



# Hydrostop™ Coating

(Polymerized Cementitious Topping Mortar for Above Grade Concrete)

Product Code: K-720 (Gray) or K-725 (White)

## DESCRIPTION

Hydrostop Coating is a 2-part polymerized cementitious topping mortar applied as a slurry to the concrete or mortar surface and will provide a strong and durable barrier against water intrusion. Hydrostop Coating is used in conjunction with Hydrostop Grout and Hydrostop Sealer as part of the Hydrostop Restore & Protect System™. The system is intended for above grade concrete or mortar surfaces (i.e., concrete exposed to minimal hydrostatic pressure) and has been designed to extend the lifespan of aging infrastructure and buildings.

## FEATURES

- Extends the lifespan of aging concrete infrastructure and buildings as part of the Hydrostop Restore & Protect System
- Improves aesthetics by providing more even color and smoothness to the concrete surface
- Provides superior aging quality when exposed to UV radiation versus liquid coatings
- Resists thermal cycling and provides a resilient surface
- Protects reinforcing steel against corrosion
- Provides excellent resistance to waterborne chemicals such as sulfates, chlorides, and acids
- Choice of gray or white color
- Can be painted after curing
- Can be applied to damp concrete
- Can be tinted using colored pigments for concrete

## KEY BENEFITS

- Reduces the cost of maintenance and repairs
- Avoids costs of building replacement and prevents disruption to facility and building operations
- Easy-to-use system that decreases the application costs
- Increases environmental sustainability by extending the lifespan
- Increases durability, decreasing building maintenance and repair costs
- Superior performance enhancing your reputation for high quality work

## RECOMMENDED USES

Use in conjunction with Hydrostop Sealer and Hydrostop Grout as part of the Hydrostop Restore & Protect System to:

- Repair and resurface aged, weathered and deteriorating concrete to protect it from further damage
- Extend the lifespan of aging concrete infrastructure such as hydroelectric facilities and transportation structures
- Restore and protect aging concrete buildings such as churches, mosques, and any other concrete or mortar rendered finish



### PHYSICAL PROPERTIES

Appearance	Part A: Light gray powder or white powder Part B: Milky white liquid
Density g/cm <sup>3</sup> (lb. /cu. in.)	Part A: 1.27 (0.046) Part B: 1.05 (0.038)
pH	Part B: 9.5 Part A+B mixed: 10

### PLASTIC PROPERTIES

Working time (23 °C, 50% RH)	15-20 minutes
Initial setting time (23 °C, 50% RH)	4 hours
Hardening time (field moist curing conditions)	18-24 hours

### HARDENED PROPERTIES

#### COMPRESSIVE STRENGTH

##### ASTM C109 – Standard Test Method for Compressive Strength of Hydraulic Cement Mortars

Specimens of the Hydrostop Coating cast at 4:1 mixing ratio (moist cured for 24 hours and allowed to dry for 6 days) displayed a compressive strength of 11 MPa (1,600 psi).

#### PULL OFF ADHESION STRENGTH

##### ASTM D7234 – Standard Test Method for Pull-Off Adhesion Strength of Coatings on Concrete Using Portable Pull-Off Adhesion Testers

Specimens coated with Hydrostop Coating @ 1.5 kg/m<sup>2</sup> (0.307 lb./sq. ft.) (moist cured for 24 hours and allowed to dry for 6 days) displayed pull off adhesion strength of 7.5 MPa (1,100 psi).

#### WATER ABSORPTION REDUCTION

##### ASTM C1403 – 06 Standard Test Method for Rate of Water Absorption of Masonry Mortars

Specimens were coated with Hydrostop Coating @ 1.5 kg/m<sup>2</sup> (0.307 lb./sq. ft.) (moist cured for 24 hours and allowed to dry for 6 days) then coated with Hydrostop Sealer @ 7.4 m<sup>2</sup>/L (302 sq. ft./gal.). Specimens were weighed and showed a reduction in absorption versus the control samples of 75% after 24 hours.

### APPLICATION

#### Hydrostop Grout is part of the Hydrostop Restore & Protect System – Read and distribute Application

**Instruction 8.11 – Restoring Above Grade Concrete before using this product.** Fix any defects in the substrate, such as honeycombing, cracks, or holes using Hydrostop Grout. Hydrostop Coating comes supplied as a pre-measured kit. Pour the entire contents of part A (powder) into a mixing bucket containing part B (liquid) and mix using an electric drill and paddle. Mix thoroughly for several minutes to produce a thick slurry. Ensure the concrete is in SSD condition and apply the Hydrostop Coating to the concrete using a stiff bristle concrete brush or by spreading with a push broom. Do not apply thicker than 3 mm (0.125 in.). The coverage is approximately 1-2 kg/m<sup>2</sup> (1.8-3.7 lb./sq. yd.) or about 16.5 m<sup>2</sup> (180 sq. ft.) of concrete surface per kit. Prevent the application from drying out by misting with water for at least one day. Follow with one coat of Hydrostop Sealer, for added value and performance. If painting with a water-based paint, do not apply the sealer.

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### LIMITATIONS

Hydrostop Restore & Protect System is effective for rigid structures only and may not reliably resist water for structures that experience variable loading or repeated movement. Consult a Kryton representative for project specific recommendations.

### SAFETY

Read the Material Safety Data Sheet (MSDS) for this product. For professional use only, Hydrostop Coating Part-A becomes caustic when mixed with Part-B, water or perspiration. Avoid contact with skin or eyes. Avoid breathing dust. Wear long sleeves, safety goggles and impervious gloves.

### PACKAGING

- Part A: 12.7 kg (28 lb.) resealable pails
- Part B: 3.8 L (1 gal.) jugs

Total kit size is 16.5 kg (36 lb.)

### SHELF LIFE

Part A (powder) has a minimum shelf life of 24 months for unopened pails, and 4 months for properly resealed pails. Part B (liquid) has a minimum shelf of 6 months for properly resealed jugs. Do not store Part-B at temperatures below 4 °C (39 °F).

### WARRANTY

Kryton International Inc. (Kryton) warrants that Kryton products are free from manufacturing defects and comply with the specifications given in their respective technical data sheet. Because conditions of use, such as site conditions, surface preparations, workmanship, concrete ingredients, weather, structural issues and other factors are beyond the control of Kryton, no warranty can be given as to the results of use. Purchaser agrees to seek the advice of qualified professionals and to determine for themselves the suitability of the products for their intended purpose and assumes all risks. Purchaser's sole remedy is limited to replacement of any product proven defective or at Kryton's option refund of the purchase price paid. THIS LIMITED WARRANTY CONTAINS THE ENTIRE OBLIGATION OF KRYTON. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. KRYTON SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. No representative of Kryton has the authority to make any representations or provision except as stated herein. Kryton reserves the right to change the properties of its products without notice.