TECHNICAL DATA SHEET

Jiffy Seal® BUTYL Ice & Water Guard HT™
High Temperature Self Adhered Underlayment
with Tri-Layer Engineered Film

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Color</td>
<td></td>
<td>Green</td>
</tr>
<tr>
<td>Thickness</td>
<td></td>
<td>30 mils</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D412</td>
<td>&gt;1600 psi</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D412</td>
<td>500%</td>
</tr>
<tr>
<td>Puncture Resistance</td>
<td>ASTM E154</td>
<td>&gt;250 psi</td>
</tr>
<tr>
<td>Low Temperature Flex</td>
<td>ASTM D1970</td>
<td>-20°F (-29°C) No cracks or delamination</td>
</tr>
<tr>
<td>Nail sealability</td>
<td>ASTM D1970</td>
<td>Pass</td>
</tr>
<tr>
<td>Adhesion to Plywood</td>
<td>ASTM D903</td>
<td>4.5lb/in width (unprimed)</td>
</tr>
<tr>
<td>UV Exposure period</td>
<td></td>
<td>6 months</td>
</tr>
<tr>
<td>Permeance</td>
<td>ASTM E96</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Installation Temperature</td>
<td></td>
<td>20°F to 120°F (-6°C to 48°C)</td>
</tr>
<tr>
<td>In-Service Temperature</td>
<td></td>
<td>-45°F to 300°F (-42°C to 149°C)</td>
</tr>
</tbody>
</table>

PACKAGING
36” x 66’ roll (198 SF/Roll)

DESCRIPTION
Jiffy Seal® BUTYL Ice & Water Guard HT is a cold applied, self-adhering membrane composed of a proprietary slip resistant, tri-layer, woven polypropylene fabric coated on one side with a layer of our proprietary high temperature recycled butyl adhesive.

FEATURES
- Proprietary RECYCLED butyl adhesive
- Recommended for High Altitude and or Highly Conductive Roof Coverings
- IAPMO ER-0390 Listed
- Florida Product Approval #FL17155
- 6 month exposure rating
- Fully adhered system
- Proprietary Tri-Layer, Engineered Film Technology
- Proprietary slip resistant surface for added footing safety
- Seals around properly installed fasteners
- Waterproof, Air and Vapor Barrier
- Can be installed Horizontally or Vertically (as code allows)
- Can be installed on roof pitches down to 2”/12”, for lower slopes contact your Protecto Wrap Representative
- Compatible with EPDM

USES
A complete waterproof roofing underlayment specifically formulated for use on very high temperature roof applications, highly conductive roof applications and high altitude applications, also can be used on new and retro-fit roofs, under most roof coverings. Designed for use at low slope areas, hip, ridge, valleys, rake edges, confined rake edges, around skylights and chimneys.

LIMITATIONS
Not recommended for use on roof slopes less than 2”/12” (without approval). Not recommend for use over granulated surfaces or existing roof coverings.
SHELF LIFE
Jiffy Seal BUTYL Ice & Water Guard HT maintains optimum initial adhesion to substrates when used within one year from the date of manufacture.

STORAGE
Jiffy Seal BUTYL Ice & Water Guard HT should be stored in the original, unopened container at ambient temperatures between 40°F to 90°F (5°C to 32°C). Storage area should remain dry and out of direct sunlight. Do not remove materials from original containers until ready for use. Do not double stack pallets. Do not store rolls on end.

Cold Weather Storage – products should be stored in original containers in a warm dry area between 50°F to 90°F (10°C to 32°C). Product should be kept warm a minimum of 24 hours prior to and just up to installation.

PREPARATION
Roof deck surface shall be clean, dry and free of any foreign materials. The roof deck surface shall be free of gaps, sharp edges and protrusions. Do not walk on surface when wet or covered with frost as there is an increase risk of injury.

Metal surfaces may need to be solvent wiped and/or abraded to achieve optimum adhesion.

On vertical applications, all surfaces shall be clean, dry and free of any foreign materials. The surface shall be free of gaps, sharp edges and protrusions.

* Note: If deck surface cannot be cleaned to a like new surface or the deck is damp or below 32°F (0°C), primer should be used prior to the application of the membrane. Prime DensGlass Gold, DensDeck, masonry and concrete substrates; for other substrates such as wood composition and gypsum sheathing, prime as necessary if adhesion is found to be marginal. Refer to: “Technical Letter Primer Recommendations” for more information regarding primer recommendations and “Technical Letter Adhesion to Substrates” for adhesion guidelines.

APPLICATION
Jiffy Seal BUTYL Ice & Water Guard HT can be installed on any exterior grade solid sheathing normally used for roof decking.

Install membrane such that all laps shed water in both vertical and horizontal installations. Valleys require a minimum 18” wide roll of Jiffy Seal BUTYL Ice & Water Guard HT centered down the full length of the valley. DO NOT LACE MEMBRANE THROUGH THE VALLEY!

Install membrane starting at the lowest point of roof slope and work up the slope. Position the roll into the desired location, roll out the membrane and cut to length as needed.

Align the roll with edge of eave or overlap of preceding roll, pull membrane tight, start by removing a portion of the release liner and adhere to roof deck (reposition as needed prior to removing the remaining release liner).

Lift the opposing end of the membrane and remove or strip the release liner, pulling it to one side, keep membrane aligned and tight, adhere membrane to the roof deck while another person brooms the sheet flat.

Edge laps are 3” minimum and end laps are 6” minimum. All laps should be firmly pressed or rolled to ensure a positive seal.

At the end of each day’s work, Jiffy Seal BUTYL Ice and Water Guard HT should be trimmed flush with the rake edge of the roof and not left to hang over the side of the rake edge.

If the Jiffy Seal BUTYL Ice and Water Guard HT is installed in a soffit type application, the substrate should be primed and the membrane should be mechanically fastened at the perimeter edges and may need to be fastened in the field to prevent sagging / debonding.

Vertical Application (at roof to wall interfaces)
in the case of a roof to wall transition we recommend sealing the terminal edge of the membrane on the wall with Protecto Sealant 25XL or JS 160H Mastic (or equal) to prevent moisture from migrating behind the membrane. Cut membrane to length, apply to substrate and firmly roll into place using a hand roller (J-roller, Laminate roller) to smooth out any wrinkles, air bubbles or creases that would allow water to migrate behind the membrane.
* Additional methods and details can be found at www.protectowrap.com or call (800) 759-9727.

**CLEAN UP**
Dispose of waste in accordance to local requirements. Control worksite so that boxes and release liner do not present a hazard.
Packaging materials and release liner can be recycled.

**CAUTION**
**Jiffy Seal BUTYL Ice & Water Guard HT** incorporates a slip resistant surface; however, Protecto Wrap Company recommends the use of appropriate fall protection when installing roof underlayments.
**Jiffy Seal BUTYL Ice & Water Guard HT** is a moisture, air/vapor barrier; spaces under the area covered must be properly vented.

**LIMITED WARRANTY**
This product is covered by the Protecto Wrap Standard 10 Year Limited Warranty.