Equivalent (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.

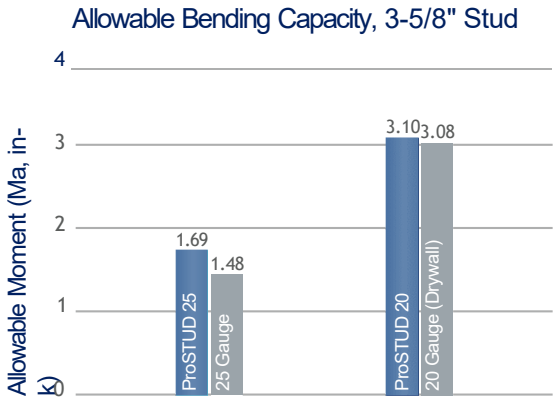
Comparison of ProSTUD Drywall Framing to Conventional Drywall Framing

ProSTUD Drywall Framing	
ProSTUD 25	15mil
ProSTUD 20	18mil

Conventional Drywall Framing	
25 Gauge	18mil
20 Gauge	30mil

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.

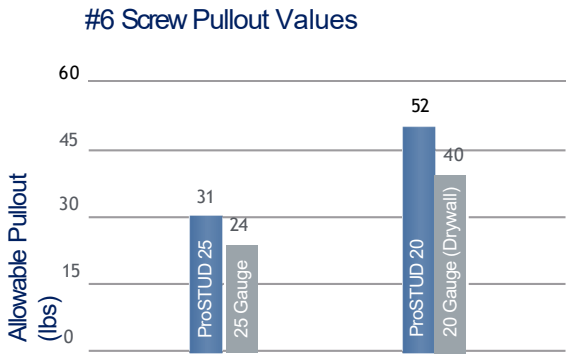


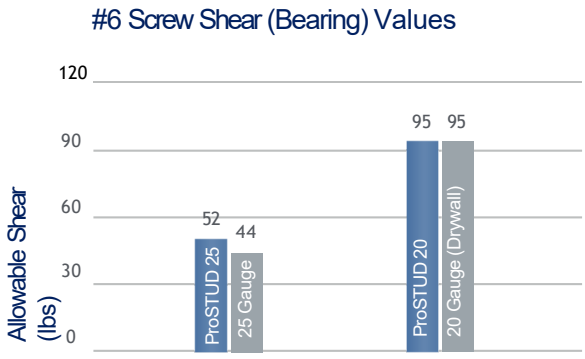
System Performance

Given ProSTUD's strength and versatility, it's important to know the performance of the ProSTUD member under your project's specific criteria.This catalog will provide guidance in a variety of assemblies and loading criteria, based on current building codes. Additional data is available at clarkdietrich.com.

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 AISI S220.

Complies with IBC 2021 • AISI S100 • AISI S220.

ProSTUD & ProTRAK Data

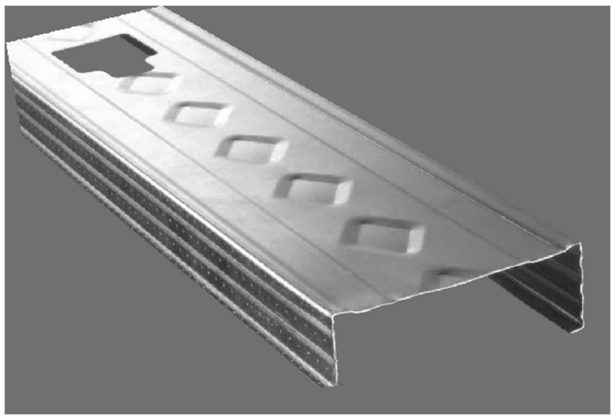
Construction Advantages

- High-Strength Steel combined with low-profile flange stiffening grooves and double offset web planking increases strength and provides greater limiting heights
- Diamond-embossed web creates stiffness, reducing flange fade and screw spinout during drywall installation
- Strong lightweight stud and track cuts and handles easier than conventional flat steel studs
- Flange grooves provide sight line for drywall alignment and aid in positioning screws at drywall joints to maintain the 3/8” edge requirement
- Web and leg enhancements in ProTRAK® provide straight and rigid legs, making it the best choice for framing walls, headers, soffits, and bulkheads

Design Advantages

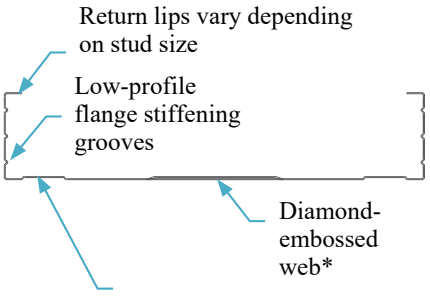
- Designed to meet the additional strength requirements of today’s building codes: IBC 2021, AISI S100, S220, S916, and ICC-ES AC46, and AC86
- UL Classified and listed in over 50 designs, including U419, V438, and chase wall assemblies
- Exceptional sound performance in over 30 tested sound assemblies
- Can contribute LEED® points in LEED v4.1 or v4.EPD and HPD verifications also available.
- Nationally availability.

ProSTUD®

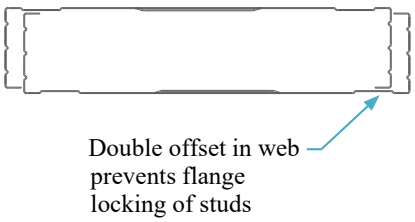


- Web widths: 1-5/8," 2-1/2," 3-1/2," 3-5/8," 4," 5-1/2," and 6"
- Flange: 1-1/4"
- Return lip: varies by stud size
- Material thickness
- ProSTUD 25 / 15mil (25ga EQ) 50ksi ProSTUD 20 / 18mil (20ga EQ) 70ksi ProSTUD 30MIL 33ksi
  ProSTUD 33MIL 33ksi
- G40EQ is standard, G40 available upon request.
- Other coatings available as special order: G60 and G90.

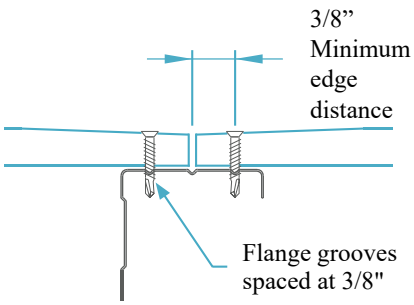
ProSTUD Profile



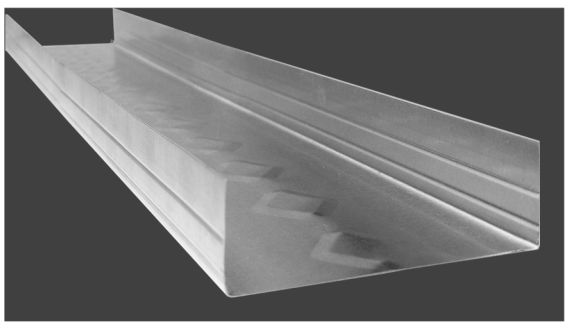
Shipping / Stacking



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"
  **Not all combinations of web, leg, and gauge are available.*
- Material Thicknesses:
  ProTRAK 25 / 15mil (25ga EQ) 50ksi
  ProTRAK 20 / 18mil (20ga EQ) 50ksi
  ProTRAK 30MIL 33ksi
  ProTRAK 33MIL 33ksi
- G40EQ is standard, G40 available upon request.
- Other coatings available as special order: G60 and G90.

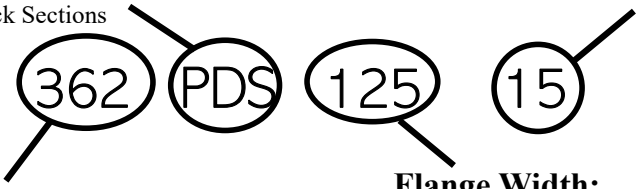
Complies with IBC 2021 • AISI S100 • AISI S220.

Drywall Framing System - ProSTUD & ProTRAK

Industry standard nomenclature is used to identify MBA's products.The standard designation codes for drywall studs and track can be found on each finished product member.In each case, the identification starts with the measurement of the width of the member, followed by a letter (PDS = stud and PDT = track) followed by the flange dimension.A hyphen is used to separate all of this from the thickness of the metal.

Style:
*(Example: Stud or Joist Section = **PDS**)*
Relevant alpha characters utilized by the designation system are:
PDS = Stud or Joist Sections **PDT** = Track Sections

Material Thickness:
*(Example: 0.015 in." = **15** mils; 1 mil = 1/1000 in.)*
Material thickness is the minimum base metal thickness in mils.
Minimum base metal thickness represents 95% of the design thickness.



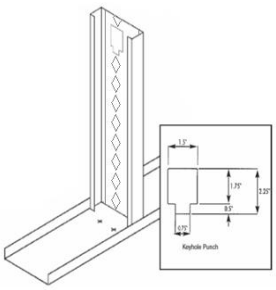
Member Depth:
*(Example: 3-5/8" = 3.625" **362** x 1/100 inches)*
All member depths are taken in 1/100 inches. For all "PT" sections member depth is the inside to inside dimension.

Flange Width:
*(Example: 1-1/4" = 1.25" = **125** x 1/100 inches)*
All flange widths are taken in 1/100 inches.

Steel Thickness

Mils	Gauge	Thickness (in)	
		Design	Minimum[1]
15	25	0.0158	0.0150
18	20	0.0190	0.0185
30	20	0.0312	0.0300
33	20	0.0346	0.0330

[1] Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the job site based on AISI S100-16/S2-20.



ProSTUD Punchouts

Drywall studs are manufactured with punchouts to enable plumbing and wiring installation.The lowest punchout is centered 12" from the bottom and 24" or 48" o.c thereafter, with the final opening 12" minimum from the top.Care should be taken during installation to orient all studs in the same top-to-bottom direction.

General Notes

1. Physical properties and load tables have been calculated in conformance with the AISI S100-16/S2-20.
2. Allowable composite heights are calculated using ICC-ES AC86-2010. The 1/3 stress increase was not used.
3. Drywall framing members have a protective coating conforming to ASTM spec A 653/A 653M, G-40 min, or equivalent corrosion resistance.
4. Reference ASTM specification A 1003/A 1003 M table 1 for the universe of allowable coatings for light gauge steel framing.
5. Drywall framing members are marked with product information per the requirements of ASTM C 645 section 14.
6. All delivered material must be kept dry, preferably by being stored inside a building under a roof.If it is necessary to store material outside, it must be stacked off the ground, properly supported on a level platform, and fully protected from the weather.Reference ASTM C 754 section 8 and ASTM C 1007 section 4.
7. Drywall framing [nonstructural 25 gauge, and 20 gauge] is not permitted in load bearing (i.e.axial load greater than 200 lbs.) or exterior applications (i.e.transverse load greater than 10 PSF).Reference ASTM C 645 section 3.2.2.

LEED Green Building Credits

MR Credit 2: Construction Waste Management – MBA steel framing is 100% recyclable.
MR Credit 4: Recycled Content – MBA steel framing is formed from no less than 25.5% post-consumer and 6.8% pre-consumer recycled content.
MR Credit 5: Regional Materials – MBA has manufacturing facilities in multiple states.

15mil ProSTUD and ProTRAK physical and Structural Properties

ProSTUD® 25 (15mil) Drywall Stud

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy						Torsional Properties					Lu (in)
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	β Beta	
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
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
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

ProTRAK® 25 (15mil) Drywall Track

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy					Torsional Properties				
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	β Beta
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
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
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
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
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
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
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

Notes:
– Calculated properties are based on AISI S100-16 (2020) w/S2-20 North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-20 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 Section A3.3.2 of AISI S100-16 (2020) w/S2-20.
– Tabulated gross properties, including torsional properties, are based on full-unreduced cross section of the studs, away from punchouts.
– 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.
– Allowable moment is taken as the lowest value based on local or distortional buckling.Distortional buckling strength is based on a k-phi = 0.
– Web depth for track sections is equal to the nominal height plus two times the design thickness plus the bend radius.Hems on nonstructural track sections are ignored.
1 Web-height to thickness ratio exceeds 200.
2 Web-height to thickness ratio exceeds 260.

Complies with IBC 2021 • AISI S100 • AISI S220

18mil ProSTUD and ProTRAK physical and Structural Properties

ProSTUD® 20 (18mil) Drywall Stud

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy						Torsional Properties					Lu (in)
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	β Beta	
162PDS125-18	0.0190	70	0.086	0.29	0.040	0.685	0.019	0.468	0.039	0.035	0.028	1194	405	149	0.01032	0.012	-1.105	1.382	0.361	24.8
250PDS125-18	0.0190	70	0.104	0.35	0.107	1.017	0.023	0.470	0.043	0.099	0.056	2361	256	204	0.01250	0.031	-1.004	1.504	0.555	24.5
362PDS125-18	0.0190	70	0.126	0.43	0.254	1.421	0.026	0.456	0.044	0.234	0.074	3102	174	170	0.01512	0.070	-0.884	1.734	0.740	24.3
400PDS125-18[1]	0.0190	70	0.133	0.45	0.321	1.551	0.027	0.453	0.046	0.286	0.084	3532	157	157	0.01605	0.089	-0.859	1.830	0.780	24.2
600PDS125-18[2]	0.0190	70	0.173	0.59	0.855	2.223	0.032	0.431	0.046	0.669	0.141	5891	104	104	0.02083	0.233	-0.739	2.382	0.904	23.6

ProTRAK® 20 (18mil) Drywall Track

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy					Torsional Properties				
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	β Beta
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
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
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
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
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
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
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

Notes:
– Calculated properties are based on AISI S100-16 (2020) w/S2-20 North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-20 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 Section A3.3.2 of AISI S100-16 (2020) w/S2-20.
– Tabulated gross properties, including torsional properties, are based on full-unreduced cross section of the studs, away from punchouts.
– 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.
– Allowable moment is taken as the lowest value based on local or distortional buckling.Distortional buckling strength is based on a k-phi = 0.
– Web depth for track sections is equal to the nominal height plus two times the design thickness plus the bend radius.Hems on nonstructural track sections are ignored.
1 Web-height to thickness ratio exceeds 200.
2 Web-height to thickness ratio exceeds 260.

Complies with IBC 2021 • AISI S100 • AISI S220

30mil ProSTUD and ProTRAK Physical and Structural Properties

ProSTUD® 30mil Drywall Stud
(Available Upon Request)

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy						Torsional Properties					Lu (in)
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	Vanet (lb)	J*1000 (in^4)	Cw (in^5)	Xo (in)	Ro (in)	β Beta	
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
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
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

ProTRAK® 30mil Drywall Track
(Available Upon Request)

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy					Torsional Properties				
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	J*1000 (in^4)	Cw (in^5)	Xo (in)	Ro (in)	β Beta
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
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
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
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
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
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

Notes:
– Calculated properties are based on AISI S100-16 (2020) w/S2-20 North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-20 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 Section A3.3.2 of AISI S100-16 (2020) w/S2-20.
– Tabulated gross properties, including torsional properties, are based on full-unreduced cross section of the studs, away from punchouts.
– 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.
– Allowable moment is taken as the lowest value based on local or distortional buckling.Distortional buckling strength is based on a k-phi = 0.
– Web depth for track sections is equal to the nominal height plus two times the design thickness plus the bend radius.Hems on nonstructural track sections are ignored.
1 Web-height to thickness ratio exceeds 200.
2 Web-height to thickness ratio exceeds 260.

Complies with IBC 2021 • AISI S100 • AISI S220

33mil ProSTUD and ProTRAK physical and Structural Properties

ProSTUD® 33mil Drywall Stud
(Available Upon Request)

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy						Torsional Properties					Lu (in)
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	Vanet (lb)	J*1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	β Beta	
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
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
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

ProTRAK® 33mil Drywall Track
(Available Upon Request)

Member	Design thickness (in)	Fy (ksi)	Gross Section Properties						Effective Section Properties at Fy					Torsional Properties				
			Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ae (in^2)	Ix (in^4)	Sx (in^3)	Ma (in-lbs)	Vag (lb)	J*1000 (in^4)	Cw (in^6)	Xo (in)	Ro (in)	β Beta
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
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
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
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
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
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
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

Notes:
– Calculated properties are based on AISI S100-16 (2020) w/S2-20 North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-20 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 Section A3.3.2 of AISI S100-16 (2020) w/S2-20.
– Tabulated gross properties, including torsional properties, are based on full-unreduced cross section of the studs, away from punchouts.
– 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.
– Allowable moment is taken as the lowest value based on local or distortional buckling.Distortional buckling strength is based on a k-phi = 0.
– Web depth for track sections is equal to the nominal height plus two times the design thickness plus the bend radius.Hems on nonstructural track sections are ignored.
1 Web-height to thickness ratio exceeds 200.
2 Web-height to thickness ratio exceeds 260.

Complies with IBC 2021 • AISI S100 • AISI S220

Head-of-Wall (HOW) Composite Using Deflection Track

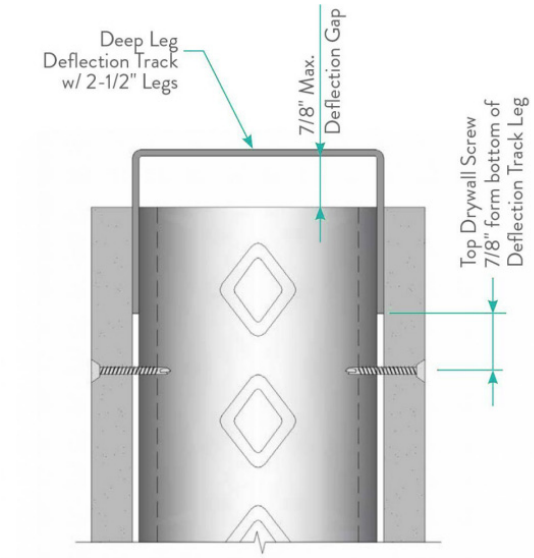
HOW Composite Wall 30mil 2-1/2" DeepLeg Deflection Track

HOW Composite limiting heights were tested in accordance with AISI S916 and ICC-ES AC86.
The tests were modified from the standards with the tracks fastened to the test fixture such that the wall stiffness included the track deformation.

It is important to note that a wall designed using limiting heights from HOW composite tables must be constructed consistent with notes listed below the HOW Composite limiting heights tables.

Use of Head-of-Wall Composite tables if your wall meets these conditions:

- Maximum deflection gap is 7/8" or less
- Meets the requirements of the most common ½" and ¾" deflection gap
- For use of the following Deflection Tracks:
- 30mil 2-1/2" Deep Leg Deflection Track
    - Thicker Deep Leg Deflection Track noted above are allowed but won't increase limiting heights without
- 5/8" Type X Gypsum board applied full height in the vertical orientation
    - (Leaving a 7/8" max.deflection gap and not having the board attached to the top deflection track is allowed.)



Full Composite Assemblies

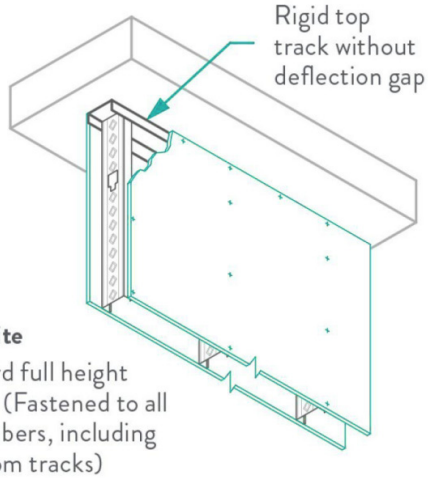
Full Composite wall w/ 1-1/4" Leg Non-Deflection Track

Full Composite limiting Height Data can be applied to walls where gypsum board is installed vertically on both flanges of the stud, for the full height of the wall and attached to the top and bottom tracks.ProSTUD composite data is based on the 2021 International Building Code and was tested and analyzed in accordance with AISI S916 and ICC-ES AC86.Composite limiting height tables for ProSTUD members are available and starting on Page 20.

Not to be used with:

- Deflection Tracks
- Resilient Channel
- Sound Clips
- ½" Gypsum Board
- Horizontally Installed Board

It is important to note that a wall designed using limited heights from composite tables must be constructed consistent with the assembly as it was tested per AISI S916 and ICC-ES AC86



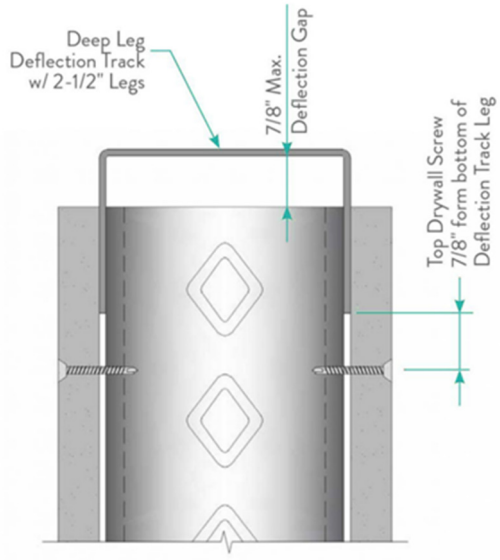
Full Composite
Gypsum board full height on both sides (Fastened to all framing members, including top and bottom tracks)

Complies with IBC 2021 • AISI S100 • AISI S220.

Limiting Wall Heights (cont'd)

ProSTUD® 25/15mil Head-of-Wall (HOW) Composite Limiting Heights
w/30mil 2-1/2" Leg Deflection Track

Width	Section	Yield Strength	Spacing (in) o.c.	5psf			7.5psf			10psf		
				L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
3-5/8"	362PDS125-15	50 ksi	12	19' - 9"	16' - 6"	14' - 6"	16' - 10" f	14' - 5"	12' - 8"	14' - 7" f	13' - 1"	11' - 3"
			16	18' - 7"	15' - 6"	13' - 7"	15' - 4" f	13' - 7"	11' - 10"	13' - 3" f	12' - 4"	10' - 3"
			24	15' - 10" f	13' - 7"	11' - 10"	12' - 11" f	11' - 10"	10' - 1"	11' - 2" f	10' - 7"	8' - 10"
4"	400PDS125-15	50 ksi	12	20' - 11"	17' - 6"	15' - 3"	18' - 0" f	15' - 3"	13' - 4"	15' - 7" f	13' - 11"	12' - 1"
			16	19' - 9"	16' - 4"	14' - 4"	16' - 4" f	14' - 4"	12' - 6"	14' - 2" f	13' - 0"	11' - 2"
			24	16' - 6" f	14' - 4"	12' - 6"	13' - 6" f	12' - 6"	10' - 8"	11' - 8" f	11' - 3"	9' - 6"
6"	600PDS125-15	50 ksi	12	27' - 10" f	23' - 8"	20' - 8"	22' - 9" f	20' - 8"	18' - 1"	19' - 8" f	18' - 9"	16' - 5"
			16	24' - 1" f	21' - 11"	19' - 5"	19' - 8" f	19' - 2"	17' - 0"	17' - 1" f	17' - 1" f	15' - 2"
			24	19' - 8" f	19' - 2"	17' - 0"	16' - 1" f	16' - 1" f	14' - 9"	13' - 11" f	13' - 11" f	13' - 2"



Notes:
– Allowable HOW composite limiting heights were tested in accordance with AISI S916 and ICC-ES AC86.
– The tests were modified from the standards with the tracks fastened to the test fixture such that the wall stiffness included the track deformation.
– 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 5/8" 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:
– Sheathing screws spaced a maximum of 16 in on-center to framing members (including bottom track) when studs spaced at 16 in or 12 in on-center.
– Sheathing screws spaced a maximum of 12 in on-center to framing members (including bottom track) when studs spaced at 24 in on-center.
– No fasteners are required for attaching the stud to the Deflection track at the top except as detailed in ASTM C754:
– Stud to track connection must be installed as depicted in figure with a maximum gap of 7/8" between the web of the Deflection track and end of stud.
– The maximum amount of total vertical movement (compression + extension) cannot exceed 1-1/2".
– To permit head of wall deflection, gypsum board must not be fastened directly to the Deflection track.– No fasteners are required for attaching the stud to the bottom track except as detailed in ASTM C754.
– A spazzer spacing bar shall be installed in the punchouts immediately adjacent to the top track (Deflection Track) to hold studs in place.f Adjacent to the height value indicates that flexural stress controls the allowable wall height.

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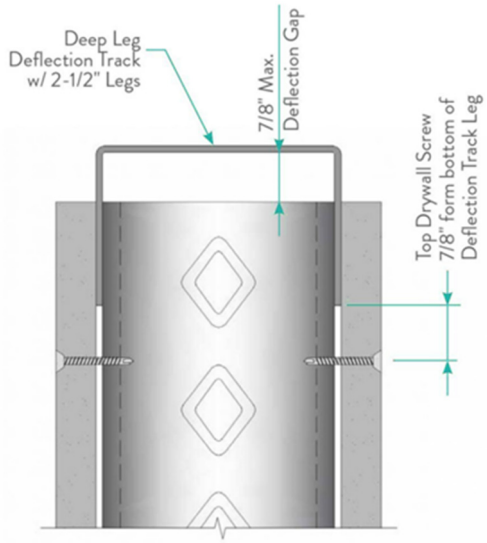
Limiting Wall Heights (cont'd)

ProSTUD® 20/18mil Head-of-Wall (HOW) Composite Limiting Heights
w/30mil 2-1/2" Leg Deflection Track

Width	Section	Yield Strength	Spacing (in) o.c.	5psf			7.5psf			10psf		
				L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
2-1/2"	250PDS125-18	70 ksi	12	16' - 6"	14' - 1"	12' - 4"	14' - 6"	12' - 4"	10' - 9"	13' - 3"	11' - 2"	9' - 9"
			16	15' - 11"	13' - 5"	11' - 8"	13' - 11"	11' - 8"	10' - 3"	12' - 8"	10' - 8"	9' - 0"
			24	14' - 5"	12' - 2"	10' - 7"	12' - 6" f	10' - 7"	8' - 11"	10' - 10" f	9' - 6"	--
3-5/8"	362PDS125-18	70 ksi	12	21' - 2"	17' - 8"	15' - 5"	18' - 6"	15' - 6"	13' - 5"	16' - 10"	14' - 1"	12' - 3"
			16	19' - 11"	16' - 8"	14' - 6"	17' - 5"	14' - 7"	12' - 8"	15' - 10"	13' - 3"	11' - 3"
			24	18' - 0"	14' - 11"	13' - 0"	15' - 9"	13' - 1"	11' - 1"	13' - 7" f	11' - 10"	9' - 9"
4"	400PDS125-18	70 ksi	12	22' - 5"	18' - 7"	16' - 4"	19' - 7"	16' - 3"	14' - 3"	17' - 10"	14' - 9"	12' - 11"
			16	20' - 10"	17' - 3"	15' - 2"	18' - 3"	15' - 1"	13' - 3"	16' - 7"	13' - 9"	12' - 1"
			24	18' - 7"	15' - 5"	13' - 6"	16' - 3"	13' - 6"	11' - 9"	14' - 2" f	12' - 3"	10' - 2"
6"	600PDS125-18	70 ksi	12	29' - 6"	24' - 8"	21' - 9"	25' - 9"	21' - 6"	19' - 0"	22' - 5" f	19' - 7"	17' - 3"
			16	27' - 9"	23' - 2"	20' - 5"	23' - 4" f	20' - 3"	17' - 10"	20' - 3" f	18' - 5"	16' - 2"
			24	24' - 3" f	20' - 11"	18' - 3"	19' - 10" f	18' - 3"	15' - 11"	17' - 2" f	16' - 7"	13' - 8"



Notes:
– Allowable HOW composite limiting heights were tested in accordance with AISI S916 and ICC-ES AC86.
– The tests were modified from the standards with the tracks fastened to the test fixture such that the wall stiffness included the track deformation.
– 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 5/8" 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:
– Sheathing screws spaced a maximum of 16 in on-center to framing members (including bottom track) when studs spaced at 16 in or 12 in on-center.
– Sheathing screws spaced a maximum of 12 in on-center to framing members (including bottom track) when studs spaced at 24 in on-center.
– No fasteners are required for attaching the stud to the Deflection track at the top except as detailed in ASTM C754:
– Stud to track connection must be installed as depicted in figure with a maximum gap of 7/8" between the web of the Deflection track and end of stud.
– The maximum amount of total vertical movement (compression + extension) cannot exceed 1-1/2".
– To permit head of wall deflection, gypsum board must not be fastened directly to the Deflection track.– No fasteners are required for attaching the stud to the bottom track except as detailed in ASTM C754.
– A spazzer spacing bar shall be installed in the punchouts immediately adjacent to the top track (Deflection Track) to hold studs in place.f Adjacent to the height value indicates that flexural stress controls the allowable wall height.

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Limiting Wall Heights

Interior Non-Structural Composite Table Notes

1. Allowable composite limiting heights are calculated using ICC-ES AC86-2019.In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
2. 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, Lafarge, National, Temple Inland, and USG.
3. 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 a minimum of 12 inch on-center to the framing members.
4. No fasteners are required for attaching the stud to the track except as detailed in ASTM C754.
5. Stud end bearing must be a minimum of 1 inch.
6. Minimum material yield strength equals 65ksi for 19 mil studs.
7. ‘f’ adjacent to the height value indicates that flexural stress controls the allowable wall height.
8. ‘s’ adjacent to the height value indicates that shear/end reaction controls the allowable wall height.

Interior Composite data with 1 layer 5/8” Type X Gypsum Board

Depth (in)	Section	Design thickness (in)	Yield strength (ksi)	Spacing (inches)	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	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"		
	162PDS125-18	0.0190	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"		
	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"		
	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	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"	
	250PDS125-18	0.0190	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"
	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"
	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"

Limiting Wall Heights (cont'd)

Interior Composite data with 1 layer 5/8" Type X Gypsum Board

Depth (in)	Section	Design thickness (in)	Yield strength (ksi)	Spacing (inches)	5psf			7.5psf			10psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
3-5/8	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"
	362PDS125-18	0.0190	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"
	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"
	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	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"
	400PDS125-18	0.0190	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"
	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"
	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	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"
	600PDS125-18	0.0190	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"
	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"	
	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"	

Limiting Wall Heights

Non-Composite Limiting Heights Fully Braced

Depth (in)	Section	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	162PDS125-15	0.0158	50	12	9' 2"	7' 4"	6' 4"	8' 0"	6' 4"	5' 7"	6' 11"	5' 9"	5' 1"
				16	8' 4"	6' 8"	5' 9"	6' 11"	5' 9"	5' 1"	6' 0"	5' 3"	4' 7"
				24	6' 11"	5' 9"	5' 1"	5' 8"	5' 1"	4' 5"	4' 11"	4' 7"	4' 0"
	162PDS125-18	0.0190	70	12	9' 9"	7' 9"	6' 9"	8' 6"	6' 9"	5' 11"	7' 9"	6' 2"	5' 4"
				16	8' 10"	7' 0"	6' 2"	7' 9"	6' 2"	5' 4"	7' 0"	5' 7"	4' 10"
				24	7' 9"	6' 2"	5' 4"	6' 9"	5' 4"	4' 8"	6' 2"	4' 10"	4' 3"
	162PDS125-30	0.0312	33	12	11' 10"	9' 5"	8' 3"	10' 4"	8' 3"	7' 2"	9' 5"	7' 6"	6' 6"
				16	10' 9"	8' 7"	7' 6"	9' 5"	7' 6"	6' 6"	8' 2"	6' 9"	5' 11"
				24	9' 5"	7' 6"	6' 6"	7' 8"	6' 6"	5' 8"	6' 8"	5' 11"	5' 2"
	162PDS125-33	0.0346	33	12	12' 3"	9' 9"	8' 6"	10' 8"	8' 6"	7' 5"	9' 9"	7' 9"	6' 9"
				16	11' 2"	8' 10"	7' 9"	9' 9"	7' 9"	6' 9"	8' 9"	7' 0"	6' 1"
				24	9' 9"	7' 9"	6' 9"	8' 3"	6' 9"	5' 11"	7' 2"	6' 1"	5' 4"
2-1/2	250PDS125-15	0.0158	50	12	12' 8"	10' 2"	8' 11"	10' 4"	8' 11"	7' 9"	8' 11"	8' 1"	7' 1"
				16	10' 11"	9' 3"	8' 1"	8' 11"	8' 1"	7' 1"	7' 9"	7' 4"	6' 5"
				24	8' 11"	8' 1"	7' 1"	7' 4"	7' 1"	6' 2"	6' 4"	6' 4"	5' 7"
	250PDS125-18	0.0190	70	12	13' 9"	10' 11"	9' 6"	12' 0"	9' 6"	8' 4"	10' 11"	8' 8"	7' 7"
				16	12' 6"	9' 11"	8' 8"	10' 11"	8' 8"	7' 7"	9' 11"	7' 10"	6' 10"
				24	10' 11"	8' 8"	7' 7"	9' 6"	7' 7"	6' 7"	8' 4"	6' 10"	6' 0"
	250PDS125-30	0.0312	33	12	16' 5"	13' 0"	11' 4"	14' 4"	11' 4"	9' 11"	12' 6"	10' 4"	9' 0"
				16	14' 11"	11' 10"	10' 4"	12' 6"	10' 4"	9' 0"	10' 10"	9' 5"	8' 2"
				24	12' 6"	10' 4"	9' 0"	10' 3"	9' 0"	7' 11"	8' 10"	8' 2"	7' 2"
	250PDS125-33	0.0346	33	12	16' 11"	13' 5"	11' 9"	14' 10"	11' 9"	10' 3"	13' 5"	10' 8"	9' 4"
				16	15' 5"	12' 3"	10' 8"	13' 5"	10' 8"	9' 4"	11' 7"	9' 8"	8' 6"
				24	13' 5"	10' 8"	9' 4"	10' 11"	9' 4"	8' 2"	9' 6"	8' 6"	7' 5"
3-5/8	362PDS125-15	0.0158	50	12	15' 0"	13' 7"	11' 10"	12' 3"	11' 10"	10' 4"	10' 7"	10' 7"	9' 5"
				16	13' 0"	12' 4"	10' 9"	10' 7"	10' 7"	9' 5"	9' 2"	9' 2"	8' 6"
				24	10' 7"	10' 7"	9' 5"	8' 8"	8' 8"	8' 3"	7' 6"	7' 6"	7' 5"
	362PDS125-18	0.0190	70	12	18' 4"	14' 6"	12' 8"	16' 0"	12' 8"	11' 1"	14' 5"	11' 6"	10' 1"
				16	16' 8"	13' 2"	11' 6"	14' 5"	11' 6"	10' 1"	12' 5"	10' 6"	9' 2"
				24	14' 5"	11' 6"	10' 1"	11' 9"	10' 1"	8' 10"	10' 2"	9' 2"	8' 0"
	362PDS125-30	0.0312	33	12	21' 2"	17' 4"	15' 2"	17' 3"	15' 2"	13' 3"	15' 0"	13' 9"	12' 0"
				16	18' 4"	15' 9"	13' 9"	15' 0"	13' 9"	12' 0"	12' 11"	12' 6"	10' 11"
				24	15' 0"	13' 9"	12' 0"	12' 3"	12' 0"	10' 6"	10' 7"	10' 7"	9' 6"
	362PDS125-33	0.0346	33	12	22' 7"	17' 11"	15' 8"	18' 9"	15' 8"	13' 8"	16' 3"	14' 3"	12' 5"
				16	19' 10"	16' 3"	14' 3"	16' 3"	14' 3"	12' 5"	14' 0"	12' 11"	11' 3"
				24	16' 3"	14' 3"	12' 5"	13' 3"	12' 5"	10' 10"	11' 6"	11' 3"	9' 10"

Notes:
– Heights are based on AISI S100-16, 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 Lu.
– Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
*Web stiffeners are required at bearing points.

See Interior Non-Structural Non-Composite Table Notes

Limiting Wall Heights

Non-Composite Limiting Heights Fully Braced

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

Notes:
– Heights are based on AISI S100-16, 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 Lu.
– Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
*Web stiffeners are required at bearing points.

See Interior Non-Structural Non-Composite Table Notes

Limiting Wall Heights

Non-Composite Limiting Heights Braced At 48” o.c.

Depth (in)	Section	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	162PDS125-15	0.0158	50	12	8' 1"	7' 4"	6' 4"	6' 7"	6' 4"	5' 7"	5' 9"	5' 9"	5' 1"
		0.0158	50	16	7' 0"	6' 8"	5' 9"	5' 9"	5' 9"	5' 1"	4' 11"	4' 11"	4' 7"
		0.0158	50	24	5' 9"	5' 9"	5' 1"	4' 8"	4' 8"	4' 5"	4' 0"	4' 0"	4' 0"
	162PDS125-18	0.0190	70	12	9' 6"	7' 9"	6' 9"	7' 9"	6' 9"	5' 11"	6' 9"	6' 2"	5' 4"
		0.0190	70	16	8' 3"	7' 0"	6' 2"	6' 9"	6' 2"	5' 4"	5' 10"	5' 7"	4' 10"
		0.0190	70	24	6' 9"	6' 2"	5' 4"	5' 6"	5' 4"	4' 8"	4' 9"	4' 9"	4' 3"
	162PDS125-30	0.0312	33	12	11' 10"	9' 5"	8' 3"	10' 3"	8' 3"	7' 2"	8' 11"	7' 6"	6' 6"
		0.0312	33	16	10' 9"	8' 7"	7' 6"	8' 11"	7' 6"	6' 6"	7' 8"	6' 9"	5' 11"
		0.0312	33	24	8' 11"	7' 6"	6' 6"	7' 3"	6' 6"	5' 8"	6' 3"	5' 11"	5' 2"
	162PDS125-33	0.0346	33	12	12' 3"	9' 9"	8' 6"	10' 8"	8' 6"	7' 5"	9' 5"	7' 9"	6' 9"
		0.0346	33	16	11' 2"	8' 10"	7' 9"	9' 5"	7' 9"	6' 9"	8' 2"	7' 0"	6' 1"
		0.0346	33	24	9' 5"	7' 9"	6' 9"	7' 8"	6' 9"	5' 11"	6' 8"	6' 1"	5' 4"
2-1/2	250PDS125-15	0.0158	50	12	10' 5"	10' 2"	8' 11"	8' 6"	8' 6"	7' 9"	7' 4"	7' 4"	7' 1"
		0.0158	50	16	9' 0"	9' 0"	8' 1"	7' 4"	7' 4"	7' 1"	6' 5"	6' 5"	6' 5"
		0.0158	50	24	7' 4"	7' 4"	7' 1"	6' 0"	6' 0"	6' 0"	5' 3"	5' 3"	5' 3"
	250PDS125-18	0.0190	70	12	13' 5"	10' 11"	9' 6"	10' 11"	9' 6"	8' 4"	9' 6"	8' 8"	7' 7"
		0.0190	70	16	11' 7"	9' 11"	8' 8"	9' 6"	8' 8"	7' 7"	8' 3"	7' 10"	6' 10"
		0.0190	70	24	9' 6"	8' 8"	7' 7"	7' 9"	7' 7"	6' 7"	6' 8"	6' 8"	6' 0"
	250PDS125-30	0.0312	33	12	16' 5"	13' 0"	11' 4"	13' 8"	11' 4"	9' 11"	11' 10"	10' 4"	9' 0"
		0.0312	33	16	14' 6"	11' 10"	10' 4"	11' 10"	10' 4"	9' 0"	10' 3"	9' 5"	8' 2"
		0.0312	33	24	11' 10"	10' 4"	9' 0"	9' 8"	9' 0"	7' 11"	8' 4"	8' 2"	7' 2"
	250PDS125-33	0.0346	33	12	16' 11"	13' 5"	11' 9"	14' 4"	11' 9"	10' 3"	12' 5"	10' 8"	9' 4"
		0.0346	33	16	15' 3"	12' 3"	10' 8"	12' 5"	10' 8"	9' 4"	10' 9"	9' 8"	8' 6"
		0.0346	33	24	12' 5"	10' 8"	9' 4"	10' 2"	9' 4"	8' 2"	8' 10"	8' 6"	7' 5"
3-5/8	362PDS125-15	0.0158	50	12	12' 5"	12' 5"	11' 10"	10' 1"	10' 1"	10' 1"	8' 9"	8' 9"	8' 9"
		0.0158	50	16	10' 9"	10' 9"	10' 9"	8' 9"	8' 9"	8' 9"	7' 7"	7' 7"	7' 7"
		0.0158	50	24	8' 9"	8' 9"	8' 9"	7' 2"	7' 2"	7' 2"	6' 2"	6' 2"	6' 2"
	362PDS125-18	0.0190	70	12	15' 2"	14' 6"	12' 8"	12' 5"	12' 5"	11' 1"	10' 9"	10' 9"	10' 1"
		0.0190	70	16	13' 2"	13' 2"	11' 6"	10' 9"	10' 9"	10' 1"	9' 4"	9' 4"	9' 2"
		0.0190	70	24	10' 9"	10' 9"	10' 1"	8' 9"	8' 9"	8' 9"	7' 7"	7' 7"	7' 7"
	362PDS125-30	0.0312	33	12	20' 0"	17' 4"	15' 2"	16' 4"	15' 2"	13' 3"	14' 1"	13' 9"	12' 0"
		0.0312	33	16	17' 3"	15' 9"	13' 9"	14' 1"	13' 9"	12' 0"	12' 3"	12' 3"	10' 11"
		0.0312	33	24	14' 1"	13' 9"	12' 0"	11' 6"	11' 6"	10' 6"	10' 0"	10' 0"	9' 6"
	362PDS125-33	0.0346	33	12	21' 3"	17' 11"	15' 8"	17' 4"	15' 8"	13' 8"	15' 0"	14' 3"	12' 5"
		0.0346	33	16	18' 5"	16' 3"	14' 3"	15' 0"	14' 3"	12' 5"	13' 0"	12' 11"	11' 3"
		0.0346	33	24	15' 0"	14' 3"	12' 5"	12' 3"	12' 3"	10' 10"	10' 8"	10' 8"	9' 10"

Notes:
– Heights are based on AISI S100-16, 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 Lu.
– Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
*Web stiffeners are required at bearing points.

See Interior Non-Structural Non-Composite Table Notes

Limiting Wall Heights

Non-Composite Limiting Heights Braced At 48” o.c.

Depth (in)	Section	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
4	400PDS125-15	0.0158	50	12	13' 0"	13' 0"	12' 8"	10' 8"	10' 8"	10' 8"	9' 2"	9' 2"	9' 2"
		0.0158	50	16	11' 3"	11' 3"	11' 3"	9' 2"	9' 2"	9' 2"	8' 0"	8' 0"	8' 0"
		0.0158	50	24	9' 2"	9' 2"	9' 2"	7' 6"	7' 6"	7' 6"	6' 6"	6' 6"	6' 6"
	400PDS125-18	0.0190	70	12	16' 3"	15' 6"	13' 7"	13' 3"	13' 3"	11' 10"	11' 6"	11' 6"	10' 9"
		0.0190	70	16	14' 1"	14' 1"	12' 4"	11' 6"	11' 6"	10' 9"	9' 11"	9' 11"	9' 9"
		0.0190	70	24	11' 6"	11' 6"	10' 9"	9' 4"	9' 4"	9' 4"	8' 1"	8' 1"	8' 1"
	400PDS125-30	0.0312	33	12	21' 1"	18' 8"	16' 4"	17' 2"	16' 4"	14' 3"	14' 11"	14' 10"	13' 0"
		0.0312	33	16	18' 3"	17' 0"	14' 10"	14' 11"	14' 10"	13' 0"	12' 11"	12' 11"	11' 9"
		0.0312	33	24	14' 11"	14' 10"	13' 0"	12' 2"	12' 2"	11' 4"	10' 6"	10' 6"	10' 3"
	400PDS125-33	0.0346	33	12	22' 5"	19' 4"	16' 11"	18' 4"	16' 11"	14' 9"	15' 10"	15' 4"	13' 5"
		0.0346	33	16	19' 5"	17' 7"	15' 4"	15' 10"	15' 4"	13' 5"	13' 9"	13' 9"	12' 2"
		0.0346	33	24	15' 10"	15' 4"	13' 5"	13' 0"	13' 0"	11' 9"	11' 3"	11' 3"	10' 8"
6	600PDS125-15	0.0158	50	12	15' 11"	15' 11"	15' 11"	13' 0"	13' 0"	13' 0"	11' 3"	11' 3"	11' 3"
		0.0158	50	16	13' 9"	13' 9"	13' 9"	11' 3"	11' 3"	11' 3"	8' 11"	8' 11"	8' 11"
		0.0158	50	24	11' 3"	11' 3"	11' 3"	7' 11"	7' 11"	7' 11"	6' 0"	6' 0"	6' 0"
	600PDS125-18	0.0190	70	12	20' 10"	20' 8"	18' 0"	17' 0"	17' 0"	15' 9"	14' 8"	14' 8"	14' 4"
		0.0190	70	16	18' 0"	18' 0"	16' 4"	14' 8"	14' 8"	14' 4"	12' 9"	12' 9"	12' 9"
		0.0190	70	24	14' 8"	14' 8"	14' 4"	12' 0"	12' 0"	12' 0"	10' 5"	10' 5"	10' 5"
	600PDS125-30	0.0312	33	12	26' 9"	25' 7"	22' 4"	21' 10"	21' 10"	19' 7"	18' 11"	18' 11"	17' 9"
		0.0312	33	16	23' 2"	23' 2"	20' 4"	18' 11"	18' 11"	17' 9"	16' 5"	16' 5"	16' 2"
		0.0312	33	24	18' 11"	18' 11"	17' 9"	15' 5"	15' 5"	15' 5"	13' 5"	13' 5"	13' 5"
	600PDS125-33	0.0346	33	12	28' 4"	26' 7"	23' 2"	23' 2"	23' 2"	20' 3"	20' 1"	20' 1"	18' 5"
		0.0346	33	16	24' 7"	24' 1"	21' 1"	20' 1"	20' 1"	18' 5"	17' 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"	14' 2"

Notes:
– Heights are based on AISI S100-16, 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 Lu.
– Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
*Web stiffeners are required at bearing points.

See Interior Non-Structural Non-Composite Table Notes

Section Properties

Section Properties Table Notes

1. Section properties were determined in accordance with AISI S100-16/2-20, North American Specification for Design of Cold-Formed Steel Structural Members.
2. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
3. Tabulated gross properties including torsional properties are based on full-unreduced cross section of the studs, away from punchouts.
4. For deflection calculations, use the effective moment of inertia.
5. Allowable moment includes cold-work of forming.
6. 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.
7. Allowable moment is taken as the lowest value based on local or distortional buckling. Distortional buckling strength is based on a k-phi = 0.

ProTRAK® Allowable Lateral Loads and Wall Heights

Deflection Track System	2" Leg Track with 1/2" Gap		2-1/2" Leg Track with 3/4" Gap		3" Leg Track with 1" Gap	
	Allowable Load (LBS)	Limiting Wall Height	Allowable Load (LBS)	Limiting Wall Height	Allowable Load (LBS)	Limiting Wall Height
ProTRAK 25	36	10' 8"	24	7' 2"	18	5' 4"
ProTRAK 20	52	15' 6"	34	10' 4"	26	7' 9"
ProTRAK 30MIL	92	27' 6"	61	18' 4"	46	13' 9"
ProTRAK 33MIL	113	33' 10"	75	22' 7"	56	16' 11"

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.Use www.iProSTUD.com to check limiting wall heights for ProSTUD members.
– Stud failure modes relating to the deflection track connection (shear, web crippling, etc.) must be checked separately.

ProSTUD 1-5/8” Stud Chase Sound Assemblies

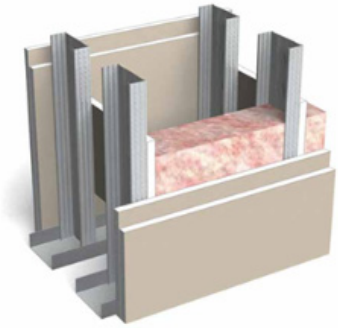
Two parallel rows

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

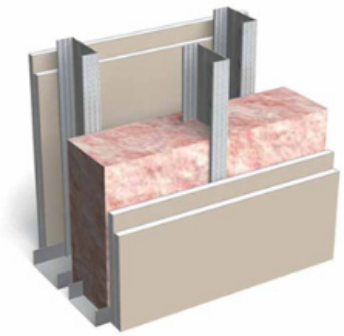
ProSTUD 2-1/2” Stud Chase Sound Assemblies

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



Partition Type 1



Partition Type 2

Notes:
Sound Assemblies are certified by Western Electro-Acoustic Laboratories.
NVLAP Accredited for ASTM E90 & E413, ISO Certified.
Values are the same for R-11 insulation.

Complies with AISI S100-16 • AISI S220-15 • IBC 2018

ProSTUD 3-5/8” Stud Sound Assemblies

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	-	24"	43	TL09-539	Fig.1
5/8" Type X	1 layer	1 layer	R-13" unfaced	24"	48	TL09-540	Fig.2
5/8" Type X	1 layer	2 layer	R-13" unfaced	24"	49	TL09-167	Fig.3
5/8" Type X	2 layer	2 layer	R-13" unfaced	24"	54	TL09-538	Fig.4

Fig.1

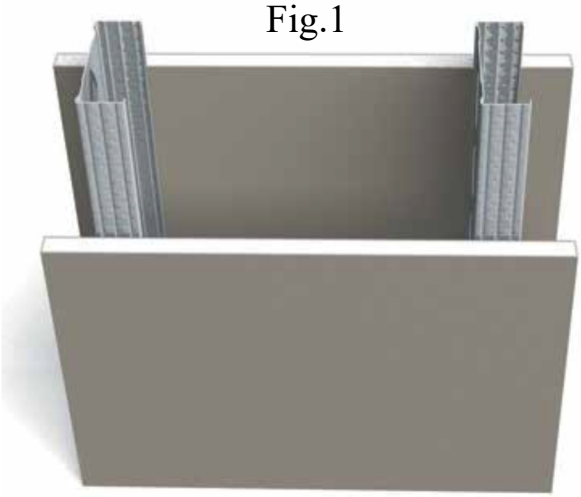


Fig.2

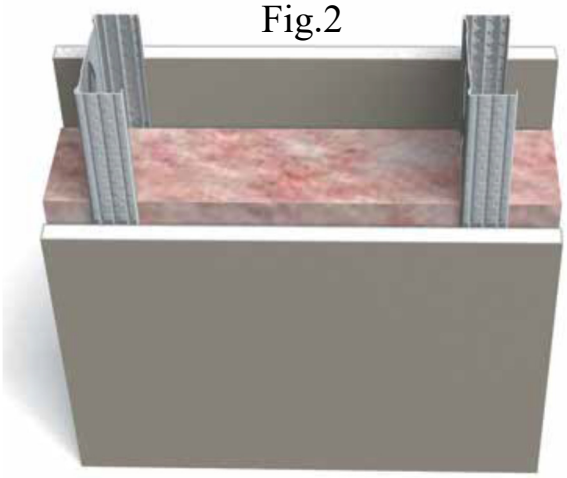


Fig.3

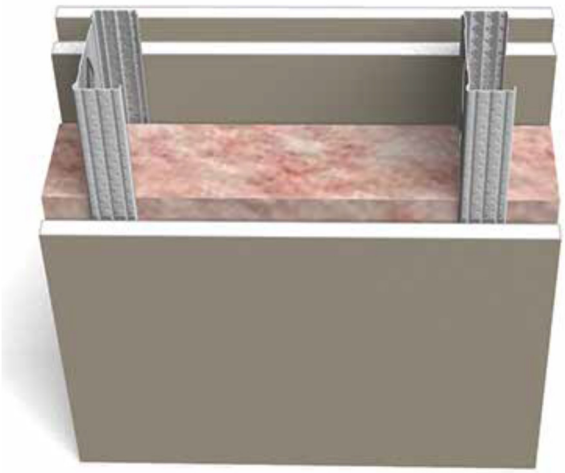
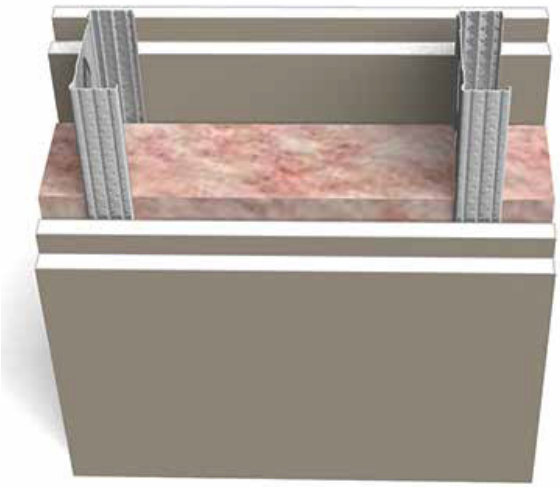


Fig.4



Notes:
Sound Assemblies are certified by Western Electro-Acoustic Laboratories.
NVLAP Accredited for ASTM E90 & E413, ISO Certified.
Values are the same for R-11 insulation.

Complies with AISI S100-16 • AISI S220-15 • IBC 2018

ProSTUD ® Allowable Ceiling Spans

Deflection Limit L/240

Member	Fy (ksi)	4psf						6psf					
		Unsupported joist spacing (in) o.c.			Mid-span joist spacing (in) o.c.			Unsupported joist spacing (in) o.c.			Mid-span 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"
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
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"
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"
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"
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"
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"
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"
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"

Deflection Limit L/360

Member	Fy (ksi)	4psf						6psf					
		Unsupported joist spacing (in) o.c.			Mid-span joist spacing (in) o.c.			Unsupported joist spacing (in) o.c.			Mid-span 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"
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
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"
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"
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	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"
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"
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"
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"
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"

Notes:

– For unbraced sections, allowable moment is based on AISI S100-16/2-20 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 2016 AISI Specification Section C3.1.2 with weak axis and torsional unbraced length assumed to be one-half of the listed span (bracing at mid-span).

– 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 AISI S100-16/2-20 Specification.

– Values are for simple span conditions.

– Web stiffeners required at support.

Allowable Screw Design Values

Member Designation	Thickness (mils)	Design Thickness (in)	Yield (ksi)	Ultimate	#6 Screw (.138" Dia., 5/16" Head)				#8 Screw (.164" Dia., 5/16" Head)				#6 Screw (.190" Dia., 0.34" 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	56	62	123	37	61	67	134	43
PDS125-18	18	0.0190	70	70	95	104	208	52	104	104	208	62	112	113	226	72
PDS125-19	19	0.0200	65	65	96	102	203	51	104	102	203	60	112	111	221	70
PDS125-30	30	0.0312	33	33	95	80	161	40	103	80	161	48	111	88	175	55
PDS125-33	33	0.0346	33	45	151	122	243	61	164	122	243	72	177	132	265	84

Notes:

– Allowable screw connection capacities are based on Section J4 of the AISI S100 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.

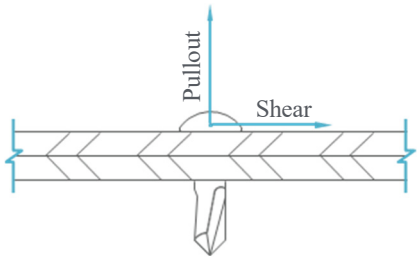
– When multiple fasteners are used, screws are assumed to have a center-to-center spacing of at least three times the nominal diameter (d).

– Screws are assumed to have a center-of-screw to edge-of-steel dimension of at least 1-1/2 times the nominal diameter (d) of the screw.

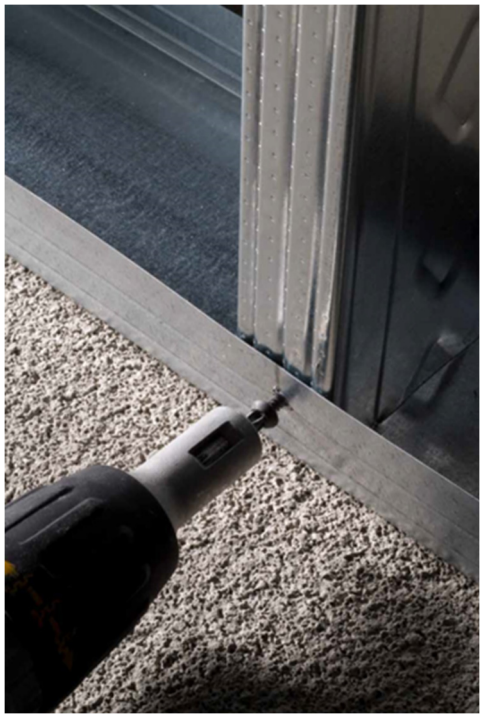
– Tension capacity is based on the lesser of pullout capacity in sheet closest to screw tip, or pullover capacity for sheet closest to screw head (using head diameter).

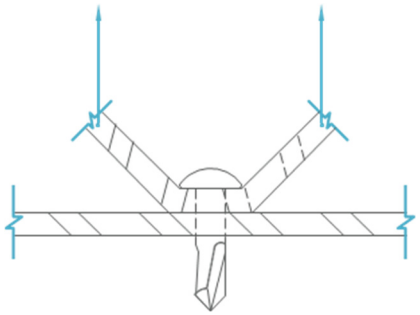
– Screw capacities are governed by a conservative estimate of screw capacity, not by sheet steel failure.

– 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.



Pullout / Shear





2-Sided Pullover

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