



Description

CRP 540 WB CRU is a two component, high solids, water base, aliphatic polyurethane. The UV resistant, mar resistant, chemical resistant nature of this product will cause it to outperform most other types of sealers or topcoats without the unwanted smell of solvents.

Uses

CRP 540 WB CRU is designed for professional use only and is specified as the finish coat for use in moderate to severe chemical environments or in medium-heavy traffic areas. This U.V. resistant coating can be used in both indoor and outdoor applications. Apply CRP 540 WB CRU as a coating over CRP water base and 100% solids epoxy floor coatings. 540 WB CRU is also used as a sealer on a variety of other substrates such as decorative concrete overlays and acid stained concrete flooring. Use CRP 540 WB CRU on Garage Floors, Decorative Floors, Restaurant Floors, and Food Processing Facilities.

Advantages

- SCAQMD VOC Compliant (VOC < 50 g/l)
- Chemical Resistant
- Color and Gloss Retention
- Impact & Abrasion Resistant
- No Solvent Smell
- Water based formula

Coverage

300-400 sf per gal as a coating (thin with 5% water)
400-450 sf per gal as sealer (thin w 10% water)

Packaging

1½ gallon kits premeasured with Hardener A in ½ gallon and Resin B in 1 gallon containers
15 gallon kits premeasured in three 5 gallon pails

Colors

Clear

Inspection

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170). All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes high humidity, sprinklers, rain, fog, dew, etc. Make sure relative humidity of the air is < 70% to ensure gloss finish.

Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts have a tendency to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran, and cannot be used to predict long-term conditions.

Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for a floor coating's installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, *Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride*. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 2.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure to install CRP directly over concrete. If the reading is any higher, please consult your CRP Salesman for further instructions.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the applicator. CRP bears no responsibility for failures due to any of the above conditions.

Surface Preparation

Over Concrete: Shotblasting is the preferred method for preparing concrete when applying epoxy and urethane floor systems. When using other methods, prepare the surface so that the surface is porous and contaminant free so the product can soak in and properly bond.

As a sealer over concrete: When applying WB CRU directly over porous concrete as a clear sealer, the surface may be lightly abraded. Make sure no contaminants or prior sealers are present.

Recoat or Over Epoxy: Apply directly over existing coat of CRP or new epoxy within 24 hours of application of previous coating. When recoating or applying over existing epoxy that has been cured for longer than 24 hours, sand the surface with 100-150



grit sand paper, remove debris and wipe with acetone just before new application.

Mixing

As Coating over Concrete, Epoxy, or CRU: Before application, CRP WB CRU A-Side and B-Side should be pre-mixed in their individual containers. Add 1 part of the A-Side to 2 parts of the B-Side while mixing, using a mechanical mixer (Jiffy Mixer) at low to medium speeds. For proper leveling purposes, add 5% water (10oz) to 1½ gallon mix. Mix until a homogeneous mixture and streak-free appearance is attained (approximately 3 minutes). Use care to scrape the sides of the container to ensure that no unmixed material remains.

As a sealer over concrete: When applying as a clear sealer directly on acrylic cements or acid stained concrete, it is recommended to thin the CRU with a *maximum total* of 10% water (20 oz) per 1½ gallon kit. Thinning will aid in penetration, help avoid puddles and help avoid bubbles and unevenness. Make sure to proper neutralize floor if acid stained. If a second coat is to be applied, dilute mixed product with 5% water (10 oz).

Application

The CRP WB CRU material may be squeegeed, rolled or brushed. Apply product within 24 hours after previous coating is applied. Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush or trowel. Leave remaining material in bucket and spread evenly using a 3/8" non-shedding nap roller cover beginning near the cut in area. Apply quickly and avoid overrolling, as product will begin to "tack-up" as it begins to cure.

Re-coat if needed *within* 24 hours of application to insure adhesion. If a delay occurs, it is recommended that the surface be sanded and wiped clean with acetone before reapplication.

Maintenance:

Cleaning the CRU is best done by mopping surface with mild soap and water or a mild detergent. For best appearance, CRP recommends resealing the surface every 3-4 years. Reseal by lightly sanding existing coating, cleaning surface, and applying CRU over dry surface using above application specifications

Limitations

- Do not apply in temperatures below 50°F or above 90°F.
- Do not apply unless temperature is 5° above the dew point or if rain is expected within 24 hours.
- Do not apply on damp or moist surface as product will whiten and may cause delamination.
- Apply only if relative humidity < 70% to ensure gloss finish
- Opened material must be used within 2 days.
- 1 gallon must cover at least 275 sf to properly cure.
- Please read MSDS sheet before use.
- Shelf Life of this material is 1 year from the date of manufacture. (See batch number for manufactured date)
- CRP recommends the use of angular slip resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards.

Clean Up

Uncured material can be removed with soap and water or an environmentally safe solvent immediately after use. Cured material can only be removed mechanically. All empty containers must be disposed of according to local, state, and federal regulations.

Warranty

Concrete Restoration Products guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. CRP makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are hereby disclaimed. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product. Manufacturer shall not be liable for material used outside of its shelf life. For product dating, please refer to the batch number on the product or contact CRP.

Technical Data

	Test Method	Results
Shelf Life		6 months



Mixing Ratio by Volume A:B		1:2
Wet Film Thickness per Coat:		3-5 mils
Dry Film Thickness per Coat	ASTM D-3363	1 ½ - 3 mils
Tear Resistance DleC	ASTM D-1004-66	270 pli
Tensile Strength	ASTM D-412	3980 psi
Ultimate Elongation	ASTM D-412	30%
Gloss (60 deg)	ASTM D-823	85 (±5)
Volume Solids	ASTM D-2697	61% by volume
VOC	ASTM D 2369-81	58% (when cut with 5% water per 1.5 gal kit)
Pot Life (75±3°F)		<50 g/l
Recoat Time		60 minutes
Taber Abrasion	ASTM D-4060-84	7 hrs (min) -24 hrs (max)
Impact Resistance	ASTM D-2794-84	33.9 mg Loss, C17 Wheel, 1000g Load,
Pencil Hardness	ASTM D-3363-84	1000 Cycles
Pendulum Hardness	After 1 Day	Inch-pounds Direct 160 Reverse 160
	After 7 Days	2-H
Mixed Viscosity at 75 F(24 C) 50% RH		800 cps
Mixed viscosity with 5% water dilution		520 cps
Weight		A-SIDE 9.1 lbs/gal
		B-SIDE 9.0 lbs/gal
Flash Point		A-SIDE <365 F
		B-SIDE n/a
14 Days Cured	4 hrs	24hrs
10% Acetic Acid	No Effect	No Effect
10% Sulfuric Acid	No Effect	No Effect
10% Hydrochloric Acid	No Effect	No Effect
14% Ammonium Hydroxide	No Effect	No Effect
50% Sodium Hydroxide	No Effect	No Effect
IPA - Iso-Propyl Alcohol	No Effect	No Effect
MEK - Methyl Ethyl Ketone	No Effect	No Effect
Deionized (Water)	No Effect	No Effect
10% Betadine	No Effect	No Effect
10% Bleach	No Effect	No Effect
Gasoline	No Effect	No Effect

