



Thermafiber® FireSpan® FF 40 & FireSpan® FF 90

Formaldehyde-Free Mineral Wool Insulation



Description

Thermafiber® introduces the first formaldehyde free, GreenGuard® Gold certified perimeter fire containment mineral wool insulation in North America. FireSpan® is designed to provide enhanced fire protection in curtain wall and perimeter fire containment systems and meet 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.¹ Its natural dark color provides shadowing in glass spandrels. FireSpan® FF 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. The new formaldehyde free FireSpan products are 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

ASTM C 665	Type I, III (Class A, Category 1)
ASTM C 612	FireSpan® 40 Type IA, IB, II, III, IVA
ASTM C 612	FireSpan® 90 Type IA, IB, II, III, IVA
ASTM E 136	Non-combustible as defined per NFPA Standard 220
CAN/ULC S114	Complies
ASTM C 1104	Sorption less than 1% by volume
ASTM C 356	Linear Shrinkage <2% @ 1200° F (650° C)
ASTM E 84/CAN/ULC S102	Flame Spread 0, Smoke Developed 0
UL Formaldehyde-Free	Validated
GreenGuard	Gold certified

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^{1,2}:

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
- 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® design listing.³

³ 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 safining 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.

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 content²
- 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.

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[®] FireSpan[®] mineral wool insulation provided critical components of the perimeter fire containment system in 181 Fremont in and San Francisco, CA. Photography credit: Jay Paul Co.

Certifications and Sustainable Features

- ³ Verified by ICC-ES to contain a minimum of 70% recycled content. See ICC-ES Evaluation Report VAR-1025 at 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.
- UL Environment validated Formaldehyde-Free. For more information, visit ul.com/ecv.
- Gold level Material Health Certificate from Cradle to Cradle Products Innovation Institute (Unfaced products only). For more information visit c2ccertified.org.
- Thermafiber[®] FireSpan FF mineral wool insulation is participating in Declare, and is Living Building Challenge compliant. For more information, visit living-future.org/declare.
- This product receives SAFETY Act Designation by the U.S. Department of Homeland Security. For more information visit safetyact.gov.
- 86% biobased content for unfaced product and 64% biobased content for faced product, certified by USDA BioPreferred[®] program.

Declare.



Disclaimer of Liability

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