**Thermo-1200**
Water-Resistant Calcium Silicate Pipe & Block Insulation

Thermo-1200® is a water-resistant, molded, high-temperature, abuse-resistant pipe and block insulation composed of hydrous calcium silicate. Recommended for use in the industrial processing and power generation industries. Integral to Thermo-1200 is XOX Corrosion Inhibitor®, a distinctive formula and process that actively inhibits corrosion to outside surfaces of pipe and equipment.

Operating Temperature Limit: 1200°F (650°C)

**Sproule WR-1200®**
Hydrophobic Expanded Perlite Pipe & Block Insulation

Sproule WR-1200 is a preformed, high-temperature, non-wicking, hydrophobic pipe and block insulation composed of expanded perlite that is uniformly reinforced with a high-strength fiber. Integral to Sproule-1200 is XOX Corrosion Inhibitor®, a distinctive formula and process that actively inhibits corrosion to outside surfaces of pipe and equipment.

Operating Temperature Limit: 1200°F (650°C)

**InsulThin® HT**
Hydrophobic Microporous Blanket Insulation

InsulThin® HT is a high-temperature, hydrophobic, thin, flexible, microporous blanket insulation. Microporous insulation is a highly efficient insulation material and has been in service in a variety of industrial and commercial insulation applications for more than 35 years.

Operating Temperature Limit: 1200°F (650°C)

**AVAILABLE SHAPES AND SIZES**

**THERMAL PERFORMANCE**

**SPECIFICATION COMPLIANCE**

**AVAILABE SHAPES AND SIZES**

**THERMAL PERFORMANCE**

**SPECIFICATION COMPLIANCE**

**AVAILABE SHAPES AND SIZES**

**THERMAL PERFORMANCE**

**SPECIFICATION COMPLIANCE**

For more information, refer to product data sheet IND-700

For more information, refer to product data sheet IND-303

For more information, refer to product data sheet IND-200

For more information, refer to product data sheet IND-100
MinWool-1200® Pipe
Water-repellent Mineral Wool Insulation

MinWool-1200® Pipe is a water-repellent pipe insulation made of inorganic fibers derived from basalt, a volcanic rock. It is made with a thermostetting resin binder. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low short content, for excellent performance in high-temperature, thermal control and fire-resistant applications.

Operating Temperature Limit: 1200°F (650°C)

AVAILABLE SHAPES AND SIZES
Form       Pipe Size in/mm   Thickness in/mm
One Piece  ½ - 6 / 15-152   1-6 / 25-152
Two Piece  7-24 / 175-600   1-6 / 25-152
Four Piece 25-44 / 625-1100 (½” increments)

THERMAL PERFORMANCE
Mean Temperature         Btu×in/hr×ft×°F     W/mºC
100°F / 38°C           0.25       0.033
200°F / 93°C           0.30       0.044
400°F / 204°C         0.44       0.064
600°F / 316°C         0.62       0.090

SPECIFICATION COMPLIANCE
ASTM C547 Material Specification Types I, II, IV: Passes
ASTM C665 Corrosivity to Steel: Passes
ASTM E84 Surface Burning Characteristics: Flame Spread ≤0, Smoke Developed ≤0
BS EN 13472 Short-Term Water Absorption

For more information, refer to product data sheet IND-401

MinWool-1200® Preformed Pipe
Water-repellent Mineral Wool Insulation

MinWool-1200® Preformed (PF) pipe insulation is a water-repellent, factory v-grooved mineral wool board that is formed to specific pipe sizes. It is provided in half-cylinder sections with a variety of facing options. PF Pipe insulation is a factory "V-grooved" mineral wool board that is formed to specific pipe sizes and provided in half cylinder sections with a variety of facing options.

Operating Temperature Limit: 1200°F (650°C)

AVAILABLE SHAPES AND SIZES
Standard Thickness
Single Layer: 1-4” thick
Double Layer: Over 4” thick in ½” increments
Pipe Size: ½ - 28”
Available in iron and copper tubing sizes

THERMAL PERFORMANCE
Mean Temperature         Btu×in/hr×ft×°F     W/mºC
100°F / 38°C           0.25       0.036
200°F / 93°C           0.30       0.044
400°F / 204°C         0.44       0.064
600°F / 316°C         0.62       0.090

SPECIFICATION COMPLIANCE
ASTM C547 Material Specification Types III: Passes
ASTM C795 / C692 Corrosion Austenitic Stainless Steel: Passes
ASTM E84 Surface Burning Characteristics: Flame Spread ≤25, Smoke Developed ≤50
BS EN 1609 Short-term Water Absorption

For more information, refer to product data sheet IND-423

MinWool-1200® Field-Formed Pipe
Water-repellent Mineral Wool Insulation

MinWool-1200® Field-Formed Pipe insulation is a water-repellent, factory v-grooved mineral wool board with a unique contact adhesive in the grooves. It is manufactured to specific pipe sizes with a variety of facing options. MinWool-1200 Field-Formed Pipe ships flat and allows for easy forming at the job site.

Operating Temperature Limit: 1200°F (650°C)

AVAILABLE SHAPES AND SIZES
Standard Thickness
Single Layer: 1½-4” thick
Double Layer: Over 4” thick in ½” increments
Pipe Size: ½ - 72”
Available in NPS pipe sizes and copper tubing sizes

THERMAL PERFORMANCE
Mean Temperature         Btu×in/hr×ft×°F     W/mºC
100°F / 38°C           0.25       0.036
200°F / 93°C           0.30       0.044
400°F / 204°C         0.44       0.064
600°F / 316°C         0.62       0.090

SPECIFICATION COMPLIANCE
ASTM C547 Material Specification Types III: Passes
ASTM C795 / C692 Corrosion Austenitic Stainless Steel: Passes
ASTM E84 Surface Burning Characteristics: Flame Spread ≤25, Smoke Developed ≤50
BS EN 1609 Short-term Water Absorption

For more information, refer to product data sheet IND-420
MinWool-1200® Precision Cut
Water-repellent Mineral Wool Insulation

MinWool-1200® Precision Cut (PC) pipe insulation is a water-repellent, factory v-grooved mineral wool board, manufactured to specific pipe or vessel sizes. It is offered with a variety of facings and is shipped flat in 4 mil plastic, allowing for easy forming on the job site.

Operating Temperature Limit: 1200°F (650°C)

MinWool-1200® Pipe & Tank Wrap
Water-repellent Mineral Wool Insulation

MinWool-1200® Pipe & Tank Wrap is a water-repellent mineral wool blanket insulation. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low shot content, for excellent performance in high-temperature, thermal control, and fire-resistance applications.

Operating Temperature Limit: 1200°F (650°C)

MinWool-1200® Lamella Tank Wrap
Water-repellent Mineral Wool Insulation

MinWool-1200® Lamella Tank Wrap is a water-repellent, lightweight, strong, flexible mineral wool wrap insulation with perpendicular oriented fibers. This insulation is produced to fit large diameter pipes, ducts, tanks and equipment, operating at temperatures from below ambient up to 1000°F continuous maximum service temperature.

Operating Temperature Limit: 1200°F (650°C)

Available Shapes and Sizes

<table>
<thead>
<tr>
<th>Standard Thickness</th>
<th>Facings Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Layer: 1-4&quot; thick</td>
<td>Sizes ½ - 2&quot; are supplied with no facing</td>
</tr>
<tr>
<td>Double Layer: Over 4&quot; thick in ½&quot; increments</td>
<td>Sizes 2½&quot; and above are supplied with a fiberglass mat facing</td>
</tr>
<tr>
<td>Pipe Size: ½ - 72&quot;</td>
<td>Other facings available include: ASJ and FSK</td>
</tr>
</tbody>
</table>

Thermal Performance

<table>
<thead>
<tr>
<th>Mean Temperature</th>
<th>Btu/hr·ft·°F</th>
<th>W/m²°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°F / 38°C</td>
<td>0.25</td>
<td>0.036</td>
</tr>
<tr>
<td>200°F / 93°C</td>
<td>0.30</td>
<td>0.044</td>
</tr>
<tr>
<td>400°F / 204°C</td>
<td>0.44</td>
<td>0.064</td>
</tr>
<tr>
<td>600°F / 316°C</td>
<td>0.62</td>
<td>0.090</td>
</tr>
</tbody>
</table>

Specification Compliance

ASTM C665 Corrosivity to Steel: Passes
ASTM E84 Surface Burning Characteristics: Flame Spread ≤25, Smoke Developed ≤50
BS EN 1609 Short-Term Water Absorption

For more information, refer to product data sheet IND-422

Available Shapes and Sizes

<table>
<thead>
<tr>
<th>Roll Length ft/m</th>
<th>Width in/m</th>
<th>Thickness in/mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 / 5.5</td>
<td>48 / 1.22</td>
<td>1½ / 40</td>
</tr>
<tr>
<td>16 / 4.9</td>
<td>48 / 1.22</td>
<td>2 / 50</td>
</tr>
<tr>
<td>14 / 4.3</td>
<td>48 / 1.22</td>
<td>2½ / 65</td>
</tr>
<tr>
<td>12 / 3.7</td>
<td>48 / 1.22</td>
<td>3 / 75</td>
</tr>
<tr>
<td>10 / 3.1</td>
<td>48 / 1.22</td>
<td>3½ / 90</td>
</tr>
<tr>
<td>8 / 2.4</td>
<td>48 / 1.22</td>
<td>4 / 100</td>
</tr>
</tbody>
</table>

Thermal Performance

<table>
<thead>
<tr>
<th>Mean Temperature</th>
<th>Btu/hr·ft·°F</th>
<th>W/m²°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°F / 38°C</td>
<td>0.23</td>
<td>0.033</td>
</tr>
<tr>
<td>200°F / 93°C</td>
<td>0.28</td>
<td>0.040</td>
</tr>
<tr>
<td>400°F / 204°C</td>
<td>0.40</td>
<td>0.058</td>
</tr>
<tr>
<td>600°F / 316°C</td>
<td>0.56</td>
<td>0.081</td>
</tr>
</tbody>
</table>

Specification Compliance

ASTM C547 Material Specification Types III: Passes
ASTM C795 / C871 / C692 Corrosion Austenitic Stainless Steel: Passes
ASTM E84 Surface Burning Characteristics: Flame Spread ≤25, Smoke Developed ≤50
BS EN 1609 Short-Term Water Absorption

For more information, refer to product data sheet IND-415

Available Shapes and Sizes

<table>
<thead>
<tr>
<th>Roll Length ft/m</th>
<th>Width in/m</th>
<th>Thickness in/mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 / 5.5</td>
<td>48 / 1.22</td>
<td>1½ / 40</td>
</tr>
<tr>
<td>16 / 4.9</td>
<td>48 / 1.22</td>
<td>2 / 50</td>
</tr>
<tr>
<td>14 / 4.3</td>
<td>48 / 1.22</td>
<td>2½ / 65</td>
</tr>
<tr>
<td>12 / 3.7</td>
<td>48 / 1.22</td>
<td>3 / 75</td>
</tr>
<tr>
<td>10 / 3.1</td>
<td>48 / 1.22</td>
<td>3½ / 90</td>
</tr>
<tr>
<td>8 / 2.4</td>
<td>48 / 1.22</td>
<td>4 / 100</td>
</tr>
</tbody>
</table>

Thermal Performance

<table>
<thead>
<tr>
<th>Mean Temperature</th>
<th>Btu/hr·ft·°F</th>
<th>W/m²°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°F / 38°C</td>
<td>0.29</td>
<td>0.042</td>
</tr>
<tr>
<td>200°F / 93°C</td>
<td>0.36</td>
<td>0.052</td>
</tr>
<tr>
<td>400°F / 204°C</td>
<td>0.54</td>
<td>0.078</td>
</tr>
<tr>
<td>600°F / 316°C</td>
<td>0.82</td>
<td>0.118</td>
</tr>
</tbody>
</table>

Specification Compliance

ASTM C1393 Material Specification / Complies
ASTM C795 / C871 / C692 Corrosion Austenitic Stainless Steel: Passes
ASTM E84 Surface Burning Characteristics: Flame Spread ≤25, Smoke Developed ≤50
ASTM E136 Non-Combustible: Passes (mineral wool only)
BS EN 1609 Short-Term Water Absorption

For more information, refer to product data sheet IND-424
MinWool-1200® Industrial Board
Water-repellent Mineral Wool Insulation

MinWool-1200® Industrial Board is a water-repellent, mineral wool board insulation. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low shot content, for excellent performance in high-temperature, thermal control, and fire-resistant applications.

Operating Temperature Limit: 1200°F (650°C)

MinWool-1200® Flexible Batt
Water-repellent Mineral Wool Insulation

MinWool-1200® Flexible Batt is a flexible, water-repellent, mineral wool, batt insulation. Advanced manufacturing technology ensures consistent product quality, with high fiber density and low shot content, for excellent performance in high-temperature, thermal control, and fire-resistant applications.

Operating Temperature Limit: 1200°F (650°C)

MinWool-1200® Metal Mesh Blanket
Water-repellent Mineral Wool Insulation

MinWool-1200® Metal Mesh Blanket (MMB) is a water-repellent, mineral wool insulation, reinforced with metal mesh for enhanced durability. MMB is offered with a variety of metal mesh options, that are mechanically applied to one or both surfaces.

Operating Temperature Limit: 1200°F (650°C)
MinWool-1200® Mitered Fittings
Water-repellent Mineral Wool Insulation

MinWool-1200® Mitered Fittings are made of water-repellent, inorganic fibers derived from basalt, a volcanic rock. It is made with thermostetting resin binder. These mitered and bonded fittings are for standard short and long radius and non-standard radius sweep elbows found in normal piping schemes. Fittings are manufactured from MinWool-1200 Preformed Pipe Insulation and mitered into precision segments.

Operating Temperature Limit: 1200°F (650°C)

Super Caltemp® Gold 1700
Calcium Silicate Block Insulation Rated to 1700°F

Super Caltemp® Gold 1700 block is an inorganic, non-combustible, high-temperature insulation that is composed primarily of hydrous calcium silicate. The insulation is tailored for systems operating up to 1700°F (927°C). Super Caltemp Gold 1700 meets or exceeds the physical and thermal property requirements of ASTM C533, Type II.

Operating Temperature Limit: 1700°F (927°C)

Super Firetemp®
High-Temperature Insulation Rated Above 1200°F

Super Firetemp® boards are inorganic, high-temperature boards with exceptional strength and insulating qualities, produced in various densities. Super Firetemp boards are suitable for fire protection applications, refractory backup, and can be machined into component parts of many shapes and sizes.

Continuous Temperature Limit: Varies by product type

---

**AVAILABLE SHAPES AND SIZES**

**THERMAL PERFORMANCE**

<table>
<thead>
<tr>
<th>Mean Temperature</th>
<th>Btu/ft²•hr•°F</th>
<th>W/m²•°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°F / 38°C</td>
<td>0.25</td>
<td>0.036</td>
</tr>
<tr>
<td>200°F / 93°C</td>
<td>0.30</td>
<td>0.044</td>
</tr>
<tr>
<td>400°F / 204°C</td>
<td>0.44</td>
<td>0.064</td>
</tr>
<tr>
<td>600°F / 316°C</td>
<td>0.62</td>
<td>0.090</td>
</tr>
</tbody>
</table>

**SPECIFICATION COMPLIANCE**

ASTM C533 Type II Material Specification: Passes
ASTM C795 / C871 / C692 Corrosion Austenitic Stainless Steel: Passes
ASTM E136 Non-Combustible: Passes
UL 1709: 120 minutes, call for design details

For more information, refer to product data sheet IND-305

---

**AVAILABLE TYPES AND SIZES**

**AVAILABLE DENSITIES**

**SPECIFICATION COMPLIANCE**

ASTM C795 Corrosion Austenitic Stainless Steel: Passes
ASTM E136 Non-Combustible: Passes
UL 1709 (L and M): Call for design details

For more information, refer to product data sheets: IND-103(L), IND-104(M), IND-105(H), IND-106(X), IND-107(S)
**Trymer® PIR**
Polyisocyanurate (PIR) Bunstock

Trymer® is a closed-cell, PIR foam insulation for industrial and commercial pipes, vessels, and equipment. Trymer PIR can be used in applications that operate at temperatures ranging from -297°F to 300°F (-183°C to 149°C). Additionally, Trymer PIR is offered in several different densities and compressive strengths to suit the unique requirements of a variety of applications. Trymer PIR features one of the lowest k-factors among all pipe insulations: 0.19 Btu•in/(hr•ft•°F) at 75°F mean temperature (0.027 W/m•°C at 24°C).

*Trymer PIR can be used at temperatures below -297°F but certain system design precautions may be necessary. Please consult JM for more information.*

**AVAILABLE DENSITIES AND SIZES**

<table>
<thead>
<tr>
<th>Name</th>
<th>Density (Avg.)</th>
<th>Height:</th>
<th>Sizes (in/cm)</th>
<th>Width:</th>
<th>Length:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trymer 1800</td>
<td>1.8 lb PCF</td>
<td>24” (61 cm)</td>
<td>48” (122 cm)</td>
<td>36” (91 cm) or 96” (244 cm)</td>
<td></td>
</tr>
<tr>
<td>Trymer 2000XP</td>
<td>2.0 lb PCF</td>
<td>24” (61 cm)</td>
<td>48” (122 cm)</td>
<td>36” (91 cm) or 108” (274 cm)</td>
<td></td>
</tr>
<tr>
<td>Trymer 2500</td>
<td>2.5 lb PCF</td>
<td>24” (61 cm)</td>
<td>48” (122 cm)</td>
<td>36” (91 cm) or 108” (274 cm)</td>
<td></td>
</tr>
<tr>
<td>Trymer 3000</td>
<td>3.0 lb PCF</td>
<td>18” (46 cm)</td>
<td>48” (122 cm)</td>
<td>36” (91 cm)</td>
<td></td>
</tr>
<tr>
<td>Trymer 4000</td>
<td>4.0 lb PCF</td>
<td>16” (41 cm)</td>
<td>48” (122 cm)</td>
<td>36” (91 cm) or 96” (244 cm)</td>
<td></td>
</tr>
<tr>
<td>Trymer 6000</td>
<td>6.0 lb PCF</td>
<td>12” (31 cm)</td>
<td>48” (122 cm)</td>
<td>36” (91 cm)</td>
<td></td>
</tr>
</tbody>
</table>

**THERMAL CONDUCTIVITY/K-FACTOR**

<table>
<thead>
<tr>
<th>ASTM C518, @75°F (24°C) mean temp</th>
<th>Btu•in/hr•ft•°F</th>
<th>W/m•°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trymer 1800</td>
<td>0.19</td>
<td>0.027</td>
</tr>
<tr>
<td>Trymer 2000XP</td>
<td>0.19</td>
<td>0.027</td>
</tr>
<tr>
<td>Trymer 2500</td>
<td>0.19</td>
<td>0.027</td>
</tr>
<tr>
<td>Trymer 3000</td>
<td>0.19</td>
<td>0.027</td>
</tr>
<tr>
<td>Trymer 4000</td>
<td>0.19</td>
<td>0.027</td>
</tr>
<tr>
<td>Trymer 6000</td>
<td>0.20</td>
<td>0.029</td>
</tr>
</tbody>
</table>

**SPECIFICATION COMPLIANCE**

ASTM C591, Grade 2, Type I - VI Material Specification - Complies
ASTM C727 Water Absorption - < 0.7% by vol. after 24-hour immersion
ASTM E84 Surface Burning Characteristics - ≤ 25 Flame Spread ≤ 50 Smoke Developed

For more information, refer to product data sheet.

**Trymer® 25-50 (PIR)**
Polyisocyanurate (PIR) Bunstock

Trymer® 25-50 PIR insulation is is a closed-cell, PIR foam designed for use in commercial chilled water applications. Unlike other PIR materials, Trymer 25-50 PIR meets the ASTM E84 Surface Burning Characteristics rating of ≤25 flame spread and ≤50 smoke developed for commercial applications*. Trymer 25-50 is ideal for use in applications where flammability is the greatest concern.

Service temperature range** of -297°F to 300°F (-183°C to 149°C).

**AVAILABLE DENSITIES AND SIZES**

<table>
<thead>
<tr>
<th>Name</th>
<th>Density (Avg.)</th>
<th>Height:</th>
<th>Sizes (in/cm)</th>
<th>Width:</th>
<th>Length:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trymer 25-50</td>
<td>2.0 lb PCF</td>
<td>24” (61 cm)</td>
<td>48” (122 cm)</td>
<td>36” (91 cm)</td>
<td></td>
</tr>
</tbody>
</table>

**THERMAL CONDUCTIVITY/K-FACTOR**

<table>
<thead>
<tr>
<th>ASTM C518, @75°F (24°C) mean temp</th>
<th>Btu•in/hr•ft•°F</th>
<th>W/m•°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trymer 25-50</td>
<td>0.19</td>
<td>0.027</td>
</tr>
</tbody>
</table>

**SPECIFICATION COMPLIANCE**

ASTM C272 Water Absorption - < 0.93 m³•°C /W
ASTM E84 Surface Burning Characteristics - ≤ 25 Flame Spread ≤ 50 Smoke Developed (up to 1.5” thickness)

For more information, refer to product data sheet.

*At thicknesses up to 1.5”
**Trymer PIR can be used at temperatures below -297°F but certain system design precautions may be necessary. Please consult JM for more information.*

**Trymer® Supercel Phenolic**
Phenolic Bunstock

Trymer® Supercel Phenolic Insulation is a closed-cell, rigid, phenolic foam insulation, supplied in the form of large buns. It is fabricated into pipe shells, curved segments, sheets, tank and vessel coverings, and other shapes for a variety of industrial and commercial thermal insulation applications. It has a very low thermal conductivity and an exceptionally low flammability. These properties make Trymer Supercel Phenolic ideal for a variety of industrial and commercial applications, including insulating chilled water lines in commercial buildings.

Service Temperature: -297°F to +250°F (-183°C to 125°C)

**AVAILABLE DENSITIES & COMRESSIVE STRENGTH**

<table>
<thead>
<tr>
<th>Density (min.) ASTM 1622</th>
<th>Compressive Strength ASTM C656</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 lb PCF</td>
<td>32.6 psi / 27.7 psi / 29.5 psi</td>
</tr>
<tr>
<td>3.75 lb PCF</td>
<td>60 psi / 45 psi</td>
</tr>
<tr>
<td>5.0 lb PCF</td>
<td>88 psi / 71 psi</td>
</tr>
<tr>
<td>7.5 lb PCF</td>
<td>158 psi / 188 psi</td>
</tr>
</tbody>
</table>

**THERMAL CONDUCTIVITY**

<table>
<thead>
<tr>
<th>Mean Temp @ 50°F and 75°F (24°C)</th>
<th>ASTM C518 Btu•in/hr•ft•°F</th>
<th>W/m•°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 lb PCF</td>
<td>0.18</td>
<td>0.026</td>
</tr>
<tr>
<td>3.75 lb PCF</td>
<td>0.22</td>
<td>0.032</td>
</tr>
<tr>
<td>5.0 lb PCF</td>
<td>0.23</td>
<td>0.033</td>
</tr>
<tr>
<td>7.5 lb PCF</td>
<td>0.24</td>
<td>0.035</td>
</tr>
</tbody>
</table>

**SPECIFICATION COMPLIANCE**

ASTM C1126, Type III, Material Specification - Passes
ASTM C209 Water Absorption - 0.87% by vol.
ASTM E86 Water Vapor Permeability - 2.4 perms/inch (3.10 ng/Pa•s•m)
ASTM E84 Surface Burning Characteristics - ≤ 25 Flame Spread ≤ 50 Smoke Developed (up to 3” thickness)

For more information, refer to product data sheet.

*Trymer Supercel Phenolic can be used at temperatures below -297°F but certain system design precautions may be necessary. Please consult JM for more information.*
Aluminum Jacketing

JM’s Aluminum Jacketing is the premier protective outer surface for mechanical insulation systems, including pipes, vessels, and equipment. It is offered in sheets and rolls and provides protection to the insulation and underlying pipe/vessel from physical damage, UV exposure, corrosive environments, and water. Aluminum jacketing is available in smooth, stucco embossed, and 3/16” corrugated (cross-crimped) finishes. Aluminum Jacketing has a bare outer surface and comes standard with a 3-mil thick, 3-layer polyfilm moisture barrier (PFMB) heat-laminated to the interior surface to help prevent corrosion to the interior side of the jacketing. All Aluminum Jacketing from JM complies with the requirements of ASTM C1729 (Aluminum Jacketing Material Standard) which includes the strength and chemical composition requirements for compliance to ASTM B209 (Aluminum Alloy Standard).

**Standard thickness (in):** 0.016, 0.020, 0.024, 0.032 and 0.040

**Standard sheet lengths:** 8’, 10’, 12’, and cut & rolled to specific lengths

**Standard roll lengths:** 50’ and 100’

**Standard widths of sheets and rolls:** 3’ or 4’

For more information, refer to the product data sheet.

Painted Aluminum Jacketing has a factory-applied, baked-on finish of highly durable hard film acrylic or polyester paint on the exterior surface. The outer finish provides improved aesthetics, color-coding, increased emittance, and improved corrosion protection for the aluminum jacketing. Painted Aluminum Jacketing is available in sheets and rolls and can be used on pipes, tanks, and equipment insulation systems. The special paints used on this jacketing are chalk and fade resistant. They exhibit better resistance to oxidation and to the effects of corrosive environments than bare aluminum jacketing. Standard exterior colors for Painted Aluminum Jacketing are white, gray, and clear coated. It also comes standard with a 3-mil thick 3-layer polyfilm moisture barrier (PFMB) heat-laminated to the interior surface to help prevent corrosion to the interior side of the jacketing.

**Standard thickness (in):** 0.016, 0.020, 0.024, 0.032 and 0.040

**Standard sheet lengths:** 8’, 10’, 12’, and cut & rolled to specific lengths

**Standard roll lengths:** 50’ and 100’

**Standard width of sheets and rolls:** 3’

For more information, refer to the product data sheet.

Stainless Steel Jacketing

JM’s Stainless Steel Jacketing is offered in sheets and rolls and is manufactured from T-304 or T-316 prime grade stainless steels. These alloys are supplied with a dull finish for reduced glare. The yield strength is 30,000-45,000 PSI, and the tensile strength is 75,000-110,000 PSI. These alloys are of a special annealed temper for ease in fabrication. T-304 is normally used in all except the most corrosive areas, where T-316 is recommended. The melt point of our 300 Series Stainless Steel is 2500°F, making it an excellent solution for fire protection.

JM’s Stainless Steel Jacketing is offered in sheets and rolls and is manufactured from T-304 or T-316 prime grade stainless steels, and comes standard with a 3-mil thick 3-layer polyfilm moisture barrier (PFMB) heat-laminated to the interior surface.

**Standard thickness (in):** 0.010, 0.016, 0.020, 0.024, and 0.032

**Standard roll length:** 50’

**Standard sheet lengths:** 8’, 10’, 12’, and cut & rolled to specific lengths

**Standard roll lengths:** 50’ and 100’

**Standard width of sheets and rolls:** 3’

For more information, refer to the product data sheet.
Deep Corrugated Sheets
Stainless Steel & Aluminum Corrugated Jacketing

Deep Corrugated Sheets are available in aluminum, painted aluminum, and stainless steel. They provide protection for insulated equipment, towers, vessels, and tanks with outside diameters of 8 feet or more. They are available in a smooth finish, painted, or stucco embossed pattern, and comes standard with a 3-mil thick 3-layer polyfilm moisture barrier (PFMB) heat-laminated to the interior surface. They are specifically designed for weather-proofing insulation on vertical tanks and vessels, as well as providing mechanical abuse protection for the insulation.

- **Aluminum Standard thickness (in):** 0.016, 0.020, 0.024, 0.032 and 0.040
- **Stainless Steel Standard thickness (in):** 0.010, 0.016, 0.020, 0.024, and 0.032
- **Standard lengths:** Up to 12’
- **Standard width:** ~33”
- **Nominal corrugations:**
  - 1¼” (30mm) have a depth of 1/4”
  - 2½” (64mm) have a depth of 5/8”

For more information, refer to the product data sheet.

*1/2” depth in eastern Canada*

Muffl-Jac
Lead-Free Sound-Barrier Metal Jacketing

JM’s 1 lb Muffl-Jac® sound barrier jacketing is a special high density, composite film laminated to 0.020” aluminum using a viscoelastic film adhesive. It simultaneously absorbs, dampens, blocks and isolates sound, and reduces noise levels radiated by piping and equipment.

- **Standard thickness (in):** 0.020 Aluminum (other thicknesses of aluminum and stainless steel are available)
- **Standard sheet size:** 36” W by 36’ L (108 sq. ft)
- **Weight (film):** 1 lb/sq. ft
- **Available Finishes:** Smooth or Stucco Embossed
- **Service Temperature:** -40°F to 180°F (-40°C to 82.2°C)
- **Sound Transmission Class (STC):** 29 (ASTM E413)

For more information, refer to the product data sheet.

Ell-Jacs™ Plus
Polyfilm Lined Aluminum Elbow Covers

Ell-Jacs™ Plus Polyfilm Lined Aluminum Elbow Covers are made in two, precision-formed, matching halves to cover and weatherproof insulated 45° and 90° pipe elbows. Like our Aluminum Jacketing, Ell-Jacs Plus are a premier protective jacketing for insulation pipe systems and are a crucial accessory to complement the aluminum jacketing. Ell-Jacs Plus help protect the insulation and underlying pipe from physical damage, UV exposure, corrosive environments, and water. They also reduce the time and labor needed to install a metal jacketing system.

- **Standard thickness (in):** 0.024

For more information, refer to the product data sheet.

Multi-Fit Aluminum Elbow Covers
Polyfilm Lined Aluminum Elbow Covers

Multi-Fit Aluminum Polyfilm Lined Elbow Covers are designed to fit over 90° insulation elbows with a specific outer diameter, regardless of the pipe size, use of long or short radius pipe elbows, or insulation thickness. Multi-Fit Aluminum Elbow Covers come in 13 sizes that fit 111 combinations of nominal pipe size (NPS) and insulation thickness, up to a nominal outer insulation diameter of 12.75 inches. Like our Aluminum Jacketing, Multi-Fit Aluminum Elbow Covers are a premier protective jacketing for insulation pipe systems and are a crucial accessory to complement JM’s Aluminum Jacketing. Multi-Fit Aluminum Elbows from JM comply with the applicable requirements of ASTM C1729 (Aluminum Jacketing Material Standard), Type III, Grade 3, Class A, which includes the strength and chemical composition requirements for compliance to ASTM B209 (Aluminum Alloy Standard).

- **Standard thickness (in):** 0.024

For more information, refer to the product data sheet.
Stainless Steel Sure-Fit Elbow Covers
Stainless Steel Insulation Elbow Covers

Stainless Steel Sure-Fit Insulation Elbow Covers are made in two, precision-formed matching halves, sized to cover and weatherproof insulated 90° and 45° elbows along pipelines. They are manufactured from Type-316 Stainless Steel in 0.016-inch thickness. They can be used on long and short radius, butt weld, socket weld, and screwed pipe elbows from ½-inch to 10-inch Iron Pipe Size, inclusive. JM’s stainless steel elbows are the closest fitting elbow insulation covers available from any source. They are designed to allow for a minimum 3/8-inch circumferential overlap and are manufactured to conform to ASTM C450 Method of Fabrication and ASTM C585.

Stainless Steel Sure-Fit Insulation Elbow Covers from JM comply with the applicable requirements of ASTM C1767 (Stainless Steel Jacketing Material Standard), Type I, Grade 2, Class E, which includes the strength and chemical composition requirements for compliance to ASTM A240 (Stainless Steel Alloy Standard).

Standard thickness (in): 0.016
For more information, refer to the product data sheet.

ACCESSORIES

Insulkote® ET
Weather Protective Coating

Developed as a high-quality protective coating, Insulkote® ET is a compound of selected and processed bitumens and mineral fillers. It is recommended for weather-protecting insulated vessels, tanks, piping, equipment and duct work. Insulkote ET is a non-vapor barrier, weather-proof coating for use over thermal insulation where “breathing” is required.

For more information, refer to product data sheet IND-10

Calbond® Gold
High-Temperature Glue

CalBond® Gold is a modified, silicate-based glue for thermal insulations. It sets quickly to provide a high-temperature bond for porous insulating materials. CalBond Gold is useful for bonding sections of calcium silicate or perlite high-temperature pipe or block insulation and to make mitered elbows, large insulating sections or other special shapes.

For more information, refer to product data sheet IND-11

CalCoat-127®
One Coat Finishing Cement

CalCoat-127® is a proprietary blend of hydraulic cement, calcium silicate and inorganic mineral fibers with corrosion inhibitors that provides a smooth finish over high-temperature insulation. CalCoat-127 is recommended for finishing use with calcium silicate or perlite insulation in high-temperature piping and equipment applications.

For more information, refer to product data sheet IND-13

Super Calstik®
High-Temperature Glue

Super Calstik® is a modified, silicate-based glue. It sets quickly to provide a high-temperature bond for porous insulating materials. Super Calstik is used for bonding and sealing joints in Super Firetemp high-temperature insulation. It is used in walls, structural steel, cable trays and other fire-rated applications.

For more information refer, to product data sheet IND-108
Saranex® CX Film 540 & 560
Vapor Retarder Film

Saranex® CX Vapor Retarder Film is a durable, flexible polyvinylidene chloride (PVDC) vapor retarder film used in conjunction with jackets for mechanical insulation systems. This high-performance, cost-effective, vapor retarder system helps prevent water absorption and resists moisture vapor drive into the insulation. Saranex CX Vapor Retarder Film is ideal for low-temperature applications such as food and beverage facilities, hydronic piping and HVAC systems, transport pipelines, chemical condensation tanks, cold-storage systems, refrigerated transport, and chilled water systems.

Saranex CX Vapor Retarder Film is supplied either factory-applied on straight lengths of Trymer or Styrofoam™ insulation or in easy-to-use rolls for field application.

For more information, refer to the product data sheet.

<table>
<thead>
<tr>
<th>Name</th>
<th>ASTM D374</th>
<th>Roll Length:</th>
<th>Roll Widths:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saranex® CX Film 540</td>
<td>4 mils, avg.</td>
<td>375 (114 m)</td>
<td>35.5’ (90 cm)</td>
</tr>
<tr>
<td>Saranex® CX Film 560</td>
<td>6 mils, avg.</td>
<td>250 (78 m)</td>
<td>35.5’ (90 cm)</td>
</tr>
</tbody>
</table>

Saranex® Tape 520 & 560
Vapor Retarder Tape

Saranex® CX Vapor Retarder Tape products are composed of Saranex CX Vapor Retarder Film coated with an acrylic adhesive designed for effective, long-lasting adhesion to a variety of substrates over a wide temperature range. Saranex CX Tape products conform easily to fittings, elbows, and joints, protecting these vulnerable areas from moisture intrusion and energy loss.

For maximum tape flexibility during installation, it is recommended that Saranex tape products be installed at ambient temperatures above 24°F (-4°C).

For more information, refer to the product data sheet.

<table>
<thead>
<tr>
<th>Name</th>
<th>ASTM D374</th>
<th>Roll Length:</th>
<th>Roll Widths:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saranex® CX Tape 520</td>
<td>1.5 mils, avg.</td>
<td>50 yards (46 m)</td>
<td>1” (2.5cm), 2” (5 cm), 3” (7.5 cm)</td>
</tr>
<tr>
<td>Saranex® CX Tape 560</td>
<td>1.5 mils, avg.</td>
<td>50 yards (46 m)</td>
<td>2” (5 cm), 3” (7.5 cm)</td>
</tr>
</tbody>
</table>

Mass Loaded Vinyl
Non-Reinforced Vinyl Noise Barrier

JM’s Mass Loaded Vinyl Noise (MLV) Noise Barrier is a flexible, non-reinforced mass loaded vinyl that resists the passage of sound waves and reduces the transmission of airborne noises. MLV Noise Barrier will not shrink, rot or cause metal corrosion. MLV features a strong resistance to adverse environmental conditions, oils, weak acids and alkalis. The vinyl can be combined with acoustical foams, mineral wool, glass fiber and ceramic fiber insulation wool to provide lightweight, efficient composites with high transmission losses over a broad frequency range.

Standard thickness (in): 100”
Standard size: 100 (1lb./sq.ft.) - 35.5” x 36’ - Please Inquire about 150 (1.5lb./sq.ft.) & 200 (2lb./sq.ft.)
Weight (film): 1 lb/sq. ft
Service Temperature: -40°F to 180°F (-40°C to 82.2°C)

Metal Jacketing Accessories

JM offers several accessories for a complete metal jacketing system.

Stainless Steel Strapping: Manufactured from T-304 stainless steel in a special soft annealed temper to facilitate handling. It is available in ½” and ¾” widths and in .015” and .020” thickness. Blue painted ½” width, .020” thickness is available when a need exists to identify underlying asbestos-free insulation. Stainless steel strapping offers the greatest strength and corrosion resistance. T-316 Stainless Steel available upon request.

Aluminum Strapping: Manufactured from high-quality aluminum alloy conforming to ASTM B-209 designation. It is .020” in thickness to allow for maximum tensioning. Aluminum strapping is available in ½” and ¾” widths.

Aluminum or Stainless Steel Butt Straps: Available in 2” widths and 100’ lengths, butt straps are used to seal circumferential joints of aluminum or stainless steel jacketing on insulated piping.

Aluminum Wing Seals: Manufactured from .032” aluminum to allow for maximum tensioning and binding power. They are available in ½” and ¾” widths.

Stainless Steel Wing Seals: Manufactured from heavy duty T-304 annealed stainless steel. They are available in ½”, and ¾”, T-316 available upon request.

Stainless Steel Closed Seals: Manufactured from heavy duty 0.024” T-304 hard temper stainless steel. They are available in ½” x ½” and ¾” x ¾”. Closed seals are recommended in lieu of wing seals for use with strapping on tanks and/or vessels with diameters of 8” or more.

Expansion Springs: 4” Type 300 series stainless steel flat expansion springs used with strapping up to ¾” to accommodate expansion and contraction of small diameter insulated and jacketed piping, tanks, vessels, and equipment.

Compression Springs: Assembled from components of Type 302 and 304 stainless steel, used with strapping to accommodate expansion and contraction of large diameter insulated and jacketed piping, tanks, vessels, and equipment.

Also available – Strapping Tools, Screws and Tie Wire.
Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the products listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

All Johns Manville products are sold subject to Johns Manville’s standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800)654-3103.