



Graphite Polystyrene (GPS) Rigid Foam Insulation

Halo® Interra® FR are rigid foam sheathing insulation boards made from graphite infused polystyrene (GPS). At a thickness of 2.28” or less, Interra® FR can be used without an ignition barrier, as tested to NFPA 286, and in compliance with the International Residential Code.







Coated with a reflective laminate on both sides of the rigid insulation. Acts as a vapor barrier while providing continuous insulation. In addition, when a sealed air gap between the reflective laminate surface and covering is provided an additional boost in R-value is provided.

BASIC USE

- Roof
- Ceiling
- Interior above-grade wall
- Interior foundation



Product Features

					
Stable long term thermal resistance (R4.6 per inch (25.4mm))	Environmentally responsible	Cost-efficient insulation	Water-resistant	Vapor barrier	Air barrier

Environmental & Sustainability

- Produced without the use of chlorofluorocarbon (CFCs), hydrochlorofluorocarbon (HCFCs) or formaldehyde. As a result, Halo Interra® FR will not produce harmful emissions to the environment.

Performance Criteria

		COMPLIANCE	Halo Interra® FR Type XI
THERMAL RESISTANCE	75°F (24°C)	ASTM C518	R-4.6 (RSI 0.86)
PHYSICAL	Compressive Resistance at 10% def., Min.	ASTM D1621	5 psi (35 kPa)
	Flexural Resistance Min.	ASTM C203	10 psi (70 kPa)
	Dimensional Stability Max.	ASTM D2126	2%
MOISTURE	Water Vapor Permeance Max. ^a	ASTM E96	0.03 perms (1.7 ng/Pa•s•m ²)
	Water Absorption Max.	ASTM C272	4.0%
FIRE	Flame Spread Index, Max.	ASTM E84	<=25
	Smoke Developed Index, Max.		<=450
	Thickness, Max. ^b		4" (102mm)
	Density, Max.		2.2 pcf (35 kg/m ³)
	Oxygen Index, Min.	ASTM D2863	24%
	Room Corner Test	NFPA 286	Can be used without ignition barrier

a. Based on independent testing conducted by QAI. Water vapor permeance properties tested with laminate and 1” (25.4 mm) thick GPS.
b. Tested at maximum thickness, as required by ASTM E84. However, Interra FR must be 2.28” (58 mm) or less in thickness if used without an ignition barrier.

Technical Information

USE WITHOUT A THERMAL BARRIER May be installed on any wall surface as interior insulation without a thermal or ignition barrier applied over Halo® Interra® FR provided Type XI Halo® Interra® FR is installed at a maximum thickness of 2.28 inch. Based on testing to NFPA 286 in accordance with IBC 2015, Section 2603.9 and IRC 2015, Section 316.6.

- Halo® products should be protected from reflective sunlight or prolonged solar exposure. Always keep stored Halo® products tarped or covered to protect from weather. Do not use a clear plastic covering film. When possible, store indoors.
- Until the building is enclosed with the wall, subfloor or roof sheathing, the following recommendations will help ensure installed Interra® are protected from thermal expansion, and minimize damage due to reflective sunlight or prolonged solar exposure.
 - Remove or cover any surface that is casting a reflection on installed Interra®, or shield the affected Interra® products. (Reflections can also come through the building enclosure through openings or non-opaque areas, such as windows).
 - Cover Interra® if left exposed for more than 30 days. Faded printing on Interra® laminates is normal and will not degrade its properties.
 - Ensure all butt joints are tightly fitted, and apply sheathing tape as soon as possible. Immediately tape seal or temporarily cover all joints of inside corners until tape sealant is applied.
- Prior to use of adhesives, sealants or other similar products with GPS insulation please verify the compatibility with adhesive manufacturers.
- Halo® Interra® products are made of combustible materials and may need to be protected from high heat sources. In additional thermal barrier may be required when used in the interior of a building. Refer to the local building code for appropriate protection and thermal barrier requirements.

Sizes

	BOARD THICKNESS	BOARD SIZE
Halo® Interra® FR	1-1/16" (27mm), 1-5/8" (41mm), 2-1/8" (54mm), 2-1/4" (57mm)	4' x 8' (1220mm x 2438mm)

Custom sizes are available upon request.

Packaging

Halo® packaging and bundle sizes vary. Please contact your local Halo® manufacturer or dealer to confirm your local packaging specifications and available bundle sizes.

Manufacturers

- AMC Foam Technologies Inc.
35 Headingley St.
Headingley Manitoba, R4H 0A8
877-789-7622
- Beaver Thermal Solutions Inc.
#215-44393 Simpson Rd.
Chilliwack, BC V2R 5M3
888.453.5961
- Beaver Thermal Solutions Inc.
11581-272 St.
Acheson, Alberta, T7X 6E9
888-453-5961
- Progressive Foam Technologies
1 Southern Gateway Dr.
Gnadenhutzen, OH, 44629
800-860-3626

Applicable Standards

ASTM C578	Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
ASTM C518	Standard Test Method for Steady-state Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
ASTM D1621	Standard Test Method for Compressive Properties of Rigid Cellular Plastics.
ASTM D2842	Standard Test Method for Water Absorption of Rigid Cellular Plastics.
ASTM E84	Standard Test Method for Surface Burning Characteristics of Building Materials.
ASTM E96	Standard Test Methods for Water Vapor Transmission of Materials.
ASTM C203	Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation.
ASTM D2863	Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index).
NFPA 286	Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
ASTM C272	Standard Test Method for Water Absorption of Core Materials for Sandwich Constructions

Limited Warranty

Subject to the terms and conditions contained in the Limited Warranty, the Manufacturer (as defined herein) warrants that if the representative thermal insulation value of the Halo® insulation products Halo® Interra®, Halo® Exterra®, or Halo® Subterra® (the "Product" or "Products") varies from the published thermal resistance, the Manufacturer will, when a claim under the attached Limited Warranty is made within fifteen (15) years from the date of manufacture, refund the original purchase price to the first owner of a structure in which the Product has been installed (the "Owner"). For the purposes of the Limited Warranty, the original purchase price of the Product shall be exclusive of taxes and all other costs, including builder mark ups, labor costs and costs to remove the original Product and replace it with new Product.

For more information refer to the [Halo Zero Thermal Drift Guarantee](#).

Disclaimer of Liability

References to "Logix Brands" or the "Company" mean the manufacturer selling the Products to Owner (the "Manufacturer") unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR THE ATTACHED LIMITED WARRANTY. ALL OTHER WARRANTIES, EXPRESS, STATUTORY AND IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY DISCLAIMED. The Owner assumes all risks as to the use of the material. As the Manufacturer has no control over installation design and workmanship, accessory materials or application conditions, the Manufacturer does not warranty the performance or results of any installation containing the Products. The Products must be handled and installed according to the instructions outlined in the applicable Product installation guide and used only for the particular purposes recommended in the Halo Product literature available on [BuildWithHalo.com](#).

Technical Support

For North American technical inquires please contact:
techdept@logixbrands.com

Code Evaluation Approvals

- CCMC 14004-L
- QAI Listing B1031-2



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REV12072021 | 2 of 2