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

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

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Carlisle Coatings & Waterproofing Incorporated
8810 W. 100th Street S.
Sapulpa OK 74066

Your application for Product Approval of:
CCW-500-R Waterproofing System w/Pavers
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.: 99-0412.02

Expires: 02/25/2003

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: 02/25/2000

Internet mail address: postmaster@buildingcodeonline.com **Homepage: http://www.buildingcodeonline.com**

PRODUCT CONTROL NOTICE OF ACCEPTANCE
ROOFING SYSTEM APPROVAL

Applicant:
Carlisle Coatings & Waterproofing Inc.
8810 West 100th Street-South
Sapulpa, OK 74066-1600

Product Control No.: **99-0412.02**
Approval Date: February 25, 2000
Expiration Date: February 25, 2003

Category: Waterproofing with Pavers
Sub-Category: Hot-Applied Rubberized Asphalt
Type: Reinforced, Non-reinforced
Sub-Type: Liquid Applied

System Trade Names:

CCW-500 Hot-Applied Liquid Membrane Waterproofing System

Insulation Types:

None

Maximum Design Velocity Pressures

Material	Design Velocity Pressure
Concrete	167.5 psf

Maximum Fire Classification

Material	Classification
Concrete	N\A

Frank Zuloaga RRC
Roofing Product Control Examiner

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

Product	Dimensions	Test Specification	Product Description
CCW-500 Hot-Applied Liquid Membrane	45 lb. Boxes	CGBS-37.50-M89	Single component, hot-applied Rubberized asphalt compound for Reinforced and non-reinforced applications
CCW-550 Primer	5 gal. Pails, 55 gal. Drums	See Product Literature	Concrete surface primer.
CCW Reinforcing Fabric	59" x 610 ft. rolls	See Product Literature	Polyester spunbonded reinforcement fabric.
CCW-711-90 Sheet Membrane and flashing	18, 36, 48" wide 45 ft./roll	See Product Literature	90 mil self-ashesive preformed flashing
CCW-711-150 Sheet Membrane and flashing	18, 36, 48" wide 25 ft./roll	See Product Literature	150 mil self-adhesive preformed flashing
CCW-704 Mastic	5 gal. Pails, 30 oz. Tubes	See Product Literature	Rubberized asphalt mastic for terminating flashing
CCW-703 V Liquid Membrane	4 gal. Kit	See Product Literature	Two-component liquid-applied membrane
CCW Protection Board H	0.125 in x 3ft. x 36 ft.	See Product Literature	Asphalt impregnated protection board
CCW Sure Drain H	4 ft. x 50 ft. roll	See Product Literature	Drainage composite, 0.375" core
CCW Sure Drain H-2	4 ft. x 50 ft. roll	See Product Literature	Drainage composite, 0.45" core
CCW-201 Sealant	1.5 gal. Kit	TT-S-227E	Multi-component polyurethane sealant

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PRODUCTS MANUFACTURED BY OTHERS

Product	Dimensions	Test Specification	Product Description	Manufacture
Concrete pavers	1' x 1' x 1½" thick	ASTM C936	8000 psi Min. Compressive strength, 5% water absorption max.	PaverModule
Concrete pavers	1' x 1' x 1½" thick	ASTM C936	8000 psi Min. Compressive strength, 5% water absorption max.	TREMRON
Mortar mix	3:1 mix		Three parts white masonry sand to one part cement (Tamrac Portland Cement Type I).	

EVIDENCE SUBMITTED

Test Agency	Test Identifier	Test Specification	Product Date
IRT of S. Florida, Inc..	C-99015 3.9.99	PA 114	March 1999

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SYSTEMS

Deck Type 1 Concrete Decks, New Construction

Deck Description: Min. 2500 psi

System Type A: CCW-500-R Hot Applied Liquid Membrane, reinforced

Substrate: New concrete shall be water cured and be in place for 14 days minimum, 21 days preferred. If curing agents are required, they must be of the self-dissipating type and be approved by the membrane manufacturer. Venting of the deck from the underside is recommended to facilitate drying. Deck shall be sloped to drain and all roof drains shall be the two stage with weep holes to provide drainage at the membrane level.

Substrate Preparation: Surface shall be structurally sound, dry, and free of dust, dirt, laitance, non-approved curing agent or other contamination which may affect adhesion of the membrane. Remove splatters, fins, ridges or other projections to provide a level surface. Fill holes, honeycombs, rock pockets, spalls or other voids and indentations with approved concrete patching compound. Grind or fill surface at cold joints where each pour is at a different plane to provide a smooth and level surface.

Saw cut cracks greater than 1/16" wide to 1/4" X 1/4". Saw cut a 1/4" X 1/4" kerf around drain flanges. Mix CCW-201 Sealant and apply a 1-1/2" X 1-1/2", 45 degree sealant cant at the juncture of all vertical and horizontal surfaces including pipes and all other projections. Fill saw cut cracks and saw cuts around drain flanges. Install backer rod and sealant to all expansion joints. Allow the sealant to cure overnight.

Membrane Flashing: Apply a thin, even coat of CCW-550 Primer, 16" wide, centered over all cracks greater than 1/16" wide and all moving cracks. Allow primer to dry. Install a 12" wide strip of CCW-711-90 Sheet Membrane Flashing, centered over the cracks.

At the juncture of all vertical sections with the deck surface, such as parapet walls, columns and all projections through the deck, apply a thin even coat of CCW-550 Primer to the vertical wall section to the height of a minimum of 8", and 8" onto the deck. Flashing must terminate a minimum of 1" below top of wearing slab. Allow the primer to dry. Apply CCW-711-90 Sheet Membrane flashing over primed area on the vertical section and extend flashing 6" onto the deck surface. Termination of flashing: Terminate flashing on wall per Carlisle 500-9 details. Apply CCW-500-R over all horizontal flashing sections during membrane installation. Install Sure-Seal® EPDM flashing in exposed areas per Carlisle recommendations and 500-4B tie-in detail.

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Apply a thin, even coat of CCW-550 Primer to drain flange and a 4 ft. by 4 ft. area around drain. Allow primer to dry. Install a 3 ft. by 3 ft. piece of CCW-711-90 Sheet Membrane Flashing, centered over the drain. Install drain clamping ring. Cut away flashing inside drain opening. Detail expansion joints per Carlisle approved drawings.

Primer: Apply a thin, even coat of CCW-550 Primer to the entire surface to receive waterproofing. Apply primer at a rate of 350-450 ft^2 per gallon. Allow the primer to dry. *Note: Membrane will not properly adhere to wet primer.*

Base Coat: Blocks of CCW-500 shall be melted in a twin wall (oil or air jacketed) kettle with continuous agitation. **Caution:Do not exceed maximum safe operating temperature of 400°F.** Apply a 6" wide, 125 mil thickness coat of CCW-500 Hot Applied Liquid Membrane over non-moving cracks and cold joints. Mark off the deck in 9 ft. x 10 ft. sections. Apply CCW-500 Hot Applied Membrane to the primed surface, including over all previously detailed areas, at a rate 18 ft^2/gallon (5 gallons per marked 90 square foot area) as required to obtain 90 mils minimum average thickness.

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: Install CCW Reinforcing Fabric as quickly as possible, while the CCW-500 Liquid Membrane is still tacky. Place fabric carefully to avoid wrinkles, overlap edges 0" to ½".

Top Coat: Top coat reinforcing fabric with a second coat of CCW-500 Hot Applied Membrane at a rate of 13 ft^2/gallon (125 mils) for 215 mil systems as required to obtain the specified total system thickness.

Protection Course: Place CCW Protection Board H over the membrane as soon as possible. Tightly butt all protection, leaving no gaps greater than 0.125".

Integrity Test: Allow membrane to cool sufficiently to allow foot traffic. 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.

Inspection: Inspection shall be witnessed by the Building Official, the building owner's representative, general contractor, architect/engineer, waterproofing contractor, and a representative of Carlisle Coatings & Waterproofing Incorporated.

Repairs: In the event the CCW-500 Hot Applied Liquid Membrane is damaged, clean the area with a cloth wet with mineral spirits and apply CCW-500 Hot Applied Liquid Membrane to the damaged area.

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Surfacing: Concrete Pavers by PaverModules embedded in minimum 2" thick bet of mortar mix.

Maximum Design Pressure: 147.5 psf

Maximum Slope: N/A

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Roofing Product Control Examiner

Deck Type 1 Concrete Decks, New Construction

Deck Description: Min. 2500 psi

System Type A: CCW-500-R Hot Applied Liquid Membrane, reinforced

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Substrate Preparation: Surface shall be structurally sound, dry, and free of dust, dirt, laitance, non-approved curing agent or other contamination which may affect adhesion of the membrane. Remove splatters, fins, ridges or other projections to provide a level surface. Fill holes, honeycombs, rock pockets, spalls or other voids and indentations with approved concrete patching compound. Grind or fill surface at cold joints where each pour is at a different plane to provide a smooth and level surface.

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

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Integrity Test: Allow membrane to cool sufficiently to allow foot traffic. 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.

Inspection: Inspection shall be witnessed by the Building Official, the building owner's representative, general contractor, architect/engineer, waterproofing contractor, and a representative of Carlisle Coatings & Waterproofing Incorporated.

Repairs: In the event the CCW-500 Hot Applied Liquid Membrane is damaged, clean the area with a cloth wet with mineral spirits and apply CCW-500 Hot Applied Liquid Membrane to the damaged area.

Surfacing: Concrete Pavers by TREMRON embedded in minimum 2" thick bet of mortar mix.

Maximum Design Pressure: 167.5 psf

Maximum Slope: N/A

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Roofing Product Control Examiner

General Limitations:

1. A copy of the integrity test described in this approval shall be provided to the Building Official at time of final inspection.

2. Fire ratings are determined by a combination of slope, deck type and assembly CCW-500 does not require a separate fire rating. Fire ratings shall be in compliance with Sections 3401.5 and 3401.6 of the South Florida Building Code.

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. Carlisle 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

Carlisle Coatings & Waterproofing Inc.
8810 W. 100 St.
Sapulpa, OK 74066

ACCEPTANCE NO: 99-0412.02
APPROVED: February 25, 2000
EXPIRES: February 25, 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 11.

END OF THIS ACCEPTANCE

Frank Zuloaga RRC
Roofing Product Control Examiner