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)

American Hydrotech, Inc.
303 East Ohio Street Suite 2700
Chicago, IL 60611

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: American Hydrotech Waterproofing

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 consists of pages 1 through 13.
The submitted documentation was reviewed by Frank Zuloaga, RRC

ROOFING ASSEMBLY APPROVAL

Category:	Roofing
Sub-Category:	Waterproofing
Material	Hot Rubberized Asphalt
Deck Type:	Concrete
Maximum Design Pressure	**-237.5 psf**
Fire Classification:	N/A

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product	Dimensions	Test Specification	Product Description
MM6125	Available in 50 or 500 lb Drums	CGSB-37.50-M89	Single component, rubberized asphalt compound.
Flex-Flash UN	60 mils thick 6", 12", 18", 36" x 50' & 100' rolls	TAS 110	Uncured neoprene flashing, for exposed applications.
Flex-Flash F	6", 12", 39" x 360' & 600' rolls	N/A	Spun-bonded polyester fabric reinforcement.
Surface Conditioner	5 gal or 55 gal	N/A	Single component, asphalt modified solvent base polymer primer for concrete surfaces.
Hydroflex 30	90 mil	N/A	Fiberglass reinforced, rubberized asphalt protection course.
Hydrodrain 100	.25" x 4' x 75' roll	N/A	Single-sided drainage composite with filter fabric bonded to one side of drainage core. For use in vertical applications over 25 ft. or under vehicular traffic applications.
Hydrodrain 102	.25" x 4' x 75'	N/A	Double-sided drainage composite filter fabric bonded to both sides of drainage core. For use in vertical applications over 25 ft. or under vehicular traffic applications.
Hydrodrain 300	.22" x 4' x 75'	N/A	Single sided drainage composite with filter fabric bonded to one side of the drainage core. For use in vertical applications under 25 ft. or under pedestrian traffic applications.

Product	Dimensions	Test Specification	Product Description
Hydrodrain 302	.22" x 4'x 75'	N/A	Double-sided drainage composite with filter fabric bonded to both sides of the drainage core. For use in vertical applications under 25 ft. or under pedestrian traffic applications.
Hydrodrain 1000	.25" x 4' x 50'	N/A	Double-sided drainage composite with filter fabric bonded to one side of the core and polyethylene laminate protection sheet bonded to the backside of the core. For use in both vertical and horizontal applications.
Hydrodrain AL	54" x 100' roll	N/A	Singe-sided blue composite with filter fabric bonded to one side of the core. For use in split-slab construction and vented paver configurations.
MM7800	5 gallon pail	N/A	Single component, cold applied rubberized asphalt-waterproofing membrane.
LM6090	5 gallon pail	N/A	Cold-applied elastomeric asphalt membrane flashing.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

Product	Dimensions	Test Specification	Product Description	Manufacturer (With current NOA)
Foam Insulation	Various Min. 40 psi	TAS 110	Extruded Polystyrene Insulation (XPS)	Dow Chemical USA
ChemRex PL adhesive	Tubes and 1, 5 and 55 gallons pails	ASTM C 557 ASTM 3498	Polyurethane Construction adhesive.	ChemRex, Inc.
Plaza Paver	24" x 24" x 1-¾" min. 7500 psi		Concrete Pavers	Westile
Roof tiles	various min. 3000 psi		Pre-manufactured tiles for use as roof surfacing.	Generic
Portland Cement	94 lb. Bags	ASTM C 220	Type I Portland Cemene.	Generic

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Specification	Date
Inchape Testing Services	488-0111-01	CAN/CGSB 37.50-M89	02/04/97
Factory Mutual Research	3003756	Class 4470	04/10/2000
IRT of S. Florida	00003-00008	PA 114	05/12/200

APPROVED APPLICATIONS:

Deck Type 3 Concrete Decks, Roof Plaza Decks, Parking Decks, New Construction

Deck Description: Min. 2500 psi, dual slab construction (roof plaza and parking decks)

System Types F: MM 6125, Reinforced or un-reinforced systems

Substrate Preparation: All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of unapproved curing compounds, form release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

The substrate shall be cleaned to remove loose debris. Apply the surface conditioner to the concrete using a hand held sprayer evenly at a rate of 300 to 600 SF/gallon (7.4 - 14.7 m^2/L) depending on surface texture. Surface conditioner should "tan" the surface, not blacken it. Allow sufficient time for the surface conditioner to thoroughly dry prior to the membrane application. A final check of the substrate must be made to determine that the substrate has been properly cleaned and a test patch of Monolithic Membrane 6125 shall be applied to the surface to check adhesion. Apply 6" wide strips of Flex-Flash UN or Flex-Flash F at the junction of all vertical and horizontal surfaces, changes in plane and expansion joints.

Concrete around drain shall be depressed to promote positive water drainage.

Membrane Flashing: All prepared cracks, expansion joints, base flashings, penetrations and junctures at horizontal/vertical changes in plane shall be primed and flashed with MM 6125 Hot Applied Liquid Membrane prior to the application of the field membrane.

All cracks greater than $^1/_{16}$" wide shall be covered with Flex-Flash UN or Flex-Flash F reinforcement fabric in 6" minimum width strips

Expansion joints, Flex-Flash UN shall be installed in accordance with manufacturer's published literature.

Apply one sheet Flex-Flash UN extending 6 inches beyond the drain flange on all sides and secured by the clamping ring to the drain. Drain must be maintained free to weep at membrane level.

Base Coat: Membrane shall be applied at a rate to provide a continuous, monolithic coat of 180 mil minimum thickness for non-reinforced systems, and 90 mil minimum for reinforced systems.

Reinforcement: **For reinforced systems**, embed a layer of spunbonded polyester fabric reinforcing sheet into the hot applied MM 6125 membrane while it is still hot. Overlap fabric reinforcing sheet 2 inches with membrane between sheets. No reinforcement required for un-reinforced systems.

Top Coat: **For reinforced systems**, apply a continuous monolithic coat of MM 6125 membrane at a minimum thickness of 125 mil over the reinforcement sheets. Total membrane thickness for reinforced systems shall not be less than 215 mils thick. No top coat required for un-reinforced systems.

Protection Course: The MM 6125 membrane shall receive a protection course of Hydroflex 30 or other approved protection while MM 6225 is still hot. Overlap adjoining sheet edges (dry) a minimum of 2-3" (50.8 mm - 76.2 mm), to insure complete coverage.

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.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. All defects shall be corrected.

Surfacing: Structural Concrete Slab, minimum 2500 psi shall be designed to comply with applicable Building Code requirements.

Deck Type 3 Concrete Decks, Roof Plaza Decks, Parking Decks, New Construction

Deck Description: Min. 2500 psi, dual slab construction (roof plaza and parking decks)

System Types F: MM 6125, Reinforced or un-reinforced systems

Substrate Preparation: All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of unapproved curing compounds, form release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

The substrate shall be cleaned to remove loose debris. Apply the surface conditioner to the concrete using a hand held sprayer evenly at a rate of 300 to 600 SF/gallon (7.4 - 14.7 m^2/L) depending on surface texture. Surface conditioner should "tan" the surface, not blacken it. Allow sufficient time for the surface conditioner to thoroughly dry prior to the membrane application. A final check of the substrate must be made to determine that the substrate has been properly cleaned and a test patch of Monolithic Membrane 6125 shall be applied to the surface to check adhesion. Apply 6" wide strips of Flex-Flash UN or Flex-Flash F at the junction of all vertical and horizontal surfaces, changes in plane and expansion joints.

Concrete around drain shall be depressed to promote positive water drainage.

Membrane Flashing: All prepared cracks, expansion joints, base flashings, penetrations and junctures at horizontal/vertical changes in plane shall be primed and flashed with MM 6125 Hot Applied Liquid Membrane prior to the application of the field membrane.

All cracks greater than $^1/_{16}$" wide shall be covered with Flex-Flash UN or Flex-Flash F reinforcement fabric in 6" minimum width strips

Expansion joints, Flex-Flash UN shall be installed in accordance with manufacturer's published literature.

Apply one sheet Flex-Flash UN extending 6 inches beyond the drain flange on all sides and secured by the clamping ring to the drain. Drain must be maintained free to weep at membrane level.

Base Coat: Membrane shall be applied at a rate to provide a continuous, monolithic coat of 180 mil minimum thickness for non-reinforced systems, and 90 mil minimum for reinforced systems.

Reinforcement: **For reinforced systems**, embed a layer of spunbonded polyester fabric reinforcing sheet into the hot applied MM 6125 membrane while it is still hot. Overlap fabric reinforcing sheet 2 inches with membrane between sheets. No reinforcement required for un-reinforced systems.

Top Coat: **For reinforced systems**, apply a continuous monolithic coat of MM 6125 membrane at a minimum thickness of 125 mil over the reinforcement sheets. Total membrane thickness for reinforced systems shall not be less than 215 mils thick. No top coat required for un-reinforced systems.

Protection Course: The MM 6125 membrane shall receive a protection course of Hydroflex 30 or other approved protection while MM 6225 is still hot. Overlap adjoining sheet edges (dry) a minimum of 2-3" (50.8 mm - 76.2 mm), to insure complete coverage.

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.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. All defects shall be corrected.

Insulation: Loose laid over protection course a minimum 2" thick Extruded Polystyrene Foam Insulation minimum 40 psi compressive strength.

Surfacing: Structural Concrete Slab, minimum 2500 psi shall be designed to comply with applicable Building Code requirements.

Deck Type 3 Concrete Decks, Roof Plaza Decks, New Construction

Deck Description: Min. 2500 psi, slab construction (roof plaza decks)

System Types F: MM 6125, Reinforced

Substrate Preparation: All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of unapproved curing compounds, form release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

The substrate shall be cleaned to remove loose debris. Apply the surface conditioner to the concrete using a hand held sprayer evenly at a rate of 300 to 600 SF/gallon (7.4 - 14.7 m^2/L) depending on surface texture. Surface conditioner should "tan" the surface, not blacken it. Allow sufficient time for the surface conditioner to thoroughly dry prior to the membrane application. A final check of the substrate must be made to determine that the substrate has been properly cleaned and a test patch of Monolithic Membrane 6125 shall be applied to the surface to check adhesion. Apply 6" wide strips of Flex-Flash UN or Flex-Flash F at the junction of all vertical and horizontal surfaces, changes in plane and expansion joints.

Concrete around drain shall be depressed to promote positive water drainage.

Membrane Flashing: All prepared cracks, expansion joints, base flashings, penetrations and junctures at horizontal/vertical changes in plane shall be primed and flashed with MM 6125 Hot Applied Liquid Membrane prior to the application of the field membrane.

All cracks greater than $^1/_{16}$" wide shall be covered with Flex-Flash UN or Flex-Flash F reinforcement fabric in 6" minimum width strips

Expansion joints, Flex-Flash UN shall be installed in accordance with manufacturer's published literature.

Apply one sheet Flex-Flash UN extending 6 inches beyond the drain flange on all sides and secured by the clamping ring to the drain. Drain must be maintained free to weep at membrane level.

Base Coat: Membrane shall be applied at a rate to provide a continuous, monolithic coat of 90 mil minimum thickness.

Reinforcement: Embed a layer of spunbonded polyester fabric reinforcing sheet into the hot applied MM 6125 membrane while it is still hot. Overlap fabric reinforcing sheet 2 inches with membrane between sheets.

Top Coat: Apply a continuous monolithic coat of MM 6125 membrane at a minimum thickness of 125 mil over the reinforcement sheets. Total membrane thickness for reinforced systems shall not be less than 215 mils thick.

Protection Course: The MM 6125 membrane shall receive a protection course of Hydroflex 30 or other approved protection while MM 6225 is still hot. Overlap adjoining sheet edges (dry) a minimum of 2-3" (50.8 mm - 76.2 mm), to insure complete coverage.

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.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. All defects shall be corrected.

Insulation: After integrity test apply a continuous monolithic coat of MM 6125 membrane at a minimum thickness of 125 mil over the protection course and insulation shall be imbedded in membrane while it is still hot. Butt edges of insulation together. A minimum 2" thick Extruded Polystyrene Foam Insulation with minimum 40 psi compressive strength.

Surfacing: Pavers (24" x 24 x 1 ¾" pre-manufactured concrete pavers) adhered to top of insulation with four evenly spaced ½' wide beads of ChemRex PL adhesive running the length of pavers. Paver edger shall be butted together.

Maximum Design Pressure: -95 psf (See General Limitation # 9)

Deck Type 3 Concrete Decks, Roof Plaza Decks, New Construction

Deck Description: Min. 2500 psi slab construction (roof plaza decks)

System Types F: MM 6125, Reinforced

Substrate Preparation:

All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of unapproved curing compounds, form release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

The substrate must be cleaned to remove loose debris. Apply the surface conditioner to the concrete using a hand held sprayer evenly at a rate of 300 to 600 SF/gallon (7.4 - 14.7 m^2/L) depending on surface texture. Surface conditioner should "tan" the surface, not blacken it. Allow sufficient time for the surface conditioner to thoroughly dry prior to the membrane application. A final check of the substrate must be made to determine that the substrate has been properly cleaned and a test patch of Monolithic Membrane 6125 shall be applied to the surface to check adhesion. Apply 6" wide strips of Flex-Flash UN or Flex-Flash F at the junction of all vertical and horizontal surfaces, changes in plane and expansion joints.

Concrete around drain shall be depressed to promote positive water drainage.

Membrane Flashing:

All prepared cracks, expansion joints, base flashings, penetrations and junctures at horizontal/vertical changes in plane shall be primed and flashed with MM 6125 Hot Applied Liquid Membrane prior to the application of the field membrane.

All cracks greater than $^1/_{16}$" wide shall be covered with Flex-Flash UN or Flex-Flash F reinforcement fabric in 6" minimum width strips

Expansion joints, Flex-Flash UN shall be installed in accordance with manufacturer's published literature.

Apply one sheet Flex-Flash UN extending 6 inches beyond the drain flange on all sides and secured by the clamping ring to the drain. Drain must be maintained free to weep at membrane level.

Base Coat: Membrane shall be applied at a rate to provide a continuous, monolithic coat of 90 mil minimum thickness.

Reinforcement: Embed a layer of spunbonded polyester fabric reinforcing sheet into the hot applied MM 6125 membrane while it is still hot. Overlap fabric reinforcing sheet 2 inches with membrane between sheets.

Top Coat: Apply a continuous monolithic coat of MM 6125 membrane at a minimum thickness of 125 mil over the reinforcement sheets. Total membrane thickness for reinforced systems shall not be less than 215 mils thick.

Protection Course: The MM 6125 membrane shall receive a protection course of Hydrocap 160 on while MM 6225 is still hot. Overlap adjoining sheet edges (dry) a minimum of 2-3" (50.8 mm - 76.2 mm), to insure complete coverage.

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.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. All defects shall be corrected.

Surfacing: Concrete tiles approved for exterior use (pre-manufactured concrete tiles) set on top of protection course with minimum 2" thick mortar bed. Mortar shall be a 3:1mix, three parts mansory sand to one part cement. Before setting tiles, dampen the back of each one and apply a slurry of mortar to ensure maximum contact with mortar bed. Tiles should then be carefully embedded in the mortar bed and tapped in place to insure full solid bearing.

Maximum Design Pressure: -237.5 psf (See General Limitation # 9)

GENERAL LIMITATIONS:

1. Required integrity flood testing shall be provided to the Building Official for review at time of final inspection.
2. All work shall be performed by a Contractor licensed to do roofing/waterproofing work in Miami-Dade County. Contractor shall be familiar with the details and shall be approved by American Hydrotech, Inc. American Hydrotech, Inc., Hot Applied Liquid Membrane Systems shall be installed solely by approved applicators and only with installation and heating equipment approved by American Hydrotech, Inc.
3. 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.
4. Flashings shall be installed according to the manufacturers published standard details, specific details, approved by American Hydrotech, Inc., shall be submitted to the Building Official for review.
5. American Hydrotech, Inc., Hot Applied Liquid Membrane Systems shall not be exposed to the weather and shall be protected by a protection sheet or other approved protection method from traffic.
6. American Hydrotech, Inc.,Hot Applied Liquid Membrane Systems shall not be installed without consultation with American Hydrotech, Inc., if ambient or surface temperature is below 0°F. Do not apply to wet or frozen concrete surface.
7. American Hydrotech, Inc., Hot Applied Liquid Membrane Systems shall not be installed over lightweight insulating concrete.
8. 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.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**