



# Thermafiber® FireSpan® 90 & FireSpan® 40 Mineral Wool Insulation



## Description

Thermafiber® FireSpan® products are designed to provide enhanced fire protection in curtain wall and perimeter fire containment systems. These products are non-combustible, moisture-resistant, non-corrosive, non-deteriorating, mildew-resistant and vermin-resistant. Its natural dark color provides shadowing in glass spandrels. FireSpan® 40 & 90 insulations provide thermal insulation, fire containment, enhanced acoustical performance, and vapor control in many different UL and Intertek (formerly OPL) listed fire containment assemblies of 1, 2, and 3-hr ratings.

## Standards, Codes Compliance

<b>ASTM C 665</b>	Type I, III (Class A, Category 1)
<b>ASTM C 612</b>	FireSpan® 40 Type IA, IB, II, III, IVA
<b>ASTM C 612</b>	FireSpan® 90 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>ASTM E 96</b>	Unfaced, 50 Perms as tested
<b>ASTM E 96</b>	Foil Faced, 0.02 Perms as tested
<b>ASTM C 1104</b>	Sorption less than 1% by volume
<b>ASTM C 356</b>	Linear Shrinkage <2% @ 1200° F (650° C)
<b>ASTM C 356</b>	Flame Spread 0, Smoke Developed 0

Curtain wall products are approved by: **New York City Board of Standards & Appeals** – (under BSA 214-73-SM & accepted by MEA-209-82, Vol. II). Also, MEA-189-93-M and MEA-190-93-M.

## Product Options

FireSpan® 40, 2" or greater thickness, is available with a vapor retarding foil facing.

FireSpan® 90, 1" 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

	Nominal Density	Tested to ASTM C 518		Tested to ASTM E 84			
		"k" @ 75° [24°C] BTU.in/hr .sq. ft. °F	"R" value per inch of thickness***	Unfaced	Foil Faced	Flame Spread	Smoke Developed
FireSpan® 40	4.0 pcf	0.23	4.3	0	0	25	0
FireSpan® 90	8.0 pcf	0.23	4.3	0	0	25	0

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

## Perimeter Fire Containment Tests Per ASTM E 2307

FireSpan® insulation is the insulation for perimeter fire containment. Thermafiber, Inc. has performed decades of testing in all of the containment systems listed below.

- Aluminum Spandrel 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

For more complete test information, see UL® and Intertek® (formerly OPL) Directories. For a full listing of containment systems visit [www.thermafiber.com](http://www.thermafiber.com) and click on Fire Rated Assemblies.

For additional job specific details and accessory materials necessary to complete the Perimeter Fire Containment System, please refer to UL® 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

FireSpan® products should be mechanically attached to horizontal and vertical mullions with architect approved insulation fasteners. Reinforce FireSpan® insulation on the outer insulation surface at the safin line. Typical reinforcement members include hat channels, "L" angles, and "T" bars. Thermafiber Inc.'s patented Impasse® system is designed to quickly and easily mechanically attach FireSpan® insulation to curtain wall systems.

## Availability

	Thickness*	Widths**	Lengths**
FireSpan® 40	2" - 7"	24", 36", 72"	48", 60", 72"
FireSpan® 90	1" - 7"	24", 36", 72"	48", 60", 72"
Tolerances	+1/4", - 1/8"	± 1/8"	+3/4", - 1/4"

\* 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®

## 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>.

## Submission Approvals

Job Name \_\_\_\_\_  
Contractor \_\_\_\_\_  
Date \_\_\_\_\_



Thermafiber® FireSpan® mineral wool insulation provides the critical components of the perimeter fire containment system in the Trump International Hotel and Tower in Chicago, IL.



Made in the USA

## Certifications and Sustainable Features

- <sup>2</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).
- Environmental Product Declaration (EPD) has been certified by UL Environment. For more information visit [ul.com/epd](http://ul.com/epd).
- Material Health Certificate from Cradle to Cradle Products Innovation Institute. For more information visit [c2ccertified.org](http://c2ccertified.org).
- This product receives SAFETY Act designation by the U.S. department of Homeland Security. For more information visit [safetyact.gov](http://safetyact.gov).



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