ClarkDietrich

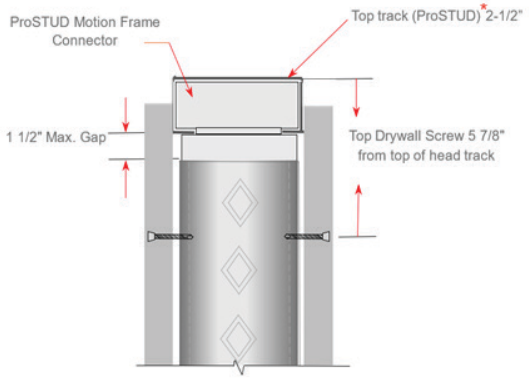
ProSTUD® Head-of-Wall (HOW) Composite Limiting Heights with ProSTUD® Motion Frame Connector

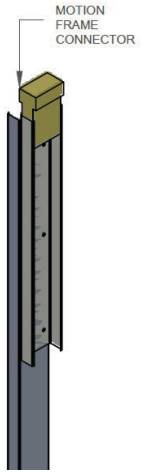
5/8" Type X Gypsum Board

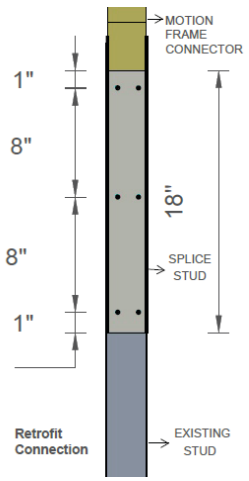
Width	Stud Member	Stud Spacing	Screw Spacing	5psf			7.5psf			10psf			15psf		
				L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
2-1/2"	ProSTUD 25 / 15mil 250PDS125-15	12	16	15'-3"	12'-10"	11'-2"	13'-3" f	11'-2"	9'-6"	11'-6" f	10'-2"	8'-0"	–	–	–
		16	16	14'-4"	12'-1"	10'-6"	12'-2" f	10'-6"	8'-4"	10'-6" f	9'-0"	–	–	–	–
		24	12	12'-10" f	10'-10"	8'-8"	10'-6" f	8'-8"	–	9'-1" f	–	–	–	–	–
2-1/2"	ProSTUD 20 / 18mil 250PDS125-18	12	16	16'-7"	13'-11"	12'-2"	14'-5" f	12'-2"	10'-8"	12'-6" f	11'-0"	9'-4"	8'-3" f	8'-3" f	–
		16	16	15'-4"	12'-10"	11'-3"	13'-5"	11'-3"	9'-8"	11'-8" f	10'-2"	8'-2"	–	–	–
		24	12	13'-8"	11'-5"	10'-0"	11'-9" f	9'-11"	8'-0"	10'-2" f	8'-6"	–	–	–	–
2-1/2"	ProSTUD 30mil 250PDS125-30	12	16	17'-11"	14'-11"	13'-3"	15'-8"	13'-0"	11'-6"	14'-3"	11'-10"	10'-6"	10'-11" f	10'-4"	8'-8"
		16	16	16'-8"	14'-0"	12'-5"	14'-7"	12'-2"	10'-10"	13'-3"	11'-1"	9'-8"	10'-0" f	9'-6"	–
		24	12	14'-11"	12'-7"	11'-2"	13'-0"	11'-0"	9'-6"	11'-10"	9'-11"	8'-0"	8'-6" f	8'-0"	–
2-1/2"	ProSTUD 33mil 250PDS125-33	12	16	18'-1"	14'-11"	13'-3"	15'-9"	13'-0"	11'-6"	14'-4"	11'-10"	10'-6"	10'-11" f	10'-4"	8'-8"
		16	16	16'-11"	14'-0"	12'-5"	14'-10"	12'-2"	10'-10"	13'-5"	11'-1"	9'-8"	10'-0" f	9'-6"	–
		24	12	15'-3"	12'-7"	11'-2"	13'-4"	11'-0"	9'-6"	12'-1"	9'-11"	8'-0"	8'-6" f	8'-0"	–
3-5/8"	ProSTUD 25 / 15mil 362PDS125-15	12	16	17'-0"	14'-2"	12'-6"	14'-2"	12'-4"	10'-2"	12'-3"	10'-9"	8'-8"	–	–	–
		16	16	15'-11"	13'-6"	11'-10"	13'-0"f	11'-7"	9'-4"	11'-3"f	9'-10"	8'-0"	–	–	–
		24	12	13'-9"f	12'-3"	10'-0"	11'-2"f	9'-11"	--	9'-8"f	8'-6"	–	–	–	–
3-5/8"	ProSTUD 20 / 18mil 362PDS125-18	12	16	19'-4"	16'-0"	14'-1"	16'-11"	14'-0"	12'-4"	15'-4"	12'-9"	10'-10"	10'-2"f	10'-2"f	8'-10"
		16	16	17'-9"	14'-9"	13'-0"	15'-6"	12'-11"	10'-11"	14'-1"	11'-6"	9'-4"	9'-4"F	9'-3"	–
		24	12	15'-8"	13'-0"	11'-0"	13'-9"	10'-10"	8'-7"	12'-3"f	9'-2"	–	8'-1"F	–	–
3-5/8"	ProSTUD 30mil 362PDS125-30	12	16	23'-4"	18'-6"	16'-2"	20'-4"	16'-2"	14'-1"	18'-6"	14'-8"	12'-9"	13' - 3" f	12'-9"	10'-9"
		16	16	21'-8"	17'-2"	15'-0"	18'-11"	15'-0"	13'-1"	17'-2"	13'-8"	11'-8"	12'-2"f	11'-8"	–
		24	12	19'-3"	15'-4"	13'-4"	16'-10"	13'-4"	11'-4"	15'-4"	11'-11"	10'-1"	10'-2"f	10'-1"	–
3-5/8"	ProSTUD 33mil 362PDS125-33	12	16	23'-4"	18'-6"	16'-2"	20'-4"	16'-2"	14'-1"	18' - 6"	14'-8"	12'-9"	13'-3" f	12'-9"	10'-9"
		16	16	21'-11"	17'-5"	15'-2"	19'-2"	15'-2"	13'-3"	17' - 5"	13'-10"	11'-10"	12'-5" f	11'-10"	10'-0"
		24	12	19'-9"	15'-8"	13'-8"	17'-3"	13'-8"	11'- 9"	15' - 8"	12'-4"	10'-5"	10'-10" f	10'-5"	–

Notes:

1 Allowable HOW composite limiting heights were tested in accordance with AISI S916 and ICC-ES AC86.
2 The tabulated heights are applicable for both New Construction and Retrofit Construction conditions.
3 The tests were modified from the standards with the tracks fastened to the test fixture such that the wall stiffness included the track deformation.
4 In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
5 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.
6 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 at 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 at maximum of 12 in on-center to framing members (including bottom track) when studs spaced at 24 in on-center.
7 ProSTUD Motion Frame Connector connects stud to top track (ProSTUD) without any screws adhering to details below:
   – Stud to top track connection must be installed as depicted in figure with a gap of 1-1/2" from top track to stud which still allows ± 1" vertical movement.
   – Screws shall be placed in each flange of the stud at 5-7/8" from top of the top track.
   – To permit head of wall deflection, gypsum board shall not be fastened directly to top track.
8 No fasteners are required for attaching the stud to the bottom track except as detailed in ASTM C754 .
f Adjacent to the height value indicates that flexural stress controls the allowable wall height.







The technical content of this literature is effective 9/11/25 and supersedes all previous information.
Pub. No. CD-MotionFrame 9/25