CRP
Concrete Restoration Products

Product Information

CRP 350 Metallic Resin ***High-Flow, Self-Leveling, Epoxy Floor Coating***

Description

CRP 350 Metallic Resin **is a two component, 100% solids, low viscosity, self-leveling, epoxy floor coating. It has excellent flow characteristics, great bubble release, and provides a tough floor finish. The diverse nature of this coating allows it to be poured at various mil thicknesses with great success.**

Uses

- **Apply at 30-200 ft²/gallon**
- **Metallic Epoxy Floors**
- **Artistic Coating Systems**
- **High-Build Epoxy Coating**
- **Showrooms**

Advantages

- **100% Solids & Zero-VOC**
- **Convenient 2A:1B (by volume) Mix Ratio**
- **Self-Leveling Low Viscosity**
- **Incredible Bubble Release**
- **Excellent Chemical Resistance**
- **Flows Great for Easy Application**
- **Meets/Exceeds USDA Criteria**

Coverage

CRP 350 Metallic Resin can be applied anywhere between 30-200 sq ft per gallon depending on the usage.

Typical coverage for a metallic floor is 65 sq ft per 1 gallon of mixed product. At this rate, 1.5 gallons will cover 100 sq ft, 3 gallons will cover 200 sq ft, and 15 gallons will cover 1,000 sq ft. Typically, one large jar of Metallic Pigment is used with one 1.5 gallon kit of CRP 350 Metallic Epoxy.

When used as a high-build clear coat, CRP 350 Metallic Resin can be applied up to 30 sq ft per gallon on a floor and still keep its excellent bubble release.

Solid color pigment packs can be added to the CRP 350 Metallic Resin and it can be applied 100-200 sq ft per gallon for use as a traditional epoxy floor coating.

Colors

Available in Clear
Metallic Color Packs and Solid Color

Packaging

1 1/2-gallon kits
(1 gallon bucket part A to 1/2-gallon jug part B)
3-gallon kits
(2-gallon bucket part A to 1-gallon jug part B)
15-gallon kits
(2 – 5-gallon pails part A to 1 – 5-gallon pail part B)

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 60-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).

Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. 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 an epoxy flooring 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 4.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for an epoxy flooring installation. If the reading ranges from 4.5lbs to 15lbs, a moisture barrier system such as our CRP Moisture Block can be installed to reduce the emissions.

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. Concrete Restoration Products bears no responsibility for failures due to any of the above conditions.

Surface Preparation

Over Concrete Surfaces: Shotblasting or diamond grinding is the preferred method for preparing the concrete. Proper preparation should achieve a clean, porous, and uniform surface that feels like 60 grit sandpaper that will allow the product to soak in and properly bond.

Over CRP Epoxy: Typically, if an epoxy primer has been down < 24 hrs, CRP 350 Metallic Resin should be able to be applied directly over the primed floor without further preparation. Refer to primer's individual TDS to confirm this prior to proceeding.
If epoxy has been down for > 24 hrs, sand the surface with a floor buffer and 100 grit sandpaper. Remove debris and wipe clean with acetone just before new application. Always test a small area to ensure adhesion prior to application.

Primer

Use CRP Moisture Block primer or any of CRP's 100% solids epoxy primers to seal the concrete prior to use of 350 Metallic. If applying a metallic finish, it is typically best to prime the floor with a similarly colored pigmented coat prior to the metallic coat to give a good background color for the final product.

Metallic Pigments

Metallic Pigments (sold separately) should be pre-mixed into Part A Resin prior to combining with Part B Hardener. It is best practice to pre-mix the pigment into your resin the night before the project to soften up any chunks in the pigment. If that is not feasible, you may also strain or filter the resin/metallic combination through a paint strainer to eliminate the possibility of any lumps/chunks in your project.

Typically, 1 jar of Metallic Pigment to each 1.5-gallon kit of CRP Metallic Epoxy when applied at 65 sq ft per gallon is a perfect ratio for metallic floors.

Mixing

Mix 2 parts Side-A Resin with 1 part Side-B Hardener by volume into a clean mixing container. Mix the epoxy with a slow speed drill with a mixing paddle attachment. Blend for 3 to 4 minutes. Carefully scrape the sides and bottom of the pail during mixing. After mixing thoroughly, immediately pour the blended mixture onto the horizontal surface at desired thickness and spread over the area to be coated by trowel or squeegee to achieve desired design. Leaving material in mixing bucket for too long can cause material to quickly heat up and begin curing in the bucket.
When using CRP 350 Metallic Resin as a stand-alone clear coat, applicator should take care to backroll epoxy using 3/8" non-shedding nap roller cover to help ensure product will level out correctly.

When using metallic pigments, a wide array of techniques can be used to achieve various effects including use of weenie rollers, looped roller covers, multiple colors, sprayed alcohol, etc. It is always best to test techniques out on sample boards prior to applying on the job.

Bubble Release

This formula is designed to release bubbles and flow together on its own. While torching the surface or spraying with alcohol/acetone is not required, the misting of 91% isopropyl alcohol using a high-quality spray bottle or pump-sprayer can still help to break the surface tension and ensure a perfect finish.

Batch Size

Large batches of epoxy will cure much faster in hot weather. We do not recommend applications over 90° F. Do not prepare mixtures of more than 3 gallons at a time.

Working Time

CRP 350 Metallic Resin **should remain open for design/tinkering for ~30 minutes if spread on the floor (at 75°F).**
Note: Do not leave mixed material in bucket. Product should be poured onto the desired surface *immediately* after mixing or material will quickly heat up and cure in bucket severely shortening or altogether eliminating working time.

CRP 350 Metallic Resin can be re-coated as soon as the surface is dry to touch up until a maximum of 24 hrs after previous application. If additional coats need to be applied after the acceptable window, sand the surface and wipe it with a suitable solvent (i.e. acetone) prior to re-coating.

Limitations

- **Do not apply at temperatures below 55˚F or above 90˚F.**
- **Do not let mixed product sit in bucket for prolonged period or it will become very hot and unusable.**
- **Do not apply over concrete with Moisture Vapor Emissions above 4.5 lbs/1000 ft²/24hr.**
- **For interior use only unless protected by a pigmented UV resistant coating.**
- **Concrete must be cured for a minimum of 28 days to ensure adhesion.**
- **Solvents added to thin such as acetone will make product combustible or flammable in which case be aware of sparks or open flame.**
- **If solvent is added, the product must be applied thin (~300 ft²/gal to allow the solvent to escape and proper curing to occur.)**
- **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 a solvent. 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 Concrete Restoration Products.