



# Thermafiber® Safing FF

## Formaldehyde-Free Mineral Wool Insulation



### Description

Thermafiber® introduces the first formaldehyde free, GreenGuard® Gold certified perimeter fire containment mineral wool insulation in North America. Safing mineral wool insulation products are designed to provide enhanced fire protection in perimeter fire containment systems, floor and wall penetrations, construction joints, and other fire stopping applications. Thermafiber® Safing meets green building standards by using products that exclude red list materials like formaldehyde. These products are non-combustible, moisture-resistant, non-corrosive, non-deteriorating, mildew resistant, and vermin-resistant.<sup>1</sup> 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. The new formaldehyde free Safing product is especially appropriate for applications in education, healthcare, and other institutions committed to indoor air quality.

1. Living Building Challenge (LBC) Red List.

### Standards, Codes Compliance

<b>ASTM C 665</b>	Non-corrosive, Type I, III
<b>ASTM C 612</b>	Type IA, IB, II, III, IVA
<b>ASTM E 136</b>	Non-combustible as defined per NFPA Standard 220
<b>CAN/ULC S114</b>	Complies
<b>CAN/ULC S102</b>	Flame Spread 0, Smoke Developed 0, unfaced
<b>ASTM E 814 or UL 1479</b>	Safing Insulation used in conjunction with an approved fill, void, or cavity material sealant or other approved material in through – penetration firestop systems - Complies
<b>UL 2079</b>	Safing Insulation used in conjunction with an approved fill, void or cavity material in construction joint systems - Complies
<b>CAN/ULC S115</b>	Complies
<b>ASTM E84/CAN/ULC S102</b>	Flame Spread 0, Smoke Developed 0
<b>UL Formaldehyde-Free</b>	Validated
<b>GreenGuard</b>	Gold certified

Safing products are approved by: **New York City Board of Standards & Appeals** – (under BSA 39-74-SM & accepted by MEA-209-82-M, Vol. 4).

### Product Options

Safing 4.0, 2" or greater thickness, is available with a vapor retarding foil facing.

Safing 6.0, 1.5" or greater thickness, is available with a vapor retarding foil facing.

Recycled Content Options<sup>1,2</sup>:

EPA Choice Fiber	
(US Government Buildings) .....	Minimum 75%
Standard Fiber .....	70%

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

### Technical Data

Actual Density	Tested to ASTM C 518		Tested to ASTM E 84 Unfaced		Tested to ASTM E 84 Foil Faced	
	"k" @ 75° [24°C] BTU.in/hr .sq. ft. °F	"R" value per inch of thickness***	Flame Spread	Smoke Developed	Flame Spread	Smoke Developed
4.0 pcf	0.23	4.3	0	0	25	0
6.0 pcf	0.23	4.3	0	0	25	0

\*\*\*R = thickness divided by 'k'

### Perimeter Fire Containment Tests Per ASTM E 2307

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

- Back pan curtain wall fire containment
- Steel Stud-Framed/Gypsum Sheathing Curtain Wall Fire Containment
- Glass Spandrel Curtain Wall Fire Containment
- Granite Spandrel Curtain Wall Fire Containment
- Precast Concrete Spandrel
- Steel Back Pan Curtain Wall Fire Containment

For additional job specific details and accessory materials necessary to complete the Perimeter Fire Containment System, please refer to UL<sup>®</sup> design listing.<sup>3</sup>

<sup>3</sup>Underwriters Laboratories (UL) Designs, Fire Resistance Directory, UL, 333 Pfingsten Road, Northbrook, IL 60062.

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

### Installation

All firestopping insulation should be installed per the architectural specification or system specific test description. All compressed Safing insulation should be installed per the listed assembly.

- Perimeter Installation: Safing insulation should be compression fitted between the slab edge and the FireSpan® curtain wall insulation, leaving no voids.
- Penetration Application: Safing insulation should be cut slightly larger than the opening and compression fitted into the opening, leaving no voids.
- Construction Joint Application: Safing insulation should be compression fitted into the joint opening, leaving no voids.

### Availability

	Thickness*	Widths**	Lengths**
Safing 4.0 pcf	1" - 7"	16", 24", 36"	48", 60"
Safing 6.0 pcf	1" - 7"	16", 24", 36"	48", 60"
Tolerances	+1/4", - 1/8"	± 1/8"	± 1/2"

\*Thicknesses are available in 1/2" increments. \*\*Custom sizes are available upon request.

## 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](mailto:ThermafiberInsolutions@owenscorning.com).

## Features

- Exceptional performance in Perimeter Fire Containment 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
- Natural dark color provides shadowing in glass spandrels
- Minimum 70% recycled content<sup>2</sup>
- Contributes to credits in several green building programs such as LEED® and Green Globes®
- Formaldehyde Free

## 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](http://www.owenscorning.com).

## Notes

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

## Submittal Approvals

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Date \_\_\_\_\_



Thermafiber® Safing mineral wool insulation provided critical components of the perimeter fire containment system in the Edith Green Federal Building in Portland, OR.

## Certifications and Sustainable Features

- <sup>3</sup> Verified by ICC-ES to contain a minimum of 70% recycled content. See ICC-ES Evaluation Report VAR-1025 at [icc-es.org](http://icc-es.org).
- UL Environment GreenGuard Gold Certified. GREENGUARD Gold Certified products are certified to GREENGUARD Gold standards for low chemical emissions into indoor air during product usage, and are qualified for use in environments such as schools and healthcare facilities. For more information, visit [ul.com/gg](http://ul.com/gg).
- UL Environment validated Formaldehyde-Free. For more information, visit [ul.com/ecv](http://ul.com/ecv).
- Gold level Material Health Certificate from Cradle to Cradle Products Innovation Institute. For more information visit [c2ccertified.org](http://c2ccertified.org).
- Thermafiber® Safing FF mineral wool insulation is participating in Declare, and is Living Building Challenge compliant. For more information, visit [living-future.org/declare](http://living-future.org/declare).
- This product receives SAFETY Act Designation by the U.S. Department of Homeland Security. For more information visit [safetyact.gov](http://safetyact.gov).
- 86% biobased content for unfaced product and 64% biobased content for faced product, certified by USDA BioPreferred® program.

Declare.



**Thermafiber**

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