PRODUCT FEATURES

Description
Mineral wool insulation designed to provide enhanced fire protection in curtain wall and perimeter fire containment systems, with thermal and acoustical properties.

Basic Uses/Related Uses
Fire protection insulation for curtain wall and perimeter fire containment systems. Tested systems include:
- Aluminum-Framed/Aluminum Spandrel Perimeter Fire Containment System
- Steel Stud-Framed/Gypsum Sheathing Perimeter Fire Containment System
- Aluminum-Framed/Glass Spandrel Perimeter Fire Containment System
- Aluminum-Framed/Granite Spandrel Perimeter Fire Containment System
- Precast Concrete Spandrel Perimeter Fire Containment System
- Aluminum-Framed/Steel Back Pan Perimeter Fire Containment System

Selection Criteria
- 3rd-party independently tested for use in perimeter fire containment assemblies having 2 and 3 hour fire resistance ratings
- Non-combustible
- Moisture resistant and non-deteriorating
- Non-corrosive
- Vermin resistant
- Optional vapour retarding foil facing for use in applicable construction assemblies
- Helps conserve energy, reduce greenhouse gas emissions
- Fire resistant to temperatures above 1,093°C (2,000°F)
- Enhances acoustical performance

Sustainability Criteria
- Recycled content minimum 70%, standard fiber
- Transparency Documentation Available - Health Product Declaration
- Contributes to credits in several green building programs such as LEED® and Green Globes®
- For more information see Environmental Product Declaration (EPD) certified by UL Environment via www.thermafiber.ca/sustainability

Applicable Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>CAN/ULC-S702</td>
<td>Standard for Mineral Fibre Thermal Insulation for Buildings</td>
</tr>
<tr>
<td>CAN/ULC-S114</td>
<td>Standard Method of Test for Determination of Non-combustibility in Building Materials</td>
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<tr>
<td>ASTM E136</td>
<td>Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C</td>
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<tr>
<td>CAN/ULC-S129</td>
<td>Standard Method of Test for Smoulder Resistance of Insulation (Basket Method)</td>
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<tr>
<td>CAN/ULC-S102</td>
<td>Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies</td>
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<tr>
<td>ASTM E96</td>
<td>Standard Test Methods for Water Vapor Transmission of Materials</td>
</tr>
<tr>
<td>ASTM C795</td>
<td>Standard Specification for Thermal Insulation for Use in Contact with Austentic Stainless Steel</td>
</tr>
</tbody>
</table>
Thermafiber® FireSpan® 40 & 90
Mineral Wool Fire Containment Insulation

Performance Criteria

<table>
<thead>
<tr>
<th>Property</th>
<th>FireSpan® 40</th>
<th>FireSpan® 90</th>
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<tbody>
<tr>
<td>Density</td>
<td>64 kg/m³ (4.0 lbs/ft³)</td>
<td>128 kg/m³ (8.0 lbs/ft³)</td>
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<tr>
<td>RSI value</td>
<td>0.74 m²K/W</td>
<td>0.74 m²K/W</td>
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<tr>
<td>R-value/inch</td>
<td>4.2 h•ft²°F/Btu</td>
<td>4.2 h•ft²°F/Btu</td>
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Stability
Linear Shrinkage <2% @ 650°C (1200°F)

Fire
Non-Combustible
Non-Combustible as defined per NFPA Standard 220
Smoulder Resistance Mean Mass Loss ≤ 0.02%
Flame Spread 0; Smoke Developed 5
Flame Spread 0; Smoke Developed 0
Perimeter Fire Containment
(see UL & Intertek listings)

Moisture
Moisture Absorption <1% by volume
Water Vapour Permeance:
Unfaced 2850 ng/Pa.s.m² (50 Perms)
Foil Faced 1 ng/Pa.s.m² (0.02 Perms)
Fungi Resistance - Pass

Corrosion
Austenitic Steel - Non-corrosive
Steel, Aluminum & Copper - Non-corrosive

Sizes

<table>
<thead>
<tr>
<th>Product</th>
<th>Thickness</th>
<th>Widths</th>
<th>Lengths</th>
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</thead>
<tbody>
<tr>
<td>FireSpan® 40</td>
<td>51 mm (2&quot;) - 610 mm (24&quot;)</td>
<td>1219 mm (48&quot;)</td>
<td></td>
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<tr>
<td></td>
<td>179 mm (7&quot;)</td>
<td>1524 mm (60&quot;)</td>
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<tr>
<td>FireSpan® 90</td>
<td>25 mm (1&quot;) - 1829 mm (72&quot;)</td>
<td>1829 mm (72&quot;)</td>
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Quality Statement, Tests, Certifications, and Approvals
- Fire resistance verified by ULC, UL, and Intertek.
- Perimeter Fire Containment Systems verified by testing to ASTM E2307. For complete information see UL/Intertek fire resistance directories.
- Recycled content verified by ICC-ES.

Delivery and Storage
Deliver products in their original packages, and store in enclosed shelter.

Limitations
Packaging is not UV resistant. Shelter unused packages from the elements.

Safety
Contact with mineral wool may cause temporary eye and skin irritation. Wear eye protection and long-sleeved loose fitting clothing closed at the neck and wrists. For additional information refer to the Safe Use Instruction Sheet (SUIS) found in the SDS Database via http://sds.owenscorning.com.

Availability/Cost
Contact Owens Corning local Area Sales Manager. See ASM territory map via www.thermafiber.ca/contact.

PRODUCT PROPERTIES

Materials
Mineral wool, Type I & III (to CAN/ULC-S702), non-combustible (to CAN/ULC-S114), non-corrosive (to ASTM C665).
Thermafiber® FireSpan® 40 & 90
Mineral Wool Fire Containment Insulation

PRODUCT PLACEMENT
Installation
• Install according to assembly listing in UL and Intertek fire resistance directories.
• Mechanically attach to horizontal and vertical aluminum framing with approved insulation fasteners.
• Thermafiber Inc.’s patented Impasse® system is designed to quickly and easily attach FireSpan® to curtain wall systems.
• Where applicable, reinforce insulation on the outer insulation surface at the safing line; typical reinforcement members include hat channels, “L” angles, and “T” bars.
• Protect exposed vertical aluminum mullions with FireSpan® 90 mullion covers.
• Interior joint between floor assembly and exterior curtain wall to be compression fit with Thermafiber® Safing insulation.
• Cut insulation with a serrated knife.

Technical Services Available
For Canadian Thermafiber® Technical inquiries, please contact our technical team at www.thermafiber.ca/contact.