

Technical Information Sheet



Enverge™ CI Foil Exterior Wall Insulation

Item Description	Item Number
Exterior Wall Insulation	See Product Data Below

Meets or exceeds the general performance requirements of ASTM C 1289, Type II, Class 1, Grade 3 and is NFPA 285 compliant.

Description

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 Elevate 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

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. Elevate 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.

Post Installation Exposure

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 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

- 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.
- Holcim Solutions & Products US, LLC 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 Elevate for additional information. Refer to Safety Data Sheets (SDS) for additional information.

Product Data – Available Sizes: 4' x 8' (1.22 m x 2.44 m)							
Thickness		Bundle Packaging	Bundle Square Feet	Bundle Square Meters	Item Number	R-Values	Recycled Content %
inches	mm						
1.00	25.4	48 Panels	1536	142.9	W8CMEE1008	6.0	3.4
1.50	38.1	32 Panels	1024	95.3	W8CMEE1508	9.0	4.4
2.00	50.8	24 Panels	768	71.4	W8CMEE2008	12.1	5.2
2.50	63.5	19 Panels	608	56.6	W8CMEE2508	15.1	5.8
3.00	76.2	16 Panels	512	47.8	W8CMEE3008	18.1	6.3
3.50	88.9	13 Panels	416	38.6	W8CMEE3508	21.2	6.6
4.00	101.6	12 Panels	384	35.7	W8CMEE4008	24.2	7.0

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 II, Class 2, Grade 3

Please contact Holcim Technical Services at 800-428-4511 for further information.

This sheet is meant to highlight Elevate products and specifications and is subject to change without notice. Holcim takes responsibility for furnishing quality materials that meet published Elevate product specifications or other technical documents, subject to normal manufacturing tolerances. Neither Holcim nor its representatives practice architecture. Holcim offers no opinion on and expressly refuses any responsibility for the soundness of any structure. Holcim 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 Holcim representative is authorized to vary this disclaimer.

Firestone, the brand of premier roofing, wall, and lining systems you know and trust, will be coming to you under a new name: Elevate. During our transition, products carrying the brand name **Firestone** will change to **Elevate** on product labels and packaging, Technical Information Sheets, and elsewhere. Only the brand name is changing. Our products remain the same.

For further information on our brand transition to Elevate, scan the code below with your smartphone, or visit our website: www.holcimelevate.com

