



# UN-INSULATED TSTUD™

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

## 2x6

### 5.5" Uninsulated 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', and 12'

## 2x8

### 7.25" Uninsulated Tstud™

Certified to hold 4400# in axial load with a #2 SPF bottom plate

Certified to hold 7565# 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'

## AT A GLANCE:

95.9-98% complete thermal break through the wall assembly  
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. Route through the open truss system.

Compatible with any blown-in or spray foam insulation.

## ~24-75% REDUCTION IN HEATING + COOLING COSTS

*Depending on insulation choice and ACH*

**CAD Blocks + SketchUp Components available online.**

SI: 1 in = 25.4 mm, 1 F·ft<sup>2</sup>·h/Btu = 0.1761 K·m<sup>2</sup>/W

1. Stud spacing at 24" o.c. 2. Values are for the opaque sections of the wall only. Assumes double 2x6 top plates and a single 2x6 bottom plate. Additional framing for openings in the wall are not considered. 3. The thermal break is defined as the distance between the flange and spline of the Tstud™ (Figure 1) plus any CI. See TER 1908-02 for BareNaked Tstud™ dimensions. 4. All material R values must be verified for the actual assembly being constructed.

	Thermal Break (in)	US Imperial Effective R-Value (h·ft <sup>2</sup> ·F/Btu)	US Imperial U-Factor (h·ft <sup>2</sup> ·F/Btu)	Canadian Metric U-Factor
5.5" Uninsulated Tstud™	Dense Pack Cellulose, R=3.7/in.	1.5	20.4	0.048
	Dense Pack Fiberglass, R=4.18/in.	1.5	23.0	0.044
	R5 Cont. Rigid Insul & Dense Pack Fiberglass, R=4.18/in.	1.5	28.0	0.036
	5" Closed Cell Spray Foam, R=6.7/in.,	1.5	33.5	0.032
7.25" Uninsulated Tstud™	Dense Pack Cellulose, R=3.7/in.	2.25	26.8	0.037
	Dense Pack Fiberglass, R=4.18/in.	2.25	30.3	0.037
	R5 Cont. Rigid Insul & Dense Pack Fiberglass, R=4.18/in.	3.25	35.3	0.030
	5" Closed Cell Spray Foam, R=6.7/in.,	2.25	33.5	0.025



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



**Thermal Studs**

Table 5. Stud Allowable (ASD) Compressive Load for Walls Subject to Wind Pressures  
(5.5" BareNaked Tstud™ with SPF Top/Bottom Plates)1,2

Stud Spacing (in)	Wall Height (ft)	Allowable Compression Load (lb) & (Deflection Ratio)									
		Components & Cladding Wind Pressure (psf)									
		15	20	25	30	35	40	45	50	55	60
12	8	3,665 (L/2161)	3,665 (L/1621)	3,665 (L/1297)	3,665 (L/1081)	3,665 (L/926)	3,665 (L/810)	3,665 (L/720)	3,665 (L/648)	3,665 (L/589)	3,665 (L/540)
	9	3,665 (L/1497)	3,665 (L/1123)	3,665 (L/898)	3,665 (L/748)	3,665 (L/641)	3,665 (L/561)	3,325 (L/499)	2,980 (L/449)	2,635 (L/408)	2,290 (L/374)
	10	3,665 (L/1079)	3,665 (L/809)	3,295 (L/647)	2,865 (L/540)	2,435 (L/462)	2,010 (L/405)	1,580 (L/360)	1,155 (L/324)	725 (L/294)	295 (L/270)
	12	2,080 (L/614)	1,460 (L/461)	835 (L/368)	210 (L/307)	-	-	-	-	-	-
	14	400 (L/382)	-	-	-	-	-	-	-	-	-
16	8	3,665 (L/1621)	3,665 (L/1216)	3,665 (L/973)	3,665 (L/810)	3,665 (L/695)	3,665 (L/608)	3,665 (L/540)	3,665 (L/486)	3,610 (L/442)	3,250 (L/405)
	9	3,665 (L/1123)	3,665 (L/842)	3,665 (L/674)	3,665 (L/561)	3,210 (L/481)	2,750 (L/421)	2,290 (L/374)	1,830 (L/337)	1,370 (L/306)	910 (L/281)
	10	3,665 (L/809)	3,150 (L/607)	2,580 (L/486)	2,010 (L/405)	1,440 (L/347)	865 (L/303)	295 (L/270)	-	-	-
	12	1,460 (L/461)	625 (L/345)	-	-	-	-	-	-	-	-
24	8	3,665 (L/1081)	3,665 (L/810)	3,665 (L/648)	3,665 (L/540)	3,665 (L/463)	3,250 (L/405)	2,715 (L/360)	2,175 (L/324)	1,635 (L/295)	1,095 (L/270)
	9	3,665 (L/748)	3,665 (L/561)	2,980 (L/449)	2,290 (L/374)	1,600 (L/321)	910 (L/281)	225 (L/249)	-	-	-
	10	2,865 (L/540)	2,010 (L/405)	1,155 (L/324)	295 (L/270)	-	-	-	-	-	-
	12	210 (L/307)	-	-	-	-	-	-	-	-	-
SI: 1 in. = 25.4 mm, 1 psf = 0.0479 kN/m <sup>2</sup>											
1. Wind speed provided assumes Exposure Category B, Enclosed Building, Mean Roof Height 30'											
2. Walls constructed with BareNaked Tstud™ studs and SPF top and bottom plates.											

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



Thermal Studs



Table 8. Stud Allowable (ASD) Compressive Load for Walls Subject to Wind Pressures  
(7.25" BareNaked Tstud™ with SPF Top/Bottom Plates)1,2

Stud Spacing (in)	Wall Height (ft)	Allowable Compression Load (lb) & (Deflection Ratio)									
		Components & Cladding Wind Pressure (psf)									
		15	20	25	30	35	40	45	50	55	60
12	8	4400 (L/4167)	4400 (L/3126)	4400 (L/2500)	4400 (L/2084)	4400 (L/1786)	4400 (L/1563)	4400 (L/1389)	4400 (L/1250)	4400 (L/1137)	4400 (L/1042)
	9	4400 (L/2886)	4400 (L/2165)	4400 (L/1732)	4400 (L/1443)	4400 (L/1237)	4400 (L/1082)	4400 (L/962)	4400 (L/866)	4400 (L/787)	4400 (L/722)
	10	4400 (L/2081)	4400 (L/1561)	4400 (L/1248)	4400 (L/1040)	4400 (L/892)	4400 (L/780)	4400 (L/694)	4400 (L/624)	4400 (L/567)	4115 (L/520)
	12	4400 (L/1184)	4355 (L/888)	3830 (L/711)	3310 (L/592)	2785 (L/508)	2260 (L/444)	1735 (L/395)	1210 (L/355)	685 (L/323)	165 (L/296)
	14	2805 (L/737)	2090 (L/553)	1370 (L/442)	650 (L/369)	--	--	--	--	--	--
	16	1060 (L/489)	115 (L/367)	--	--	--	--	--	--	--	--
16	8	4400 (L/3126)	4400 (L/2344)	4400 (L/1875)	4400 (L/1563)	4400 (L/1340)	4400 (L/1172)	4400 (L/1042)	4400 (L/938)	4400 (L/852)	4400 (L/781)
	9	4400 (L/2165)	4400 (L/1624)	4400 (L/1299)	4400 (L/1082)	4400 (L/928)	4400 (L/812)	4400 (L/722)	4400 (L/649)	4400 (L/590)	4400 (L/541)
	10	4400 (L/1561)	4400 (L/1170)	4400 (L/936)	4400 (L/780)	4400 (L/669)	4400 (L/585)	4115 (L/520)	3635 (L/468)	3155 (L/426)	2675 (L/390)
	12	4355 (L/888)	3655 (L/666)	2960 (L/533)	2260 (L/444)	1560 (L/381)	860 (L/333)	165 (L/296)	--	--	--
	14	2090 (L/553)	1130 (L/415)	170 (L/332)	--	--	--	--	--	--	--
	16	115 (L/367)	--	--	--	--	--	--	--	--	--
24	8	4400 (L/2084)	4400 (L/1563)	4400 (L/1250)	4400 (L/1042)	4400 (L/893)	4400 (L/781)	4400 (L/695)	4400 (L/625)	4400 (L/568)	4400 (L/521)
	9	4400 (L/1443)	4400 (L/1082)	4400 (L/866)	4400 (L/722)	4400 (L/618)	4400 (L/541)	4340 (L/481)	3765 (L/433)	3185 (L/394)	2605 (L/361)
	10	4400 (L/1040)	4400 (L/780)	4400 (L/624)	4115 (L/520)	3395 (L/446)	2675 (L/390)	1955 (L/347)	1235 (L/312)	515 (L/284)	--
	12	3310 (L/592)	2260 (L/444)	1210 (L/355)	165 (L/296)	--	--	--	--	--	--
	14	650 (L/369)	--	--	--	--	--	--	--	--	--

SI: 1 in. = 25.4 mm, 1 psf = 0.0479 kN/m<sup>2</sup>

- Wind speed provided assumes Exposure Category B, Enclosed Building, Mean Roof Height 30'
- Walls constructed with BareNaked Tstud™ studs and SPF top and bottom plates.

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



Thermal Studs

