



THERMAFIBER® SAFING MINERAL WOOL INSULATION

Thermafiber® Safing mineral wool insulation products are designed to provide enhanced fire protection in perimeter fire containment systems tested to ASTM E2307, floor and wall penetrations, construction joints, and other firestopping applications. These products are non-combustible, moisture-resistant, non-corrosive, non-deteriorating, mildew-resistant and vermin-resistant. Thermafiber® Safing provides thermal insulation, fire containment, and enhanced acoustical performance in many different UL and Intertek (formerly OPL) listed fire containment assemblies of 1, 2, and 3-hr ratings.

Features

- Exceptional performance in Perimeter Fire Containment Systems as tested in full-scale ASTM E2307 systems
- Provides fire containment in rated assemblies
- Fire-resistant to temperatures above 2,000°F (1,093°C)
- Helps conserve energy, reduce greenhouse gas emissions
- Mold-resistant
- Enhances acoustical performance
- Minimum 70% recycled content¹
- Contributes to credits in several green building programs, such as LEED® and Green Globes®

Physical Properties

PROPERTY	TEST METHOD	VALUE
Corrosion of Steel, Aluminum, and Copper	ASTM C665	Noncorrosive, Types I, II
Non-Combustibility	ASTM E136	Non-Combustible
Non-Combustibility	CAN/ULC S114	Complies
Water Vapor Permeance	ASTM E96	Unfaced, 50 perms as tested Foil-Faced, 0.02 perms as tested
Water Vapor Sorption	ASTM C1104	Sorption less than 1% by volume
Surface Burning Characteristics	ASTM E84	Unfaced, Flame Spread 0, Smoke Developed 0 Foil-Faced, Flame Spread 25, Smoke Developed 0
Surface Burning Characteristics	CAN/ULC S102	Unfaced, Flame Spread 0, Smoke Developed 0 Foil-Faced, Flame Spread 25, Smoke Developed 0
Perimeter Fire Containment Systems	ASTM E2307	Thermafiber® Safing insulation used in conjunction with Thermafiber® FireSpan® insulations in the Perimeter Fire Containment System Complies
Penetration Firestop Systems	ASTM E814 or UL 1479	Thermafiber® Safing insulation used in conjunction with an approved fill, void, or cavity material sealant or other approved material in through-penetration firestop systems Complies
Fire Resistance of Building Joint Systems	UL 2079	Thermafiber® Safing insulation used in conjunction with an approved fill, void, or cavity material in construction joint systems Complies
Fire Tests of Firestop Systems	CAN/ULC S115	Complies

Standards, Code Compliance

ASTM C612, Types IA, IB, II, III, IVA

Technical Data

TESTED TO ASTM C518

ACTUAL DENSITY	"K" @ 75° [24°C] BTU.IN/HR.SQ FT. °F	"R" VALUE PER INCH OF THICKNESS ²
4.0 pcf	0.23	4.3
6.0 pcf	0.23	4.3

2 R = thickness divided by "k."

Perimeter Fire Containment Systems Per ASTM E2307

Safing insulation is a critical component of any perimeter fire containment system. Thermafiber, Inc. has performed decades of testing in all of the perimeter fire containment systems listed below.

- Aluminum Spandrel
- Steel Stud-Framed/Gypsum Sheathing
- Glass Spandrel
- Granite Spandrel
- Precast Concrete Spandrel
- Steel Back Pan

For more complete test information, see UL® and Intertek® (formerly OPL) Directories. For a full listing of fire containment systems, visit www.thermafiber.com.

UL Reference = TYPE SAF.

For additional job-specific details and accessory materials necessary to complete the Perimeter Fire Containment System, please refer to UL® and Intertek® design listings.^{3,4}

See Owens Corning publication "Enclosure Solutions Perimeter Fire Containment System E2307 Perimeter Technical Bulletin" (Pub. No. 10020920) for more information.

See Owens Corning publication "Thermafiber® Perimeter Fire Containment System Guide" (Pub. No. 10022722) for more information.

3 UL Fire Rated Designs, UL 333 Pflingsten Road, Northbrook, IL 60062.

4 Intertek Laboratories Designs, Fire Resistance Directory, Intertek 16015 Shady Falls Rd. Elmendorf, TX 78112

Availability

PRODUCT	AVAILABLE THICKNESS	STANDARD DIMENSIONS ^{5,6}
Safing 4.0 pcf	1"–7" in ½" increments	24" x 48"
Safing 6.0 pcf	2", 3", 4", 6"	24" x 48"
Tolerances	+¼", -⅓"	Width: ±⅛", Length: ±½"

⁵ See our product guide for more details.

⁶ Custom sizes are available upon request.

Installation

All firestopping insulation should be installed per the tested and listed assembly requirements that most closely represent the project conditions.

- Perimeter Fire Containment Installation: Thermafiber® Safing insulation should be compression-fitted between the slab edge and the Thermafiber® FireSpan® curtain wall insulation, leaving no voids per the UL® or Intertek® design listing.
- Penetration Application: Thermafiber® Safing insulation should be cut slightly larger than the opening and compression-fitted into the opening, leaving no voids per the UL® or Intertek® design listing.
- Construction Joint Application: Thermafiber® Safing insulation should be compression-fitted into the joint opening, leaving no voids per the UL® or Intertek® design listing.

Product Options

- Safing 4.0, 2-inch or greater thickness, is available with a vapor-retarding foil-facing.
- Safing 6.0, 1.5-inch or greater thickness, is available with a vapor-retarding foil-facing.
- Recycled Content Options^{1,7}:
 - Standard Fiber.....70%

Formaldehyde-free product available. See Owens Corning publication Thermafiber® Safing Formaldehyde-Free Mineral Wool Insulation Data Sheet (Pub. No. 10023216) for more information.

⁷ Recycled content options other than standard must be specified at time of order.

Thermafiber Insolutions®

Thermafiber Insolutions® offers industry-leading technical and engineering assistance to architects, specifiers, and contractors. These services include CAD drawings, engineering judgments, LEED® credit information, and product recommendations. Contact our technical services department at 1-888-834-2371 or email ThermafiberInsolutions@owenscorning.com.

Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation, and composite solutions, delivering a broad range of high-quality products and services. Owens Corning is committed to driving sustainability by delivering solutions, transforming markets, and enhancing lives. More information can be found at www.owenscorning.com.

Certifications and Sustainable Features

- ¹Verified by ICC-ES to contain a minimum of 70% recycled content. See ICC-ES Evaluation Report VAR-1025 at icc-es.org.
- Environmental Product Declaration (EPD) has been certified by UL Environment. For more information, visit ul.com/epd.
- Safing Products have a published Health Product Declaration (HPD).
- This product receives SAFETY Act designation by the U.S. Department of Homeland Security. For more information, visit safetyact.gov.



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Notes

For additional information, refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via <http://sds.owenscorning.com>.

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