



**CITADEL®  
ULTRA-HYDRO STOP PRIMER**

**DESCRIPTION AND USES**

Ultra-Hydro Stop Primer is a versatile moisture vapor barrier ideal for use on damp and green concrete floors. It is the perfect solution on moisture laden concrete surfaces for the installation of most resinous coatings and protects moisture sensitive flooring. Ultra-Hydro Stop Primer is two component, 100% solids epoxy primer that is easy to install, self-leveling and fast setting. It provides excellent adhesion and is capable of holding back up to 25 lbs. of moisture vapor transmission, (MVT). Available in Clear, Dunes Tan and Light Grey. The pre-tinted colors can be used as broadcast coats to save time and money.

**PRODUCT FEATURES AND BENEFITS**

- Compliant with all state and federal VOC regulations
- Typical one coat application
- Excellent adhesion to moisture laden slabs
- Resistant to high PH
- Meets ASTM F3010 standard requirements

**PRODUCTS**

SKU	DESCRIPTION
10301B	Clear 5 Gallon Kit
359081	Dunes Tan 5 Gallon Kit
359082	Light Gray 5 Gallon Kit

**RECOMMENDED TOPCOATS**

Contact Rust-Oleum Technical Service Department for approved systems and more detailed information.

**PRODUCT APPLICATION**

**READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT**

**SURFACE PREPARATION**

New concrete must be allowed to cure for a minimum of 14 days before application of the Ultra Hydro Stop Primer. All concrete surfaces must be free of all dirt, grease, oil, fats, and other contamination. Remove surface contamination by cleaning with Krud Kutter® Original Cleaner/Degreaser, detergent, or other suitable cleaner.

After the concrete surface has been cleaned and visibly dry at the time of application, the concrete must be further prepared. The concrete surface texture must be comparable to ICRI CSP Level 3 for moderate environments or Level 5 for severe environments. Contact Rust-Oleum Technical Service Department for more detailed information.

**PRODUCT APPLICATION (cont.)**

**SURFACE PREPARATION (cont.)**

**CONCRETE REPAIR**

All spalls and cracks must be chased out and repaired to ICRI standards using Citadel® Concrete Repair Compound. For floors with very high moisture levels, cracks should be repaired with a mix of Ultra-Hydro Stop Primer and Cab-O-Sil® fumed silica to create a paste and applied by trowel or putty knife.

**MIXING**

Both components and environment should be pre conditioned to a minimum of 50°F (10°C) prior to use. Hand mixing is not adequate. You must combine the base and activator by power mixing using either a 3" Jiffler Mixer or Hanson Plunge Mixer. Mix at 500-750 rpm for 1-3 minutes. Do not over mix or use higher speeds. This can introduce air into the coating causing small bubbles in the finish.

Start mixing the Base component in the short filled 5- gallon pail then add in the two gallons of Activator while maintaining mixing.

It is very important to transfer as much activator as possible. Mix the two components together for 1-3 minutes being careful to not pull air into the mixture. Do not mix more material than what can be applied within 25 minutes of mixing.

If mixing less than the pre measured amounts, mix each component separately before accurately measuring out material. Use a 3:2 (base to activator) by volume mixing ratio and mix thoroughly.

**EQUIPMENT RECOMMENDATIONS**

**SQUEEGEE:** Use a high quality ¼ inch notched rubber squeegee.

**ROLLER:** Use a high quality ¾ inch lint-free roller with a phenolic core.

**BRUSH:** Use a disposable natural fiber chip brush, 2-4 inch wide for cut in work.



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**PRODUCT APPLICATION (cont.)**

**APPLICATION**

Apply only when air, material and floor temperatures are between 60-80°F (15-27°C). Do not apply in direct Sunlight or when temperature is rising. Immediately after mixing, pour the material onto the floor in a long, 8 to 12 inch wide stripe.

Ultra-Hydro Stop Primer is to be applied at a minimum thickness of 16 mils. Ultra Hydro Stop Primer when applied at a minimum of 16 mils thickness will reduce vapor emission rate up to 25 lbs./1,000 sq.ft./24 hr and maximum RH of 99%. To insure proper coverage, periodically check mil thickness using a wet film thickness gauge.

**NOTE:** Do not try to work out of a pan or container, as the build-up of heat could shorten the pot life and create a hazardous condition. Do not scrape the sides or bottom of the container. Use only the material that flows naturally out of the container. Also, do not turn the container upside down and leave on the floor to drain. Doing so may result with unactivated material from the sidewall of the container being applied. This will cause soft spots in the coating.

Use a ¼ inch notched squeegee to spread the material out and achieve the 80-100 square feet per gallon spread rate. Roll out the material smooth using a ⅜ inch lint free roller with a phenolic core. If needed, a spiked roller can be used to release any entrapped air in the coating.

Ultra-Hydro Stop Primer should be allowed to flow down into saw cuts, but not allowed to fill the saw cut. Allow to cure for a minimum of 24 hours before the placement of backer rod and a suitable polyurethane sealant. All expansion joints must be honored.

**COVERAGE**

One activated gallon of Ultra-Hydro Stop Primer will cover 80-100 square feet. The full 5-gallon kit will cover 400-500 square feet. This spread rate must be honored to ensure the primer properly performs.

**THINNING:** Not required.

**CLEAN-UP:** Acetone

**PERFORMANCE CHARACTERISTICS**

**COMPRESSIVE STRENGTH**

METHOD: ASTM D695  
TYPICAL VALUE: 15,225 psi

**TENSILE STRENGTH**

METHOD: ASTM D638  
TYPICAL VALUE: 10,000 psi

**FILM HARDNESS, SHORE D**


METHOD: ASTM D2240  
TYPICAL VALUE: 85

**FLEXURAL STRENGTH**

METHOD: ASTM D790 @ 2 hours  
TYPICAL VALUE: 16,100 psi

**PERMEANCE**

METHOD: ASTM E96  
TYPICAL VALUE: 0.09 perms (grains/h/sq.ft./in. Hg)

	<b>TECHNICAL DATA</b>	<b>CDL-13</b>
	<b>CITADEL<sup>®</sup></b> <b>ULTRA-HYDRO STOP PRIMER</b>	

**PHYSICAL PROPERTIES**

		ULTRA-HYDRO STOP PRIMER
<b>Resin Type</b>		Amidoamine Converted Epoxy
<b>Weight*</b>	<b>Per Gallon</b>	9.1 lbs.
	<b>Per Liter</b>	1.1 kg/l
<b>Solids by Volume</b>		100%
<b>Volatile Organic Compounds</b>		0 g/l
<b>Mixing Ratio</b>		3:2 (Base to Activator by volume)
<b>Induction Time</b>		None required
<b>Working Time</b>		25 minutes @ 77°F (25°C)
<b>Practical Coverage</b>		80-100 sq.ft./gal. Coverage rate can vary depending on the texture and porosity of the concrete
<b>Recoat/Topcoat</b>		12-14 hours. Scuff sanding is required if greater than 24 hours
<b>Shelf Life</b>		5 years
<b>CAUTION</b>		Protect from freezing
<b>Safety Information</b>		For additional information see SDS

Calculated values are shown and may vary slightly from the actual manufactured material.

\*Activated material

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