



MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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

PRODUCT CONTROL NOTICE OF ACCEPTANCE

W.R. Grace & Co. -Conn.
62 Whittemore Avenue
Cambridge MA 02140

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT SECTION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

Your application for Product Approval of:

SBS Modified Roofing Underlayment

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This approval shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at anytime from a jobsite or manufacturer's plant for quality control testing.

If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

Acceptance No.: 99-1108.05

Expires: 01/14/2003

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS

BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director

Miami-Dade County
Building Code Compliance Office

Approved: 01/14/2000



ROOFING SYSTEM APPROVAL

Applicant:
W.R. Grace & Company
62 Whittmore Avenue
Cambridge, MA 02140

Category:
Sub-Category:
Type:
Sub-Type:

Prepared Roofing

Underlayment
Self Adhered Membrane, SBS

Product Control No.: 99-1108.05
Approval Date: January 14, 2000
Expiration Date: January 14, 2003

**TRADE NAMES OF PRODUCTS MANUFACTURED OR
LABELED BY APPLICANT**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Grace Ice & Water Shield®	Thickness 40 mils, 36" x 75'.		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.



Frank Zuloaga, RRC
Roofing Product Control Examiner

EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
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
Underwriters Laboratories		R1339	11/01/93
Underwriters Laboratories		R7910	11/01/93
Warnock-Hersey		Dade County Protocol	08/24/93
Vipin Tolat, P.E.		ASTM Confirmation Tests	11/06/92
Simpson, Gumpertz & Heger, Inc.		ASTM D 570-81	11/06/93
Simpson, Gumpertz & Heger, Inc.		ASTM D E96-90	11/06/93



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Systems

- Deck Type 1:** Wood
- Deck Description:** 19/32" or greater plywood or wood plank
- System Type A(2):** Anchor sheet mechanically fastened.
- Prepared Roofing:** Any prepared roof covering assembly with a current Miami-Dade County Notice of Acceptance that lists Grace Ice & Water Shield® as an approved underlayment for the assembly.

All General and System limitations apply.

Anchor Sheet: Anchor sheet shall be a minimum of one ply of ASTM D 226 Type II, ASTM D 2626, or (equivalent approved underlayment) installed in a shingle fashion with a minimum 4 inch headlap, and 6 inch endlaps. Anchor sheet shall be fastened 6" o.c. at the 4" headlaps, and with two staggered rows of 12" o.c. in the field of the sheet with corrosion resistant ring shank nails and tin-caps.

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 3-½". 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.

Maximum Design Pressure: (As listed in the prepared roofing system's Notice of Acceptance)

Fire Classification: (As listed in the prepared roofing system's Notice of Acceptance)


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**Wood Deck
System Limitations:**

- 1 Joints in plywood or wood planks shall not be greater than 1/8 inch wide.
- 2 All wood decks shall be fastened to meet the requirements set forth in chapter 29 of the SFBC., and all existing fasteners shall be resealed 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, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type D: 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 that lists Grace Ice and Water Shield® as an approved underlayment for the assembly.

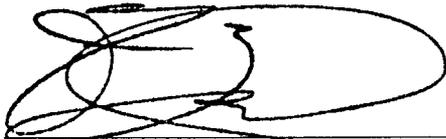
All General and System limitations apply.

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 ft² / gal.

Bituthene P-3000 Primer:
A solvent rubber-based primer applied at minimum rate of 250ft² / gal.



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Grace Ice and WaterShield®: Cut Grace Ice & Water Shield® membrane into 10 to 15 foot 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 minimum 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)

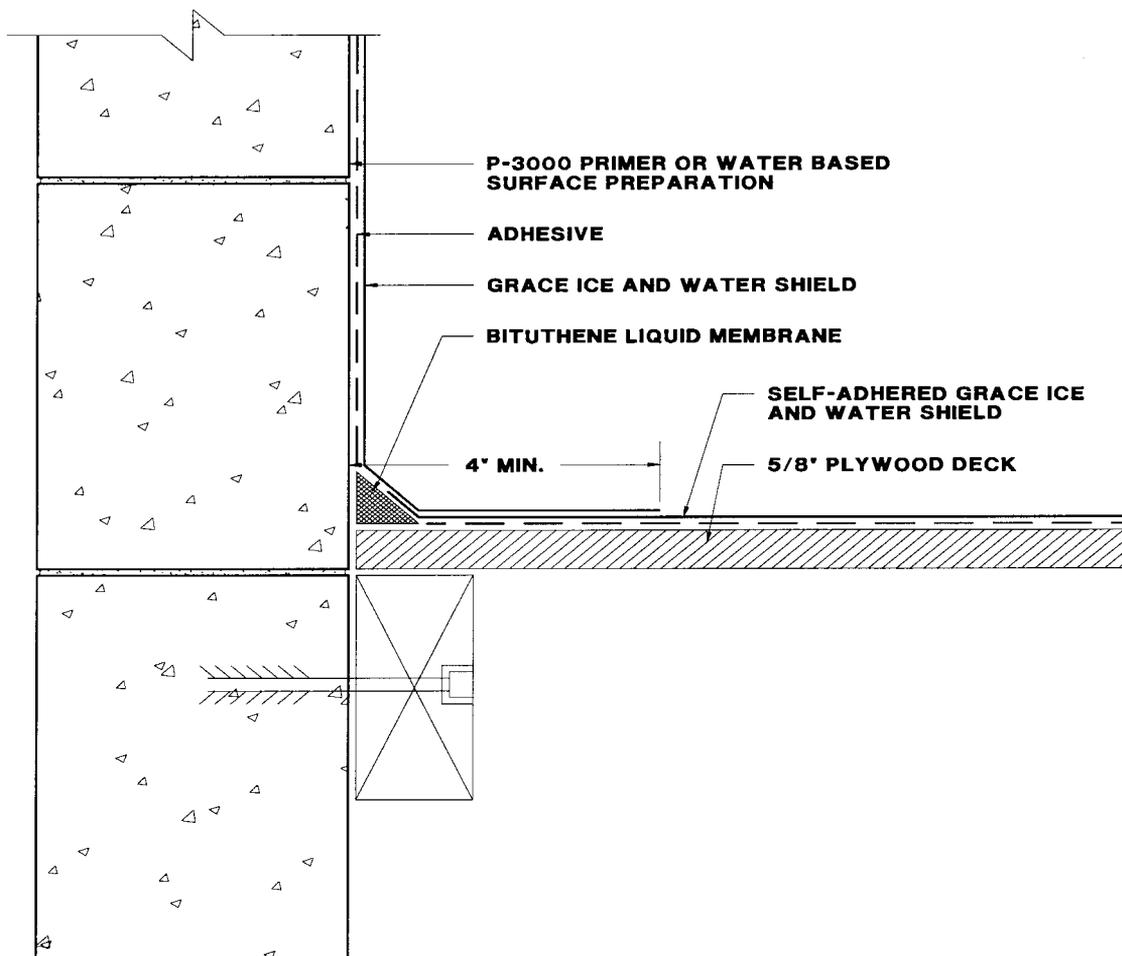
Maximum Fire Classification: (As listed in the prepared roofing sytem's Notice of Acceptance)

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 600, or where unlike materials join. Bituthene Liquid Membrane fillet shall be applied in compliance with detail 'A'.



DETAIL A



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General Limitations:

- 1 Grace Ice & Water Shield® shall not be left exposed to sunlight. It must be covered with a prepared roofing surface within 30 days.
- 2 All bonding surfaces shall be clean, dry and free from sharp, or uneven edges.
- 3 Primer is required on all concrete and masonry surfaces.
- 4 Grace Ice & Water Shield® is a component of sloped roof assemblies and is approved for use only with roof assemblies having a current Notice of Acceptance listing Grace Ice & Water Shield® as an approved underlayment system.
- 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.



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

**ACCEPTANCE NO: 99-1108.05
APPROVED : January 14, 2000
EXPIRES : January 14, 2003**

NOTICE OF ACCEPTANCE STANDARD CONDITIONS

- 1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
- 2 Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
- 3 Renewals of Acceptance will not be considered if:
 - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
 - b) The product is no longer the same product (identical) as the one originally approved;
 - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
 - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
- 4 Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
- 5 Any of the following shall also be grounds for removal of this Acceptance:
 - a) Unsatisfactory performance of this product or process;
 - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
- 6 The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
- 7 A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The copies need not be resealed by the engineer.
- 8 Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
- 9 This Acceptance contains pages 1 through 9

END OF THIS ACCEPTANCE


Frank Zuloaga, RRC
Roofing Product Control Examiner