PATENT 9783985 | THERMALSTUDS.COM | MADE IN THE USA

INSULATED R19 TSTUD™

A COST-EFFECTIVE, THERMAL BREAK HIGH-PERFORMANCE FRAMING SOLUTION FOR BUILDERS WHO WANT TO BUILD BETTER.

2x6

5.5" R19 Tstud™
Certified to hold 3600# in axial load with a #2 SPF bottom plate

Certified to hold 5600# in axial load with a LSL or LVL bottom plate

Lengths Available:
92 5/8", 8', 104 5/8", 9', 10', 12', 14' and 16'

STANDARD 2X6
R-6.8
vs.
R19 TSTUD
R-19

AT A GLANCE:

98% complete thermal break through the wall assembly using R19 top and bottom plates.

3x stronger than a standard 2x6.

Doubles as a sound break by reducing sound transmission through wall assemblies.

Meets or exceeds 2021 IECC and Canadian Step Code energy performance criteria.

Simplifies electrical. No drilling, simply puncture through the foam filled truss system.

Compatible with any insulation, batts, blown-in or spray foam insulation.

~24-75% REDUCTION IN HEATING + COOLING COSTS

Depending on insulation choice and ACH

	Thermal Break (in)	US Imperial Effective R-Value (h*ft²F/Btu)	US Imperial U-Factor (h*ft²F/Btu)	Canadian Metric U-Factor
5.5" R19 Tstud w/ R21 Fiberglass Batt	2.5	23.4	0.043	0.24

Wall Assembly Layer or Component	R Value
Exterior Air Film	0.17
Wood Siding	0.81
OSB Sheathing	0.55
R19 Tstud	**19**
Insulation	Varies
1/2" Gypsum Drywall	0.45
Interior Air Film	0.68

HURRICANE CATEGORY 1-5 COMPLIANT | SEISMIC ZONE A-F COMPLIANT

Thermal Studs

Table 5. Allowable (ASD) Compressive Load for Walls Subject to Wind Pressures
(SPF No. 2 R19 Tstud and SPF Top/Bottom Plate)

Stud Spacing (in)	Wall[2] Height (ft)	Allowable Compression Load (lb) and (Deflection Ratio)									
		Components & Cladding Wind Pressure[1] (psf)									
		15	20	25	30	35	40	45	50	55	60
12	8	3665 (L/3401)	3665 (L/2551)	3665 (L/2041)	3665 (L/1701)	3665 (L/1458)	3665 (L/1276)	3665 (L/1134)	3665 (L/1020)	3665 (L/928)	3665 (L/850)
	9	3665 (L/2356)	3665 (L/1767)	3665 (L/1413)	3665 (L/1178)	3665 (L/1010)	3665 (L/883)	3665 (L/785)	3665 (L/707)	3665 (L/642)	3665 (L/589)
	10	3665 (L/1698)	3665 (L/1274)	3665 (L/1019)	3665 (L/849)	3665 (L/728)	3665 (L/637)	3665 (L/566)	3665 (L/509)	3665 (L/463)	3665 (L/425)
	12	3665 (L/967)	3665 (L/725)	3665 (L/580)	3640 (L/483)	3185 (L/414)	2725 (L/362)	2270 (L/322)	1815 (L/290)	1360 (L/264)	900 (L/242)
	14	3030 (L/602)	2405 (L/451)	1780 (L/361)	1155 (L/301)	530 (L/258)	--	--	--	--	--
	16	1385 (L/399)	565 (L/300)	--	--	--	--	--	--	--	--
16	8	3665 (L/2551)	3665 (L/1913)	3665 (L/1531)	3665 (L/1276)	3665 (L/1093)	3665 (L/957)	3665 (L/850)	3665 (L/765)	3665 (L/696)	3665 (L/638)
	9	3665 (L/1767)	3665 (L/1325)	3665 (L/1060)	3665 (L/883)	3665 (L/757)	3665 (L/663)	3665 (L/589)	3665 (L/530)	3665 (L/482)	3665 (L/442)
	10	3665 (L/1274)	3665 (L/955)	3665 (L/764)	3665 (L/637)	3665 (L/546)	3665 (L/478)	3665 (L/425)	3665 (L/382)	3665 (L/347)	3310 (L/318)
	12	3665 (L/725)	3665 (L/544)	3335 (L/435)	2725 (L/362)	2120 (L/311)	1510 (L/272)	900 (L/242)	295 (L/217)	--	--
	14	2405 (L/451)	1570 (L/338)	735 (L/271)	--	--	--	--	--	--	--
	16	565 (L/300)	--	--	--	--	--	--	--	--	--
24	8	3665 (L/1701)	3665 (L/1276)	3665 (L/1020)	3665 (L/850)	3665 (L/729)	3665 (L/638)	3665 (L/567)	3665 (L/510)	3665 (L/464)	3665 (L/425)
	9	3665 (L/1178)	3665 (L/883)	3665 (L/707)	3665 (L/589)	3665 (L/505)	3665 (L/442)	3665 (L/393)	3665 (L/353)	3665 (L/321)	3370 (L/294)
	10	3665 (L/849)	3665 (L/637)	3665 (L/509)	3665 (L/425)	3665 (L/364)	3310 (L/318)	2680 (L/283)	2055 (L/255)	1430 (L/232)	805 (L/212)
	12	3640 (L/483)	2725 (L/362)	1815 (L/290)	900 (L/242)	--	--	--	--	--	--
	14	1155 (L/301)	--	--	--	--	--	--	--	--	--

SI: 1 in = 25.4 mm, 1 psf = 0.0479 kN/m^2

1. Wind pressure provided assumes Exposure Category B, Enclosed Building, Mean Roof Height 30'.
2. Walls constructed with No. 2 R19 Tstud studs and SPF top and bottom plates.