



NLL STEEL

F R A M I N G

ProSTUD® and ProTRAK® Technical Data



TABLE OF CONTENTS

3 Profile Information

4 Overview

PHYSICAL & STRUCUTRAL PROPERTIES

5 ProSTUD 25 (15mil)

6 ProSTUD 20 (18mil)

7 ProSTUD 30mil

8 ProSTUD 33mil

9 Allowable Screw Connections

COMPOSITE LIMITING HEIGHTS TABLES

10 ProSTUD 25 (15mil)

11 ProSTUD 20 (18mil)

12 ProSTUD 30mil

13 ProSTUD 33mil

NON-COMPOSITE LIMITING HEIGHTS TABLES

14 Fully Braced

15 Braced at 48" OC

16 Allowable Ceiling Spans

17 Lateral Loads and Wall Heights

DRYWALL FRAMING

WHAT IS AN EQ DRYWALL STUD?

Gauge equivalent drywall framing must meet the minimum performance requirements of conventional drywall framing as defined by the Steel Framing Industry Association (SFIA). The industry's "EQ" product of choice, ProSTUD,[®] employs roll-forming and steel-making technology, exceeding the performance of conventional drywall framing for allowable moment and screw connection strength. When comparing drywall framing systems, it is important to keep in mind Life Safety, System Performance and Connections. The ProSTUD Drywall Framing System provides peace of mind for all three important functions by providing the right selection of products and product data for every application.

ProSTUD[®] PROFILE INFORMATION

Web Widths: 1-5/8", 2-1/2", 3-1/2", 3-5/8", 4", 5-1/2", & 6"

Flange: 1-1/4"

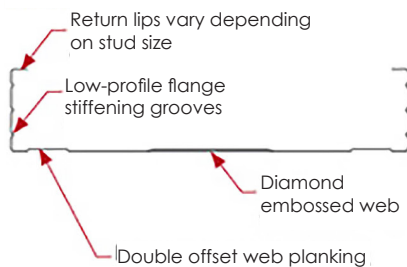
Lip: Varies by stud size

MATERIAL THICKNESSES:

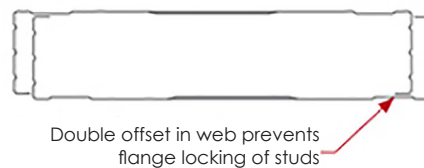
- ProSTUD 25 / 15mil (25ga. EQ) 50ksi
- ProSTUD 20 / 18mil (20ga. EQ) 70ksi
- ProSTUD 30MIL 33ksi
- ProSTUD 33MIL 33ksi



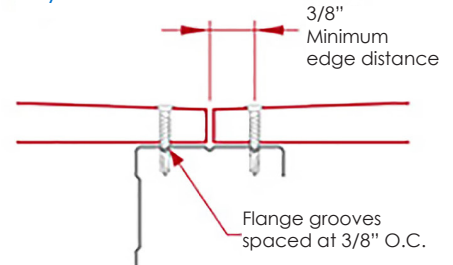
ProSTUD Profile



Shipping / Stacking



Drywall Joint

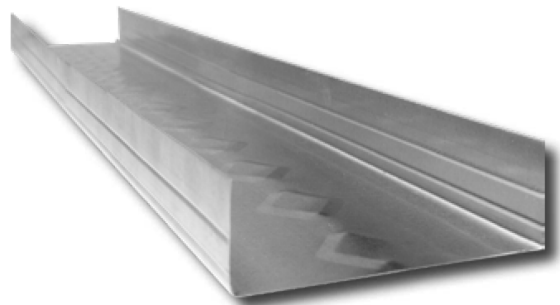


ProTRAK

- Web Widths: 1-5/8", 2-1/2", 3-1/2", 3-5/8", 4", 5-1/2", and 6"
- Legs: 1", 1-1/4", 1-1/2", 2", 2-1/2", and 3"

MATERIAL THICKNESSES:

- ProTRAK 25 / 15mil (25ga EQ) 50ksi
- ProTRAK 20 / 18mil (20ga EQ) 50ksi
- ProTRAK 30MIL 33ksi
- ProTRAK 33MIL 33ksi

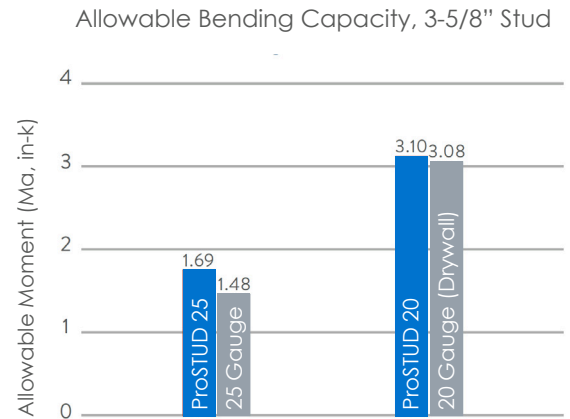


LIFE SAFETY

Life Safety is the primary concern and duty of all construction and design professionals. For interior drywall framing members, bending strength is the criteria most important to the strength of a wall or ceiling. AISI defines bending or flexural strength by Allowable Moment. The corresponding chart compares the bending strength of ProSTUD and conventional drywall studs.

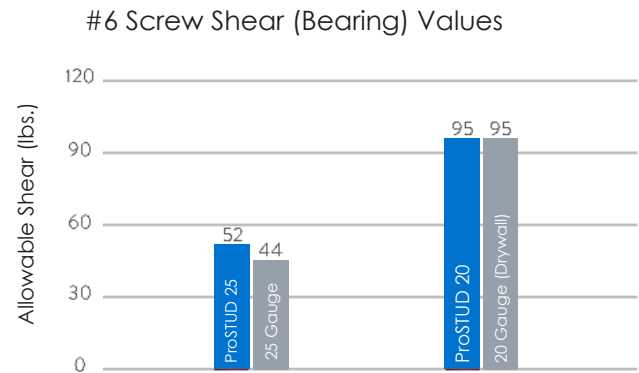
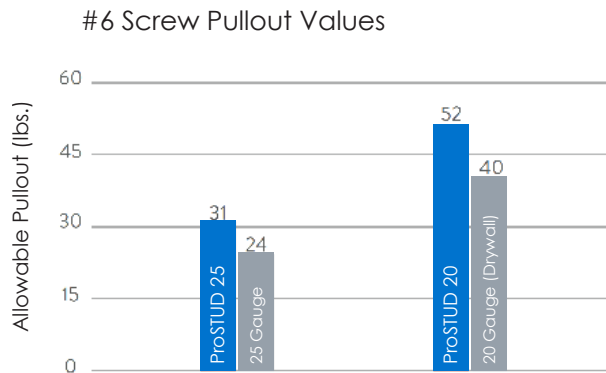
SYSTEM PERFORMANCE

Given ProSTUD's strength and versatility, it is important to know the performance of the ProSTUD under your project's specific criteria. The data contained in this web site will provide guidance in a variety of assemblies and loading criteria, based on current building codes.



CONNECTIONS

In addition to sufficient member strength, it's important to know how connections will perform. Connections can be critical to the capacity and safety of an assembly, but they are also important for the attachment of cabinets, shelving, handrails, and other accessories to steel framing. The tables below compare the screw performance of ProSTUD to conventional drywall framing. This performance relationship to conventional studs can be applied to a variety of fasteners and connections.



Along with connection capacity, conventional framing members are required to meet performance criteria for screw spinout. ProSTUD was developed with screw performance in mind. High-strength steel, flange stiffening grooves, web embossments, and knurling features combine to provide the best performance per thickness, exceeding the requirements of ASTM C645.

PHYSICAL AND STRUCTURAL PROPERTIES

ProSTUD® 25 (15mil) Section Properties

Member	Design Thickness (in)	F _y (ksi)	Return Lip (in)	Area (in ²)	Weight (lb/ft)	w/t	h/t	Gross Section Properties						Effective Section Properties at F _y										Torsional Properties					
								I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	S _y (in ³)	R _y (in)	A _e (in ²)	I _x (in ⁴)	S _x (in ³)	M _{a,local} (in-lbs)	M _{a,dist} (in-lbs)	V _{a,inter} (in-lbs)	V _a (lb)	V _{a,net} (lb)	Axial (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	m	β	L _u (in)
162PDS125-15 ²	0.0158	50	0.250	0.071	0.24	72	96	0.033	0.041	0.688	0.015	0.020	0.466	0.033	0.030	0.024	719	769	508	232	104	980	0.00589	0.009	-1.088	1.369	0.626	0.368	24.8
250PDS125-15 ¹	0.0158	50	0.250	0.085	0.29	72	151	0.088	0.070	1.020	0.018	0.021	0.459	0.033	0.080	0.044	1318	1198	912	147	141	998	0.00704	0.023	-0.959	1.473	0.572	0.576	24.5
350PDS125-15 ¹	0.0158	50	0.250	0.100	0.34	72	214	0.190	0.109	1.377	0.020	0.022	0.444	0.034	0.177	0.054	1629	1691	1113	104	104	1000	0.00835	0.048	-0.849	1.677	0.523	0.744	24.3
362PDS125-15 ¹	0.0158	50	0.250	0.102	0.35	72	222	0.206	0.114	1.420	0.020	0.022	0.442	0.034	0.190	0.056	1689	1752	1152	100	100	1001	0.00852	0.051	-0.837	1.706	0.517	0.760	24.3
400PDS125-15 ¹	0.0158	50	0.250	0.108	0.37	72	246	0.260	0.130	1.549	0.021	0.022	0.436	0.034	0.233	0.062	1870	1932	1268	90	90	1003	0.00901	0.064	-0.803	1.798	0.501	0.800	24.2
550PDS125-15 ²	0.0158	50	0.250	0.132	0.45	72	341	0.553	0.201	2.047	0.022	0.022	0.411	0.034	0.444	0.097	2890	2590	1910	65	65	1007	0.01098	0.132	-0.695	2.201	0.447	0.900	23.8
600PDS125-15 ¹	0.0158	50	0.250	0.140	0.48	72	373	0.683	0.228	2.209	0.023	0.023	0.404	0.034	0.537	0.105	3159	2781	2066	60	60	1007	0.01164	0.161	-0.666	2.343	0.432	0.919	23.6

ProTRAK® 25 (15mil) Section Properties

Member	Design Thickness (in)	F _y (ksi)	Area (in ²)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at F _y					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)	V _a (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	β
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
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

SECTION PROPERTIES TABLE NOTES

- Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-15, North American Standard for Cold-Formed Steel
- 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.
- 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.

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

PHYSICAL AND STRUCTURAL PROPERTIES

ProSTUD® 20 (18mil) Section Properties

Member	Design Thickness (in)	F _y (ksi)	Return Lip (in)	Area (in ²)	Weight (lb/ft)	w/t	h/t	Gross Section Properties						Effective Section Properties at F _y								Torsional Properties							
								I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	S _y (in ³)	R _y (in)	A _e (in ²)	I _x (in ⁴)	S _x (in ³)	M _a _local (in-lbs)	M _a _dist (in-lbs)	M _a _lateral (in-lbs)	V _a (lb)	V _a _net (lb)	Axial (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	m	β	L _u (in)
162PDS125-18	0.0190	70	0.275	0.086	0.29	60	79	0.040	0.050	0.685	0.019	0.024	0.468	0.039	0.035	0.028	1194	1263	678	405	149	1628	0.01032	0.012	-1.105	1.382	0.636	0.361	24.8
250PDS125-18	0.0190	70	0.315	0.104	0.35	60	125	0.107	0.086	1.017	0.023	0.027	0.470	0.043	0.099	0.056	2361	2093	1348	256	204	1796	0.01250	0.031	-1.004	1.504	0.599	0.555	24.5
350PDS125-18	0.0190	70	0.325	0.123	0.42	60	178	0.234	0.134	1.377	0.026	0.029	0.458	0.044	0.217	0.071	2992	3009	1672	181	166	1837	0.01484	0.065	-0.896	1.705	0.551	0.724	24.3
362PDS125-18	0.0190	70	0.325	0.126	0.43	60	185	0.254	0.140	1.421	0.026	0.029	0.456	0.044	0.234	0.074	3102	3118	1728	174	170	1839	0.01512	0.070	-0.884	1.734	0.545	0.740	24.3
400PDS125-18 ¹	0.0190	70	0.340	0.133	0.45	60	204	0.321	0.160	1.551	0.027	0.030	0.453	0.046	0.286	0.084	3532	3511	1977	157	157	1902	0.01605	0.089	-0.859	1.830	0.534	0.780	24.2
550PDS125-18 ²	0.0190	70	0.360	0.163	0.55	60	283	0.688	0.250	2.057	0.031	0.032	0.434	0.046	0.552	0.129	5405	4866	2950	113	113	1947	0.01957	0.185	-0.756	2.234	0.484	0.886	23.8
600PDS125-18 ²	0.0190	70	0.386	0.173	0.59	60	310	0.855	0.285	2.223	0.032	0.033	0.431	0.046	0.669	0.141	5891	5409	3244	104	104	1941	0.02083	0.233	-0.739	2.382	0.476	0.904	23.6

ProTRAK® 20 (18mil) Section Properties

Member	Design Thickness (in)	F _y (ksi)	Area (in ²)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at F _y					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)	V _a (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	β
162PDT125-18	0.0190	50	0.078	0.27	0.040	0.718	0.013	0.411	0.028	0.027	0.022	663	380	0.00943	0.007	-0.879	1.207	0.470
250PDT125-18	0.0190	50	0.095	0.32	0.102	1.038	0.015	0.400	0.029	0.073	0.034	1029	248	0.01143	0.017	-0.770	1.353	0.676
350PDT125-18	0.0190	50	0.114	0.39	0.218	1.384	0.017	0.383	0.029	0.162	0.048	1445	176	0.01371	0.038	-0.676	1.587	0.818
362PDT125-18	0.0190	50	0.116	0.40	0.236	1.426	0.017	0.380	0.029	0.173	0.050	1497	170	0.01400	0.041	-0.666	1.619	0.831
400PDT125-18	0.0190	50	0.123	0.42	0.297	1.550	0.017	0.374	0.029	0.211	0.055	1653	154	0.01486	0.051	-0.638	1.718	0.862
550PDT125-18 ²	0.0190	50	0.152	0.52	0.630	2.036	0.019	0.349	0.029	0.388	0.075	2260	112	0.01828	0.107	-0.548	2.137	0.934
600PDT125-18 ²	0.0190	50	0.161	0.55	0.778	2.195	0.019	0.342	0.029	0.469	0.083	2473	102	0.01943	0.130	-0.523	2.282	0.947
162PDT200-18	0.0190	50	0.107	0.36	0.061	0.753	0.047	0.662	0.028	0.032	0.021	642	380	0.01285	0.024	-1.577	1.869	0.288
250PDT200-18	0.0190	50	0.123	0.42	0.149	1.099	0.054	0.661	0.029	0.088	0.034	1016	248	0.01486	0.063	-1.429	1.920	0.446
350PDT200-18	0.0190	50	0.142	0.48	0.308	1.471	0.060	0.650	0.029	0.175	0.048	1446	176	0.01714	0.134	-1.295	2.065	0.607
362PDT200-18	0.0190	50	0.145	0.49	0.333	1.517	0.061	0.648	0.029	0.188	0.050	1500	170	0.01743	0.145	-1.280	2.088	0.624
400PDT200-18	0.0190	50	0.152	0.52	0.414	1.651	0.063	0.642	0.029	0.230	0.055	1661	154	0.01828	0.181	-1.238	2.161	0.672
550PDT200-18 ²	0.0190	50	0.180	0.61	0.850	2.171	0.068	0.616	0.030	0.444	0.077	2309	112	0.02171	0.377	-1.096	2.509	0.809
600PDT200-18 ²	0.0190	50	0.190	0.65	1.039	2.339	0.070	0.607	0.030	0.532	0.084	2525	102	0.02286	0.461	-1.057	2.637	0.840
162PDT250-18	0.0190	50	0.126	0.43	0.074	0.767	0.085	0.823	0.028	0.035	0.021	635	380	0.01514	0.045	-2.056	2.344	0.231
250PDT250-18	0.0190	50	0.142	0.48	0.180	1.125	0.098	0.830	0.029	0.091	0.034	1011	248	0.01714	0.115	-1.891	2.351	0.353
350PDT250-18	0.0190	50	0.161	0.55	0.369	1.511	0.110	0.824	0.029	0.182	0.048	1444	176	0.01943	0.244	-1.736	2.444	0.496
362PDT250-18	0.0190	50	0.164	0.56	0.398	1.558	0.111	0.823	0.029	0.195	0.050	1498	170	0.01971	0.264	-1.718	2.461	0.512
400PDT250-18	0.0190	50	0.171	0.58	0.492	1.697	0.114	0.818	0.029	0.239	0.055	1661	154	0.02057	0.331	-1.669	2.517	0.560
550PDT250-18 ²	0.0190	50	0.199	0.68	0.997	2.236	0.126	0.795	0.030	0.463	0.077	2315	112	0.02400	0.685	-1.499	2.806	0.715
600PDT250-18 ²	0.0190	50	0.209	0.71	1.214	2.410	0.129	0.786	0.030	0.555	0.085	2533	102	0.02514	0.838	-1.450	2.920	0.753

SECTION PROPERTIES TABLE NOTES

- Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-15, North American Standard for Cold-Formed Steel Framing - Nonstructural 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.

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

PHYSICAL AND STRUCTURAL PROPERTIES

ProSTUD® 20 (18mil) Section Properties

Member	Design Thickness (in)	F _y (ksi)	Return Lip (in)	Area (in ²)	Weight (lb/ft)	w/t	h/t	Gross Section Properties						Effective Section Properties at F _y								Torsional Properties								L _u (in)
								I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	S _y (in ³)	R _y (in)	A _e (in ²)	I _x (in ⁴)	S _x (in ³)	M _{a,local} (in-lbs)	M _{a,dist} (in-lbs)	M _{a,lateral} (in-lbs)	V _{ag} (lb)	V _{a,net} (lb)	Axial (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	m	β		
162PDS125-18	0.0190	70	0.275	0.086	0.29	60	79	0.040	0.050	0.685	0.019	0.024	0.468	0.039	0.035	0.028	1194	1263	678	405	149	1628	0.01032	0.012	-1.105	1.382	0.636	0.361	24.8	
250PDS125-18	0.0190	70	0.315	0.104	0.35	60	125	0.107	0.086	1.017	0.023	0.027	0.470	0.043	0.099	0.056	2361	2093	1348	256	204	1796	0.01250	0.031	-1.004	1.504	0.599	0.555	24.5	
350PDS125-18	0.0190	70	0.325	0.123	0.42	60	178	0.234	0.134	1.377	0.026	0.029	0.458	0.044	0.217	0.071	2992	3009	1672	181	166	1837	0.01484	0.065	-0.896	1.705	0.551	0.724	24.3	
362PDS125-18	0.0190	70	0.325	0.126	0.43	60	185	0.254	0.140	1.421	0.026	0.029	0.456	0.044	0.234	0.074	3102	3118	1728	174	170	1839	0.01512	0.070	-0.884	1.734	0.545	0.740	24.3	
400PDS125-18 ¹	0.0190	70	0.340	0.133	0.45	60	204	0.321	0.160	1.551	0.027	0.030	0.453	0.046	0.286	0.084	3532	3511	1977	157	157	1902	0.01605	0.089	-0.859	1.830	0.534	0.780	24.2	
550PDS125-18 ²	0.0190	70	0.360	0.163	0.55	60	283	0.688	0.250	2.057	0.031	0.032	0.434	0.046	0.552	0.129	5405	4866	2950	113	113	1947	0.01957	0.185	-0.756	2.234	0.484	0.886	23.8	
600PDS125-18 ²	0.0190	70	0.386	0.173	0.59	60	310	0.855	0.285	2.223	0.032	0.033	0.431	0.046	0.669	0.141	5891	5409	3244	104	104	1941	0.02083	0.233	-0.739	2.382	0.476	0.904	23.6	

ProTRAK® 30mil Section Properties

Member	Design Thickness (in)	F _y (ksi)	Area (in ²)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at F _y					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)	V _a (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	β
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
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

SECTION PROPERTIES TABLE NOTES

- Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-15, North American Standard for Cold-Formed Steel Framing - Nonstructural 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.

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

PHYSICAL AND STRUCTURAL PROPERTIES

ProSTUD® 33mil Section Properties

Member	Design Thickness (in)	F _y (ksi)	Return Lip (in)	Area (in ²)	Weight (lb/ft)	w/t	h/t	Gross Section Properties						Effective Section Properties at F _y										Torsional Properties						L _w (in)
								I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	S _y (in ³)	R _y (in)	A _e (in ²)	I _x (in ⁴)	S _x (in ³)	M _{u,local} (in-lbs)	M _{u,dist} (in-lbs)	M _{u,lateral} (in-lbs)	V _u (lb)	V _{u,net} (lb)	Axial (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _c (in)	R _c (in)	m	β		
162PDS125-33	0.0346	33	0.250	0.152	0.52	32	43	0.070	0.086	0.679	0.032	0.041	0.456	0.114	0.070	0.078	1541	1657	1326	632	123	2244	0.06059	0.019	-1.065	1.344	0.614	0.371	30.8	
250PDS125-33	0.0346	33	0.250	0.182	0.62	32	68	0.186	0.149	1.010	0.037	0.043	0.449	0.125	0.186	0.138	2735	2697	2295	1007	431	2499	0.07267	0.046	-0.937	1.449	0.560	0.582	30.1	
350PDS125-33	0.0346	33	0.250	0.217	0.74	32	97	0.404	0.231	1.366	0.041	0.045	0.435	0.126	0.404	0.192	3793	3948	3138	1024	507	2522	0.08648	0.098	-0.828	1.655	0.511	0.750	29.7	
362PDS125-33	0.0346	33	0.250	0.221	0.75	32	100	0.439	0.242	1.409	0.041	0.045	0.433	0.127	0.439	0.200	3943	4107	3257	1024	541	2531	0.08820	0.106	-0.816	1.685	0.505	0.766	29.6	
400PDS125-33	0.0346	33	0.250	0.234	0.80	32	111	0.553	0.277	1.538	0.043	0.045	0.426	0.128	0.553	0.222	4394	4584	3613	957	602	2553	0.09338	0.132	-0.783	1.777	0.490	0.806	29.5	
550PDS125-33	0.0346	33	0.250	0.286	0.97	32	155	1.184	0.430	2.035	0.046	0.047	0.402	0.130	1.167	0.362	7149	6439	5772	689	689	2598	0.11409	0.272	-0.676	2.182	0.436	0.904	28.9	
600PDS125-33	0.0346	33	0.250	0.303	1.03	32	169	1.463	0.488	2.196	0.047	0.047	0.394	0.130	1.428	0.399	7875	7021	6317	630	630	2606	0.12100	0.332	-0.647	2.323	0.421	0.922	28.6	

ProTRAK® 33mil Section Properties

Member	Design Thickness (in)	F _y (ksi)	Area (in ²)	Weight (lb/ft)	Gross Section Properties				Effective Section Properties at F _y					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)	V _u (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	β
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
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

SECTION PROPERTIES TABLE NOTES

- Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-15, North American Standard for Cold-Formed Steel Framing - Nonstructural 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.
- Web-height to thickness ratio exceeds 200.
 - Web-height-to thickness ratio exceeds 260.

ProSTUD® ALLOWABLE SCREW CONNECTIONS

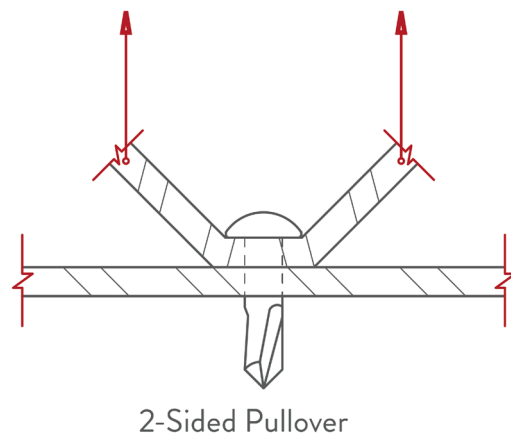
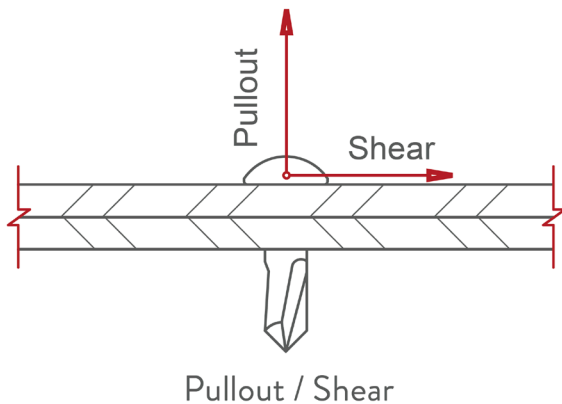
ProSTUD®Screw Design Values

Designation	Thickness, Mils	Design Thickness, in	Yield, Fy	Ultimate, Fu	#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
PDS125-18	18	0.0190	70	70	95	104	208	52	100	104	208	57	104	104	208	62
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, in	Yield, Fy	Ultimate, Fu	#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
PDS125-18	18	0.0190	70	70	112	113	226	72	119	113	226	81	128	136	272	94
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 S100-12 Specification.
- When connecting materials of different steel thicknesses or tensile strengths, use the lowest values. Tabulated values assume two sheets of equal thickness are connected.
- Screw shear and tension capacities were 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).
- 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

ProSTUD® 25 (15mil) Composite Limiting Heights - 5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing	5 psf			7.5 psf			10 psf		
				(inches)	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"	---
				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"
				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"	---
3-5/8"	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"
				16	19'5"f	15'6"	13'7"	15'10"f	13'7"	11'10"	13'9"f	12'4"	10'7"
				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"
				16	20'3"f	16'4"	14'4"	16'6"f	14'4"	12'6"	14'4"f	13'0"	11'3"
				24	16'6"f	14'4"	12'6"	13'6"f	12'6"	10'8"	11'8"f	11'3"	9'6"
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"
				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"

TABLE NOTES

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2015.
- 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 Type X Gypsum Board from the following manufacturers: American, CertainTeed, Georgia Pacific, Continental, National, PABCO, 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 using minimum No. 6 Type S Drywall screws spaced as listed below:
- Screws spaced a maximum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
- Screws spaced a maximum 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.
- 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 the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® COMPOSITE LIMITING HEIGHTS

ProSTUD® 20 (18mil) 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		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1-5/8"	ProSTUD20 162PDS125-18	0.019	70	12	13'2"	11'5"	10'0"	11'6"	10'0"	8'5"	10'6"	8'9"	---
				16	12'10"	11'1"	9'9"	11'2"	9'8"	7'11"	10'2"	8'4"	---
				24	11'10"	10'3"	8'6"	10'4"	8'5"	---	9'2"	---	---
2-1/2"	ProSTUD20 250PDS125-18	0.019	70	12	17'5"	14'8"	12'11"	15'3"	12'10"	11'3"	13'10"	11'8"	10'3"
				16	16'8"	14'0"	12'4"	14'6"	12'3"	10'9"	13'2"	11'2" f	9'9"
				24	15'2"	12'10"	11'3"	13'2" f	11'2"	9'10"	11'5" f	10'2"	8'5"
3-5/8"	ProSTUD20 362PDS125-18	0.019	70	12	22'0"	18'2"	15'8"	19'3"	15'10"	13'8"	17'6"	14'5"	12'5"
				16	20'6"	16'10"	14'7"	17'11"	14'9"	12'9"	16'3"	13'5"	11'6"
				24	18'4"	15'1"	13'0"	15'11" f	13'2"	11'4"	13'9" f	12'0"	10'1"
4"	ProSTUD20 400PDS125-18	0.019	70	12	22'9"	18'8"	16'4"	19'11"	16'4"	14'3"	18'1"	14'10"	13'0"
				16	21'4"	17'7"	15'4"	18'8"	15'4"	13'5"	16'11"	13'11"	12'2"
				24	19'3"	15'10"	13'10"	16'7" f	13'10"	12'1"	14'4" f	12'6"	10'9"
6"	ProSTUD20 600PDS125-18	0.019	70	12	32'1"	25'6"	22'3"	28'1"	22'3"	19'5"	24'4" f	20'3"	17'8"
				16	29'10"	23'8"	20'8"	24'10" f	20'8"	18'1"	21'6" f	18'9"	16'5"
				24	25'5" f	21'1"	18'5"	20'9" f	18'5"	16'1"	18'0" f	16'9"	14'6"

TABLE NOTES

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2015.
- 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 Type X Gypsum Board from the following manufacturers: American, CertainTeed, Georgia Pacific, Continental, National, PABCO, 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 using minimum No. 6 Type S Drywall screws spaced as listed below:
- Screws spaced a maximum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
- Screws spaced a maximum 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.
- 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 the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® COMPOSITE LIMITING HEIGHTS

ProSTUD® 30mil Composite Limiting Heights - 5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing	5 psf			7.5 psf			10 psf		
				(inches)	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"
				16	14' 9"	11' 9"	10' 3"	12' 11"	10' 3"	8' 8"	11' 9"	9' 2"	---
				24	12' 11"	10' 3"	8' 8"	11' 3"	8' 8"	---	10' 3"	---	---
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"
				16	17' 11"	14' 9"	13' 0"	15' 8"	12' 11"	11' 4"	14' 3"	11' 9"	10' 4"
				24	15' 8"	12' 11"	11' 4"	13' 8" f	11' 3"	9' 11"	12' 5"	10' 3"	8' 8"
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	23' 4"	18' 6"	16' 2"	20' 5"	16' 2"	14' 2"	18' 6"	14' 8"	12' 10"
				24	20' 5"	16' 2"	14' 2"	17' 10"	14' 2"	12' 3"	16' 2"	12' 10"	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	24' 11"	19' 10"	17' 4"	21' 9"	17' 4"	15' 1"	19' 10"	15' 9"	13' 9"
				24	21' 9"	17' 4"	15' 1"	19' 0"	15' 1"	13' 2"	17' 4"	13' 9"	11' 10"
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"
				16	33' 3"	26' 5"	23' 1"	29' 1"	23' 1"	20' 2"	26' 5"	20' 11"	18' 4"
				24	29' 1"	23' 1"	20' 2"	25' 5"	20' 2"	17' 7"	22' 6" f	18' 4"	---

TABLE NOTES

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2015.
- 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 Type X Gypsum Board from the following manufacturers: American, CertainTeed, Georgia Pacific, Continental, National, PABCO, 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 using minimum No. 6 Type S Drywall screws spaced as listed below:
- Screws spaced a maximum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
- Screws spaced a maximum 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.
- 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 the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® COMPOSITE LIMITING HEIGHTS

ProSTUD® 33mil Composite Limiting Heights - 5/8" Type X Gypsum Board

Width	Stud Member	Design Thickness (in)	Yield Strength (ksi)	Spacing	5 psf			7.5 psf			10 psf		
				(inches)	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"
				16	15'6"	12'3"	10'9"	13'6"	10'9"	9'3"	12'3"	9'9"	---
				24	13'6"	10'9"	9'3"	11'10"	9'3"	---	10'9"	---	---
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"
				16	18'6"	15'2"	13'5"	16'2"	13'3"	11'8"	14'8"	12'1"	10'7"
				24	16'2"	13'3"	11'8"	14'1"	11'7"	10'3"	12'10"	10'7"	9'1"
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	24'2"	19'2"	16'9"	21'2"	16'9"	14'8"	19'2"	15'3"	13'4"
				24	21'2"	16'9"	14'8"	18'5"	14'8"	12'10"	16'9"	13'4"	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"
				16	25'3"	20'8"	18'3"	22'1"	18'1"	15'11"	20'1"	16'5"	14'6"
				24	22'1"	18'1"	15'11"	19'3"	15'10"	13'11"	17'6"	14'4"	12'8"
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"
				16	33'3"	27'4"	24'1"	29'1"	23'10"	21'0"	26'5"	21'8"	19'1"
				24	29'1"	23'10"	21'0"	25'5"	20'10"	18'4"	23'1"	18'11"	---

TABLE NOTES

- Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2015.
- 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 Type X Gypsum Board from the following manufacturers: American, CertainTeed, Georgia Pacific, Continental, National, PABCO, 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 using minimum No. 6 Type S Drywall screws spaced as listed below:
- Screws spaced a maximum of 16 in on-center to framing members spaced at 16 in or 12 in on-center.
- Screws spaced a maximum 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.
- 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 the height value indicates that shear/end reaction controls the allowable wall height.

ProSTUD® NON-COMPOSITE LIMITING HEIGHTS

ProSTUD® NON-COMPOSITE LIMITING HEIGHTS													
Depth (in)	Stud member	Design thickness (in)	Yield strength (ksi)	Spacing o.c. (in)	Lateral Load (psf)								
					5psf			7.5psf			10psf		
					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	9' 2"	7' 4"	6' 4"	8' 0"	6' 4"	5' 7"	6' 11"	5' 9"	5' 1"
		0.0158	50	16	8' 4"	6' 8"	5' 9"	6' 11"	5' 9"	5' 1"	6' 0"	5' 3"	4' 7"
		0.0158	50	24	6' 11"	5' 9"	5' 1"	5' 8"	5' 1"	4' 5"	4' 11"	4' 7"	4' 0"
	ProSTUD 20 162PDS125-18	0.0190	70	12	9' 9"	7' 9"	6' 9"	8' 6"	6' 9"	5' 11"	7' 9"	6' 2"	5' 4"
		0.0190	70	16	8' 10"	7' 0"	6' 2"	7' 9"	6' 2"	5' 4"	7' 0"	5' 7"	4' 10"
		0.0190	70	24	7' 9"	6' 2"	5' 4"	6' 9"	5' 4"	4' 8"	6' 2"	4' 10"	4' 3"
	ProSTUD 30MIL 162PDS125-30	0.0312	33	12	11' 10"	9' 5"	8' 3"	10' 4"	8' 3"	7' 2"	9' 5"	7' 6"	6' 6"
		0.0312	33	16	10' 9"	8' 7"	7' 6"	9' 5"	7' 6"	6' 6"	8' 2"	6' 9"	5' 11"
		0.0312	33	24	9' 5"	7' 6"	6' 6"	7' 8"	6' 6"	5' 8"	6' 8"	5' 11"	5' 2"
	ProSTUD 33MIL 162PDS125-33	0.0346	33	12	12' 3"	9' 9"	8' 6"	10' 8"	8' 6"	7' 5"	9' 9"	7' 9"	6' 9"
		0.0346	33	16	11' 2"	8' 10"	7' 9"	9' 9"	7' 9"	6' 9"	8' 9"	7' 0"	6' 1"
		0.0346	33	24	9' 9"	7' 9"	6' 9"	8' 3"	6' 9"	5' 11"	7' 2"	6' 1"	5' 4"
2-1/2	ProSTUD 25 250PDS125-15	0.0158	50	12	12' 8"	10' 2"	8' 11"	10' 4"	8' 11"	7' 9"	8' 11"	8' 1"	7' 1"
		0.0158	50	16	10' 11"	9' 3"	8' 1"	8' 11"	8' 1"	7' 1"	7' 9"	7' 4"	6' 5"
		0.0158	50	24	8' 11"	8' 1"	7' 1"	7' 4"	7' 1"	6' 2"	6' 4"	6' 4"	5' 7"
	ProSTUD 20 250PDS125-18	0.0190	70	12	13' 9"	10' 11"	9' 6"	12' 0"	9' 6"	8' 4"	10' 11"	8' 8"	7' 7"
		0.0190	70	16	12' 6"	9' 11"	8' 8"	10' 11"	8' 8"	7' 7"	9' 11"	7' 10"	6' 10"
		0.0190	70	24	10' 11"	8' 8"	7' 7"	9' 6"	7' 7"	6' 7"	8' 4"	6' 10"	6' 0"
	ProSTUD 30MIL 250PDS125-30	0.0312	33	12	16' 5"	13' 0"	11' 4"	14' 4"	11' 4"	9' 11"	12' 6"	10' 4"	9' 0"
		0.0312	33	16	14' 11"	11' 10"	10' 4"	12' 6"	10' 4"	9' 0"	10' 10"	9' 5"	8' 2"
		0.0312	33	24	12' 6"	10' 4"	9' 0"	10' 3"	9' 0"	7' 11"	8' 10"	8' 2"	7' 2"
	ProSTUD 33MIL 250PDS125-33	0.0346	33	12	16' 11"	13' 5"	11' 9"	14' 10"	11' 9"	10' 3"	13' 5"	10' 8"	9' 4"
		0.0346	33	16	15' 5"	12' 3"	10' 8"	13' 5"	10' 8"	9' 4"	11' 7"	9' 8"	8' 6"
		0.0346	33	24	13' 5"	10' 8"	9' 4"	10' 11"	9' 4"	8' 2"	9' 6"	8' 6"	7' 5"
3-5/8	ProSTUD 25* 362PDS125-15	0.0158	50	12	15' 0"	13' 7"	11' 10"	12' 3"	11' 10"	10' 4"	10' 7"	10' 7"	9' 5"
		0.0158	50	16	13' 0"	12' 4"	10' 9"	10' 7"	10' 7"	9' 5"	9' 2"	9' 2"	8' 6"
		0.0158	50	24	10' 7"	10' 7"	9' 5"	8' 8"	8' 8"	8' 3"	7' 6"	7' 6"	7' 5"
	ProSTUD 20 362PDS125-18	0.0190	70	12	18' 4"	14' 6"	12' 8"	16' 0"	12' 8"	11' 1"	14' 5"	11' 6"	10' 1"
		0.0190	70	16	16' 8"	13' 2"	11' 6"	14' 5"	11' 6"	10' 1"	12' 5"	10' 6"	9' 2"
		0.0190	70	24	14' 5"	11' 6"	10' 1"	11' 9"	10' 1"	8' 10"	10' 2"	9' 2"	8' 0"
	ProSTUD 30MIL 362PDS125-30	0.0312	33	12	21' 2"	17' 4"	15' 2"	17' 3"	15' 2"	13' 3"	15' 0"	13' 9"	12' 0"
		0.0312	33	16	18' 4"	15' 9"	13' 9"	15' 0"	13' 9"	12' 0"	12' 11"	12' 6"	10' 11"
		0.0312	33	24	15' 0"	13' 9"	12' 0"	12' 3"	12' 0"	10' 6"	10' 7"	10' 7"	9' 6"
	ProSTUD 33MIL 362PDS125-33	0.0346	33	12	22' 7"	17' 11"	15' 8"	18' 9"	15' 8"	13' 8"	16' 3"	14' 3"	12' 5"
		0.0346	33	16	19' 10"	16' 3"	14' 3"	16' 3"	14' 3"	12' 5"	14' 0"	12' 11"	11' 3"
		0.0346	33	24	16' 3"	14' 3"	12' 5"	13' 3"	12' 5"	10' 10"	11' 6"	11' 3"	9' 10"
4	ProSTUD 25* 400PDS125-15	0.0158	50	12	15' 9"	14' 6"	12' 8"	12' 11"	12' 8"	11' 1"	11' 2"	11' 2"	10' 1"
		0.0158	50	16	13' 8"	13' 2"	11' 6"	11' 2"	11' 2"	10' 1"	9' 8"	9' 8"	9' 2"
		0.0158	50	24	11' 2"	11' 2"	10' 1"	9' 1"	9' 1"	8' 9"	7' 11"	7' 11"	7' 11"
	ProSTUD 20* 400PDS125-18	0.0190	70	12	19' 7"	15' 6"	13' 7"	17' 1"	13' 7"	11' 10"	15' 4"	12' 4"	10' 9"
		0.0190	70	16	17' 9"	14' 1"	12' 4"	15' 4"	12' 4"	10' 9"	13' 3"	11' 2"	9' 9"
		0.0190	70	24	15' 4"	12' 4"	10' 9"	12' 6"	10' 9"	9' 5"	10' 10"	9' 9"	8' 7"
	ProSTUD 30MIL 400PDS125-30	0.0312	33	12	22' 4"	18' 8"	16' 4"	18' 3"	16' 4"	14' 3"	15' 9"	14' 10"	13' 0"
		0.0312	33	16	19' 4"	17' 0"	14' 10"	15' 9"	14' 10"	13' 0"	13' 8"	13' 6"	11' 9"
		0.0312	33	24	15' 9"	14' 10"	13' 0"	12' 11"	12' 11"	11' 4"	11' 2"	11' 2"	10' 3"
	ProSTUD 33MIL 400PDS125-33	0.0346	33	12	24' 2"	19' 4"	16' 11"	19' 9"	16' 11"	14' 9"	17' 1"	15' 4"	13' 5"
		0.0346	33	16	21' 0"	17' 7"	15' 4"	17' 1"	15' 4"	13' 5"	14' 10"	13' 11"	12' 2"
		0.0346	33	24	17' 1"	15' 4"	13' 5"	14' 0"	13' 5"	11' 9"	12' 1"	12' 1"	10' 8"
6	ProSTUD 25* 600PDS125-15	0.0158	50	12	19' 3"	19' 2"	16' 9"	15' 9"	15' 9"	14' 8"	11' 11"	11' 11"	11' 11"
		0.0158	50	16	16' 8"	16' 8"	15' 3"	11' 11"	11' 11"	11' 11"	8' 11"	8' 11"	8' 11"
		0.0158	50	24	11' 11"	11' 11"	11' 11"	7' 11"	7' 11"	7' 11"	6' 0"	6' 0"	6' 0"
	ProSTUD 20* 600PDS125-18	0.0190	70	12	26' 0"	20' 8"	18' 0"	21' 11"	18' 0"	15' 9"	19' 0"	16' 4"	14' 4"
		0.0190	70	16	23' 3"	18' 9"	16' 4"	19' 0"	16' 4"	14' 4"	15' 7"	14' 11"	13' 0"
		0.0190	70	24	19' 0"	16' 4"	14' 4"	13' 10"	13' 10"	12' 6"	10' 5"	10' 5"	10' 5"
	ProSTUD 30MIL 600PDS125-30	0.0312	33	12	28' 4"	25' 7"	22' 4"	23' 2"	22' 4"	19' 7"	20' 1"	20' 1"	17' 9"
		0.0312	33	16	24' 7"	23' 3"	20' 4"	20' 1"	20' 1"	17' 9"	17' 4"	17' 4"	16' 2"
		0.0312	33	24	20' 1"	20' 1"	17' 9"	16' 4"	16' 4"	15' 6"	14' 2"	14' 2"	14' 1"
	ProSTUD 33MIL 600PDS125-33	0.0346	33	12	30' 7"	26' 7"	23' 2"	25' 0"	23' 2"	20' 3"	21' 8"	21' 1"	18' 5"
		0.0346	33	16	26' 6"	24' 1"	21' 1"	21' 8"	21' 1"	18' 5"	18' 9"	18' 9"	16' 9"
		0.0346	33	24	21' 8"	21' 1"	18' 5"	17' 8"	17' 8"	16' 1"	15' 4"	15' 4"	14' 7"

TABLE NOTES

- Heights are based on AISI S100-12, North American Specification and AISI S220-15, North American Standard for Cold-Formed Steel Framing --Nonstructural Members, using steel properties alone.
- Above listed Non-Composite Limiting Heights are applicable when the unbraced length is less than or equal to L_u .
- Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
- *Web stiffeners are required at bearing points.

ProSTUD® NON-COMPOSITE LIMITING HEIGHTS

ProSTUD® NON-COMPOSITE LIMITING HEIGHTS												
Depth (in)	Stud member	Design thickness (in)	Yield strength (ksi)	Spacing o.c. (in)	Lateral Load (psf)							
					5psf			7.5psf			10psf	
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/360
1-5/8	ProSTUD 25 162PDS125-15	0.0158	50	12	8' 1"	7' 4"	6' 4"	6' 7"	6' 4"	5' 7"	5' 9"	5' 1"
		0.0158	50	16	7' 0"	6' 8"	5' 9"	5' 9"	5' 9"	5' 1"	4' 11"	4' 7"
		0.0158	50	24	5' 9"	5' 9"	5' 1"	4' 8"	4' 8"	4' 5"	4' 0"	4' 0"
	ProSTUD 20 162PDS125-18	0.0190	70	12	9' 6"	7' 9"	6' 9"	7' 9"	6' 9"	5' 11"	6' 9"	5' 4"
		0.0190	70	16	8' 3"	7' 0"	6' 2"	6' 9"	6' 2"	5' 4"	5' 10"	4' 10"
		0.0190	70	24	6' 9"	6' 2"	5' 4"	5' 6"	5' 4"	4' 8"	4' 9"	4' 3"
	ProSTUD 30MIL 162PDS125-30	0.0312	33	12	11' 10"	9' 5"	8' 3"	10' 3"	8' 3"	7' 2"	8' 11"	6' 6"
		0.0312	33	16	10' 9"	8' 7"	7' 6"	8' 11"	7' 6"	6' 6"	7' 8"	6' 9"
		0.0312	33	24	8' 11"	7' 6"	6' 6"	7' 3"	6' 6"	5' 8"	6' 3"	5' 2"
	ProSTUD 33MIL 162PDS125-33	0.0346	33	12	12' 3"	9' 9"	8' 6"	10' 8"	8' 6"	7' 5"	9' 5"	6' 9"
		0.0346	33	16	11' 2"	8' 10"	7' 9"	9' 5"	7' 9"	6' 9"	8' 2"	7' 9"
		0.0346	33	24	9' 5"	7' 9"	6' 9"	7' 8"	6' 9"	5' 11"	6' 8"	5' 4"
2-1/2	ProSTUD 25 250PDS125-15	0.0158	50	12	10' 5"	10' 2"	8' 11"	8' 6"	8' 6"	7' 9"	7' 4"	7' 1"
		0.0158	50	16	9' 0"	9' 0"	8' 1"	7' 4"	7' 4"	7' 1"	6' 5"	6' 5"
		0.0158	50	24	7' 4"	7' 4"	7' 1"	6' 0"	6' 0"	6' 0"	5' 3"	5' 3"
	ProSTUD 20 250PDS125-18	0.0190	70	12	13' 5"	10' 11"	9' 6"	10' 11"	9' 6"	8' 4"	9' 6"	8' 7"
		0.0190	70	16	11' 7"	9' 11"	8' 8"	9' 6"	8' 8"	7' 7"	8' 3"	7' 10"
		0.0190	70	24	9' 6"	8' 8"	7' 7"	7' 9"	7' 7"	6' 7"	6' 8"	6' 0"
	ProSTUD 30MIL 250PDS125-30	0.0312	33	12	16' 5"	13' 0"	11' 4"	13' 8"	11' 4"	9' 11"	11' 10"	10' 4"
		0.0312	33	16	14' 6"	11' 10"	10' 4"	11' 10"	10' 4"	9' 0"	10' 3"	9' 5"
		0.0312	33	24	11' 10"	10' 4"	9' 0"	9' 8"	9' 0"	7' 11"	8' 4"	8' 2"
	ProSTUD 33MIL 250PDS125-33	0.0346	33	12	16' 11"	13' 5"	11' 5"	14' 4"	11' 9"	10' 3"	12' 5"	10' 8"
		0.0346	33	16	15' 3"	12' 3"	10' 8"	12' 5"	10' 8"	9' 4"	10' 9"	9' 8"
		0.0346	33	24	12' 5"	10' 8"	9' 4"	10' 2"	9' 4"	8' 2"	8' 10"	7' 5"
3-5/8	ProSTUD 25* 362PDS125-15	0.0158	50	12	12' 5"	12' 5"	11' 10"	10' 1"	10' 1"	10' 1"	8' 9"	8' 9"
		0.0158	50	16	10' 9"	10' 9"	10' 9"	8' 9"	8' 9"	8' 9"	7' 7"	7' 7"
		0.0158	50	24	8' 9"	8' 9"	8' 9"	7' 2"	7' 2"	7' 2"	6' 2"	6' 2"
	ProSTUD 20 362PDS125-18	0.0190	70	12	15' 2"	14' 6"	12' 8"	12' 5"	12' 5"	11' 1"	10' 9"	10' 1"
		0.0190	70	16	13' 2"	13' 2"	11' 6"	10' 9"	10' 9"	10' 1"	9' 4"	9' 2"
		0.0190	70	24	10' 9"	10' 9"	10' 1"	8' 9"	8' 9"	8' 9"	7' 7"	7' 7"
	ProSTUD 30MIL 362PDS125-30	0.0312	33	12	20' 0"	17' 4"	15' 9"	16' 4"	15' 2"	13' 3"	14' 1"	13' 9"
		0.0312	33	16	17' 3"	15' 9"	13' 9"	14' 1"	13' 9"	12' 0"	12' 3"	10' 11"
		0.0312	33	24	14' 1"	13' 9"	12' 0"	11' 6"	11' 6"	10' 0"	10' 0"	9' 6"
	ProSTUD 33MIL 362PDS125-33	0.0346	33	12	21' 3"	17' 11"	15' 8"	17' 4"	15' 8"	13' 8"	15' 0"	14' 3"
		0.0346	33	16	18' 5"	16' 3"	14' 3"	15' 0"	14' 3"	12' 5"	13' 0"	12' 11"
		0.0346	33	24	15' 0"	14' 3"	12' 5"	12' 3"	12' 3"	10' 10"	10' 8"	9' 10"
4	ProSTUD 25* 400PDS125-15	0.0158	50	12	13' 0"	13' 0"	12' 8"	10' 8"	10' 8"	10' 8"	9' 2"	9' 2"
		0.0158	50	16	11' 3"	11' 3"	11' 3"	9' 2"	9' 2"	9' 2"	8' 0"	8' 0"
		0.0158	50	24	9' 2"	9' 2"	9' 2"	7' 6"	7' 6"	7' 6"	6' 6"	6' 6"
	ProSTUD 20* 400PDS125-18	0.0190	70	12	16' 3"	15' 6"	13' 7"	13' 3"	13' 3"	11' 10"	11' 6"	10' 9"
		0.0190	70	16	14' 1"	14' 1"	12' 4"	11' 6"	11' 6"	10' 9"	9' 11"	9' 9"
		0.0190	70	24	11' 6"	11' 6"	10' 9"	9' 4"	9' 4"	9' 4"	8' 1"	8' 1"
	ProSTUD 30MIL 400PDS125-30	0.0312	33	12	21' 1"	18' 8"	16' 4"	17' 2"	16' 4"	14' 3"	14' 11"	14' 10"
		0.0312	33	16	18' 3"	17' 0"	14' 10"	14' 11"	14' 10"	13' 0"	12' 11"	11' 9"
		0.0312	33	24	14' 11"	14' 10"	13' 0"	12' 2"	12' 2"	11' 4"	10' 6"	10' 3"
	ProSTUD 33MIL 400PDS125-33	0.0346	33	12	22' 5"	19' 4"	16' 11"	18' 4"	16' 11"	14' 9"	15' 10"	15' 4"
		0.0346	33	16	19' 5"	17' 7"	15' 4"	15' 10"	15' 4"	13' 5"	13' 9"	13' 9"
		0.0346	33	24	15' 10"	15' 4"	13' 5"	13' 0"	13' 0"	11' 9"	11' 3"	10' 8"
6	ProSTUD 25* 600PDS125-15	0.0158	50	12	15' 11"	15' 11"	15' 11"	13' 0"	13' 0"	13' 0"	11' 3"	11' 3"
		0.0158	50	16	13' 9"	13' 9"	13' 9"	11' 3"	11' 3"	11' 3"	8' 11"	8' 11"
		0.0158	50	24	11' 3"	11' 3"	11' 3"	7' 11"	7' 11"	7' 11"	6' 0"	6' 0"
	ProSTUD 20* 600PDS125-18	0.0190	70	12	20' 10"	20' 8"	18' 0"	17' 0"	17' 0"	15' 9"	14' 8"	14' 4"
		0.0190	70	16	18' 0"	18' 0"	16' 4"	14' 8"	14' 8"	14' 4"	12' 9"	12' 9"
		0.0190	70	24	14' 8"	14' 8"	14' 4"	12' 0"	12' 0"	12' 0"	10' 5"	10' 5"
	ProSTUD 30MIL 600PDS125-30	0.0312	33	12	26' 9"	25' 7"	22' 4"	21' 10"	21' 10"	19' 7"	18' 11"	17' 9"
		0.0312	33	16	23' 2"	23' 2"	20' 4"	18' 11"	18' 11"	17' 9"	16' 5"	16' 2"
		0.0312	33	24	18' 11"	18' 11"	17' 9"	15' 5"	15' 5"	15' 5"	13' 5"	13' 5"
	ProSTUD 33MIL 600PDS125-33	0.0346	33	12	28' 4"	26' 7"	23' 2"	23' 2"	23' 2"	20' 3"	20' 1"	18' 5"
		0.0346	33	16	24' 7"	24' 1"	21' 1"	20' 1"	20' 1"	18' 5"	17' 5"	16' 9"
		0.0346	33	24	20' 1"	20' 1"	18' 5"	16' 5"	16' 5"	16' 1"	14' 2"	14' 2"

TABLE NOTES

- Heights are based on AISI S100-12, North American Specification and AISI S220-15, North American Standard for Cold-Formed Steel Framing --Nonstructural Members, using steel properties alone.
- Above listed Non-Composite Limiting Heights are applicable when the unbraced length is less than or equal to L_u .
- Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
- *Web stiffeners are required at bearing points.

ALLOWABLE CEILING SPANS

ProSTUD® ALLOWABLE CEILING SPANS								Deflection Limit L/240					
Section	Fy, ksi	4 psf						6 psf					
		Lateral Support of Compression Flange						Lateral Support of Compression Flange					
		Unsupported			Midspan			Unsupported			Midspan		
		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
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"
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"
350PDS125-15	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" e
362PDS125-15	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" e
400PDS125-15	50	9' 5"	8' 9"	7' 10"	13' 1"	12' 0"	10' 7" e	8' 6"	7' 10"	6' 11" e	11' 7" e	10' 7" e	9' 3" e
550PDS125-15	50	10' 5"	9' 8"	8' 8"	14' 7"	13' 5"	11' 10"	9' 4"	8' 8"	7' 9"	12' 11"	11' 10"	10' 6" e
600PDS125-15	50	10' 8"	9' 10"	8' 10"	15' 0"	13' 9"	12' 2"	9' 6"	8' 10"	7' 11"	13' 3"	12' 2"	9' 11" e
162PDS125-18	70	7' 10"	7' 3"	6' 6"	8' 4"	7' 7"	6' 8"	7' 1"	6' 6"	5' 9"	7' 4"	6' 8"	5' 10"
250PDS125-18	70	9' 0"	8' 5"	7' 7"	11' 9"	10' 8"	9' 4"	8' 2"	7' 7"	6' 9"	10' 3"	9' 4"	8' 2"
350PDS125-18	70	9' 10"	9' 1"	8' 2"	13' 11"	12' 10"	11' 5"	8' 10"	8' 2"	7' 4"	12' 4"	11' 5"	10' 1"
362PDS125-18	70	9' 11"	9' 2"	8' 3"	14' 1"	12' 11"	11' 6"	8' 11"	8' 3"	7' 5"	12' 6"	11' 6"	10' 2"
400PDS125-18	70	10' 2"	9' 5"	8' 6"	14' 6"	13' 4"	11' 10"	9' 2"	8' 6"	7' 8"	12' 11"	11' 10"	10' 6"
550PDS125-18	70	11' 6" e	10' 7" e	9' 6" e	16' 4" e	15' 1" e	13' 5" e	10' 3" e	9' 6" e	8' 7" e	14' 7" e	13' 5" e	11' 11" e
600PDS125-18	70	11' 10"	10' 11"	9' 10"	16' 10"	15' 6"	13' 10"	10' 7"	9' 10"	8' 10"	15' 0"	13' 10"	12' 3"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"

TABLE NOTES

- For unbraced sections, allowable moment is based on 2012 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be the listed span (completely unbraced). For mid-span braced sections, allowable moment based on 2012 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 2012 AISI Specification.
- Values are for simple span conditions.
- e - Web stiffeners required at supports.

ALLOWABLE CEILING SPANS

ProSTUD® ALLOWABLE CEILING SPANS								Deflection Limit L/360					
Section	Fy, ksi	4 psf						6 psf					
		Lateral Support of Compression Flange						Lateral Support of Compression Flange					
		Unsupported			Midspan			Unsupported			Midspan		
		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
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"
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"
350PDS125-15	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" e
362PDS125-15	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" e
400PDS125-15	50	9' 5"	8' 9"	7' 10"	13' 1"	12' 0"	10' 7" e	8' 6"	7' 10"	6' 11" e	11' 7" e	10' 7" e	9' 3" e
550PDS125-15	50	10' 5"	9' 8"	8' 8"	14' 7"	13' 5"	11' 10"	9' 4"	8' 8"	7' 9"	12' 11"	11' 10"	10' 6" e
600PDS125-15	50	10' 8"	9' 10"	8' 10"	15' 0"	13' 9"	12' 2"	9' 6"	8' 10"	7' 11"	13' 3"	12' 2"	9' 11" e
162PDS125-18	70	7' 4"	6' 8"	5' 10"	7' 4"	6' 8"	5' 10"	6' 5"	5' 10"	5' 1"	6' 5"	5' 10"	5' 1"
250PDS125-18	70	9' 0"	8' 5"	7' 7"	10' 3"	9' 4"	8' 2"	8' 2"	7' 7"	6' 9"	9' 0"	8' 2"	7' 2"
350PDS125-18	70	9' 10"	9' 1"	8' 2"	13' 5"	12' 2"	10' 8"	8' 10"	8' 2"	7' 4"	11' 8"	10' 8"	9' 3"
362PDS125-18	70	9' 11"	9' 2"	8' 3"	13' 9"	12' 6"	10' 11"	8' 11"	8' 3"	7' 5"	12' 0"	10' 11"	9' 6"
400PDS125-18	70	10' 2"	9' 5"	8' 6"	14' 6"	13' 4"	11' 8"	9' 2"	8' 6"	7' 8"	12' 10"	11' 8"	10' 2"
550PDS125-18	70	11' 6" e	10' 7" e	9' 6" e	16' 4" e	15' 1" e	13' 5" e	10' 3" e	9' 6" e	8' 7" e	14' 7" e	13' 5" e	11' 11" e
600PDS125-18	70	11' 10"	10' 11"	9' 10"	16' 10"	15' 6"	13' 10"	10' 7"	9' 10"	8' 10"	15' 0"	13' 10"	12' 3"
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"
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"
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"
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"
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"
550PDS125-19	65	11' 7"	10' 9"	9' 8" e	16' 7"	15' 4" e	13' 8" e	10' 5"	9' 8" e	8' 8" e	14' 10" e	13' 8" e	12' 2" e
600PDS125-19	65	11' 11" e	11' 0" e	9' 11" e	17' 0" e	15' 9" e	14' 0" e	10' 8" e	9' 11" e	8' 11" e	15' 3" e	14' 0" e	12' 6" e
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"
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"

TABLE NOTES

- For unbraced sections, allowable moment is based on 2012 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be the listed span (completely unbraced). For mid-span braced sections, allowable moment based on 2012 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 2012 AISI Specification.
- Values are for simple span conditions.
- e - Web stiffeners required at supports.

ALLOWABLE LATERAL LOADS AND WALL HEIGHTS

ProSTUD® Lateral Loads and Wall Heights

Deflection Track System	Thickness, in	Yield Strength, F _y (ksi)	2" Leg Track with 1/2" Gap		2-1/2" Leg Track with 3/4" Gap		3" Leg Track with 1" Gap	
			Allowable Load	Limiting Wall Height	Allowable Load	Limiting Wall Height	Allowable Load	Limiting Wall Height
ProTRAK-15	0.0158	50	36	10' 8"	24	7' 2"	18	5' 4"
ProTRAK-18	0.0190	50	52	15' 6"	34	10' 4"	26	7' 9"
ProTRAK-19	0.0200	50	57	17' 2"	38	11' 5"	29	8' 7"
ProTRAK-22	0.0232	50	77	23' 1"	51	15' 5"	38	11' 6"
ProTRAK-30	0.0312	50	92	27' 6"	61	18' 4"	46	13' 9"
ProTRAK-33	0.0346	50	113	33' 10"	75	22' 7"	56	16' 11"

TABLE NOTES

- Limiting wall heights are based on studs spaced at 16" o.c. and an interior lateral load of 5psf.
- Stud members must be analyzed independently of the track system.