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>Green</td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>40 mils</td>
<td></td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D412</td>
<td>&gt;1600 psi</td>
</tr>
<tr>
<td>Elongation (adhesive only)</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 Temp Flex</td>
<td>ASTM D1970</td>
<td>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>6 months</td>
<td></td>
</tr>
<tr>
<td>In-Service Temperature</td>
<td>Up to 250°F (up to 121°C)</td>
<td></td>
</tr>
<tr>
<td>Permeance</td>
<td>ASTM E96</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

PACKAGING
36” x 36’ roll (108 SF/Roll)
36” x 66’ roll (198 SF/Roll)
36” x 75’ roll (225 SF/Roll)

DESCRIPTION
Jiffy Seal® 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 high temperature asphalt / recycled butyl hybrid adhesive.

FEATURES
- Proprietary asphalt / recycled butyl hybrid adhesive
- 6 month UV exposure rating
- Fully adhered system
- 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

USES
A complete waterproof roofing underlayment 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 roofs that exceed 250°F (121°C) operating temperature.
Not recommended for use on roof slopes less than 2'/12" (without approval).
Not recommend for use over granulated surfaces or existing roof coverings.

¹ Note: Copper, Core-Tin and Zinc roof components are considered highly conductive metals and can reach temperatures exceeding 250°F (121°C)
SHELF LIFE
Jiffy Seal Ice & Water Guard HT maintains optimum initial adhesion to substrates when used within one year from the date of manufacture.

STORAGE
Jiffy Seal Ice & Water Guard HT should be stored in the original, unopened container at ambient temperatures between 50°F to 90°F (10°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 at roof to wall intersections, all surfaces shall be clean, dry and free of any foreign materials. The surface shall be free of gaps, sharp edges and protrusions.

Protecto Wrap Company recommends testing substrates for adhesion prior to full application of membrane. If adhesion to substrate is found to be marginal, then a primer shall be used to ensure optimal adhesion. Refer to: “Technical Letter Primer Recommendations”.

Priming
Prime if surface is DensGlass Gold®, DensDeck, OSB, concrete substrates, Concrete block (CMU), masonry, fiber board sheathing, exterior gypsum or cannot be cleaned to a like new surface or the surface is damp or below 45°F (7°C).

APPLICATION
Jiffy Seal Ice & Water Guard HT can be installed on any exterior grade solid sheathing normally used for roof decking. Apply Jiffy Seal Ice & Water Guard HT only in fair weather conditions when air, roof deck and membrane temperatures are at 45°F (7°C) or higher.

Install membrane such that all laps shed water in both vertical and horizontal installations. Valleys require a minimum 18” wide roll of Jiffy Seal Ice & Water Guard HT centered down the full length of the valley. The valley strips should be applied prior to the field membrane application. 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, the field membrane should not extend past the center line of the valley. 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.

VERTICAL APPLICATION
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. Protecto Wrap Company recommends the application of a troweled bead of JS160H Mastic to be applied to all terminating edges of vertical applications to prevent water from migrating behind the membrane.
For **Cold Weather Applications**, 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. Protecto Wrap Company recommends testing substrates for adhesion. If adhesion to substrate is found to be marginal, then a primer shall be used to ensure optimal adhesion. Refer to: “Technical Letter Primer Recommendations” for more information regarding primer recommendations and “Technical Letter Cold Weather Applications”.

* Additional methods and details can be found at www.protectowrap.com in the Technical area 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 Ice & Water Guard HT** should not come into contact with solvent based products, polysulfide’s, plasticized PVC roofing materials or high concentrations of resins (pitch). **Jiffy Seal 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 Ice & Water Guard HT** is a waterproof, air/vapor barrier; spaces under the area covered must be properly vented.

² Note: It is very important in full coverage envelope applications that the **Jiffy Seal Ice & Water Guard HT** is tightly sealed into the roofing and below grade waterproofing systems and perimeter flashings to retain the integrity of the vapor barrier throughout the entire structure. In full building envelope applications, the dew point of the wall assembly must be engineered to the exterior of the building.

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

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