

STRONGIRT

PULTRUDED FRP CLADDING ATTACHMENT SUPPORT SYSTEM

by **STRONGWELL**

Shown with optional weep holes. Available for multiple insulation thicknesses.



PULTRUDED FRP CLADDING ATTACHMENT SUPPORT SYSTEM

What is STRONGIRT®?

STRONGWELL's STRONGIRT[®] is the ideal continuous insulation (CI) cladding attachment support system. This all-FRP (fiberglass) pultruded composite uses a custom fire-retardant resin system and unique laminate design to offer superior pull out strength, excellent thermal efficiency, and the ability to work with any non-proprietary insulation (no routing or fabricating of rigid insulation is required).

The geometry of STRONGIRT[®] offers self-draining to clear rainwater, and weep holes can be pre-fabricated or added in the field for additional drainage needs. The product has been engineered for strength and stiffness to support cladding, insulation, and wind loads, while offering a simple, durable, cost-effective solution for installers.

Elements of Design

Fastening lines

Features and Benefits:

- 100% FRP system (no metal to rust or react)
- Superior pullout strength
- Invisible in rainscreen cavities
- Double fastening system on front flange
- Light weight
- Works with all non-proprietary insulation
- · No in-field fabrication required
- 10' and 20' standard lengths (custom lengths available)
- Thermally efficient replacement to metal cladding attachment systems
- · Code compliant

Request a Quote at www.strongirt.com

Pitched flanges for water mitigation

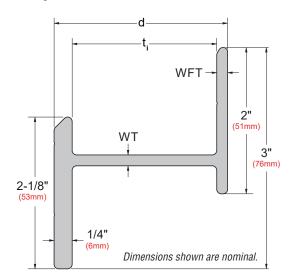
Weep holes (optional)

> Line to drill weep holes (optional)

Insulation retention system (no insulation fasteners needed)

Dimensions & Availability

STRONGIRT[®] profiles are designed to accomodate a range of insulation thicknesses.



Insulation Thickness, t _i	STRONGIRT® Depth (nom.), d	Web Thickness (nom.), WT	Wall Flange Thickness (nom.), WFT	
1.5" (38mm)	1.9" (48mm)			
2.0" (51mm)	2.4" (61 mm)			
2.5" (64mm)	2.9" (74mm)			
3.0" (76mm)	3.4" (86mm)			
3.5" (89mm)	3.9" (99mm)	0.15" (4mm)	0.15" (4mm)	
4.0" (102mm)	4.4" (112mm)	0.15" (4mm)	0.15" (4mm)	
4.5" (114mm)	4.9" (124mm)			
5.0" (127mm)	5.4" (137mm)			
5.5" (140mm)	5.9" (150mm)			
6.0" (152mm)	6.4" (163mm)			
5.0" Ultra (127mm)	5.5" (140mm)			
5.5" Ultra (140mm)	6.0" (152mm)	0.25" (6mm)	0.25" (6mm)	
6.0" Ultra (152mm)	6.5" (165mm)			

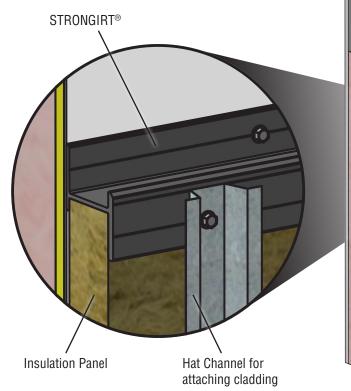
PROPERTIES

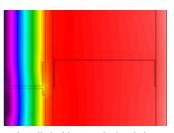
PROPERTY	TEST METHOD	AVG. ULTIMATE Values*
Tensile Strength (LW)	ASTM D638	77,370 psi (533 N/mm²)
Tensile Modulus (LW)	ASTM D638	4.39 x 10 ⁶ psi (30.2 x 10 ³ N/mm ²)
Short Beam Shear Strength (LW)	ASTM D2344	5,313 psi (36.6 N/mm²)
Screw Pullout Load*	ASTM D1761	869 lbf <mark>(394.0 kg</mark> f)
		Flame Spread: Class A, 10
Flammability Characteristics [†]	ASTM E84	Smoke Density: Class A, 160
	NFPA 285	Passed
Thermal Conductivity [‡]	ASTM E1530	2.64 BTU-in/ft ² -Hr/°F (0.382 W(m °K))
Bearing Load	ASTM D5961 (Proc. A)	1330 lb (<mark>603 kgf)</mark>
Screw Head Pull-Through Load*	ASTM D7332 (Proc. B)	935 lb (424 kgf)

**Tested using 1/4" #14 external hex head self drilling screws.* †Tested as an assembly. Test report available upon request. ‡*Typical value*

EXAMPLE INSTALLATION

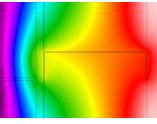
 ${\tt STRONGIRT}^{\circledast}$ can be installed vertically or horizontally depending on construction requirements. Shown horizontally below.





Installed with no cavity insulation

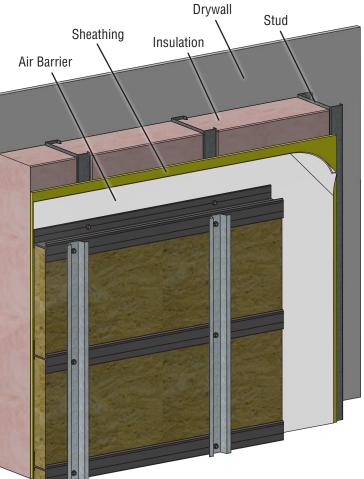




Installed with mineral wool insulation



ASTM E84 is the standard test method for assessing the surface burning characteristics of building products to observe the flame spread and developed smoke density. The above photos show the STRONGIRT® and mineral wool insulation assembly before and after testing.



Thank you for your interest in Strongwell fiber-reinforced polymer (FRP) products. We expect you will find Strongwell to be the ideal material manufacturer for your project. Strongwell offers an excellent value on a top-quality product, made exclusively in the USA, backed by unmatched technical and support resources.

MATERIAL COMPARISON

	FRP	Steel	Aluminum
Weight	Light	Heavy	Light
Life Cycle Cost	Low	High	High
Fabrication/Installation	Easy	Hard	Moderate
Corrosion Resistance	High	Low	Moderate
Maintenance	Low	High	Moderate
Thermal Conductivity	Low	Moderate	High
Electrical Conductivity	Low	High	High
EMI / RFI Transparency	High	Low	Moderate



Vertically Integrated In-House R&D, Engineering, and Fabrication



Over 730,000 sq. ft. of Manufacturing Space in 4 Locations





All Domestically Available Products are Made in the USA in ISO 9001 Certified Facilities since ⁶56

Pultruding Since 1956 The World Leader in Pultrusion and Pultruded Structures and Shapes



Extensive Product Range Infinite Custom Profiles (up to 60" x 30")

BRISTOL LOCATION 400 Commonwealth Ave. • Bristol, VA 24201 USA • (276) 645-8000 www.strongirt.com

STRONGWELL. ISO 9001 Quality Certified Manufacturing Plants