CCW-500R

REINFORCED HOT APPLIED, LIQUID MEMBRANE SYSTEM

DESCRIPTION

The CCW-500R System utilizes CCW-500 Hot Applied Liquid Membrane; a single component, rubberized asphalt compound that forms a tough, flexible, thick, waterproofing membrane. CCW-500 adheres tenaciously to virtually any sound surface, vertical or horizontal to assure water will not migrate beneath the membrane in the event of physical damage. The fast set up time speeds the completion of the waterproofing. CCW-500 Hot Applied Liquid Membrane is applied in a thick, monolithic coating utilizing CCW Reinforcing Fabric which allows for a wide variety of substrate conditions.

TYPICAL USES

CCW-500R is used for waterproofing split slab construction projects and is especially suited as the waterproofing membrane on roof decks using the inverted roof system.

LIMITATIONS

- Do not use on exposed or wearing surfaces.
- Not recommended over lightweight insulated concrete.
- If metal pan is used for concrete form, the metal pan must be vented.
- Consult with Carlisle's representative before using CCW-500R on any type lightweight concrete, concrete with curing compounds or additives, decks which have existing waterproofing materials
- Do not apply below 0°F or to damp, frosty or contaminated surfaces.

PACKAGING

CCW-500 is packaged in 45 lb. blocks, one block per carton, 64 cartons per pallet. Each block is sealed in a polyethylene bag inside the carton. The block, including the bag, is placed in the kettle, leaving only disposal of the carton.

The CCW Reinforcing Fabric is packaged in a rolls of:
59" X 610' (3000ft²) weight approx. 30 lbs.
36" X 667' (2000ft²) weight approx. 24 lbs.

APPLICABLE STANDARDS

1. US Patent # 5,979,133
2. Canadian Specification CGSB-37.50-M89
3. UL 790 Class A
4. City of New York MEA#63-96-M
5. Miami-Dade

COVERAGE

The following is a guide to estimate the amount of materials required for various membrane thicknesses.

215 mils applied	=	1.23 lbs/ft² =	7.46 ft²/gal.
180 mils applied	=	1.03 lbs/ft² =	8.91 ft²/gal.
90 mils applied	=	.51 lbs/ft² =	17.83 ft²/gal.

PROPERTY	TEST METHOD	RESULTS
Solids content	ASTM D-1353	100%
Flow	ASTM D-5329	@ 140°F, 0 mm
Penetration (1/10th mm)	ASTM D-5329	@ 77°F = 43 @ 122°F = 159
Flash Point	ASTM D-92	579°F
Water Vapor Permeance	ASTM E-96 (E)	0.02 perms
Toughness	CGSB-37.50-M89	37.6J
Ratio of Toughness to peak load	CGSB-37.50-M89	0.117
Adhesion	CGSN-37.50-M89	Pass
Softening	ASTM D-36	220°F
Viscosity	CGSB-3750-M89	8 seconds
Water Absorption	(CGSB-37.50-M89 max. 0.35 g [gain])	96 hrs. = 0.16 g
Pinholing	CGSB-37.50-M89	No visible pinholes
Low Temperature flexibility	CGSB-37.50-M89	Pass
Low temperature crack bridging	CGSB-37.50-M89	Pass
Heat stability	CGSB-37.50-M89	No change in viscosity, penetration, flow or low temp flexibility after aging
Resiliency	ASTM D-3407	52%
Resistance to mild acids		No effect
Minimum ambient temperature for application		0°F

WARNINGS AND HAZARDS

Use with adequate ventilation. Workers must use proper protection to prevent burns. *Refer to the MSDS for important warnings and product information.*

INSTALLATION

Surface Preparation: New concrete shall be water cured, with a light, hair broom finish and in place for 14 days minimum, 21 days preferred. Surface shall be structurally sound, dry, and free of dust, dirt, frost, 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.

Detail Work: Mix CCW-201 Sealant and apply per Carlisle standard details. Allow the sealant to cure overnight.

Detail expansion joints and drains per manufacturer's recommendation.

Apply a thin, even coat of CCW-550 Primer, 6" wide, centered over all non-moving cracks less than 1/16" wide and cold joints. Apply primer at a rate of 400 - 600 ft^2 per gallon. Allow primer to dry. Apply a 125 mil thickness coat of CCW-500 Hot Applied Liquid Membrane over the primed crack or cold joint.

Apply a thin, even coat of CCW-550 Primer, 16" wide, centered over all cracks greater than 1/16" wide, all moving cracks and all previously sealed expansion joints. Allow primer to dry. Apply 90 mils of CCW-500 membrane to cover primed areas. Install a 12" wide strip of CCW-711W Sheet Membrane Flashing, centered over the cracks and expansion joints.

Application: Blocks of CCW-500 shall be melted in a twin wall kettle with continuous agitation. **Caution: Do not exceed maximum safe operating temperature of 400°F.**

Apply a thin, even coat of CCW-550 Primer to the entire surface to receive waterproofing. 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). Apply primer at a rate of 400-600 ft^2/gallon. Allow the primer to dry. *Note: Membrane will not properly adhere to wet primer.*

Apply CCW-500 Hot Applied Membrane to the primed vertical and horizontal surfaces, including over all previously detailed areas, in a two-layer application, at a rate of 21 ft^2/gallon (75 mils) for 150 mil systems and 18 ft^2/gallon (90 mils) for the 180 mil systems. For the 215 mils system, two coats should be applied, with the first coat applied at 18 ft^2/gallon (90 mils) and the second coat applied at 13 ft^2/gallon (125 mils). Install CCW-711W mil sheet membrane or uncured neoprene flashing into the first course of CCW-500 to cover the vertical section and extend flashing 6-inches onto deck surface. Apply CCW Reinforcing fabric while membrane is warm and tacky. Apply second coat of CCW-500 Hot Applied Membrane at the rate required to obtain the specified total system thickness.

Termination of flashing: Terminate flashing on wall per Carlisle 500-9 details. Apply CCW-500R over all horizontal flashing sections during membrane installation. Install Sure-Seal® EPDM flashing in exposed areas per Carlisle recommendations.

Note: When CCW-500 Hot Applied Liquid Membrane is installed on the flange of a two stage drain, use care not to fill the weep holes.

Flood Test: (Optional and at the direction of structural engineer) Plug drains and provide necessary barriers to contain flood water. Flood deck with 2" head of water and check for leaks after 24 hours.

Protection Course: The membrane must be protected from damage. Install CCW MiraDRAIN® or CCW Protection Board immediately following flood test. Install 8-mil Elephant Skin prior to the protection course to provide easy future access to the memrane.

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.

LIMITED WARRANTY

Carlisle Coatings & Waterproofing Incorporated (Carlisle) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any Carlisle materials prove to contain manufacturing defects that substantially effect their performance, Carlisle will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by Carlisle with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. Carlisle specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of Carlisle's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the Carlisle material in question.

CCW-500R 04/03 tc

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