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

<table>
<thead>
<tr>
<th>Standard</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 665</td>
<td>Type I, III (Class A, Category 1)</td>
</tr>
<tr>
<td>ASTM C 612</td>
<td>FireSpan® 40 Type IA, IB, II, III, IVA</td>
</tr>
<tr>
<td>ASTM C 612</td>
<td>FireSpan® 90 Type IA, IB, II, III, IVA</td>
</tr>
<tr>
<td>ASTM E 136</td>
<td>Non-combustible as defined per NFPA Standard 220</td>
</tr>
<tr>
<td>CAN/ULC S114</td>
<td>Complies</td>
</tr>
<tr>
<td>ASTM E 96</td>
<td>Unfaced, 50 Perms as tested</td>
</tr>
<tr>
<td>ASTM E 96</td>
<td>Foil Faced, 0.02 Perms as tested</td>
</tr>
<tr>
<td>ASTM C 1104</td>
<td>Sorption less than 1% by volume</td>
</tr>
<tr>
<td>ASTM C 356</td>
<td>Linear Shrinkage &lt;2% @ 1200°F (650°C)</td>
</tr>
<tr>
<td>ASTM C 356</td>
<td>Flame Spread 0, Smoke Developed 0</td>
</tr>
</tbody>
</table>

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 Options1,2:

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

Technical Data

<table>
<thead>
<tr>
<th>Tested to ASTM C 518</th>
<th>Tested to ASTM E 84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Density</td>
<td>Flame Spread</td>
</tr>
<tr>
<td>“k” @ 73°F (24°C) BTU/in/hr-sq.ft-°F</td>
<td>Flame Spread</td>
</tr>
<tr>
<td>“R” value per inch of thickness***</td>
<td>Flame Spread</td>
</tr>
</tbody>
</table>

FireSpan® 40
- 4.0 pcf
- 0.23
- 4.3
- 0
- 25
- 0

FireSpan® 90
- 8.0 pcf
- 0.23
- 4.3
- 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 and click on Fire Rated Assemblies.

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

<table>
<thead>
<tr>
<th>Thickness*</th>
<th>Widths**</th>
<th>Lengths**</th>
</tr>
</thead>
<tbody>
<tr>
<td>FireSpan® 40</td>
<td>2” - 7”</td>
<td>24”, 36”, 72”</td>
</tr>
<tr>
<td>FireSpan® 90</td>
<td>1” - 7”</td>
<td>24”, 36”, 72”</td>
</tr>
<tr>
<td>Tolerances</td>
<td>+½”, - ½”</td>
<td>+½”, - ¼”</td>
</tr>
</tbody>
</table>

* Thicknesses are available in ½” 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 content
- 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.

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 ____________________________

Certifications and Sustainable Features
- Verified 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.
- Material Health Certificate from Cradle to Cradle Products Innovation Institute. For more information visit c2ccertified.org.