

# Enverge<sup>™</sup> CI Foil Exterior Wall Insulation

## **Description:**

Firestone Enverge™ CI Foil Exterior Wall Insulation is a fire-resistant rigid insulation panel that consists of a specially formulated closed-cell polyisocyanurate foam core laminated to high performance aluminum foil facers. Enverge CI Foil provides outstanding thermal performance in commercial wall applications to provide continuous insulation (ci) within the building envelope. With the proper detailing, Enverge CI Foil can be part of the air, and water resistant barriers as well as the vapor retarder in the exterior wall.

All Firestone polyisocyanurate insulation products use EPA accepted blowing agents and gualify under the Federal Procurement Regulation for Recycled Material. Enverge CI Foil incorporates a proprietary foam technology that uses a

HCFC-free blowing agent that does not contribute to the depletion of the ozone (non-ODP). Additionally, low global warming potential (low-GWP) Enverge CI Foil is formaldehyde-free.

### Method of Application:

Firestone Enverge CI Foil Exterior Wall Insulation is not a structural sheathing

- Exterior cladding must be attached through to the framing.
- Always follow local codes for structural bracing
- Refer to local codes and practices for placement of the Weather Resistant Barrier (WRB) in the wall assembly
- Fasteners and/or adhesives are required for attachment of the insulation
- Compatible with a variety of construction configurations
- Approved adhesives can be used for attachment to Concrete Masonry Units, gypsum and concrete
- Seams can be taped to provide a component of the WRB, the air barrier, the vapor retarder or if required by local codes

#### Weather Resistant Barriers (WRB):

The incorporation of Weather Resistant Barriers (air, vapor and moisture barriers) is a critical element of a wall assembly. Firestone recommends that a design professional familiar with local code requirements, specify the selection and placement of a weather resistant barrier. A hygrothermal analysis should be

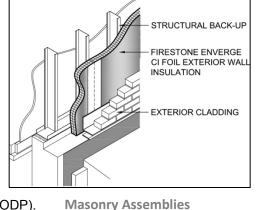
conducted to determine the type and placement of a weather resistant barrier in the wall assembly.

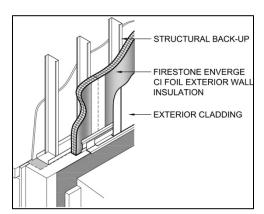
### **Post Installation Exposure:**

Firestone Enverge CI Foil Exterior Wall Insulation is not designed to be exposed for more than 60 days without adequate protection. All exposed foam core surfaces of Enverge CI Foil should be taped with a compatible waterproof tape to protect the insulation during the period between installation of Firestone Enverge CI Foil Exterior Wall Insulation and the application of a finished exterior cladding,

### Storage:

Protect all insulation materials from moisture and direct sunlight during storage. Pallets of Firestone Enverge CI Foil Exterior Wall Insulation are packaged in a UV resistant polyethylene bag. This protective package is designed to protect Enverge CI Foil from the elements during shipment. Outdoor storage requires additional breathable, waterproof, light colored tarpaulins and elevated storage at least 4 inches above the floor or ground.





**MCM** Assemblies

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### **Precautions:**

Firestone Enverge CI Foil Exterior Wall Insulation will burn if exposed to a flame of sufficient heat and intensity. Keep away from heat, sparks, and open flames. Firestone will not be responsible for specific building designs by others, for deficiencies in construction or workmanship, for dangerous conditions on the jobsite, or for improper storage and handling of materials. The technical data shown is provided as a guideline and is subject to change without notice. Contact Firestone for additional information. Refer to Material Safety Data Sheets (MSDS) for additional information.

#### **Product Information:**

Manufactured in an ISO 9001 / ISO 14001 Registered Facility Manufacturing Locations: Corsicana, TX Youngwood, PA

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Available Sizes	5:	Bundle Packaging	Bundle Square Feet	Bundle Square Meters	ltem Number:
Panel Size:	4' x 8' (1.22 m x 2.44 m)				
Thickness:	1.0 inch (25.4 mm)	48 Panels	1536	142.7	W8C1FF1008
	1.5 inch (38.1 mm)	32 Panels	1024	95.1	W8C1FF1508
	2.0 inch (50.8 mm)	24 Panels	768	71.4	W8C1FF2008
	2.5 inch (63.5 mm)	19 Panels	608	56.5	W8C1FF2508

### **Specification Compliance:**

ASTM C1289, Type I, Class 1 Contact Firestone Building Products for information regarding listings of NFPA 285 compliant wall assemblies.

Typical Physical Properties	ASTM Standard	Units	Value	SI Units	SI Value
Compressive Strength	D1621	Psi	20	kPa	138
Density	D1622	Pcf	2	kg/m <sup>2</sup>	32
Dimensional Stability	D2126	%	2	%	2
Moisture Vapor Transmission	E96	Perm	0.03	ng/(Pa•s•m²)	1.86
Water Absorption	C209	% by volume	0.057	% by volume	0.057
Service Temperature		°F	-40 - 200	°C	-40 - 93.33
Resistance to Mold	D3273	Pass/Fail	Pass	Pass/Fail	Pass
Air Permeance	E2178	L/s/m <sup>2</sup>	0.002	L/s/m <sup>2</sup>	0.002
Surface Burning Characteristics IBC 2603.5.4 compliant	E84	FSI/SDI	≤25/450	FSI/SDI	≤25/450

Product Data	Thickness inches	Thickness mm	R-Value	<b>Recycled Content</b>
	1.0	25.4	6.5	9.1%
	1.5	38.1	9.8	9.6%
	2.0	50.8	13.1	9.8%
	2.5	63.5	16.4	10.0%



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#### **LEED** Information:

Firestone Enverge CI Foil Exterior Wall Insulation can contribute to overall LEED project certification in the following areas:

- EA Prerequisite 2: Minimize Energy Performance
- EA Credit 1: Optimization of Energy Performance (1-19 Points)
- MR Credit 2: Construction Waste Management (1-2 Points)
- MR Credit 4: Recycled Content (1-2 Points)
- MR Credit 5: Regional Materials (1-2 Points)

#### Please the technical department at 1-800-428-4222 for further information.

This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.