MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

W.R. Grace & Co.
62 Whittmore Avenue
Cambridge, MA 02140

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Grace Ice & Water Shield®

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 02-1113.02 and consists of pages 1 through 5.
The submitted documentation was reviewed by Jorge L. Acebo.

PRODUCT CONTROL ACCEPTED

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: Underlayment
Materials: SBS

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

Product	Dimensions	Test Specifications	Product Description
Grace Ice & Water Shield®	Thickness 40 mils, 36" x 75'.	ASTM D1970	Self-adhering SBS modified, bitumen underlayment membrane reinforced with polyethylene film.
Bituthene® P-3000 Primer			Primer for masonry or concrete surfaces.
Bituthene® Water Based Primer			Water-based surface primer applied in lieu of P-3000.
Bituthene® Liquid Membrane			For application at transition between unlike materials at angles of 60 Deg. or greater.

EVIDENCE SUBMITTED

Test Agency	Test Identifier	Test Name/Report	Date
Housing and Urban Development Release		1056C	07/17/91
International Conference of Building Officials Report		3997	12/19/89
Construction Research Laboratory, Inc.		5670	10/12/92
Underwriters Laboratories		88NK3269	09/28/88
		R1339	11/01/93
		R7910	11/01/93
Warnock-Hersey		PA 103	08/24/93
Simpson, Gumpertz & Heger, Inc.		ASTM D 570-81	11/06/93
		ASTM D E96-90	11/06/93
PRI Asphalt Technologies	WRG-017-02-01	ASTM D1970	10/17/05

APPROVED ASSEMBLIES:

Deck Type 1:	Wood
Deck Description:	$^{19}/_{32}$" or greater plywood or wood plank
System Type A(1):	Anchor sheet mechanically fastened.
Prepared Roofing:	Any prepared roof covering assembly with a current Miami-Dade County Notice of Acceptance listing Grace Ice & Water Shield® as an approved underlayment for the assembly.

All General and System limitations apply.

Anchor Sheet:	One or more plies of ASTM D 266 Type II or ASTM D 2626 with a minimum 4" side lap and a 6" end lap mechanically fastened to deck with approved nails and tin caps 6" o.c. at the laps and two staggered rows 12" o.c. the field of the roll.
Grace Ice & WaterShield®:	Cut Grace Ice & Water Shield® membrane into 10 to 15 feet lengths and reroll. Peel back 1 to 2 feet length of release paper, align membrane on the lower edge of the roof and place the 'first' 1 to 2 feet length of membrane. Pull the release paper under the membrane and continue to peel it from the membrane, while pressing the membrane in place. Roll lower edges firmly with a wallpaper or other type hand roller. Always begin application at low point of the roof, applying membrane in shingle fashion to shed water. Grace Ice & Water Shield® shall be overlapped to shed water a minimum of 3½". End laps shall be a minimum of 6". Membrane shall not be applied to the exposed face of the roof edge.
Valleys:	For valley application, peel the release paper, center the sheet over the valley or ridge, drape and press it in place, working from the center of the valley or ridge outward in each direction. Apply membrane starting at the low point and work upwards. Valley assemblies require double application.
Eave Termination:	Metal drip of eave edges shall be installed over the primary membrane.

WOOD DECK SYSTEM LIMITATIONS:

1. Joints in plywood or wood planks shall not be greater than $^{1}/_{8}$ of an inch wide.
2. All wood decks shall be fastened in accordance with applicable building code, and all existing fasteners shall be reseated to avoid any protruding fastener heads.
3. Bituthene Liquid Membrane shall be applied at all angles greater than 60°, or where unlike materials join. Bituthene Liquid Membrane fillet shall be applied in compliance with detail 'A'.

Deck Type 3:	Concrete Decks, Non-insulated
Deck Description:	2500 psi structural concrete or concrete plank
System Type A(2):	Grace Ice & Water Shield® fully adhered to primed concrete deck.
Prepared Roofing:	Any prepared roof covering assembly with a current Miami-Dade County Notice of Acceptance listing Grace Ice and Water Shield® as an approved underlayment for the assembly.

Note: Concrete decks shall be fully primed and allowed to dry prior to the application of Grace Ice & Water Shield®

Deck Primers:	Bituthene Water Based Primer: A water based primer packaged as a concentrate to be mixed 50% with water, and applied at minimum rate of 500 ft^2 / gal. Bituthene P-3000 Primer: A solvent rubber-based primer applied at minimum rate of 250ft^2 / gal.
Grace Ice and WaterShield®:	Cut Grace Ice & Water Shield® membrane into 10 to 15 feet lengths and reroll. Peel back 1 to 2 feet lengths of release paper, align membrane on the lower edge of the roof and place the first 1 to 2 feet lengths of membrane. Pull the release paper under the membrane and continue to peel it from the membrane in place. Roll lower edges firmly with a wallpaper or other type hand roller. Always begin at low point of the roof, applying membrane in shingle shingle fashion to shed water. Grace Ice & Water Shield® shall be overlapped to shed water a minumum of $3^1/_2$". End laps shall be minimum of 6". Membrane shall not be applied to the exposed face of the roof edge.
Valleys:	For valley application, peel the release paper, center the sheet over the valley or ridge, drape and press it in place, working from the center of the valley or ridge outward in each direction. Apply membrane starting at the low point and work upwards. Valley assemblies require double application.
Eave Termination:	Metal drip of eave edges shall be installed over the primary membrane.
Maximum Design Pressure:	(As listed in the prepared roofing sytem's Notice of Acceptance)

CONCRETE DECK SYSTEM LIMITATIONS:

1. Grace Ice & Water Shield® shall only be applied over smooth, clean, dry, properly primed structural concrete decks.
2. Bituthene Liquid Membrane shall be applied at all angles greater than 60^0, or where unlike materials join. Bituthene Liquid Membrane fillet shall be applied in compliance with detail 'A'.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance.
2. Grace Ice & Water Shield® shall not be left exposed to weather for longer than 30days.
3. All bonding surfaces shall be clean, dry and free from sharp or uneven edges.
4. Primer is required on all concrete and masonry surfaces.
5. All work shall be performed by a Dade County licensed roofing contractor. Contractor shall be familiar with the details and specifications published by the manufacturer.
6. Minimum deck requirements shall be in compliance with applicable building code.
7. Grace Ice & Water Shield® shall not be applied over an existing roof membrane as a recover system but may be applied over a roofing Base/Anchor sheet underlayment.
8. Grace Ice & Water Shield® may be used with any approved roof covering Notice of Acceptance listing Grace Ice & Water Shield® as a component part of an assembly in the Notice of Acceptance. If Grace Ice & Water Shield® is not listed, a request may be made to the Authority Having Jurisdiction (AHJ) or the Miami-Dade County Product Control Department for approval provided that appropriate documentation is provided to detail compatibility of the products, wind uplift resistance, and fire testing results.
9. All nails in the deck shall be carefully checked for protruding heads. Re-fasten any loose decking panels. Sweep the deck thoroughly to remove any dust and debris prior to application.
10. Grace Ice & Water Shield® may be used in Asphaltic shingles, wood shakes and shingles, quarry slate roof assemblies. Grace Ice & Water Shield® shall not be used as roof tile underlayment.
11. When applying the membrane in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in both directions.
12. Roll or broom the entire membrane surface so as to have 100% contact with the surface, giving special attention to overlap areas.
13. Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.
14. All membranes shall bear the imprint or identifiable marking of the manufacturer's name or logo, or following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade logo.

END OF THIS ACCEPTANCE