

**Installation Guide** 

### **PRODUCT DESCRIPTION**

5400 is a Chemical Resistant Waterborne Urethane that exhibits excellent wear and U.V. Resistance. The film build, gloss and chemical resistance are comparable to solvent based systems, yet without the intense odor associated with them or the high V.O.C. levels. 5400 is designed for use over concrete, stone, epoxy and other various substrates to protect against wear and chemical attack.

#### **\*\*Available in Matte and Gloss Finish\*\***

\*\*NOTE: We do not recommend 5400 for industrial floors exposed to forklift traffic.\*\*

### **RECOMMENDED COVERAGE RATES**

5400 Clear Water Based CRU

450-525 sqft/ 1.5 Gal Kit

#### SUBSTRATE REQUIREMENTS

#### **Concrete Priming**

Concrete shall be structurally sound and stable. Concrete shall be free of dust, dirt, grease, contamination, surface laitance, and other potential bond-breaking substances that could impair adhesion. Concrete may need to be mechanically profiled and prepared by shot-blasting, grinding, or other means of scarification. All cracks, gouges, and other surface defects need to be addressed prior to coating installation. Substrate and ambient temperatures must be above 50<sup>IIF</sup> (10<sup>IIC</sup>C) during installation of 5400. Relative humidity should not exceed 65% during installation of the coatings. Environmental conditions must not be near the dew point during installation of the coatings. Moisture vapor emission must be < 3lbs /24hr/1000 ft2.

# <u>\*\*Under most conditions concrete shall be primed with an approved primer (typically 4001) when 5400</u> <u>directly over it.\*\*</u>

If moisture vapor emission is higher, contact a Versatile Building Products representative for and alternative coating system.

#### ADVICE BEFORE INSTALLATION



# **Installation Guide**

All products in this system are two component products. Be sure to mix thoroughly before the application. Cure times will be affected by environmental conditions so do not force dry.

High Humidity and or Low Temperatures can cause haziness and blushing in the coatings. Pot life is approx. 60 min for a 1.5 Gal kit.

Large masses of mixed or heated material will have shorter pot life so if you are not familiar with the product do not mix more than one a 1.5 Gal kit at a time.

The more you mix the shorter the pot life and working time will be.

#### Hot Weather Tips

These Products have a shorter pot life in very hot conditions. Keep the material core temperature around 50-75°F if possible. <u>Icing the buckets hours before doing job or placing in a cool environment the day before application can help lower the core temperature.</u> If instructions are not followed, excessive heat may cause outgassing. <u>To reduce the effects of outgassing (vapor coming out of the substrate), install when the temperature is dropping from the highest temperature of the day.</u>

#### **Cold Weather Tips**

All WB CRU's are temperature sensitive. The colder the temperature the longer the dry and cure times will be.

Keep the material core temperature around 50 to 75° if possible. <u>Using a pale warmer before doing the job</u> or placing product in a warm environment the day before application can help increase the core <u>temperature which will make the material thinner and easier to work with.</u>

#### **INSTALLATION STEPS**

#### 1. Surface Preparation

There are many methods of surface preparation for various substrates many of which are adequate for this application consult a Versatile representative for alternatives to the procedure outlined below and methods of correcting problematic and contaminated substrates.

#### Concrete-

If the Concrete allows water to penetrate, then proceed to clean the surface with the V-100 Degreaser Cleaner using liberal amounts on oil stains and scrub until the water no longer beads up on on it.

If the Concrete is not porous, does not darken when wet, it must be mechanically profiled and prepared by shotblasting, grinding, water jetting or other means of scarification to a concrete surface profile (CSP) between two and four according to international concrete repair institute ICRI guideline number 03732

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### **Installation Guide**

#### 2. Preparation

- Shut off all sources of ignition prior to work, and throughout the Installation process.
- Supply auxiliary ventilation as necessary to produce a safe working environment.
- Use a NIOSH approved respirator capable of filtering organic vapors

#### 3. Mixing

- Materials should be kept room temperature 50 to 75°F.
- Mix 5400 CRU A component with 5400 CRU B Component at ratios listed on the label, 2 A : 1 B for 2 to 3 minutes using a jiffy type Mixing Blade at no less than 700 rpm.
- Transfer mixed material to a second Mixing Versatile and mix an additional minute to ensure that material along the sides of the first mixing vessel are properly incorporated into the mixture, be sure to mix thoroughly
- Product is a Milky White consistency that will dry clear.

#### 4. Application

- Working with enough material you can properly manage begin by cutting in around the edge of the concrete with a brush. Do not go too far ahead of the main body of Material as you will always want to keep a "Wet Edge ".
- Pour a 3-4" Ribbon of material across the floor of the mixed material out onto the floor and begin either using a Brush or Roller ( $3/8 \frac{1}{2}$ " Nap ) to apply.
- Use spiked shoes when walking into wet material.
- Work the material evenly to a film thickness of approx.. 5-6 Mills. 300-350 sqft / Gal.
- This Product has a thin watery consistency and is not meant to be applied thick like Solvent Epoxy Primers
- Evenly back roll the entire surface and making sure the Product does not puddle.
- Subsequent coats must be applied whilst the Coating is still tacky otherwise surface deglossing with sandpaper or buffing pads will be required.
- Additional coats may be necessary over highly porous concrete.
- Be sure to maintain a wet edge in order to avoid streaking or flashing of primer.
- \*\* Do not use material after 1 hour pot life, material applied after 1 hour pot life will stay white when dry. Do not applied too thick as product will foam up \*\*.

#### 5. Clean-up



# **Installation Guide**

- Immediately cleanup splatter marks and tools with MEK or Acetone.
- Clean hands and exposed skin with mild soap and water, and/or citrus based hand-cleaner.

#### 6. Cure Times

- 5400 CRU can typically accept light foot traffic in 8-10 Hrs.
- Recoat after 10-24 Hrs. If left to dry it must be scuffed up prior to another coat being applied.
- Vehicular traffic with pneumatic tires in 72 hours.
- Full cure occurs in 7 days.

#### ADDITIONAL CAUTIONS AND RECOMENDATIONS

- Do not force dry.
- Mask all areas that need protection.
- Always wear protective clothing and equipment as required by OSHA and as necessary.
- Read Safety Data Sheets before commencing work.
- Store material at 50-75°F
- Shut off all sources of ignition prior to work, and throughout the sealing process.
- Supply auxiliary ventilation as necessary to produce a safe working environment.
- Use a NIOSH approved respirator capable of filtering organic vapors.
- Do not use leftover material in the Mixing Bucket after 1 Hrs. Even though it is still in a Liquid Form.

#### **TECHNICAL SERVICES**

• Technical services can be obtained by contacting Versatile directly at 714-829-2600.