



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

American Permaquik
5500 Main Street, Suite B-1
Williamsville NY 14221

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:

Hot - Applied Rubberized Asphalt Membrane Waterproofing System

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.: 99-1102.07

Expires: 04/14/2003

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: 04/14/2000

1 of 10



ROOFING SYSTEM APPROVAL

<u>Applicant:</u> American Permaquik, Inc. 1591 Trinity Drive Mississauga, Ontario LST 1K4	Product Control No.: <u>99-1102.07</u>
<u>Category:</u> <u>Sub-Category:</u> <u>Type:</u> <u>Sub-Type:</u>	Approval Date: <u>April 14, 2000</u> Expiration Date: <u>April 14, 2003</u> Waterproofing Hot-Applied Rubberized Asphalt Reinforced, Non-reinforced Liquid Applied

System Trade Names:

Permaquik 6100

Insulation Types:

None

Maximum Design Pressures

<u>Material</u>	<u>Design Pressure</u>
Concrete	N/A

Maximum Fire Classification

See General Limitation #1

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

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
PQ 6100	55 gal. drums or 50 lb boxes	CGSB 37-GP-50M	Single component, hot applied rubberized asphalt compound for use in non-reinforced and reinforced applications.
PQ 6109	4, 20 and 205 liter containers and 5 gal. pails	CGSB 37-GP-9M	Concrete surface primer.
PQ 2016	6", 9", 18" or 39" x 200 yards	See Product Literature	Polyester spunbonded reinforcement fabric.
PQ 2047	6", 9", 12", 18", 24" or 36" x 100' x 47 mil	See Product Literature	Elastometric reinforcement and flashing.


Frank Zuloaga, RRC
Roofing Product Control Examiner

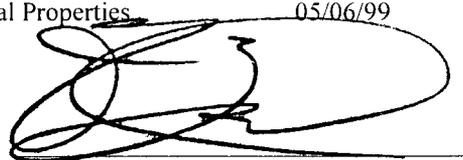
<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
PQ 2063	6", 9", 12", 18", 24" or 36" x 100' x 63 mil	See Product Literature	Elastometric reinforcement and flashing.
PQ 2450	36" x 48" x 0.1"	See Product Literature	Polypropylene protection board.
PQ 2550	1/8" or 1/4" thickness	See Product Literature	Semi-flexible asphaltic protection sheet.
PQ Uncured Neoprene	2" x 6" x 60 mil	See Product Literature	Reinforcement and flashing.
PQ Permaflex 10	300 ft ² x 50 mil thickness	See Product Literature	Rubberized asphalt separation / protection sheet.
Mechanical Fastening Bars.	1/8" x 1"	See Product Literature	Aluminum or galvanized metal fastened with non-corroding fasteners of similar material.
PQ 6800	5 gal. pails	ASTM C836 76.4	Asphalt modified urethane membrane.
PQ Super 200			Capillary cementitious waterproofing.
PQ Permacrete WF Expansion Joints		See Product Literature	Elastomeric concrete expansion joints with 2.5" and greater seals.
PQ 9000	20 liter containers and 205 liter drums	See Product Literature	Siloxane based water repellent.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY OTHERS

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Monsanto Hydaway 100	36" x 82' x 0.42"	See Product Literature	Subsurface Polyethelene Drainage System.
Monsanto Hydaway 300	38" x 82' x 0.42"	See Product Literature	Subsurface Polyethelene Drainage System.
Pacific Polymers Elastothane 227 High Shore	1 gallon & 5 gallon pails, 55 gallon drums	TT-S-227e A116.1-1967	Two-part, self leveling or gun grade, nonstaining, polyurathane sealant that cures at room temperature.
American Wick Drain #650	48" x 104' x 1/4" or 1/2"	See Product Literature	Woven or non-woven fabric subsurface Polyethelene drainage system.

EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
M. Nasiruddin & Associates LTD	19PA88-03	CGSB 37GP-50M	05/11/88
M. Nasiruddin & Associates LTD	1PC93-01	ASTM 896-84 ASTM 412 - 87 ASTM D 3408	01/17/94
Underwriters Laboratories, Inc.	R14468, 94NK17240	UL 790	04/27/93
Underwriters Laboratories, Inc.	R14468(N) 43NK9380	UL 790	04/12/93
Ministry of Transportation	OPSS 1213 DSM 9.90.15	CGSB 37GP-50M	05/88
Celotex Corporation Testing Services	520171	Physical Properties	05/06/99


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 Roofing Product Control Examiner

SYSTEMS

Deck Type 1 Concrete Decks, Insulated, New Construction

Deck Description: Min. 2500 psi, dual slab construction

System Type A: PQ 6100, non-insulated, un-reinforced

Substrate: Structural concrete shall be water cured a minimum of 14 days, 28 day cure recommended, prior to application of the membrane. Lightweight concrete shall be water cured a minimum of 30 days, 60 days cure recommended, prior to application of membrane. Venting the deck from the underside is recommended to facilitate drying of the lightweight deck. The curing method must be a water cure, wet coverings, paper sheets, plastic sheets or approved liquid curing compound such as sodium silicate.

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. Poured in place concrete must be monolithic, smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions. Precast concrete decks shall be mechanically secured to minimize differential movement and all joints between units shall be grouted.

The substrate must be cleaned to remove loose debris. A final check of the substrate must be made to determine that the substrate has been properly cleaned. Any defects which may impair performance of membrane shall be appropriately repaired. Commencement of work shall imply acceptance of surfaces.

Membrane Flashing: Flashing materials shall be PQ 2047 or PQ 2063 butyl reinforcement or PQ Uncured Neoprene.

A minimum of 6" (150 mm) reinforcement shall be centered over all joints and cracks. Upturns are to be reinforced to provide a minimum lap onto the horizontal and vertical of 6" (150 mm). Place reinforcement continuously and overlap a minimum of 6" (150 mm) using the membrane as an adhesive.

All cracks and non-working joints up to 1/8" (3 mm) in width to receive fabric reinforcement. Cracks and joints exceeding 1/8" (3 mm) in width and up to 1/4" (6 mm) will receive 47 mil elastomeric reinforcement. For all cracks and non-working joints exceeding 1/4" (6 mm) contact the membrane manufacturer.

Where reglets are detailed on verticals, ensure that reinforcement materials are terminated a minimum 3" (75 mm) below reglet, and carry hot membrane into reglet.

At expansion joints, apply a minimum membrane coat of 1/8" (3 mm) thickness on either side of joint and carry membrane a minimum of 3" (75 mm) beyond termination of 63 mil elastomeric reinforcement. For expansion joints of 1/2"

(12.8 mm) wide to 2" (50 mm) wide and designed for 50% movement, loop reinforcement into joint to a depth 1.5 times the width of joint and carry reinforcement a minimum of 6" (150 mm) from edge of joint on both sides. Apply a top coat of membrane to fill loop. For expansion joints at juncture of horizontal and vertical surfaces, reinforce as above and provide continuous mechanical fastening bar on vertical face of reinforcement fastened at 8" (200 mm) o.c. For vertical expansion joints, a continuous mechanical fastening bar over elastometric reinforcement on both sides of joint at 8" (200 mm) o.c. or as detailed in drawings.

At drains, lead flashing or minimum 18" (457 mm) square of 47 mil elastometric reinforcement shall be centered over drain with membrane being applied with a minimum 1/8" (3 mm) top coat of membrane and secured by clamping ring.

Primer: Prior to membrane application, spray or roll PQ 6109 Primer over concrete substrates at a coverage rate of 300 to 500 ft²/gal. (28 to 46 m²/L). Primer must be allowed to dry, with membrane following shortly thereafter to prevent excessive dusting.

Base Coat: Apply PQ 6100 membrane to a minimum thickness of 1/8" (3 mm) to all areas to receive reinforcement. Apply membrane to ensure that membrane extends a minimum of 3" (75 mm) beyond any reinforcement material.

Apply any necessary reinforcement over membrane immediately, while membrane is still warm and tacky to ensure adhesion. Ensure that no air pockets or fish-mouths exist.

Apply waterproofing membrane evenly to provide a continuous monolithic coating of not less than 1/8" (3.2 mm) and averaging 3/16" (4.5 mm) thickness over all horizontal and vertical surfaces.

Reinforcement: None.

Top Coat: None.

Integrity Test: Plug all drains and provide barriers to contain flood water. Apply a minimum water depth of 2" (50.8 mm) for a period of 48 hours. Verify that the structure can support the deadload weight of a watertest before testing. If leaks should occur, the water must be drained completely and the membrane installation repaired.

Protection Course: Place PQ 2450 or Permaflex 10 protection board over membrane as soon as possible and overlap a minimum of 1" (25 mm). Overlap protection board in a manner consistent with good drainage practices.



Surfacing Structural Concrete Slab, minimum 2500 psi., in compliance with the South Florida Building Code.

Maximum Design
Velocity Pressure: N/A

Maximum Fire
Classification: N/A

Maximum Slope: No limitation

A handwritten signature in black ink, appearing to read 'Frank Zuloaga', written over a horizontal line.

System Type B: PQ 6100, non-insulated, 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. Poured in place concrete must be monolithic, smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions. Precast concrete decks shall be mechanically secured to minimize differential movement and all joints between units shall be grouted.

The substrate must be cleaned to remove loose debris. A final check of the substrate must be made to determine that the substrate has been properly cleaned. Any defects which may impair performance of membrane shall be appropriately repaired. Commencement of work shall imply acceptance of surfaces.

Membrane Flashing: Flashing materials shall be PQ 2047 or PQ 2063 butyl reinforcement or PQ Uncured Neoprene.

A minimum of 6" (150 mm) reinforcement shall be centered over all joints and cracks or as detailed. Upturns are to be reinforced to provide a minimum lap onto the horizontal and vertical of 6" (150 mm) or as detailed. Place reinforcement continuously and overlap a minimum of 6" (150 mm) using the membrane as an adhesive.

All cracks and non-working joints up to 1/8" (3 mm) in width to receive fabric reinforcement or as detailed, cracks and joints exceeding 1/8" (3 mm) in width and up to 1/4" (6 mm) will receive 47 mil elastomeric reinforcement. For all cracks and non-working joints exceeding 1/4" (6 mm) contact the membrane manufacturer.

Where reglets are detailed on verticals, ensure that reinforcement materials are terminated a minimum 3" (75 mm) below reglet, and carry hot membrane into reglet.

At expansion joints, apply a minimum membrane coat of 1/8" (3 mm) thickness on either side of joint and carry membrane a minimum of 3" (75 mm) beyond termination of 63 mil elastomeric reinforcement. For expansion joints of 1/2" (12.8 mm) wide to 2" (50 mm) wide and designed for 50% movement, loop reinforcement into joint to a depth 1.5 times the width of joint and carry reinforcement a minimum of 6" (150 mm) from edge of joint on both sides. Apply a top coat of membrane to fill loop. For expansion joints at juncture of horizontal and vertical surfaces, reinforce as above and provide continuous mechanical fastening bar on vertical face of reinforcement fastened at 8" (200 mm) o.c. For vertical expansion joints, a continuous mechanical fastening bar over elastomeric reinforcement on both sides of joint at 8" (200 mm) o.c. or as detailed in drawings.

At drains, lead flashing or minimum 18" (457 mm) square of 47 mil elastomeric reinforcement shall be centered over drain with membrane being

applied with a minimum 1/8" (3 mm) top coat of membrane and secured by clamping ring.

Primer: Prior to membrane application, spray or roll Primer over concrete substrates at a coverage rate of 300 to 500 ft²/gal. (28 to 46 m²/L). Primer must be allowed to dry, with membrane following shortly thereafter to prevent excessive dusting.

Base Coat: Apply membrane to a minimum thickness of 3/32" (2 mm) to all areas to receive reinforcement.

Apply reinforcement over membrane immediately, while membrane is still warm and tacky to ensure adhesion. Ensure that no air pockets or fish-mouths exist.

Reinforcement: Apply an initial membrane coat of a minimum 3/32" (2 mm) thickness and follow immediately with PQ 2016 fabric reinforcement. Overlap fabric a minimum of 2" (50 mm) and ensure membrane is applied between fabric.

Top Coat: Top coat fabric reinforcement with a final coat of membrane to provide a total finished membrane thickness of a minimum 7/32" (5 mm).

Integrity Test: Plug all drains and provide barriers to contain flood water. Apply a minimum water depth of 2" (50.8 mm) for a period of 48 hours. Verify that the structure can support the deadload weight of a watertest before testing. If leaks should occur, the water must be drained completely and the membrane installation repaired.

Protection Course: Place PQ 2047 or PermafleX 10 protection board over membrane as soon as possible and overlap a minimum of 1" (25 mm). Overlap protection board in a manner consistent with good drainage practices.

Surfacing: Structural Concrete Slab, minimum 2500 psi.

Maximum Design Velocity Pressure: N/A

Maximum Fire Classification: N/A

Maximum Slope: No limitation



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 in this approval shall be provided to the Building Official at time of final inspection.
3. 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 specifications published by the manufacturer and shall be approved by the manufacturer.
4. The submission of system specifications and details shall accompany the Section II Building Code Permit Application. This information is available in the publications listed in the 'System Description' of this Product Control Approval. Submission of these documents, as well as the proper application and installation of all materials shall be the sole responsibility of the contractor.
5. Flashings shall be installed according to the manufacturers standard details, specific details, approved by the manufacturer, shall be submitted with the Section II Permit Application.
6. Permaquik Hot Applied Liquid Membrane Systems shall not be exposed and shall be protected by a protection sheet or other approved protection method from traffic.



Frank Zuloaga, RRC
Roofing Product Control Examiner

**American Permaquik, Inc.
1591 Trinity Drive
Mississauga, Ontario LST 1K4**

**ACCEPTANCE NO: 99-1102.07
APPROVED: April 14, 2000
EXPIRES: April 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 10

END OF THIS ACCEPTANCE



Frank Zuloaga, RRC
Roofing Product Control Examiner