



# Epoxy 600

## Data Sheet

Part # E600-CL, E600-CO

### DESCRIPTION:

Concrete Solutions™ Epoxy 600 is a 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 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:

- Environmentally friendly
- No VOCs (solvent free)
- Low odor
- Self-Leveling
- Nice gloss appearance
- Excellent bond to a variety of surfaces
- Low viscosity
- Excellent chemical resistance

### 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
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	≥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
Flexural Strength (psi)	ASTM D-790	17,900
Elongation (%)	ASTM D-638	4.5
HDT	ASTM D-648-264	120°F
Compressive Strength (psi)	ASTM D-695	10,100
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. Concrete Solutions, Inc. does not warranty against moisture problem failures.

**SURFACE PREPARATION:** The surface must be clean and sound, free from oil, dirt, waxes and any other contaminants that may interfere with bonding. Some surface preparation methods include shot-blasting and scrubbing with detergent or acid washing, neutralizing and rinsing. Shot-blasting is recommended for commercial or industrial jobs. 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

## CONCRETE SOLUTIONS™ EPOXY 600 (continued):

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 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 metal edge squeegee (available from Concrete Solutions) 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.

### 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
Methel alcohol	G	5% Acetic Acid	G
Skydrol	E	10% Acetic Acid	F

E = Excellent, G = Good, F = Fair

**COLOR OPTIONS:** Clear and 8 standards colors: light gray, medium gray, dark gray, concrete gray, mojave sand, adobe tan, baja red and greenstone. Limited custom colors are available by special order.

**HOW SUPPLIED:** Epoxy 600 is packaged in 1 ½, 3, 15 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 SB Urethane will be used as a topcoat sealer and on indoor applications 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. Concrete Solutions or its sales people will not be responsible for injury incurred in a slip/fall accident.

### SAFETY PRECAUTIONS: Health Considerations: Consult the Rhino Linings® Material Safety Data Sheets

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product MSDS and Safety Manual for detailed information and handling guidelines.

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