LRi™ has been designed specifically for use under membrane roof assemblies. LRi is typically used as a recover sheet that is applied over an existing roof assembly before the new membrane is installed.

- Compatible with PVC roof membranes

For more information about LRi, please visit our website at: www.ThermalStar.com

<table>
<thead>
<tr>
<th>Property</th>
<th>ASTM Test Method</th>
<th>LRi Product ID</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compressive Strength (minimum psi) @ 10% Deformation</strong></td>
<td>D1621</td>
<td>LRi 10</td>
</tr>
<tr>
<td>R-value per inch (minimum) at 75°F mean temperature</td>
<td>C518</td>
<td>3.9</td>
</tr>
<tr>
<td>R-value per inch (minimum) at 40°F mean temperature</td>
<td>C518</td>
<td>4.2</td>
</tr>
<tr>
<td>R-value per inch (minimum) at 25°F mean temperature</td>
<td>C518</td>
<td>4.4</td>
</tr>
<tr>
<td>ASTM Classification</td>
<td>C578</td>
<td>Type I</td>
</tr>
<tr>
<td>Compressive Strength (minimum psi) at 1% Deformation</td>
<td>D1621</td>
<td>4.4</td>
</tr>
<tr>
<td>Flexural Strength (minimum psi)</td>
<td>C203</td>
<td>30</td>
</tr>
<tr>
<td>Water Absorption % by volume, maximum after 24 hr immersion</td>
<td>C272</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Water Vapor Permeance at 1” thick (perms)</td>
<td>Typical E96</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Surface Burning - Flame Spread and Smoke Developed</td>
<td>E84</td>
<td>Flame Spread 20, Smoke Developed 300 [meets code]</td>
</tr>
<tr>
<td>Maximum Use Temperature</td>
<td>-</td>
<td>Short Term (10-15 minutes) 180°F, Long Term 165°F</td>
</tr>
</tbody>
</table>

1ThermalStar LRi is elastic within 1-2% deformation. To prevent long term creep, 3:1 design safety factors for static loads of the 10% deformation values are recommended, or use the tested 1% deformation values for design, whichever is greater.
Advantages of LRi:

STANDARD FEATURES:

• Continuous insulation laminated with a polymeric film facer on both sides
• Standard Size: 4’x50’ fanfold bundle, with 24” wide sections
• Standard thicknesses: 3/8”, 1/2”, 3/4”

STABLE R-VALUE:
LRi’s thermal performance is stable over time, assuring R-value meets design requirements over the life of the structure.

ENVIRONMENTALLY FRIENDLY:
The insulating cells of ThermalStar LRi only contain air, providing an environmentally friendly solution with zero global warming potential.

RECYCLABLE:
LRi is readily accepted for recycle at the end of its service life. Visit epsparkaging.org to locate a drop-off location nearest you.

INSTALLATION RECOMMENDATIONS:
When installing LRi under PVC membrane, install the clear printed side facing up with the plain clear side facing downward towards existing membrane, when applicable. The ends of the panels should be butted tightly together or filled with expanding foam insulation where this is not possible. Fasteners should be placed at each corner of the leading and trailing edges, and every 12 ft² on alternating sides thereafter, 6” from the board’s edge (see diagram 1 below). Some membrane manufacturers require a higher density of fasteners to comply with the warranted systems. Consult with the membrane manufacturer for specific requirements.

INSTALLATION AND HANDLING
LRi can be handled much the same as any other foam or wood sheathing, using similar tools or a simple utility knife to customize panels to fit the application.

SAFETY
SDS for this product are available at AtlasMoldedProducts.com. Dust generated from cutting LRi should be avoided using a dust mask. LRi insulation is combustible and the product should be protected from ignition sources such as open flames or welder’s torch. Applications not specifically listed in UL ER16529.1 require permanent separation of LRi insulation from the interior of the building by a thermal barrier such as drywall or concrete for fire safety.

WARRANTY
LRi insulation is backed by a limited lifetime warranty for physical and thermal performance.

CODE COMPLIANCE
ThermalStar LRi insulation complies with the model building codes when properly installed:

• Surface Burning – UL BRYX.R16529
• Physical Properties – UL QORW.R16529
• CAN/ULC S102.2, S701 – ULC BOZCC.R16529
• International Energy Conservation Code
• International Residential Code (IRC) – UL ER16529.1, ESR-1962
• International Building Code (IBC) – UL ER16529.1, ESR-1962
• ASTM C578 – (See product marking for type)
• Roof Assemblies - UL TGFU.R16529

Figure 1: ThermalStar LRi fastening pattern

Use ThermalStar LRi on Your Next Project!