

# TECH DATA - DOC 110

## METALLIC EPOXY 100% SOLIDS



### PRODUCT DESCRIPTION:

DOC 110 is a two component 100% solids cycloaliphatic epoxy clear coat and works with metallic powders to create one of a kind decorative floors. Cycloaliphatic epoxies are known for improved weatherability, better chemical resistance, better impact resistance, and water moisture tolerance. DOC 110 can also be used as a standalone top coat in a broadcast system or filled with paint chips, marble chips, and colored sand mixtures.

### RECOMMENDED FOR:

Recommended for warehouses, kitchens, restrooms, restaurants, basements, garages, living rooms, bedrooms, and other areas where a beautiful metallic floor or broadcast system is desired.

### SOLIDS BY WEIGHT:

100%

### SOLIDS BY VOLUME:

100%

### VOLATILE ORGANIC CONTENT:

Less than 2 g/l

### STANDARD COLORS:

Clear – gardner color 1-2

### RECOMMENDED FILM THICKNESS:

16-18 mils

### COVERAGE PER GALLON:

80-100 square feet per gallon @ 16-18 mils

### PACKAGING INFORMATION

3 gallon kits

15 gallon kits

### MIX RATIO:

2:1 (1 gallon part A, 1 gallon part B)

### SHELF LIFE:

1 year in unopened containers

### FINISH CHARACTERISTICS:

Gloss (60 to 90 glossmeter)

### ABRASION RESISTANCE:

Taber abraser CS-17

### FLEXURAL STRENGTH:

7,400 psi ASTM D790

### COMPRESSIVE STRENGTH:

11,200 psi ASTM D695

### ADHESION:

350 psi

### TENSILE STRENGTH:

7,600 psi ASTM D638

### ULTIMATE ELONGATION:

4.1%

### GARDNER VARIABLE IMPACTOR:

50 inch pounds direct – passed

### HARDNESS:

Shore D = 81

### CURE SCHEDULE:

pot life – 1 1/2 gallon volume .....20-30 minutes @ 70° F

tack free (dry to touch).....6-8 hours @ 70° F

recoat or topcoat.....10-16 hours @ 70°F

light foot traffic.....14-18 hours @ 70°F

full cure (heavy traffic)... .....2-7 days @ 70°F

### APPLICATION TEMPERATURE:

55-90 degrees F

### PRIMER:

Recommended DOC 102 water base epoxy. Colors include black, white, red, blue, or other. Use as a base coat for metallic epoxy floors.

### TOPCOAT:

Optional: Doc 210, aliphatic urethanes, low VOC

### LIMITATIONS:

1. Color stability or gloss may be affected by environmental conditions such as high humidity, chemical exposure, UV exposure or exposure to lighting such as sodium vapor lights.
2. Colors may vary from batch to batch. Therefore, use only product from the same batch for an entire job.
3. This product is not UV color stable. Clear aliphatic urethane topcoats reduce color instability.
4. Substrate temperature must be 5°F above dew point.
5. For best results, apply with a ¼” nap roller.
6. All new concrete must be cured for at least 30 days prior to application.
7. Apply a suitable primer before using this product
8. See page 2 for application instructions.
9. Physical properties are typical values and not specifications.
10. See reverse side for limitations of our liability and warranty.

### MIXING AND APPLICATION INSTRUCTIONS

1) **PRODUCT STORAGE:** Store product at normal room temperature. Continuous storage should be between 60 and 90 degree F. Low temperatures or temperature fluctuations may cause product crystallization.

2) **SURFACE PREPARATION:** Shot blast or grinding the surface is the best prep for concrete. All dirt, foreign contaminants, oil, and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. For further testing a moisture test kit can be purchased from EpoxyDoc.

3) **PRODUCT MIXING:** Use a clean bucket. This product has a mix ratio of two parts A to one part B by volume. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We highly recommend that the kits not be broken down unless accurate measuring is used. Before mixing part A and part B, pour part A into a 3 gallon bucket. Add the pre measured metallic powder slowly and mix for 5 minutes. Mix using a special metallic mixing paddle. Add part B and mix for additional 3 minutes.

4) **PRIMING:** A suitable primer should be used before applying this product. If a primer is not used, more porous substrates may cause out gassing and possible surface defects. DOC 102 water base primer is suitable for this purpose. Applying a colored primer will work with the metallic epoxy to create a beautiful finish.

5) **PRODUCT APPLICATION:** You will need a clean bucket, roller, 3/8 inch roller cover, mixing paddle, cut brush and squeegee. Cut in all edges and corners as you proceed. Roll out the metallic epoxy at 80 SF/gallon. For faster results pour mixture onto the floor, and squeegee to distribute the epoxy evenly. Back roll the epoxy using a 3/8 inch roller. Back roll one way then re-roll another way.

Once several feet have been applied, use spike shoes to walk out on to the epoxy floor and look for imperfections. If bubbles appear use a spray bottle filled with rubbing alcohol and mist lightly to break. Once satisfied back out and start to apply the rest of the floor.

- Remember pot life is about 30 minutes so work in small batches only mix 1.5 gallons at a time.
- Maintain temperatures within recommended ranges during application and curing.
- When humidity is present, apply epoxy within parameters shown.
- When pot life is reached and epoxy starts to get sticky or hard to apply, stop and mix a new batch.
- Applications made at different times and conditions may show slight variations in color and gloss.

6) **RECOAT OR TOPCOATING:** A suitable top coat can be used to protect the epoxy finish. Make sure the epoxy is completely tack free before applying any top coat. Colder temperatures will require more cure time for the product before recoating. If a blush is present, it can be removed by any standard detergent cleaner prior to top coating. Many epoxy coatings and urethanes as well as multiple coats of this product are compatible for use as a topcoat. If recoating after 48 hours, de-gloss before recoat by sanding the surface with a light sand paper.

7) **CLEANUP:** Xylene or like products

8) **RESTRICTIONS:** Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.

**NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND  
LIMITATIONS ON OUR LIABILITY**

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. **NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT.** We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may **CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.**  
(EPOXYDOC LLC)

**SLIP AND FALL INFORMATION**  
**IMPORTANT PLEASE READ**

OSHA and the ADA (American Disabilities Act) have set standards for pedestrian surfaces concerning slip resistance. These standards are enforceable and should be taken seriously by professional installers and end users. Most floor coatings are not slip resistant. **EpoxyDoc recommends the use of a slip resistant additive in all flooring systems.** Any floor coatings exposed to water, oil, dirt, grease, and or any other potential slip hazard material should contain a slip resistant additive. EpoxyDoc or its sales agents shall have no liability and will not be responsible for incidents or injuries incurred in a slip and fall accident. It is the end user's and professional installer's responsibility to provide a flooring system that meets current safety standards for slip resistant floors when using EpoxyDoc flooring systems.

**RESPIRATORY AND SKIN PROTECTION**

- 1) Use adequate ventilation when installing coatings.
- 2) Use protective clothing and gloves.
- 3) Use appropriate respirator during application in confined areas.
- 4) Avoid contact with skin
- 5) Some people may be allergic to floor coating resins and vapors