



# CCW-5012

## UNDER-TILE/CARPET WATERPROOFING SYSTEM

### DESCRIPTION

A two coat waterproofing system consisting of a one-part polyurethane coating that cures to form a flexible, resilient, seamless, waterproof membrane. The membrane has tenacious adhesion to the concrete to prevent water migration between the membrane and the substrate. High elongation allows it to bridge structural or shrinkage cracks that may occur in the substrate when used under tile. The high strength final coat provides an additional layer of coating with aggregate to allow a good bond with thin set tile adhesive.

### TYPICAL USES

This system is suitable for use as a waterproofing membrane under carpet, ceramic tile, quarry tile and other types of tile or pavers. This system cures to form a firm rubber that is compatible with many thin set adhesives. CCW-5012 can be used for interior or exterior applications under tile.

### TYPICAL PROPERTIES

#### CCW-501 BASE COAT

Solids Content	ASTM C 1250	85%
Hardness, Shore A	ASTM D 2240	63
Tensile Strength	ASTM D 412	900 psi
Ultimate Elongation	ASTM D 412	625%
Tear Resistance, Die C	ASTM D 624	150 lb/in
Adhesion to Concrete	ASTM D-903	23 PLI
Low Temp. Flexibility	ASTM D-522	65°F

#### CCW-502 FINAL COAT

Solids Content	ASTM C 1250	80%
Hardness, Shore A	ASTM D 2240	85
Tensile Strength	ASTM D 412	2500 psi
Ultimate Elongation	ASTM D 412	450%
Tear, Die C	ASTM D 624	300 lb/in
Low Temp. Flexibility	ASTM D-522	-65°F

### PACKAGING

CCW-501 Base Coat, CCW-502 Final Coat: 5 gallon pails and 55 gallon drums.

CCW-501-T Detail Coat: 5 gallon pails

### APPLICABLE STANDARDS

ASTM E 84 Class II

### WARNINGS AND HAZARDS

Avoid contact with the skin, especially open breaks in the skin. In the event of skin contact, remove immediately and wash with hot, soapy water. *Refer to MSDS for important product information and warnings.*

### LIMITATIONS

- Do not apply to a wet, damp or contaminated surface.
- Not recommended for exposed or wearing surface.
- Do not proceed with coating application if temperature is below 40°F or if rain is imminent within 8 hours after application. Cure time is slower in cool weather.
- Polyurethane coating cure times may be significantly faster than listed when temperature and/or humidity are high.
- If metal pan is used for concrete form, the pan must be vented. Not for use on grade.
- Concrete curing compounds must be approved by Carlisle.

### SURFACE PREPARATION

New concrete shall be water cured with a steel trowel finish followed by a light, hair broom and in place for 28 days minimum. Curing compounds, if required, must be self dissipating and approved by Carlisle. Surface shall be structurally sound, dry, and free of oil, grease, dirt, laitance, curing or release agents or other contamination which may harmfully affect the adhesion of the membrane. Surface shall be smooth and sloped to drains. Scrape off or grind splatters, ridges or fins.

Fill honey combs, rock pockets, spalls or other voids with approved non-shrink grout.

Saw cut cracks greater than 1/16" in width to 1/4" wide x 1/4" deep.

### DETAIL WORK

Blow saw cuts with oil-free compressed air. Confer with CARLISLE Representative regarding the use of a primer.

Apply PT-304 one component or CCW-201 two component polyurethane sealant to saw cuts and tool sealant flush with the surface.

Clean expansion joints. Insert backer rod (1/8" to 1/4" diameter larger than joint width). Apply Sealant into the joints. (Confer with the CARLISLE Representative regarding primer and coating over expansion joints.) Allow sealant to cure over night.

**CAUTION:** *Ensure that all sealant is thoroughly cured. Uncured sealant will affect the cure of the coating.*

Apply a bead of sealant at the juncture of all vertical and horizontal surfaces including at pipes, vents, and all other projections. Tool sealant to form a 1", 45 degree cant. Allow sealant to cure over night.

Mix primer and apply to all areas to receive a detail coat. Allow primer to dry 1 hour minimum, 8 hours maximum.

Apply a stripe coat of CCW-501-T Detail Coat, 30 mils thick, 6" wide, centered over all sealant cants, sealed cracks, hairline cracks, control joints, expansion joints (less than 1/2" wide) and cold joints. Apply a stripe coat of CCW-501-T Detail Coat, 30 mils thick, 6" wide, centered over any transition between dissimilar materials, such as concrete to metal flashings, concrete to wood or wood to metal, and reinforce with CCW Reinforcing Fabric. Allow stripe coats to cure 16 hours, minimum.

## PRIMER

Prime substrate with either CCW-557 Solvent-based Primer or CCW-600 Water-based Primer. Stir each side separately to ensure that no separation has occurred then mix all of Part A with all of Part B. Use a mixing paddle in a slow speed electric drill motor. Avoid air entrapment. Mix 2 to 3 minutes until a homogenous blend is achieved. Wait 15 minutes before applying.

Apply CCW-557 primer at a rate of 300 square feet per gallon. Avoid puddles or ponding the primer and do not apply primer over stripe coats. Allow primer to dry for 1 hour minimum, 8 hours maximum. Primer is sufficiently dry when it is somewhat tacky but will not transfer when touched. In the event coating is not applied within the maximum time, reprime.

Apply CCW-600 at a rate of 350 square feet per gallon. Avoid puddles or ponding of the primer and do not apply primer over stripe coats.

**Do not apply CCW-600 primer unless temperature is 40° or higher and stable or rising. Relative humidity should be less than 70%.**

Allow CCW-600 Primer to dry 1 to 2 hours. Primer is dry when it will not transfer when touched.

## APPLICATION:

**BASE COAT APPLICATION:** Wipe stripe coats with a clean cloth that has been wet with xylene solvent.

Apply a coat of CCW-501 at 55 sq. ft. per gallon or as

required to obtain 25 mils minimum, 30 mils maximum thickness, to the entire area to receive waterproofing, including over detail coats.

**NOTE:** *Thickness of the CCW-501 Membrane must be controlled closely as excessive thickness will result in the tile flexing and the tile grout cracking.*

On large areas, the best method of application is with a notched squeegee. On smaller decks such as balconies, CCW-501 can be applied with a roller or a notched trowel. Backroll for even coverage. Allow the base membrane to cure 16 hours minimum at 75° F.

**FINAL COAT APPLICATION: TILE;** Apply CCW-502 in one uniform coat at the rate of one gallon minimum per 100 square feet or as needed in order to obtain a minimum thickness of 16 wet mils. Uniformly broadcast 20/16 mesh crushed angular sand over the surface at 25 lbs. per 100 square feet. Allow to cure overnight. Sweep or vacuum off excess sand. Allow to cure 48 hours minimum at 75° F before installing tile.

**CARPET;** Carlisle Coatings & Waterproofing Incorporated does not endorse nor recommend any particular adhesive. However, experience has shown the solvent based acrylic adhesives to provide excellent adhesion to the polyurethane coating. It is prudent to perform a test to determine proper adhesion and compatibility.

## ADHESIVE

Carlisle Coatings & Waterproofing Incorporated does not endorse or recommend any adhesives. It is prudent to perform a test for adhesion and compatibility.

**NOTE:** Workmen must use care when installing flooring to ensure the membrane is not torn, punctured or otherwise damaged during the application of the tile or mortar bed. Workmen should wear soft rubber sole shoes and use care not to track nails, stones or other harmful debris on the membrane.

## 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.