

DRYWALL TRACK

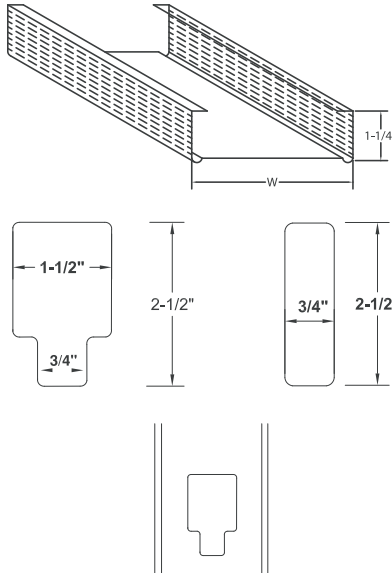
Telling Industries track is used to anchor the partition at the ceiling and floor. Tracks are roll-formed steel in a channel configuration with hemmed or unhemmed legs in 1-1/4" depths. Sections are manufactured to receive the corresponding size of the studs with an overbend for a friction fit. Telling Industries' standard 25, 22, and 20 gage track meets ASTM C-645, A568-00a, and A653. The properties and weights shown are calculated on minimum thicknesses in accordance to A.I.S.I. specifications.

PHYSICAL AND STRUCTURAL PROPERTIES

Section	Design Thickness (in)	Area (in ²)	Weight (lb/ft)	Gross Properties				33 ksi Effective Properties					Torsional Properties					
				I _{xx} (in ⁴)	R _x (in)	I _{yy} (in ⁴)	R _y (in)	I _{xx} (in ⁴)	S _{xx} (in ³)	Ma (in-in)	V _a (lb)	Y _{cg} (in)	J _x 1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	φ	
162T125-18	0.018	0.078	0.26	0.042	0.733	0.013	0.411	-	-	-	-	-	-	0.009	0.007	-0.891	1.225	0.471
162T125-27	0.028	0.117	0.4	0.063	0.735	0.020	0.410	0.050	0.044	0.87	541	1.048	0.031	0.010	-0.886	1.221	0.474	
162T125-30	0.031	0.129	0.44	0.070	0.735	0.022	0.409	0.057	0.050	1	597	1.038	0.042	0.012	-0.884	1.22	0.475	
162T125-33	0.034	0.143	0.49	0.077	0.736	0.024	0.408	0.066	0.058	1.15	663	1.026	0.057	0.013	-0.882	1.219	0.476	
162T150-18	0.018	0.087	0.3	0.049	0.749	0.021	0.496	-	-	-	-	-	-	0.010	0.011	-1.12	1.436	0.391
162T150-27	0.028	0.131	0.45	0.074	0.750	0.032	0.495	0.055	0.045	0.9	541	1.092	0.035	0.017	-1.115	1.432	0.394	
162T150-30	0.031	0.144	0.49	0.081	0.751	0.035	0.494	0.062	0.052	1.03	597	1.082	0.047	0.019	-1.113	1.431	0.395	
162T150-33	0.034	0.16	0.54	0.09	0.751	0.039	0.494	0.072	0.06	1.19	663	1.07	0.064	0.021	-1.111	1.429	0.395	
250T125-18	0.018	0.094	0.32	0.104	1.052	0.015	0.399	-	-	-	-	-	-	0.011	0.018	-0.779	1.368	0.676
250T125-27	0.028	0.141	0.48	0.157	1.053	0.022	0.398	0.129	0.079	1.56	685	1.519	0.038	0.027	-0.77	1.366	0.679	
250T125-30	0.031	0.156	0.53	0.173	1.053	0.025	0.397	0.145	0.090	1.77	832	1.507	0.051	0.030	-0.77	1.365	0.679	
250T125-33	0.034	0.173	0.59	0.192	1.054	0.027	0.397	0.166	0.103	2.03	1024	1.492	0.069	0.033	-0.77	1.365	0.68	
250T150-18	0.018	0.103	0.35	0.120	1.077	0.025	0.488	-	-	-	-	-	-	0.012	0.029	-0.99	1.544	0.586
250T150-27	0.028	0.156	0.53	0.181	1.078	0.037	0.486	0.139	0.082	1.61	685	1.576	0.042	0.044	-0.99	1.542	0.588	
250T150-30	0.031	0.172	0.58	0.199	1.078	0.040	0.486	0.157	0.093	1.83	832	1.563	0.056	0.048	-0.99	1.541	0.589	
250T150-33	0.034	0.190	0.65	0.221	1.079	0.045	0.485	0.179	0.107	2.11	1024	1.548	0.076	0.054	-0.99	1.54	0.59	
250T200-18	0.018	0.122	0.42	0.152	1.114	0.053	0.661	-	-	-	-	-	-	0.014	0.064	-1.44	1.938	0.447
250T200-27	0.028	0.184	0.63	0.229	1.116	0.080	0.659	-	-	-	-	-	-	0.049	0.096	-1.44	1.934	0.449
250T200-30	0.031	0.203	0.69	0.253	1.116	0.088	0.659	-	-	-	-	-	-	0.066	0.106	-1.43	1.933	0.45
250T200-33	0.034	0.225	0.76	0.280	1.117	0.097	0.658	0.203	0.112	2.22	1024	1.647	0.090	0.118	-1.43	1.932	0.45	
350T125-18	0.018	0.113	0.38	0.220	1.395	0.016	0.382	-	-	-	-	-	-	0.013	0.038	-0.68	1.6	0.817
350T125-27	0.028	0.170	0.58	0.331	1.396	0.025	0.381	0.277	0.128	2.53	590	2.044	0.045	0.057	-0.68	1.599	0.819	
350T125-30	0.031	0.187	0.64	0.365	1.396	0.027	0.38	0.312	0.145	2.86	790	2.03	0.061	0.063	-0.679	1.598	0.82	
350T125-33	0.034	0.207	0.71	0.405	1.397	0.030	0.379	0.354	0.165	3.27	1024	2.014	0.083	0.070	-0.68	1.598	0.820	
350T150-18	0.018	0.122	0.42	0.250	1.430	0.027	0.472	-	-	-	-	-	-	0.014	0.062	-0.88	1.746	0.744
350T150-27	0.028	0.184	0.63	0.377	1.431	0.041	0.470	0.298	0.132	2.62	590	2.111	0.049	0.093	-0.88	1.745	0.746	
350T150-30	0.031	0.203	0.69	0.416	1.432	0.045	0.469	0.336	0.150	2.96	790	2.097	0.066	0.103	-0.88	1.744	0.747	
350T150-33	0.034	0.225	0.76	0.461	1.432	0.049	0.469	0.382	0.171	3.39	1024	2.080	0.090	0.114	-0.88	1.743	0.747	
350T200-18	0.018	0.141	0.48	0.311	1.485	0.059	0.649	-	-	-	-	-	-	0.017	0.136	-1.31	2.081	0.607
350T200-27	0.028	0.212	0.72	0.469	1.487	0.089	0.648	-	-	-	-	-	-	0.057	0.203	-1.30	2.079	0.609
350T200-30	0.031	0.234	0.80	0.517	1.487	0.098	0.647	-	-	-	-	-	-	0.076	0.224	-1.30	2.078	0.609
350T200-33	0.034	0.259	0.88	0.574	1.487	0.108	0.647	0.428	0.181	3.57	1024	2.199	0.103	0.248	-1.30	2.077	0.610	
362T125-18	0.018	0.115	0.39	0.238	1.437	0.017	0.380	-	-	-	-	-	-	0.014	0.041	-0.67	1.632	0.829
362T125-27	0.028	0.173	0.59	0.358	1.438	0.025	0.378	0.301	0.135	2.66	569	2.109	0.046	0.062	-0.67	1.631	0.831	
362T125-30	0.031	0.191	0.65	0.395	1.438	0.027	0.378	0.339	0.152	3.01	762	2.095	0.062	0.068	-0.67	1.63	0.832	
362T125-33	0.034	0.212	0.72	0.438	1.438	0.030	0.377	0.384	0.174	3.44	1024	2.079	0.085	0.075	-0.67	1.63	0.832	
362T150-18	0.018	0.125	0.42	0.271	1.474	0.027	0.470	-	-	-	-	-	-	0.015	0.068	-0.87	1.775	0.759
362T150-27	0.028	0.187	0.64	0.408	1.475	0.041	0.468	0.323	0.140	2.76	569	2.177	0.050	0.101	-0.87	1.774	0.761	
362T150-30	0.031	0.207	0.70	0.449	1.475	0.045	0.467	0.364	0.158	3.12	762	2.162	0.067	0.111	-0.87	1.773	0.761	
362T150-33	0.034	0.229	0.78	0.499	1.475	0.050	0.467	0.414	0.180	3.56	1024	2.146	0.091	0.127	-0.87	1.772	0.762	
362T200-18	0.018	0.143	0.49	0.336	1.530	0.060	0.648	-	-	-	-	-	-	0.017	0.147	-1.29	2.104	0.624
362T200-27	0.028	0.216	0.73	0.506	1.532	0.090	0.646	-	-	-	-	-	-	0.058	0.220	-1.29	2.101	0.626
362T200-30	0.031	0.238	0.81	0.558	1.532	0.099	0.645	-	-	-	-	-	-	0.077	0.242	-1.28	2.101	0.626
362T200-33	0.034	0.264	0.90	0.619	1.532	0.110	0.645	0.464	0.190	3.76	1024	2.267	0.105	0.269	-1.28	2.1	0.627	
400T125-18	0.018	0.122	0.42	0.298	1.561	0.017	0.374	-	-	-	-	-	-	0.014	0.052	-0.65	1.73	0.861
400T125-27	0.028	0.184	0.63	0.449	1.562	0.025	0.372	0.380	0.156	3.08	515	2.306	0.049	0.077	-0.64	1.729	0.862	
400T125-30	0.031	0.203	0.69	0.495	1.562	0.028	0.371	0.427	0.176	3.49	689	2.289	0.066	0.085	-0.64	1.729	0.863	
400T125-33	0.034	0.225	0.76	0.549	1.563	0.031	0.371	0.484	0.201	3.97	940	2.272	0.090	0.094	-0.64	1.728	0.863	
400T150-18	0.018	0.132	0.45	0.338	1.601	0.028	0.463	-	-	-	-	-	-	0.016	0.085	-0.84	1.866	0.798
400T150-27	0.028	0.198	0.67	0.509	1.602	0.042	0.461	0.409	0.184	3.04	515	2.420	0.053	0.127	-0.83	1.864	0.800	
400T150-30	0.031	0.218	0.74	0.561	1.603	0.046	0.461	0.458	0.153	3.61	689	2.359	0.071	0.139	-0.83	1.864	0.800	
400T150-33	0.034	0.242	0.82	0.622	1.603	0.051	0.460	0.519	0.208	4.12	940	2.342	0.097	0.154	-0.83	1.863	0.801	
400T200-18	0.018	0.150	0.51	0.417	1.664	0.062	0.642	-	-	-	-	-	-	0.018	0.183	-1.25	2.177	0.672
400T200-27	0.028	0.226	0.77	0.628	1.665	0.093	0.640	-	-	-	-	-	-	0.060	0.275	-1.24	2.174	0.673
400T200-30	0.031	0.250	0.85	0.692	1.666	0.102	0.639	-	-	-	-	-	-	0.081	0.303	-1.24	2.174	0.674
400T200-33	0.034	0.277	0.94	0.768	1.666	0.113	0.639	0.581	0.220	4.34	940	2.469	0.110	0.335	-1.24	2.173	0.674	
550T125-18	0.018	0.15	0.51	0.630	2.046	0.018	0.349	-	-	-	-	-	-	0.018	0.107	-0.55	2.148	0.934
550T125-27	0.028	0.226	0.77	0.948	2.046	0.027	0.348	0.786	0.192	3.79	372	3.464	0.060	0.160	-0.55	2.147	0.934	
550T125-30	0.031	0.25	0.85	1.045	2.046	0.030	0.347	0.897	0.226	4.47	499	3.385	0.081	0.176	-0.55	2.147	0.935	
550T125-33	0.034	0.277	0.94	1.159	2.046	0.033	0.346	1.029	0.270	5.33	680	3.302	0.110	0.194	-0.55	2.146	0.935	
550T150-18	0.018	0.16	0.54	0.703	2.098	0.031	0.437	-	-	-	-	-	-	0.019	0.175	-0.73	2.263	0.897
550T150-27	0.028	0.241	0.82	1.059	2.098	0.048	0.436	0.893	0.207	4.10	372	3.460	0.064	0.262	-0.72	2.262	0.899	
550T150-30	0.031	0.265	0.90	1.168	2.098	0.050	0.435	0.995	0.251	4.96	499	3.349	0.086	0.288	-0.72	2.262	0.898	
550T150-33	0.034	0.294	1.00	1.295	2.099	0.055	0.434	1.115	0.310	6.12	680	3.224	0.117	0.319	-0.72	2.261	0.898	
550T200-18	0.018	0.179	0.61	0.851	2.182	0.068	0.616	-	-	-	-	-	-	0.021	0.379	-1.10	2.522	0.808
550T200-27	0.028	0.269	0.91	1.282	2.183	0.101	0.614	-	-	-								

DRYWALL STUDS

Telling Industries roll-formed, channel shaped, non-load bearing steel members drywall studs are used exclusively for interior partitions. Outer flanges are knurled to prevent screw ride and to expedite attachment O.C. Telling Industries' 25, 22, and 20 gage studs meet ASTM C-645 and A-653 standards. The properties and weights shown below are calculated on minimum thicknesses in compliance with A.I.S.I. specifications.



Section	Design Thickness (in)	Gross Properties						33 ksi Effective Properties					Torsional Properties				
		Area (in ²)	Weight (lb/ft)	I _{xx} (in ⁴)	R _x (in)	I _{yy} (in ⁴)	R _y (in)	I _{xx} (in ⁴)	S _{xx} (in ³)	Ma (in-k)	Va (lb)	Ycg (in)	Jx1000 (in ⁴)	Cw (in ⁶)	Xo (in)	Ro (in)	β
162S125-18	0.018	0.080	0.27	0.038	0.686	0.016	0.447	0.034	0.031	0.61	302	0.962	0.009	0.009	-1.061	1.340	0.373
162S125-27	0.028	0.120	0.41	0.056	0.682	0.023	0.443	0.055	0.053	1.05	494	0.903	0.032	0.013	-1.049	1.327	0.375
162S125-30	0.031	0.131	0.45	0.061	0.681	0.026	0.441	0.060	0.060	1.19	543	0.889	0.043	0.014	-1.046	1.323	0.376
162S125-33	0.034	0.145	0.49	0.067	0.679	0.028	0.440	0.066	0.069	1.37	601	0.873	0.058	0.015	-1.042	1.319	0.376
250S125-18	0.018	0.097	0.33	0.099	1.014	0.019	0.439	0.089	0.059	1.17	258	1.391	0.011	0.023	-0.930	1.444	0.585
250S125-27	0.028	0.144	0.49	0.147	1.009	0.027	0.434	0.144	0.097	1.92	685	1.343	0.039	0.033	-0.919	1.432	0.589
250S125-30	0.031	0.159	0.54	0.161	1.008	0.030	0.433	0.159	0.110	2.17	832	1.329	0.052	0.036	-0.915	1.429	0.590
250S125-33	0.034	0.176	0.60	0.178	1.006	0.033	0.431	0.175	0.125	2.48	975	1.313	0.070	0.039	-0.911	1.425	0.591
350S125-18	0.018	0.115	0.39	0.215	1.366	0.021	0.423	0.203	0.072	1.42	180	2.175	0.014	0.049	-0.819	1.648	0.753
350S125-27	0.028	0.173	0.59	0.320	1.361	0.030	0.418	0.315	0.130	2.57	614	2.020	0.046	0.071	-0.809	1.637	0.756
350S125-30	0.031	0.190	0.65	0.351	1.359	0.033	0.417	0.346	0.150	2.96	824	1.979	0.062	0.077	-0.805	1.634	0.757
350S125-33	0.034	0.210	0.72	0.387	1.358	0.036	0.415	0.382	0.175	3.45	1024	1.935	0.084	0.085	-0.802	1.630	0.758
362S125-18	0.018	0.118	0.40	0.234	1.409	0.021	0.421	0.221	0.075	1.48	173	2.262	0.014	0.053	-0.807	1.677	0.768
362S125-27	0.028	0.176	0.60	0.347	1.404	0.031	0.416	0.342	0.135	2.67	592	2.102	0.047	0.077	-0.797	1.667	0.771
362S125-30	0.031	0.194	0.66	0.381	1.402	0.033	0.415	0.376	0.156	3.08	794	2.059	0.063	0.084	-0.794	1.664	0.772
362S125-33	0.034	0.215	0.73	0.421	1.400	0.037	0.413	0.415	0.182	3.59	1024	2.013	0.086	0.092	-0.790	1.660	0.774
400S125-18	0.018	0.125	0.42	0.294	1.536	0.021	0.414	0.281	0.083	1.64	156	2.524	0.015	0.066	-0.774	1.769	0.809
400S125-27	0.028	0.187	0.64	0.438	1.531	0.031	0.410	0.431	0.151	2.97	533	2.349	0.050	0.096	-0.764	1.759	0.811
400S125-30	0.031	0.206	0.70	0.481	1.529	0.034	0.408	0.474	0.174	3.44	715	2.303	0.067	0.105	-0.761	1.756	0.812
400S125-33	0.034	0.228	0.77	0.531	1.527	0.038	0.407	0.524	0.203	4.01	976	2.252	0.091	0.115	-0.757	1.752	0.813
550S125-18	0.018	0.153	0.52	0.630	2.029	0.023	0.390	-	-	-	-	-	0.018	0.138	-0.666	2.171	0.906
550S125-27	0.028	0.229	0.78	0.938	2.023	0.034	0.385	0.898	0.246	4.86	382	3.150	0.061	0.202	-0.657	2.162	0.908
550S125-30	0.031	0.252	0.86	1.031	2.021	0.037	0.384	0.996	0.286	5.65	512	3.063	0.082	0.220	-0.654	2.159	0.908
550S125-33	0.034	0.279	0.95	1.139	2.019	0.041	0.382	1.111	0.335	6.62	699	3.012	0.112	0.242	-0.651	2.156	0.909
600S125-18	0.018	0.162	0.55	0.778	2.189	0.024	0.382	-	-	-	-	-	0.019	0.169	-0.637	2.312	0.924
600S125-27	0.028	0.243	0.83	1.160	2.183	0.035	0.377	1.097	0.271	5.35	349	3.479	0.065	0.247	-0.628	2.303	0.926
600S125-30	0.031	0.268	0.91	1.275	2.181	0.038	0.376	1.218	0.315	6.22	468	3.405	0.087	0.270	-0.625	2.300	0.926
600S125-33	0.034	0.297	1.01	1.409	2.179	0.042	0.374	1.361	0.369	7.30	638	3.326	0.118	0.296	-0.622	2.297	0.927

COMPOSITE DRYWALL LIMITING HEIGHTS*

Part#	Web in. (1/100in.)	GA. in., (Mils)	5 PSF Interior Wind Load					7.5 PSF Interior Wind Load					10 PSF Interior Wind Load					
			1/2" Layer Gypsum Board Each Side					1/2" Layer Gypsum Board Each Side					1/2" Layer Gypsum Board Each Side					
			16" O.C.		24" O.C.			16" O.C.		24" O.C.			16" O.C.		24" O.C.			
L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	
162S125-18	1-5/8", (162)	25, (18)	10' 7"	8' 4"	-	9' 9"	7' 11"	-	8' 10"	-	-	8' 0"	-	-	8' 4"	-	-	-
162S125-27	-	22, (27)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
162S125-30	-	20, (30)*	11' 9"	9' 4"	-	10' 9"	8' 7"	-	-	-	-	-	-	-	-	-	-	-
162S125-33	-	20, (33)	12' 1"	9' 8"	8' 5"	11' 0"	8' 9"	7' 8"	10' 7"	8' 5"	-	9' 7"	7' 8"	-	9' 8"	-	-	-
250S125-18	2-1/2", (250)	25, (18)	13' 3"	11' 3"	9' 10"	11' 10"	10' 7"	9' 3"	10' 10"	9' 10"	8' 7"	9' 8"	9' 3"	8' 1"	9' 5"	8' 11"	-	8' 5"
250S125-27	-	22, (27)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250S125-30	-	20, (30)*	15' 9"	12' 6"	10' 10"	14' 2"	11' 4"	9' 10"	-	-	-	-	-	-	-	-	-	-
250S125-33	-	20, (33)	16' 5"	12' 10"	11' 2"	14' 10"	11' 7"	10' 0"	14' 4"	11' 2"	9' 8"	13' 0"	10' 0"	8' 7"	12' 10"	10' 0"	8' 8"	11' 7"
362S125-18	3-5/8", (362)	25, (18)	15' 4"	14' 4"	12' 4"	13' 9"	13' 5"	11' 7"	12' 5"	12' 5"	10' 10"	11' 0"	11' 0"	10' 1"	10' 9"	10' 9"	9' 9"	9' 5"
362S125-27	-	22, (27)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
362S125-30	-	20, (30)*	19' 7"	16' 0"	13' 10"	17' 6"	14' 6"	12' 6"	18' 6"	14' 9"	12' 9"	16' 2"	12' 9"	11' 2"	16' 5"	12' 11"	11' 4"	14' 9"
362S125-33	-	20, (33)	20' 8"	16' 5"	14' 3"	18' 6"	14' 9"	12' 9"	18' 1"	14' 3"	12' 6"	16' 2"	12' 9"	11' 2"	16' 5"	12' 11"	11' 4"	14' 9"
400S125-18	4", (400)	25, (18)	17' 2"	15' 4"	13' 4"	15' 1"	14' 2"	12' 4"	13' 10"	13' 4"	11' 8"	12' 1"	12' 1"	10' 9"	11' 11"	11' 11"	10' 6"	10' 5"
400S125-27	-	22, (27)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
400S125-30	-	20, (30)*	21' 10"	17' 8"	15' 4"	19' 7"	15' 11"	13' 10"	20' 9"	16' 5"	14' 3"	18' 1"	14' 3"	12' 4"	18' 4"	14' 5"	12' 6"	16' 5"
400S125-33	-	20, (33)	23' 1"	18' 4"	15' 11"	20' 9"	16' 5"	14' 3"	22' 2"	15' 11"	13' 9"	18' 1"	14' 3"	12' 4"	18' 4"	14' 5"	12' 6"	16' 5"
600S125-18	6", (600)	25, (18)	19' 9"	17' 11"	16' 9"	16' 9"	16' 9"	-	16' 2"	16' 2"	15' 7"	13' 5"	13' 5"	13' 5"	14' 0"	14' 0"	13' 10"	11' 5"
600S125-27	-	22, (27)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600S125-30	-	20, (30)*	28' 7"	23' 6"	20' 7"	25' 1"	20' 7"	18' 4"	-	-	-	-	-	-	-	-	-	-
600S125-33	-	20, (33)	30' 10"	24' 6"	21' 4"	27' 2"	21' 7"	18' 10"	27' 0"	21' 4"	18' 9"	23' 10"	18' 10"	16' 7"	24' 6"	19' 5"	17' 0"	19' 1"

*BASED ON AISI 2001 CODE

Foot Notes:

- D- Distance between the centroid of the section and the web center.
- I_x- Moment of inertia for deflection about the x-axis.
- S_x- Section modulus for load about the x-axis.
- Ma- Allowable resisting moment. Listed values incorporate the effects of cold forming as allowed per section A7.2 of the 2001 A.I.S.I. "Specification for Design of Cold Formed Steel Structural Members."

Notes for the Limiting Heights Table:

- To attain values listed, attachment of drywall stud to runner track with (1) type S drywall screwed to each side, top and bottom, is required. If facing material is not applied to both sides of the framing then horizontal bridging is required. The spacing of this bridging shall not exceed 5' 0" O.C.
- Calculated values based on 33ksi yield strength.

Note for the Limiting Height With Gypsum Board Table:

Drywall installation shall be in accordance with A.S.T.M. C840- 99a "Application and Finishing of Gypsum Board" The following are thickness for Telling Industries' drywall products:

* Composite values based on interpolation of test data. f: Flexural stress controls allowable wall height. s: Sheer/web crippling controls allowable wall height
1: Web-height to thickness ratio exceeds 200. Web stiffeners required at all support points and concentrated loads.