



WATERPROOFING

CCW-525

Description

CCW-525 is a liquid-applied, single-component, moisture-cured, elastomeric, coal-tar free, modified polyurethane that cures to form a flexible, monolithic, waterproof membrane on vertical or horizontal surfaces, above or below grade. The membrane has tenacious adhesion to concrete substrates preventing lateral water migration. The inherent toughness and resilience of CCW-525 Membrane enables it to bridge structural or shrinkage cracks which may develop in the substrate.

CCW-525 is available in two viscosities (H & V) for application to horizontal and vertical surfaces. Typical applications are between structural slab and wearing course on parking garages, plaza decks, balconies, roof decks, terraces, mechanical equipment rooms, wetrooms, malls, kitchens and shower stalls. CCW-525 is ideally suited for waterproofing on below-grade foundation walls, tunnels, planters and other areas where a seamless, elastomeric waterproofing is required.

Installation

Surface Preparation

New concrete shall be water-cured, trowel-finished, followed by a light, hair broom and in place for 14 days minimum, 28 days preferred. If curing compounds are required, they shall be 100% Sodium Silicate and shall be approved by CCW. Surfaces shall be structurally sound, dry, and free of oil, grease, dirt, laitance, curing or release agents and other contamination which may harmfully affect the adhesion of the membrane. Mortar joints on block walls shall be struck flush with the block surface.

Remove splatters, fins, ridges or other projections to provide a smooth, level surface. Fill tie rod holes, honey combs, rock pockets, spalls or other voids and indentations with non-shrink grout. Saw-cut moving cracks greater than $\frac{1}{16}$ " in width to $\frac{1}{4}$ " wide x $\frac{1}{4}$ " deep.

Grind or fill (as required) surface at cold joints where each pour is at a different plane, to provide a smooth and level surface. Clean metal to expose a bright finish.

Detail Work

Clean joints and saw cut cracks. All moving cracks over $\frac{1}{16}$ " wide and all expansion joints less than 1" wide shall be cleaned, primed, fitted with a backing rod and caulked with CCW-201 non-sag polyurethane sealant. Refer to CCW-201 data sheet for information on the use of this product. For larger joints, contact CCW representative.

Apply a 1", 45° angle cant of CCW-201 sealant at the juncture of all vertical and horizontal surfaces including at pipes, vents and other projections.

Apply a bondbreaker tape over the Sealant installed in expansion joints. Width of bondbreaker shall be three times joint width.

Apply a 4"-6"-wide stripe coat of CCW-525-V Membrane over all sealed cracks, joints and over all hairline cracks less than $\frac{1}{16}$ " and cold joints. Apply a stripe coat of CCW-525-V over sealant cants and up the vertical wall to the height called out on the drawings, (minimum eight inches recommended) and onto the horizontal deck 4"-6". Stripe coat shall be 45 +/- 5 mils thick. Allow stripe coats to cure over night.

Priming

Primer is not required for adhesion to dry, non-porous concrete. However, if pinhole and blister problems occur as a result of air and/or moisture vapors emitted from the concrete and environmental conditions, it is recommended that the surface be primed. Please contact CCW Technical Services regarding primer.

Apply 2 part epoxy Primer to metal surfaces immediately after sanding and cleaning. Refer to manufacturer's data sheet for information on the use of this product.

For Horizontal

Apply CCW-525 over cleaned, primed flange of drains, taking care not to fill weep holes. Using a notched squeegee, apply CCW-525-H at 22 sq. ft. per gallon or as required to obtain a 60-mil thickness, to the entire area to receive waterproofing, including over all detail coats.

For Vertical

Using a roller, apply CCW-525 V in one coat at a rate of 22 square feet per gallon or as required to obtain a final dry film thickness of 60 mils. Wait 24 hours between each coat if subsequential coats are required.

CCW-525R Reinforced Systems: Apply CCW-525-H at 22 square feet per gallon or as required to obtain a 60-mil thickness to the entire area to receive waterproofing, including over all detail coats. Use a $\frac{1}{4}$ " notched squeegee or flat squeegee with guide pins to achieve a uniform thickness. Immediately install CCW LiquiFiber-W glass mat or CCW DCH white polyester reinforcing fabric into the uncured CCW-525. Install carefully to avoid wrinkles. In the event of wrinkles or fishmouths, cut the fabric and overlap the excess to avoid trapped air. Once the coating has cured to a firm consistency, apply an additional coat of CCW-525 at 22 sq. ft. per gallon or as required to obtain a 60 mil thickness, extending past the edge of the fabric to completely encapsulate it. Total system dry film thickness is 120 mils. Wait 24 hours between each coat.

All fluid-applied product application rates are based on theoretical coverage relative to the percentage of solids in the material. These are minimum application rates to achieve the required dry film thickness for the system and do not account for substrate condition or porosity. A thicker application of the product may be necessary to achieve the required dry film thickness for system relative to the substrate.

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Protection

The membrane must be protected from damage by future operations and other trades. The applicator shall install protection material applicable to jobsite conditions, to protect the membrane. Protection course must be CCW Protection Board products that correspond to horizontal or vertical applications.

Install protection course on vertical walls immediately after membrane has cured (36 hrs at 75°F). Install protection course on horizontal application immediately following successful flood testing. If flood test is delayed, install a temporary covering to protect the membrane from other trades.

Flood Test

After membrane has cured 36 to 72 hours, plug drains and provide necessary barriers to contain flood water. Flood deck with a 2" head of water and allow to stand for 24 hours. Check for leaks and immediately make repairs if required. Retest after any repairs have been made.

Clean Up

Before material cures, clean adjacent areas to remove stains or spills and clean tools with toluene or xylene. Do not wash off skin with solvents.

Limitations

- Do not apply CCW-525 to a wet, damp or contaminated surface
- Not recommended for exposed or wearing surfaces
- If metal pan is used for concrete form, the metal pan must be vented
- Surface temperature must be above 40°F
- Do not use around swimming pools or other areas where pool chemicals are used.

Warnings and Hazards

Combustible liquid and vapor. Keep away from heat and flame. Use only with adequate ventilation. Avoid contact with the eyes or skin, especially open breaks in the skin. In the event of skin contact, remove immediately and wash with warm soapy water. Refer to MSDS for important warnings and product information.

Xylene and toluene are combustible and flammable solvents. Observe all regulations with regards to working with flammable materials. Workmen must wear appropriate protective clothing, eye and skin protection and NIOSH approved breathing apparatus (organic cartridge recommended).

Standards

ASTM Specification: ASTM C 836-95

Shelf Life

When stored at temperatures below 80°F, shelf life is 12 months in the original, unopened container.

Packaging

Product	Size / Weight
CCW-525-H	5-gallon pails and 55-gallon drums
CCW-525-V	5-gallon pails and 55-gallon drums
CCW LiquiFiber-W	6" x 300' rolls, 8 rolls per case (1,200 sq. ft.) 12" x 300' rolls, 4 rolls per case (1,200 sq. ft.)
Carlisle DCH Polyester Reinforcing Fabric	4", 6", 12", 40" x 324'
CCW-201 Sealant	1.5 Gallon kit (in 2 gallon pail, plus color pack)

Typical Properties

Property	Method	Typical Value
Composition	—	Modified Polyurethane
Color	—	Black
Tack-free Time @ 77°F (25°C), 50% RH.	—	16 hrs
Cure Time @ 77°F (25°C), 50% RH.	—	36 hrs
Solids Content	ASTM D2369	82% (+/-2)
Hardness (H) (V)	ASTM D2240 ASTM D2240	30 Shore A (min) 30 Shore A (min)
Elongation (H) (V)	ASTM D412 ASTM D412	575% 600%
Tensile (H) (V)	ASTM D412 ASTM D412	250 ps 400 psi
Permeability (H) (V)	ASTM E96 ASTM E96	0.07384 perms 0.07176 perms
Adhesion to Primed Concrete (H) (V)	ASTM D4541 ASTM D4541	> 150 psi > 150 psi

* Individual lots may vary +/- 10% from typical value

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 affect 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.