InSoFast®

Batt-Brackets® by InSoFast®

InSoFast Batt-Brackets revolutionizes the way exterior wall insulation is installed by allowing the continuous use of batt insulation while eliminating thermal bridging. Engineered with strength to withstand extreme wind and cladding loads, Batt-Brackets utilize a vapor permeable WRB to protect the batts and provide a ventilated rain screen for long-lasting durability.

Features

- Continuous Insulation with Batt Insulation
- No Thermal Bridging
- Ventilated Rainscreen
- Simple Installation Methods
- Durable Construction
- Increased Comfort
- Sound Resistance

Applications

- Framed Walls
- Concrete Walls
- Roof

Insulation Options

- Batt Insulation

Standards & Code Compliance

- IBC – 15, 18, 21: International Building Code®
- IRC – 15, 18, 21: International Residential Code®
- Approved in all state & local jurisdictions pursuant to ISO/IEC 17065 duly authenticated report
- Approved by the Code of Federal Regulations Manufactured Home Construction and Safety Standards
- Code Evaluation by Dr J Engineering: Report No 2405-119 available at https://www.drjcertification.org/ter/2405-119



Table 1: Physical Properties

Property	Test Method	Value
Allowable Compressive Strength, lb (kg)	ASTM D5961	1590 (721)
Allowable Tensile Strength, lb (kg)	ASTM D638	860 (390) [1]
Thermal Resistance, W/m·K	ASTM E1530	0.2
Maximum Service Temperature, °F (°C)	-	180 (82)
Minimum Install Temperature, °F (°C)	-	0 (-17)

(1) Refer to Allowable Loading table for allowable withdrawal loads.

Table 2: Allowable Loading

Substrate	Fastener	Test Method	Withdrawal, lb (kg)	Lateral, lb (kg)
Wood (SG = 0.42)	0.131 Ring Shank Nail (4)	ASTM D1761 ASTM D7332	295 (134)	240 (109)
	#8 or Larger Construction Screw (2)		330 (150)	180 (82)
	¼" x 2 ½" GRK RSS Screw (2)		530 (240)	240 (108)
20 ga CFS Stud[1]	#14 x 1 1/4 " Self-Drilling Screw (2)		290 (132)	80 (36)
18 ga CFS Stud[1]			380 (172)	105 (47)
Concrete/ CMU	¼" Tapcon (2)		210 (95)	150 (68)
	Hilti X-U, Hilti X-P Concrete Pins (2)		140 (63)	100 (45)
Batt-Bracket Top Face	0.131" x 3" Ring Shank Nail [2]		170 (77)	-[3]
	#8 Construction Screw [2]		195 (88)	325(147) [3]
	#10 Construction Screw [2]		205 (93)	325(147) [3]
	#12 Self-Drilling Screw [2]		190 (86)	325(147) [3]

(1) 33 ksi.
(2) Screws must penetrate at least 1" into the top face of the X-Bracket and must not be within 1/4" of the edge of the top face.
(3) Tabulated lateral load is the total allowable load for a minimum 2-fastener top-face connection.

Table 3: Product Options

Product	SKU	Product Dimensions	Quantity Per Box	Approx. Coverage per Box(sf) [1]
Batt-Bracket® 3.5	XB-3.5	3.5" x 6.5" x 3.5"	24	50-136
Batt-Bracket® 5.5	XB-5.5	5.5" x 8.0" x 3.5"	24	50-136
Batt-Bracket® 7.25	XB-7.25	7.25" x 10.5" x 3.5"	24	50-136

(1) Coverage will vary based on bracket spacing and complexity of the project.

Table 4: Allowable Wind Loading Based on Bracket Spacing & Cladding Weight

Substrate	Fastener [6]	Bracket Spacing Between Rows (in O.C.)[1]	Bracket Spacing in a Row (in O.C.)[1]	Basic Wind Speed (mph) For Specified Cladding Weight								
				Exposure B			Exposure C			Exposure D		
				7 psf[2]	11 psf[2]	20 psf[2]	7 psf[2]	11 psf[2]	20 psf[2]	7 psf[2]	11 psf[2]	20 psf[2]
Wood (SG = 0.42)	0.131 Ring Shank Nail (4)	16	24	220	220	220	210	204	192	194	189	178
			32	209	202	185	179	173	158	165	160	147
			48	165	156	134	141	134	115	131	124	106
			72	129	117	-	110	100	-	102	93	-
			96	106	91	-	91	-	-	-	-	-
		24	24	195	188	170	167	161	146	155	149	135
			32	165	156	134	141	134	115	131	124	106
			48	129	117	-	110	100	-	102	93	-
			72	97	-	-	-	-	-	-	-	-
	#8 or Larger Construction Screw (2)	16	24	220	220	220	218	211	194	202	195	179
			32	216	206	181	185	177	155	172	164	144
			48	170	156	122	145	134	104	134	124	96
			72	129	111	-	110	95	-	102	-	-
			96	103	-	-	-	-	-	-	-	-
		24	24	201	190	163	172	163	140	160	151	129
			32	170	156	122	145	134	104	134	124	96
			48	129	111	-	110	95	-	102	-	-
			72	92	-	-	-	-	-	-	-	-
	¼" x 2 ½" GRK RSS Screws (2)	16	24	220	220	220	220	220	220	220	220	220
			32	220	220	220	220	216	195	208	200	196
			48	220	209	179	189	179	154	175	166	142
			72	172	156	113	147	134	97	136	124	-
			96	142	122	-	122	105	-	113	97	-
		24	24	220	220	220	220	216	195	208	200	181
			32	220	209	179	189	179	154	175	166	142
			48	172	156	113	147	134	97	136	124	-
			72	129	108	-	111	92	-	103	-	-
			96	101	-	-	-	-	-	-	-	-
CFS Stud 20-gauge (33 ksi)	#14 x 1 1/4 " Self-Drilling Screw (2) [5]	16	24	220	201	146	189	172	125	175	159	116
			32	182	157	-	156	134	-	144	124	-
			48	130	92	-	110	-	-	103	-	-
		24	24	167	139	-	143	119	-	132	110	-
			32	130	92	-	110	-	-	103	-	-
CFS Stud 18-gauge (33 ksi)		16	24	220	220	203	220	210	174	208	195	161
			32	218	198	142	187	170	122	173	157	113
			48	163	135	-	140	116	-	130	107	-
			72	114	-	-	98	-	-	91	-	-
		24	24	202	180	115	173	154	99	160	143	91
			32	164	135	-	140	116	-	130	107	-
			48	114	-	-	98	-	-	91	-	-

InSoFast® LLC
40434 254th St, STE B, Mitchell, SD 57301
www.insofast.com (888) 501-7899
Patent Information Available at www.insofast.com/pat
Printed in U.S.A. August 2026 © 2026 InSoFast, LLC. All Rights Reserved

Substrate	Fastener [6]	Bracket Spacing Between Rows (in O.C.)[1]	Bracket Spacing in a Row (in O.C.)[1]	Basic Wind Speed (mph) For Specified Cladding Weight								
				Exposure B			Exposure C			Exposure D		
				7 psf[2]	11 psf[2]	20 psf[2]	7 psf[2]	11 psf[2]	20 psf[2]	7 psf[2]	11 psf[2]	20 psf[2]
Concrete/ CMU[3,4]	¼" Tapcon[3,4]	16	24	201	193	173	172	165	148	160	153	137
			32	170	160	135	145	137	115	135	127	107
			48	131	118	-	112	101	-	104	93	-
			72	98	-	-	-	-	-	-	-	-
		24	24	159	148	120	136	127	103	126	117	95
			32	131	118	-	112	101	-	104	93	-
			48	98	-	-	-	-	-	-	-	-
	Hilti X-U, Hilti X-P Concrete Pins[3,4]	16	24	159	148	120	136	127	103	126	117	95
			32	131	118	-	112	101	-	104	93	-
			48	98	-	-	-	-	-	-	-	-
		24	24	121	107	-	104	92	-	96	-	-
			32	98	-	-	-	-	-	-	-	-

(1) Rows can be oriented in vertical, horizontal or diagonal directions. **Additional spacings available – See Dr J Code Compliance Report.**
(2) The 7 psf, 11 psf, and 20 psf columns represent total supported dead load acting parallel to the wall, including the weight of furring strips, girts, cladding, backer board, accessories, and other supported components. Interpolation between tabulated values is not permitted.
(3) Concrete and CMU mechanical fasteners are limited to:
a) 1/4" Tapcon hex-washer-head screw anchor with 0.190" shank diameter, 0.250" thread outside diameter, effective head/washer bearing diameter not less than 0.321", and minimum nominal embedment of 1.0" into minimum 2,000 psi uncracked concrete or medium/normal-weight CMU in accordance with the applicable manufacturer evaluation report.
b) Hilti X-U and Hilti X-P power-actuated fasteners with 0.157" shank and 0.321" head, minimum 1.0" embedment into minimum 2,500 psi normal-weight uncracked concrete or normal-weight CMU in accordance with the applicable manufacturer evaluation report.
(4) Fastener length, spacing, edge distance, concrete thickness, environmental exposure, redundancy, and installation shall comply with the applicable evaluation report and manufacturer instructions.
(5) For fasteners used in the connection to cold-formed steel members, the length of the fastener shall be sufficient to penetrate through the thickness of the steel by 3 threads.
(6) For configurations requiring two fasteners, install one fastener in one of the top flanges and one of the bottom flanges. For configurations requiring four fasteners, install one fastener in each of the two top and bottom flanges. Install fasteners into flange with a minimum edge distance of 1/2".

Table 5: Allowable Cladding Weight Based on Bracket Spacing & Basic Wind Speed

Substrate	Fastener[6]	Bracket Spacing Between Rows (in O.C.)[1]	Bracket Spacing in a Row (in O.C.)[1]	Allowable Cladding Weight (psf) At Specified Basic Wind Speed[2]								
				Exposure B			Exposure C			Exposure D		
				120	170	220	120	170	220	120	170	220
Wood (SG = 0.42)	0.131 Ring Shank Nail (4)	16	24	25	25	20	25	25	-	25	23	-
			32	25	24	-	25	10	-	25	-	-
			48	22	2	-	15	-	-	10	-	-
			72	7	-	-	-	-	-	-	-	-
		24	24	25	17	-	25	2	-	25	-	-
			32	22	2	-	15	-	-	10	-	-
			48	7	-	-	-	-	-	-	-	-
	#8 or Larger Construction Screw (2)	16	24	25	25	19	25	25	3	25	22	-
			32	25	21	2	25	11	-	25	5	-
			48	17	4	-	12	-	-	9	-	-
			72	6	-	-	1	-	-	-	-	-
		24	24	25	15	-	24	5	-	21	-	-
			32	17	4	-	12	-	-	9	-	-
			48	6	-	-	1	-	-	-	-	-
	¼" x 2 ½" GRK RSS Screws (2)	16	24	25	25	25	25	25	25	25	25	25
			32	25	25	25	25	25	13	25	25	5
			48	25	20	5	25	12	-	24	6	-
			72	16	5	-	12	-	-	9	-	-
			96	8	-	-	4	-	-	2	-	-

InSoFast® LLC
40434 254th St, STE B, Mitchell, SD 57301
www.insofast.com (888) 501-7899
Patent Information Available at www.insofast.com/pat
Printed in U.S.A. August 2026 © 2026 InSoFast, LLC. All Rights Reserved

Substrate	Fastener[6]	Bracket Spacing Between Rows (in O.C.)[1]	Bracket Spacing in a Row (in O.C.)[1]	Allowable Cladding Weight (psf) At Specified Basic Wind Speed[2]								
				Exposure B			Exposure C			Exposure D		
				120	170	220	120	170	220	120	170	220
Wood (SG = 0.42)	¼" x 2 ½" GRK RSS Screws (2)	24	24	25	25	20	25	25	6	25	21	-
			32	25	20	5	25	12	-	24	6	-
			48	16	5	-	12	-	-	9	-	-
			72	6	-	-	2	-	-	-	-	-
CFS Stud 20-gauge (33 ksi)	#14 x 1 1/4 " Self-Drilling Screw (2)[5]	16	24	20	13	4	18	8	-	16	5	-
			32	13	6	-	10	-	-	9	-	-
			48	5	-	-	3	-	-	1	-	-
		24	24	10	3	-	8	-	-	6	-	-
			32	5	-	-	3	-	-	1	-	-
CFS Stud 18-gauge (33 ksi)		16	24	25	23	14	25	18	5	25	15	-
			32	20	13	4	17	8	-	16	5	-
			48	10	3	-	7	-	-	6	-	-
			72	3	-	-	-	-	-	-	-	-
		24	24	16	10	-	14	5	-	12	2	-
			32	10	3	-	7	-	-	6	-	-
			48	3	-	-	-	-	-	-	-	-
Concrete/ CMU[3,4]	¼" Tapcon[3,4]	16	24	25	18	-	25	5	-	25	-	-
			32	22	4	-	15	-	-	11	-	-
			48	8	-	-	1	-	-	-	-	-
		24	24	17	-	-	11	-	-	7	-	-
			32	7	-	-	1	-	-	-	-	-
	Hilti X-U, Hilti X-P Concrete Pins[3,4]	16	24	17	-	-	11	-	-	7	-	-
			32	8	-	-	1	-	-	-	-	-
		24	24	4	-	-	-	-	-	-	-	-

(1) Rows can be oriented in vertical, horizontal or diagonal directions. **Additional spacings available – See Dr J Code Compliance Report.**
(2) The tabulated allowable cladding weight assumed a dead load (i.e. weight of furring strips, girts, hat channels, backer board, accessories, or other supported components) of 3 psf. Interpolation between tabulated values is not permitted.
(3) Concrete and CMU mechanical fasteners are limited to:
a) 1/4" Tapcon hex-washer-head screw anchor with 0.190" shank diameter, 0.250" thread outside diameter, effective head/washer bearing diameter not less than 0.321", and minimum nominal embedment of 1.0" into minimum 2,000 psi uncracked concrete or medium/normal-weight CMU in accordance with the applicable manufacturer evaluation report.
b) Hilti X-U and Hilti X-P power-actuated fasteners with 0.157" shank and 0.321" head, minimum 1.0" embedment into minimum 2,500 psi normal-weight uncracked concrete or normal-weight CMU in accordance with the applicable manufacturer evaluation report.
(4) Fastener length, spacing, edge distance, concrete thickness, environmental exposure, redundancy, and installation shall comply with the applicable evaluation report and manufacturer instructions.
(5) For fasteners used in the connection to cold-formed steel members, the length of the fastener shall be sufficient to penetrate through the thickness of the steel by 3 threads.
(6) For configurations requiring two fasteners, install one fastener in one of the top flanges and one of the bottom flanges. For configurations requiring four fasteners, install one fastener in each of the two top and bottom flanges. Install fasteners into flange with a minimum edge distance of 1/2".

Technical Information

- InSoFast® X-Brackets® are non-structural materials and must be installed on framing that is independently braced and structurally adequate to me required construction and service loading conditions.
- Approved adhesives for attaching InSoFast® X-Brackets InSoFast® to concrete or steel substrates are Loctite® PL Premium® 3X and LaPage® PL Premium® 3X. No other adhesives are approved for this application.
- All construction should be evaluated for the necessity to provide vapor retarders. See ASHRAE Handbook of Fundamentals.
- Values in Table 4 & Table 5 are based on a building height of 60-feet, GCp= -1.4 for Zone 5 and an Effective Wind Area of 10ft2, Topographic Factor: Kzt=1.0, Ground Elevation Factor: Ke=1.0, Internal Pressure Coefficient, GCpi=+/- 0.18 for an enclosed building, Kd = 0.85 for Component and Cladding

Warranty and Disclaimer of Liability

InSoFast® Batt-Brackets® are warranted to be free from manufacturing defects arising from workmanship or defects in material which may cause the InSoFast® Batt-Brackets® to be unusable in insulated wall assemblies. This warranty is effective only if the InSoFast® Batt-Brackets® are installed in accordance with the Installation Manual, or any other installation instruction or guidelines published by InSoFast®, LLC, and local building codes, and only if InSoFast®, LLC has received written notice of defects within 30 days of the first discovery of a defect but in any event no later than within one year of the date of shipment by InSoFast®, LLC. EXCEPT AS EXPRESSLY SET FORTH ABOVE, INSOFAST®, LLC MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, IN FACT OR IN LAW, INCLUDING, WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. No person has any authority to bind InSoFast®, LLC to any affirmation, representation, or warranty concerning InSoFast® panels except as stated in this Manufacturer's Warranty. InSoFast®, LLC's liability and the purchaser's sole and exclusive remedy from alleged defects in the materials or manufacturing of the InSoFast® Batt-Brackets® shall be limited to the replacement of an equivalent amount of product or a refund of the invoice charged up to the manufacturer's suggested retail price (as InSoFast®, LLC may elect) if payment has been made. In no event shall InSoFast®, LLC be liable for any consequential or incidental damages, losses, costs, or expenses of any person of any kind (including without limitation, loss of profits or injury to credit, reputation, or goodwill) directly or indirectly resulting from any alleged breach of warranty contained in this Manufacturer's Warranty. The term of this warranty is 3 Years from the date of purchase.

InSoFast® LLC
40434 254th St, STE B, Mitchell, SD 57301
www.insofast.com (888) 501-7899
Patent Information Available at www.insofast.com/pat
Printed in U.S.A. August 2026 © 2026 InSoFast, LLC. All Rights Reserved