

# Structural studs & track 10"

Member	Design Thickness (in)	Gross Properties							33 ksi Effective Properties				50 ksi Effective Properties				Torsional Properties					
		Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	R <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	Ma (in-k)	V <sub>a</sub> (lb)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	Ma (in-k)	V <sub>a</sub> (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	X <sub>o</sub> (in)	R <sub>o</sub> (in)	Beta	
10" Studs	1000S162-43'	0.0451	0.627	2.13	8.025	1.605	3.577	0.168	0.518	7.523	1.302	25.74	836	7.370	1.099	32.91	836	0.425	3.430	-0.823	3.707	0.951
	1000S162-54	0.0566	0.783	2.66	9.950	1.990	3.565	0.204	0.511	9.627	1.722	34.02	1661	9.391	1.572	47.07	1661	0.836	4.198	-0.812	3.692	0.952
	1000S162-68	0.0713	0.978	3.33	12.325	2.465	3.550	0.246	0.502	12.256	2.276	44.98	3345	11.978	2.154	64.51	3345	1.658	5.121	-0.798	3.673	0.953
	1000S162-97	0.1017	1.372	4.67	16.967	3.393	3.516	0.320	0.483	16.967	3.393	67.06	8843	16.967	3.269	97.89	9864	4.731	6.827	-0.768	3.631	0.955
	1000S162-118	0.1242	1.655	5.63	20.169	4.034	3.491	0.363	0.468	20.169	4.034	100.24	13189	20.169	4.034	120.77	16235	8.511	7.924	-0.746	3.600	0.957
	1000S200-43'	0.0451	0.672	2.29	9.085	1.817	3.676	0.309	0.677	8.602	1.470	29.05	836	8.443	1.270	38.03	836	0.456	6.236	-1.147	3.910	0.914
	1000S200-54	0.0566	0.839	2.86	11.278	2.256	3.666	0.378	0.671	10.953	1.984	39.20	1661	10.769	1.705	51.05	1661	0.896	7.665	-1.135	3.896	0.915
	1000S200-68	0.0713	1.050	3.57	13.994	2.799	3.652	0.460	0.662	13.920	2.607	51.51	3345	13.665	2.420	72.46	3345	1.779	9.401	-1.120	3.876	0.917
	1000S200-97	0.1017	1.474	5.02	19.336	3.867	3.622	0.609	0.643	19.336	3.867	76.42	8843	19.336	3.741	112.00	9864	5.082	12.679	-1.088	3.836	0.920
	1000S200-118	0.1242	1.779	6.05	23.052	4.610	3.599	0.703	0.629	23.052	4.610	110.50	13189	23.052	4.610	138.04	16235	9.149	14.848	-1.064	3.805	0.922
	1000S250-43'	0.0451	0.717	2.44	10.203	2.041	3.771	0.531	0.860	10.203	1.617	31.95	836	10.140	1.342	40.19	836	0.486	10.481	-1.518	4.155	0.867
	1000S250-54	0.0566	0.896	3.05	12.677	2.535	3.762	0.653	0.854	12.677	2.277	44.99	1661	12.660	1.879	56.26	1661	0.957	12.922	-1.505	4.140	0.868
	1000S250-68	0.0713	1.121	3.81	15.751	3.150	3.749	0.799	0.844	15.751	3.028	65.93	3345	15.741	2.768	82.89	3345	1.899	15.909	-1.488	4.121	0.870
	1000S250-97	0.1017	1.576	5.36	21.827	4.365	3.722	1.072	0.825	21.827	4.357	98.41	8843	21.827	4.181	140.63	9864	5.433	21.632	-1.454	4.080	0.873
	1000S250-118	0.1242	1.904	6.48	26.080	5.216	3.701	1.249	0.810	26.080	5.216	120.89	13189	26.080	5.082	174.84	16235	9.788	25.490	-1.428	4.049	0.876
	1000S300-54	0.0566	0.953	3.24	14.076	2.815	3.844	1.024	1.037	13.938	2.312	45.69	1661	13.440	1.902	56.96	1661	1.017	19.888	-1.892	4.408	0.816
	1000S300-68	0.0713	1.192	4.06	17.509	3.502	3.832	1.258	1.027	17.441	3.158	62.41	3345	17.099	2.802	83.89	3345	2.020	24.551	-1.874	4.388	0.818
	1000S300-97	0.1017	1.677	5.71	24.318	4.864	3.808	1.702	1.007	24.318	4.671	103.39	8843	23.970	4.499	134.69	9864	5.783	33.570	-1.838	4.346	0.821
	1000S300-118	0.1242	2.028	6.90	29.109	5.822	3.789	1.997	0.992	29.109	5.662	128.16	13189	28.861	5.586	188.23	16235	10.427	39.725	-1.811	4.315	0.824
	1000S350-54	0.0566	1.052	3.58	16.220	3.244	3.927	1.768	1.297	15.942	2.772	54.77	1661	15.577	2.328	69.69	1661	1.123	36.575	-2.546	4.857	0.725
1000S350-68	0.0713	1.317	4.48	20.204	4.041	3.917	2.185	1.288	20.204	3.824	75.57	3345	20.026	3.417	102.32	3345	2.232	45.277	-2.529	4.837	0.727	
1000S350-97	0.1017	1.855	6.31	28.148	5.630	3.895	2.992	1.270	28.148	5.517	120.33	8843	28.148	5.118	153.25	9864	6.397	62.280	-2.492	4.795	0.730	
1000S350-118	0.1242	2.245	7.64	33.772	6.754	3.878	3.543	1.256	33.772	6.754	150.23	13189	33.772	6.427	213.25	16235	11.544	74.030	-2.465	4.764	0.732	
10" Track	1000T125-43'	0.0451	0.563	1.92	6.630	1.305	3.431	0.047	0.290	5.886	0.819	16.19	822	5.442	0.702	21.02	822	0.382	0.973	-0.379	3.464	0.988
	1000T125-54	0.0566	0.707	2.41	8.333	1.634	3.434	0.059	0.288	7.960	1.216	24.03	1628	7.479	1.055	31.59	1628	0.755	1.212	-0.376	3.466	0.988
	1000T125-68	0.0713	0.890	3.03	10.522	2.053	3.438	0.073	0.286	10.452	1.781	35.19	3261	10.155	1.575	47.15	3261	1.508	1.515	-0.372	3.470	0.989
	1000T125-97	0.1017	1.269	4.32	15.077	2.912	3.447	0.100	0.280	15.077	2.907	57.44	8843	15.077	2.753	82.42	9507	4.375	2.123	-0.363	3.477	0.989
	1000T125-118	0.1242	1.549	5.27	18.471	3.540	3.453	0.118	0.276	18.471	3.540	82.05	13189	18.471	3.535	105.85	16235	7.966	2.558	-0.357	3.482	0.990
	1000T150-43'	0.0451	0.586	1.99	7.207	1.419	3.507	0.080	0.370	6.195	0.837	16.54	822	5.703	0.714	21.39	822	0.397	1.612	-0.513	3.564	0.979
	1000T150-54	0.0566	0.735	2.50	9.061	1.777	3.511	0.100	0.368	8.430	1.249	24.69	1628	7.880	1.079	32.29	1628	0.785	2.013	-0.509	3.567	0.980
	1000T150-68	0.0713	0.926	3.15	11.445	2.233	3.516	0.124	0.366	11.342	1.846	36.48	3261	10.774	1.621	48.53	3261	1.569	2.522	-0.505	3.571	0.980
	1000T150-97	0.1017	1.320	4.49	16.413	3.170	3.526	0.171	0.360	16.413	3.165	62.54	8843	16.413	2.902	86.90	9507	4.550	3.557	-0.495	3.579	0.981
	1000T150-118	0.1242	1.611	5.48	20.121	3.857	3.534	0.204	0.356	20.121	3.857	87.30	13189	20.121	3.852	115.32	16235	8.285	4.307	-0.488	3.585	0.982
	1000T200-43'	0.0451	0.631	2.15	8.361	1.646	3.640	0.183	0.539	6.722	0.861	17.01	822	6.145	0.731	21.89	822	0.428	3.540	-0.813	3.769	0.953
	1000T200-54	0.0566	0.792	2.69	10.516	2.062	3.645	0.228	0.537	9.231	1.295	25.60	1628	8.560	1.111	33.26	1628	0.845	4.434	-0.809	3.772	0.954
	1000T200-68	0.0713	0.997	3.39	13.292	2.594	3.651	0.284	0.534	12.551	1.936	38.26	3261	11.820	1.684	50.42	3261	1.690	5.576	-0.803	3.776	0.955
	1000T200-97	0.1017	1.422	4.84	19.087	3.686	3.664	0.397	0.528	19.031	3.427	67.72	8843	18.583	3.081	92.25	9507	4.901	7.924	-0.791	3.786	0.956
	1000T200-118	0.1242	1.735	5.91	23.422	4.489	3.674	0.476	0.524	23.422	4.420	87.35	13189	23.422	4.208	125.99	16235	8.924	9.649	-0.783	3.793	0.957
	1000T250-43'	0.0451	0.676	2.30	9.515	1.873	3.751	0.344	0.713	7.172	0.876	17.32	822	6.519	0.742	22.22	822	0.458	6.477	-1.147	3.987	0.917
	1000T250-54	0.0566	0.848	2.89	11.972	2.348	3.757	0.429	0.711	9.913	1.326	26.20	1628	9.141	1.132	33.89	1628	0.906	8.125	-1.142	3.990	0.918
	1000T250-68	0.0713	1.068	3.64	15.138	2.954	3.764	0.536	0.708	13.578	1.997	39.46	3261	12.708	1.726	51.68	3261	1.810	10.240	-1.135	3.995	0.919
	1000T250-97	0.1017	1.523	5.18	21.760	4.202	3.780	0.751	0.702	20.871	3.596	71.05	8843	20.254	3.201	95.84	9507	5.252	14.617	-1.122	4.005	0.921
	1000T250-118	0.1242	1.860	6.33	26.723	5.122	3.791	0.905	0.698	26.538	4.721	93.29	13189	25.721	4.422	132.38	16235	9.562	17.858	-1.112	4.012	0.923
1000T300-54	0.0566	0.905	3.08	13.427	2.633	3.852	0.714	0.888	11.083	1.452	28.69	1628	10.826	1.191	35.65	1628	0.966	13.289	-1.500	4.228	0.874	
1000T300-68	0.0713	1.140	3.88	16.985	3.314	3.860	0.893	0.885	14.416	2.377	46.96	3261	14.106	1.904	57.01	3261	1.931	16.771	-1.493	4.233	0.876	
1000T300-97	0.1017	1.625	5.53	24.434	4.719	3.878	1.257	0.879	22.441	3.798	75.04	8843	21.530	3.589	107.45	9507	5.602	24.009	-1.478	4.242	0.879	
1000T300-118	0.1242	1.984																				