



**Water & Ice Protection is a 55-mil flexible rubberized asphalt, fiberglass-reinforced membrane used as a shingle underlayment on critical roof areas such as eaves, ridges, valleys, dormers and skylights. Water & Ice Protection underlayment protects roofing structures and interior spaces from water penetration caused by wind-driven rain and ice dams and may also be used as covering for the entire roof to prevent moisture or water entry.**

## Features and Benefits

- Protects the roof structure from water seepage caused by ice dams and wind-driven rains
- Seals around roofing nails, staples and screws
- Ensures the watertightness of the primary roofing system in critical areas
- Split-release film provides easier, faster installation
- Unique granular skid-resistant surface for safe and easy installation
- Resists cracking, drying and rotting, providing long-term waterproofing performance and low life cycle cost
- Concealed waterproofing system will not detract from the architectural aesthetics of the primary roofing system

## Standards

- UL Classified
- 2009 and 2012 International Building Code™
- Florida Building Code Approved Product #6785
- Miami-Dade County Product Control Approved
- ICC - ES ESR# 1556
- Meets ASTM D1970

## Storage

Water & Ice Protection roofing underlayment rolls should be stored on end, under cover and in areas where the temperature is between 40°F and 100°F (4.4°C and 38°C). Do not double-stack pallets.

## Warranty

Water & Ice Protection is backed by New Castle's industry-leading warranty. Visit our website for warranty details.

## Installation

Water & Ice Protection roofing underlayments are applied when the roof deck is dry and the substrate temperature is 40°F (4.4°C) or higher. At temperatures below 40°F, nailing or priming should be used to temporarily hold the membrane in place while adhesion develops. Water & Ice Protection is designed to be covered with the primary roofing system and should not be exposed to sunlight for more than 30 days.

Substrate must be free of any moisture. If moisture is present, it may inhibit adhesion. Prepare the roof deck by removing all loose objects, dirt, dust and debris. For re-roofing applications, remove all old materials from the roof deck in the area to be covered with Water & Ice Protection. Replace water-damaged sheathing and sweep roof deck thoroughly.

### PRIMING

Priming is not required on clean, dry wood, metal or most polyisocyanurate surfaces (polyiso paper facer does require priming). Masonry and exterior gypsum boards (such as DensDeck®) should be primed using an appropriate primer or adhesive. Some rigid insulation boards with porous or dusty surfaces may require priming to promote initial adhesion. Priming is required on all substrates when air or substrate temperatures are below 40°F (4.4°C). Refer to your local building codes to determine acceptable product for use in your region.

Selection of roof deck or insulation substrate and/or use of a primer or adhesive are the responsibility of the architect, specifier or roofing contractor to determine based on the roof assembly and environmental conditions.

### VALLEYS, HIPS & RIDGES

Cut Water & Ice Protection roofing underlayment into manageable lengths. Align over the center of the valley, hip or ridge. Remove release film. Press the middle of the membrane first before working toward the edges. For open valleys, cover Water & Ice Protection roofing underlayment with metal valley liners.

### EAVES & RAKES

Cut Water & Ice Protection roofing underlayment into 10–15' pieces. Remove 2–3' of release film and align the edge of the membrane, sticky side down, so it overhangs the drip edge by 3/8" (10 mm). Continue to remove release film and press as you move across the roof. Use a hand roller and/or hand pressure to press into place.

Overlap end laps a minimum of 6". Ice & Water Shield roofing underlayment should reach a point 2' inside the interior wall line. Local codes may require additional courses.

If additional courses are required, the top lap must be at least 3".

### DRIP EDGES

At the rake edge, apply Ice & Water Shield roofing underlayment first and place drip edge on top. At the eave, apply drip edge first and place Ice & Water Shield roofing underlayment on top of the drip edge so that it overhangs drip edge by 3/8" (10 mm).

For standard installation details, follow the New Castle detail drawings. For nonstandard installation instructions, contact your local representative.

## Limitations

- Water & Ice Protection should be installed when air, roof deck and membrane temperatures are at or above 40°F (4.4°C).
- Water & Ice Protection should not be left exposed to sunlight for more than 30 days.
- Water & Ice Protection membrane should not be folded over the roof edge unless protected by a gutter or other flashing materials.
- The primary roof system must be ventilated to prevent excessive moisture build-up in the interior structure.
- Use caution during the installation of the membrane as it may become slippery when wet or covered with frost.
- Water & Ice Protection should not be used under metal roofs.
- Water & Ice Protection should not be used in contact with flexible PVC or PVC trim materials.
- Water & Ice Protection installed in 100% coverage will create an air and vapor barrier on the roof deck.

## Product Specifications

PHYSICAL PROPERTIES		
Surface	Black Granular	
Membrane	Rubberized Asphalt–Reinforced	
PRODUCT CHARACTERISTIC	UNITS	RESULTS
Roll Length (1, 2 sq)	feet	33, 65
Roll Weight (1, 2 sq)	lbs	35, 65
Roll Size (1, 2 sq)	sq ft	100, 195
Roll Width	inches	36
TYPICAL PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Thickness	ASTM D1970	55 mils
Low Temperature Flexibility	ASTM D1970	-25°F
Adhesion to Plywood at 75°F	ASTM D1970	30 lbs/ft
Lap Seam Adhesion at 75°F	ASTM D1970	40 lbs/ft
Sealability Around Nail	ASTM D1970	Pass
Slip Resistance	ASTM D1970	Pass
Thermal Stability	ASTM D1970	Pass
Moisture Vapor Permeance	ASTM D1970	0.05 perms
Water Absorption	ASTM D1970	1.50%
Maximum Load Machine Direction	ASTM D1970	55 lbs/in
Maximum Load Transverse Direction	ASTM D1970	30 lbs/in
Elongation at Break Machine Direction	ASTM D1970	30%
Elongation at Break Transverse Direction	ASTM D1970	45%
Tear Resistance Machine Direction	ASTM D1970	85 lbs
Tear Resistance Transverse Direction	ASTM D1970	55 lbs
PACKAGING INFORMATION		
Boxes (rolls) per pallet (1 sq or 2 sq)		42/20