

ProSTUD® Full Composite Limiting Heights

5/8" Type X Gypsum Board

Width (in)	Stud member	Design thickness (in)	Yield strength (ksi)	Spacing (inches)	Lateral Load (psf)								
					5psf			7.5psf			10psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1-5/8	ProSTUD 25 162PDS125-15	0.0158	50	12	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"	—	—
	ProSTUD 20 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"	—	—
	ProSTUD 30 162PDS125-30	0.0312	33	12	16'-3"	12'-11"	11'-3"	14'-3"	11'-3"	9'-10"	12'-11"	10'-3"	8'-8"
				16	14'-9"	11'-9"	10'-3"	12'-11"	10'-3"	8'-8"	11'-9"	9'-2"	—
				24	12'-11"	10'-3"	8'-8"	11'-3"	8'-8"	—	10'-3"	—	—
	ProSTUD 33 162PDS125-33	0.0346	33	12	17'-0"	13'-6"	11'-10"	14'-10"	11'-10"	10'-4"	13'-6"	10'-9"	9'-3"
				16	15'-6"	12'-3"	10'-9"	13'-6"	10'-9"	9'-3"	12'-3"	9'-9"	—
				24	13'-6"	10'-9"	9'-3"	11'-10"	9'-3"	—	10'-9"	—	—
2-1/2	ProSTUD 25 250PDS125-15	0.0158	50	12	17'-2"	14'-8"	13'-0"	15'-0"	12'-10"	11'-4"	13'-3" f	11'-8"	10'-4"
				16	15'-7"	13'-4"	11'-9"	13'-3" f	11'-8"	10'-4"	11'-5" f	10'-7"	9'-1"
				24	13'-3" f	11'-8"	10'-4"	10'-10" f	10'-2"	8'-6"	9'-4" f	8'-11"	—
	ProSTUD 20 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"
	ProSTUD 30 250PDS125-30	0.0312	33	12	19'-9"	16'-3"	14'-4"	17'-3"	14'-2"	12'-6"	15'-8"	12'-11"	11'-4"
				16	17'-11"	14'-9"	13'-0"	15'-8"	12'-11"	11'-4"	14'-3"	11'-9"	10'-4"
				24	15'-8"	12'-11"	11'-4"	13'-8" f	11'-3"	9'-11"	12'-5"	10'-3"	8'-8"
	ProSTUD 33 250PDS125-33	0.0346	33	12	20'-4"	16'-9"	14'-9"	17'-9"	14'-7"	12'-10"	16'-2"	13'-3"	11'-8"
				16	18'-6"	15'-2"	13'-5"	16'-2"	13'-3"	11'-8"	14'-8"	12'-1"	10'-7"
				24	16'-2"	13'-3"	11'-8"	14'-1"	11'-7"	10'-3"	12'-10"	10'-7"	9'-1"
3-5/8	ProSTUD 25 362PDS125-15	0.0158	50	12	21'-6"	17'-1"	14'-11"	18'-4" f	14'-11"	13'-0"	15'-10" f	13'-7"	11'-10"
				16	19'-5" f	15'-6"	13'-7"	15'-10" f	13'-7"	11'-10"	13'-9" f	12'-4"	10'-7"
				24	15'-10" f	13'-7"	11'-10"	12'-11" f	11'-10"	10'-1"	11'-2" f	10'-7"	9'-0"
	ProSTUD 20 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"
	ProSTUD 30 362PDS125-30	0.0312	33	12	25'-8"	20'-5"	17'-10"	22'-5"	17'-10"	15'-7"	20'-5"	16'-2"	14'-2"
				16	23'-4"	18'-6"	16'-2"	20'-5"	16'-2"	14'-2"	18'-6"	14'-8"	12'-10"
				24	20'-5"	16'-2"	14'-2"	17'-10"	14'-2"	12'-3"	16'-2"	12'-10"	11'-0"
	ProSTUD 33 362PDS125-33	0.0346	33	12	26'-7"	21'-2"	18'-5"	23'-3"	18'-5"	16'-1"	21'-2"	16'-9"	14'-8"
				16	24'-2"	19'-2"	16'-9"	21'-2"	16'-9"	14'-8"	19'-2"	15'-3"	13'-4"
				24	21'-2"	16'-9"	14'-8"	18'-5"	14'-8"	12'-10"	16'-9"	13'-4"	11'-6"

Notes:

- Allowable composite limiting heights were tested in accordance with AISI S916 and ICC-ES AC86.
- Additional composite wall testing and analysis requirements of the SFIA Code Compliance Certification Program were also 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 maximum of 16 in. o.c. to framing members (including top and bottom tracks) spaced at 16 in. or 12 in. o.c.
 - Screws spaced a maximum of 12 in. o.c. to framing members (including top and bottom tracks) 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.

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					5psf			7.5psf			10psf		
					L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
4	ProSTUD 25 400PDS125-15	0.0158	50	12	22'-8"	18'-0"	15'-9"	19'-1" f	15'-9"	13'-9"	16'-6" f	14'-4"	12'-6"
				16	20'-3" f	16'-4"	14'-4"	16'-6" f	14'-4"	12'-6"	14'-4" f	13'-0"	11'-3"
				24	16'-6" f	14'-4"	12'-6"	13'-6" f	12'-6"	10'-8"	11'-8" f	11'-3"	9'-6"
	ProSTUD 20 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"
	ProSTUD 30 400PDS125-30	0.0312	33	12	27'-5"	21'-9"	19'-0"	19'-0"	16'-8"	16'-8"	17'-4"	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"
	ProSTUD 33 400PDS125-33	0.0346	33	12	27'-10"	22'-9"	20'-1"	24'-3"	19'-11"	17'-7"	22'-1"	18'-1"	15'-11"
				16	25'-3"	20'-8"	18'-3"	22'-1"	18'-1"	15'-11"	20'-1"	16'-5"	14'-6"
				24	22'-1"	18'-1"	15'-11"	19'-3"	15'-10"	13'-11"	17'-6"	14'-4"	12'-8"
6	ProSTUD 25 600PDS125-15	0.0158	50	12	27'-10" f	24'-2"	21'-5"	22'-9" f	21'-1"	18'-8"	19'-8" f	19'-2"	17'-0"
				16	24'-1" f	21'-11"	19'-5"	19'-8" f	19'-2"	17'-0"	21'-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"
	ProSTUD 20 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"
	ProSTUD 30 600PDS125-30	0.0312	33	12	36'-7"	29'-1"	25'-5"	32'-0"	25'-5"	22'-2"	29'-1"	23'-1"	20'-2"
				16	33'-3"	26'-5"	23'-1"	29'-1"	23'-1"	20'-2"	26'-5"	20'-11"	18'-4"
				24	29'-1"	23'-1"	20'-2"	25'-5"	20'-2"	17'-7"	22'-6" f	18'-4"	—
	ProSTUD 33 600PDS125-33	0.0346	33	12	36'-8"	30'-1"	26'-6"	32'-0"	26'-3"	23'-2"	29'-1"	23'-10"	21'-0"
				16	33'-3"	27'-4"	24'-1"	29'-1"	23'-10"	21'-0"	26'-5"	21'-8"	19'-1"
				24	29'-1"	23'-10"	21'-0"	25'-5"	20'-10"	18'-4"	23'-1"	18'-11"	—

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