

ASTM C754 – 18 33 MIL COMPOSITE 5/8" BOARD

Depth	Member Designation	Spacing (in.)	5 (psf)			7.5 (psf)			10 (psf)		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
			ft - in	ft - in	ft - in	ft - in	ft - in	ft - in	ft - in	ft - in	ft - in
2-1/2"	250S125-33	12	19-8	15-8	13-8	17-3	13-8	11-11	15-8	12-5	10-10
		16	17-11	14-3	12-5	15-8	12-5	10-10	14-3	11-3	9-10
		24	15-8	12-5	10-10	13-8	10-10	9-5	12-4f	9-10	8-4
3-1/2"	350S125-33	12	23-0	18-3	15-11	20-1	15-11	13-11	18-3	14-6	12-8
		16	20-11	16-7	14-6	18-3	14-6	12-8	16-7	13-2	11-4
		24	18-3	14-6	12-8	15-11	12-8	10-10	14-4f	11-4	9-8
3-5/8"	362S125-33	12	24-2	19-2	16-9	21-1	16-9	14-8	19-2	15-3	13-4
		16	21-1	17-5	15-3	19-2	15-3	13-4	17-5	13-10	11-11
		24	19-2	15-3	13-4	16-8f	13-4	11-4	14-5f	11-11	10-1
4"	400S125-33	12	25-3	20-1	17-6	22-1	17-6	15-4	20-1	15-11	13-11
		16	22-11	18-3	15-11	20-1	15-11	13-11	18-3	15-4	12-7
		24	20-1	15-11	13-11	17-3f	13-11	12-0	15-0f	12-7	10-9
6"	600S125-33	12	35-4	28-1	24-6	30-10	24-6	21-5	27-10f	22-3	19-5
		16	32-1f	25-6	22-3	27-10f	22-3	19-5	24-1f	20-3	17-8
		24	27-10	22-3	19-5	22-9f	19-5	16-11	19-8f	17-8	n/a

Notes to Table:

- Allowable composite heights are derived from tests conducted in accordance with ICC-ES AC86-2012.
- Table heights also applicable for two layers of gypsum board.
- The gypsum board (one or two layers) must be installed vertically full height to each stud flange using minimum No. 6 Type S drywall screws spaced a maximum of 12 in. on-center for studs at 24 in. spacing, and 16 in. on-center for studs at 16 in. and 12 in. spacing. Gypsum board (one or two layers) must be attached to each top and bottom track flange using minimum No. 6 drywall screws at maximum 16 in. (406 mm) on-center
- Application of gypsum board as required in accordance with Specification C840.
- No fasteners are required for attaching the stud to the track except as required by subsection 5.3.2.1 of ASTM C754-18.
- Stud end bearing must be a minimum of 1 in.
- Minimum material yield strength equals 33 ksi (230 MPa).
- 'f' adjacent to the height value indicates that flexural stress controls the allowable wall height.

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