# Waterproofing Underlayment

# Ice & Water Shield™ Applications Data Sheet

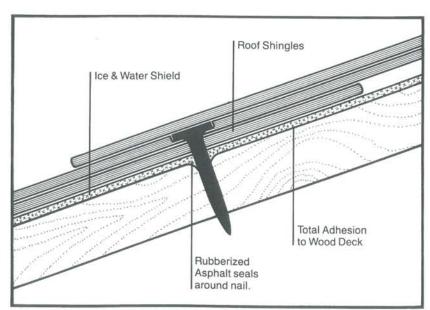
# **Product Usage**

Ice & Water Shield is a waterproofing membrane designed for use as an underlayment for roof surfacing systems for sloped roofs. Installed fully selfadhered to the roof deck or sheathing. the membrane is designed to protect against water damage to the roof deck or interior of the structure from water penetration due to wind-driven rain, ice dams, difficult architectural details. fastener penetrations, or errors in workmanship. Ice & Water Shield will perform equally well with any of several roof surfacing systems, including shingles, slate, shakes, tile or metal, or as an underlayment for most non-adhered flashing products.

## Performance Properties (Table 1)

Property	Value	<b>Test Method</b>
Color	Gray — Black	
Thickness-mils	40 min.	_
Tensile Strength — psi	250 min.	ASTM D412 (Die C) modified
Elongation — ultimate failure of rubberized asphalt — %	250 min.	ASTM D412 (Die C) modified
Pliability — 180° bend (1" mandrel at – 25°F)	Unaffected	ASTM D146
Adhesion to plywood-lb./inch width	3.0 min.	See footnote 1

Footnote 1: A 3" × 7" sample of membrane is applied to a plywood substrate and rolled with a 13 kg. roller. After 7 days storage at 70°F, the sample is peeled from the substrate at 180° at rate of 2" per minute.



Seals around nails, or fasteners, fully adhered to deck—water can't get under Ice & Water Shield.

### Description

Ice & Water Shield Membrane is composed of two waterproofing materials—rubberized asphalt and polyethylene. The rubberized asphalt surface is backed with a release paper. During application the release paper is removed allowing the rubberized asphalt to bond tightly to the roof deck. Ice & Water Shield is supplied in rolls 36" wide and 75' long. It is self-adhesive and can be applied in all temperatures down to 40°F.

#### Specification

Roof decks shall be treated with a self-adhering membrane of rubberized asphalt integrally bonded to polyethylene sheeting (Ice & Water Shield, manufactured by W. R. Grace & Co.) The material shall conform to Table 1 Performance Properties.

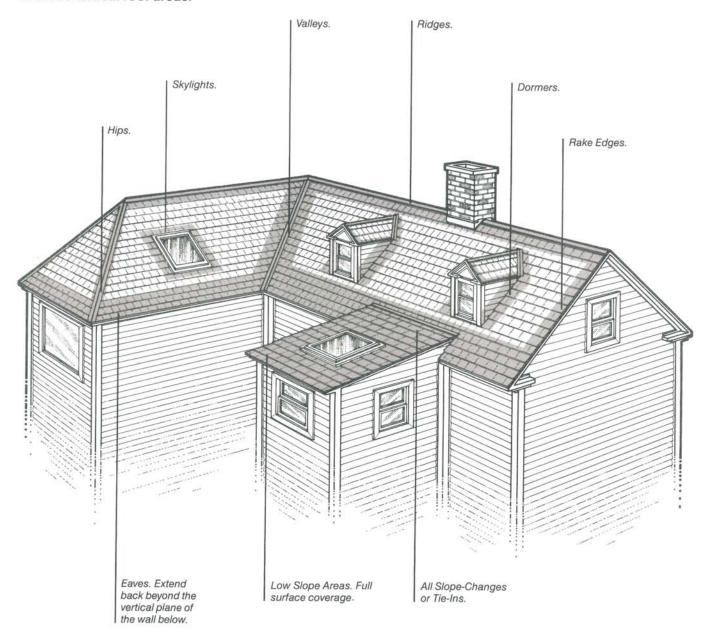
#### Features and Benefits

- Self-Adhesive: The membrane bonds firmly to the roof deck. Water cannot seep under the membrane.
- Esthetically Pleasing: Ice & Water Shield is concealed by the shingles, preserving the architectural appearance of the roof.
- Self-Sealing: The rubberized asphalt layer seals around nails, thus avoiding potential source of leaks,
- Dual Barrier Protection: Rubberized asphalt and polyethylene are combined in the two waterproofing barriers that provide maximum protection.
- Membrane will not Crack, Dry Out, or Rot: Resists attack from fungus and bacteria
- Proven Waterproofing Materials: Ice
   Water Shield is a modification of W.R.
   Grace's Bituthene® Waterproofing System.
   The latter has been used for structural waterproofing for 20 years.

#### **Precautions and Limitations**

- 1. Ice & Water Shield membrane must not be left permanently exposed to sunlight.
- 2. Ice & Water Shield is a vapor barrier. When the entire deck is covered by the membrane, space under the deck must be properly ventilated.

# Use Ice & Water Shield on all of these critical roof areas.



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