Thermafiber® Safing
Mineral Wool Insulation

Description
Thermafiber® 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 firestopping applications. These products are non-combustible, moisture-resistant, non-corrosive, non-deteriorating, mildew-resistant and vermin-resistant. 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.

Standards, Codes Compliance

| ASTM C 665 | Non-combustible, Type I, III |
| ASTM C 612 | Type IA, IB, II, III, IVA |
| ASTM E 136 | Non-combustible as defined per NFPA Standard 220 |
| CAN/ULC S114 | Complies |
| ASTM E 96 | Unfaced, 50 Perms as tested |
| ASTM E 96 | Foil Faced, 0.02 Perms as tested |
| ASTM C 1104 | Absorbs less than 1% by volume |
| CAN/ULC S102 | Flame Spread 0, Smoke Developed 0, unfaced |
| ASTM E 814 or UL 1479 | Safing Insulation used in conjunction with an approved fill, void, or cavity material sealant or other approved material in through – penetration firestop systems Complies |
| UL 2079 | Safing Insulation used in conjunction with an approved fill, void or cavity material in construction joint systems Complies |
| CAN/ULC S115 | Complies |


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 Options1,2:
- EPA Choice Fiber
- (US Government Buildings) Minimum 75%
- Standard Fiber Maximum 70%

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

Technical Data

<table>
<thead>
<tr>
<th>Density</th>
<th>Actual</th>
<th>&quot;R&quot; @ 75° [24°C] BTU.in/hr. sq. ft. °F</th>
<th>&quot;R&quot; value per inch of thickness***</th>
<th>Flame Spread</th>
<th>Smoke Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfaced</td>
<td>4.0 pcf</td>
<td>0.23</td>
<td>4.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Foil Faced</td>
<td>4.0 pcf</td>
<td>0.23</td>
<td>4.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6.0 pcf</td>
<td>0.23</td>
<td>4.3</td>
<td>0</td>
<td>0</td>
<td></td>
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</tbody>
</table>

**R = thickness divided by k²

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.

- 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
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

<table>
<thead>
<tr>
<th>Thickness*</th>
<th>Widths**</th>
<th>Lengths**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safing 4.0 pcf</td>
<td>1&quot; - 7&quot;</td>
<td>16&quot;, 24&quot;, 36&quot;</td>
</tr>
<tr>
<td>Safing 6.0 pcf</td>
<td>1&quot; - 7&quot;</td>
<td>16&quot;, 24&quot;, 36&quot;</td>
</tr>
</tbody>
</table>

*Tolerances +¼", -⅛" ± ⅛" ± ½"  
**Custom sizes are available upon request.

Thermafiber Insulations®
Thermafiber Insulations® 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 content³
• 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

• ³Verified 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.

Disclaimer of Liability

Thermafiber, Inc. shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Thermafiber, Inc. liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing within thirty (30) days from date it was or reasonably should have been discovered.

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Thermalfibe® Safing and FireSpan® mineral wool products provide the critical components of the perimeter fire containment system in the 111 South Wacker Building in Chicago, IL. Thermalfibe® mineral wool insulation also contributed to the building’s LEED® Gold Rating.