125-54	0.0566	33	0.480	1.63	2.344	0.756	2.209	0.054	0.335	2.299	0.666	13.15	2,728	0.513	0.384	-0.508	0.332	2.291	0.951
600T125-54	0.0566	50	0.480	1.63	2.344	0.756	2.209	0.054	0.335	2.241	0.592	17.73	2,728	0.513	0.384	-0.508	0.332	2.291	0.951
600T125-68	0.0713	33	0.605	2.06	2.969	0.950	2.215	0.067	0.332	2.969	0.916	18.09	4,347	1.025	0.483	-0.503	0.329	2.296	0.952
600T125-68	0.0713	50	0.605	2.06	2.969	0.950	2.215	0.067	0.332	2.934	0.858	25.69	5,350	1.025	0.483	-0.503	0.329	2.296	0.952
600T125-97	0.1017	33	0.862	2.93	4.281	1.347	2.228	0.092	0.326	4.281	1.347	30.43*	7,359	2.973	0.685	-0.491	0.321	2.305	0.955
600T125-97	0.1017	50	0.862	2.93	4.281	1.347	2.228	0.092	0.326	4.281	1.347	40.33	10,885	2.973	0.685	-0.491	0.321	2.305	0.955
600T150-27' ¹	0.0283	33	0.255	0.87	1.300	0.424	2.260	0.047	0.427	1.011	0.214	4.23	341	0.068	0.320	-0.686	0.441	2.400	0.918
600T150-30	0.0312	33	0.281	0.96	1.434	0.467	2.260	0.051	0.427	1.159	0.253	5.01	456	0.091	0.352	-0.685	0.440	2.400	0.918
600T150-33	0.0346	33	0.311	1.06	1.590	0.517	2.260	0.057	0.426	1.334	0.303	5.99	622	0.124	0.390	-0.684	0.439	2.399	0.919
600T150-43	0.0451	33	0.405	1.38	2.072	0.673	2.261	0.073	0.424	1.890	0.474	9.36	1,377	0.275	0.504	-0.680	0.437	2.398	0.920
600T150-54	0.0566	33	0.509	1.73	2.611	0.843	2.266	0.091	0.422	2.473	0.689	13.62	2,728	0.543	0.632	-0.675	0.434	2.401	0.921
600T150-54	0.0566	50	0.509	1.73	2.611	0.843	2.266	0.091	0.422	2.400	0.609	18.24	2,728	0.543	0.632	-0.675	0.434	2.401	0.921
600T150-68	0.0713	33	0.641	2.18	3.309	1.059	2.273	0.113	0.419	3.262	0.963	19.03	4,347	1.086	0.797	-0.669	0.430	2.406	0.923
600T150-68	0.0713	50	0.641	2.18	3.309	1.059	2.273	0.113	0.419	3.162	0.891	26.68	5,350	1.086	0.797	-0.669	0.430	2.406	0.923
600T150-97	0.1017	33	0.913	3.11	4.778	1.504	2.288	0.156	0.413	4.778	1.504	29.71	7,359	3.148	1.138	-0.656	0.421	2.415	0.926
600T150-97	0.1017	50	0.913	3.11	4.778	1.504	2.288	0.156	0.413	4.778	1.444	43.23	10,885	3.148	1.138	-0.656	0.421	2.415	0.926
600T200-33	0.0346	33	0.346	1.18	1.913	0.622	2.352	0.126	0.604	1.542	0.333	6.59	622	0.138	0.847	-1.048	0.655	2.645	0.843
600T200-43	0.0451	33	0.451	1.53	2.494	0.809	2.353	0.163	0.602	2.076	0.565	11.16	1,377	0.305	1.098	-1.044	0.652	2.643	0.844
600T200-54	0.0566	33	0.565	1.92	3.145	1.015	2.359	0.203	0.600	2.759	0.759	15.00	2,728	0.604	1.381	-1.038	0.649	2.646	0.846
600T200-54	0.0566	50	0.565	1.92	3.145	1.015	2.359	0.203	0.600	2.641	0.717	21.48	2,728	0.604	1.381	-1.038	0.649	2.646	0.846
600T200-68	0.0713	33	0.712	2.42	3.990	1.277	2.367	0.254	0.597	3.696	1.034	20.42	4,347	1.206	1.746	-1.031	0.644	2.650	0.849
600T200-68	0.0713	50	0.712	2.42	3.990	1.277	2.367	0.254	0.597	3.540	0.973	29.12	5,350	1.206	1.746	-1.031	0.644	2.650	0.849
600T200-97	0.1017	33	1.015	3.45	5.773	1.816	2.385	0.354	0.591	5.758	1.667	32.95	7,359	3.499	2.510	-1.016	0.635	2.659	0.854
600T200-97	0.1017	50	1.015	3.45	5.773	1.816	2.385	0.354	0.591	5.558	1.568	46.94	10,885	3.499	2.510	-1.016	0.635	2.659	0.854
800T125-33 ¹	0.0346	33	0.363	1.24	2.895	0.711	2.824	0.036	0.313	2.441	0.407	8.03	465	0.145	0.456	-0.439	0.294	2.875	0.977
800T125-43	0.0451	33	0.473	1.61	3.773	0.924	2.824	0.046	0.311	3.484	0.640	12.65	1,030	0.321	0.589	-0.436	0.292	2.874	0.977
800T125-54	0.0566	33	0.594	2.02	4.745	1.158	2.827	0.057	0.309	4.668	0.940	18.58	2,039	0.634	0.735	-0.432	0.289	2.877	0.977
800T125-54	0.0566	50	0.594	2.02	4.745	1.158	2.827	0.057	0.309	4.426	0.824	24.66	2,039	0.634	0.735	-0.432	0.289	2.877	0.977
800T125-68	0.0713	33	0.748	2.54	5.998	1.454	2.833	0.070	0.306	5.998	1.356	26.80	4,087	1.267	0.920	-0.427	0.286	2.881	0.978
800T125-68	0.0713	50	0.748	2.54	5.998	1.454	2.833	0.070	0.306	5.956	1.216	36.39	4,087	1.267	0.920	-0.427	0.286	2.881	0.978
800T125-97	0.1017	33	1.066	3.63	8.613	2.062	2.843	0.096	0.301	8.613	2.062	40.74	8,843	3.674	1.296	-0.417	0.279	2.889	0.979
800T125-97	0.1017	50	1.066	3.63	8.613	2.062	2.843	0.096	0.301	8.613	2.062	61.72	10,885	3.674	1.296	-0.417	0.279	2.889	0.979
800T150-33 ¹	0.0346	33	0.380	1.29	3.180	0.781	2.891	0.06	0.397	2.569	0.414	8.18	465	0.152	0.751	-0.588	0.388	2.977	0.961
800T150-43	0.0451	33	0.496	1.69	4.144	1.015	2.891	0.077	0.395	3.689	0.655	12.95	1,030	0.336	0.972	-0.584	0.386	2.976	0.961
800T150-54	0.0566	33	0.622	2.12	5.214	1.272	2.896	0.096	0.393	4.976	0.969	19.15	2,039	0.664	1.215	-0.580	0.383	2.979	0.962
800T150-54	0.0566	50	0.622	2.12	5.214	1.272	2.896	0.096	0.393	4.692	0.844	25.27	2,039	0.664	1.215	-0.580	0.383	2.979	0.962
800T150-68	0.0713	33	0.783	2.67	6.594	1.599	2.902	0.119	0.390	6.527	1.412	27.91	4,087	1.327	1.526	-0.575	0.379	2.984	0.963
800T150-68	0.0713	50	0.783	2.67	6.594	1.599	2.902	0.119	0.390	6.361	1.255	37.58	4,087	1.327	1.526	-0.575	0.379	2.984	0.963
800T150-97	0.1017	33	1.116	3.80	9.479	2.269	2.914	0.165	0.384	9.479	2.269	44.83	8,843	3.849	2.162	-0.564	0.372	2.993	0.965
800T150-97	0.1017	50	1.116	3.80	9.479	2.269	2.914	0.165	0.384	9.479	2.192	65.62	10,885	3.849	2.162	-0.564	0.372	2.993	0.965
800T200-33 ¹	0.0346	33	0.415	1.41	3.749	0.921	3.005	0.135	0.571	2.788	0.424	8.37	465	0.166	1.638	-0.917	0.589	3.194	0.918
800T200-43	0.0451	33	0.541	1.84	4.887	1.197	3.006	0.175	0.569	4.043	0.676	13.35	1,030	0.367	2.124	-0.913	0.587	3.193	0.918
800T200-54	0.0566	33	0.679	2.31	6.152	1.501	3.011	0.218	0.567	5.505	1.009	19.93	2,039	0.725	2.664	-0.908	0.584	3.196	0.919
800T200-54	0.0566	50	0.679	2.31	6.152	1.501	3.011	0.218	0.567	5.149	0.871	26.09	2,039	0.725	2.664	-0.908	0.584	3.196	0.919
800T200-68	0.0713	33	0.854	2.91	7.786	1.888	3.019	0.272	0.564	7.306	1.490	29.45	4,087	1.448	3.357	-0.902	0.580	3.201	0.921
800T200-68	0.0713	50	0.854	2.91	7.786	1.888	3.019	0.272	0.564	7.051	1.310	39.22	4,087	1.448	3.357	-0.902	0.580	3.2	

Section	Design Thickness (in)	F _y (ksi)	Gross Properties							Effective Properties					Torsional				
			Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _{xe} (in ⁴)	S _{xe} (in ³)	M _x (in-k)	V _{ag} (lb)	Jx1000 (in ⁴)	C _w (in ²)	X _o (in)	m (in)	R _o (in)	β
1000T150-43'	0.0451	33	0.586	1.99	7.207	1.419	3.507	0.080	0.370	6.195	0.837	16.54	822	0.397	1.612	-0.513	0.345	3.564	0.979
1000T150-54	0.0566	33	0.735	2.50	9.061	1.777	3.511	0.100	0.368	8.430	1.249	24.69	1,628	0.785	2.013	-0.509	0.342	3.567	0.980
1000T150-54	0.0566	50	0.735	2.50	9.061	1.777	3.511	0.100	0.368	7.880	1.079	32.29	1,628	0.785	2.013	-0.509	0.342	3.567	0.980
1000T150-68	0.0713	33	0.926	3.15	11.445	2.233	3.516	0.124	0.366	11.342	1.846	36.48	3,261	1.569	2.522	-0.505	0.339	3.571	0.980
1000T150-68	0.0713	50	0.926	3.15	11.445	2.233	3.516	0.124	0.366	10.774	1.621	48.53	3,261	1.569	2.522	-0.505	0.339	3.571	0.980
1000T150-97	0.1017	33	1.320	4.49	16.413	3.170	3.526	0.171	0.360	16.413	3.165	62.54	8,843	4.550	3.557	-0.495	0.332	3.579	0.981
1000T150-97	0.1017	50	1.320	4.49	16.413	3.170	3.526	0.171	0.360	16.413	2.902	86.90	9,507	4.550	3.557	-0.495	0.332	3.579	0.981
1000T200-43'	0.0451	33	0.631	2.15	8.361	1.646	3.640	0.183	0.539	6.722	0.861	17.01	822	0.428	3.540	-0.813	0.534	3.769	0.953
1000T200-54	0.0566	33	0.792	2.69	10.516	2.062	3.645	0.228	0.537	9.231	1.295	25.60	1,628	0.845	4.434	-0.809	0.531	3.772	0.954
1000T200-54	0.0566	50	0.792	2.69	10.516	2.062	3.645	0.228	0.537	8.560	1.111	33.26	1,628	0.845	4.434	-0.809	0.531	3.772	0.954
1000T200-68	0.0713	33	0.997	3.39	13.292	2.594	3.651	0.284	0.534	12.551	1.936	38.26	3,261	1.690	5.576	-0.803	0.527	3.776	0.955
1000T200-68	0.0713	50	0.997	3.39	13.292	2.594	3.651	0.284	0.534	11.820	1.684	50.42	3,261	1.690	5.576	-0.803	0.527	3.776	0.955
1000T200-97	0.1017	33	1.422	4.84	19.087	3.686	3.664	0.397	0.528	19.031	3.427	67.72	8,843	4.901	7.924	-0.791	0.519	3.786	0.956
1000T200-97	0.1017	50	1.422	4.84	19.087	3.686	3.664	0.397	0.528	18.583	3.081	92.25	9,507	4.901	7.924	-0.791	0.519	3.786	0.956
1200T125-54'	0.0566	33	0.820	2.79	13.335	2.186	4.033	0.060	0.271	12.296	1.491	29.47	1,354	0.876	1.820	-0.333	0.230	4.055	0.993
1200T125-54'	0.0566	50	0.820	2.79	13.335	2.186	4.033	0.060	0.271	11.460	1.286	38.51	1,354	0.876	1.820	-0.333	0.230	4.055	0.993
1200T125-68	0.0713	33	1.033	3.51	16.826	2.747	4.036	0.074	0.268	16.246	2.206	43.60	2,713	1.750	2.270	-0.329	0.227	4.059	0.993
1200T125-68	0.0713	50	1.033	3.51	16.826	2.747	4.036	0.074	0.268	15.686	1.934	57.90	2,713	1.750	2.270	-0.329	0.227	4.059	0.993
1200T125-97	0.1017	33	1.472	5.01	24.078	3.897	4.044	0.102	0.263	24.078	3.690	72.92	7,902	5.076	3.171	-0.322	0.222	4.065	0.994
1200T125-97	0.1017	50	1.472	5.01	24.078	3.897	4.044	0.102	0.263	23.751	3.442	103.06	7,902	5.076	3.171	-0.322	0.222	4.065	0.994
1200T150-54'	0.0566	33	0.848	2.89	14.378	2.357	4.117	0.103	0.348	12.962	1.530	30.23	1,354	0.906	3.033	-0.454	0.310	4.156	0.988
1200T150-54'	0.0566	50	0.848	2.89	14.378	2.357	4.117	0.103	0.348	12.020	1.313	39.31	1,354	0.906	3.033	-0.454	0.310	4.156	0.988
1200T150-68	0.0713	33	1.068	3.64	18.148	2.963	4.121	0.127	0.345	17.568	2.281	45.08	2,713	1.810	3.795	-0.450	0.307	4.160	0.988
1200T150-68	0.0713	50	1.068	3.64	18.148	2.963	4.121	0.127	0.345	16.566	1.987	59.48	2,713	1.810	3.795	-0.450	0.307	4.160	0.988
1200T150-97	0.1017	33	1.523	5.18	25.987	4.206	4.130	0.176	0.340	25.987	3.996	78.97	7,902	5.252	5.335	-0.441	0.301	4.168	0.989
1200T150-97	0.1017	50	1.523	5.18	25.987	4.206	4.130	0.176	0.340	25.719	3.616	108.27	7,902	5.252	5.335	-0.441	0.301	4.168	0.989
1200T200-54'	0.0566	33	0.905	3.08	16.464	2.699	4.265	0.236	0.510	14.078	1.582	31.26	1,354	0.966	6.714	-0.730	0.487	4.357	0.972
1200T200-54'	0.0566	50	0.905	3.08	16.464	2.699	4.265	0.236	0.510	12.962	1.350	40.41	1,354	0.966	6.714	-0.730	0.487	4.357	0.972
1200T200-68	0.0713	33	1.140	3.88	20.791	3.395	4.271	0.294	0.508	19.277	2.383	47.09	2,713	1.931	8.431	-0.725	0.483	4.362	0.972
1200T200-68	0.0713	50	1.140	3.88	20.791	3.395	4.271	0.294	0.508	18.026	2.058	61.62	2,713	1.931	8.431	-0.725	0.483	4.362	0.972
1200T200-97	0.1017	33	1.625	5.53	29.805	4.824	4.283	0.410	0.502	29.805	4.298	84.93	7,902	5.602	11.945	-0.714	0.476	4.371	0.973
1200T200-97	0.1017	50	1.625	5.53	29.805	4.824	4.283	0.410	0.502	28.959	3.819	114.35	7,902	5.602	11.945	-0.714	0.476	4.371	0.973
1400T125-54'	0.0566	33	0.933	3.18	19.977	2.814	4.627	0.061	0.256	17.725	1.767	34.91	1,160	0.997	2.559	-0.299	0.209	4.643	0.996
1400T125-54'	0.0566	50	0.933	3.18	19.977	2.814	4.627	0.061	0.256	16.407	1.517	45.42	1,160	0.997	2.559	-0.299	0.209	4.643	0.996
1400T125-68	0.0713	33	1.175	4.00	25.196	3.536	4.630	0.076	0.254	23.552	2.632	52.01	2,322	1.992	3.189	-0.296	0.206	4.646	0.996
1400T125-68	0.0713	50	1.175	4.00	25.196	3.536	4.630	0.076	0.254	22.620	2.293	68.64	2,322	1.992	3.189	-0.296	0.206	4.646	0.996
1400T125-97	0.1017	33	1.676	5.70	36.024	5.019	4.636	0.104	0.249	35.775	4.480	88.53	6,761	5.778	4.445	-0.289	0.201	4.652	0.996
1400T125-97	0.1017	50	1.676	5.70	36.024	5.019	4.636	0.104	0.249	34.588	4.134	123.76	6,761	5.778	4.445	-0.289	0.201	4.652	0.996
1400T125-118	0.1242	33	2.046	6.96	44.068	6.106	4.641	0.123	0.245	43.752	5.453	163.27	12,344	10.520	5.334	-0.284	0.197	4.656	0.996
1400T150-54'	0.0566	33	0.962	3.27	21.392	3.013	4.717	0.105	0.330	18.620	1.810	35.76	1,160	1.027	4.280	-0.410	0.283	4.746	0.993
1400T150-54'	0.0566	50	0.962	3.27	21.392	3.013	4.717	0.105	0.330	17.153	1.547	46.33	1,160	1.027	4.280	-0.410	0.283	4.746	0.993
1400T150-68	0.0713	33	1.211	4.12	26.987	3.788	4.721	0.130	0.327	25.409	2.717	53.68	2,322	2.052	5.349	-0.407	0.280	4.749	0.993
1400T150-68	0.0713	50	1.211	4.12	26.987	3.788	4.721	0.130	0.327	23.803	2.352	70.42	2,322	2.052	5.349	-0.407	0.280	4.749	0.993
1400T150-97	0.1017	33	1.727	5.88	38.607	5.379	4.729	0.180	0.322	38.340	4.834	95.52	6,761	5.953	7.503	-0.399	0.275	4.756	0.993
1400T150-97	0.1017	50	1.727	5.88	38.607	5.379	4.729	0.180	0.322	37.285	4.332	129.69	6,761	5.953	7.503	-0.399	0.275	4.756	0.993
1400T150-118	0.1242	50	2.108	7.17	47.247	6.546	4.734	0.214	0.319	46.911	5.887	176.24	12,344	10.839	9.048	-0.393	0.270	4.761	0.993
1400T200-54'	0.0566	33	1.018	3.46	24.221	3.412	4.878	0.242	0.487	20.098	1.868	36.92	1,160	1.087	9.520	-0.665	0.449	4.947	0.982
1400T200-54'	0.0566	50	1.018	3.46	24.221	3.412	4.878	0.242	0.487	18.387	1.589	47.56	1,160	1.087	9.520	-0.665	0.449	4.947	0.982
1400T200-68	0.0713	33	1.282	4.36	30.571	4.291	4.883	0.301	0.485	27.707	2.830	55.93	2,322	2.173	11.942	-0.661	0.446	4.951	0.982
1400T200-68	0.0713	50	1.282	4.36	30.571	4.291	4.883	0.301	0.485	25.738	2.432	72.81	2,322	2.173	11.942	-0.661	0.446	4.951	0.982
1400T200-97	0.1017	33	1.828	6.22	43.773	6.098	4.893	0.420	0.479	43.679	5.174	102.24	6,761	6.304	16.883	-0.651	0.439	4.959	0.983
1400T200-97	0.1017	50	1.828	6.22	43.773	6.098	4.893	0.420	0.479	41.749	4.559	136.48	6,761	6.304	16.883	-0.651	0.439	4.959	0.983
1400T200-118	0.1242	50	2.232	7.60	53.606	7.427	4.900	0.504	0.475	53.453	6.354	190.23	12,344	11.478	20.479	-0.644	0.434	4.965	0.983
1600T125-68	0.0713	33	1.318	4.48	35.916	4.421	5.220	0.077	0.241	32.443	3.058	60.42	2,030	2.233	4.273	-0.268	0.189	5.233	0.997
1600T125-68	0.0713	50	1.318	4.48	35.916	4.421	5.220	0.077	0.241	31.004	2.651	79.37	2,030	2.233	4.273	-0.268	0.189	5.233	0.997
1600T125-97	0.1017	33	1.879	6.39	51.322	6.276	5.226	0.105	0.237	49.844	5.273	104.19	5,908	6.479	5.945	-0.262	0.184	5.238	0.997
1600T125-																			