

## LeakBarrier® NR600 Ultra

**LeakBarrier NR600 Ultra Ice and Water Armor** is a state-of-the-art SBS modified, non-reinforced, self-adhesive roofing underlayment for use under tile, metal, slate, and asphalt shingles. Surfaced with a highly durable polyester reinforcement that provides exceptional strength and excellent walkability, NR600 Ultra is specially formulated for use in high temperature environments and self-seals around nails. The unique self-adhesive compound on the side lap ensures an immediate bond between adjacent rolls, resulting in instant watertight laps.



**Usage** **LeakBarrier NR600 Ultra** is a premium underlayment designed to prevent leaks caused by ice and water damming and wind-driven rain. Ideally suited for use in mechanical and foam-attached tile roof systems, it is also an excellent choice as an underlayment for shingles, slate, and metal. NR600 Ultra is highly effective in critical roofing areas such as valleys, ridges, coping joints, chimneys, vents, dormers, skylights, and low-slope sections.

### Features and Benefits

- ◆ Clean, easy to handle, self-adhering application
- ◆ Specially formulated SBS compound withstands temperatures to 260°F
- ◆ Self-sealing around nails preventing moisture penetration
- ◆ Self-adhesive coating on the side lap yields instant watertight laps
- ◆ Polymer modified asphalt provides excellent pliability
- ◆ Ultra violet (UV) resistant polyester fabric surface
- ◆ White colored fabric provides cooler working surface
- ◆ High tensile and tear strengths
- ◆ Good walkability
- ◆ Enhanced skid resistance
- ◆ Surface stays intact when exposed to the elements
- ◆ 180 day exposure allows for long-term dry in
- ◆ Exceptionally durable
- ◆ Adheres to a variety of substrates
- ◆ Membrane lays flat and resists wrinkling for ease of application
- ◆ Split-back release film peels off for easy installation and handling
- ◆ Meets ASTM D1970

### Storage

- ◆ NR600 Ultra rolls must be stored indoors, in a dry location.
- ◆ Rolls must be stored on end only. Do not store in a leaning position.
- ◆ 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.

### General Precautions

- ◆ Install NR600 Ultra in strict compliance with applicable Building Code.
- ◆ Follow Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate precautions to prevent accidents.
- ◆ Install rolls 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 slope and drainage prior to installation.
- ◆ NR600 Ultra is considered a vapor barrier. Proper ventilation is critical. Ensure installation does not interfere with existing ventilation.
- ◆ When applying over the entire roof deck, the roofing system must provide sufficient ventilation.
- ◆ 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.
- ◆ NR600 Ultra shall not be torched or hot-mopped to.
- ◆ NR600 Ultra 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 time.

## Surface Preparation

- The substrate shall be clean, dry, and without voids when installing NR600 Ultra.
- Consult applicable Technical Bulletin at the Tarco website prior to installation.
- Old roofing and other loose material must be removed before installation.
- Acceptable substrates for adhesion of LeakBarrier membranes can be found at the Tarco website.
- Surface may be primed with an ASTM D41 primer, water-based acrylic primer or water-based modified primer prior to installing NR600 Ultra. If primer is used, ensure it is fully dry before application of the membrane.

## Application Guidelines

- Cut the NR600 Ultra roll to suitable, manageable lengths before installation.
- Apply an ASTM D41 primer, water-based acrylic primer or water-based polymer-modified primer over the eave and rake metal drip edges extending onto the deck surface where the roll will intersect.
- Place a full width piece of the pre-cut NR600 Ultra underlayment onto the approved substrate, parallel to the eave (low) edge of the roof.
- Align NR600 Ultra so that it is parallel with the edge of the eave and extend over the eave and/or rake approximately 3/8".
- Fold back the sheet, and carefully 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 NR600 Ultra must be set straight. Repeat this process for the other half of the sheet once the remaining release film has been removed.
- On slopes greater than 2:12, install capped or tin tagged nails 6" on center in the side lap area 1½" from the edge, in the middle of the side lap area or fasten according to applicable Building Code after the NR600 Ultra has been applied and prior to the overlapping of the next course.
- Apply the next eave course in the same manner as described overlapping the first course at the end lap by a minimum of 6".
- Apply a 1/8" thick layer of a trowel grade SBS modified bitumen asphalt adhesive/flashing cement at the T-joint (area where an end lap and the next succeeding course intersect) for slopes less than 2:12.
- Stagger all end laps a minimum of 18" for slopes 2:12 and greater, and 36" for slopes less than 2:12 from the preceding course.
- Lap the succeeding course over the side lap area for 3" or as per applicable Building Code.
- Apply pressure to the entire surface of the membrane during installation. Pressure is to be applied vertically and horizontally throughout the entire area of the membrane. A minimum of a 28 lb weighted roller shall be used for application on slopes up to 6:12 pitch. The use of a soft bristled push broom is acceptable on steeper slopes (> 6:12 pitch). Pay special attention to side lap, end lap, T-joint, eave and rake edges during the application of pressure to ensure contact and adhesion. This procedure is necessary in order to ensure uniform pressure and achieve contact of NR600 Ultra with the underlying substrate.
- Apply all succeeding courses in like manner, as described in steps above.
- Prime all metal collars, flashings, valleys, liner and drip edge with ASTM D41 Primer, Water-based Acrylic Primer, or Water-based Polymer-Modified Primer. All metal shall comply with applicable Building Codes.
- All protrusions shall be initially sealed with a trowel grade SBS modified bitumen asphalt adhesive/flashing cement and membrane. A subsequent application of similar self-adhesive membrane must be applied to the existing area and is to extend a minimum of 6" from the edge of the original penetration, where applicable.
- Inspect all side laps, end laps, T-joints, eaves and rakes to verify they are securely sealed in place.
- Carefully trim the excess material off the eaves and rakes.

## Properties

Property	Typical Values	Reference Test	Product Data	
Tensile Strength, MD & XMD	35 lbf/in	ASTM D1970	Width	36 in
Elongation, Mod. Bit. Portion	100% min	ASTM D1970	Length	72 ft
Adhesion to Plywood @ 40°F	2 lb/ft of width	ASTM D1970	Thickness	50 mil (nominal)
Adhesion to Plywood @ 75°F	20 lb/ft of width	ASTM D1970	Gross Coverage	216 sq ft
Thermal Stability, Max.	0.1 in	ASTM D1970	Weight	55 lb (nominal)
Compound Stability	260°F	ASTM D1970	Rolls Per Pallet	25
Flexibility Temperature	-20°F	ASTM D1970		
Tear Resistance, MD & XMD	30 lbf	ASTM D1970		
Slip Resistance	Pass	ASTM D1970		
Moisture Vapor Permeance	0.05 US Perm or less	ASTM D1970		
Sealability Around Nails	Pass	ASTM D1970		
Waterproof Integrity of Lap Seams	Pass	ASTM D1970		

## Warranty

Tarco Specialty Products, Inc. offers a 30 Year Limited Warranty.

**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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