



**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)

**Carlisle Coatings & Waterproofing, nc.
8810 West 100th Street South
Sapulpa, OK 74066**

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: CCW-500-R Hot Applied Liquid Membrane

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 7.

The submitted documentation was reviewed by Frank Zuloaga, RRC



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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).

END OF THIS ACCEPTANCE



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 ft²/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 18 ft²/gallon (90 mils) for 180 mil systems or 13 ft²/gallon (125 mils) for 215 mil systems as required to obtain the specified total system thickness. The system may be covered with a 4 mil low density polyethylene sheet to eliminate surface tack.

Protection Course: Once integrity testing is complete, place CCW Sure Drain™ H or CCW Protection Board H over the membrane as soon as possible. Tightly butt all protection, leaving no gaps greater than 0.125".

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

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: Structural Concrete Slab, minimum 2500 psi.



System Type B: CCW-500-R, Insulated, reinforced

Substrate Preparation: 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.

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 $\frac{1}{16}$ " wide to $\frac{1}{4}$ " x $\frac{1}{4}$ ". Saw cut a $\frac{1}{4}$ " x $\frac{1}{4}$ " kerf around drain flanges. Mix CCW-201 Sealant and apply a 1- $\frac{1}{2}$ " x 1- $\frac{1}{2}$ ", 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.

Apply a thin, even coat of CCW-550 Primer to the entire surface to receive waterproofing. Apply primer at a rate of 350-450 ft² per gallon. Allow the primer to dry. *Note: Membrane will not properly adhere to wet primer.*

Membrane Flashing: Apply a thin, even coat of CCW-550 Primer, 16" wide, centered over all cracks greater than $\frac{1}{16}$ " 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.

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.

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



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away flashing inside drain opening. Detail expansion joints per Carlisle approved drawings.

Base Coat: Blocks of CCW-500 shall be melted in a twin wall (oil or air jacketed) kettle with 8 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 5 ft. x 10 ft. sections. Apply CCW-500 Hot Applied Membrane to the primed surface, including over all previously detailed areas, at a rate of 10 ft²/gallon (5 gallons per marked 50 square foot area) to obtain 150 mils minimum average membrane thickness.

Reinforcement: None.

Top Coat: None. The system may be covered with a 4 mil low density polyethylene sheet to eliminate surface tack.

Protection Course: Once integrity testing is complete, place CCW Sure Drain™ H or CCW Protection Board H over the membrane as soon as possible. Tightly butt all protection, leaving no gaps greater than 0.125".

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

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: Structural Concrete Slab, minimum 2500 psi.,



APPROVED ASSEMBLIES:

Deck Type 1 Concrete Decks, Insulated, New Construction

Deck Description: Min. 2500 psi, dual slab construction

System Type A: CCW-500-150, Insulated, un-reinforced

Substrate Preparation: 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 stage with weep holes to provide drainage at the membrane level.

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 $\frac{1}{16}$ " wide to $\frac{1}{4}$ " x $\frac{1}{4}$ ". Saw cut a $\frac{1}{4}$ " x $\frac{1}{4}$ " kerf around drain flanges. Mix CCW-201 Sealant and apply a $1\text{-}\frac{1}{2}$ " x $1\text{-}\frac{1}{2}$ ", 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.

Apply a thin, even coat of CCW-550 Primer to the entire surface to receive waterproofing. Apply primer at a rate of 350-450 ft² per gallon. Allow the primer to dry. *Note: Membrane will not properly adhere to wet primer.*

Membrane Flashing: Apply a thin, even coat of CCW-550 Primer, 16" wide, centered over all cracks greater than $\frac{1}{16}$ " 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 section to the height indicated on the drawings (8" minimum recommended) 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 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.

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



ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: Waterproofing
Material: Hot-Applied Rubberized Asphalt
Deck Type: Concrete
Maximum Design Pressure: N/A

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
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 1	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

EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Specification</u>	<u>Product Date</u>
United States Testing Company, Inc.	CM93-0213	PA 110 (CGSB-37.50-M89)	10-25-93



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