PRODUCT DESCRIPTION

Tough-Guard™ EMBOSSED Ice and Water Membrane is a self-adhesive, glass fiber reinforced, modified bituminous roofing underlayment designed for use under metal roofing. Manufactured using a polyolefinic film on the upper side, this unique film laminate is non-abrasive and has anti-skid properties that provide good walkability. Tough-Guard is specially formulated for use in high temperature environments.

USAGE

Tough-Guard EMBOSSED Ice and Water Armor helps to protect a building’s deck or internal structure against leaks caused by ice and water damming and wind-driven rain. Ideally suited for use under metal roofing. It is also an excellent choice as an underlayment for shingles, slate, and mechanically attached tiles. Tough-Guard EMBOSSED is highly effective in critical roofing areas such as valleys, ridges, coping joints, chimneys, vents, dormers, skylights, and low-slope sections.

GENERAL PRECAUTIONS

- Install Tough-Guard EMBOSSED only when material interface temperatures (air, deck, material) are 40°F and rising.
- Do not install when any form of moisture such as water, ice, snow, dew, rain, etc. is present.
- Ensure roof has proper drainage prior to installation.
- Proper ventilation is critical. When applying over the entire roof deck, the roofing system must provide sufficient ventilation, including both ridge and soffit venting.
- A full, irreversible adhesion is achieved when the underlayment goes through a complete heat cycle. Do not attempt to remove the underlayment immediately after adhesion to the substrate.
- Use of a hand-held “hot air gun” might help in enhancing the adhesion during application of underlayment in cooler weather.
- Tough-Guard EMBOSSED shall not be used in adhesive (foam) set tile applications.
- Not recommended for extreme high temperature environments such as under copper or zinc metal roofing.
- Tough-Guard EMBOSSED must be covered with a finished roof covering within the specified exposure time of the product. Refer to the section on Features and Benefits for exposure time.

STORAGE

- Tough-Guard EMBOSSED rolls must be stored indoors, in a dry location.
- Rolls must be stored on end only. Do not store in a leaning position.
- The rolls must be protected from the elements. Do not expose to direct sunlight.
- Store rolls at room temperature. Prolonged exposure to elevated temperatures may reduce the adhesive characteristics of the material.

FEATURES AND BENEFITS

- Cost-effective sheet
- Clean, easy to handle, self-adhering application
- Specially formulated SBS with 250°F temperature rating
- Polymer modified asphalt gives excellent pliability
- UV resistant film surface
- Anti-skid treatment allows for good walkability
- Exceptionally durable - High tensile and tear strengths
- Glass fiber reinforcement imparts high dimensional stability
- Adheres to a variety of substrates
- Membrane lays flat and resists wrinkling for ease of application
- 60-day exposure allows for long term dry in
- Split-back release film peels off for easy installation and handling
- Instant watertight laps
- Self-seals around nails
- Meets ASTM D1970
- Florida Building Code FL16858

For more information contact your BlueLinx representative
888-502-BLUE | www.BlueLinxCo.com
SURFACE PREPARATION

- Surface must be clean, dry, and without voids that may interfere with adhesion.
- For re-roofing, all old roofing and other loose materials must be removed prior to installation.
- For a list of Acceptable Substrates for the adhesion of Tough-Guard products contact your BlueLinx Product Specialist at 888-502-BLUE or visit www.blulinx.com.
- For best results, surface may be primed with an ASTM D 41 Primer before installation of Tough-Guard EMBOSSED.
- When primer is used, ensure the primer is fully dry prior to application of Tough-Guard EMBOSSED.

APPLICATION GUIDELINES

- Cut Tough-Guard EMBOSSED roll to suitable, manageable lengths before installation.
- Place a full width piece of the pre-cut sheet on the substrate, parallel to the eave edge of the roof.
- Align the sheet so that it is parallel with the edge of the eave and extend over the eave and rake approximately 3/8”.
- Fold back the sheet, and remove the exposed release film, taking care not to displace the sheet.
- Working from the center out, roll the sheet onto the substrate, taking care to avoid wrinkles and ridges.
- Sheet must be set straight. Repeat this process for the remaining half of the sheet.
- Apply a 1/16” thick layer of asphalt plastic cement over the eave and rake metal drip edges extending 2” to 3” onto the deck surface where the roll will intersect.
- Apply the next eave course in the same manner overlapping the first course at the end lap by 6”.
- Lap the succeeding course over the lap area.
- Apply succeeding courses in like manner, as in steps above.
- Stagger the end laps a minimum 3′ from the preceding course.
- Install capped or tin tagged nails 6 inches on center in the middle of the side lap or fasten according to applicable Building Code.
- At the T-joint (where an end lap and next overlapping course intersect), apply a bead of roofing lap cement before the overlapping course is laid.
- Roll the entire membrane surface, paying special attention to side laps, end laps and T-joints. Roller weight shall be 70 lb. minimum for low slope (<2:12 pitch) and 28 lb. minimum for steep slope (>2:12 pitch).

WARRANTY

Tough-Guard EMBOSSED is warranted to be free from manufacturer’s defects.

PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Values</th>
<th>Reference Test</th>
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<th>Typical Values</th>
<th>Reference Test</th>
<th>Product Data</th>
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<tr>
<td>TensileStrength, MD</td>
<td>34 lbf/in</td>
<td>ASTM D1970</td>
<td>Flexibility temperature</td>
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<td>ASTM D1970</td>
<td>Width</td>
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<td>ASTM D1970</td>
<td>Tear Resistance, MD &amp; XMD</td>
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<td>ASTM D1970</td>
<td>Length</td>
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<td>ASTM D1970</td>
<td>Moisture vapor permeance</td>
<td>0.1 U.S. Perm or Less</td>
<td>ASTM D1970</td>
<td>Gross Coverage</td>
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<td>Sealability around nail</td>
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<td>ASTM D1970</td>
<td>Weight</td>
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<td>Thermal Stability, max</td>
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<td>Waterproof integrity</td>
<td>Pass</td>
<td>ASTM D1970</td>
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</tbody>
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NOTE:
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