DESCRIPTION
Johns Manville AP™ Foil-Faced Foam Sheathing board consists of a uniform closed-cell polyisocyanurate foam core bonded on each side to a foil facer. One side has a reflective foil facer and the other side has a white non-reflective foil facer to suit your building needs.

Polyiso provides one of the highest R-values per inch of any rigid insulation (R-6.0 at 1 inch). Furthermore, when properly installed, AP Foil-Faced Foam Sheathing functions as a water-resistant barrier, vapor barrier and air barrier, eliminating the need to install additional components.

AP Foil-Faced Foam Sheathing is produced with an EPA-compliant hydrocarbon-based blowing agent that has zero Ozone Depletion Potential (ODP) and virtually no Global Warming Potential (GWP); it also meets both CFC- and HCFC-free specification requirements. Polyiso is one of North America's most widely used insulation products and has been cited by the EPA for its responsible impact on the environment.

AP Foil-Faced Foam Sheathing provides exceptional heat, moisture and air control to protect your building's exterior wall assembly.

INSTALLATION
AP Foil-Faced Foam Sheathing is lightweight and can be easily cut with a utility knife or saw. Use maximum board lengths to minimize the number of joints. Vertical joints should be staggered. Butt joints should be centered over framing. To create a water-resistant barrier or an air barrier, treat seams and penetrations as instructed in the installation guide and in accordance with manufacturer's guidelines. Once installed, AP Foil-Faced Foam Sheathing may be left exposed for up to 60 days. Consult your local building department for code requirements.

COMPLIANCES
- ASTM C1289 Type 1, Class 1
- CAN/ULC S704, Type 1, Class 1
- ICC-ES Evaluation Report ESR-3398
- Canadian Construction Materials Centre 13104-L
- Air Barrier Association of America Evaluated Air Barrier Material, Assembly & Water Resistant Barrier
- International Building Code
- International Residential Code
- International Energy Conservation Code
- ENERGY STAR
- ASHRAE 90.1
- California State Insulation Quality Standards

PERFORMANCE STANDARDS
- CAN/ULC-S704, Standard for Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced
- ASTM E84, Test for Surface Burning Characteristics of Building Materials
- CAN/ULC S102, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies
- AC 71, Acceptance Criteria for Foam Plastic Sheathing Panels Used as Water-Resistant Barriers
- ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
- AATCC Test Method 127, Water Resistance: Hydro Static Pressure Test
- ASTM E2357, Standard Test Method for Determining Air Leakage of Air Barrier Assemblies

AVAILABILITY
AP Foil-Faced Foam Sheathing is available in the sizes shown in Table 1 (see reverse). For additional information or special size inquiries, please consult a sales representative at 800-654-3103.

PERFORMANCE ADVANTAGES
Thermal Insulation: inch for inch, polyiso has one of the highest energy efficiencies. R-values for AP Foil-Faced Foam Sheathing are shown in Table 1, and physical properties are shown in Table 2 (see reverse). R means resistance to heat flow. The higher the R-value, the greater the insulating power.

Water-Resistant Barrier: when properly installed as part of a Johns Manville Wall System, AP Foil-Faced Foam Sheathing meets the ICC-ES AC71 acceptance criteria for foam plastic sheathing used as a water-resistant barrier. Please see the installation guide for qualifying assemblies and detailed instructions.

Vapor Barrier: at a minimum thickness of one inch, AP Foil-Faced Foam Sheathing has a vapor permeance of 0.05 perms and qualifies as a Class I vapor retarder.

Air Barrier: when properly installed as part of a Johns Manville Wall System, AP Foil-Faced Foam Sheathing meets the Air Barrier Association of America boardstock criteria for materials and assemblies. Please see installation guide for qualifying assemblies and detailed instructions.

Noncorrosive: does not accelerate corrosion of pipes, wiring or metal studs.

Lightweight: easy to handle, can be cut with a utility knife or saw.

ENERGY, QUALITY & ENVIRONMENT
### PERFORMANCE DATA

#### Table 1: Thermal Performance

<table>
<thead>
<tr>
<th>THICKNESS (inches)</th>
<th>R-VALUE U.S.1 (°F·ft²·h/BTU)</th>
<th>THICKNESS (mm)</th>
<th>RSI-VALUE1 (°K·m²/W)</th>
<th>BOARD SIZE (ft)</th>
<th>R-VALUE WITH REFLECTIVE AIR SPACE2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50</td>
<td>2.7</td>
<td>13</td>
<td>0.48</td>
<td>4 x 8, 9, or 10</td>
<td>5.2</td>
</tr>
<tr>
<td>0.625</td>
<td>3.5</td>
<td>16</td>
<td>0.62</td>
<td>4 x 8, 9, or 10</td>
<td>6.0</td>
</tr>
<tr>
<td>0.75</td>
<td>4.4</td>
<td>19</td>
<td>0.77</td>
<td>4 x 8, 9, or 10</td>
<td>6.8</td>
</tr>
<tr>
<td>1.00</td>
<td>6.0</td>
<td>25</td>
<td>1.06</td>
<td>4 x 8, 9, or 10</td>
<td>8.5</td>
</tr>
<tr>
<td>1.50</td>
<td>9.3</td>
<td>38</td>
<td>1.63</td>
<td>4 x 9, 9, or 10</td>
<td>11.7</td>
</tr>
<tr>
<td>2.00</td>
<td>13</td>
<td>51</td>
<td>2.21</td>
<td>4 x 9, 9, or 10</td>
<td>11.7</td>
</tr>
<tr>
<td>2.50</td>
<td>16</td>
<td>64</td>
<td>2.79</td>
<td>4 x 9, 9, or 10</td>
<td>18</td>
</tr>
<tr>
<td>3.00</td>
<td>19</td>
<td>76</td>
<td>3.36</td>
<td>4 x 9, 9, or 10</td>
<td>22</td>
</tr>
<tr>
<td>3.50</td>
<td>22</td>
<td>89</td>
<td>3.94</td>
<td>4 x 9, 9, or 10</td>
<td>25</td>
</tr>
<tr>
<td>4.00</td>
<td>26</td>
<td>102</td>
<td>4.52</td>
<td>4 x 9, 9, or 10</td>
<td>28</td>
</tr>
<tr>
<td>4.50</td>
<td>28</td>
<td>114</td>
<td>5.09</td>
<td>4 x 9, 9, or 10</td>
<td>30</td>
</tr>
</tbody>
</table>

1 Aged R-value at 75°F in accordance with ASTM C1289.
2 Only applies when an ideal reflective air space and horizontal heat flow conditions exist. The shiny foil side of product must face the air space.

#### Table 2: Physical Properties

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>UNITS</th>
<th>TEST METHOD</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Resistance, 1 inch</td>
<td>°F·Ft²·hr/BTU</td>
<td>ASTM C518†</td>
<td>6.0</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>psi</td>
<td>ASTM D1621</td>
<td>≥ 16</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>psi</td>
<td>ASTM C203</td>
<td>≥ 40</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>% by volume</td>
<td>ASTM C209</td>
<td>0.1</td>
</tr>
<tr>
<td>Water Vapor Permeance</td>
<td>perms</td>
<td>ASTM E96</td>
<td>0.05</td>
</tr>
<tr>
<td>Surface Burning Characteristics**</td>
<td>index</td>
<td>ASTM E84</td>
<td>≤ 25</td>
</tr>
<tr>
<td>Flame Spread†</td>
<td>index</td>
<td>ASTM E84</td>
<td>≤ 450</td>
</tr>
<tr>
<td>Smoke Developed†</td>
<td>°F</td>
<td></td>
<td>-100 to 250</td>
</tr>
</tbody>
</table>

† Aged R-value at 75°F in accordance with ASTM C1289.
** Numerical ratings are not intended to reflect hazards present in actual fire conditions.
† Foam core tested at 4 inches.

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**STORAGE**

Store AP Foil-Faced Foam Sheathing elevated above the floor or ground and standing water. If stored outdoors, keep dry by covering completely with a waterproof tarpaulin.

**LIMITATIONS**

AP Foil-Faced Foam Sheathing is nonstructural. The walls must be braced in accordance with the requirements of the applicable code.

**WARRANTY**

All Johns Manville products are sold subject to Johns Manville’s Limited Warranty and Limitation of Remedy. For a copy of these documents, call 800-654-3103.

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**WARNING**

AP Foil-Faced Foam Sheathing is combustible and shall only be used as specified by the local building code with respect to flame spread classification and to the use of a suitable thermal barrier when required.

**TECHNICAL SERVICES**

Johns Manville can provide technical information to assist in addressing questions regarding AP Foil-Faced Foam Sheathing. Please call 800-654-3103 for technical assistance.