No-Wrap Fiberglas™ Pipe Insulation
Fiberglass Insulation

Description
Owens Corning® No-Wrap Fiberglas™ Pipe Insulation is molded of heavy density resin bonded inorganic glass fibers that come in one-piece, 36” (914mm) long, hinged sections. The insulation is tailored to fit for copper, iron, PVC, and other polymer pipe applications.

Features
- Insulation is tailored to fit with:
  - a flexible core to compress over copper and some small-bore iron, PVC and polymer pipes and fittings, saving time by eliminating the need to fillet
  - a rigid core for fast and easy fabrication on larger pipes
- The product has a maximum operating temperature of 1,000°F (538°C) (with heat-up schedule)
- The product does not contain Polybromodiphenyl ethers (PBDE) (penta-, octa-, or deca-brominated diphenyl)
- UL Labeled for Flame Spread Index of 0 or less and Smoke Developed Index of 0 and is fully building code compliant

Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (size dependent)</td>
<td>ASTM C302</td>
<td>3.5 to 5.5 pcf</td>
</tr>
<tr>
<td>Operating Temperature Range¹</td>
<td>ASTM C411</td>
<td>0°F to 1,000°F (-18°C to 538°C)</td>
</tr>
<tr>
<td>Water Vapor Sorption</td>
<td>ASTM C1104</td>
<td>Less than 5% by weight</td>
</tr>
<tr>
<td>Corrosion</td>
<td>ASTM C665</td>
<td>Pass – steel, copper, and aluminum</td>
</tr>
<tr>
<td>Corrosion</td>
<td>ASTM C1617</td>
<td>Pass – steel</td>
</tr>
<tr>
<td>Surface Burning Characteristics³</td>
<td>UL 723, ASTM E84 or CAN/ULC-S102</td>
<td>Flame Spread 0, Smoke Developed 0</td>
</tr>
</tbody>
</table>

Applications
- Used to insulate iron, copper, PVC and other polymer pipes with operating temperatures between 0°F (-18°C) to 1,000°F (538°C) in commercial & institutional buildings, and industrial facilities
- When temperatures are above 650°F (454°C), maximum installed insulation thickness shall be no greater than 6” as a single layer or nested
- Rated per ASTM C547, Type I, Grade A - Pipe insulation can be installed on in-service/hot pipes with an operating temperature up to 850°F (454°C)
- Rated per ASTM C547, Type IV, Grade B - When operating temperatures will be between 850°F (454°C) to a 1,000°F (538°C) a heat-up schedule needs to be followed per the Installation Instructions, Pub No. 10021355
- When installed outdoors, an additional weather-protective jacket is required
- No-Wrap is intended for field installation with jacketing appropriate to the vapor control, damage, or corrosion resistance requirements of the application

Standards, Codes Compliance
- ASTM C547, Mineral Fiber Pipe Insulation: Type I, Grade A; and Type IV, Grade B
- ASTM C585, Inner and Outer Diameters of Thermal Insulation for Nominal Sizes of Pipe and Tubing
- NFPA 90A and 90B
- ASTM C795, Thermal Insulation for Use in Contact with Austenitic Stainless Steel³
- Nuclear Regulatory Commission Guide 1.36, Non-Metallic Thermal Insulation³
- MIL-PRF-22344E, Insulation, Pipe, Thermal, Fibrous Glass
- MIL-DTL-32586, Insulation, Thermal and Acoustic, Fibrous Glass; Type I; Form 4; Facing A
- MIL-DTL-24244D (Ships) Insulation Material with Special Corrosion, Chloride, and Fluoride Requirements³
- US Coast Guard 164.109/70/0 Non-Combustible
- NFPA 90A and 90B

¹. With heat-up schedule when operating temperatures between 850°F and 1,000°F.
². The surface burning characteristics of these products have been determined in accordance with UL 723, ASTM E84 or CAN/ULC-S102. Values are reported to the nearest 5 rating.
³. Preproduction qualification testing complete and on file. Chemical analysis of each production lot required for total conformance. Certification needs to be specified at time of order.
Thickness to Prevent Surface Condensation

Owens Corning® No-Wrap up to 16" NPS (400mm DN), with field applied jacket

Ambient Temperature

<table>
<thead>
<tr>
<th>Relative Humidity</th>
<th>110°F (43°C)</th>
<th>100°F (38°C)</th>
<th>90°F (32°C)</th>
<th>80°F (27°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70%</td>
<td>1 (25)</td>
<td>1 (25)</td>
<td>1 (25)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>80%</td>
<td>1½ (38)</td>
<td>1¼ (36)</td>
<td>1 (25)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>90%</td>
<td>3½ (89)</td>
<td>3 (76)</td>
<td>2½ (64)</td>
<td>2 (51)</td>
</tr>
</tbody>
</table>

System Operating Temperatures

<table>
<thead>
<tr>
<th>Temperature °F</th>
<th>35°F</th>
<th>45°F</th>
<th>55°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°F (38°C)</td>
<td>1 (25)</td>
<td>1 (25)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>90°F (32°C)</td>
<td>1 (25)</td>
<td>1 (25)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>80°F (27°C)</td>
<td>1½ (38)</td>
<td>1½ (38)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>70°F (21°C)</td>
<td>2½ (64)</td>
<td>2 (51)</td>
<td>1 (25)</td>
</tr>
</tbody>
</table>

Apparent thermal conductivity values determined in accordance with ASTM practice C1045 with data obtained by ASTM Test Method C335. Values are nominal, subject to normal testing and manufacturing tolerances.

Certifications and Sustainable Features

- Certified by SCS Global Services to contain an average of 53% recycled glass content, 31% pre-consumer and 22% post-consumer
- Environmental Product Declaration (EPD) has been certified by UL Environment
- Material Health Certificate from Cradle to Cradle Products Innovation Institute

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SCS Global Services provides independent verification of recycled content in building materials and verifies recycled content claims made by manufacturers. For more information, visit www.SCSglobalservices.com.

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