

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

5/8" Type X Gypsum Board

Width	Stud Member	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"	ProSTUD 20 / 18 mil 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"	ProSTUD 20 / 18 mil 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"	ProSTUD 20 / 18 mil 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"	ProSTUD 20 / 18 mil 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.

