



# Epoxy 600

## Data Sheet

Part # E600-CL, E600-CO

**DESCRIPTION:** Concrete Solutions® Epoxy 600 is a two component, unique, self-leveling epoxy coating designed as a high build, clear or pigmented topcoat for interior floor applications. It can also be used over Concrete Solutions Polymer Concrete 1/4" Stamping applications (Stamp-Top™) to help fill in some of the stamped texture on interior floor applications where a smoother, easier to clean surface is desired. It is a versatile, high grade epoxy material used for a variety of job applications and provides an attractive gloss appearance. For the best gloss retention and UV stability, it is recommended to apply our Concrete Solutions SB or HP Urethane as a topcoat.

**TYPICAL USES:** Used as a topcoat over warehouse floors, airport hangars, and over decorative Color Quartz or other aggregate and Color Flake interior floor applications.

**FEATURES & BENEFITS:**

- Excellent chemical resistance
- Nice gloss appearance
- Low odor
- Cures in presence of moisture and humidity
- Environmentally friendly
- Low viscosity
- Self-leveling
- No VOCs (solvent free)
- Excellent bond to a variety of surfaces

**CHEMICAL PROPERTIES\*:**

	Result
Viscosity, Mixed (cps)	300 – 600
Solids by Volume/Weight	100%
Volatile Organic Compounds	0 lbs/gal
Mix Ratio by Volume	2A (resin) : 1B (hardener)
Gel Time @ 77°F (25°C), 150g	25 – 30 min
Pot Life	15 min
Recoat	12 – 24 hrs
Tack-free	6 – 8 hrs
Walk on Time (light foot traffic)	12 – 18 hrs
Return to Service Time (vehicle traffic)	72 hrs
Full Cure	7 days
Coverage Rate per Gallon	80 – 120 sq. ft. at 13 – 20 mils DFT
Recommended Application Temperature (cures faster in warmer temperatures)	≥50°F (10°C)
Odor	low
Color	clear, standard colors
Shelf Life - unopened containers	12 months

\*Properties were tested at 70°F (21°C).

**TYPICAL PHYSICAL PROPERTIES\*:**

	Test	Result
Hardness (Shore D)	ASTM D-2240	85
Tensile Strength (psi)	ASTM D-638	7000 – 7500
Elongation (%)	ASTM D-638	2 – 5
HDT	ASTM D-648-264	120°F
Compressive Strength (psi)	ASTM D-695	9,000 – 10,000
Water Absorption, gain in 24 hrs (%)	ASTM D-570	<1

\*Properties were checked on dry films at 5 – 6 mils thick, air dried for 7 days.

**MOISTURE VAPOR TESTING:** All concrete floors not poured over a proper moisture barrier, are subject to possible moisture vapor transmission or hydrostatic pressure problems which can cause a coating system to blister or fail. Before applying a coating system over a concrete floor which is on-grade or below grade, the customer should be informed of this potential problem and given the option to have a qualified moisture testing company perform calcium chloride test to give the proper recommendations. Rhino Linings Corporation does not warranty against moisture problem failures.

## CONCRETE SOLUTIONS® EPOXY 600 (continued):

**SURFACE PREPARATION:** Surface Preparation is often the most important part of a successful coating or resurfacing application. Surface must be clean, sound, and free from oil, dirt, waxes, or any other contaminant that may interfere with bonding. Popular methods of surface preparation include grinding, shotblasting, and/or scrubbing with detergent, acid etching, neutralizing, and pressure washing. The type of surface preparation needed will depend on the condition of the substrate to be repaired, resurfaced, textured, stamped, colorcoated and/or sealed. For commercial and industrial indoor jobs, grinding is required to prepare the surface. For residential indoor jobs, scrubbing with detergent, acid washing, neutralizing, rinsing and wet/dry vacuuming is recommended. See Surface Preparation in Concrete Solutions Training Manual for more step by step instructions. Apply Epoxy 600 over a dry surface.

**MIXING INSTRUCTIONS:** The mixing ratio for Epoxy 600 is 2 parts A to 1 part B. Mix each component separately. Check the batch number on Part B (hardener) containers. If the batch numbers are not all the same, then mix all containers of Part B together prior to achieve a uniform color. Mix part A and B together (only the amount that can be used within 10 – 15 minutes) using a low speed drill motor and mixing paddle for 3 – 5 minutes scraping the sides and bottom of the container. After mixing, immediately pour the entire bucket in a thin row next to the starting edge and begin spreading using our metal edge squeegee followed by a 1/4" nap paint roller. **Important: Use a lint free or micro fiber roller. Ensure the roller cover is lint free. One method to remove loose lint is by wrapping the roller with tape. Any loose roller hairs can result in surface defects. For the best results, mix only 3 gallons of material or only what can be applied within 10 – 15 minutes. Do not allow the Epoxy 600 to sit in the bucket for more than 5 minutes after mixing.**

**APPLICATION INSTRUCTIONS:** Epoxy 600 can be applied by roller, brush or rubber or metal edge squeegee. When using a squeegee it is best to follow immediately behind with a 1/4" – 3/8" nap paint roller to even out any squeegee marks. Keep a wet edge and do not roll into an area once it has begun to set up to avoid color differences. Temperature and humidity conditions affect the cure and tack free times of this material. Warm, dry conditions speed the cure and cool, damp conditions will lengthen the cure time. Recoat within 12 – 24 hours to achieve the best chemical bond. After 24 hours it will be necessary to sand the Epoxy 600 with an orbital sander and #100 grit sandpaper to achieve a physical bond.

FOR LARGE APPLICATIONS: It is important not to use the same mixing bucket for more than 1 hour and to change roller covers as needed. This will avoid leaving lumps on the floor from material starting to set up in the bucket and on the roller.

AS A COATING OVER CONCRETE: Before applying the Epoxy 600 over an indoor concrete surface, it is recommended to apply Concrete Solutions WB Epoxy Clear as a prime coat. Apply both by squeegee followed by a 1/4" nap paint roller.

AS A COATING OVER COLOR QUARTZ OR COLOR FLAKE APPLICATIONS: Apply Epoxy 600 using a rubber or metal edge squeegee (available from Rhino Linings Corp. or many Concrete Solutions distributors) followed by a 1/4" nap paint roller. While one person is spreading with the squeegee to the desired thickness, another person wearing spiked shoes should be back rolling over the Epoxy 600 to help even out any squeegee marks. Allow to dry for a minimum of 12 – 18 hours before opening to traffic. Do not apply in areas exposed to sunlight.

**NOT RECOMMENDED FOR:** Do not apply to concrete less than 30 days old. For indoor use only.

### CHEMICAL RESISTANCE (3 week immersion):

Reagent	% weight gain (loss)	Reagent	% weight gain (loss)
Xylene	E	Synthetic Gasohol	E
Toluene	E	5% Detergent Solution	E
1,1,1 Trichloroethane	E	10% Sodium Hydroxide	E
MEK	G	50% Sodium Hydroxide	E
EB (Ethylene Glycol Monobutyl Ether)	E	10% Sulfuric Acid	E
Ethyl Alcohol	E	70% Sulfuric Acid	E
Water (deionized)	E	10% Hydrochloric Acid	E
Methyl alcohol	G	5% Acetic Acid	G
Skydrol	E	10% Acetic Acid	F

E = Excellent, G = Good, F = Fair

**COLOR OPTIONS:** Clear and 5 standards colors: light gray, medium gray, dark gray, mojave sand and adobe tan. Limited custom colors are available by special order.

**HOW SUPPLIED:** Epoxy 600 is packaged in 1 ½, 3 gallon kits for convenient use in a 2:1 mixing ratio.

**STORAGE:** ≥50°F (10°C)

**SLIP/FALL PRECAUTIONS:** Concrete Solutions recommends using slip resistant granules in all outdoor applications where the Epoxy 600 will be used as a topcoat sealer that may be exposed to water, oil or other spills that may cause a slippery environment. Aluminum oxide granules #80 grit or courser may be broadcast into the prime coat to achieve the amount of slip resistance desired. It is the end user's responsibility to determine the suitability of a coating for their particular application. Rhino Linings Corp. or its sales agents will not be responsible for injury incurred in a slip/fall accident.

**CONCRETE SOLUTIONS® EPOXY 600** *(continued)*:

**SAFETY PRECAUTIONS: Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS)**

Chemical systems require the use of proper safety equipment and procedures. Please follow the Rhino Linings® product SDS and Safety Manual for detailed information and handling guidelines.

**For Your Protection:** The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors.

Because of numerous factors affecting results, **Rhino Linings Corporation makes no warranty of any kind, express or implied**, other than that the material conforms to its applicable current Standard Specifications. Rhino Linings Corporation hereby disclaims any and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of Rhino Linings Corporation for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.

©2014 Rhino Linings Corporation. All rights reserved.



**Rhino Linings Corporation**

9747 Businesspark Avenue, San Diego, CA 92131  
858-450-0441 • Fax 858-450-6881  
1-800-422-2603  
[www.rhino linings.com](http://www.rhino linings.com)

**Concrete Solutions by Rhino Linings**

7455 Carroll Road, San Diego, CA 92121  
1-800-232-8311 • Fax 858-566-4346  
[www.concretesolutions.com](http://www.concretesolutions.com)