

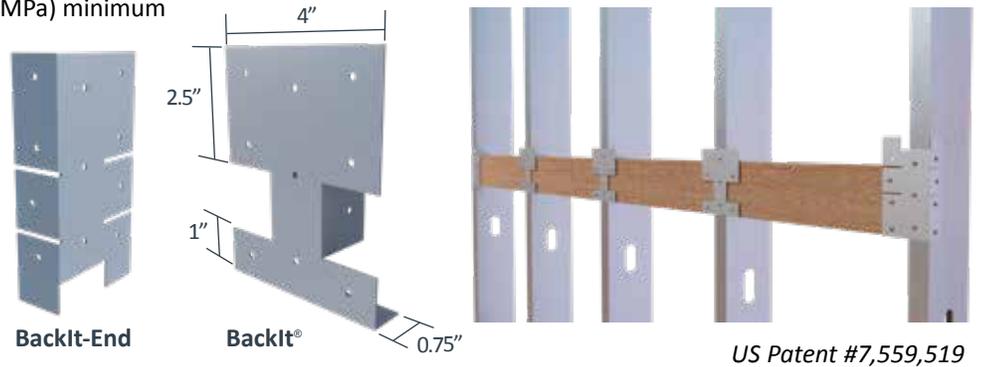
BackIt®

Rigid Wall Backing



Material Composition

ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, 43mil minimum thickness (18 gauge, 0.0451" design thickness) with ASTM A653/A653M G60 (Z180) hot dipped galvanized coating.



US Patent #7,559,519

BackIt Allowable Loads

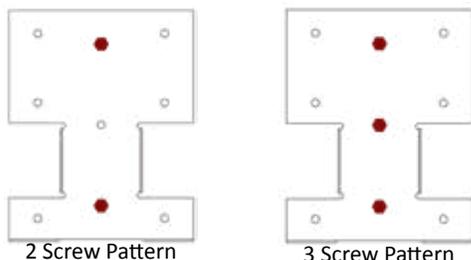
BackIt®, Recommended Allowable Load (lbs) (in-lbs or in-lbs/rad): F2 & F3 & M1 Load Direction						
Screw Patterns with #12 Screws	F2 Load Direction (lbs)		F3 Load Direction (lbs)		M1 Load Direction	
	2 Screws	3 Screws	2 Screws	3 Screws	Moment 3 Screws	Stiffness up to 0.02 rad
18mil (25ga), 33ksi Stud	-	156*	-	225	221	16,800
27mil (22ga), 33ksi Stud	-	234	278	417	332	
30mil (20ga-Drywall), 33ksi Stud	-	258	322	483	366	
33mil (20ga-Structural), 33ksi Stud	-	285	376	564	404	
33mil (20ga), 50ksi Stud	276	391	544	816	587	
43mil (18ga), 33ksi Stud	248	372	560	840	527	
43mil (18ga), 50ksi Stud	358	391	810	1,215	761	
54mil (16ga), 33ksi Stud	312	391	822	1,233	663	
54mil (16ga), 50ksi Stud	391	391	1,140	1,388	956	
68mil (14ga), 50ksi Stud	391	391	1,140	1,388	967	
97mil (12ga), 50ksi Stud	391	391	1,140	1,388	967	
Maximum Allowable Clip Load	391		1,388		967	

Notes:

- The recommended allowable loads and moments reported in this table are for the clip and attachment to the stud only. The attachment to the backing material must be designed by a design professional.
 - For LRFD strengths contact TSN technical services.
- *Additional screws may be added to increase the allowable load. F2 value with (4) #12 screws is 207 lbs.

IBC (International Building Code) and OSHA (Occupational Safety and Health Administration) load requirements include the ability of wall backing to resist a minimum of 200 lbs of concentrated load, or 50 lbs per linear foot in any direction. BackIt satisfies the load requirements in vertical (F3) and horizontal (F2) directions. Extra testing has been done in the rotational (M1) direction. Product test reports are available upon request. Contact TSN Technical Support at (888) 474-4876 for more information.

Screw Patterns



Nomenclature

BackIt is designed to be used with studs having flanges up to 1 5/8" wide*, and is designated BackIt®.
 * Custom clips are available by request for use with studs having flanges greater than 1 5/8"
 **Also Available by Request: End-of-Run BackIt® to finish walls with a flat angle

Load Direction

