



DRYWALL FRAMING SYSTEM

# The ProSTUD® Drywall Framing System with Smart Edge™

Technology can be called many things. Strong. Versatile. Fast. And without a doubt—revolutionary. But one of the biggest benefits to keep in mind is this: ProSTUD was developed, tested and approved by pros in the field who demanded nothing less than achieving absolute ease of use. Its performance has also been proven by the most extensive laboratory evaluations available. All of which means ProSTUD comes with complete confidence and no questions about code compliance. With the backing of online, mobile and data-rich BIM resources, there's no better example of a broader vision at work.

ProSTUD, in fact, is just one example of how ClarkDietrich can reinforce your efforts to design and build more intelligently. Yes, we're known as a manufacturer of extensively tested, code-compliant steel framing products, but we offer so much more. Our products perform as a system. We support a range of efforts for smarter installation and design.

**ProSTUD Drywall** 

We provide the expertise of a versatile engineering services team. And we do it all on a nationwide scale.

We've put together an incredible array of resources to help you be successful on any project, regardless of size or complexity. Within this catalog you'll discover the multiple advantages ProSTUD has to offer, as well as detailed information on the product lineup, limiting heights, sound and fire assemblies, and more.

Ultimately, your choice of ProSTUD doesn't come down to the integrity of the product alone, or even its ease of use. You're also looking to the strength of the company that stands behind it. Count on the expertise, services and full support of ClarkDietrich today—and far into the future.

**Non-Composite Limiting** 

Need Product Submittals?
Use SubmittalPro® at clarkdietrich.com.

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# What is an 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) and the Steel Stud Manufacturers Association (SSMA). 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.

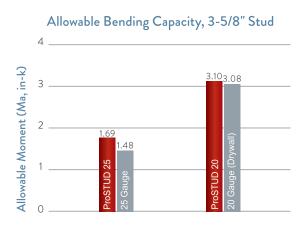
Comparison of Pro to Conventional D	STUD Dryv rywall Frami	vall Framing ing	
ProSTUD Drywall F	raming	Conventional D	rywall Framing
ProSTUD 25	15mil	25 Gauge	18mil
ProSTUD 20	18mil	20 Gauge	30mil

# 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

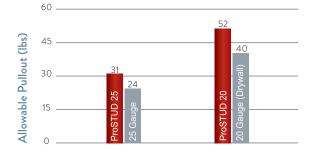
Given ProSTUD's strength and versatility, it's important to know the performance of the ProSTUD member under your project's specific criteria. This catalog will provide guidance in a variety of assemblies and loading criteria, based on current building codes. Additional data is available at clarkdietrich.com.



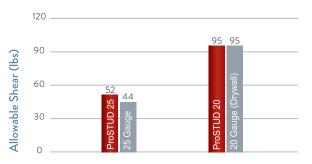
#### Connections

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.





# #6 Screw Shear (Bearing) Values



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.

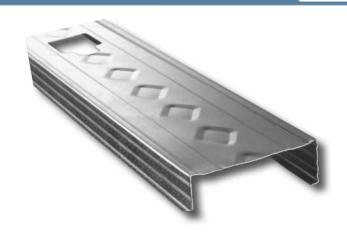
# Construction Advantages

- 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

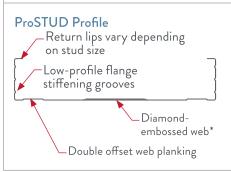
# Design Advantages

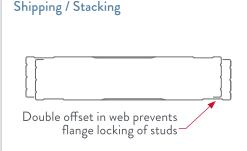
- Designed to meet the additional strength requirements of today's building codes: IBC 2015, AISI (S100), ICC-ES AC86 (2015)
- Smart Edge<sup>™</sup> Technology is an enhancement for producing easier-to-handle steel that reduces the risk of cuts and scrapes
- UL Classified and listed in over 50 designs, including U419, V438, and chase wall assemblies
- Exceptional sound performance in over 30 tested sound assemblies
- Can contribute LEED® points in LEED v4 or LEED 2009.
   EPD and HPD verifications also available.
- National availability

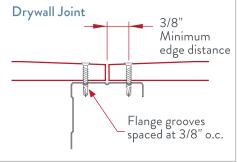
# ProSTUD®



- 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 Thicknesses:
   ProSTUD 25 / 15mil (25ga EQ) 50ksi
   ProSTUD 20 / 18mil (20ga EQ) 70ksi
   ProSTUD 30MIL 33ksi
   ProSTUD 33MIL 33ksi
- Available G40EQ DiamondPlus®, G40 (CP60 available as special order)
- G40EQ DiamondPlus® available for 15mil & 18mil only

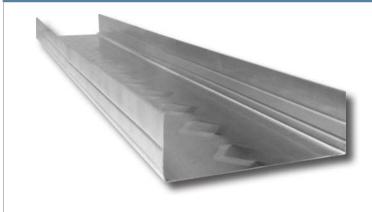






\*Except in 1-5/8"

# **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
- Available G40EQ DiamondPlus®, G40 (CP60 available as special order)
- G40EQ DiamondPlus® available for 15mil & 18mil only

#### ProSTUD® 25 (15mil) Drywall Stud ClarkDietrich ProSTUD 25 (15mil) physical and structural properties **Gross Section Properties** Effective Section Properties at Fy **Torsional Properties** Design Weight (lb/ft) Ry (in) Member thickness Lu (in) Area Ae Ιx Sx Ma Vag (Ib) Vanet Jx1000 Cw Ro ß ly (in<sup>4</sup>) (in) (in4) (in) (in<sup>2</sup>) (in4) (in<sup>3</sup>) (in-lbs) (lb) (in<sup>4</sup>) 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 362PDS125-151 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 400PDS125-151 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 24.2 0.800 0.683 0.023 0.034 2781 600PDS125-15<sup>2</sup> 0.0158 50 0.140 0.48 2.209 0.404 0.537 0.105 60 60 0.01164 0.161 -0.666 2.343 0.919 23.6

ProTRA	K <sup>®</sup> 25	(1	5mil					Cl						nysical a				rties
	Design	Fy		G	ross Sectio	n Properti	es		E	ffective Se	ection Pro	perties at F	у		Torsi	onal Prope	erties	
Member	thickness (in)	(ksi)	Area (in²)	Weight (lb/ft)	lx (in⁴)	Rx (in)	ly (in⁴)	Ry (in)	Ae (in²)	lx (in <sup>4</sup> )	Sx (in³)	Ma (in-Ibs)	Vag (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	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 <sup>1</sup>	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 <sup>1</sup>	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 <sup>2</sup>	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 <sup>1</sup>	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 <sup>1</sup>	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 <sup>2</sup>	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 <sup>1</sup>	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 <sup>1</sup>	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 <sup>2</sup>	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

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

ProSTU	D <sup>®</sup> 20	(18	3mil	) Dr	ywa	II St	u d		Cla	ırkDie	trich	ProST	UD 20	(18m	il) physi	ical an	ıd stru	ctural	prope	rties
	Design	_		Gro	ss Sectio	n Prope	rties			Effectiv	e Section	Propert	ies at Fy	•		Torsio	nal Prope	rties		
Member	thickness (in)	(ksi)	Area (in²)	Weight (lb/ft)	lx (in <sup>4</sup> )	Rx (in)	ly (in <sup>4</sup> )	Ry (in)	Ae (in²)	lx (in <sup>4</sup> )	Sx (in³)	Ma (in-lbs)	Vag (lb)	Vanet (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	Ro (in)	β Beta	(in)
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
400PDS125-181	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 <sup>2</sup>	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

	Design	_		Gi	ross Sectio	n Properti	es		E	ffective Se	ection Pro	perties at F	у		Tors	ional Prope	erties	
Member	thickness (in)	Fy (ksi)	Area (in²)	Weight (lb/ft)	lx (in <sup>4</sup> )	Rx (in)	ly (in <sup>4</sup> )	Ry (in)	Ae (in²)	lx (in <sup>4</sup> )	Sx (in³)	Ma (in-lbs)	Vag (lb)	Jx1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	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 <sup>2</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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

- 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 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.

#### ProSTUD® 30 mil Drywall Stud ClarkDietrich ProSTUD 30MIL physical and structural properties **Gross Section Properties** Effective Section Properties at Fy **Torsional Properties** Design Member Weight (lb/ft) Ma (in-lbs) J\* 1000 Cw ly (in<sup>4</sup>) Ry (in) Ae (in²) lx (in<sup>4</sup>) Sx (in³) Vag (Ib) Vanet Xo (in) Ro (in) ß Area (ksi) (in) (in) (in) (in<sup>6</sup>) (in4) Beta (in<sup>2</sup>) (lb) (in4) 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 0.04459 0.017 -1.070 1.348 0.371 30.8 124 0.0312 -0.941 250PDS125-30 0.165 0.56 0.169 1.012 0.034 0.451 0.106 0.168 0.121 2356 832 0.05345 0.042 1.454 0.581 30.1 33 397 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 29.5 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 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

	Design	_		Gi	ross Sectio	n Properti	es		Е	ffective Se	ection Pro	perties at F	у		Torsi	onal Prope	erties	
Member	thickness (in)	Fy (ksi)	Area (in²)	Weight (lb/ft)	lx (in <sup>4</sup> )	Rx (in)	ly (in⁴)	Ry (in)	Ae (in²)	lx (in <sup>4</sup> )	Sx (in³)	Ma (in-lbs)	Vag (lb)	J* 1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	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
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

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

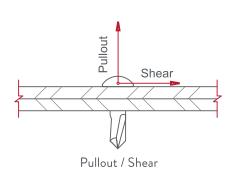
ProSTU	D® 3	<b>3 m</b>	il D	rywa	II St	ud			Cla	rkDie	trich P	roSTU	D 33M	IIL phy	sical a	nd str	uctura	l prop	erties	
	Design	_		Gro	ss Sectio	n Proper	ties			Effectiv	e Section	n Properti	es at Fy			Torsic	nal Prope	rties		
Member	alitation and	(ksi)	Area (in²)	Weight (lb/ft)	lx (in <sup>4</sup> )	Rx (in)	ly (in <sup>4</sup> )	Ry (in)	Ae (in²)	lx (in <sup>4</sup> )	Sx (in³)	Ma (in-lbs)	Vag (lb)	Vanet (Ib)	J* 1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	Xo (in)	Ro (in)	β Beta	(in)
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

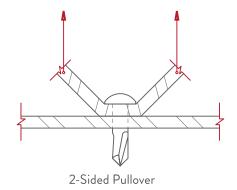
	Design	_		Gi	ross Sectio	n Propert	ies		Е	ffective Se	ection Pro	perties at F	y		Torsi	onal Prope	rties	
Member	thickness (in)	Fy (ksi)	Area (in²)	Weight (lb/ft)	lx (in <sup>4</sup> )	Rx (in)	ly (in <sup>4</sup> )	Ry (in)	Ae (in²)	lx (in <sup>4</sup> )	Sx (in³)	Ma (in-lbs)	Vag (lb)	J* 1000 (in <sup>4</sup> )	Cw (in <sup>6</sup> )	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

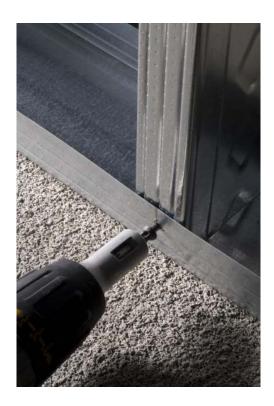
- Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-15, North American Standard for Cold-Formed Steel Framing—Nonstructural Members.
- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
- Tabulated gross properties, including torsional properties, are based on full-unreduced cross section of the 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.

Allowak	ole Sc	rew [	Desig	n Val	ues (	lbs)										
AA 1	T1 : 1	Design	V: II		#6 Sci	ew (0.138"	Dia., 5/16"	Head)	#8 Sci	ew (0.164"	Dia., 5/16"	Head)	#10 Sc	rew (0.190"	Dia., 0.34	" Head)
Member designation	Thickness (mils)	thickness (in)	Yield (ksi)	Ultimate	Shear, Ibs	1-Side	2-Side	Pullout, Ibs	Shear, Ibs	1-Side	2-Side	Pullout, Ibs	Shear, Ibs	1-Side	2-Side	Pullout, Ibs
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

- 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 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.





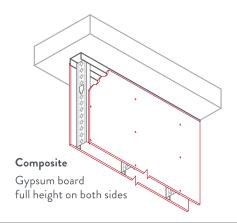


# Which ProSTUD® Limiting Heights Table Should I Use?

ProSTUD, like any interior drywall stud, may be used in a variety of applications including walls, ceilings, and soffits. While some conditions may require the expertise of a design professional, many assemblies can be selected based on tabulated data. Using the diagrams below, locate the required assembly and follow the instructions for selecting the proper ProSTUD member.

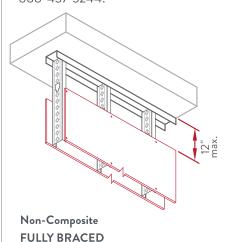
# Composite Assemblies

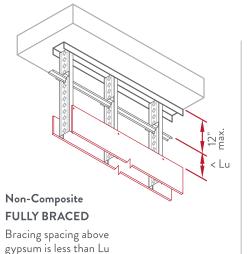
Composite limiting height data can be applied to walls where gypsum board is installed on both flanges of the stud for the full height of the wall. ProSTUD composite data is based on the 2015 International Building Code, and was tested and analyzed in accordance with the most recent version of AC86 (2015). Composite limiting height tables for ProSTUD members are available starting on page 12 of this catalog. In addition, a comprehensive offering is available at clarkdietrich.com.

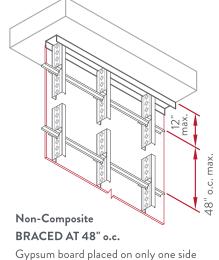


### Non-Composite Assemblies

Non-composite conditions are common in all structures. When the gypsum board stops at the ceiling level, but the stud continues to the deck, it is a non-composite condition. Wall framing with Resilient Channel (RC) or Sound Clips is a non-composite design since the screws attaching the gypsum board are not directly attached to the framing. While there may be advantages to contacting Technical Services or a Design Professional, many conditions can be covered by limiting heights tables shown in this catalog or at clarkdietrich.com. When in doubt, call our complimentary Technical Services Hotline at 888-437-3244.







Distance of unbraced length (Lu) can be found in the physical and structural properties starting on page 6.

### Chase Walls or Furred Walls

Chase and furred walls are common, but the conditions vary greatly depending on the building requirements. While non-composite tables may be used conservatively, when in doubt, contact our Technical Services Hotline at 888-437-3244 for chase wall designs.

### Ceilings

Interior ceilings are often supported by ProSTUD framing. The design criteria varies greatly based on the weight of the ceiling, bracing, and support points. You'll find a partial listing of ceiling span tables on page 20; visit clarkdietrich.com/ProSTUD for more comprehensive data.

Allowable composite limiting heights were determined in accordance with ICC-ES AC86-2015.

33

- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program were observed.
- In accordance with current building codes and AISI design standards, the 1/3 stress increase for strength was not used.

24

12

16

24

 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.

20' 5"

26' 7"

24' 2"

21' 2"

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:

16' 2"

21' 2"

19' 2"

16'9'

14' 2"

18' 5'

16'9"

14' 8"

17' 10"

23' 3"

21' 2"

18' 5"

14' 2"

18' 5"

16' 9"

14' 8"

12' 3'

16' 1'

14' 8'

12' 10'

16' 2"

21' 2"

19' 2"

16'9'

12' 10"

16' 9"

15' 3"

13' 4"

- Screws spaced a minimum of 16 in. o.c. to framing members spaced at 16 in. or 12 in. o.c.
- Screws spaced a minimum of 12 in. o.c. to framing members spaced at 24 in. o.c.
- 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.

362PDS125-30

ProSTUD 33

362PDS125-33

0.0346

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

11' 0"

14' 8"

13' 4"

11' 6'

Pro	STUD® C	ompo	site L	imiting	g Heigh	nts		5/8" Тур	e <b>X Gyps</b> u	m Board			
		Design	Yield					L	ateral Load (ps	f)			
Width	Stud member	thickness		Spacing (inches)		5psf			7.5psf			10 psf	
(in)		(in)	strength (ksi)	(inches)	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
				12	22' 8"	18' 0"	15' 9"	19' 1" f	15' 9"	13' 9"	16' 6" f	14' 4"	12' 6"
	ProSTUD 25 400PDS125-15	0.0158	50	16	20' 3" f	16' 4"	14' 4"	16' 6" f	14' 4"	12' 6"	14' 4" f	13' 0"	11' 3"
	400PD5125-15			24	16' 6" f	14' 4"	12' 6"	13' 6" f	12' 6"	10' 8"	11' 8" f	11' 3"	9' 6"
	D OTUD OO			12	22' 9"	18' 8"	16' 4"	19' 11"	16' 4"	14' 3"	18' 1"	14' 10"	13' 0"
	ProSTUD 20 400PDS125-18	0.0190	70	16	21' 4"	17' 7"	15' 4"	18' 8"	15' 4"	13' 5"	16' 11"	13' 11"	12' 2'
4	400PD5125-16			24	19' 3"	15' 10"	13' 10"	16' 7" f	13' 10"	12' 1"	14' 4" f	12' 6"	10' 9'
4	D OTUD OO			12	27' 5"	21' 9"	19' 0"	24' 0"	19' 0"	16' 8"	21' 9"	17' 4"	15' 1'
	ProSTUD 30 400PDS125-30	0.0312	33	16	24' 11"	19' 10"	17' 4"	21' 9"	17' 4"	15' 1"	19' 10"	15' 9"	13' 9'
	400PD5125-30			24	21' 9"	17' 4"	15' 1"	19' 0"	15' 1"	13' 2"	17' 4"	13' 9"	11' 10
	D. OTUD 00			12	27' 10"	22' 9"	20' 1"	24' 3"	19' 11"	17' 7"	22' 1"	18' 1"	15' 11
	ProSTUD 33 400PDS125-33	0.0346	33	16	25' 3"	20' 8"	18' 3"	22' 1"	18' 1"	15' 11"	20' 1"	16' 5"	14' 6'
	400FD3125-33			24	22' 1"	18' 1"	15' 11"	19' 3"	15' 10"	13' 11"	17' 6"	14' 4"	12' 8'
				12	27' 10" f	24' 2"	21' 5"	22' 9" f	21' 1"	18' 8"	19' 8" f	19' 2"	17' 0"
	ProSTUD 25	0.0158	50	16	24' 1" f	21' 11"	19' 5"	19' 8" f	19' 2"	17' 0"	17' 1" f	17' 1" f	15' 5'
	600PDS125-15	0.0100	00	24	19' 8" f	19' 2"	17' 0"	16' 1" f	16' 1" f	14' 9"	13' 11" f	13' 11" f	13' 4'
				12	32' 1"	25' 6"	22' 3"	28' 1"	22' 3"	19' 5"	24' 4" f	20' 3"	17' 8'
	ProSTUD 20	0.0190	70	16	29' 10"	23' 8"	20' 8"	24' 10" f	20' 8"	18' 1"	21' 6" f	18' 9"	16' 5'
	600PDS125-18	0.0.00	, ,	24	25' 5" f	21' 1"	18' 5"	20' 9" f	18' 5"	16' 1"	18' 0" f	16' 9"	14' 6'
6				12	36' 7"	29' 1"	25' 5"	32' 0"	25' 5"	22' 2"	29' 1"	23' 1"	20' 2'
	ProSTUD 30	0.0312	33	16	33' 3"	26' 5"	23' 1"	29' 1"	23' 1"	20' 2"	26' 5"	20' 11"	18' 4'
	600PDS125-30			24	29' 1"	23' 1"	20' 2"	25' 5"	20' 2"	17' 7"	22' 6" f	18' 4"	_
				12	36' 8"	30' 1"	26' 6"	32' 0"	26' 3"	23' 2"	29' 1"	23' 10"	21' 0'
	ProSTUD 33	0.0346	33	16	33' 3"	27' 4"	24' 1"	29' 1"	23' 10"	21' 0"	26' 5"	21' 8"	19' 1'
	600PDS125-33			24	29' 1"	23' 10"	21' 0"	25' 5"	20' 10"	18' 4"	23' 1"	18' 11"	

- 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 were 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 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:
  - Screws spaced a minimum of 16 in. o.c. to framing members spaced at 16 in. or 12 in. o.c.
  - Screws spaced a minimum of 12 in. o.c. to framing members spaced at 24 in. o.c.
- 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 height value indicates that shear/end reaction controls the allowable wall height.

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.

30' 7

26' 6"

21'8"

26' 7'

24' 1"

21' 1"

Above listed Non-Composite Limiting Heights are applicable when the unbraced length is less than or equal to Lu.

12

16

24

- Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).

33

33

Web stiffeners are required at bearing points.

0.0346

0.0346

0.0346

ProSTUD 33MIL

600PDS125-33

18' 5'

16' 9'

14' 7'

23' 2"

21' 1"

18' 5"

25' 0'

21' 8'

17' 8"

23' 2"

21' 1'

17' 8'

20' 3"

18' 5'

16' 1"

21' 8'

18' 9'

15' 4"

21' 1'

18' 9'

15' 4'

Pı	·oSTUD®	Non-C	omposi	te Lim	iting l	Heights					STUD Non-C -BRACED AT		
		Design	Yield	Spacing				L	ateral Load (psf)	)			
epth (in)	Stud member	thickness	strength	o.c.		5psf			7.5psf			10psf	
(In)		(in)	(ksi)	(in)	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
		0.0158	50	12	8' 1"	7' 4"	6' 4"	6' 7"	6' 4"	5' 7"	5' 9"	5' 9"	5' 1"
	ProSTUD 25	0.0158	50	16	7' 0"	6' 8"	5' 9"	5' 9"	5' 9"	5' 1"	4' 11"	4' 11"	4' 7"
	162PDS125-15	0.0158	50	24	5' 9"	5' 9"	5' 1"	4' 8"	4' 8"	4' 5"	4' 0"	4' 0"	4' 0"
		0.0190	70	12	9' 6"	7' 9"	6' 9"	7' 9"	6' 9"	5' 11"	6' 9"	6' 2"	5' 4"
	ProSTUD 20	0.0190	70	16	8' 3"	7' 0"	6' 2"	6' 9"	6' 2"	5' 4"	5' 10"	5' 7"	4' 10"
	162PDS125-18		70	24	6' 9"	6' 2"	5' 4"	5' 6"	5' 4"	4' 8"	4' 9"	4' 9"	4' 3"
1-5/8		0.0190											
	ProSTUD 30MIL	0.0312	33	12	11' 10"	9' 5"	8' 3"	10' 3"	8' 3"	7' 2"	8' 11"	7' 6"	6' 6"
	162PDS125-30	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"
	ProSTUD 33MIL	0.0346	33	12	12' 3"	9' 9"	8' 6"	10' 8"	8' 6"	7' 5"	9' 5"	7' 9"	6' 9"
	162PDS125-33	0.0346	33	16	11' 2"	8' 10"	7' 9"	9' 5"	7' 9"	6' 9"	8' 2"	7' 0"	6' 1"
	102FD3125-33	0.0346	33	24	9' 5"	7' 9"	6' 9"	7' 8"	6' 9"	5' 11"	6' 8"	6' 1"	5' 4"
		0.0158	50	12	10' 5"	10' 2"	8' 11"	8' 6"	8' 6"	7' 9"	7' 4"	7' 4"	7' 1"
	ProSTUD 25	0.0158	50	16	9' 0"	9' 0"	8' 1"	7' 4"	7' 4"	7' 1"	6' 5"	6' 5"	6' 5"
	250PDS125-15	0.0158	50	24	7' 4"	7' 4"	7' 1"	6' 0"	6' 0"	6' 0"	5' 3"	5' 3"	5' 3"
	ProSTUD 20	0.0190	70	12	13' 5"	10' 11"	9' 6"	10' 11"	9' 6"	8' 4"	9' 6"	8' 8"	7' 7"
	250PDS125-18	0.0190	70	16	11' 7"	9' 11"	8' 8"	9' 6"	8' 8"	7' 7"	8' 3"	7' 10"	6' 10"
2-1/2	200. 20120 10	0.0190	70	24	9' 6"	8' 8"	7' 7"	7' 9"	7' 7"	6' 7"	6' 8"	6' 8"	6' 0"
L- 1/Z	Des OTLID COM!	0.0312	33	12	16' 5"	13' 0"	11' 4"	13' 8"	11' 4"	9' 11"	11' 10"	10' 4"	9' 0"
	ProSTUD 30MIL	0.0312	33	16	14' 6"	11' 10"	10' 4"	11' 10"	10' 4"	9' 0"	10' 3"	9' 5"	8' 2"
	250PDS125-30	0.0312	33	24	11' 10"	10' 4"	9' 0"	9' 8"	9' 0"	7' 11"	8' 4"	8' 2"	7' 2"
		0.0346	33	12	16' 11"	13' 5"	11' 9"	14' 4"	11' 9"	10' 3"	12' 5"	10' 8"	9' 4"
	ProSTUD 33MIL	0.0346	33	16	15' 3"	12' 3"	10' 8"	12' 5"	10' 8"	9' 4"	10' 9"	9' 8"	8' 6"
	250PDS125-33												
		0.0346	33	24	12' 5"	10' 8"	9' 4"	10' 2"	9' 4"	8' 2"	8' 10"	8' 6"	7' 5"
	ProSTUD 25*	0.0158	50	12	12' 5"	12' 5"	11' 10"	10' 1"	10' 1"	10' 1"	8' 9"	8' 9"	8' 9"
	362PDS125-15	0.0158	50	16	10' 9"	10' 9"	10' 9"	8' 9"	8' 9"	8' 9"	7' 7"	7' 7"	7' 7"
	302FD3125-15	0.0158	50	24	8' 9"	8' 9"	8' 9"	7' 2"	7' 2"	7' 2"	6' 2"	6' 2"	6' 2"
		0.0190	70	12	15' 2"	14' 6"	12' 8"	12' 5"	12' 5"	11' 1"	10' 9"	10' 9"	10' 1"
	ProSTUD 20	0.0190	70	16	13' 2"	13' 2"	11' 6"	10' 9"	10' 9"	10' 1"	9' 4"	9' 4"	9' 2"
	362PDS125-18	0.0190	70	24	10' 9"	10' 9"	10' 1"	8' 9"	8' 9"	8' 9"	7' 7"	7' 7"	7' 7"
3-5/8							15' 2"	16' 4"					_
	ProSTUD 30MIL	0.0312	33	12	20' 0"	17' 4"			15' 2"	13' 3"	14' 1"	13' 9"	12' 0"
	362PDS125-30	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"
	D CTUD 22MII	0.0346	33	12	21' 3"	17' 11"	15' 8"	17' 4"	15' 8"	13' 8"	15' 0"	14' 3"	12' 5"
	ProSTUD 33MIL	0.0346	33	16	18' 5"	16' 3"	14' 3"	15' 0"	14' 3"	12' 5"	13' 0"	12' 11"	11' 3"
	362PDS125-33	0.0346	33	24	15' 0"	14' 3"	12' 5"	12' 3"	12' 3"	10' 10"	' 10'8"	10' 8"	9' 10"
		0.0158	50	12	13' 0"	13' 0"	12' 8"	10' 8"	10' 8"	10' 8"	9' 2"	9' 2"	9' 2"
	ProSTUD 25*	0.0158	50	16	11' 3"	11' 3"	11' 3"	9' 2"	9' 2"	9' 2"	8' 0"	8' 0"	8' 0"
	400PDS125-15												
		0.0158	50	24	9' 2"	9' 2"	9' 2"	7' 6"	7' 6"	7' 6"	6' 6"	6' 6"	6' 6"
	ProSTUD 20*	0.0190	70	12	16' 3"	15' 6"	13' 7"	13' 3"	13' 3"	11' 10"		11' 6"	10' 9"
	400PDS125-18	0.0190	70	16	14' 1"	14' 1"	12' 4"	11' 6"	11' 6"	10' 9"	9' 11"	9' 11"	9' 9"
4	.001 20120 10	0.0190	70	24	11' 6"	11' 6"	10' 9"	9' 4"	9' 4"	9' 4"	8' 1"	8' 1"	8' 1"
4	Des OTLID COM!	0.0312	33	12	21' 1"	18' 8"	16' 4"	17' 2"	16' 4"	14' 3"	14' 11"	14' 10"	13' 0"
	ProSTUD 30MIL	0.0312	33	16	18' 3"	17' 0"	14' 10"	14' 11"	14' 10"	13' 0"	12' 11"	12' 11"	11' 9"
	400PDS125-30	0.0312	33	24	14' 11"	14' 10"	13' 0"	12' 2"	12' 2"	11' 4"	10' 6"	10' 6"	10' 3"
		0.0346	33	12	22' 5"	19' 4"	16' 11"	18' 4"	16' 11"	14' 9"	15' 10"	15' 4"	13' 5"
	ProSTUD 33MIL	0.0346			19' 5"				15' 4"				
	400PDS125-33		33	16		17' 7"	15' 4"	15' 10"		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"
	ProSTUD 25*	0.0158	50	12	15' 11"	15' 11"	15' 11"	13' 0"	13' 0"	13' 0"	11' 3"	11' 3"	11' 3"
	600PDS125-15	0.0158	50	16	13' 9"	13' 9"	13' 9"	11' 3"	11' 3"	11' 3"	8' 11"	8' 11"	8' 11"
	0001 00120-10	0.0158	50	24	11' 3"	11' 3"	11' 3"	7' 11"	7' 11"	7' 11"	6' 0"	6' 0"	6' 0"
		0.0190	70	12	20' 10"	20' 8"	18' 0"	17' 0"	17' 0"	15' 9"	14' 8"	14' 8"	14' 4"
	ProSTUD 20*	0.0190	70	16	18' 0"	18' 0"	16' 4"	14' 8"	14' 8"	14' 4"	12' 9"	12' 9"	12' 9"
	600PDS125-18	0.0190	70	24	14' 8"	14' 8"	14' 4"	12' 0"	12' 0"	12' 0"	10' 5"	10' 5"	10' 5"
6													
	ProSTUD 30MIL	0.0312	33	12	26' 9"	25' 7"	22' 4"	21' 10"	21' 10"	19' 7"	18' 11"	18' 11"	17' 9"
	600PDS125-30	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"
	ProSTUD 33MIL	0.0346	33	12	28' 4"	26' 7"	23' 2"	23' 2"	23' 2"	20' 3"	20' 1"	20' 1"	18' 5"
		0.0040	33	16	24' 7"	24' 1"	21' 1"	20' 1"	20' 1"	18' 5"	17' 5"	17' 5"	16' 9"
	600PDS125-33	0.0346	33	10									

- 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 moment capacities are based on discrete stud bracing at 4 ft. o.c.
- Heights are limited by moment, deflection, shear, and web crippling (assuming 1" end reaction bearing).
- Web stiffeners are required at bearing points.

#### ProSTUD® 3-5/8" Sound Assemblies STC Rating / Test Report Partition type Assembly description ProSTUD 25 ProSTUD 20 ProSTUD 30mil ProSTUD 33mil 37 43 40 36 3-5/8" ProSTUD @ 24" o.c. 1 layer 5/8" Type X GWB on each side TL09-539 TL19-091 TL20-412 TL13-197 3-5/8" ProSTUD 37 48 47 40 3-1/2" R-13 unfaced insulation @ 24" o.c. TL19-094 TL09-540 TL20-413 TL13-196 1 layer 5/8" Type X GWB on each side 3-5/8" ProSTUD 49 51 40 42 3-1/2" R-13 unfaced insulation @ 24" o.c. 1 layer 5/8" Type X GWB on one side TL13-167 TL19-092 TL13-202 TL13-195 2 layers 5/8" Type X GWB on the other side 3-5/8" ProSTUD 54 52 42 45 3-1/2" R-13 unfaced insulation @ 24" o.c. TL09-538 TL19-093 TL13-201 TL13-194 2 layers 5/8" Type X GWB on each side 3-5/8" ProSTUD 54 53 48 50 3-1/2" R-13 unfaced insulation @ 24" o.c. RC-Deluxe w/1 layer 5/8" Type X GWB on one side TL18-302 TL19-097 TL20-414 TL16-369 1 layer 5/8" Type X GWB on the other side 3-5/8" ProSTUD 56 59 58 55 3-1/2" R-13 unfaced insulation @ 24" o.c. RC-Deluxe w/ 2 layers 5/8" Type X GWB on one side TL09-543 TL19-096 TL20-415 TL16-370 1 layer 5/8" Type X GWB on the other side

### Notes:

Sound assemblies are certified by Western Electro-Acoustic Laboratories.

3-5/8" ProSTUD.

3-1/2" R-13 unfaced insulation

- NVLAP accredited for ASTM E90 & E413, ISO Certified.
- See STC test reports at www.clarkdietrich.com/ProSTUD for detailed requirements of construction of wall assembly.
   Contact ClarkDietrich Technical Services at 888-437-3244 for questions about ProSTUD sound assemblies.

RC-Deluxe w/ 2 layers 5/8" Type X GWB on one side

2 layers 5/8" Type X GWB on the other side

# Visit itools.clarkdietrich.com for a complete list of sound ratings.

58

TL13-200

58

TL20-416

@ 24" o.c.

62

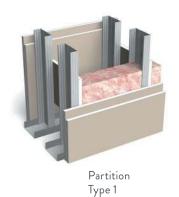
TL13-181

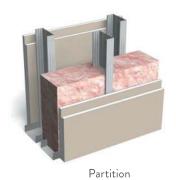
60

TL19-095

ProSTUD	1-5/8" Stud	l Chase Sou	nd Assembl	lies	Two parallel ro	ws	
6	C: 1. A	C.1. D	Level of the Land	Studensia -	STC Rating	Total	Description Laws
Gypsum type	Side A	Side B	Insulation type	Stud spacing	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 lavers	2 lavers	R-13* unfaced	24"	61	TL09-592	1

ProSTUD	2-1/2" Stud	Staggered in opposite walls					
Gypsum type	Side A	Side B	Insulation type	Stud spacing	STC Rating	Took oo ook	Partition type
	Side A	Side B	insulation type	Stud spacing	ProSTUD 25 (15mil)	Test report	
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





Type 2

#### Notes:

- Sound Assemblies are certified by Western Electro-Acoustic Laboratories.
- NVLAP Accredited for ASTM E90 & E413, ISO Certified.
- See STC test reports at www.clarkdietrich.com/ProSTUD for detailed requirements of construction of wall assembly.
- $^{\ast}$  Values are the same for R-11 insulation.

 $Contact\ Clark Dietrich\ Technical\ Services\ at\ 888-437-3244\ for\ questions\ about\ ProSTUD\ sound\ assemblies.$ 

ProSTUD® Sing		W/ II F:	A 11. A
Problud Sing	le Stud	vvall—Fire	Assemblies^

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
U403	2	ProSTUD 20 (18mil)	3-5/8"
U407	1/2 or 1	ProSTUD 25 (15mil)	3-5/8"
U408	2	ProSTUD 20 (18mil)	3-5/8"
U411	2	ProSTUD 25 (15mil)	2-1/2"
U412	2	ProSTUD 25 (15mil)	1-5/8"
U419	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
U421	2	ProSTUD 25 (15mil)	3-5/8"
U431	4	ProSTUD 20 (18mil)	3-5/8"
U435	3 or 4	ProSTUD 25 (15mil)	1-5/8"
U442*	1	ProSTUD 33MIL	2-1/2"
U450	1 or 3	ProSTUD 20 (18mil)	3-5/8"
U451	1	ProSTUD 20 (18mil)	2-1/2"
U454	2	ProSTUD 20 (18mil)	2-1/2"
U463	3 or 4	ProSTUD 20 (18mil)	1-5/8"
U465	1	ProSTUD 20 (18mil)	3-5/8"
U471	1-1/2	ProSTUD 20 (18mil)	3-5/8"
U475	1, 2 or 3	ProSTUD 20 (18mil)	3-5/8"
U478	3	ProSTUD 20 (18mil)	1-5/8"
U484*	2	ProSTUD 33MIL	2-1/2"
U488*	1	ProSTUD 33MIL	2-1/2"
U490	4	ProSTUD 20 (18mil)	2-1/2"
U491	2	ProSTUD 20 (18mil)	3-5/8"
U494	1	ProSTUD 20 (18mil)	2-1/2"
U495	1 or 2	ProSTUD 20 (18mil)	3-5/8"
U496	1	ProSTUD 20 (18mil)	1-5/8"

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
V410	2	ProSTUD 20 (18mil)	1-5/8"
V412	2	ProSTUD 20 (18mil)	3-5/8"
V416	1	ProSTUD 20 (18mil)	3-5/8"
V417	1	ProSTUD 20 (18mil)	3-5/8"
V418	2	ProSTUD 20 (18mil)	1-5/8"
V419	2	ProSTUD 20 (18mil)	2-1/2"
V425	1	ProSTUD 20 (18mil)	2-1/2"
V435	1	ProSTUD 20 (18mil)	3-5/8"
V438	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
V443	4	ProSTUD 20 (18mil)	3-5/8"
V444	1	ProSTUD 20 (18mil)	3-5/8"
V448	1	ProSTUD 20 (18mil)	3-5/8"
V449	2	ProSTUD 20 (18mil)	3-5/8"
V450	1	ProSTUD 25 (15mil)	3-5/8"
V450	2	ProSTUD 25 (15mil)	2-1/2"
V452	1 or 2	ProSTUD 20 (18mil)	3-5/8"
V453*	1-1/2	ProSTUD 33MIL	6"
V461*	1	ProSTUD 33MIL	3-5/8"
V476	1 or 3	ProSTUD 20 (18mil)	3-5/8"
V477	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
V487	2	ProSTUD 20 (18mil)	1-5/8"
V489	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
V498	1, 2, 3 or 4	ProSTUD 25 (15mil)	(See Table 1 below)
W411	1/2 or 1	ProSTUD 25 (15mil)	3-5/8"
W415	1 or 2	ProSTUD 20 (18mil)	2-1/2"
W424	1	ProSTUD 25 (15mil)	3-5/8"

# ProSTUD Chase or Double Stud-Fire Assemblies<sup>A</sup>

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
U420	2	ProSTUD 25 (15mil)	1-5/8"
U436	1, 2, or 3	ProSTUD 20 (18mil)	1-5/8"
U444	2	ProSTUD 25 (15mil)	1-5/8"
U445*	1	ProSTUD 33 (33mil)	1-5/8"
U466	1	ProSTUD 20 (18mil)	2-1/2"
U493	2	ProSTUD 25 (15mil)	2-1/2"
V437	1	ProSTUD 20 (18mil)	1-5/8"

UL design no.	Hourly rating	ProSTUD minimum thickness	ProSTUD minimum depth
V442	2	ProSTUD 25 (15mil)	1-5/8"
V464	1	ProSTUD 25 (15mil)	3-5/8"
V469*	1	ProSTUD 33 (33mil)	2-1/2"
V469	2	ProSTUD 20 (18mil)	2-1/2"
V488	1 or 2	ProSTUD 20 (18mil)	2-1/2"
V490*	1 or 2	ProSTUD 33 (33mil)	2-1/2"
V496	1 or 2	ProSTUD 20 (18mil)	2-1/2"

# ProSTUD Table 1: Minimum Depth of ProSTUD Required<sup>A</sup>

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

ASee UL listing for detailed requirements of construction of tested assembly.



<sup>\*</sup>ProSTUD meets or exceeds the description of the generic stud/track listed in the UL assembly.

# Deep Leg Deflection Track Systems

Head-of-wall vertical deep leg deflection track systems are required to allow the top of the wall stud to float within the top track legs. This condition allows for vertical live load movement of the primary structure without transferring axial loads to the interior drywall studs. A gap (determined by the Engineer of Record) is required between the top of the wall stud and the deflection track. ProSTUD® Drywall Framing studs can be used with the three Deep Leg Track Systems listed below:

# ProTRAK® Deep Leg Track

ProTRAK deep leg track is available with leg lengths of 2," 2-1/2" and 3" long. The wall studs are not fastened to the deflection track, and a row of lateral bracing is required within 12" of the deep leg track to prevent rotation and lateral movement of the studs. The deflection track system must be designed for the end reaction of the wall studs (point loads) and for the specific gap required for vertical deflection.

ProTRAK® Allowable Lateral Loads and Wall Heights										
Deflection		g Track '2" Gap		eg Track '4" Gap	3" Leg Track with 1" Gap					
track system	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.

# Structural Deep Leg Track (18ga & 16ga)

Structural Deep Leg Track systems are installed the same as the ProTRAK deep leg track system but are designed to handle tall wall systems.

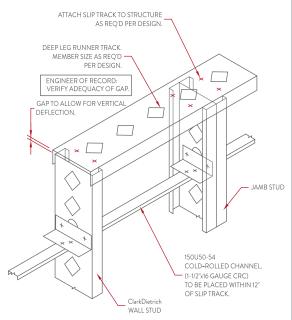
For structural deep leg track allowable loads, contact Technical Services at 888-437-3244 or visit clarkdietrich.com.

### Slotted Deflection Track from ClarkDietrich

The slotted deflection track is attached to the wall studs through vertical slots using wafer head screws, creating a positive connection that allows for vertical movement and also eliminates the requirement for lateral bracing near the top of the wall stud.

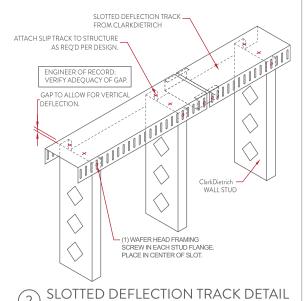
MaxTrak* Allowable Lateral Loads and Wall Heights									
Deflection track system		UD 25 50ksi)		UD 20 70ksi)		TUD (33ksi)	ProSTUD 33mil (33ksi)		
	Allowable load (lbs)	Limiting wall height	Allowable load (lbs)		Allowable load (lbs)	Limiting wall height	Allowable load (lbs)	Limiting wall height	
MaxTrak 30MIL	45	13' 6"	76	22' 10"	148	44' 4"	148	44' 4"	
MaxTrak 33MIL	52	15' 7"	88	26' 5"	156	46' 10"	156	46' 10"	

- Allowable loads are based on screws through the slots located 1-1/4" from the track web.
- #8 minimum wafer head screws shall be used for stud-track connection.
- The above table is applicable to ProSTUD members only. ProSTUD allowable heights must be checked also.
- Allowable heights are based on 5psf and wall stud spacing at 16" o.c. with a max. gap of 7/8."



## DEEP LEG DEFLECTION TRACK DETAIL WITH LATERAL BRACING WITHIN 12" OF SLIP TRACK

Details shown are for example only. The engineer of record of the project is responsible for the design of the connection to the structure. Additional connection details can be found at clarkdietrich.com.



ClarkDietrich offers both the MaxTrak® Slotted Deflection Track and BlazeFrame® Integrated Fire Stop System. Find more information on these systems at clarkdietrich.com.

# ProSTUD® Allowable Ceiling Spans

# Deflection Limit L/240

		4psf Lateral Support of Compression Flange						6psf Lateral Support of Compression Flange					
Section	Fy (ksi)	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"

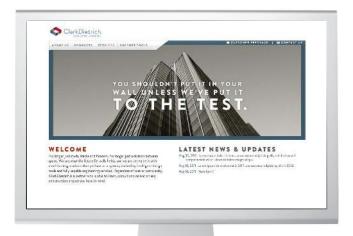
# ProSTUD Allowable Ceiling Spans

# Deflection Limit L/360

				0 1										
	4psf Lateral Support of Compression Flange							6psf Lateral Support of Compression Flange						
Section F		Unsupported joist spacing (in) o.c.			joi	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"	

- For unbraced sections, allowable moment is based on AISI S100-12 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 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 S100-12 Specification.
- Values are for simple span conditions.
- e Web stiffeners required at support.

# Support Tools



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Visit to explore company information, design tools, technical documents, services and so much more. Featuring a unique product selector, our website is designed to deliver the details you want with a minimum number of clicks.



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Over time, project specifications can become outdated. For suggestions on how to improve the performance of your specifications, contact us about a complimentary review. Send us an email to info@clarkdietrich.com.



### **Technical Services**

Count on ClarkDietrich Technical Services to respond to a variety of needs, from general questions on industry standards to specifics on accurate sizing. Call us at 888-437-3244.





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- · Product support and typical member sizing
- · Framing detail recommendations
- Compliance and industry standards, such as AISI, ASTM and SFIA
- · Engineering software and product submittal support
- · LEED requirements support

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# ProSTUD® & ProTRAK® CODE APPROVALS AND PERFORMANCE STANDARDS

ClarkDietrich® ProSTUD Drywall Framing System meets or exceeds these applicable performance standards.

AISI S100-12 North American Specification for the Design of Cold-Formed Steel Structural Members

AISI S220-15 North American Standard for Cold-Formed Steel Framing-Nonstructural Members

# **ASTM American Society for Testing and Materials**

A1003	"Material specification for steel sheet mechanical and chemical requirements"
C645	"Standard Specification for Nonstructural Steel Framing Members"
C754	"Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products"
C1002	"Standard Specification for Steel Self Piercing Tapping Screw for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs"
E119	"Standard Test Methods for Fire Tests of Building Construction and Materials"
E72	"Standard Test Methods of Conducting Strength Tests of Panels for Building Construction"
E90	"Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements"

### **UL®** Underwriters Laboratories testing standard

UL 263 "Fire Tests of Building Construction and Materials"

### Independent product testing and certification

Sound ratings: (WEAL) Western Electro-Acoustic Laboratory Fire testing: (UL) Underwriters Laboratories Inc.

# Multiple UL® design listings for ProSTUD

Over 50 UL Designs, See UL file number R26512 for additional information.

For the complete listing of all Fire and Sound rated assemblies, visit www.clarkdietrich.com/testing-agencies.

UL® and UL® Design are service marks of Underwriters Laboratories. Inc.

ClarkDietrich is a proud member of the Steel Framing Industry Association (SFIA). Check the updated list of Certified Production Facilities at Intertek's website at www.intertek.com. Additional code approvals SFIA (Steel Framing Industry Association) Intertek CCRR0207.

# LEED® Services BUILD GREEN with ClarkDietrich

ClarkDietrich is an active member of the U.S. Green Building Council and is committed to supplying quality products that are environmentally responsible. We are continually working to develop greener building products and sustainable business practices. Clark Dietrich steel framing helps contribute points toward LEED® certification. For more details contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED.

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