



# CCW-703

## LIQUISEAL® LIQUID APPLIED WATERPROOFING MEMBRANE

### DESCRIPTION

Carlisle CCW-703 Liqueal liquid applied membrane is a two-component polyurethane waterproofing system. It is self-curing, forming a seamless, impermeable coating which bonds tightly to an appropriate substrate, preventing the lateral transfer of water. Liqueal is easily mixed at the job site and applied using a squeegee, trowel, or spray equipment, providing a waterproof rubber membrane.

Use Vertical Grade Liqueal for coating walls, vent pipes, air ducts, or other vertical surfaces. Trowel applied Vertical Grade Liqueal will not sag or “slide” down the walls so proper thickness is maintained top to bottom.

### TYPICAL USES

Liqueal 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, fountains, kitchens, wetrooms, malls and shower stalls. Liqueal is ideally suited for waterproofing on below grade foundation walls, tunnels, planters and other areas where a seamless, elastomeric waterproofing is required.

### LIMITATIONS

- Do not apply Liqueal to a wet, damp or contaminated surface.
- Not recommended for exposed or wearing surface.
- If metal pan is used for concrete form, the metal pan must be vented.
- Surface temperature must be above 40°F and rising.
- Do not use CCW-703-H beneath rubberized asphalt membranes.

### PACKAGING

Supplied in kit form:  
 3.5 Gal. Part A  
 0.5 Gal. Part B  
 45 lbs./Unit  
 Shelf Life: One Year

### TECHNICAL DATA

#### CCW-703-H Self-Leveling

PROPERTY (Metric-SI Units)	TEST METHOD	TYPICAL
Color		Black
Tensile Strength	ASTM D-412	155 psi (1.07 MPa) min.
Elongation	ASTM D-412	405% min.
Hardness (Shore A)	ASTM D-2240	15 min.
Low Temp. Brittleness	ASTM D-746	-50°F (-46°C) min.
Flash Point	ASTM D-92	Greater than 300°F (150°C)
Permeability	ASTM E-96 Proc. BW	0.1 Perm. In.
Solids Content	—	100%
Specific Gravity	—	1.1 g/cc
Density	—	9.3 lbs/gal
Pot Life @ 70°F (21°C)	—	1 Hr.

#### CCW-703-V Vertical Grade

PROPERTY (Metric-SI Units)	TEST METHOD	TYPICAL
Color		Black
Tensile Strength	ASTM D-412	100 psi (0.69 MPa) min.
Elongation	ASTM D-412	180% min
Hardness (Shore A)	ASTM D-2240	37 min.
Low Temp. Brittleness	ASTM D-746	-50°F (-46°C) min.
Flash Point	ASTM D-92	Greater than 300°F (150°C)
Permeability	ASTM E-96 Proc. BW	0.1 Perm. In.
Solids Content	—	100%
Specific Gravity	—	1.2 g/cc
Density	—	10.0 lbs/gal
Pot Life @ 70°F (21°C)	—	1 Hr.

## INSTALLATION

**Preparation:** An inspection must be made of all surfaces on which the CCW-703 Liqueiseal waterproofing membrane is to be installed to insure that the concrete deck is clean, dry, smooth, and free of contaminants. Do not apply over CCW-702 or CCW-550 Primers.

Installation of Liqueiseal waterproofing membrane shall not commence until the area to receive the waterproofing has been cleared of all traffic and stored materials of other trades, and all surface dirt and dust removed by blowing with air under pressure, use of a soft broom, or washed with potable water, followed by thorough drying.

Cracks, holes and other surface imperfections exceeding 1/16" in width or 1/16" in depth, as measured at 70°F or less and evident at the conclusion of the curing or drying period, shall be patched with Vertical Grade Liqueiseal before the deck is coated.

**Vents and Drain Pipes:** Voids or openings around vents, pipes, drains, or other protrusions shall be treated with Vertical Grade Liqueiseal waterproofing membrane.

**Expansion Joints:** Install Sure-Seal Elastoflex Flashing 12 inches wide, centered over the joint, embedding the flashing in Vertical Grade Liqueiseal. Care must be taken not to stretch the flashing, and any entrapped air, wrinkles, or fishmouths should be worked out. As soon as possible, the entire expansion joint should be coated with Horizontal Grade Liqueiseal. Should the flashing at the expansion joint be exposed for a significant period of time, it may be necessary to clean the membrane with an approved solvent prior to applying the final coating of Liqueiseal.

Flashing should be installed in lengths as long as possible, lapped a minimum of four inches, and spliced using Sure-Seal EP-95 splicing cement.

**Application:** Application of Liqueiseal Waterproofing Membrane shall not commence unless the temperature is 40°F and rising, or if the weather is inclement or threatening.

Should the uncured Liqueiseal Waterproofing Membrane be exposed to rain prior to obtaining a surface cure, the water will penetrate the surface of the membrane and form craters. If this occurs, allow the waterproofing membrane to cure. Allow to dry thoroughly, remove all dust and dirt and apply a top coating of Liqueiseal Waterproofing Membrane to fill all depressions in the membrane.

**Mixing/Application:** Combine the two components of Liqueiseal according to mixing instructions. *When mixing Part A and Part B, use a variable speed 1/2" drill with a Model PS Jiffy blade for a minimum of 5 minutes.*

The mixed batch will provide a pot life of 1-2 hours at 40°F to 60°F and 1/2 to 1 hour at 80°F.

As soon as Liqueiseal Waterproofing Membrane is mixed, apply directly to the concrete slab in a uniform application spreading with a squeegee or trowel. Controlled coverage is obtained by applying 4 gallons of Liqueiseal per measured 100 square feet, resulting in a seamless membrane approximately .055 ± .005 inches thick.

Coves and vertical surfaces should be coated with trowel-applied, Vertical Grade Liqueiseal prior to horizontal application. This initial coating should extend onto the horizontal surface 2 to 3 inches. When the deck waterproofing membrane is applied, it should be continued up and over the previously coated applied vertical surface.

Liqueiseal can be sprayed with a Graco 45:1 pump, airless gun, (or equal), equipped with a Reverse-A-Clean tip. Material build-up on surfaces will vary with equipment used, texture of finished surface and speed of pass, 20 to 25 mil thickness per pass can be expected.

**Protection Course:** For at least 24 hours after application of Liqueiseal Waterproofing Membrane, the surface should be kept free of all traffic. If the membrane is to be left uncovered for a significant period of time, install CCW Protection Board or CCW MiraDRAIN drainage composite following the 24 hour cure time.

## 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.