



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 & Company
6050 West 51 Street
Chicago, IL 60638

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, including the High Velocity Hurricane Zone.

DESCRIPTION: Bituthene® Waterproofing Membrane Systems

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 revises NOA # 03-0630.04 and consists of pages 1 through 4.
The submitted documentation was reviewed by Frank Zuloaga, RRC.

NOA No 04-0114.03
Expiration Date: 11/09/08
Approval Date:
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WATERPROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Waterproofing

Materials: Asphalt
Maximum Design Pressure N/A.
Fire Classification: N/A

Note: Fire classifications and maximum design velocity pressures are not relevant to this system.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

<u>Product</u>	<u>Product Description</u>
Bituthene® 3000 Waterproofing Membrane	Consists of 1.4 mm of rubberized asphalt and 0.1 mm of cross-laminated, high density polyethylene film.
Bituthene® 4000 Waterproofing Membrane	Consists of 1.4 mm of rubberized asphalt and 0.1 mm of cross-laminated, high density polyethylene film.
Bituthene® System 4000 Surface Conditioner	For use with Bituthene 4000 membrane system. Water-based latex surface conditioner used for all concrete, masonry and wood surfaces.
Bituthene® Solvent-Based Primers	Rubber-based primers in solvent used to prime all concrete, masonry and wood surfaces.
Bituthene® Water-Based Primers	Water-based latex primers used to prime all concrete, masonry and wood surfaces.
Bituthene® Deck Prep® Surface Treatment	A low viscosity, 2-component asphalt-modified coating used to smooth and level rough decks prior to installing the Bituthene waterproofing membrane.
Bituthene® Liquid Membrane	A 2-component, cold-applied trowel grade waterproofing material used to flash corners, form fillets and detail hard-to-reach areas.
Bituthene® Mastic	Rubberized asphalt-based mastic used to seal membrane terminations.
Bituthene® Protection Board Adhesive	Fast drying, rubber-based cement used to adhere polystyrene protection board and insulation.
Hydroduct® Tape	A 2-sided, highly aggressive adhesive tape that is specially formulated to adhere Hydroduct drainage composites or expanded or extruded polystyrene protection board to the membrane.
Hydroduct® 200	Consists of a nominal 0.375 in. (10 mm) thick drainage core and a high performance geotextile.
Hydroduct® 220	Consists of a nominal 0.375 in. (10 mm) thick drainage core and a high performance geotextile with a high strength backing film.
Hydroduct® 225	Consists of a nominal 0.43 in. (10.9 mm) thick drainage core and a high performance geotextile with a high strength backing film.
Hydroduct® 660	Consists of a nominal 0.375 in. (10 mm) thick drainage core and a high performance geotextile.
Hydroduct® Coil 600	Dual profile drainage composite consisting of a combination of low and high profile drainage core.

APPROVED SYSTEMS

Deck Type 1: Concrete Decks

Deck Description: Min. 2500 psi, dual slab construction

System Type A: Bituthene® Waterproofing Systems

Surface Condition: New concrete shall be water cured and be in place for 14 days minimum. Concrete surface must be smooth, monolithic and free of voids, spalled areas, loose substrate and sharp protrusions, dirt and debris, and contain no visible coarse aggregate. Repair defects such as spalled or poorly consolidated areas. To smooth and level surface use Bituthene® Deck Prep Surface Treatment. Allow concrete to dry thoroughly following rain.

Properly seal all joints with waterstop, joint filler and sealant as required. Allow sealant to fully cure. Prestrip all slabs and wall cracks over $\frac{1}{16}$ " wide and all construction and control joints with 9" wide membrane.

Priming: Apply Bituthene® water-based primer by spray or roller at coverage rate of 500-600 ft²/gal. Other Bituthene® primers shall be applied by lamb's wool roller at a coverage rate of 250-300 ft²/gal. Re-prime areas if contaminated by dust. (System 4000 only) Bituthene® Surface Conditioner shall be sprayed to prepared surface at a rate of 300ft²/gal. Allow surface to dry completely before membrane application.

Surfaces treated with Deck Prep surface treatment do not require conditioning or priming.

Membrane: Apply membrane from the low point to the high point so that laps shed water. Overlap all seams maintaining a minimum 2.5 inch side lap and end lap. Peel back release and roll the entire membrane firmly and completely. Seal all T-joints and membrane terminations with Bituthene liquid membrane at the end of the day.

Flashing: At the juncture of all vertical sections with the deck surface, such as parapet walls, columns and all projections through the deck, apply membrane on wall and deck to within 1" of corner. Treat the inside corner by installing a $\frac{3}{4}$ " fillet of Bituthene® Liquid Membrane. Extend Bituthene® Liquid Membrane at least 3" onto deck membrane and wall membrane. Terminate top of membrane wall flashing with Bituthene® Mastic, Bituthene® Liquid Membrane or termination bar.

Membrane Protection: Hydroduct drainage composite shall be required for both active drainage and membrane protection.

Integrity Test: Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required.

Inspect the membrane thoroughly before covering and make any repairs. Patch tears and inadequately lapped seams with membrane. Slit fish-mouths and repair with a patch extending 6" in all directions from the slit and seal edges of the patch with Bituthene® Mastic.

Verify that the structure can support the deadload weight of a watertight test before proceeding. Plug drains and provide necessary barriers to contain flood water. Flood deck with 2" head of water and check for leaks after 24 hours. Any leaks found shall be repaired immediately and the area shall be retested. Perform flood test one day after completing the application of Bituthene® Waterproofing System.

Inspection:

Inspection shall be witnessed by the Building Official, the building owner's representative, general contractor, architect/engineer, waterproofing contractor.

Surfacing:

Structural Concrete Slab, minimum 2500 psi. Surfacing shall comply with the applicable Building Code.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. A copy of the integrity test described herein in accordance with ASTM 5957, shall be provided to the Building Official for review at time of final inspection.
3. All work shall be performed by a Contractor licensed to do roofing/waterproofing. Contractor shall be familiar with the details and shall be approved by W.R. Grace.
4. Flashings shall be installed according to the manufacturer's published standard details and shall be submitted to the Building Official for review.
5. Bituthene Waterproofing Membrane Systems shall not be exposed to the weather and shall be protected by a Hydroduct® drainage composites.
7. Contractor shall submit to the Building Official for review the system specifications and details. Submission of these documents, as well as the proper application and installation of all materials shall be the sole responsibility of the contractor.
9. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and the wind load requirements of applicable Building Code.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Specification</u>	<u>Date</u>
Simpson Gumpertz & Heger, Inc.		Physical Properties	1992
PRI Asphalt Technologies		Physical Properties	2000

END OF THIS ACCEPTANCE