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## **CFFS ULTRA-HYDRO STOP H2O PRIMER™**

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### **Product Description**

CFFS Ultra-Hydro Stop H2O Primer is a three component, water-based, 50% solids, moisture vapor transmission (MVT) blocking and pH resistant epoxy primer used to remedy concrete floors with high moisture levels before the application of finish coatings. Capable of holding back up to 12 lbs. of MVT (two coats), this primer has excellent adhesion to moisture laden concrete slabs. Ultra-Hydro Stop H2O Primer can be applied to concrete as early as 48 hours after placement, reducing job-site downtime and delays in production.

### **Product Features**

- ❖ Adheres to damp concrete and masonry substrates.
- ❖ Long working time eases in the spread of the mixed material.
- ❖ Prevents shrinkage cracks.
- ❖ Eliminates concrete dust.
- ❖ Resistant to high alkalinity floors up to 14 pH.
- ❖ Will provide a glossy smooth finish when cured.
- ❖ Displays good chemical resistance.
- ❖ Emits virtually no odors and can be applied indoors with minimal disturbance to surrounding activities.
- ❖ Excellent self leveling properties increase hiding power over damaged substrates.
- ❖ Fast curing, allowing for re-coat within 5-7 hours
- ❖ Can be applied to "Green Concrete" as early as 2 days after placement. (Contact CFFS for details)

### **Primary Applications**

- ❖ Primer for "Green Concrete"
- ❖ Self leveling coating
- ❖ Moisture stopping primer
- ❖ Strengthen existing concrete
- ❖ Substitute for concrete curing compounds

### **Suitable For Use Under**

- ❖ Epoxies
- ❖ Urethanes
- ❖ Polyureas
- ❖ Cementitious overlays

**Product is sold CLEAR.**

### **Safety and Handling**

Always wear protective rubber gloves and eye protection when mixing or handling this material and provide proper ventilation. For more information, see Material Safety Data Sheets.

### **Typical Processing Properties**

Pot Life	Empty container immediately after mixing.
Working Time	1 Hour @ 77°F (25°C)
Cure Time	Tack free - 5 hours
(Relative Humidity- 72°F - 54%)	Hard dry - 16 hours
VOC Content	Zero VOC
Viscosity	700 cps at 77°F (25°C)
Permeability (gr./ft <sup>2</sup> /hr. in Hg <sup>-1</sup> )	0.09

### **Recommended Coverage**

Over prepared concrete surface 250 sf/gal @ 3.2 mils DFT

### **Adhesion Results (ASTM D-4541 Elcometer)**

Concrete	Concrete Failure	>450psi
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### **Temperature**

60°F - 80°F (16°C - 27°C)

During the installation and cure, maintain surface temperatures between 60°F and 80°F. It is possible to condition the environment to allow for application via heaters and enclosures. The concrete surface must be at least 5°F above the Dew Point temperature. Coating should only be applied when temperature is steady and/or falling. **DO NOT APPLY UNDER 60°F OR WHEN TEMPERATURE IS RISING. DO NOT APPLY IN DIRECT SUNLIGHT.**

### **Packaging**

Available CLEAR in 1.5 gallon kits

### **Shelf Life and Storage**

Twelve months in factory delivered unopened drums and buckets. Keep away from extreme heat, cold and moisture. Maintain at a proper storage temperature of 60-90° F. Keep out of direct sunlight and away from fire hazards.

## Surface Preparation

### Concrete

**Old concrete** - Shot blasting, diamond grinding or water blasting is highly recommended to remove surface contaminants. Acid etching is also an acceptable method of preparation, and must be neutralized and flushed clean prior to the application of any coatings. Any oils or fats must be completely removed prior to product application. Sealers, Silicates, and failed coatings must be removed via mechanical abrasion. Do not apply to wet substrates, damp surfaces are acceptable. Chloride, moisture and pH levels should be checked prior to application. Concrete surface should be rough to promote proper penetration.

**New Concrete** - Use standard Portland cement (type I) or high early strength (type 3) concrete without additives, hardeners, curing agents or sealers. Surface must be set so it can be walked on (usually overnight) and must be free of surface dirt, oil spills, etc. CFFS highly suggests waiting as long as possible for the concrete to dry, but the CFFS Ultra-Hydro Stop H2O Primer™ can be installed as soon as 48 hours after placement. Shot blasting, diamond grinding or water blasting is highly recommended to remove surface contaminants. Acid etching is also an acceptable method of preparation, and must be neutralized and flushed clean prior to the application of any coatings. Any oils or fats must be completely removed prior to product application. Sealers, Silicates, and failed coatings must be removed via mechanical abrasion. Do not apply to wet substrates, damp surfaces are acceptable. Chloride, moisture and pH levels should be checked prior to application. Concrete surface should be rough to promote proper penetration.

### Substrate Repairs

All spalls and cracks should be chased out and repaired to ICRI standards using CFFS-Fortification Formula. Expansion joints must be honored. CFFS Ultra-Hydro Stop H2O Primer should be applied down into horizontal saw-cut control joints (do not allow to pool) and allowed to cure a minimum of 24 hours before they can be filled with a backer rod and CFFS Polyflex-93 or compatible Polyurethane sealant.

## Primer Requirements

Please consult your product supplier for job specific recommendations. CFFS Ultra-Hydro Stop H2O Primer is designed to be applied direct to concrete and under no circumstances should a separate primer be applied prior to the application of CFFS Ultra-Hydro Stop H2O Primer.

## Installation Recommendations

It is recommended that this product be roll applied in a multi-directional (north, south, east and west) motion to help ensure proper coating thickness.

## Application Information

### Mixing

CFFS Ultra-Hydro Stop H2O Primer™ is provided in proportioned kits containing resin and hardener. The entire contents of the Hardener (Part B) is emptied into the Resin (Part A) container and mixed with a drill for 2-3 minutes. After the resin and hardener are combined, clean water (64 oz) is added slowly, under agitation, until a uniform mixture is achieved. No induction time is needed the material is ready to use immediately.

1.5 gallon kit

	Kit amounts
Part A (Resin)	.422 gallons (54 oz)
Part B (Hardener)	.578 gallons (74 oz)
Part C (Water)	.500 gallons (64 oz)

### Application

Pour the mixed material onto the surface in a ribbon about 8 to 10 inches wide along the starting edge of the wall. Roller, brush or squeegee the material out over the surface at a spread rate of 250 sf/gallon. **THIS SPREAD RATE MUST BE PRECISELY MET FOR THE PRODUCT TO FUNCTION PROPERLY.** Do not allow the material to pool or fill in control joints or a soft cured product may result.

When applying subsequent coatings, allow the CFFS Ultra-Hydro Stop H2O Primer to cure to a *tack free* finish. This will generally be about 5 hours at 77° F (25°C) or longer at lower temperatures. Scuff sanding may be necessary prior to the application of CFFS polyurea coatings. (see Compatible Coatings)

### Squeegee Application

CFFS Ultra-Hydro Stop H2O Primer is to be applied using 1/8" notched squeegees or trowels at a spread rate of 250 sg/gal.

**DO NOT APPLY THE MATERIAL THINNER THAN SPECIFIED OR LOSS OF PERFORMANCE WILL OCCUR.**

### Roller

Use only high quality, shed and solvent resistant, phenolic core, natural or synthetic fiber roller covers. 3/8" nap are recommended, thicker nap may cause bubbling of the coating. A spiked roller can be used to release any entrapped air in the coating if required.

### Brush

Inexpensive natural fiber chip brushes are suggested - 2" to 4" width depending on the application. These will be one-time use items.

### Thinner

Water can be added up to 10% by volume to thin the CFFS Ultra-Hydro Stop H2O Primer to the desired viscosity.

### Clean Up

Use Acetone on tools and equipment before product cures.

## LEED Credits

Most CFFS products contribute to LEED Credits. See our LEED Credit Bulletin for more information.

## Compatible Coatings

### Primers

CFFS Ultra-Hydro Stop H2O Primer (Epoxy MVT Primer)

\* Can be coated over directly with CFFS Poly100-SC, Polyurea-350, Polyurea-1 HD, and additional coats of Ultra-Hydro Stop H2O Primer if done so within 5-8 hours of initial application. CFFS Ultra-Hydro Stop H2O Primer requires scuff sanding via 40-60 grit sandpaper to provide a profile for additional coatings after 8 hours.

### Intermediates

CFFS Poly100-SC	(Single Component Aromatic Polyurea)
CFFS Polyurea-350	(Polyurea)
CFFS Polyurea-1 HD	(Single Component Aliphatic Polyurea)
CFFS Level-Hard	(Epoxy Hybrid)

### Clear Finish Topcoats

CFFS RG-80	(Aliphatic Polyaspartic Polyurea)
CFFS PG-100	(Aliphatic Polyaspartic Polyurea)
CFFS Polyurea-1 HD	(Single Component Aliphatic Polyurea)

### Accelerator

No additional catalyst is required or available to reduce cure time.

## Coverage Calculations

General Coating Thickness (@100% Solids)	Sq.Ft./gal
1 mils	1600
5 mils	320
10 mils	160

## Certifications

VOC Compliant in all 50 states, Canada, Australia and Various Countries in Europe (National Standards – IMC)

## Safety Precautions

Read container labels and Material Safety Data Sheet before using all products. Contact with liquids Part A and Part B can cause irritation. Wear protective clothing. Cover hands with protective cream and/or gloves. Wear chemical splash goggles. Use only with adequate ventilation. **NEVER** recap a container of mixed material as the continuing reaction may cause an explosion. Keep out of reach of children. See MSDS for First Aid recommendations.

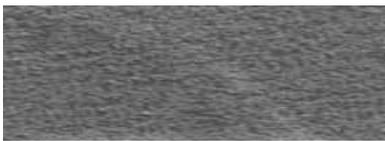
## Shipping Information

Flash Point:	>66°C (>150°F)
Weight/Gallon:	9 ±1.0 lbs.
DOT HAZARD CLASS	Not Regulated
DOT PACKAGING GROUP	N / A
DOT LABEL	Not Regulated
DOT SHIPPING NAME	N / A
UN / NA NUMBER	N / A

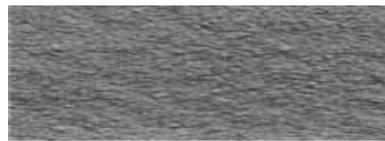
## Warranty

The technical data and any other printed information furnished by CFFS are true and accurate to the best of our knowledge. CFFS Ultra-Hydro Stop H2O Primer™ conforms to in house quality control procedures and should be considered free of defects. The data provided is believed to be reliable and is offered solely for evaluation. The use of this product is beyond the control of the seller, therefore the buyer assumes all risks of use and handling whether done in a matter that is in accordance with the provided posted directions or not. CFFS makes no warranty; expressed or implied, of its products and shall not be liable for indirect or consequential damage in any event.

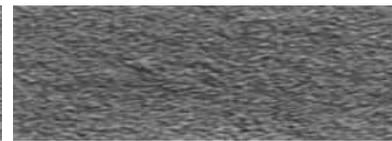
## International Concrete Repair Institute (ICRI) Concrete Surface Profile (CSP) Scale



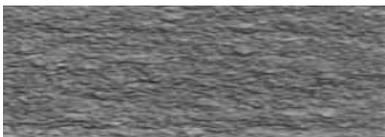
CSP 1 (acid etched)



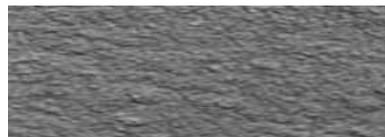
CSP 2 (grinding)



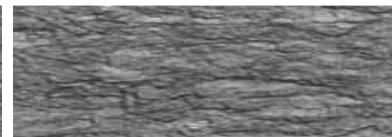
CSP 3 (light shotblast)



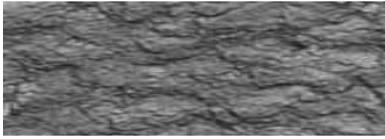
CSP 4 (medium shotblast)



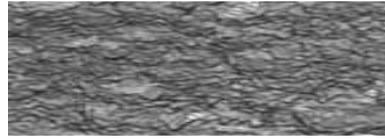
CSP 5 (medium-heavy shotblast)



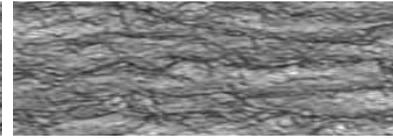
CSP 6 (heavy shotblast)



**CSP 7** (heavy shotblast)



**CSP 8** (extreme shotblast)



**CSP 9** (extreme shotblast)