COMPANY
Johns Manville, a Berkshire Hathaway company, was founded in 1858. Our ownership by Berkshire Hathaway, one of the most admired companies in the world and one of the most financially secure, allows JM to invest for the future. This enables JM to continue delivering the broadest range of insulation products in the industry and offering innovative solutions that meet your needs.

DESCRIPTION
JM ComfortTherm poly-encapsulated thermal and acoustical fiberglass insulation is lightweight and made of long resilient glass fibers. ComfortTherm is wrapped in plastic for more comfortable installation with less itch and dust. The product is available with a vapor-retarder plastic facing, and also with a plastic facing that does not act as a vapor retarder for use in hot, humid climates.

AVAILABLE FORMS
• Pre-cut batts – fit standard wall cavities and are faster to install than roll products.
• Rolls – can be cut to fit any size wall cavity and installed in any part of a building—especially useful for long, unobstructed areas such as attics or crawl spaces.

USE
JM ComfortTherm insulation can be used in a wide variety of wood frame, engineered wood and steel frame construction applications, including:

New Construction: Residential homes and commercial buildings interior walls, floors and ceilings for thermal and sound control, as well as basement wall insulation.

Retrofit: Adding insulation to attics and crawl spaces.

INSTALLATION
ComfortTherm batts are sized to fit standard cavities. JM ComfortTherm insulation can easily be cut with an ordinary utility knife to fit nonstandard cavities—install it by simply pressing in place between studs or joists. JM ComfortTherm insulation can be secured by stapling the flanges to wood studs.

PACKAGING
JM ComfortTherm insulation is compression-packaged for savings in storage and freight costs.

DESIGN CONSIDERATIONS
In colder climates, vapor retarders (whether attached to the insulation or applied separately) are often placed toward the heated or conditioned side of the wall. This is done to reduce water vapor penetration into the wall from the building interior. The plastic facing of standard JM ComfortTherm insulation is a vapor retarder.

JM ComfortTherm insulation with a non-vapor-retarder facing is also available. Check your local building code for vapor-retarder requirements.

Refer to JM guide specifications for further design considerations and required installation instructions.

LIMITATIONS OF USE
Check applicable building codes.

PERFORMANCE ADVANTAGES
Formaldehyde-free: will not off-gas formaldehyde in the indoor environment.

Thermally Efficient: provides effective resistance to heat transfer with R-values up to R-30 (RSI-5.3).

Sound Control: reduces transmission of sound through exterior and interior walls and floor or ceiling assemblies.

Fire Resistant: see Physical Properties.

Durable Inorganic Glass: will not rot, mildew or deteriorate and is noncorrosive to pipes, wiring and metal studs.

Superior Performance: bonded glass fibers are dimensionally stable and will not slump within the wall cavity, settle or break down during normal applications.

ENERGY AND ENVIRONMENT
*GREENGUARD certification is not intended for residential environments. Instead, the certification is intended only for buildings meeting ASHRAE 62.1-2007 commercial building ventilation rates. This certification is proof that the product meets the GREENGUARD Environmental Institute’s indoor air quality standards and product emission standards for VDCs.
**STANDARD SIZES**

<table>
<thead>
<tr>
<th>FACING</th>
<th>R-VALUE (hr•ft²•ºF/Btu)</th>
<th>RSI VALUE (m²•ºC/Watts)</th>
<th>THICKNESS**</th>
<th>METAL FRAMING in (mm)</th>
<th>WOOD FRAMING in (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly-encapsulated</td>
<td>11</td>
<td>1.9</td>
<td>3¹/₈ (82)</td>
<td>24 (610)</td>
<td>15 (381)</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>2.3</td>
<td>3¹/₂ (89)</td>
<td>16 (406)</td>
<td>15 (381)</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>3.3</td>
<td>6¹/₂ (165)</td>
<td>16 (406)</td>
<td>15 (381)</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>3.7</td>
<td>5¹/₂ (140)</td>
<td>24 (610)</td>
<td>23 (584)</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>5.3</td>
<td>10¹/₄ (260)</td>
<td>16 (406)</td>
<td>24 (610)</td>
</tr>
</tbody>
</table>

*Consult your local JM sales representative or product availability chart for other available sizes and R-values (RSI-values).

**Thickness may vary by producing location.

†Special widths and lengths may be available. Check with your local JM sales representative. Standard product lengths include 48", 93" and 96" (1,219 mm; 2,362 and 2,438 mm) batts.

**APPLICABLE STANDARDS & BUILDING CODE CLASSIFICATION**

<table>
<thead>
<tr>
<th>JM COMFORTHERM INSULATION</th>
<th><strong>ASTM C665, Type II, Class A, Category 1 or 2</strong></th>
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</thead>
<tbody>
<tr>
<td>IBC, ALL TYPES</td>
<td></td>
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</tbody>
</table>

*Standard ComfortTherm is Category 1 (vapor retarder), R-25 and non-vapor retarder ComfortTherm for hot humid climates (available R-13, 19, 25 and 30) are Category 2.

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>FLAME SPREAD</th>
<th>SMOKE DEVELOPED</th>
<th>VAPOR RETARDER (PERMS)</th>
<th>WATER VAPOR SORPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>JM ComfortTherm Insulation</td>
<td>&lt;25</td>
<td>&lt;50</td>
<td>&lt;0.5</td>
<td>Less than 5%</td>
</tr>
</tbody>
</table>

*Products are tested in accordance: R-value ASTM C518 | Surface Burning Characteristics ASTM E84 | Water Vapor Permeance ASTM E96 | Water Vapor Sorption ASTM C1104