

# STRONG<sup>®</sup>GIRT

Pultruded FRP Cladding Attachment  
Support System



Made Exclusively in the USA by



## 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.

## FEATURES & 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







## ELEMENTS OF DESIGN

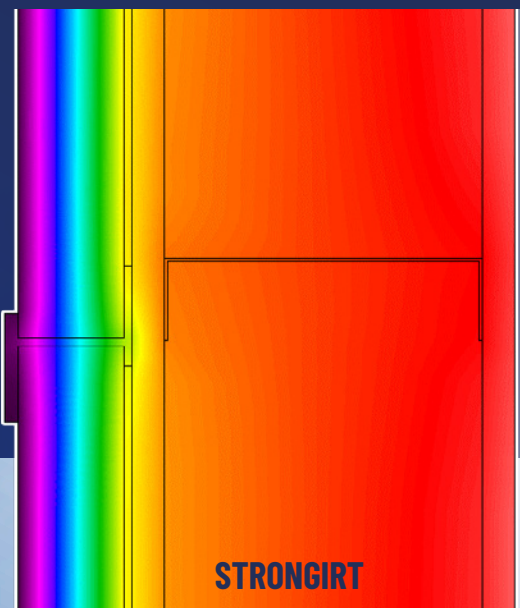
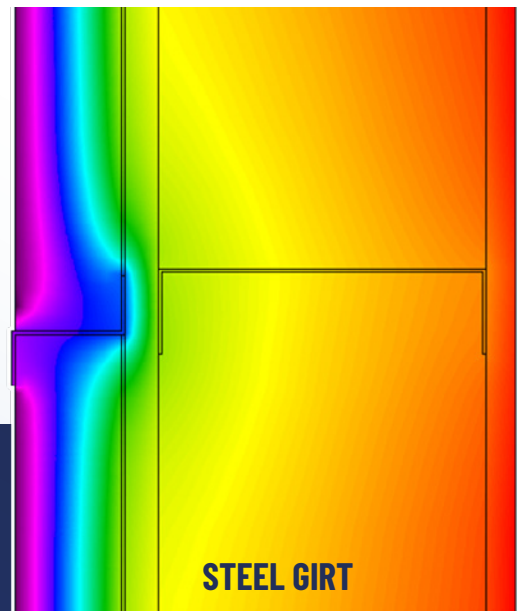
1. Pitched flanges for water mitigation
2. Insulation retention system  
(no insulation fasteners needed)
3. Fastening lines
4. Line to drill weep holes (optional)
5. Weep holes (optional)

## IMPROVED THERMAL PERFORMANCE

STRONGIRT is designed to lessen thermal bridging and create a well functioning wall assembly. The result of this is apparent there when compared to a steel girt in an identical installation.

**Steel Girt R-Value = 7.14**

**STRONGIRT R-Value = 11.23**



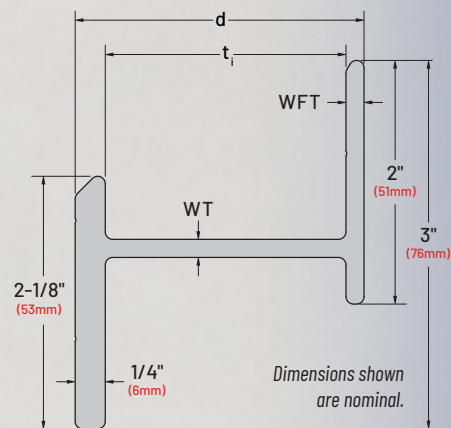


Shown with optional weep holes.  
Available for multiple insulation thicknesses.

## DIMENSIONS & AVAILABILITY

STRONGIRT® profiles are designed to accommodate 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)	0.15" (4mm)	0.15" (4mm)
2.0" (51mm)	2.4" (61mm)		
2.5" (64mm)	2.9" (74mm)		
3.0" (76mm)	3.4" (86mm)		
3.5" (89mm)	3.9" (99mm)		
4.0" (102mm)	4.4" (112mm)		
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)	0.25" (6mm)	0.25" (6mm)
5.5" Ultra (140mm)	6.0" (152mm)		
6.0" Ultra (152mm)	6.5" (165mm)		
8.0" Ultra (203mm)	8.5" (216mm)		





## PROPERTIES

Property	Test Method	Avg. Ultimate Values*
Tensile Strength (LW)	ASTM D638	77,370 psi (533 N/mm <sup>2</sup> )
Tensile Modulus (LW)	ASTM D638	4.39 x 10 <sup>6</sup> psi (30.2 x 10 <sup>3</sup> N/mm <sup>2</sup> )
Short Beam Shear Strength (LW)	ASTM D2344	5,313 psi (36.6 N/mm <sup>2</sup> )
Screw Pullout Load*	ASTM D1761	869 lbf (394.0 kgf)
Flammability Characteristics†	ASTM E84	Flame Spread: Class A, 10 Smoke Density: Class A, 160
	NFPA 285	Passed
Thermal Conductivity‡	ASTM E1530	2.64 BTU-in/ft <sup>2</sup> -Hr/°F (0.382 W(m°K))
Bearing Load	ASTM D5961 (Proc. A)	1330 lb (603 kgf)
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



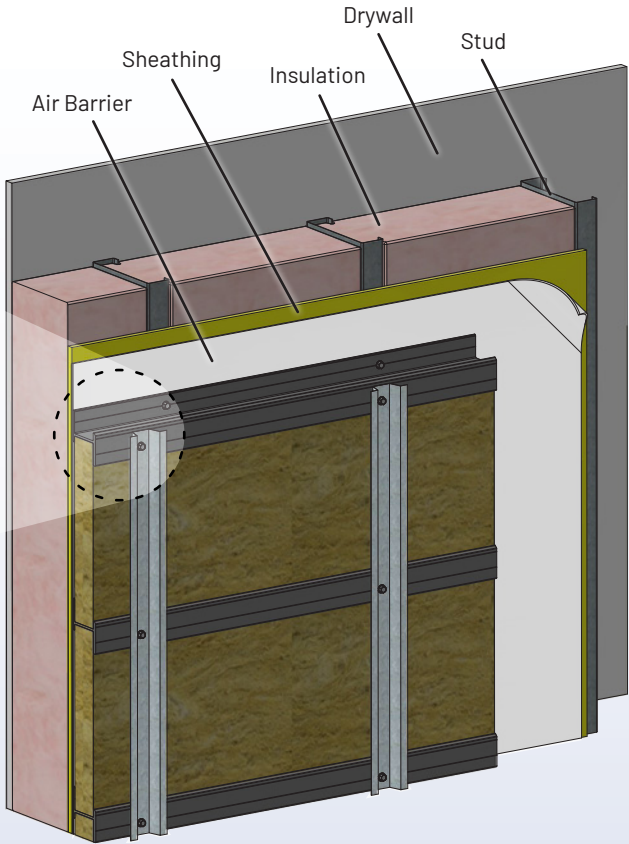
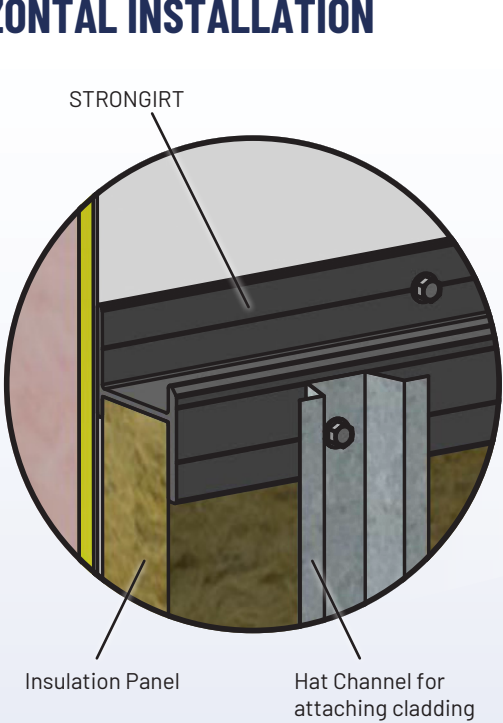
ASTM E84 is the standard test method for assessing the surface burning characteristics of building products to observe the flame spread and developed smoke density. The above photos show the STRONGIR™ and mineral wool insulation assembly before (top) and after (bottom) testing.



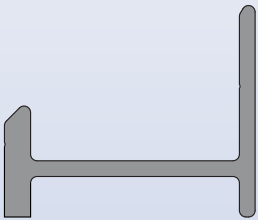
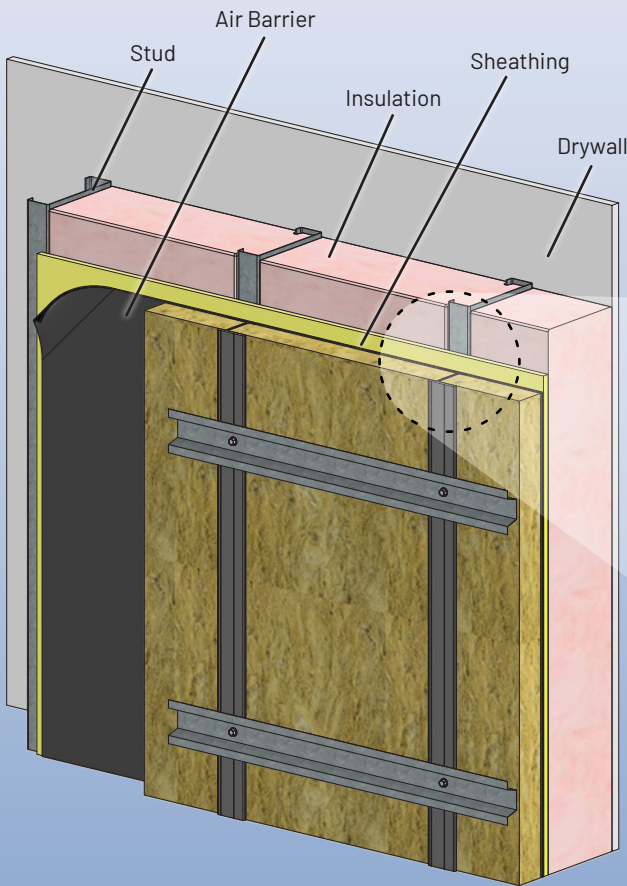
NFPA 285 Tested and Passed



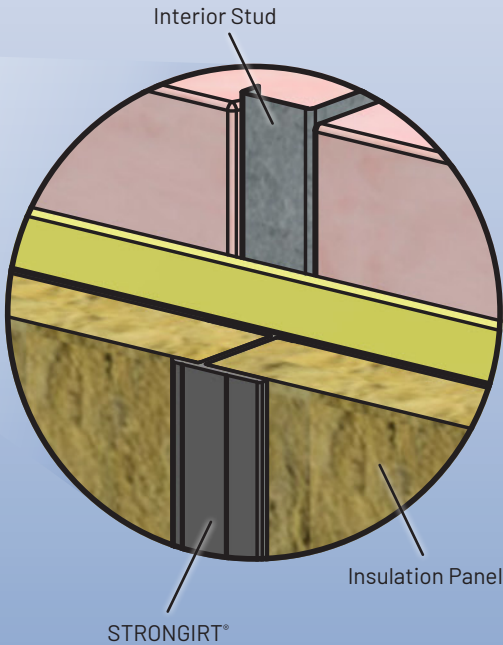
# HORIZONTAL INSTALLATION



# VERTICAL INSTALLATION



STRONGIRT® can be fabricated to provide a non-structural J-channel or starter strip. See the Installation Detail drawings on [strongirt.com](http://strongirt.com) for more information.

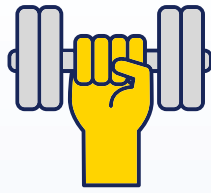


## HOW STRONGIRT COMPARES



### EASIER TO INSTALL

STRONGIRT can be installed horizontally or vertically and works with all non-proprietary insulation types with special field fabrication.



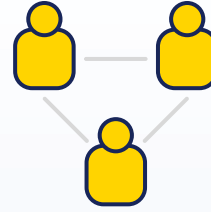
### STRONGER MATERIALS

Custom-engineered, 100% FRP system (no metal to rust or react) with superior pullout strength and better overall performance.



### FIRE PERFORMANCE

STRONGIRT has been tested to ASTM E84 and NFPA 285 standards.



### ROBUST REP NETWORK

STRONGIRT is available all across the U.S. and in parts of Canada through a robust network of representatives.



### PREMIUM QUALITY

STRONGIRT is manufactured exclusively in the USA by Strongwell, the world's recognized leader in pultruded FRP.

## HOW FRP COMPARES

	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

## HOW STRONGWELL COMPARES



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



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



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



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



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

**STRONGIRT® is made exclusively by:**



The World Leader in Pultrusion and  
Pultruded Fiberglass Structures & Shapes



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ISO 9001 Quality Certified Manufacturing Plants

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