

Enverge™ CI Foil Exterior Wall Insulation

Item Description

Exterior Wall Insulation



Product Information

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 (3.22 mil, both sides). 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 qualify 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.

Hourly Rated Assemblies:

The following designs are hourly rated assemblies listed in the UL Fire Resistance Directory:

U326, U330, U354, U364, U424, U425, U460, U902, U904, U905, U906, U907, V454, V499, and W417.

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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 Enverge CI Foil 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 Glass Exterior Wall Insulation are packaged in a UV resistant polyethylene bag. This protective package is designed to protect Enverge CI Glass 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.

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, deficiencies in construction or workmanship, dangerous conditions on the jobsite, or 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 Safety Data Sheets (SDS) for additional information.

Typical Properties

Property	ASTM Standard	Units	Value	Units	Value
Compressive Strength:	D1621	psi	25	kPa	172
Density:	D1622	pcf	2	Kg/ m ²	32
Dimensional Stability:	D2126	%	2	%	2
Thermal and Humid Aging:	D2126	pass/fail	pass	pass/fail	pass
Service Temperature:	----	°F	-40 to 200	°C	-40 to 93.33
Moisture Vapor Transmission:	E96	Perm	0.03	ng/(Pa•s•m ²)	1.86
Hydrostatic Pressure Test:	AATCC 127	pass/fail	pass	pass/fail	pass
Water Absorption:	C209	% by volume	0.057	% by volume	0.057
Resistance to Mold:	D3273	pass/fail	pass	pass/fail	pass
Air Permeance (Material):	E2178	cfm/ft ²	0.0004	L/s/m ²	0.002
Air Permeance (Assembly):	E2357	pass/fail	pass	pass/fail	pass
Surface Burning Characteristics*:	E84	FSI/SDI	≤25/450	FSI/SDI	≤25/450
Vertical and Lateral Fire Propagation	NFPA 285	pass/fail	pass	pass/fail	pass
Potential Heat	NFPA 259	Btu/lb	<11200	Kj/kg	<26000

*Surface Burning Characteristics – IBC 2603.5.4 compliant

ASTM C1289, Type I, Class 1, Grade 3

Contact Firestone Building Products for information regarding listings of NFPA 285 compliant wall assemblies.

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Product Data - Available Sizes: 4' x 8' (1.22 m x 2.44 m)

<u>Thickness</u>		<u>Bundle Packaging</u>	<u>Bundle Square Feet</u>	<u>Bundle Square Meters</u>	<u>Item Number</u>	<u>R-Values</u>	<u>Recycled Content</u>
<u>inches</u>	<u>mm</u>						
1.00	25.4	48 Panels	1536	142.9	W8CMFF1008	6.5	9.1%
1.50	38.1	32 Panels	1024	95.3	W8CMFF1508	9.8	9.6%
2.00	50.8	24 Panels	768	71.4	W8CMFF2008	13.1	9.8%
2.50	63.5	19 Panels	608	56.5	W8CMFF2508	16.4	10.0%
3.00	76.2	16 Panels	512	47.8	W8CMFF3008	19.7	10.1%
3.50	88.9	13 Panels	416	38.6	W8CMFF3508	23.0	10.1%
4.00	101.6	12 Panels	384	35.7	W8CMFF4008	26.3	10.2%

Please contact Quality Building Services Technical Department at 1-800-428-4511 for further information.

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