LeakBarrier® MS300 Ice and Water Armor

LeakBarrier MS300 Ice and Water Armor is a glass fiber reinforced, self-adhesive modified bituminous roofing underlayment for use under slate and asphalt shingles. Mineral granules on the upper surface provide enhanced skid resistant properties.

Usage

LeakBarrier MS300 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. It is highly effective in critical roofing areas such as valleys, ridges, coping joints, chimneys, vents, dormers, skylights and low-slope sections.

Features and Benefits

- Skid resistant surface provides improved footing
- Release film peels off for easy installation and handling
- 30 day exposure limit
- Adheres directly to concrete, plywood, wood composition board and gypsum sheathing
- Self-sealing around nails, preventing moisture penetration
- Meets ASTM D 1970
- ICC-ES ESR-2116
- Miami-Dade County Approval NOA No. 22-1103.01
- Florida Building Code FL 10450-R17
- UL Prepared Roofing Accessory File No. R16744
- Texas Department of Insurance approved
- Available in 1 sq. and 2 sq. rolls

Storage

- MS300 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 rolls to direct sunlight.
- Store rolls at room temperature. Prolonged exposure to elevated temperatures may reduce the adhesive characteristics of the membrane.

General Precautions

- Install MS300 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 positive 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 adhesion during application of underlayment in cooler weather.
- MS300 must be covered with a finished roof covering within the specified exposure time of the product. Refer to section on Features and Benefits for exposure times.

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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.
- Acceptable substrates for adhesion of LeakBarrier membranes can be found at the Tarco website.
- For best results, surface may be primed with an ASTM D 41 Primer prior to installation of MS300. When primer is used, ensure the primer is fully dry prior to application of MS300.

Application

- Cut MS300 roll to suitable, manageable lengths before installation.
- Place a full width piece of the pre-cut MS300 underlayment on the substrate, parallel to the eave (low) edge of the roof.
- Align MS300 so that it is parallel with the edge of the eave and extend over the eave and rake approximately 3/8".
- Place the side lap on the up side of the roof, 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. MS300 must be set straight. Repeat this process for the remaining half of the sheet.
- Starting at the middle and extending to one end of MS300, drive securing nails in 18" centers in the side lap area, 1½" from the edge. Do not drive the nails all the way in.
- Backroll the unsecured portion of the roll up the middle where the first securing nail is driven.
- Apply a 1/16" thick layer of roofing lap cement over the eave and rake metal drip edges extending 2" to 3" onto the deck surface where the roll will intersect.
- Remove the securing nails from the other half of MS300, backroll and apply in like manner.
- On slopes greater than 2:12, drive nails flush in the selvage area 1½" from the edge on 18" centers, after MS300 has been applied and prior to the next overlapping course.
- Apply full roll width, a 1/16" thick layer of roofing lap cement to the surface of the first course in the 6" end lap area before adhering the next course.
- 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 selvage edge (side lap) or fasten according to applicable Building Codes.
- 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).

Properties

Property	Typical Values	Reference Test
Tensile Strength, MD	25 lbf/in	ASTM D1970
Tensile Strength, XMD	25 lbf/in	ASTM D1970
Elongation, mod. bit. portion	10% min	ASTM D1970
Adhesion to Plywood @ 40°F	2 lb/ft of width	ASTM D1970
Adhesion to Plywood @ 75°F	15 lb/ft of width	ASTM D1970

Property	Typical Values	Reference Test
Thermal Stability, max	0.1 inch	ASTM D1970
Flexibility Temperature	-20° F	ASTM D1970
Tear Resistance, MD & XMD	20 lbf	ASTM D1970
Slip Resistance	Pass	ASTM D1970
Moisture Vapor Permeance	0.1 U.S. Perms *(max)*	ASTM D1970

Product Data	1 Square	2 Square
Width	36 in	36 in
Length	33 ft	65 ft
Weight	30 lb *(nominal)*	60 lb *(nominal)*
Thickness	56 mil *(nominal)*	56 mil *(nominal)*

Warranty MS300 Ice and Water Armor is warranted to be free from manufacturer's defects.

NOTE: All statements, information and data, given herein are believed to be accurate and reliable but are presented without guaranty, warranty or responsibility of any kind, expressed or implied, except as may be indicated otherwise in this literature. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent.

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