ProSTUD Section Properties

Member	Design Thickness (in)	F_y (ksi)	Area (in^2)	Weight (lb/ft)	Gross Section Properties I_x (in^4)	R_x (in)	I_y (in^4)	R_y (in)	Effective Section Properties at Fy A_e (in^2)	I_x (in^4)	S_x (in^3)	M_a (in-lbs)	Va_g (lb)	Va_{net} (lb)	Torsional Properties Jx1000 (in^4)	C_w (in^6)	X_o (in)	R_o (in)	β	L_u (in)
162PDS125-15	0.0158	50	0.071	0.24	0.033	0.688	0.015	0.466	0.033	0.030	0.024	719	232	104	0.00589	0.009	-1.088	1.369	0.368	24.8
250PDS125-15	0.0158	50	0.085	0.29	0.088	1.020	0.018	0.459	0.033	0.080	0.044	1198	147	141	0.00704	0.023	-0.959	1.473	0.576	24.5
350PDS125-15[1]	0.0158	50	0.100	0.34	0.190	1.377	0.020	0.444	0.034	0.177	0.054	1629	104	104	0.00835	0.048	-0.849	1.677	0.744	24.3
362PDS125-15[1]	0.0158	50	0.102	0.35	0.206	1.420	0.020	0.442	0.034	0.190	0.056	1689	100	100	0.00852	0.051	-0.837	1.706	0.760	24.3
400PDS125-15[1]	0.0158	50	0.108	0.37	0.260	1.549	0.021	0.436	0.034	0.233	0.062	1870	90	90	0.00901	0.064	-0.803	1.798	0.800	24.2
550PDS125-15[2]	0.0158	50	0.132	0.45	0.553	2.047	0.022	0.411	0.034	0.444	0.097	2590	65	65	0.01098	0.132	-0.695	2.201	0.900	23.8
600PDS125-15[2]	0.0158	50	0.140	0.48	0.683	2.209	0.023	0.404	0.034	0.537	0.105	2781	60	60	0.01164	0.161	-0.666	2.343	0.919	23.6
162PDS125-19	0.0200	65	0.090	0.31	0.042	0.685	0.020	0.466	0.042	0.037	0.031	1193	473	165	0.01197	0.012	-1.096	1.374	0.364	22.0
250PDS125-19	0.0200	65	0.109	0.37	0.112	1.017	0.024	0.467	0.046	0.104	0.061	2110	299	226	0.01449	0.032	-0.992	1.495	0.560	22.2
350PDS125-19	0.0200	65	0.129	0.44	0.245	1.376	0.027	0.456	0.048	0.233	0.077	2992	211	183	0.01724	0.067	-0.888	1.700	0.727	22.1
362PDS125-19	0.0200	65	0.132	0.45	0.266	1.420	0.027	0.454	0.048	0.254	0.080	3103	203	189	0.01757	0.072	-0.876	1.729	0.743	22.1
400PDS125-19	0.0200	65	0.140	0.48	0.336	1.550	0.028	0.451	0.050	0.316	0.091	3537	184	184	0.01865	0.092	-0.851	1.825	0.783	22.2
550PDS125-19[2]	0.0200	65	0.171	0.58	0.721	2.055	0.032	0.431	0.052	0.599	0.144	4967	132	132	0.02276	0.192	-0.749	2.229	0.887	21.9
600PDS125-19[2]	0.0200	65	0.181	0.62	0.892	2.220	0.033	0.425	0.051	0.727	0.158	5421	121	121	0.02414	0.236	-0.723	2.373	0.907	21.9
162PDS125-22	0.0232	57	0.103	0.35	0.048	0.685	0.022	0.462	0.053	0.044	0.038	1302	605	181	0.01850	0.013	-1.079	1.359	0.369	23.2
250PDS125-22	0.0232	57	0.123	0.42	0.127	1.016	0.026	0.455	0.055	0.115	0.075	2226	468	303	0.02214	0.033	-0.950	1.464	0.579	22.9
350PDS125-22	0.0232	57	0.147	0.50	0.276	1.372	0.028	0.440	0.055	0.256	0.088	3008	329	246	0.02630	0.068	-0.840	1.668	0.746	22.7
362PDS125-22	0.0232	57	0.149	0.51	0.300	1.416	0.029	0.438	0.055	0.279	0.091	3121	318	253	0.02682	0.074	-0.828	1.698	0.762	22.7
400PDS125-22	0.0232	57	0.158	0.54	0.377	1.544	0.030	0.432	0.055	0.353	0.101	3459	287	272	0.02838	0.092	-0.795	1.790	0.803	22.6
550PDS125-22[1]	0.0232	57	0.193	0.66	0.805	2.043	0.032	0.408	0.056	0.680	0.161	4959	207	207	0.03463	0.190	-0.688	2.194	0.902	22.2
600PDS125-22[1]	0.0232	57	0.205	0.70	0.997	2.205	0.033	0.402	0.056	0.830	0.178	5404	189	189	0.03676	0.233	-0.662	2.337	0.920	22.1
162PDS125-30	0.0312	33	0.137	0.47	0.064	0.681	0.029	0.458	0.098	0.064	0.067	1332	572	124	0.04459	0.017	-1.070	1.348	0.371	30.8
250PDS125-30	0.0312	33	0.165	0.56	0.169	1.012	0.034	0.451	0.106	0.168	0.121	2356	832	397	0.05345	0.042	-0.941	1.454	0.581	30.1
350PDS125-30	0.0312	33	0.196	0.67	0.367	1.368	0.037	0.436	0.107	0.365	0.164	3231	805	444	0.06357	0.089	-0.831	1.659	0.749	29.7
362PDS125-30	0.0312	33	0.200	0.68	0.398	1.411	0.038	0.434	0.107	0.396	0.170	3358	776	457	0.06484	0.096	-0.820	1.689	0.764	29.7
400PDS125-30	0.0312	33	0.212	0.72	0.501	1.540	0.039	0.428	0.108	0.499	0.189	3737	701	490	0.06864	0.120	-0.787	1.781	0.805	29.5
550PDS125-30	0.0312	33	0.258	0.88	1.072	2.037	0.042	0.404	0.109	1.048	0.307	5544	505	505	0.08382	0.248	-0.680	2.185	0.903	28.9
600PDS125-30	0.0312	33	0.274	0.93	1.324	2.199	0.043	0.396	0.109	1.281	0.338	6031	461	461	0.08888	0.303	-0.651	2.327	0.922	28.7
162PDS125-33	0.0346	33	0.152	0.52	0.070	0.679	0.032	0.456	0.114	0.070	0.078	1541	632	123	0.06059	0.019	-1.065	1.344	0.371	30.8
250PDS125-33	0.0346	33	0.182	0.62	0.186	1.010	0.037	0.449	0.125	0.186	0.138	2697	1007	431	0.07267	0.046	-0.937	1.449	0.582	30.1
350PDS125-33	0.0346	33	0.217	0.74	0.404	1.366	0.041	0.435	0.126	0.404	0.192	3793	1024	507	0.08648	0.098	-0.828	1.655	0.750	29.7
362PDS125-33	0.0346	33	0.221	0.75	0.439	1.409	0.041	0.433	0.127	0.439	0.200	3943	1024	541	0.08820	0.106	-0.816	1.685	0.766	29.6
400PDS125-33	0.0346	33	0.234	0.80	0.553	1.538	0.043	0.426	0.128	0.553	0.222	4394	957	602	0.09338	0.132	-0.783	1.777	0.806	29.5
550PDS125-33	0.0346	33	0.286	0.97	1.184	2.035	0.046	0.402	0.130	1.167	0.362	6439	689	689	0.11409	0.272	-0.676	2.182	0.904	28.9
600PDS125-33	0.0346	33	0.303	1.03	1.463	2.196	0.047	0.394	0.130	1.428	0.399	7021	630	630	0.12100	0.332	-0.647	2.323	0.922	28.6

Section Properties Table Notes

- Calculated properties are based on AISI S100-07, North American Specification for Design of Cold-Formed Steel Structural Members.
- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
- Tabulated gross properties including torsional properties are based on full-unreduced cross section of the studs, away from punchouts.
- For deflection calculations, use the effective moment of inertia.
- Allowable moment includes cold-work of forming.
- Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius. Hems on non-structural rack sections are ignored.
- Allowable moment is taken as the lowest value based on loacl or distortional buckling. Distortional buckling strength is based on a k-phi = 0.

1. Web-height to thickness ratio exceeds 200.
2. Web-height-to thickness ratio exceeds 260.

ProTRAK Section Properties

Member	Design Thickness (in)	F_y (ksi)	Area (in^2)	Weight (lb/ft)	Gross Section Properties I_x (in^4)	R_x (in)	I_y (in^4)	R_y (in)	Effective Section Properties at Fy A_e (in^2)	I_x (in^4)	S_x (in^3)	M_a (in-lbs)	Va_g (lb)	Torsional Properties Jx1000 (in^4)	C_w (in^6)	X_o (in)	R_o (in)	β
162PDT100-15	0.0158	50	0.057	0.19	0.028	0.698	0.006	0.325	0.020	0.019	0.016	470	222	0.00476	0.003	-0.659	1.014	0.578
250PDT100-15	0.0158	50	0.071	0.24	0.072	1.007	0.007	0.311	0.020	0.054	0.024	725	143	0.00591	0.008	-0.566	1.197	0.776
350PDT100-15[1]	0.0158	50	0.087	0.30	0.156	1.341	0.007	0.294	0.021	0.112	0.034	1017	101	0.00723	0.017	-0.490	1.458	0.887
362PDT100-15[1]	0.0158	50	0.089	0.30	0.170	1.382	0.008	0.292	0.021	0.120	0.035	1054	98	0.00739	0.019	-0.482	1.492	0.896
400PDT100-15[1]	0.0158	50	0.095	0.32	0.214	1.503	0.008	0.286	0.021	0.138	0.038	1147	89	0.00789	0.023	-0.459	1.597	0.917
550PDT100-15[2]	0.0158	50	0.118	0.40	0.463	1.976	0.008	0.264	0.021	0.277	0.053	1595	64	0.00986	0.049	-0.388	2.031	0.964
600PDT100-15[2]	0.0158	50	0.126	0.43	0.574	2.131	0.008	0.257	0.021	0.334	0.058	1744	59	0.01052	0.059	-0.369	2.178	0.971
162PDT125-15	0.0158	50	0.065	0.22	0.034	0.717	0.011	0.412	0.020	0.021	0.016	464	222	0.00542	0.006	-0.881	1.208	0.468
250PDT125-15	0.0158	50	0.079	0.27	0.085	1.038	0.013	0.400	0.020	0.059	0.024	724	143	0.00657	0.015	-0.771	1.353	0.675
350PDT125-15[1]	0.0158	50	0.095	0.32	0.181	1.383	0.014	0.383	0.021	0.116	0.034	1022	101	0.00789	0.031	-0.678	1.587	0.818
362PDT125-15[1]	0.0158	50	0.097	0.33	0.196	1.425	0.014	0.381	0.021	0.125	0.035	1059	98	0.00805	0.034	-0.668	1.619	0.830
400PDT125-15[1]	0.0158	50	0.103	0.35	0.247	1.550	0.014	0.374	0.021	0.153	0.039	1171	89	0.00854	0.043	-0.640	1.718	0.861
550PDT125-15[2]	0.0158	50	0.126	0.43	0.524	2.036	0.015	0.350	0.021	0.290	0.054	1611	64	0.01052	0.089	-0.549	2.137	0.934
600PDT125-15[2]	0.0158	50	0.134	0.46	0.646	2.194	0.016	0.343	0.021	0.350	0.059	1762	59	0.01117	0.108	-0.524	2.282	0.947
162PDT150-15	0.0158	50	0.073	0.25	0.039	0.731	0.018	0.497	0.020	0.023	0.015	460	222	0.00608	0.009	-1.110	1.419	0.388
250PDT150-15	0.0158	50	0.087	0.30	0.098	1.062	0.021	0.489	0.020	0.061	0.024	723	143	0.00723	0.024	-0.985	1.529	0.585
350PDT150-15[1]	0.0158	50	0.103	0.35	0.206	1.417	0.023	0.473	0.021	0.120	0.034	1024	101	0.00854	0.051	-0.877	1.732	0.744
362PDT150-15[1]	0.0158	50	0.105	0.36	0.223	1.460	0.023	0.470	0.021	0.129	0.035	1061	98	0.00871	0.056	-0.865	1.761	0.759
400PDT150-15[1]	0.0158	50	0.111	0.38	0.279	1.589	0.024	0.464	0.021	0.158	0.039	1175	89	0.00920	0.070	-0.832	1.852	0.798
550PDT150-15[2]	0.0158	50	0.134	0.46	0.585	2.087	0.026	0.438	0.021	0.307	0.054	1628	64	0.01117	0.145	-0.722	2.251	0.897
600PDT150-15[2]	0.0158	50	0.142	0.48	0.719	2.249	0.026	0.430	0.021	0.363	0.059	1774	59	0.01183	0.177	-0.692	2.392	0.916
162PDT200-15	0.0158	50	0.089	0.30	0.050	0.752	0.039	0.663	0.020	0.025	0.015	455	222	0.00739	0.020	-1.579	1.870	0.287
250PDT200-15	0.0158	50	0.103	0.35	0.124	1.098	0.045	0.662	0.021	0.064	0.024	720	143	0.00854	0.052	-1.431	1.921	0.445
350PDT200-15[1]	0.0158	50	0.118	0.40	0.256	1.470	0.050	0.650	0.021	0.127	0.034	1025	101	0.00986	0.111	-1.297	2.066	0.606
362PDT200-15[1]	0.0158	50	0.120	0.41	0.277	1.516	0.051	0.648	0.021	0.137	0.036	1063	98	0.01002	0.120	-1.282	2.088	0.623
400PDT200-15[1]	0.0158	50	0.126	0.43	0.344	1.650	0.052	0.642	0.021	0.168	0.039	1178	89	0.01052	0.151	-1.240	2.162	0.671
550PDT200-15[2]	0.0158	50	0.150	0.51	0.707	2.170	0.057	0.617	0.021	0.325	0.055	1637	64	0.01249	0.314	-1.098	2.509	0.809
600PDT200-15[2]	0.0158	50	0.158	0.54	0.864	2.338	0.058	0.608	0.021	0.389	0.060	1789	59	0.01315	0.383	-1.058	2.638	0.839
162PDT250-15	0.0158	50	0.105	0.36	0.061	0.766	0.071	0.824	0.020	0.027	0.015	455	222	0.00871	0.038	-2.058	2.345	0.230
250PDT250-15	0.0158	50	0.118	0.40	0.150	1.123	0.082	0.831	0.021	0.066	0.024	725	143	0.00986	0.096	-1.892	2.352	0.353
350PDT250-15[1]	0.0158	50	0.134	0.46	0.306	1.510	0.091	0.825	0.021	0.132	0.035	1034	101	0.01117	0.203	-1.737	2.445	0.495
362PDT250-15[1]	0.0158	50	0.136	0.46	0.330	1.557	0.092	0.823	0.021	0.142	0.036	1073	98	0.01134	0.220	-1.720	2.462	0.512
400PDT250-15[1]	0.0158	50	0.142	0.48	0.409	1.696	0.095	0.819	0.021	0.174	0.040	1189	89	0.01183	0.275	-1.670	2.517	0.560
550PDT250-15[2]	0.0158	50	0.166	0.56	0.829	2.235	0.105	0.795	0.021	0.337	0.055	1654	64	0.01380	0.570	-1.500	2.807	0.714
600PDT250-15[2]	0.0158	50	0.174	0.59	1.009	2.409	0.108	0.787	0.021	0.404	0.060	1809	59	0.01446	0.697	-1.452	2.921	0.753
162PDT300-15	0.0158	50	0.120	0.41	0.073	0.776	0.116	0.981	0.020	0.027	0.016	465	222	0.01002	0.063	-2.542	2.834	0.195
250PDT300-15	0.0158	50	0.134	0.46	0.175	1.143	0.133	0.996	0.021	0.067	0.025	748	143	0.01117	0.158	-2.363	2.807	0.291
350PDT300-15[1]	0.0158	50	0.150	0.51	0.356	1.540	0.149	0.996	0.021	0.135	0.035	1051	101	0.01249	0.334	-2.191	2.858	0.412
362PDT300-15[1]	0.0158	50	0.152	0.52	0.384	1.589	0.151	0.995	0.021	0.145	0.036	1090	98	0.01265	0.361	-2.172	2.869	0.427
400PDT300-15[1]	0.0158	50	0.158	0.54	0.474	1.732	0.155	0.992	0.021	0.178	0.040	1204	89	0.01315	0.450	-2.116	2.909	0.471
550PDT300-15[2]	0.0158	50	0.182	0.62	0.951	2.287	0.172	0.973	0.021	0.338	0.056	1664	64	0.01512	0.930	-1.921	3.142	0.626
600PDT300-15[2]	0.0158	50	0.190	0.64	1.153	2.467	0.177	0.965	0.021	0.412	0.061	1818	59	0.01578	1.136	-1.865	3.239	0.669

Member	Design Thickness (in)	F_y (ksi)	Area (in^2)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at Fy					Torsional Properties				
					I_x (in^4)	R_x (in)	I_y (in^4)	R_y (in)	A_e (in^2)	I_x (in^4)	S_x (in^3)	M_a (in-lbs)	Va_g (lb)	Jx1000 (in^4)	C_w (in^6)	X_o (in)	R_o (in)	β
162PDT100-19	0.0200	50	0.072	0.25	0.035	0.700	0.008	0.325	0.031	0.026	0.023	692	421	0.00966	0.004	-0.656	1.013	0.580
250PDT100-19	0.0200	50	0.090	0.31	0.091	1.008	0.009	0.310	0.031	0.071	0.038	1146	289	0.01199	0.010	-0.564	1.196	0.778
350PDT100-19	0.0200	50	0.110	0.37	0.198	1.342	0.009	0.293	0.032	0.162	0.053	1589	206	0.01466	0.022	-0.488	1.458	0.888
362PDT100-19	0.0200	50	0.112	0.38	0.215	1.383	0.010	0.291	0.032	0.177	0.055	1645	199	0.01499	0.024	-0.480	1.492	0.897
400PDT100-19	0.0200	50	0.120	0.41	0.271	1.504	0.010	0.285	0.032	0.197	0.059	1755	180	0.01599	0.030	-0.458	1.597	0.918
550PDT100-19[2]	0.0200	50	0.150	0.51	0.586	1.977	0.010	0.263	0.032	0.398	0.082	2451	130	0.01999	0.061	-0.386	2.032	0.964
600PDT100-19[2]	0.0200	50	0.160	0.54	0.727	2.132	0.011	0.257	0.032	0.483	0.090	2683	119	0.02133	0.075	-0.368	2.178	0.972
162PDT125-19	0.0200	50	0.082	0.28	0.043	0.719	0.014	0.411	0.031	0.028	0.024	718	421	0.01099	0.007	-0.879	1.207	0.470
250PDT125-19	0.0200	50	0.100	0.34	0.108	1.039	0.016	0.400	0.032	0.078	0.038	1136	289	0.01333	0.018	-0.769	1.353	0.677
350PDT125-19	0.0200	50	0.120	0.41	0.230	1.384	0.018	0.382	0.032	0.176	0.053	1593	206	0.01599	0.040	-0.676	1.587	0.819
362PDT125-19	0.0200	50	0.122	0.42	0.249	1.426	0.018	0.380	0.032	0.191	0.055	1650	199	0.01633	0.043	-0.666	1.619	0.831
400PDT125-19	0.0200	50	0.130	0.44	0.312	1.551	0.018	0.374	0.032	0.232	0.061	1822	180	0.01733	0.054	-0.638	1.718	0.862
550PDT125-19[2]	0.0200	50	0.160	0.54	0.663	2.037	0.020	0.349	0.032	0.420	0.083	2483	130	0.02133	0.112	-0.547	2.137	0.934
600PDT125-19[2]	0.0200	50	0.170	0.58	0.819	2.195	0.020	0.342	0.032	0.508	0.091	2717	119	0.02266	0.137	-0.523	2.282	0.948
162PDT150-19	0.0200	50	0.092	0.31	0.050	0.733	0.023	0.496	0.031	0.030	0.024	721	421	0.01233	0.012	-1.107	1.418	0.390
250PDT150-19	0.0200	50	0.110	0.37	0.124	1.063	0.026	0.488	0.032	0.084	0.038	1129	289	0.01466	0.030	-0.983	1.528	0.586
350PDT150-19	0.0200	50	0.130	0.44	0.261	1.418	0.029	0.472	0.032	0.183	0.053	1593	206	0.01733	0.065	-0.875	1.732	0.745
362PDT150-19	0.0200	50	0.132	0.45	0.283	1.461	0.029	0.470	0.032	0.196	0.055	1652	199	0.01766	0.070	-0.863	1.761	0.760
400PDT150-19	0.0200	50	0.140	0.48	0.354	1.590	0.030	0.463	0.032	0.238	0.061	1826	180	0.01866	0.088	-0.830	1.852	0.799
550PDT150-19[2]	0.0200	50	0.170	0.58	0.741	2.088	0.032	0.437	0.032	0.457	0.084	2527	130	0.02266	0.183	-0.721	2.251	0.898
600PDT150-19[2]	0.0200	50	0.180	0.61	0.910	2.249	0.033	0.429	0.033	0.530	0.092	2741	119	0.02399	0.224	-0.691	2.392	0.917
162PDT200-19	0.0200	50	0.112	0.38	0.064	0.754	0.049	0.662	0.031	0.034	0.024	707	421	0.01499	0.026	-1.576	1.868	0.288
250PDT200-19	0.0200	50	0.130	0.44	0.157	1.099	0.057	0.661	0.032	0.094	0.037	1119	289	0.01733	0.066	-1.429	1.920	0.446
350PDT200-19	0.0200	50	0.150	0.51	0.325	1.472	0.063	0.649	0.032	0.191	0.053	1592	206	0.01999	0.141	-1.295	2.065	0.607
362PDT200-19	0.0200	50	0.152	0.52	0.351	1.517	0.064	0.647	0.032	0.205	0.055	1651	199	0.02033	0.152	-1.280	2.088	0.624
400PDT200-19	0.0200	50	0.160	0.54	0.436	1.651	0.066	0.642	0.032	0.251	0.061	1829	180	0.02133	0.191	-1.238	2.161	0.672
550PDT200-19[2]	0.0200	50	0.190	0.65	0.895	2.171	0.072	0.616	0.033	0.484	0.085	2542	130	0.02533	0.397	-1.096	2.509	0.809
600PDT200-19[2]	0.0200	50	0.200	0.68	1.094	2.339	0.074	0.607	0.033	0.580	0.093	2780	119	0.02666	0.485	-1.056	2.637	0.840
162PDT250-19	0.0200	50	0.132	0.45	0.078	0.768	0.090	0.823	0.031	0.037	0.023	698	421	0.01766	0.048	-2.055	2.343	0.231
250PDT250-19	0.0200	50	0.150	0.51	0.190	1.125	0.103	0.830	0.032	0.099	0.037	1113	289	0.01999	0.121	-1.890	2.351	0.354
350PDT250-19	0.0200	50	0.170	0.58	0.388	1.511	0.115	0.824	0.032	0.199	0.053	1589	206	0.02266	0.257	-1.735	2.444	0.496
362PDT250-19	0.0200	50	0.172	0.59	0.419	1.558	0.117	0.822	0.032	0.213	0.055	1649	199	0.02299	0.278	-1.718	2.461	0.513
400PDT250-19	0.0200	50	0.180	0.61	0.518	1.697	0.120	0.818	0.032	0.261	0.061	1829	180	0.02399	0.348	-1.668	2.517	0.561
550PDT250-19[2]	0.0200	50	0.210	0.71	1.050	2.236	0.133	0.795	0.033	0.505	0.085	2548	130	0.02799	0.721	-1.498	2.806	0.715
600PDT250-19[2]	0.0200	50	0.220	0.75	1.278	2.410	0.136	0.786	0.033	0.605	0.093	2788	119	0.02933	0.881	-1.450	2.920	0.754
162PDT300-19	0.0200	50	0.152	0.52	0.092	0.778	0.147	0.981	0.031	0.049	0.022	727	421	0.02033	0.080	-2.540	2.831	0.195
250PDT300-19	0.0200	50	0.170	0.58	0.223	1.144	0.168	0.995	0.032	0.102	0.037	1108	289	0.02266	0.201	-2.360	2.806	0.292
350PDT300-19	0.0200	50	0.190	0.65	0.451	1.542	0.188	0.995	0.032	0.205	0.053	1587	206	0.02533	0.423	-2.189	2.856	0.413
362PDT300-19	0.0200	50	0.192	0.65	0.487	1.590	0.190	0.994	0.032	0.221	0.055	1647	199	0.02566	0.457	-2.169	2.868	0.428
400PDT300-19	0.0200	50	0.200	0.68	0.601	1.734	0.196	0.991	0.033	0.271	0.060	1790	180	0.02666	0.570	-2.113	2.908	0.472
550PDT300-19[2]	0.0200	50	0.230	0.78	1.204	2.289	0.217	0.972	0.033	0.576	0.086	2522	130	0.03066	1.177	-1.919	3.141	0.627
600PDT300-19[2]	0.0200	50	0.240	0.82	1.461	2.468	0.223	0.964	0.033	0.650	0.094	2727	119	0.03199	1.438	-1.863	3.239	0.669

Member	Design Thickness (in)	F_y (ksi)	Area (in^2)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at Fy					Torsional Properties				
					I_x (in^4)	R_x (in)	I_y (in^4)	R_y (in)	A_e (in^2)	I_x (in^4)	S_x (in^3)	M_a (in-lbs)	Va_g (lb)	Jx1000 (in^4)	C_w (in^6)	X_o (in)	R_o (in)	β
162PDT100-22	0.0232	50	0.084	0.29	0.041	0.701	0.009	0.324	0.040	0.031	0.028	844	566	0.01507	0.004	-0.655	1.012	0.582
250PDT100-22	0.0232	50	0.104	0.35	0.106	1.009	0.010	0.310	0.041	0.084	0.052	1550	452	0.01871	0.012	-0.562	1.196	0.779
350PDT100-22	0.0232	50	0.128	0.43	0.230	1.343	0.011	0.292	0.042	0.192	0.071	2123	321	0.02288	0.025	-0.487	1.458	0.889
362PDT100-22	0.0232	50	0.130	0.44	0.250	1.384	0.011	0.290	0.042	0.210	0.073	2197	310	0.02341	0.027	-0.478	1.493	0.897
400PDT100-22	0.0232	50	0.139	0.47	0.315	1.504	0.011	0.284	0.042	0.244	0.076	2289	281	0.02496	0.034	-0.456	1.598	0.918
550PDT100-22[1]	0.0232	50	0.174	0.59	0.680	1.977	0.012	0.262	0.043	0.498	0.107	3209	204	0.03120	0.071	-0.385	2.032	0.964
600PDT100-22[1]	0.0232	50	0.186	0.63	0.843	2.132	0.012	0.256	0.043	0.604	0.117	3516	186	0.03328	0.086	-0.367	2.178	0.972
162PDT125-22	0.0232	50	0.096	0.33	0.050	0.720	0.016	0.411	0.040	0.034	0.029	877	566	0.01715	0.008	-0.877	1.206	0.472
250PDT125-22	0.0232	50	0.116	0.39	0.125	1.040	0.018	0.399	0.041	0.092	0.051	1525	452	0.02079	0.021	-0.767	1.352	0.678
350PDT125-22	0.0232	50	0.139	0.47	0.267	1.384	0.020	0.382	0.042	0.209	0.071	2120	321	0.02496	0.046	-0.674	1.587	0.819
362PDT125-22	0.0232	50	0.142	0.48	0.290	1.428	0.020	0.379	0.042	0.228	0.073	2197	310	0.02549	0.050	-0.664	1.620	0.832
400PDT125-22	0.0232	50	0.151	0.51	0.363	1.551	0.021	0.373	0.042	0.290	0.081	2419	281	0.02704	0.062	-0.636	1.718	0.863
550PDT125-22[1]	0.0232	50	0.186	0.63	0.770	2.037	0.023	0.349	0.043	0.527	0.109	3258	204	0.03328	0.130	-0.546	2.138	0.935
600PDT125-22[1]	0.0232	50	0.197	0.67	0.950	2.195	0.023	0.341	0.043	0.638	0.119	3568	186	0.03536	0.158	-0.522	2.282	0.948
162PDT150-22	0.0232	50	0.107	0.36	0.058	0.734	0.026	0.496	0.040	0.037	0.030	902	566	0.01923	0.013	-1.105	1.417	0.391
250PDT150-22	0.0232	50	0.128	0.43	0.144	1.064	0.030	0.487	0.042	0.100	0.050	1508	452	0.02288	0.035	-0.981	1.527	0.587
350PDT150-22	0.0232	50	0.151	0.51	0.303	1.419	0.033	0.471	0.042	0.224	0.071	2117	321	0.02704	0.075	-0.873	1.731	0.746
362PDT150-22	0.0232	50	0.154	0.52	0.329	1.463	0.034	0.469	0.042	0.244	0.073	2195	310	0.02757	0.082	-0.861	1.761	0.761
400PDT150-22	0.0232	50	0.162	0.55	0.411	1.590	0.035	0.462	0.043	0.311	0.081	2422	281	0.02912	0.102	-0.828	1.852	0.800
550PDT150-22[1]	0.0232	50	0.197	0.67	0.859	2.088	0.038	0.437	0.043	0.591	0.112	3342	204	0.03536	0.212	-0.719	2.251	0.898
600PDT150-22[1]	0.0232	50	0.209	0.71	1.056	2.250	0.038	0.429	0.043	0.668	0.120	3604	186	0.03744	0.259	-0.690	2.392	0.917
162PDT200-22	0.0232	50	0.130	0.44	0.074	0.755	0.057	0.661	0.041	0.041	0.031	935	566	0.02340	0.030	-1.574	1.867	0.289
250PDT200-22	0.0232	50	0.151	0.51	0.182	1.100	0.066	0.660	0.042	0.112	0.050	1485	452	0.02704	0.076	-1.427	1.919	0.447
350PDT200-22	0.0232	50	0.174	0.59	0.377	1.473	0.073	0.649	0.043	0.249	0.070	2109	321	0.03120	0.163	-1.293	2.064	0.608
362PDT200-22	0.0232	50	0.177	0.60	0.408	1.519	0.074	0.647	0.043	0.268	0.073	2189	310	0.03173	0.177	-1.278	2.088	0.625
400PDT200-22	0.0232	50	0.186	0.63	0.506	1.652	0.076	0.641	0.043	0.326	0.081	2421	281	0.03328	0.221	-1.236	2.161	0.673
550PDT200-22[1]	0.0232	50	0.220	0.75	1.039	2.172	0.083	0.615	0.043	0.623	0.112	3361	204	0.03952	0.460	-1.094	2.508	0.810
600PDT200-22[1]	0.0232	50	0.232	0.79	1.270	2.340	0.085	0.606	0.043	0.746	0.123	3675	186	0.04161	0.562	-1.055	2.637	0.840
162PDT250-22	0.0232	50	0.154	0.52	0.091	0.769	0.104	0.823	0.041	0.045	0.031	921	566	0.02756	0.055	-2.053	2.342	0.231
250PDT250-22	0.0232	50	0.174	0.59	0.221	1.126	0.120	0.829	0.042	0.122	0.049	1472	452	0.03120	0.141	-1.888	2.350	0.354
350PDT250-22	0.0232	50	0.197	0.67	0.451	1.512	0.134	0.823	0.043	0.258	0.070	2102	321	0.03536	0.298	-1.733	2.443	0.497
362PDT250-22	0.0232	50	0.200	0.68	0.487	1.560	0.135	0.822	0.043	0.277	0.073	2183	310	0.03590	0.324	-1.716	2.460	0.514
400PDT250-22	0.0232	50	0.209	0.71	0.602	1.698	0.139	0.817	0.043	0.338	0.081	2418	281	0.03744	0.404	-1.666	2.516	0.561
550PDT250-22[1]	0.0232	50	0.244	0.83	1.218	2.237	0.154	0.794	0.043	0.651	0.113	3369	204	0.04369	0.836	-1.496	2.806	0.716
600PDT250-22[1]	0.0232	50	0.255	0.87	1.483	2.411	0.157	0.785	0.043	0.779	0.123	3687	186	0.04577	1.022	-1.448	2.920	0.754
162PDT300-22	0.0232	50	0.177	0.60	0.107	0.779	0.170	0.980	0.041	0.048	0.030	912	566	0.03172	0.093	-2.538	2.830	0.196
250PDT300-22	0.0232	50	0.197	0.67	0.259	1.145	0.195	0.994	0.042	0.131	0.049	1462	452	0.03536	0.233	-2.359	2.804	0.293
350PDT300-22	0.0232	50	0.220	0.75	0.524	1.543	0.218	0.994	0.043	0.265	0.070	2095	321	0.03952	0.490	-2.187	2.855	0.413
362PDT300-22	0.0232	50	0.223	0.76	0.566	1.592	0.220	0.994	0.043	0.286	0.073	2177	310	0.04006	0.532	-2.167	2.867	0.429
400PDT300-22	0.0232	50	0.232	0.79	0.698	1.735	0.228	0.991	0.043	0.349	0.081	2414	281	0.04161	0.662	-2.112	2.907	0.472
550PDT300-22[1]	0.0232	50	0.267	0.91	1.398	2.290	0.252	0.972	0.043	0.674	0.113	3371	204	0.04785	1.366	-1.917	3.140	0.627
600PDT300-22[1]	0.0232	50	0.278	0.95	1.696	2.469	0.258	0.964	0.044	0.807	0.123	3691	186	0.04993	1.667	-1.861	3.238	0.670

Member	Design Thickness (in)	F_y (ksi)	Area (in^2)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at Fy					Torsional Properties				
					I_x (in^4)	R_x (in)	I_y (in^4)	R_y (in)	A_e (in^2)	I_x (in^4)	S_x (in^3)	M_a (in-lbs)	Va_g (lb)	Jx1000 (in^4)	C_w (in^6)	X_o (in)	R_o (in)	β
162PDT100-30	0.0312	33	0.113	0.38	0.056	0.703	0.012	0.322	0.078	0.049	0.046	908	610	0.03662	0.006	-0.650	1.011	0.586
250PDT100-30	0.0312	33	0.140	0.48	0.143	1.011	0.013	0.308	0.083	0.127	0.083	1635	832	0.04548	0.016	-0.559	1.196	0.782
350PDT100-30	0.0312	33	0.171	0.58	0.310	1.344	0.015	0.291	0.086	0.279	0.135	2666	781	0.05560	0.034	-0.483	1.458	0.890
362PDT100-30	0.0312	33	0.175	0.60	0.336	1.385	0.015	0.289	0.086	0.303	0.142	2810	755	0.05687	0.037	-0.475	1.492	0.899
400PDT100-30	0.0312	33	0.187	0.64	0.424	1.506	0.015	0.283	0.087	0.388	0.148	2927	683	0.06066	0.046	-0.453	1.598	0.920
550PDT100-30	0.0312	33	0.234	0.80	0.915	1.978	0.016	0.261	0.088	0.819	0.213	4200	495	0.07585	0.095	-0.383	2.032	0.965
600PDT100-30	0.0312	33	0.249	0.85	1.135	2.133	0.016	0.255	0.088	1.004	0.234	4625	454	0.08091	0.115	-0.364	2.179	0.972
162PDT125-30	0.0312	33	0.128	0.44	0.067	0.722	0.022	0.409	0.080	0.054	0.048	951	610	0.04168	0.011	-0.872	1.204	0.475
250PDT125-30	0.0312	33	0.156	0.53	0.169	1.042	0.025	0.397	0.084	0.140	0.087	1713	832	0.05054	0.029	-0.763	1.351	0.681
350PDT125-30	0.0312	33	0.187	0.64	0.359	1.386	0.027	0.380	0.087	0.304	0.141	2789	781	0.06066	0.062	-0.671	1.586	0.821
362PDT125-30	0.0312	33	0.191	0.65	0.389	1.428	0.027	0.378	0.087	0.330	0.149	2938	755	0.06193	0.067	-0.661	1.619	0.833
400PDT125-30	0.0312	33	0.203	0.69	0.489	1.553	0.028	0.371	0.088	0.417	0.172	3407	683	0.06573	0.084	-0.633	1.718	0.864
550PDT125-30	0.0312	33	0.249	0.85	1.036	2.038	0.030	0.347	0.089	0.880	0.218	4306	495	0.08091	0.174	-0.543	2.138	0.935
600PDT125-30	0.0312	33	0.265	0.90	1.278	2.196	0.031	0.340	0.090	1.074	0.240	4737	454	0.08597	0.212	-0.519	2.282	0.948
162PDT150-30	0.0312	33	0.144	0.49	0.078	0.737	0.035	0.494	0.080	0.059	0.050	983	610	0.04674	0.018	-1.101	1.414	0.394
250PDT150-30	0.0312	33	0.171	0.58	0.195	1.066	0.040	0.486	0.085	0.151	0.090	1773	832	0.05560	0.047	-0.977	1.526	0.590
350PDT150-30	0.0312	33	0.203	0.69	0.409	1.421	0.045	0.470	0.088	0.326	0.146	2887	781	0.06573	0.101	-0.869	1.731	0.748
362PDT150-30	0.0312	33	0.206	0.70	0.443	1.464	0.045	0.468	0.088	0.354	0.154	3042	755	0.06699	0.109	-0.858	1.760	0.763
400PDT150-30	0.0312	33	0.218	0.74	0.553	1.592	0.046	0.461	0.088	0.446	0.178	3526	683	0.07079	0.137	-0.825	1.851	0.802
550PDT150-30	0.0312	33	0.265	0.90	1.157	2.090	0.050	0.435	0.090	0.979	0.241	4766	495	0.08597	0.284	-0.716	2.251	0.899
600PDT150-30	0.0312	33	0.281	0.96	1.422	2.251	0.051	0.427	0.090	1.136	0.244	4818	454	0.09104	0.347	-0.686	2.392	0.918
162PDT200-30	0.0312	33	0.175	0.60	0.101	0.758	0.076	0.660	0.081	0.067	0.052	1028	610	0.05687	0.040	-1.570	1.864	0.291
250PDT200-30	0.0312	33	0.203	0.69	0.246	1.103	0.088	0.659	0.086	0.170	0.094	1862	832	0.06573	0.103	-1.423	1.917	0.449
350PDT200-30	0.0312	33	0.234	0.80	0.509	1.475	0.098	0.647	0.088	0.365	0.154	3039	781	0.07585	0.219	-1.289	2.063	0.610
362PDT200-30	0.0312	33	0.238	0.81	0.549	1.520	0.099	0.645	0.089	0.397	0.160	3159	755	0.07712	0.237	-1.274	2.086	0.627
400PDT200-30	0.0312	33	0.249	0.85	0.682	1.654	0.102	0.639	0.089	0.502	0.176	3480	683	0.08091	0.297	-1.232	2.160	0.674
550PDT200-30	0.0312	33	0.296	1.01	1.399	2.174	0.112	0.614	0.091	1.091	0.240	4747	495	0.09610	0.617	-1.091	2.508	0.811
600PDT200-30	0.0312	33	0.312	1.06	1.710	2.342	0.114	0.605	0.091	1.353	0.262	5170	454	0.10116	0.754	-1.051	2.637	0.841
162PDT250-30	0.0312	33	0.206	0.70	0.123	0.772	0.139	0.821	0.082	0.073	0.054	1059	610	0.06699	0.075	-2.048	2.338	0.233
250PDT250-30	0.0312	33	0.234	0.80	0.298	1.129	0.160	0.828	0.086	0.186	0.097	1926	832	0.07585	0.190	-1.883	2.347	0.356
350PDT250-30	0.0312	33	0.265	0.90	0.608	1.515	0.179	0.822	0.089	0.401	0.151	2987	781	0.08597	0.402	-1.729	2.441	0.498
362PDT250-30	0.0312	33	0.269	0.92	0.656	1.562	0.181	0.820	0.089	0.436	0.157	3097	755	0.08724	0.435	-1.712	2.458	0.515
400PDT250-30	0.0312	33	0.281	0.96	0.812	1.701	0.187	0.816	0.090	0.551	0.173	3425	683	0.09104	0.543	-1.662	2.514	0.563
550PDT250-30	0.0312	33	0.327	1.11	1.641	2.239	0.206	0.793	0.091	1.190	0.239	4727	495	0.10622	1.124	-1.493	2.805	0.717
600PDT250-30	0.0312	33	0.343	1.17	1.997	2.413	0.211	0.784	0.092	1.473	0.261	5162	454	0.11128	1.373	-1.444	2.919	0.755
162PDT300-30	0.0312	33	0.238	0.81	0.146	0.783	0.228	0.979	0.082	0.078	0.055	1081	610	0.07712	0.125	-2.532	2.826	0.197
250PDT300-30	0.0312	33	0.265	0.90	0.350	1.149	0.261	0.993	0.087	0.199	0.100	1973	832	0.08597	0.315	-2.354	2.801	0.294
350PDT300-30	0.0312	33	0.296	1.01	0.707	1.546	0.292	0.993	0.089	0.432	0.149	2945	781	0.09610	0.661	-2.182	2.853	0.415
362PDT300-30	0.0312	33	0.300	1.02	0.762	1.594	0.295	0.992	0.089	0.470	0.155	3056	755	0.09736	0.714	-2.163	2.864	0.430
400PDT300-30	0.0312	33	0.312	1.06	0.941	1.737	0.305	0.989	0.090	0.593	0.171	3387	683	0.10116	0.891	-2.107	2.905	0.474
550PDT300-30	0.0312	33	0.359	1.22	1.883	2.292	0.337	0.970	0.092	1.278	0.238	4710	495	0.11635	1.836	-1.913	3.139	0.629
600PDT300-30	0.0312	33	0.374	1.27	2.285	2.471	0.346	0.962	0.092	1.580	0.261	5152	454	0.12141	2.241	-1.857	3.237	0.671

Member	Design Thickness (in)	F_y (ksi)	Area (in^2)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at Fy					Torsional Properties				
					I_x (in^4)	R_x (in)	I_y (in^4)	R_y (in)	A_e (in^2)	I_x (in^4)	S_x (in^3)	M_a (in-lbs)	Va_g (lb)	Jx1000 (in^4)	C_w (in^6)	X_o (in)	R_o (in)	β
162PDT100-33	0.0346	33	0.125	0.43	0.062	0.704	0.013	0.322	0.093	0.056	0.053	1051	677	0.04992	0.007	-0.649	1.010	0.588
250PDT100-33	0.0346	33	0.155	0.53	0.159	1.012	0.015	0.308	0.100	0.145	0.095	1878	1024	0.06201	0.017	-0.557	1.195	0.783
350PDT100-33	0.0346	33	0.190	0.65	0.344	1.345	0.016	0.290	0.104	0.316	0.154	3044	1024	0.07581	0.037	-0.482	1.458	0.891
362PDT100-33	0.0346	33	0.194	0.66	0.373	1.385	0.016	0.288	0.104	0.344	0.162	3206	1024	0.07754	0.040	-0.474	1.492	0.899
400PDT100-33	0.0346	33	0.207	0.70	0.470	1.506	0.016	0.282	0.105	0.438	0.176	3469	931	0.08272	0.051	-0.452	1.598	0.920
550PDT100-33	0.0346	33	0.259	0.88	1.015	1.979	0.018	0.260	0.107	0.939	0.254	5015	675	0.10343	0.105	-0.382	2.032	0.965
600PDT100-33	0.0346	33	0.276	0.94	1.258	2.133	0.018	0.254	0.107	1.152	0.280	5531	619	0.11033	0.127	-0.363	2.179	0.972
162PDT125-33	0.0346	33	0.142	0.48	0.075	0.723	0.024	0.409	0.095	0.063	0.056	1104	677	0.05683	0.012	-0.870	1.203	0.477
250PDT125-33	0.0346	33	0.173	0.59	0.188	1.043	0.027	0.397	0.102	0.160	0.100	1972	1024	0.06891	0.032	-0.762	1.351	0.682
350PDT125-33	0.0346	33	0.207	0.70	0.399	1.387	0.030	0.380	0.105	0.346	0.161	3189	1024	0.08272	0.068	-0.669	1.586	0.822
362PDT125-33	0.0346	33	0.212	0.72	0.432	1.429	0.030	0.377	0.105	0.375	0.170	3358	1024	0.08444	0.074	-0.659	1.618	0.834
400PDT125-33	0.0346	33	0.225	0.77	0.542	1.554	0.031	0.371	0.106	0.473	0.197	3887	931	0.08962	0.093	-0.632	1.718	0.865
550PDT125-33	0.0346	33	0.276	0.94	1.149	2.039	0.033	0.347	0.108	1.011	0.261	5157	675	0.11033	0.192	-0.542	2.138	0.936
600PDT125-33	0.0346	33	0.294	1.00	1.418	2.197	0.034	0.339	0.109	1.237	0.287	5681	619	0.11723	0.234	-0.517	2.282	0.949
162PDT150-33	0.0346	33	0.160	0.54	0.087	0.738	0.039	0.494	0.096	0.068	0.058	1143	677	0.06373	0.020	-1.099	1.413	0.395
250PDT150-33	0.0346	33	0.190	0.65	0.216	1.067	0.045	0.485	0.102	0.173	0.103	2044	1024	0.07581	0.052	-0.975	1.525	0.591
350PDT150-33	0.0346	33	0.225	0.77	0.454	1.422	0.049	0.469	0.106	0.372	0.167	3306	1024	0.08962	0.112	-0.868	1.730	0.749
362PDT150-33	0.0346	33	0.229	0.78	0.491	1.465	0.050	0.467	0.106	0.403	0.176	3481	1024	0.09135	0.121	-0.856	1.760	0.763
400PDT150-33	0.0346	33	0.242	0.82	0.614	1.593	0.051	0.460	0.107	0.507	0.204	4027	931	0.09652	0.152	-0.823	1.851	0.802
550PDT150-33	0.0346	33	0.294	1.00	1.284	2.090	0.055	0.435	0.109	1.098	0.299	5906	675	0.11723	0.315	-0.715	2.251	0.899
600PDT150-33	0.0346	33	0.311	1.06	1.578	2.252	0.057	0.426	0.110	1.311	0.293	5790	619	0.12414	0.384	-0.685	2.392	0.918
162PDT200-33	0.0346	33	0.194	0.66	0.112	0.759	0.085	0.660	0.097	0.077	0.061	1198	677	0.07754	0.045	-1.568	1.862	0.292
250PDT200-33	0.0346	33	0.225	0.77	0.274	1.104	0.097	0.658	0.104	0.196	0.109	2150	1024	0.08962	0.114	-1.421	1.916	0.450
350PDT200-33	0.0346	33	0.259	0.88	0.565	1.476	0.108	0.647	0.107	0.417	0.176	3484	1024	0.10343	0.243	-1.287	2.062	0.610
362PDT200-33	0.0346	33	0.264	0.90	0.610	1.521	0.110	0.645	0.107	0.452	0.186	3669	1024	0.10515	0.263	-1.272	2.085	0.628
400PDT200-33	0.0346	33	0.276	0.94	0.758	1.655	0.113	0.639	0.108	0.567	0.215	4246	931	0.11033	0.329	-1.230	2.159	0.675
550PDT200-33	0.0346	33	0.328	1.12	1.553	2.174	0.123	0.613	0.110	1.226	0.296	5847	675	0.13104	0.683	-1.089	2.508	0.811
600PDT200-33	0.0346	33	0.346	1.18	1.897	2.342	0.126	0.604	0.111	1.520	0.322	6355	619	0.13795	0.835	-1.050	2.637	0.842
162PDT250-33	0.0346	33	0.229	0.78	0.137	0.774	0.154	0.821	0.098	0.085	0.063	1235	677	0.09135	0.083	-2.046	2.336	0.233
250PDT250-33	0.0346	33	0.259	0.88	0.331	1.130	0.177	0.827	0.104	0.214	0.113	2225	1024	0.10343	0.211	-1.881	2.346	0.357
350PDT250-33	0.0346	33	0.294	1.00	0.675	1.516	0.198	0.821	0.108	0.455	0.183	3616	1024	0.11723	0.446	-1.727	2.440	0.499
362PDT250-33	0.0346	33	0.298	1.01	0.728	1.563	0.200	0.820	0.108	0.493	0.193	3808	1024	0.11896	0.482	-1.710	2.457	0.516
400PDT250-33	0.0346	33	0.311	1.06	0.901	1.702	0.207	0.815	0.109	0.622	0.214	4221	931	0.12414	0.602	-1.660	2.514	0.564
550PDT250-33	0.0346	33	0.363	1.23	1.821	2.240	0.228	0.792	0.111	1.339	0.294	5802	675	0.14485	1.246	-1.491	2.805	0.717
600PDT250-33	0.0346	33	0.380	1.29	2.216	2.414	0.233	0.783	0.111	1.657	0.320	6327	619	0.15175	1.522	-1.443	2.919	0.756
162PDT300-33	0.0346	33	0.264	0.90	0.162	0.784	0.252	0.979	0.098	0.091	0.064	1262	677	0.10515	0.139	-2.530	2.824	0.197
250PDT300-33	0.0346	33	0.294	1.00	0.388	1.150	0.289	0.993	0.105	0.229	0.115	2282	1024	0.11723	0.349	-2.352	2.800	0.294
350PDT300-33	0.0346	33	0.328	1.12	0.786	1.547	0.323	0.992	0.108	0.490	0.183	3615	1024	0.13104	0.733	-2.180	2.852	0.415
362PDT300-33	0.0346	33	0.333	1.13	0.846	1.595	0.327	0.992	0.109	0.532	0.190	3751	1024	0.13277	0.793	-2.161	2.863	0.430
400PDT300-33	0.0346	33	0.346	1.18	1.045	1.738	0.338	0.989	0.109	0.671	0.210	4158	931	0.13795	0.988	-2.105	2.904	0.474
550PDT300-33	0.0346	33	0.398	1.35	2.090	2.293	0.374	0.969	0.111	1.440	0.292	5767	675	0.15866	2.036	-1.911	3.139	0.629
600PDT300-33	0.0346	33	0.415	1.41	2.535	2.472	0.384	0.962	0.112	1.780	0.319	6303	619	0.16556	2.485	-1.855	3.237	0.671

Section Properties Table Notes

- Calculated properties are based on AISI S100-07, North American Specification for Design of Cold-Formed Steel Structural Members.
- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
- Tabulated gross properties including torsional properties are based on full-unreduced cross section of the tracks.
- For deflection calculations, use the effective moment of inertia.
- Allowable moment includes cold-work of forming.
- Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius. Hems on non-structural rack sections are ignored.

1. Web-height to thickness ratio exceeds 200.
2. Web-height-to thickness ratio exceeds 260.

ProSTUD Allowable Screw Connection

Designation	Thickness, Mils	Design Thickness	Yield	Ultimate	#6 Screw (0.138" Dia, 5/16" Head)				#7 Screw (0.151" Dia, 5/16" Head)				#8 Screw (0.164" Dia, 5/16" Head)			
					Shear, lbs	1-Side	2-Side	Pullout, lbs	Shear, lbs	1-Side	2-Side	Pullout, lbs	Shear, lbs	1-Side	2-Side	Pullout, lbs
PDS125-15	15	0.0158	50	50	52	62	123	31	54	62	123	34	56	62	123	37
PDS125-19	19	0.0200	65	65	96	102	203	51	100	102	203	56	104	102	203	60
PDS125-22	22	0.0232	57	57	105	103	207	52	110	103	207	57	114	103	207	61
PDS125-30	30	0.0312	33	33	95	80	161	40	99	80	161	44	103	80	161	48
PDS125-33	33	0.0346	33	45	151	122	243	61	158	122	243	67	164	122	243	72

Designation	Thickness, Mils	Design Thickness	Yield	Ultimate	#10 Screw (0.190" Dia, 0.34" Head)				#12 Screw (0.216" Dia, 0.34" Head)				1/4" Screw (0.250" Dia, 0.409" Head)			
					Shear, lbs	1-Side	2-Side	Pullout, lbs	Shear, lbs	1-Side	2-Side	Pullout, lbs	Shear, lbs	1-Side	2-Side	Pullout, lbs
PDS125-15	15	0.0158	50	50	61	67	134	43	65	67	134	48	70	81	162	56
PDS125-19	19	0.0200	65	65	112	111	221	70	120	111	221	80	129	133	266	92
PDS125-22	22	0.0232	57	57	123	112	225	71	131	112	225	81	141	135	270	94
PDS125-30	30	0.0312	33	33	111	88	175	55	118	88	175	63	127	105	211	73
PDS125-33	33	0.0346	33	45	177	132	265	84	188	132	265	95	203	159	318	110

Screw Capacity Table Notes:

- Allowable screw connection capacities are based on Section E4 of the AISI S100-07 Specification.
- When connecting materials of different steel thicknessess or tensile strengths, use the lowest values.
  Tabulated values assume two sheets of equal thickness are connected.
- Screw shear and tension capacities was developed using published screw manufacturer data and evaluation reports available at the time of publication.
- Screw capacities are based on Allowable Strength Design (ASD) and include a safety factor of 3.0.
- When multiple fasteners are used, screws are assumed to have a center-to-center spacing of at least 3 times the nominal diameter (d).
- Screws are assumed to have a center-of-screw to edge-of-steel dimension of at least 1.5 times the nominal diameter (d) of the screw.
- Tension capacity is based on the lesser of pullout capacity in sheet closest to screw tip, or pullover capacity for sheet closest to screw head (using head diameter).
- Screw capacities are governed by a conservative estimate of screw capacity, not by sheet steel failure.
- For higher screw capacities, especially for screw strength, use specific screws from specific manufacturer. See manufacturer's data for specific allowable values and installation instructions.

ProSTUD® Composite Limiting Heights

5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing (inches)	5 psf			7.5 psf			10 psf			15 psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1-5/8"	ProSTUD 25 162PDS125-15	0.0158	50	12	14' 1"	11' 7"	10' 1"	12' 3"	10' 1"	8' 7"	11' 2"	9' 1"	---	8' 2" f	---	---
				16	12' 9"	10' 6"	9' 0"	11' 2"	9' 1"	---	10' 2"	8' 1"	---	---	---	---
				24	11' 2"	9' 1"	---	9' 9"	---	---	8' 5"	---	---	---	---	---
2-1/2"	ProSTUD 25 250PDS125-15	0.0158	50	12	17' 2"	14' 8"	13' 0"	15' 0"	12' 10"	11' 4"	13' 3" f	11' 8"	10' 4"	8' 8" f	8' 8" f	8' 6"
				16	15' 7"	13' 4"	11' 9"	13' 3" f	11' 8"	10' 4"	11' 5" f	10' 7"	9' 1"	---	---	---
				24	13' 3" f	11' 8"	10' 4"	10' 10" f	10' 2"	8' 6"	9' 4" f	8' 11"	---	---	---	---
3-1/2"	ProSTUD 25 350PDS125-15	0.0158	50	12	21' 4" f	16' 11"	15' 0"	17' 5" f	14' 9"	13' 1"	15' 1" f	13' 5"	11' 10"	9' 11" f	9' 11" f	9' 11" f
				16	18' 6" f	15' 4"	13' 7"	15' 1" f	13' 5"	11' 10"	13' 1" f	12' 2"	10' 8"	8' 7" f	8' 7" f	8' 7" f
				24	15' 1" f	13' 5"	11' 10"	12' 4" f	11' 8"	10' 2"	10' 8" f	10' 5"	9' 1"	---	---	---
3-5/8"	ProSTUD 25 362PDS125-15	0.0158	50	12	21' 6"	17' 1"	14' 11"	18' 4" f	14' 11"	13' 0"	15' 10" f	13' 7"	11' 10"	10' 5" f	10' 5" f	10' 1"
				16	19' 5" f	15' 6"	13' 7"	15' 10" f	13' 7"	11' 10"	13' 9" f	12' 4"	10' 7"	9' 0" f	9' 0" f	9' 0" f
				24	15' 10" f	13' 7"	11' 10"	12' 11" f	11' 10"	10' 1"	11' 2" f	10' 7"	9' 0"	---	---	---
4"	ProSTUD 25 400PDS125-15	0.0158	50	12	22' 8"	18' 0"	15' 9"	19' 1" f	15' 9"	13' 9"	16' 6" f	14' 4"	12' 6"	10' 10" f	10' 10" f	10' 8"
				16	20' 3" f	16' 4"	14' 4"	16' 6" f	14' 4"	12' 6"	14' 4" f	13' 0"	11' 3"	9' 5" f	9' 5" f	9' 5" f
				24	16' 6" f	14' 4"	12' 6"	13' 6" f	12' 6"	10' 8"	11' 8" f	11' 3"	9' 6"	---	---	---
5-1/2"	ProSTUD 25 550PDS125-15	0.0158	50	12	26' 11" f	22' 9"	20' 3"	22' 0" f	19' 11"	17' 9"	19' 0" f	18' 1"	16' 1"	12' 6" f	12' 6" f	12' 6" f
				16	23' 4" f	20' 8"	18' 5"	19' 0" f	18' 1"	16' 1"	16' 6" f	16' 5"	14' 7"	---	---	---
				24	19' 0" f	18' 1"	16' 1"	15' 7" f	15' 7" f	14' 1"	13' 6" f	13' 6" f	12' 9"	---	---	---
6"	ProSTUD 25 600PDS125-15	0.0158	50	12	27' 10" f	24' 2"	21' 5"	22' 9" f	21' 1"	18' 8"	19' 8" f	19' 2"	17' 0"	12' 11" f	12' 11" f	12' 11" f
				16	24' 1" f	21' 11"	19' 5"	19' 8" f	19' 2"	17' 0"	17' 1" f	17' 1" f	15' 5"	---	---	---
				24	19' 8" f	19' 2"	17' 0"	16' 1" f	16' 1" f	14' 9"	13' 11" f	13' 11" f	13' 4"	---	---	---

Notes:

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2012.
- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program was observed.
- In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
- The composite limiting heights provided in the tables are based on a single layer of T *ype X Gypsum Board from the following manufacturers :*
  American, CertainTeed, Georgia Pacific, Lafarge, National, Temple Inland, and USG.
- The gypsum board must be applied full height in the vertical orientation to each stud flange and installed in accordance with ASTM C754-2004 using minimum No. 6 Type S Drywall screws spaced as listed below:
  - Screws spaced a minimum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
  - Screws spaced a minimum of 12 in on-center to framing members spaced at 24 in on-center.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754-2004.
- Stud end bearing must be a minimum of 1 inch.

f Adjacent to the height value indicates that flexural stress controls the allowable wall height.

s Adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® Composite Limiting Heights

5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing (inches)	5 psf			7.5 psf			10 psf			15 psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1-5/8"	ProSTUD 20 162PDS125-19	0.020	65	12	14' 10''	12' 11''	11' 2''	12' 11''	11' 3''	9' 9''	11' 9''	10' 3''	8' 8''	9' 3'' f	8' 7''	---
				16	13' 5''	11' 8''	10' 1''	11' 9''	10' 3''	8' 8''	10' 8''	9' 2''	---	8' 0'' f	---	---
				24	11' 9''	10' 3''	8' 8''	10' 3''	8' 8''	---	9' 2''	---	---	---	---	---
2-1/2"	ProSTUD 20 250PDS125-19	0.020	65	12	18' 1''	15' 9''	14' 0''	15' 9''	13' 9''	12' 3''	14' 4''	12' 6''	11' 1''	10' 9'' f	10' 9'' f	9' 8''
				16	16' 5''	14' 4''	12' 8''	14' 4''	12' 6''	11' 1''	13' 0''	11' 4''	10' 1''	9' 4'' f	9' 4'' f	8' 7''
				24	14' 4''	12' 6''	11' 1''	12' 6'' f	10' 11''	9' 8''	11' 5''	9' 11''	8' 7''	---	---	---
3-1/2"	ProSTUD 20 350PDS125-19	0.020	65	12	22' 10''	18' 1''	15' 10''	19' 11''	15' 10''	13' 10''	18' 1''	14' 4''	12' 7''	12' 4'' f	12' 4'' f	10' 11''
				16	20' 9''	16' 5''	14' 4''	18' 1''	14' 4''	12' 7''	16' 2'' f	13' 1''	11' 4''	10' 8'' f	10' 8'' f	9' 10''
				24	18' 1''	14' 4''	12' 7''	15' 3'' f	12' 7''	10' 11''	13' 3'' f	11' 4''	9' 10''	8' 8'' f	8' 8'' f	8' 6''
3-5/8"	ProSTUD 20 362PDS125-19	0.020	65	12	23' 3''	18' 5''	16' 1''	20' 4''	16' 1''	14' 1''	18' 5''	14' 8''	12' 10''	12' 7'' f	12' 7'' f	11' 1''
				16	21' 1''	16' 9''	14' 8''	18' 5''	14' 8''	12' 10''	16' 7'' f	13' 4''	11' 7''	10' 11'' f	10' 11'' f	9' 11''
				24	18' 5''	14' 8''	12' 10''	15' 8'' f	12' 10''	11' 1''	13' 7'' f	11' 7''	9' 11''	8' 11'' f	8' 11'' f	8' 6''
4"	ProSTUD 20 400PDS125-19	0.020	65	12	24' 4''	20' 2''	17' 9''	21' 3''	17' 8''	15' 6''	19' 4''	16' 0''	14' 1''	13' 4'' f	13' 4'' f	12' 4''
				16	22' 2''	18' 4''	16' 1''	19' 4''	16' 0''	14' 1''	17' 7'' f	14' 7''	12' 9''	11' 6'' f	11' 6'' f	11' 0''
				24	19' 4''	16' 0''	14' 1''	16' 6'' f	14' 0''	12' 4''	14' 4'' f	12' 9''	11' 0''	9' 5'' f	9' 5'' f	9' 3''
5-1/2"	ProSTUD 20 550PDS125-19	0.020	65	12	31' 10''	25' 4''	22' 1''	27' 10'' f	22' 1''	19' 4''	24' 3'' f	20' 1''	17' 6''	15' 11'' f	15' 11'' f	15' 3''
				16	28' 11''	23' 0''	20' 1''	24' 3'' f	20' 1''	17' 6''	21' 0'' f	18' 3''	15' 11''	13' 10'' f	13' 10'' f	13' 9'' f
				24	24' 3'' f	20' 1''	17' 6''	19' 10'' f	17' 6''	15' 3''	17' 2'' f	15' 11''	13' 9''	---	---	---
6"	ProSTUD 20 600PDS125-19	0.020	65	12	32' 0''	26' 5''	23' 2''	28' 0''	23' 1''	20' 3''	24' 9'' f	21' 0''	18' 5''	16' 3'' f	16' 3'' f	16' 1''
				16	29' 1''	24' 0''	21' 1''	24' 9'' f	21' 0''	18' 5''	21' 5'' f	19' 1''	16' 9''	14' 1'' f	14' 1'' f	14' 1'' f
				24	24' 9'' f	21' 0''	18' 5''	20' 3'' f	18' 4''	16' 1''	17' 6'' f	16' 8''	14' 4''	---	---	---

Notes:

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2012.
- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program was observed.
- In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
- The composite limiting heights provided in the tables are based on a single layer of T*ype X Gypsum Board from the following manufacturers:*
  American, CertainTeed, Georgia Pacific, Lafarge, National, Temple Inland, and USG.
- The gypsum board must be applied full height in the vertical orientation to each stud flange and installed in accordance with ASTM C754-2004 using minimum No. 6 Type S Drywall screws spaced as listed below:
  - Screws spaced a minimum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
  - Screws spaced a minimum of 12 in on-center to framing members spaced at 24 in on-center.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754-2004.
- Stud end bearing must be a minimum of 1 inch.

f Adjacent to the height value indicates that flexural stress controls the allowable wall height.

s Adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® Composite Limiting Heights

5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing (inches)	5 psf			7.5 psf			10 psf			15 psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1-5/8"	ProSTUD 20XD 162PDS125-22	0.0232	57	12	14' 11''	12' 9''	11' 2''	13' 0''	11' 1''	9' 9''	11' 10''	10' 1''	8' 5''	9' 5'' f	8' 4''	---
				16	13' 7''	11' 7''	10' 1''	11' 10''	10' 1''	8' 5''	10' 9''	8' 10''	---	8' 2'' f	---	---
				24	11' 10''	10' 1''	8' 5''	10' 4''	8' 4''	---	9' 3''	---	---	---	---	---
2-1/2"	ProSTUD 20XD 250PDS125-22	0.0232	57	12	19' 0''	15' 9''	13' 11''	16' 7''	13' 9''	12' 2''	15' 1''	12' 6''	11' 1''	11' 6'' f	10' 11''	9' 7''
				16	17' 3''	14' 4''	12' 8''	15' 1''	12' 6''	11' 1''	13' 8''	11' 5''	10' 1''	9' 11'' f	9' 11'' f	8' 2''
				24	15' 1''	12' 6''	11' 1''	13' 2'' f	10' 11''	9' 7''	11' 11''	9' 11''	8' 2''	8' 1'' f	8' 1'' f	---
3-1/2"	ProSTUD 20XD 350PDS125-22	0.0232	57	12	22' 11''	18' 2''	15' 11''	20' 0''	15' 11''	13' 11''	18' 2''	14' 5''	12' 7''	13' 5'' f	12' 7''	10' 11''
				16	20' 10''	16' 6''	14' 5''	18' 2''	14' 5''	12' 7''	16' 6''	13' 1''	11' 5''	11' 7'' f	11' 5''	9' 9''
				24	18' 2''	14' 5''	12' 7''	15' 11''	12' 7''	10' 11''	14' 5'' f	11' 5''	9' 9''	9' 6'' f	9' 6'' f	8' 4''
3-5/8"	ProSTUD 20XD 362PDS125-22	0.0232	57	12	23' 2''	18' 4''	16' 1''	20' 3''	16' 1''	14' 0''	18' 4''	14' 7''	12' 9''	13' 4'' f	12' 9''	11' 0''
				16	21' 0''	16' 8''	14' 7''	18' 4''	14' 7''	12' 9''	16' 8''	13' 3''	11' 6''	11' 7'' f	11' 6''	9' 10''
				24	18' 4''	14' 7''	12' 9''	16' 1''	12' 9''	11' 0''	14' 4'' f	11' 6''	9' 10''	9' 5'' f	9' 5'' f	8' 5''
4"	ProSTUD 20XD 400PDS125-22	0.0232	57	12	24' 6''	20' 1''	17' 7''	21' 5''	17' 7''	15' 5''	19' 5''	16' 0''	14' 0''	14' 3'' f	13' 11''	12' 3''
				16	22' 3''	18' 3''	16' 0''	19' 5''	16' 0''	14' 0''	17' 8''	14' 6''	12' 8''	12' 4'' f	12' 4'' f	10' 11''
				24	19' 5''	16' 0''	14' 0''	17' 0''	13' 11''	12' 3''	15' 4'' f	12' 8''	10' 11''	10' 1'' f	10' 1'' f	9' 3''
5-1/2"	ProSTUD 20XD 550PDS125-22	0.0232	57	12	31' 10''	25' 3''	22' 1''	27' 10''	22' 1''	19' 3''	25' 3'' f	20' 1''	17' 6''	16' 7'' f	16' 7'' f	15' 3''
				16	28' 11''	22' 11''	20' 1''	25' 3''	20' 1''	17' 6''	21' 10'' f	18' 3''	15' 11''	14' 4'' f	14' 4'' f	13' 10''
				24	25' 3''	20' 1''	17' 6''	20' 7'' f	17' 6''	15' 3''	17' 10'' f	15' 11''	13' 10''	---	---	---
6"	ProSTUD 20XD 600PDS125-22	0.0232	57	12	33' 5''	26' 6''	23' 2''	29' 2''	23' 2''	20' 3''	26' 1'' f	21' 1''	18' 5''	17' 2'' f	17' 2'' f	16' 1''
				16	30' 4''	24' 1''	21' 1''	26' 1'' f	21' 1''	18' 5''	22' 7'' f	19' 1''	16' 8''	14' 10'' f	14' 10'' f	14' 6''
				24	26' 1'' f	21' 1''	18' 5''	21' 4'' f	18' 5''	16' 1''	18' 6'' f	16' 8''	14' 6''	12' 2'' f	12' 2'' f	12' 2'' f

Notes:

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2012.
- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program was observed.
- In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
- The composite limiting heights provided in the tables are based on a single layer of T*ype X Gypsum Board from the following manufacturers:*
  American, CertainTeed, Georgia Pacific, Lafarge, National, Temple Inland, and USG.
- The gypsum board must be applied full height in the vertical orientation to each stud flange and installed in accordance with ASTM C754-2004 using minimum No. 6 Type S Drywall screws spaced as listed below:
  - Screws spaced a minimum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
  - Screws spaced a minimum of 12 in on-center to framing members spaced at 24 in on-center.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754-2004.
- Stud end bearing must be a minimum of 1 inch.

f Adjacent to the height value indicates that flexural stress controls the allowable wall height.

s Adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® Composite Limiting Heights

5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing (inches)	5 psf			7.5 psf			10 psf			15 psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1-5/8"	ProSTUD 30 162PDS125-30	0.0312	33	12	16' 3''	12' 11''	11' 3''	14' 3''	11' 3''	9' 10''	12' 11''	10' 3''	8' 8''	11' 3''	8' 8''	---
				16	14' 9''	11' 9''	10' 3''	12' 11''	10' 3''	8' 8''	11' 9''	9' 2''	---	10' 3'' f	---	---
				24	12' 11''	10' 3''	8' 8''	11' 3''	8' 8''	---	10' 3''	---	---	8' 4'' f	---	---
2-1/2"	ProSTUD 30 250PDS125-30	0.0312	33	12	19' 9''	16' 3''	14' 4''	17' 3''	14' 2''	12' 6''	15' 8''	12' 11''	11' 4''	13' 4'' f	11' 3''	9' 11''
				16	17' 11''	14' 9''	13' 0''	15' 8''	12' 11''	11' 4''	14' 3''	11' 9''	10' 4''	11' 7'' f	10' 3''	8' 8''
				24	15' 8''	12' 11''	11' 4''	13' 8'' f	11' 3''	9' 11''	12' 5''	10' 3''	8' 8''	9' 5'' f	8' 8''	---
3-1/2"	ProSTUD 30 350PDS125-30	0.0312	33	12	25' 4''	20' 2''	17' 7''	22' 2''	17' 7''	15' 4''	20' 2''	16' 0''	13' 11''	16' 0'' f	13' 11''	12' 2''
				16	23' 0''	18' 3''	16' 0''	20' 2''	16' 0''	13' 11''	18' 3''	14' 6''	12' 8''	13' 10'' f	12' 8''	10' 11''
				24	20' 2''	16' 0''	13' 11''	17' 7''	13' 11''	12' 2''	16' 0''	12' 8''	10' 11''	11' 4'' f	10' 11''	---
3-5/8"	ProSTUD 30 362PDS125-30	0.0312	33	12	25' 8''	20' 5''	17' 10''	22' 5''	17' 10''	15' 7''	20' 5''	16' 2''	14' 2''	16' 1'' f	14' 2''	12' 3''
				16	23' 4''	18' 6''	16' 2''	20' 5''	16' 2''	14' 2''	18' 6''	14' 8''	12' 10''	14' 0'' f	12' 10''	11' 0''
				24	20' 5''	16' 2''	14' 2''	17' 10''	14' 2''	12' 3''	16' 2''	12' 10''	11' 0''	11' 5'' f	11' 0''	---
4"	ProSTUD 30 400PDS125-30	0.0312	33	12	27' 5''	21' 9''	19' 0''	24' 0''	19' 0''	16' 8''	21' 9''	17' 4''	15' 1''	16' 11'' f	15' 1''	13' 2''
				16	24' 11''	19' 10''	17' 4''	21' 9''	17' 4''	15' 1''	19' 10''	15' 9''	13' 9''	14' 8'' f	13' 9''	11' 10''
				24	21' 9''	17' 4''	15' 1''	19' 0''	15' 1''	13' 2''	17' 4''	13' 9''	11' 10''	12' 0'' f	11' 10''	10' 2''
5-1/2"	ProSTUD 30 550PDS125-30	0.0312	33	12	34' 9''	27' 7''	24' 1''	30' 5''	24' 1''	21' 1''	27' 7''	21' 11''	19' 2''	20' 9'' f	19' 2''	16' 7''
				16	31' 7''	25' 1''	21' 11''	27' 7''	21' 11''	19' 2''	25' 1''	19' 11''	17' 4''	17' 11'' f	17' 4''	---
				24	27' 7''	21' 11''	19' 2''	24' 1''	19' 2''	16' 7''	21' 11''	17' 4''	---	---	---	---
6"	ProSTUD 30 600PDS125-30	0.0312	33	12	36' 7''	29' 1''	25' 5''	32' 0''	25' 5''	22' 2''	29' 1''	23' 1''	20' 2''	20' 11'' f	20' 2''	17' 7''
				16	33' 3''	26' 5''	23' 1''	29' 1''	23' 1''	20' 2''	26' 5''	20' 11''	18' 4''	18' 2'' f	18' 2'' f	---
				24	29' 1''	23' 1''	20' 2''	25' 5''	20' 2''	17' 7''	22' 6'' f	18' 4''	---	---	---	---

Notes:

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2012.
- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program was observed.
- In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
- The composite limiting heights provided in the tables are based on a single layer of T*ype X Gypsum Board from the following manufacturers:*
  American, CertainTeed, Georgia Pacific, Lafarge, National, Temple Inland, and USG.
- The gypsum board must be applied full height in the vertical orientation to each stud flange and installed in accordance with ASTM C754-2004 using minimum No. 6 Type S Drywall screws spaced as listed below:
  - Screws spaced a minimum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
  - Screws spaced a minimum of 12 in on-center to framing members spaced at 24 in on-center.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754-2004.
- Stud end bearing must be a minimum of 1 inch.

f Adjacent to the height value indicates that flexural stress controls the allowable wall height.

s Adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® Composite Limiting Heights

5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing (inches)	5 psf			7.5 psf			10 psf			15 psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1-5/8"	ProSTUD 33 162PDS125-33	0.0346	33	12	17' 0''	13' 6''	11' 10''	14' 10''	11' 10''	10' 4''	13' 6''	10' 9''	9' 3''	11' 10''	9' 3''	---
				16	15' 6''	12' 3''	10' 9''	13' 6''	10' 9''	9' 3''	12' 3''	9' 9''	---	10' 7'' f	8' 2''	---
				24	13' 6''	10' 9''	9' 3''	11' 10''	9' 3''	---	10' 9''	---	---	8' 8'' f	---	---
2-1/2"	ProSTUD 33 250PDS125-33	0.0346	33	12	20' 4''	16' 9''	14' 9''	17' 9''	14' 7''	12' 10''	16' 2''	13' 3''	11' 8''	13' 10'' f	11' 7''	10' 3''
				16	18' 6''	15' 2''	13' 5''	16' 2''	13' 3''	11' 8''	14' 8''	12' 1''	10' 7''	12' 0''	10' 7''	9' 1''
				24	16' 2''	13' 3''	11' 8''	14' 1''	11' 7''	10' 3''	12' 10''	10' 7''	9' 1''	9' 9'' f	9' 0''	---
3-1/2"	ProSTUD 33 350PDS125-33	0.0346	33	12	26' 3''	20' 10''	18' 2''	22' 11''	18' 2''	15' 11''	20' 10''	16' 6''	14' 5''	16' 6'' f	14' 5''	12' 7''
				16	23' 10''	18' 11''	16' 6''	20' 10''	16' 6''	14' 5''	18' 11''	15' 0''	13' 1''	14' 4'' f	13' 1''	11' 3''
				24	20' 10''	16' 6''	14' 5''	18' 2''	14' 5''	12' 7''	16' 6''	13' 1''	11' 3''	11' 8'' f	11' 3''	---
3-5/8"	ProSTUD 33 362PDS125-33	0.0346	33	12	26' 7''	21' 2''	18' 5''	23' 3''	18' 5''	16' 1''	21' 2''	16' 9''	14' 8''	16' 9'' f	14' 8''	12' 10''
				16	24' 2''	19' 2''	16' 9''	21' 2''	16' 9''	14' 8''	19' 2''	15' 3''	13' 4''	14' 6'' f	13' 4''	11' 6''
				24	21' 2''	16' 9''	14' 8''	18' 5''	14' 8''	12' 10''	16' 9''	13' 4''	11' 6''	11' 10'' f	11' 6''	---
4"	ProSTUD 33 400PDS125-33	0.0346	33	12	27' 10''	22' 9''	20' 1''	24' 3''	19' 11''	17' 7''	22' 1''	18' 1''	15' 11''	17' 10'' f	15' 10''	13' 11''
				16	25' 3''	20' 8''	18' 3''	22' 1''	18' 1''	15' 11''	20' 1''	16' 5''	14' 6''	15' 5'' f	14' 4''	12' 8''
				24	22' 1''	18' 1''	15' 11''	19' 3''	15' 10''	13' 11''	17' 6''	14' 4''	12' 8''	12' 7'' f	12' 6''	10' 8''
5-1/2"	ProSTUD 33 550PDS125-33	0.0346	33	12	34' 11''	28' 11''	25' 0''	30' 6''	25' 3''	21' 10''	27' 8''	22' 11''	19' 10''	21' 6'' f	20' 0''	17' 2''
				16	31' 8''	26' 3''	22' 9''	27' 8''	22' 11''	19' 10''	25' 2''	20' 10''	18' 0''	18' 8'' f	18' 2''	---
				24	27' 8''	22' 11''	19' 10''	24' 2''	20' 0''	17' 2''	22' 0''	18' 2''	---	---	---	---
6"	ProSTUD 33 600PDS125-33	0.0346	33	12	36' 8''	30' 1''	26' 6''	32' 0''	26' 3''	23' 2''	29' 1''	23' 10''	21' 0''	21' 9'' f	20' 10''	18' 4''
				16	33' 3''	27' 4''	24' 1''	29' 1''	23' 10''	21' 0''	26' 5''	21' 8''	19' 1''	18' 10'' f	18' 10'' f	---
				24	29' 1''	23' 10''	21' 0''	25' 5''	20' 10''	18' 4''	23' 1''	18' 11''	---	---	---	---

Notes:

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2012.
- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program was observed.
- In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
- The composite limiting heights provided in the tables are based on a single layer of T*ype X Gypsum Board from the following manufacturers:*
  American, CertainTeed, Georgia Pacific, Lafarge, National, Temple Inland, and USG.
- The gypsum board must be applied full height in the vertical orientation to each stud flange and installed in accordance with ASTM C754-2004 using minimum No. 6 Type S Drywall screws spaced as listed below:
  - Screws spaced a minimum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
  - Screws spaced a minimum of 12 in on-center to framing members spaced at 24 in on-center.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754-2004.
- Stud end bearing must be a minimum of 1 inch.

f Adjacent to the height value indicates that flexural stress controls the allowable wall height.

s Adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD Non-Composite Limiting Heights - Fully Braced

Member	Depth (in)	Design Thickness (in)	Yield Strength (ksi)	Spacing o/c (in)	Lateral Load (psf)											
					5 PSF			7.5 PSF			10 PSF			15 PSF		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162PDS125-15		0.0158	50	12	9'-2"	7'-4"	6'-4"	8'-0"	6'-4"	5'-7"	6'-11"	5'-9"	5'-1"	5'-8"	5'-1"	4'-5"
162PDS125-15	1-5/8"	0.0158	50	16	8'-4"	6'-8"	5'-9"	6'-11"	5'-9"	5'-1"	6'-0"	5'-3"	4'-7"	4'-11"	4'-7"	4'-0"
162PDS125-15		0.0158	50	24	6'-11"	5'-9"	5'-1"	5'-8"	5'-1"	4'-5"	4'-11"	4'-7"	4'-0"	4'-0"	4'-0"	3'-6"
250PDS125-15		0.0158	50	12	12'-8"	10'-2"	8'-11"	10'-4"	8'-11"	7'-9"	8'-11"	8'-1"	7'-1"	7'-4"	7'-1"	6'-2"
250PDS125-15	2-1/2"	0.0158	50	16	10'-11"	9'-3"	8'-1"	8'-11"	8'-1"	7'-1"	7'-9"	7'-4"	6'-5"	6'-4"	6'-4"	5'-7"
250PDS125-15		0.0158	50	24	8'-11"	8'-1"	7'-1"	7'-4"	7'-1"	6'-2"	6'-4"	6'-4"	5'-7"	4'-3" (5'-2")	4'-3" (5'-2")	4'-3" (4'-11")
350PDS125-15[1]		0.0158	50	12	14'-9"	13'-3"	11'-7"	12'-0"	11'-7"	10'-1"	10'-5"	10'-5"	9'-2"	7'-5" (8'-6")	7'-5" (8'-6")	7'-5" (8'-0")
350PDS125-15[1]	3-1/2"	0.0158	50	16	12'-9"	12'-0"	10'-6"	10'-5"	10'-5"	9'-2"	8'-4" (9'-0")	8'-4" (9'-0")	8'-4" (8'-4")	5'-6" (7'-4")	5'-6" (7'-4")	5'-6" (7'-3")
350PDS125-15[1]		0.0158	50	24	10'-5"	10'-5"	9'-2"	7'-5" (8'-6")	7'-5" (8'-6")	7'-5" (8'-0")	5'-6" (7'-4")	5'-6" (7'-4")	5'-6" (7'-3")	3'-8" (6'-0")	3'-8" (6'-0")	3'-8" (6'-0")
362PDS125-15[1]		0.0158	50	12	15'-0"	13'-7"	11'-10"	12'-3"	11'-10"	10'-4"	10'-7" (10'-7")	10'-7" (10'-7")	9'-5"	7'-1" (8'-8")	7'-1" (8'-8")	7'-1" (8'-3")
362PDS125-15[1]	3-5/8"	0.0158	50	16	13'-0"	12'-4"	10'-9"	10'-7" (10'-7")	10'-7" (10'-7")	9'-5"	7'-11" (9'-2")	7'-11" (9'-2")	7'-11" (8'-6")	5'-4" (7'-6")	5'-4" (7'-6")	5'-4" (7'-5")
362PDS125-15[1]		0.0158	50	24	10'-7" (10'-7")	10'-7" (10'-7")	9'-5"	7'-1" (8'-8")	7'-1" (8'-8")	7'-1" (8'-3")	5'-4" (7'-6")	5'-4" (7'-6")	5'-4" (7'-5")	3'-6" (6'-2")	3'-6" (6'-2")	3'-6" (6'-2")
400PDS125-15[1]		0.0158	50	12	15'-9"	14'-6"	12'-8"	12'-6" (12'-11")	12'-6" (12'-8")	11'-1"	9'-4" (11'-2")	9'-4" (11'-2")	9'-4" (10'-1")	6'-3" (9'-1")	6'-3" (9'-1")	6'-3" (8'-9")
400PDS125-15[1]	4"	0.0158	50	16	13'-8"	13'-2"	11'-6"	9'-4" (11'-2")	9'-4" (11'-2")	9'-4" (10'-1")	7'-0" (9'-8")	7'-0" (9'-8")	7'-0" (9'-2")	4'-8" (7'-11")	4'-8" (7'-11")	4'-8" (7'-11")
400PDS125-15[1]		0.0158	50	24	9'-4" (11'-2")	9'-4" (11'-2")	9'-4" (10'-1")	6'-3" (9'-1")	6'-3" (9'-1")	6'-3" (8'-9")	4'-8" (7'-11")	4'-8" (7'-11")	4'-8" (7'-11")	3'-1" (6'-0")	3'-1" (6'-0")	3'-1" (6'-0")
162PDS125-19		0.0200	65	12	9'-11"	7'-10"	6'-10"	8'-8"	6'-10"	6'-0"	7'-10"	6'-3"	5'-5"	6'-10"	5'-5"	4'-9"
162PDS125-19	1-5/8"	0.0200	65	16	9'-0"	7'-2"	6'-3"	7'-10"	6'-3"	5'-5"	7'-2"	5'-8"	4'-11"	6'-3"	4'-11"	4'-4"
162PDS125-19		0.0200	65	24	7'-10"	6'-3"	5'-5"	6'-10"	5'-5"	4'-9"	6'-3"	4'-11"	4'-4"	5'-2"	4'-4"	3'-9"
250PDS125-19		0.0200	65	12	14'-0"	11'-1"	9'-8"	12'-3"	9'-8"	8'-6"	11'-1"	8'-10"	7'-8"	9'-8"	7'-8"	6'-9"
250PDS125-19	2-1/2"	0.0200	65	16	12'-8"	10'-1"	8'-10"	11'-1"	8'-10"	7'-8"	10'-1"	8'-0"	7'-0"	8'-5"	7'-0"	6'-1"
250PDS125-19		0.0200	65	24	11'-1"	8'-10"	7'-8"	9'-8"	7'-8"	6'-9"	8'-5"	7'-0"	6'-1"	6'-10"	6'-1"	5'-4"
350PDS125-19		0.0200	65	12	18'-3"	14'-6"	12'-8"	16'-0"	12'-8"	11'-1"	14'-1"	11'-6"	10'-1"	11'-6"	10'-1"	8'-10"
350PDS125-19	3-1/2"	0.0200	65	16	16'-7"	13'-2"	11'-6"	14'-1"	11'-6"	10'-1"	12'-3"	10'-6"	9'-2"	10'-0"	9'-2"	8'-0"
350PDS125-19		0.0200	65	24	14'-1"	11'-6"	10'-1"	11'-6"	10'-1"	8'-10"	10'-0"	9'-2"	8'-0"	8'-2"	8'-0"	7'-0"
362PDS125-19		0.0200	65	12	18'-10"	14'-11"	13'-0"	16'-5"	13'-0"	11'-5"	14'-5"	11'-10"	10'-4"	11'-9"	10'-4"	9'-0"
362PDS125-19	3-5/8"	0.0200	65	16	17'-1"	13'-7"	11'-10"	14'-5"	11'-10"	10'-4"	12'-5"	10'-9"	9'-5"	10'-2"	9'-5"	8'-3"
362PDS125-19		0.0200	65	24	14'-5"	11'-10"	10'-4"	11'-9"	10'-4"	9'-0"	10'-2"	9'-5"	8'-3"	8'-1" (8'-4")	8'-1" (8'-3")	7'-2"
400PDS125-19		0.0200	65	12	20'-3"	16'-1"	14'-0"	17'-8"	14'-0"	12'-3"	15'-4"	12'-9"	11'-2"	12'-6"	11'-2"	9'-9"
400PDS125-19	4"	0.0200	65	16	18'-5"	14'-7"	12'-9"	15'-4"	12'-9"	11'-2"	13'-4"	11'-7"	10'-1"	10'-10"	10'-1"	8'-10"
400PDS125-19		0.0200	65	24	15'-4"	12'-9"	11'-2"	12'-6"	11'-2"	9'-9"	10'-10"	10'-1"	8'-10"	8'-0"	8'-0"	7'-9"
162PDS125-22		0.0232	57	12	10'-6"	8'-4"	7'-3"	9'-2"	7'-3"	6'-4"	8'-4"	6'-7"	5'-9"	7'-3"	5'-9"	5'-0"
162PDS125-22	1-5/8"	0.0232	57	16	9'-6"	7'-7"	6'-7"	8'-4"	6'-7"	5'-9"	7'-7"	6'-0"	5'-3"	6'-7"	5'-3"	4'-7"
162PDS125-22		0.0232	57	24	8'-4"	6'-7"	5'-9"	7'-3"	5'-9"	5'-0"	6'-7"	5'-3"	4'-7"	5'-5"	4'-7"	4'-0"
250PDS125-22		0.0232	57	12	14'-6"	11'-6"	10'-0"	12'-8"	10'-0"	8'-9"	11'-6"	9'-1"	7'-11"	9'-11"	7'-11"	6'-11"
250PDS125-22	2-1/2"	0.0232	57	16	13'-2"	10'-5"	9'-1"	11'-6"	9'-1"	7'-11"	10'-5"	8'-3"	7'-3"	8'-7"	7'-3"	6'-4"
250PDS125-22		0.0232	57	24	11'-6"	9'-1"	7'-11"	9'-11"	7'-11"	6'-11"	8'-7"	7'-3"	6'-4"	7'-0"	6'-4"	5'-6"
350PDS125-22		0.0232	57	12	18'-10"	15'-0"	13'-1"	16'-4"	13'-1"	11'-5"	14'-2"	11'-11"	10'-5"	11'-7"	10'-5"	9'-1"
350PDS125-22	3-1/2"	0.0232	57	16	17'-2"	13'-7"	11'-11"	14'-2"	11'-11"	10'-5"	12'-3"	10'-10"	9'-5"	10'-0"	9'-5"	8'-3"
350PDS125-22		0.0232	57	24	14'-2"	11'-11"	10'-5"	11'-7"	10'-5"	9'-1"	10'-0"	9'-5"	8'-3"	8'-2"	8'-2"	7'-2"
362PDS125-22		0.0232	57	12	19'-5"	15'-5"	13'-5"	16'-8"	13'-5"	11'-9"	14'-5"	12'-3"	10'-8"	11'-9"	10'-8"	9'-4"
362PDS125-22	3-5/8"	0.0232	57	16	17'-8"	14'-0"	12'-3"	14'-5"	12'-3"	10'-8"	12'-6"	11'-1"	9'-8"	10'-2"	9'-8"	8'-6"
362PDS125-22		0.0232	57	24	14'-5"	12'-3"	10'-8"	11'-9"	10'-8"	9'-4"	10'-2"	9'-8"	8'-6"	8'-4"	8'-4"	7'-5"
400PDS125-22		0.0232	57	12	21'-0"	16'-8"	14'-7"	17'-6"	14'-7"	12'-9"	15'-2"	13'-3"	11'-7"	12'-5"	11'-7"	10'-1"
400PDS125-22	4"	0.0232	57	16	18'-7"	15'-2"	13'-3"	15'-2"	13'-3"	11'-7"	13'-2"	12'-0"	10'-6"	10'-9"	10'-6"	9'-2"
400PDS125-22		0.0232	57	24	15'-2"	13'-3"	11'-7"	12'-5"	11'-7"	10'-1"	10'-9"	10'-6"	9'-2"	8'-9"	8'-9"	8'-0"
550PDS125-22[1]		0.0232	57	12	25'-9"	20'-9"	18'-1"	21'-0"	18'-1"	15'-10"	18'-2"	16'-6"	14'-5"	14'-10"	14'-5"	12'-7"
550PDS125-22[1]	5-1/2"	0.0232	57	16	22'-3"	18'-10"	16'-6"	18'-2"	16'-6"	14'-5"	15'-9"	14'-11"	13'-1"	11'-4" (12'-10")	11'-4" (12'-10")	11'-4" (11'-5")
550PDS125-22[1]		0.0232	57	24	18'-2"	16'-6"	14'-5"	14'-10"	14'-5"	12'-7"	11'-4" (12'-10")	11'-4" (12'-10")	11'-4" (11'-5")	7'-7" (10'-6")	7'-7" (10'-6")	7'-7" (10'-0")
600PDS125-22[1]		0.0232	57	12	26'-10"	22'-2"	19'-4"	21'-11"	19'-4"	16'-11"	19'-0"	17'-7"	15'-4"	13'-7" (15'-6")	13'-7" (15'-4")	13'-5"
600PDS125-22[1]	6"	0.0232	57	16	23'-3"	20'-2"	17'-7"	19'-0"	17'-7"	15'-4"	15'-3" (16'-5")	15'-3" (16'-0")	14'-0"	10'-2" (13'-5")	10'-2" (13'-5")	10'-2" (12'-2")
600PDS125-22[1]		0.0232	57	24	19'-0"	17'-7"	15'-4"	13'-7" (15'-6")	13'-7" (15'-4")	13'-5"	10'-2" (13'-5")	10'-2" (13'-5")	10'-2" (12'-2")	6'-9" (11'-0")	6'-9" (11'-0")	6'-9" (10'-8")

ProSTUD Non-Composite Limiting Heights - Fully Braced

Member	Depth (in)	Design Thickness (in)	Yield Strength (ksi)	Spacing o/c (in)	Lateral Load (psf)											
					5 PSF			7.5 PSF			10 PSF			15 PSF		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162PDS125-30		0.0312	33	12	11'-10"	9'-5"	8'-3"	10'-4"	8'-3"	7'-2"	9'-5"	7'-6"	6'-6"	7'-8"	6'-6"	5'-8"
162PDS125-30	1-5/8"	0.0312	33	16	10'-9"	8'-7"	7'-6"	9'-5"	7'-6"	6'-6"	8'-2"	6'-9"	5'-11"	6'-8"	5'-11"	5'-2"
162PDS125-30		0.0312	33	24	9'-5"	7'-6"	6'-6"	7'-8"	6'-6"	5'-8"	6'-8"	5'-11"	5'-2"	5'-5"	5'-2"	4'-6"
250PDS125-30		0.0312	33	12	16'-5"	13'-0"	11'-4"	14'-4"	11'-4"	9'-11"	12'-6"	10'-4"	9'-0"	10'-3"	9'-0"	7'-11"
250PDS125-30	2-1/2"	0.0312	33	16	14'-11"	11'-10"	10'-4"	12'-6"	10'-4"	9'-0"	10'-10"	9'-5"	8'-2"	8'-10"	8'-2"	7'-2"
250PDS125-30		0.0312	33	24	12'-6"	10'-4"	9'-0"	10'-3"	9'-0"	7'-11"	8'-10"	8'-2"	7'-2"	7'-3"	7'-2"	6'-3"
350PDS125-30		0.0312	33	12	20'-9"	16'-10"	14'-9"	16'-11"	14'-9"	12'-10"	14'-8"	13'-4"	11'-8"	12'-0"	11'-8"	10'-2"
350PDS125-30	3-1/2"	0.0312	33	16	18'-0"	15'-4"	13'-4"	14'-8"	13'-4"	11'-8"	12'-9"	12'-2"	10'-7"	10'-5"	10'-5"	9'-3"
350PDS125-30		0.0312	33	24	14'-8"	13'-4"	11'-8"	12'-0"	11'-8"	10'-2"	10'-5"	10'-5"	9'-3"	8'-6"	8'-6"	8'-1"
362PDS125-30		0.0312	33	12	21'-2"	17'-4"	15'-2"	17'-3"	15'-2"	13'-3"	15'-0"	13'-9"	12'-0"	12'-3"	12'-0"	10'-6"
362PDS125-30	3-5/8"	0.0312	33	16	18'-4"	15'-9"	13'-9"	15'-0"	13'-9"	12'-0"	12'-11"	12'-6"	10'-11"	10'-7"	10'-7"	9'-6"
362PDS125-30		0.0312	33	24	15'-0"	13'-9"	12'-0"	12'-3"	12'-0"	10'-6"	10'-7"	10'-7"	9'-6"	8'-8"	8'-8"	8'-4"
400PDS125-30		0.0312	33	12	22'-4"	18'-8"	16'-4"	18'-3"	16'-4"	14'-3"	15'-9"	14'-10"	13'-0"	12'-11"	12'-11"	11'-4"
400PDS125-30	4"	0.0312	33	16	19'-4"	17'-0"	14'-10"	15'-9"	14'-10"	13'-0"	13'-8"	13'-6"	11'-9"	11'-2"	11'-2"	10'-3"
400PDS125-30		0.0312	33	24	15'-9"	14'-10"	13'-0"	12'-11"	12'-11"	11'-4"	11'-2"	11'-2"	10'-3"	9'-1"	9'-1"	9'-0"
550PDS125-30		0.0312	33	12	27'-2"	23'-11"	20'-11"	22'-2"	20'-11"	18'-3"	19'-3"	19'-0"	16'-7"	15'-8"	15'-8"	14'-6"
550PDS125-30	5-1/2"	0.0312	33	16	23'-7"	21'-9"	19'-0"	19'-3"	19'-0"	16'-7"	16'-8"	16'-8"	15'-1"	13'-7"	13'-7"	13'-2"
550PDS125-30		0.0312	33	24	19'-3"	19'-0"	16'-7"	15'-8"	15'-8"	14'-6"	13'-7"	13'-7"	13'-2"	11'-1"	11'-1"	11'-1"
600PDS125-30		0.0312	33	12	28'-4"	25'-7"	22'-4"	23'-2"	22'-4"	19'-7"	20'-1"	20'-1"	17'-9"	16'-4"	16'-4"	15'-6"
600PDS125-30	6"	0.0312	33	16	24'-7"	23'-3"	20'-4"	20'-1"	20'-1"	17'-9"	17'-4"	17'-4"	16'-2"	14'-2"	14'-2"	14'-1"
600PDS125-30		0.0312	33	24	20'-1"	20'-1"	17'-9"	16'-4"	16'-4"	15'-6"	14'-2"	14'-2"	14'-1"	11'-7"	11'-7"	11'-7"
162PDS125-33		0.0346	33	12	12'-3"	9'-9"	8'-6"	10'-8"	8'-6"	7'-5"	9'-9"	7'-9"	6'-9"	8'-3"	6'-9"	5'-11"
162PDS125-33	1-5/8"	0.0346	33	16	11'-2"	8'-10"	7'-9"	9'-9"	7'-9"	6'-9"	8'-9"	7'-0"	6'-1"	7'-2"	6'-1"	5'-4"
162PDS125-33		0.0346	33	24	9'-9"	7'-9"	6'-9"	8'-3"	6'-9"	5'-11"	7'-2"	6'-1"	5'-4"	5'-10"	5'-4"	4'-8"
250PDS125-33		0.0346	33	12	16'-11"	13'-5"	11'-9"	14'-10"	11'-9"	10'-3"	13'-5"	10'-8"	9'-4"	10'-11"	9'-4"	8'-2"
250PDS125-33	2-1/2"	0.0346	33	16	15'-5"	12'-3"	10'-8"	13'-5"	10'-8"	9'-4"	11'-7"	9'-8"	8'-6"	9'-6"	8'-6"	7'-5"
250PDS125-33		0.0346	33	24	13'-5"	10'-8"	9'-4"	10'-11"	9'-4"	8'-2"	9'-6"	8'-6"	7'-5"	7'-9"	7'-5"	6'-6"
350PDS125-33		0.0346	33	12	22'-0"	17'-5"	15'-3"	18'-4"	15'-3"	13'-4"	15'-11"	13'-10"	12'-1"	13'-0"	12'-1"	10'-7"
350PDS125-33	3-1/2"	0.0346	33	16	19'-6"	15'-10"	13'-10"	15'-11"	13'-10"	12'-1"	13'-9"	12'-7"	11'-0"	11'-3"	11'-0"	9'-7"
350PDS125-33		0.0346	33	24	15'-11"	13'-10"	12'-1"	13'-0"	12'-1"	10'-7"	11'-3"	11'-0"	9'-7"	9'-2"	9'-2"	8'-5"
362PDS125-33		0.0346	33	12	22'-7"	17'-11"	15'-8"	18'-9"	15'-8"	13'-8"	16'-3"	14'-3"	12'-5"	13'-3"	12'-5"	10'-10"
362PDS125-33	3-5/8"	0.0346	33	16	19'-10"	16'-3"	14'-3"	16'-3"	14'-3"	12'-5"	14'-0"	12'-11"	11'-3"	11'-6"	11'-3"	9'-10"
362PDS125-33		0.0346	33	24	16'-3"	14'-3"	12'-5"	13'-3"	12'-5"	10'-10"	11'-6"	11'-3"	9'-10"	9'-4"	9'-4"	8'-7"
400PDS125-33		0.0346	33	12	24'-2"	19'-4"	16'-11"	19'-9"	16'-11"	14'-9"	17'-1"	15'-4"	13'-5"	14'-0"	13'-5"	11'-9"
400PDS125-33	4"	0.0346	33	16	21'-0"	17'-7"	15'-4"	17'-1"	15'-4"	13'-5"	14'-10"	13'-11"	12'-2"	12'-1"	12'-1"	10'-8"
400PDS125-33		0.0346	33	24	17'-1"	15'-4"	13'-5"	14'-0"	13'-5"	11'-9"	12'-1"	12'-1"	10'-8"	9'-11"	9'-11"	9'-4"
550PDS125-33		0.0346	33	12	29'-4"	24'-10"	21'-8"	23'-11"	21'-8"	18'-11"	20'-9"	19'-8"	17'-3"	16'-11"	16'-11"	15'-0"
550PDS125-33	5-1/2"	0.0346	33	16	25'-5"	22'-7"	19'-8"	20'-9"	19'-8"	17'-3"	17'-11"	17'-11"	15'-8"	14'-8"	14'-8"	13'-8"
550PDS125-33		0.0346	33	24	20'-9"	19'-8"	17'-3"	16'-11"	16'-11"	15'-0"	14'-8"	14'-8"	13'-8"	12'-0"	12'-0"	11'-11"
600PDS125-33		0.0346	33	12	30'-7"	26'-7"	23'-2"	25'-0"	23'-2"	20'-3"	21'-8"	21'-1"	18'-5"	17'-8"	17'-8"	16'-1"
600PDS125-33	6"	0.0346	33	16	26'-6"	24'-1"	21'-1"	21'-8"	21'-1"	18'-5"	18'-9"	18'-9"	16'-9"	15'-4"	15'-4"	14'-7"
600PDS125-33		0.0346	33	24	21'-8"	21'-1"	18'-5"	17'-8"	17'-8"	16'-1"	15'-4"	15'-4"	14'-7"	12'-6"	12'-6"	12'-6"

Fully Braced Non-Composite Limiting Heights Table Notes

- Heights are based on 2007 North American Specification S100-07 using steel properties alone.
- Above listed Non-Composite Limiting Heights is applicable when the unbraced length is less than or equal to L_u.
- Heights not in papentheses are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
- Heights in parentheses are limited by moment, deflection, and shear, and require end bearing stiffeners in order to achieve the indicated height.

1. Depth over thickness (h/t) ratio is greater than 200.

ProSTUD Non-Composite Limiting Heights - 48" o.c. Bracing

Member	Depth (in)	Design Thickness (in)	Yield Strength (ksi)	Spacing o/c (in)	Lateral Load (psf)											
					5 PSF			7.5 PSF			10 PSF			15 PSF		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162PDS125-15		0.0158	50	12	8'-1"	7'-4"	6'-4"	6'-7"	6'-4"	5'-7"	5'-9"	5'-9"	5'-1"	4'-8"	4'-8"	4'-5"
162PDS125-15	1-5/8"	0.0158	50	16	7'-0"	6'-8"	5'-9"	5'-9"	5'-9"	5'-1"	4'-11"	4'-11"	4'-7"	4'-0"	4'-0"	4'-0"
162PDS125-15		0.0158	50	24	5'-9"	5'-9"	5'-1"	4'-8"	4'-8"	4'-5"	4'-0"	4'-0"	4'-0"	3'-4"	3'-4"	3'-4"
250PDS125-15		0.0158	50	12	10'-5"	10'-2"	8'-11"	8'-6"	8'-6"	7'-9"	7'-4"	7'-4"	7'-1"	6'-0"	6'-0"	6'-0"
250PDS125-15	2-1/2"	0.0158	50	16	9'-0"	9'-0"	8'-1"	7'-4"	7'-4"	7'-1"	6'-5"	6'-5"	6'-5"	5'-3"	5'-3"	5'-3"
250PDS125-15		0.0158	50	24	7'-4"	7'-4"	7'-1"	6'-0"	6'-0"	6'-0"	5'-3"	5'-3"	5'-3"	4'-3" (4'-3")	4'-3" (4'-3")	4'-3" (4'-3")
350PDS125-15[1]		0.0158	50	12	12'-2"	12'-2"	11'-7"	9'-11"	9'-11"	9'-11"	8'-7"	8'-7"	8'-7"	7'-0"	7'-0"	7'-0"
350PDS125-15[1]	3-1/2"	0.0158	50	16	10'-6"	10'-6"	10'-6"	8'-7"	8'-7"	8'-7"	7'-5"	7'-5"	7'-5"	5'-6" (6'-1")	5'-6" (6'-1")	5'-6" (6'-1")
350PDS125-15[1]		0.0158	50	24	8'-7"	8'-7"	8'-7"	7'-0"	7'-0"	7'-0"	5'-6" (6'-1")	5'-6" (6'-1")	5'-6" (6'-1")	3'-8" (5'-0")	3'-8" (5'-0")	3'-8" (5'-0")
362PDS125-15[1]		0.0158	50	12	12'-5"	12'-5"	11'-10"	10'-1"	10'-1"	10'-1"	8'-9"	8'-9"	8'-9"	7'-1" (7'-2")	7'-1" (7'-2")	7'-1" (7'-2")
362PDS125-15[1]	3-5/8"	0.0158	50	16	10'-9"	10'-9"	10'-9"	8'-9"	8'-9"	8'-9"	7'-7"	7'-7"	7'-7"	5'-4" (6'-2")	5'-4" (6'-2")	5'-4" (6'-2")
362PDS125-15[1]		0.0158	50	24	8'-9"	8'-9"	8'-9"	7'-1" (7'-2")	7'-1" (7'-2")	7'-1" (7'-2")	5'-4" (6'-2")	5'-4" (6'-2")	5'-4" (6'-2")	3'-6" (5'-1")	3'-6" (5'-1")	3'-6" (5'-1")
400PDS125-15[1]		0.0158	50	12	13'-0"	13'-0"	12'-8"	10'-8"	10'-8"	10'-8"	9'-2"	9'-2"	9'-2"	6'-3" (7'-6")	6'-3" (7'-6")	6'-3" (7'-6")
400PDS125-15[1]	4"	0.0158	50	16	11'-3"	11'-3"	11'-3"	9'-2"	9'-2"	9'-2"	7'-0" (8'-0")	7'-0" (8'-0")	7'-0" (8'-0")	4'-8" (6'-6")	4'-8" (6'-6")	4'-8" (6'-6")
400PDS125-15[1]		0.0158	50	24	9'-2"	9'-2"	9'-2"	6'-3" (7'-6")	6'-3" (7'-6")	6'-3" (7'-6")	4'-8" (6'-6")	4'-8" (6'-6")	4'-8" (6'-6")	3'-1" (5'-4")	3'-1" (5'-4")	3'-1" (5'-4")
162PDS125-19		0.0200	65	12	9'-11"	7'-10"	6'-10"	8'-6"	6'-10"	6'-0"	7'-4"	6'-3"	5'-5"	6'-0"	5'-5"	4'-9"
162PDS125-19	1-5/8"	0.0200	65	16	9'-0"	7'-2"	6'-3"	7'-4"	6'-3"	5'-5"	6'-4"	5'-8"	4'-11"	5'-2"	4'-11"	4'-4"
162PDS125-19		0.0200	65	24	7'-4"	6'-3"	5'-5"	6'-0"	5'-5"	4'-9"	5'-2"	4'-11"	4'-4"	4'-3"	4'-3"	3'-9"
250PDS125-19		0.0200	65	12	13'-10"	11'-1"	9'-8"	11'-4"	9'-8"	8'-6"	9'-9"	8'-10"	7'-8"	8'-0"	7'-8"	6'-9"
250PDS125-19	2-1/2"	0.0200	65	16	12'-0"	10'-1"	8'-10"	9'-9"	8'-10"	7'-8"	8'-6"	8'-0"	7'-0"	6'-11"	6'-11"	6'-1"
250PDS125-19		0.0200	65	24	9'-9"	8'-10"	7'-8"	8'-0"	7'-8"	6'-9"	6'-11"	6'-11"	6'-1"	5'-8"	5'-8"	5'-4"
350PDS125-19		0.0200	65	12	16'-6"	14'-6"	12'-8"	13'-5"	12'-8"	11'-1"	11'-8"	11'-6"	10'-1"	9'-6"	9'-6"	8'-10"
350PDS125-19	3-1/2"	0.0200	65	16	14'-3"	13'-2"	11'-6"	11'-8"	11'-6"	10'-1"	10'-1"	10'-1"	9'-2"	8'-3"	8'-3"	8'-0"
350PDS125-19		0.0200	65	24	11'-8"	11'-6"	10'-1"	9'-6"	9'-6"	8'-10"	8'-3"	8'-3"	8'-0"	6'-9"	6'-9"	6'-9"
362PDS125-19		0.0200	65	12	16'-9"	14'-11"	13'-0"	13'-8"	13'-0"	11'-5"	11'-10"	11'-10"	10'-4"	9'-8"	9'-8"	9'-0"
362PDS125-19	3-5/8"	0.0200	65	16	14'-6"	13'-7"	11'-10"	11'-10"	11'-10"	10'-4"	10'-3"	10'-3"	9'-5"	8'-5"	8'-5"	8'-3"
362PDS125-19		0.0200	65	24	11'-10"	11'-10"	10'-4"	9'-8"	9'-8"	9'-0"	8'-5"	8'-5"	8'-3"	6'-10"	6'-10"	6'-10"
400PDS125-19		0.0200	65	12	17'-11"	16'-1"	14'-0"	14'-7"	14'-0"	12'-3"	12'-8"	12'-8"	11'-2"	10'-4"	10'-4"	9'-9"
400PDS125-19	4"	0.0200	65	16	15'-6"	14'-7"	12'-9"	12'-8"	12'-8"	11'-2"	11'-0"	11'-0"	10'-1"	8'-11"	8'-11"	8'-10"
400PDS125-19		0.0200	65	24	12'-8"	12'-8"	11'-2"	10'-4"	10'-4"	9'-9"	8'-11"	8'-11"	8'-10"	7'-4"	7'-4"	7'-4"
162PDS125-22		0.0232	57	12	10'-6"	8'-4"	7'-3"	8'-10"	7'-3"	6'-4"	7'-8"	6'-7"	5'-9"	6'-3"	5'-9"	5'-0"
162PDS125-22	1-5/8"	0.0232	57	16	9'-5"	7'-7"	6'-7"	7'-8"	6'-7"	5'-9"	6'-8"	6'-0"	5'-3"	5'-5"	5'-3"	4'-7"
162PDS125-22		0.0232	57	24	7'-8"	6'-7"	5'-9"	6'-3"	5'-9"	5'-0"	5'-5"	5'-3"	4'-7"	4'-5"	4'-5"	4'-0"
250PDS125-22		0.0232	57	12	14'-2"	11'-6"	10'-0"	11'-7"	10'-0"	8'-9"	10'-1"	9'-1"	7'-11"	8'-2"	7'-11"	6'-11"
250PDS125-22	2-1/2"	0.0232	57	16	12'-4"	10'-5"	9'-1"	10'-1"	9'-1"	7'-11"	8'-8"	8'-3"	7'-3"	7'-1"	7'-1"	6'-4"
250PDS125-22		0.0232	57	24	10'-1"	9'-1"	7'-11"	8'-2"	7'-11"	6'-11"	7'-1"	7'-1"	6'-4"	5'-10"	5'-10"	5'-6"
350PDS125-22		0.0232	57	12	16'-6"	15'-0"	13'-1"	13'-6"	13'-1"	11'-5"	11'-8"	11'-8"	10'-5"	9'-6"	9'-6"	9'-1"
350PDS125-22	3-1/2"	0.0232	57	16	14'-4"	13'-7"	11'-11"	11'-8"	11'-8"	10'-5"	10'-1"	10'-1"	9'-5"	8'-3"	8'-3"	8'-3"
350PDS125-22		0.0232	57	24	11'-8"	11'-8"	10'-5"	9'-6"	9'-6"	9'-1"	8'-3"	8'-3"	8'-3"	6'-9"	6'-9"	6'-9"
362PDS125-22		0.0232	57	12	16'-10"	15'-5"	13'-5"	13'-9"	13'-5"	11'-9"	11'-11"	11'-11"	10'-8"	9'-9"	9'-9"	9'-4"
362PDS125-22	3-5/8"	0.0232	57	16	14'-7"	14'-0"	12'-3"	11'-11"	11'-11"	10'-8"	10'-4"	10'-4"	9'-8"	8'-5"	8'-5"	8'-5"
362PDS125-22		0.0232	57	24	11'-11"	11'-11"	10'-8"	9'-9"	9'-9"	9'-4"	8'-5"	8'-5"	8'-5"	6'-10"	6'-10"	6'-10"
400PDS125-22		0.0232	57	12	17'-9"	16'-8"	14'-7"	14'-6"	14'-6"	12'-9"	12'-6"	12'-6"	11'-7"	10'-3"	10'-3"	10'-1"
400PDS125-22	4"	0.0232	57	16	15'-4"	15'-2"	13'-3"	12'-6"	12'-6"	11'-7"	10'-10"	10'-10"	10'-6"	8'-10"	8'-10"	8'-10"
400PDS125-22		0.0232	57	24	12'-6"	12'-6"	11'-7"	10'-3"	10'-3"	10'-1"	8'-10"	8'-10"	8'-10"	7'-3"	7'-3"	7'-3"
550PDS125-22[1]		0.0232	57	12	21'-2"	20'-9"	18'-1"	17'-4"	17'-4"	15'-10"	15'-0"	15'-0"	14'-5"	12'-3"	12'-3"	12'-3"
550PDS125-22[1]	5-1/2"	0.0232	57	16	18'-4"	18'-4"	16'-6"	15'-0"	15'-0"	14'-5"	13'-0"	13'-0"	13'-0"	10'-7"	10'-7"	10'-7"
550PDS125-22[1]		0.0232	57	24	15'-0"	15'-0"	14'-5"	12'-3"	12'-3"	12'-3"	10'-7"	10'-7"	10'-7"	7'-7" (8'-8")	7'-7" (8'-8")	7'-7" (8'-8")
600PDS125-22[1]		0.0232	57	12	22'-2"	22'-2"	19'-4"	18'-1"	18'-1"	16'-11"	15'-8"	15'-8"	15'-4"	12'-9"	12'-9"	12'-9"
600PDS125-22[1]	6"	0.0232	57	16	19'-2"	19'-2"	17'-7"	15'-8"	15'-8"	15'-4"	13'-7"	13'-7"	13'-7"	10'-2" (11'-1")	10'-2" (11'-1")	10'-2" (11'-1")
600PDS125-22[1]		0.0232	57	24	15'-8"	15'-8"	15'-4"	12'-9"	12'-9"	12'-9"	10'-2" (11'-1")	10'-2" (11'-1")	10'-2" (11'-1")	6'-9" (9'-0")	6'-9" (9'-0")	6'-9" (9'-0")

ProSTUD Non-Composite Limiting Heights - 48" o.c. Bracing

Member	Depth (in)	Design Thickness (in)	Yield Strength (ksi)	Spacing o/c (in)	Lateral Load (psf)											
					5 PSF			7.5 PSF			10 PSF			15 PSF		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162PDS125-30		0.0312	33	12	11'-10"	9'-5"	8'-3"	10'-3"	8'-3"	7'-2"	8'-11"	7'-6"	6'-6"	7'-3"	6'-6"	5'-8"
162PDS125-30	1-5/8"	0.0312	33	16	10'-9"	8'-7"	7'-6"	8'-11"	7'-6"	6'-6"	7'-8"	6'-9"	5'-11"	6'-3"	5'-11"	5'-2"
162PDS125-30		0.0312	33	24	8'-11"	7'-6"	6'-6"	7'-3"	6'-6"	5'-8"	6'-3"	5'-11"	5'-2"	5'-2"	5'-2"	4'-6"
250PDS125-30		0.0312	33	12	16'-5"	13'-0"	11'-4"	13'-8"	11'-4"	9'-11"	11'-10"	10'-4"	9'-0"	9'-8"	9'-0"	7'-11"
250PDS125-30	2-1/2"	0.0312	33	16	14'-6"	11'-10"	10'-4"	11'-10"	10'-4"	9'-0"	10'-3"	9'-5"	8'-2"	8'-4"	8'-2"	7'-2"
250PDS125-30		0.0312	33	24	11'-10"	10'-4"	9'-0"	9'-8"	9'-0"	7'-11"	8'-4"	8'-2"	7'-2"	6'-10"	6'-10"	6'-3"
350PDS125-30		0.0312	33	12	19'-7"	16'-10"	14'-9"	16'-0"	14'-9"	12'-10"	13'-10"	13'-4"	11'-8"	11'-4"	11'-4"	10'-2"
350PDS125-30	3-1/2"	0.0312	33	16	17'-0"	15'-4"	13'-4"	13'-10"	13'-4"	11'-8"	12'-0"	12'-0"	10'-7"	9'-9"	9'-9"	9'-3"
350PDS125-30		0.0312	33	24	13'-10"	13'-4"	11'-8"	11'-4"	11'-4"	10'-2"	9'-9"	9'-9"	9'-3"	8'-0"	8'-0"	8'-0"
362PDS125-30		0.0312	33	12	20'-0"	17'-4"	15'-2"	16'-4"	15'-2"	13'-3"	14'-1"	13'-9"	12'-0"	11'-6"	11'-6"	10'-6"
362PDS125-30	3-5/8"	0.0312	33	16	17'-3"	15'-9"	13'-9"	14'-1"	13'-9"	12'-0"	12'-3"	12'-3"	10'-11"	10'-0"	10'-0"	9'-6"
362PDS125-30		0.0312	33	24	14'-1"	13'-9"	12'-0"	11'-6"	11'-6"	10'-6"	10'-0"	10'-0"	9'-6"	8'-2"	8'-2"	8'-2"
400PDS125-30		0.0312	33	12	21'-1"	18'-8"	16'-4"	17'-2"	16'-4"	14'-3"	14'-11"	14'-10"	13'-0"	12'-2"	12'-2"	11'-4"
400PDS125-30	4"	0.0312	33	16	18'-3"	17'-0"	14'-10"	14'-11"	14'-10"	13'-0"	12'-11"	12'-11"	11'-9"	10'-6"	10'-6"	10'-3"
400PDS125-30		0.0312	33	24	14'-11"	14'-10"	13'-0"	12'-2"	12'-2"	11'-4"	10'-6"	10'-6"	10'-3"	8'-7"	8'-7"	8'-7"
550PDS125-30		0.0312	33	12	25'-8"	23'-11"	20'-11"	20'-11"	20'-11"	18'-3"	18'-2"	18'-2"	16'-7"	14'-10"	14'-10"	14'-6"
550PDS125-30	5-1/2"	0.0312	33	16	22'-3"	21'-9"	19'-0"	18'-2"	18'-2"	16'-7"	15'-8"	15'-8"	15'-1"	12'-10"	12'-10"	12'-10"
550PDS125-30		0.0312	33	24	18'-2"	18'-2"	16'-7"	14'-10"	14'-10"	14'-6"	12'-10"	12'-10"	12'-10"	10'-6"	10'-6"	10'-6"
600PDS125-30		0.0312	33	12	26'-9"	25'-7"	22'-4"	21'-10"	21'-10"	19'-7"	18'-11"	18'-11"	17'-9"	15'-5"	15'-5"	15'-5"
600PDS125-30	6"	0.0312	33	16	23'-2"	23'-2"	20'-4"	18'-11"	18'-11"	17'-9"	16'-5"	16'-5"	16'-2"	13'-5"	13'-5"	13'-5"
600PDS125-30		0.0312	33	24	18'-11"	18'-11"	17'-9"	15'-5"	15'-5"	15'-5"	13'-5"	13'-5"	13'-5"	10'-11"	10'-11"	10'-11"
162PDS125-33		0.0346	33	12	12'-3"	9'-9"	8'-6"	10'-8"	8'-6"	7'-5"	9'-5"	7'-9"	6'-9"	7'-8"	6'-9"	5'-11"
162PDS125-33	1-5/8"	0.0346	33	16	11'-2"	8'-10"	7'-9"	9'-5"	7'-9"	6'-9"	8'-2"	7'-0"	6'-1"	6'-8"	6'-1"	5'-4"
162PDS125-33		0.0346	33	24	9'-5"	7'-9"	6'-9"	7'-8"	6'-9"	5'-11"	6'-8"	6'-1"	5'-4"	5'-5"	5'-4"	4'-8"
250PDS125-33		0.0346	33	12	16'-11"	13'-5"	11'-9"	14'-4"	11'-9"	10'-3"	12'-5"	10'-8"	9'-4"	10'-2"	9'-4"	8'-2"
250PDS125-33	2-1/2"	0.0346	33	16	15'-3"	12'-3"	10'-8"	12'-5"	10'-8"	9'-4"	10'-9"	9'-8"	8'-6"	8'-10"	8'-6"	7'-5"
250PDS125-33		0.0346	33	24	12'-5"	10'-8"	9'-4"	10'-2"	9'-4"	8'-2"	8'-10"	8'-6"	7'-5"	7'-2"	7'-2"	6'-6"
350PDS125-33		0.0346	33	12	20'-10"	17'-5"	15'-3"	17'-0"	15'-3"	13'-4"	14'-9"	13'-10"	12'-1"	12'-0"	12'-0"	10'-7"
350PDS125-33	3-1/2"	0.0346	33	16	18'-1"	15'-10"	13'-10"	14'-9"	13'-10"	12'-1"	12'-9"	12'-7"	11'-0"	10'-5"	10'-5"	9'-7"
350PDS125-33		0.0346	33	24	14'-9"	13'-10"	12'-1"	12'-0"	12'-0"	10'-7"	10'-5"	10'-5"	9'-7"	8'-6"	8'-6"	8'-5"
362PDS125-33		0.0346	33	12	21'-3"	17'-11"	15'-8"	17'-4"	15'-8"	13'-8"	15'-0"	14'-3"	12'-5"	12'-3"	12'-3"	10'-10"
362PDS125-33	3-5/8"	0.0346	33	16	18'-5"	16'-3"	14'-3"	15'-0"	14'-3"	12'-5"	13'-0"	12'-11"	11'-3"	10'-8"	10'-8"	9'-10"
362PDS125-33		0.0346	33	24	15'-0"	14'-3"	12'-5"	12'-3"	12'-3"	10'-10"	10'-8"	10'-8"	9'-10"	8'-8"	8'-8"	8'-7"
400PDS125-33		0.0346	33	12	22'-5"	19'-4"	16'-11"	18'-4"	16'-11"	14'-9"	15'-10"	15'-4"	13'-5"	13'-0"	13'-0"	11'-9"
400PDS125-33	4"	0.0346	33	16	19'-5"	17'-7"	15'-4"	15'-10"	15'-4"	13'-5"	13'-9"	13'-9"	12'-2"	11'-3"	11'-3"	10'-8"
400PDS125-33		0.0346	33	24	15'-10"	15'-4"	13'-5"	13'-0"	13'-0"	11'-9"	11'-3"	11'-3"	10'-8"	9'-2"	9'-2"	9'-2"
550PDS125-33		0.0346	33	12	27'-2"	24'-10"	21'-8"	22'-2"	21'-8"	18'-11"	19'-3"	19'-3"	17'-3"	15'-8"	15'-8"	15'-0"
550PDS125-33	5-1/2"	0.0346	33	16	23'-6"	22'-7"	19'-8"	19'-3"	19'-3"	17'-3"	16'-8"	16'-8"	15'-8"	13'-7"	13'-7"	13'-7"
550PDS125-33		0.0346	33	24	19'-3"	19'-3"	17'-3"	15'-8"	15'-8"	15'-0"	13'-7"	13'-7"	13'-7"	11'-1"	11'-1"	11'-1"
600PDS125-33		0.0346	33	12	28'-4"	26'-7"	23'-2"	23'-2"	23'-2"	20'-3"	20'-1"	20'-1"	18'-5"	16'-5"	16'-5"	16'-1"
600PDS125-33	6"	0.0346	33	16	24'-7"	24'-1"	21'-1"	20'-1"	20'-1"	18'-5"	17'-5"	17'-5"	16'-9"	14'-2"	14'-2"	14'-2"
600PDS125-33		0.0346	33	24	20'-1"	20'-1"	18'-5"	16'-5"	16'-5"	16'-1"	14'-2"	14'-2"	14'-2"	11'-7"	11'-7"	11'-7"

48" o.c. Braced Non-Composite Limiting Heights Table Notes

- Heights are based on 2007 North American Specification S100-07 using steel properties alone.
- Allowable moment capacities are based on discrete stud bracing at 4-ft on-center.
- Heights not in papentheses are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
- Heights in parentheses are limited by moment, deflection, and shear, and require end bearing stiffeners in order to achieve the indicated height.

1. Depth over thickness (h/t) ratio is greater than 200.

ProSTUD® ALLOWABLE CEILING SPANS

Deflection Limit L/120

Member	ksi	4 psf						6 psf						10 psf					
		Lateral Support of Compression Flange						Lateral Support of Compression Flange						Lateral Support of Compression Flange					
		Unsupported			Midspan			Unsupported			Midspan			Unsupported			Midspan		
		Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.		
		12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
162PDS125-15	50	7' 3"	6' 8"	5' 11"	9' 9"	8' 10"	7' 6"	6' 5"	5' 11"	5' 3"	8' 5"	7' 6"	6' 3"	5' 6"	5' 1"	4' 5"	6' 10"	6' 0"	5' 0"
250PDS125-15	50	8' 4"	7' 8"	6' 11"	11' 8"	10' 9"	9' 5"	7' 5"	6' 11"	6' 2"	10' 5"	9' 5"	8' 1"	6' 6"	6' 0"	5' 4"	8' 8"	7' 8"	6' 5"
350PDS125-15[1]	50	9' 1"	8' 5"	7' 6"	12' 7"	11' 6"	10' 2"	8' 2"	7' 6"	6' 8"	11' 1"	10' 2"	8' 10"	7' 0"	6' 6"	5' 9"	9' 5"	8' 6"	7' 2"
362PDS125-15[1]	50	9' 2"	8' 6"	7' 7"	12' 9"	11' 8"	10' 3"	8' 3"	7' 7"	6' 9"	11' 3"	10' 3"	8' 11"	7' 1"	6' 7"	5' 9"	9' 6"	8' 7"	7' 3"
400PDS125-15[1]	50	9' 5"	8' 9"	7' 10"	13' 1"	12' 0"	10' 7"	8' 6"	7' 10"	6' 11"	11' 7"	10' 7"	9' 3"	7' 4"	6' 9"	6' 0"	9' 10"	8' 11"	7' 7"
162PDS125-19	65	7' 11"	7' 4"	6' 6"	10' 8"	9' 8"	8' 6"	7' 2"	6' 6"	5' 9"	9' 4"	8' 6"	7' 5"	6' 1"	5' 7"	4' 11"	7' 10"	7' 2"	6' 1"
250PDS125-19	65	9' 1"	8' 5"	7' 7"	13' 1"	12' 1"	10' 9"	8' 2"	7' 7"	6' 10"	11' 8"	10' 9"	9' 7"	7' 2"	6' 8"	5' 11"	10' 1"	9' 3"	8' 1"
350PDS125-19	65	10' 0"	9' 4"	8' 4"	14' 4"	13' 2"	11' 9"	9' 0"	8' 4"	7' 6"	12' 9"	11' 9"	10' 5"	7' 11"	7' 4"	6' 6"	11' 0"	10' 1"	8' 11"
362PDS125-19	65	10' 2"	9' 5"	8' 5"	14' 6"	13' 4"	11' 10"	9' 1"	8' 5"	7' 7"	12' 11"	11' 10"	10' 6"	7' 11"	7' 4"	6' 7"	11' 1"	10' 3"	9' 0"
400PDS125-19	65	10' 5"	9' 8"	8' 8"	14' 11"	13' 9"	12' 3"	9' 5"	8' 8"	7' 10"	13' 4"	12' 3"	10' 11"	8' 2"	7' 7"	6' 10"	11' 6"	10' 7"	9' 4"
162PDS125-22	57	8' 3"	7' 8"	6' 10"	11' 3"	10' 3"	8' 11"	7' 5"	6' 10"	6' 1"	9' 10"	8' 11"	7' 10"	6' 5"	5' 11"	5' 3"	8' 4"	7' 7"	6' 5"
250PDS125-22	57	9' 4"	8' 8"	7' 9"	13' 3"	12' 2"	10' 10"	8' 5"	7' 9"	7' 0"	11' 9"	10' 10"	9' 8"	7' 4"	6' 9"	6' 0"	10' 2"	9' 4"	8' 2"
350PDS125-22	57	10' 2"	9' 6"	8' 6"	14' 8"	13' 6"	11' 10"	9' 2"	8' 6"	7' 8"	13' 0"	11' 10"	10' 6"	8' 1"	7' 5"	6' 8"	11' 1"	10' 2"	8' 11"
362PDS125-22	57	10' 4"	9' 7"	8' 7"	14' 10"	13' 8"	12' 0"	9' 3"	8' 7"	7' 9"	13' 2"	12' 0"	10' 7"	8' 2"	7' 6"	6' 9"	11' 3"	10' 3"	9' 1"
400PDS125-22	57	10' 8"	9' 10"	8' 10"	15' 3"	14' 0"	12' 5"	9' 7"	8' 10"	7' 11"	13' 7"	12' 5"	10' 11"	8' 4"	7' 9"	6' 11"	11' 7"	10' 7"	9' 4"
550PDS125-22[1]	57	11' 9"	10' 11"	9' 10"	16' 10"	15' 7"	13' 11"	10' 7"	9' 10"	8' 9"	15' 1"	13' 11"	12' 4"	9' 3"	8' 7"	7' 8"	13' 0"	11' 11"	10' 6"
600PDS125-22[1]	57	12' 1"	11' 2"	10' 1"	17' 3"	15' 11"	14' 3"	10' 10"	10' 1"	9' 0"	15' 5"	14' 3"	12' 8"	9' 6"	8' 9"	7' 10"	13' 5"	12' 3"	10' 10"
162PDS125-30	33	9' 4"	8' 7"	7' 8"	12' 5"	11' 4"	9' 10"	8' 3"	7' 8"	6' 10"	10' 10"	9' 10"	8' 7"	7' 2"	6' 7"	5' 11"	9' 2"	8' 4"	7' 3"
250PDS125-30	33	10' 4"	9' 7"	8' 6"	14' 8"	13' 7"	12' 1"	9' 3"	8' 6"	7' 8"	13' 1"	12' 1"	10' 10"	8' 0"	7' 5"	6' 8"	11' 5"	10' 6"	9' 3"
350PDS125-30	33	11' 2"	10' 4"	9' 3"	16' 0"	14' 10"	13' 4"	10' 0"	9' 3"	8' 4"	14' 5"	13' 4"	11' 11"	8' 9"	8' 1"	7' 3"	12' 6"	11' 7"	10' 3"
362PDS125-30	33	11' 3"	10' 5"	9' 4"	16' 2"	15' 0"	13' 6"	10' 1"	9' 4"	8' 5"	14' 7"	13' 6"	12' 0"	8' 10"	8' 2"	7' 4"	12' 8"	11' 8"	10' 5"
400PDS125-30	33	11' 7"	10' 9"	9' 8"	16' 8"	15' 6"	13' 11"	10' 5"	9' 8"	8' 8"	15' 0"	13' 11"	12' 5"	9' 1"	8' 5"	7' 7"	13' 1"	12' 0"	10' 9"
550PDS125-30	33	12' 10"	11' 10"	10' 8"	18' 5"	17' 1"	15' 4"	11' 6"	10' 8"	9' 7"	16' 7"	15' 4"	13' 9"	10' 1"	9' 4"	8' 5"	14' 5"	13' 5"	11' 11"
600PDS125-30	33	13' 1"	12' 2"	10' 11"	18' 11"	17' 6"	15' 8"	11' 9"	10' 11"	9' 10"	17' 0"	15' 8"	14' 1"	10' 4"	9' 7"	8' 8"	14' 9"	13' 8"	12' 3"
162PDS125-33	33	9' 9"	9' 0"	8' 0"	13' 0"	11' 9"	10' 4"	8' 8"	8' 0"	7' 1"	11' 4"	10' 4"	9' 0"	7' 6"	6' 10"	6' 2"	9' 7"	8' 8"	7' 7"
250PDS125-33	33	10' 9"	9' 11"	8' 10"	15' 2"	14' 1"	12' 6"	9' 7"	8' 10"	7' 11"	13' 7"	12' 6"	11' 2"	8' 4"	7' 8"	6' 11"	11' 9"	10' 10"	9' 8"
350PDS125-33	33	11' 7"	10' 8"	9' 7"	16' 6"	15' 3"	13' 9"	10' 4"	9' 7"	8' 7"	14' 10"	13' 9"	12' 4"	9' 0"	8' 4"	7' 6"	13' 0"	12' 0"	10' 8"
362PDS125-33	33	11' 8"	10' 9"	9' 8"	16' 8"	15' 5"	13' 11"	10' 5"	9' 8"	8' 8"	15' 0"	13' 11"	12' 6"	9' 1"	8' 5"	7' 7"	13' 1"	12' 1"	10' 10"
400PDS125-33	33	12' 0"	11' 1"	9' 11"	17' 2"	15' 11"	14' 4"	10' 9"	9' 11"	8' 11"	15' 5"	14' 4"	12' 10"	9' 5"	8' 8"	7' 10"	13' 6"	12' 6"	11' 1"
550PDS125-33	33	13' 3"	12' 3"	11' 0"	19' 0"	17' 7"	15' 10"	11' 10"	11' 0"	9' 10"	17' 1"	15' 10"	14' 3"	10' 4"	9' 7"	8' 8"	14' 11"	13' 10"	12' 5"
600PDS125-33	33	13' 6"	12' 6"	11' 3"	19' 6"	18' 1"	16' 3"	12' 2"	11' 3"	10' 1"	17' 6"	16' 3"	14' 7"	10' 7"	9' 10"	8' 10"	15' 4"	14' 2"	12' 8"

Notes:

- For unbraced sections, allowable moment is based on 2007 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be the listed span (completely unbraced). For midspan braced sections, allowable moment based on 2007 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be one-half of the listed span (bracing at midspan).
- Web crippling calculation based on bearing length = 1 inch.
- Web crippling and shear capacity have not been reduced for punchouts. If web punchouts occur near support members must be checked for reduced shear and web crippling in accordance with the 2007 AISI Specification.
- Values are for simple span conditions.

1 Web-height to thickness ratio exceeds 200. Web stiffeners are required at bearing points.

ProSTUD® ALLOWABLE CEILING SPANS

Deflection Limit L/240

Member	ksi	4 psf						6 psf						10 psf					
		Lateral Support of Compression Flange						Lateral Support of Compression Flange						Lateral Support of Compression Flange					
		Unsupported			Midspan			Unsupported			Midspan			Unsupported			Midspan		
		Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.		
		12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
162PDS125-15	50	7' 3"	6' 8"	5' 11"	7' 10"	7' 2"	6' 3"	6' 5"	5' 11"	5' 3"	6' 10"	6' 3"	5' 5"	5' 6"	5' 1"	4' 5"	5' 9"	5' 3"	4' 7"
250PDS125-15	50	8' 4"	7' 8"	6' 11"	10' 11"	9' 11"	8' 8"	7' 5"	6' 11"	6' 2"	9' 7"	8' 8"	7' 7"	6' 6"	6' 0"	5' 4"	8' 1"	7' 4"	6' 5"
350PDS125-15[1]	50	9' 1"	8' 5"	7' 6"	12' 7"	11' 6"	10' 2"	8' 2"	7' 6"	6' 8"	11' 1"	10' 2"	8' 10"	7' 0"	6' 6"	5' 9"	9' 5"	8' 6"	7' 2"
362PDS125-15[1]	50	9' 2"	8' 6"	7' 7"	12' 9"	11' 8"	10' 3"	8' 3"	7' 7"	6' 9"	11' 3"	10' 3"	8' 11"	7' 1"	6' 7"	5' 9"	9' 6"	8' 7"	7' 3"
400PDS125-15[1]	50	9' 5"	8' 9"	7' 10"	13' 1"	12' 0"	10' 7"	8' 6"	7' 10"	6' 11"	11' 7"	10' 7"	9' 3"	7' 4"	6' 9"	6' 0"	9' 10"	8' 11"	7' 7"
162PDS125-19	65	7' 11"	7' 4"	6' 6"	8' 5"	7' 8"	6' 9"	7' 2"	6' 6"	5' 9"	7' 5"	6' 9"	5' 11"	6' 1"	5' 7"	4' 11"	6' 3"	5' 8"	4' 11"
250PDS125-19	65	9' 1"	8' 5"	7' 7"	11' 11"	10' 10"	9' 6"	8' 2"	7' 7"	6' 10"	10' 5"	9' 6"	8' 3"	7' 2"	6' 8"	5' 11"	8' 10"	8' 0"	7' 0"
350PDS125-19	65	10' 0"	9' 4"	8' 4"	14' 4"	13' 2"	11' 9"	9' 0"	8' 4"	7' 6"	12' 9"	11' 9"	10' 5"	7' 11"	7' 4"	6' 6"	11' 0"	10' 1"	8' 11"
362PDS125-19	65	10' 2"	9' 5"	8' 5"	14' 6"	13' 4"	11' 10"	9' 1"	8' 5"	7' 7"	12' 11"	11' 10"	10' 6"	7' 11"	7' 4"	6' 7"	11' 1"	10' 3"	9' 0"
400PDS125-19	65	10' 5"	9' 8"	8' 8"	14' 11"	13' 9"	12' 3"	9' 5"	8' 8"	7' 10"	13' 4"	12' 3"	10' 11"	8' 2"	7' 7"	6' 10"	11' 6"	10' 7"	9' 4"
162PDS125-22	57	8' 3"	7' 8"	6' 10"	8' 11"	8' 2"	7' 1"	7' 5"	6' 10"	6' 1"	7' 10"	7' 1"	6' 2"	6' 5"	5' 11"	5' 3"	6' 7"	6' 0"	5' 3"
250PDS125-22	57	9' 4"	8' 8"	7' 9"	12' 4"	11' 3"	9' 10"	8' 5"	7' 9"	7' 0"	10' 10"	9' 10"	8' 7"	7' 4"	6' 9"	6' 0"	9' 1"	8' 3"	7' 3"
350PDS125-22	57	10' 2"	9' 6"	8' 6"	14' 8"	13' 6"	11' 10"	9' 2"	8' 6"	7' 8"	13' 0"	11' 10"	10' 6"	8' 1"	7' 5"	6' 8"	11' 1"	10' 2"	8' 11"
362PDS125-22	57	10' 4"	9' 7"	8' 7"	14' 10"	13' 8"	12' 0"	9' 3"	8' 7"	7' 9"	13' 2"	12' 0"	10' 7"	8' 2"	7' 6"	6' 9"	11' 3"	10' 3"	9' 1"
400PDS125-22	57	10' 8"	9' 10"	8' 10"	15' 3"	14' 0"	12' 5"	9' 7"	8' 10"	7' 11"	13' 7"	12' 5"	10' 11"	8' 4"	7' 9"	6' 11"	11' 7"	10' 7"	9' 4"
550PDS125-22[1]	57	11' 9"	10' 11"	9' 10"	16' 10"	15' 7"	13' 11"	10' 7"	9' 10"	8' 9"	15' 1"	13' 11"	12' 4"	9' 3"	8' 7"	7' 8"	13' 0"	11' 11"	10' 6"
600PDS125-22[1]	57	12' 1"	11' 2"	10' 1"	17' 3"	15' 11"	14' 3"	10' 10"	10' 1"	9' 0"	15' 5"	14' 3"	12' 8"	9' 6"	8' 9"	7' 10"	13' 5"	12' 3"	10' 10"
162PDS125-30	33	9' 4"	8' 7"	7' 8"	9' 10"	9' 0"	7' 10"	8' 3"	7' 8"	6' 10"	8' 7"	7' 10"	6' 10"	7' 2"	6' 7"	5' 9"	7' 3"	6' 7"	5' 9"
250PDS125-30	33	10' 4"	9' 7"	8' 6"	13' 8"	12' 5"	10' 10"	9' 3"	8' 6"	7' 8"	11' 11"	10' 10"	9' 6"	8' 0"	7' 5"	6' 8"	10' 1"	9' 2"	8' 0"
350PDS125-30	33	11' 2"	10' 4"	9' 3"	16' 0"	14' 10"	13' 4"	10' 0"	9' 3"	8' 4"	14' 5"	13' 4"	11' 11"	8' 9"	8' 1"	7' 3"	12' 6"	11' 7"	10' 3"
362PDS125-30	33	11' 3"	10' 5"	9' 4"	16' 2"	15' 0"	13' 6"	10' 1"	9' 4"	8' 5"	14' 7"	13' 6"	12' 0"	8' 10"	8' 2"	7' 4"	12' 8"	11' 8"	10' 5"
400PDS125-30	33	11' 7"	10' 9"	9' 8"	16' 8"	15' 6"	13' 11"	10' 5"	9' 8"	8' 8"	15' 0"	13' 11"	12' 5"	9' 1"	8' 5"	7' 7"	13' 1"	12' 0"	10' 9"
550PDS125-30	33	12' 10"	11' 10"	10' 8"	18' 5"	17' 1"	15' 4"	11' 6"	10' 8"	9' 7"	16' 7"	15' 4"	13' 9"	10' 1"	9' 4"	8' 5"	14' 5"	13' 5"	11' 11"
600PDS125-30	33	13' 1"	12' 2"	10' 11"	18' 11"	17' 6"	15' 8"	11' 9"	10' 11"	9' 10"	17' 0"	15' 8"	14' 1"	10' 4"	9' 7"	8' 8"	14' 9"	13' 8"	12' 3"
162PDS125-33	33	9' 9"	9' 0"	8' 0"	10' 4"	9' 4"	8' 2"	8' 8"	8' 0"	7' 1"	9' 0"	8' 2"	7' 2"	7' 6"	6' 10"	6' 0"	7' 7"	6' 11"	6' 0"
250PDS125-33	33	10' 9"	9' 11"	8' 10"	14' 3"	12' 11"	11' 3"	9' 7"	8' 10"	7' 11"	12' 5"	11' 3"	9' 10"	8' 4"	7' 8"	6' 11"	10' 6"	9' 6"	8' 4"
350PDS125-33	33	11' 7"	10' 8"	9' 7"	16' 6"	15' 3"	13' 9"	10' 4"	9' 7"	8' 7"	14' 10"	13' 9"	12' 4"	9' 0"	8' 4"	7' 6"	13' 0"	12' 0"	10' 8"
362PDS125-33	33	11' 8"	10' 9"	9' 8"	16' 8"	15' 5"	13' 11"	10' 5"	9' 8"	8' 8"	15' 0"	13' 11"	12' 6"	9' 1"	8' 5"	7' 7"	13' 1"	12' 1"	10' 10"
400PDS125-33	33	12' 0"	11' 1"	9' 11"	17' 2"	15' 11"	14' 4"	10' 9"	9' 11"	8' 11"	15' 5"	14' 4"	12' 10"	9' 5"	8' 8"	7' 10"	13' 6"	12' 6"	11' 1"
550PDS125-33	33	13' 3"	12' 3"	11' 0"	19' 0"	17' 7"	15' 10"	11' 10"	11' 0"	9' 10"	17' 1"	15' 10"	14' 3"	10' 4"	9' 7"	8' 8"	14' 11"	13' 10"	12' 5"
600PDS125-33	33	13' 6"	12' 6"	11' 3"	19' 6"	18' 1"	16' 3"	12' 2"	11' 3"	10' 1"	17' 6"	16' 3"	14' 7"	10' 7"	9' 10"	8' 10"	15' 4"	14' 2"	12' 8"

Notes:

- For unbraced sections, allowable moment is based on 2007 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be the listed span (completely unbraced). For midspan braced sections, allowable moment based on 2007 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be one-half of the listed span (bracing at midspan).
- Web crippling calculation based on bearing length = 1 inch.
- Web crippling and shear capacity have not been reduced for punchouts. If web punchouts occur near support members must be checked for reduced shear and web crippling in accordance with the 2007 AISI Specification.
- Values are for simple span conditions.

1 Web-height to thickness ratio exceeds 200. Web stiffeners are required at bearing points.

ProSTUD® ALLOWABLE CEILING SPANS

Deflection Limit L/360

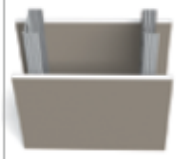
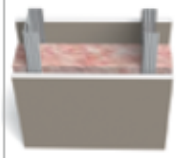
Member	ksi	4 psf						6 psf						10 psf					
		Lateral Support of Compression Flange						Lateral Support of Compression Flange						Lateral Support of Compression Flange					
		Unsupported			Midspan			Unsupported			Midspan			Unsupported			Midspan		
		Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.			Joist spacing (in) o.c.		
		12	16	24	12	16	24	12	16	24	12	16	24	12	16	24	12	16	24
162PDS125-15	50	6' 10"	6' 3"	5' 5"	6' 10"	6' 3"	5' 5"	6' 0"	5' 5"	4' 9"	6' 0"	5' 5"	4' 9"	5' 1"	4' 7"	4' 0"	5' 1"	4' 7"	4' 0"
250PDS125-15	50	8' 4"	7' 8"	6' 11"	9' 7"	8' 8"	7' 7"	7' 5"	6' 11"	6' 2"	8' 4"	7' 7"	6' 8"	6' 6"	6' 0"	5' 4"	7' 1"	6' 5"	5' 7"
350PDS125-15[1]	50	9' 1"	8' 5"	7' 6"	12' 5"	11' 4"	9' 11"	8' 2"	7' 6"	6' 8"	10' 10"	9' 11"	8' 8"	7' 0"	6' 6"	5' 9"	9' 2"	8' 4"	7' 2"
362PDS125-15[1]	50	9' 2"	8' 6"	7' 7"	12' 9"	11' 7"	10' 1"	8' 3"	7' 7"	6' 9"	11' 2"	10' 1"	8' 10"	7' 1"	6' 7"	5' 9"	9' 5"	8' 6"	7' 3"
400PDS125-15[1]	50	9' 5"	8' 9"	7' 10"	13' 1"	12' 0"	10' 7"	8' 6"	7' 10"	6' 11"	11' 7"	10' 7"	9' 3"	7' 4"	6' 9"	6' 0"	9' 10"	8' 11"	7' 7"
162PDS125-19	65	7' 5"	6' 9"	5' 11"	7' 5"	6' 9"	5' 11"	6' 5"	5' 11"	5' 2"	6' 6"	5' 11"	5' 2"	5' 5"	4' 11"	4' 4"	5' 5"	4' 11"	4' 4"
250PDS125-19	65	9' 1"	8' 5"	7' 7"	10' 5"	9' 6"	8' 3"	8' 2"	7' 7"	6' 10"	9' 1"	8' 3"	7' 3"	7' 2"	6' 8"	5' 11"	7' 8"	7' 0"	6' 1"
350PDS125-19	65	10' 0"	9' 4"	8' 4"	13' 8"	12' 5"	10' 10"	9' 0"	8' 4"	7' 6"	11' 11"	10' 10"	9' 6"	7' 11"	7' 4"	6' 6"	10' 1"	9' 2"	8' 0"
362PDS125-19	65	10' 2"	9' 5"	8' 5"	14' 1"	12' 9"	11' 2"	9' 1"	8' 5"	7' 7"	12' 3"	11' 2"	9' 9"	7' 11"	7' 4"	6' 7"	10' 4"	9' 5"	8' 3"
400PDS125-19	65	10' 5"	9' 8"	8' 8"	14' 11"	13' 9"	12' 0"	9' 5"	8' 8"	7' 10"	13' 2"	12' 0"	10' 6"	8' 2"	7' 7"	6' 10"	11' 2"	10' 1"	8' 10"
162PDS125-22	57	7' 10"	7' 1"	6' 2"	7' 10"	7' 1"	6' 2"	6' 10"	6' 2"	5' 5"	6' 10"	6' 2"	5' 5"	5' 9"	5' 3"	4' 7"	5' 9"	5' 3"	4' 7"
250PDS125-22	57	9' 4"	8' 8"	7' 9"	10' 10"	9' 10"	8' 7"	8' 5"	7' 9"	7' 0"	9' 5"	8' 7"	7' 6"	7' 4"	6' 9"	6' 0"	7' 11"	7' 3"	6' 4"
350PDS125-22	57	10' 2"	9' 6"	8' 6"	14' 1"	12' 10"	11' 2"	9' 2"	8' 6"	7' 8"	12' 4"	11' 2"	9' 9"	8' 1"	7' 5"	6' 8"	10' 5"	9' 5"	8' 3"
362PDS125-22	57	10' 4"	9' 7"	8' 7"	14' 6"	13' 2"	11' 6"	9' 3"	8' 7"	7' 9"	12' 8"	11' 6"	10' 1"	8' 2"	7' 6"	6' 9"	10' 8"	9' 8"	8' 6"
400PDS125-22	57	10' 8"	9' 10"	8' 10"	15' 3"	14' 0"	12' 5"	9' 7"	8' 10"	7' 11"	13' 7"	12' 5"	10' 11"	8' 4"	7' 9"	6' 11"	11' 7"	10' 6"	9' 2"
550PDS125-22[1]	57	11' 9"	10' 11"	9' 10"	16' 10"	15' 7"	13' 11"	10' 7"	9' 10"	8' 9"	15' 1"	13' 11"	12' 4"	9' 3"	8' 7"	7' 8"	13' 0"	11' 11"	10' 6"
600PDS125-22[1]	57	12' 1"	11' 2"	10' 1"	17' 3"	15' 11"	14' 3"	10' 10"	10' 1"	9' 0"	15' 5"	14' 3"	12' 8"	9' 6"	8' 9"	7' 10"	13' 5"	12' 3"	10' 10"
162PDS125-30	33	8' 7"	7' 10"	6' 10"	8' 7"	7' 10"	6' 10"	7' 6"	6' 10"	6' 0"	7' 6"	6' 10"	6' 0"	6' 4"	5' 9"	5' 1"	6' 4"	5' 9"	5' 1"
250PDS125-30	33	10' 4"	9' 7"	8' 6"	11' 11"	10' 10"	9' 6"	9' 3"	8' 6"	7' 8"	10' 5"	9' 6"	8' 3"	8' 0"	7' 5"	6' 8"	8' 9"	8' 0"	7' 0"
350PDS125-30	33	11' 2"	10' 4"	9' 3"	15' 6"	14' 1"	12' 4"	10' 0"	9' 3"	8' 4"	13' 6"	12' 4"	10' 9"	8' 9"	8' 1"	7' 3"	11' 5"	10' 4"	9' 1"
362PDS125-30	33	11' 3"	10' 5"	9' 4"	15' 11"	14' 6"	12' 8"	10' 1"	9' 4"	8' 5"	13' 11"	12' 8"	11' 1"	8' 10"	8' 2"	7' 4"	11' 9"	10' 8"	9' 4"
400PDS125-30	33	11' 7"	10' 9"	9' 8"	16' 8"	15' 6"	13' 9"	10' 5"	9' 8"	8' 8"	15' 0"	13' 9"	12' 0"	9' 1"	8' 5"	7' 7"	12' 9"	11' 7"	10' 1"
550PDS125-30	33	12' 10"	11' 10"	10' 8"	18' 5"	17' 1"	15' 4"	11' 6"	10' 8"	9' 7"	16' 7"	15' 4"	13' 9"	10' 1"	9' 4"	8' 5"	14' 5"	13' 5"	11' 11"
600PDS125-30	33	13' 1"	12' 2"	10' 11"	18' 11"	17' 6"	15' 8"	11' 9"	10' 11"	9' 10"	17' 0"	15' 8"	14' 1"	10' 4"	9' 7"	8' 8"	14' 9"	13' 8"	12' 3"
162PDS125-33	33	9' 0"	8' 2"	7' 2"	9' 0"	8' 2"	7' 2"	7' 10"	7' 2"	6' 3"	7' 10"	7' 2"	6' 3"	6' 8"	6' 0"	5' 3"	6' 8"	6' 0"	5' 3"
250PDS125-33	33	10' 9"	9' 11"	8' 10"	12' 5"	11' 3"	9' 10"	9' 7"	8' 10"	7' 11"	10' 10"	9' 10"	8' 7"	8' 4"	7' 8"	6' 11"	9' 2"	8' 4"	7' 3"
350PDS125-33	33	11' 7"	10' 8"	9' 7"	16' 1"	14' 7"	12' 9"	10' 4"	9' 7"	8' 7"	14' 1"	12' 9"	11' 2"	9' 0"	8' 4"	7' 6"	11' 10"	10' 9"	9' 5"
362PDS125-33	33	11' 8"	10' 9"	9' 8"	16' 6"	15' 0"	13' 2"	10' 5"	9' 8"	8' 8"	14' 5"	13' 2"	11' 6"	9' 1"	8' 5"	7' 7"	12' 2"	11' 1"	9' 8"
400PDS125-33	33	12' 0"	11' 1"	9' 11"	17' 2"	15' 11"	14' 3"	10' 9"	9' 11"	8' 11"	15' 5"	14' 3"	12' 5"	9' 5"	8' 8"	7' 10"	13' 2"	12' 0"	10' 6"
550PDS125-33	33	13' 3"	12' 3"	11' 0"	19' 0"	17' 7"	15' 10"	11' 10"	11' 0"	9' 10"	17' 1"	15' 10"	14' 3"	10' 4"	9' 7"	8' 8"	14' 11"	13' 10"	12' 5"
600PDS125-33	33	13' 6"	12' 6"	11' 3"	19' 6"	18' 1"	16' 3"	12' 2"	11' 3"	10' 1"	17' 6"	16' 3"	14' 7"	10' 7"	9' 10"	8' 10"	15' 4"	14' 2"	12' 8"

Notes:

- For unbraced sections, allowable moment is based on 2007 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be the listed span (completely unbraced). For midspan braced sections, allowable moment based on 2007 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be one-half of the listed span (bracing at midspan).
- Web crippling calculation based on bearing length = 1 inch.
- Web crippling and shear capacity have not been reduced for punchouts. If web punchouts occur near support members must be checked for reduced shear and web crippling in accordance with the 2007 AISI Specification.
- Values are for simple span conditions.

1 Web-height to thickness ratio exceeds 200. Web stiffeners are required at bearing points.

ProSTUD® 3-5/8" SOUND ASSEMBLIES

Partition type	Assembly description	STC Rating / Test Report			
		ProSTUD 25 (15mil)	ProSTUD 20 (19mil)	ProSTUD 30MIL	ProSTUD 33MIL
	3-5/8" ProSTUD @ 24" o.c. 1 layer 5/8" Type X GWB on each side	43 TL09-539	38 TL13-190	36 TL13-201	36 TL13-197
	3-5/8" ProSTUD @ 24" o.c. 3-1/2" R-13* unfaced insulation 1 layer 5/8" Type X GWB on each side	48 TL09-540	41 TL13-189	37 TL13-202	37 TL13-196
	3-5/8" ProSTUD @ 24" o.c. 3-1/2" R-13* unfaced insulation 1 layer 5/8" Type X GWB on one side 2 layers 5/8" Type X GWB on the other side	49 TL13-167	44 TL13-188	40 TL13-203	42 TL13-195
	3-5/8" ProSTUD @ 24" o.c. 3-1/2" R-13* unfaced insulation 2 layers 5/8" Type X GWB on each side	54 TL09-538	45 TL13-187	42 TL13-204	45 TL13-194
	3-5/8" ProSTUD @ 24" o.c. 3-1/2" R-13* unfaced insulation RC-Deluxe w/ 1 layer 5/8" Type X GWB on one side 1 layer 5/8" Type X GWB on the other side	53 TL13-183	48 TL13-191	48 TL13-205	48 TL13-198
	3-5/8" ProSTUD @ 24" o.c. 3-1/2" R-13* unfaced insulation RC-Deluxe w/ 2 layers 5/8" Type X GWB on one side 1 layer 5/8" Type X GWB on the other side	59 TL09-543	54 TL13-192	52 TL13-206	54 TL13-199
	3-5/8" ProSTUD @ 24" o.c. 3-1/2" R-13* unfaced insulation RC-Deluxe w/ 2 layers 5/8" Type X GWB on one side 2 layers 5/8" Type X GWB on the other side	62 TL13-181	59 TL13-193	56 TL13-207	58 TL13-200

Notes:

- Sound Assemblies are certified by Western Electro-Acoustic Laboratories.
- NVLAP Accredited for ASTM E90 & E413, ISO Certified.
- See STC test reports at www.clarkdietrich.com/ProSTUD for detailed requirements of construction of wall assembly.

*Values are the same for R-11 insulation.

Contact ClarkDietrich Technical Services at 888-437-3244 for questions about ProSTUD sound assemblies.

ProSTUD 1-5/8" STUD CHASE SOUND ASSEMBLIES

Two parallel rows

Gypsum type	Side A	Side B	Insulation type	Stud spacing	STC Rating ProSTUD 25 (15mil)	Test report	Partition type
5/8" Type X	1 layer	1 layer	R-13" unfaced	24"	55	TL09-590	1 Similar
5/8" Type X	1 layer	2 layers	R-13" unfaced	24"	59	TL09-591	1 Similar
5/8" Type X	2 layers	2 layers	R-13" unfaced	24"	61	TL09-592	1

ProSTUD 2-1/2" STUD CHASE SOUND ASSEMBLIES

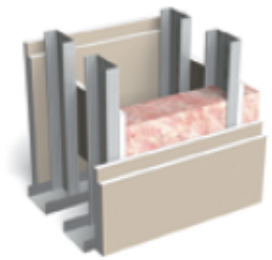
Staggered in opposite walls

Gypsum type	Side A	Side B	Insulation type	Stud spacing	STC Rating ProSTUD 25 (15mil)	Test report	Partition type
5/8" Type X	1 layer	1 layer	R-13" unfaced*	24"	58	TL09-593	2 Similar
5/8" Type X	1 layer	2 layers	R-13" unfaced*	24"	63	TL09-594	2 Similar
5/8" Type X	2 layers	2 layers	R-13" unfaced*	24"	65	TL09-595	2

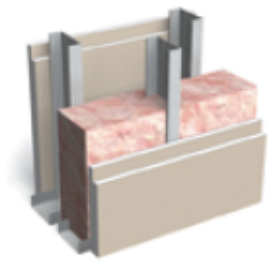
ProSTUD 3-5/8" STUD CHASE SOUND ASSEMBLIES

Staggered studs in 6" track

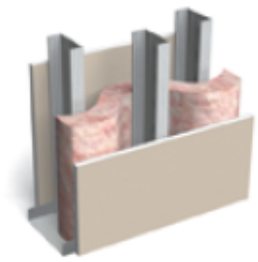
Gypsum type	Side A	Side B	Insulation type	Stud spacing	STC Rating ProSTUD 25 (15mil)	Test report	Partition type
5/8" Type X	1 layer	1 layer	R-13" unfaced	16"	49	TL09-587	3
5/8" Type X	1 layer	2 layers	R-13" unfaced	16"	52	TL09-588	3 Similar
5/8" Type X	2 layers	2 layers	R-13" unfaced	16"	56	TL09-589	3 Similar



Partition Type 1



Partition Type 2



Partition Type 3

Notes:

- Sound Assemblies are certified by Western Electro-Acoustic Laboratories.
- NVLAP Accredited for ASTM E90 & E413, ISO Certified.
- See STC test reports at www.clarkdietrich.com/ProSTUD for detailed requirements of construction of wall assembly.

* Values are the same for R-11 insulation.

Contact ClarkDietrich Technical Services at 888-437-3244 for questions about ProSTUD sound assemblies.

ProSTUD® SINGLE STUD WALL—FIRE ASSEMBLIES[A]

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
U403	2	ProSTUD 20 (19mil)	3-5/8"
U407	1/2 or 1	ProSTUD 25 (15mil)	3-5/8"
U408	2	ProSTUD 20 (19mil)	3-5/8"
U411	2	ProSTUD 25 (15mil)	2-1/2"
U412	2	ProSTUD 25 (15mil)	1-5/8"
U419	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
U421	2	ProSTUD 25 (15mil)	3-5/8"
U431	4	ProSTUD 20 (19mil)	3-5/8"
U435	3 or 4	ProSTUD 25 (15mil)	1-5/8"
U442*	1	ProSTUD 33MIL	2-1/2"
U450	1 or 3	ProSTUD 20 (19mil)	3-5/8"
U451	1	ProSTUD 20 (19mil)	2-1/2"
U454	2	ProSTUD 20 (19mil)	2-1/2"
U463	3 or 4	ProSTUD 20 (19mil)	1-5/8"
U465	1	ProSTUD 20 (19mil)	3-5/8"
U471	1-1/2	ProSTUD 20 (19mil)	3-5/8"
U475	1, 2 or 3	ProSTUD 20 (19mil)	3-5/8"
U478	3	ProSTUD 20 (19mil)	1-5/8"
U484*	2	ProSTUD 33MIL	2-1/2"
U488*	1	ProSTUD 33MIL	2-1/2"
U490	4	ProSTUD 20 (19mil)	2-1/2"
U491	2	ProSTUD 20 (19mil)	3-5/8"
U494	1	ProSTUD 20 (19mil)	2-1/2"
U495	1 or 2	ProSTUD 20 (19mil)	3-5/8"
U496	1	ProSTUD 20 (19mil)	1-5/8"

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
V410	2	ProSTUD 20 (19mil)	1-5/8"
V412	2	ProSTUD 20 (19mil)	3-5/8"
V416	1	ProSTUD 20 (19mil)	3-5/8"
V417	1	ProSTUD 20 (19mil)	3-5/8"
V418	2	ProSTUD 20 (19mil)	1-5/8"
V419	2	ProSTUD 20 (19mil)	2-1/2"
V425	1	ProSTUD 20 (19mil)	2-1/2"
V435	1	ProSTUD 20 (19mil)	3-5/8"
V438	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
V443	4	ProSTUD 20 (19mil)	3-5/8"
V444	1	ProSTUD 20 (19mil)	3-5/8"
V448	1	ProSTUD 20 (19mil)	3-5/8"
V449	2	ProSTUD 20 (19mil)	3-5/8"
V450	1	ProSTUD 25 (15mil)	3-5/8"
V450	2	ProSTUD 25 (15mil)	2-1/2"
V452	1 or 2	ProSTUD 20 (19mil)	3-5/8"
V453*	1-1/2	ProSTUD 33MIL	6"
V461*	1	ProSTUD 33MIL	3-5/8"
V476	1 or 3	ProSTUD 20 (19mil)	3-5/8"
V477	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
V487	2	ProSTUD 20 (19mil)	1-5/8"
V489	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
V498	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
W411	1/2 or 1	ProSTUD 25 (15mil)	3-5/8"
W415	1 or 2	ProSTUD 20 (19mil)	2-1/2"
W424	1	ProSTUD 25 (15mil)	3-5/8"

ProSTUD CHASE OR DOUBLE STUD—FIRE ASSEMBLIES[A]

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
U420	2	ProSTUD 25 (15mil)	1-5/8"
U436	1, 2, or 3	ProSTUD 20 (19mil)	1-5/8"
U444	2	ProSTUD 25 (15mil)	1-5/8"
U445*	1	ProSTUD 33MIL	1-5/8"
U466	1	ProSTUD 20 (19mil)	2-1/2"
U493	2	ProSTUD 25 (15mil)	2-1/2"
V437	1	ProSTUD 20 (19mil)	1-5/8"

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
V442	2	ProSTUD 25 (15mil)	1-5/8"
V469*	1	ProSTUD 33MIL	2-1/2"
V469	2	ProSTUD 20 (19mil)	2-1/2"
V488	1 or 2	ProSTUD 20 (19mil)	2-1/2"
V490*	1 or 2	ProSTUD 33MIL	2-1/2"
V496	1 or 2	ProSTUD 20 (19mil)	2-1/2"
V425	1 or 2	ProSTUD 20 (19mil)	2-1/2"

ProSTUD TABLE 1: MINIMUM DEPTH OF ProSTUD REQUIRED[A]

Hourly rating	Min. stud depth (in)	No. of layers and thickness of gypsum board	UL U419	UL V438	UL V477	UL V489	UL V498
1	2-1/2"	1 layer, 1/2"	—	—	—	✓	—
1	3-5/8"	1 layer, 5/8"	✓	✓	✓	✓	✓
2	1-5/8"	2 layer, 1/2"	✓	✓	✓	✓	✓
2	1-5/8"	2 layer, 5/8"	✓	—	✓	✓	✓
2	2-1/2"	2 layer, 5/8"	—	✓	—	—	—
3	1-5/8"	3 layer, 1/2"	✓	✓	✓	✓	✓
3	1-5/8"	3 layer, 5/8"	✓	✓	✓	✓	✓
4	1-5/8"	4 layer, 1/2"	✓	✓	✓	✓	✓
4	1-5/8"	4 layer, 5/8"	✓	✓	✓	✓	✓

Notes:

[A] See UL listing for detailed requirements of construction of tested assembly.

* ProSTUD meets or exceeds the description of generic stud/track members listed in the UL assembly.

LARR #26019, PAGE 22