

High Gloss, Low VOC, Durable and Waterborne Epoxy

**PRODUCT DESCRIPTION**

**AquaShield™** is a two-component, chemically resistant, water based epoxy floor coating system. Designed for use on almost any concrete substrate as a primer, or topcoat. Although it is a waterborne product, AquaShield™ is built on a backbone of 100% solids epoxy resins.

Because of its versatility, **AquaShield™** epoxy can be used as a clear or pigmented primer, coating and/or topcoat. This can dramatically reduce the confusion created when multiple products are required for an installation by the manufacturer.

**Advantages**

- Water Based With No Odor
- Quick Cure For Fast Turnarounds
- Strong Adhesion
- Extremely Durable And Long Wearing Under Traffic
- Cost Effective
- Excellent Hardness Development
- Good Flexibility
- **Low - Zero VOC**
- Excellent Pot Life And Open Time
- Very User-Friendly; Mixes And Applies With Ease.
- Excellent Yellowing Resistance Uncommon To Most Epoxies\*

\*Not Recommended For Outdoor Use.

Packaging Options:

- 1 gallon kits
- 3 gallon kits
- 5 gallon kits
- 15 gallon kits

**Adhesion ASTM D4541**.....> 1190 psi  
100% concrete failure (28.1 kg/cm)

**Surface Hardness ASTM D2240 Shore D @77°F (25°C)**  
2 Hours.....30  
4 Hours.....60  
24 Hours.....70

**Impact Resistance ASTM D2794**  
(Direct, inch pound)..... 40  
(Indirect, inch pound)..... 8

**Water Absorption MIL-D-3134** .....< 1.0%

**Abrasion Resistance ASTM D4060**  
(CS17, 1000g load, 1000cycles).....0.1 g loss

**Gloss Index (600) ASTM D1544** ..... 80 to 90

**Microbial Resistant ASTM G21** ..... Rating: Passes -1  
**Pot-life**.....2-4 hours  
**Tack-free**.....1-4 hours  
**Light traffic**.....>8-12 hours  
**Recoat time**.....1-4 hours

**Typical Performance ASTM D 1544-80**  
**Persoz Hardness 1 day @ 74°F (23°C)**..... 175  
**Persoz Hardness 7 days @ 74°F (23°C)**.....260  
**Persoz Hardness 14 days @ 74°F (23°C)**.....300

**Appearance:** .....Amber Liquid  
**Color (Gardner):**.....4  
**Viscosity @ 77 °F:**.....400-1000 cps  
**Specific Gravity @ 77 °F:** .....1.05  
**Weight per Gallon:** .....8.74  
**Flash Point (°F):**.....>200

**Mix Ratio:**.....2:1 (A:B)

**ORDER SPECIFICATIONS**

AquaShield™ 1 gal	EP-AQUA-1
AquaShield™ 3 gal	EP-AQUA-3
AquaShield™ 5 gal	EP-AQUA-5
AquaShield™ 15 gal	EP-AQUA-15

## **SURFACE PREPARATION**

All substrate surfaces must have all loose and deteriorated concrete removed to a sound surface. Concrete must be clean, sound, and free of dust, grease, waxes, coatings, curing compounds and all contaminants. Typical removal methods include dust-free abrasive blasting (Best) or using a 3:1 Water and Muriatic Acid solution to etch the surface, followed by a thorough pressure washing at a minimum of 3000 psi @3.0 gpm.

## **TEST SUBSTRATE FOR CLEANNESSE & ADHESION**

Before application of **AquaShield™**, test the cleaned concrete substrate for soundness and cleanliness with a Tensile Pull Test ACI 503 R (min.200 psi). 100% concrete must fail to pass either test without bond line failure.

## **PRECONDITIONING POLYMER**

When temperatures drop polymers typically thicken and it becomes harder to flow or to spread the product. When the temperatures are warmer they typically become thinner. To improve the flow-ability maintain product temperature before mixing at about 73°F (20°C). Preconditioning the material for 24 hours at room temperature is the best way to ensure good results. **CAUTION:** CCI AquaShield™ is water based and will freeze. Never store the material where temperatures can reach freezing (32°F/0°C)

## **CUSTOMER SATISFACTION**

It is highly advisable to apply a test area to ensure that the application meets the customer's expectations before applying material to the entire area. Keep all containers tightly closed prior to mixing and application.

## **MIXING**

### **MECHANICAL MIXING IS REQUIRED**

Pre-mix Component "A", (especially when pigmented) then pour Component "B" into "A", or pour both components into a separate container and mix for 2-3 minutes with a low speed paddle or Jiffy type mixer attached to a drill (400-600rpm) (until one even color develops). **MIX THOROUGHLY!** CCI AquaShield™ has enough open time (pot life) to allow mixing for several minutes. Mix slowly and thoroughly. The mixed product is ready for immediate placement.

## **COVERAGE**

Product coverage is depended upon the existing substrate surface profile and thickness of the designed system, however, 1 gallon should typically cover approximately 160-175 ft<sup>2</sup> per coat.

## **APPLICATION METHODS**

**CCI AquaShield™** can be applied either by squeegee in left to right motions, and back roll with a short nap roller at 90° angles to squeegee lines; or directly out of the mixing bucket. Do not roll excessively, only enough to smooth material.

## **LIMITATIONS**

Minimum recommended application temperature is 50°F (10°C). Maximum recommended application temperature is 90°F (32°C). For applications thicker than 20 mils, an aggregate is recommended. Contact CCI Technical Support for recommendations.

## **CURE TIMES**

The following cure times are based on 70°F (21°C) with 50% humidity. Variations of either can affect cure times:  
Pot life.....2-4 hours  
Tack-free.....1-4 hours  
Light traffic.....8-12 hours  
Recoat time.....1-4 hours

## **MAINTENANCE**

For maximum life expectancy, routinely sweep and wash floors with appropriate cleaners and detergents. All chemicals or abrasive grit should be removed as soon as possible. Also ask about CCI DuraWax for maintenance and protection.

## **CAUTION**

Component "A"- Irritant  
Contains epoxy resins. Prolonged contact with skin may cause irritation. Avoid contact with eyes.

Component "B" - Corrosive  
Contains modified amines. Contact with skin may cause irritation or burns in extreme cases. Avoid eye contact. Product is a strong sensitizer.

## **Important Safety Information**

Use of safety goggles, chemical-resistant gloves, adequate ventilation and NIOSH/MSHA approved respirator is always recommended.

## **CLEAN UP**

Clean all tools with warm soap and water. If residue remains, a light alcohol or similar solvent may be used to remove.

In case of spills wear suitable protective equipment, contain spill, collect with absorbent material, and place in suitable container. Ventilate area. Minimize contact. Dispose of all materials according to applicable local, state, and federal regulations.

## **FIRST AID**

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. For respiratory problems, remove person to fresh air. Contact Physician Immediately. Wash clothing before re-use.

**Consult Material Safety Data Sheet for  
More Information  
FOR INDUSTRIAL USE ONLY  
KEEP OUT OF REACH OF CHILDREN**

"Concrete Coatings Inc. warrants its products to be free of manufacturing defects and that they will meet Concrete Coatings Inc. current published physical properties when applied in accordance with Concrete Coatings Inc. written directions and tested in accordance with ACI, ASTM and Concrete Coatings Inc. Standards. There are no other warranties by Concrete Coatings Inc. of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Concrete Coatings Inc. shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, from any other cause whatsoever. Concrete Coatings Inc. will not be responsible for use of this product in a manner to infringe on any patent held by others."

For the Location of Your Nearest Concrete Coatings Inc. Representative  
CALL NATIONWIDE TOLL-FREE 1-800-443-2871