



## EPOXY 300 FLEX

### PRODUCT DESCRIPTION AND USE

Epoxy 300 Flex is a 100% solids, medium viscosity, flexible epoxy system. It has excellent elongation, hardness and impact resistance. The material cures blush-free and forms a tenacious bond to damp concrete and properly prepared metal. It can be purchased in a thickened paste version for easy joint and crack filling. A special hardener is available where cold weather cure down to 40 degrees or accelerated room temperature cure is required.

Epoxy 300 Flex was developed for industrial joint and crack repair. Its combination of resilience and physical strength allows it to absorb the impact of heavy loads and steel wheeled traffic. When used as a coating system, it is especially well suited for applications where surface movement, vibrations or thermal cycling may defeat the protection of a rigid material. Typical applications of this type would include wood decks, suspended concrete slabs, mechanical rooms and exterior aggregate-filled flooring. Epoxy 300 Flex has been used successfully as a coating material for aluminum and on steel ship decks.

### **Chemical Composition**

Internally flexibilized Bisphenol A epoxy resin crosslinked with a cycloaliphatic amine curing agent.

### **Colors**

16 standard colors available, plus clear.

### **Limitations**

- Exterior pigmented applications will show chalking.
- Exterior clear applications are not recommended.

### TECHNICAL DATA

#### **Physical Properties**

Mixing Ratio, by Volume .....2-1

Solids Content, % ..... 100

Viscosity, cps (77 degrees) ..... 1,250

Pot Life, (77 degrees, 1 quart mass) ..... 45 minutes

Pot Life is reduced by increasing mass and/or temperature

Cure Times (77 degrees)

#### Regular Cure

Dry to Touch.....12 hours

Light Traffic.....24 hours

Full Cure.....7 days

#### Fast Cure

Dry to Touch.....6 hours

Light Traffic.....12 hours

Full Cure.....5 days

### WARRANTY INFORMATION

Arizona Polymer Flooring 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. ARIZONA POLYMER FLOORING MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Arizona Polymer Flooring shall not be liable for damages caused by application of its products over concrete with excessive moisture vapor transmission or alkalinity. Arizona Polymer Flooring shall not be liable for any injury incurred in a slip and fall accident. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product.

### **HIGH PERFORMANCE CONCRETE COATING SYSTEM**

## Performance Properties

Tensile Strength, psi (ASTM D-638).....	1,100
Ultimate Elongation, % (ASTM D-638).....	60
Hardness, Shore D (ASTM D-2240).....	57
Ultimate Compressive Strength (ASTM D-695) .....	25,000
Bond Strength to Damp Concrete (ACI 503.4-2.3.2.2)concrete fails before loss of bond	
Tensile Shear Strength to Steel (ASTM D-1002) .....	347 psi

## GENERAL INFORMATION

### Moisture Vapor Emissions Precautions

All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride and relative humidity probe testing to determine if excessive levels of vapor emissions are present before applying any coatings. APF can supply moisture remediation products. Consult our technical service department. Arizona Polymer Flooring and its sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

### Surface Preparation

Concrete must be cured 30 days and be clean, structurally sound and free of wax, loose paint or curing compounds. Concrete should be sand blasted, shot blasted or acid etched to achieve a minimum 5 mil profile. **If acid etched, machine scrubbing is required. Carefully follow the guidelines listed in the Arizona Polymer Flooring Surface Preparation Manual.** Surface may be damp, but standing water must be removed. Joints and cracks should be thoroughly cleaned by routing and all dust removed. Metal must be clean, dry and profiled by abrasive blasting.

### Mixing Instructions

Pot life of regular cure material is 45 minutes at 77 degrees. Pot life of fast cure material is 15 minutes. Work times are shortened by higher temperatures. Pouring mixed material on floor immediately after mixing will extend work life. Combining ratio is 2 parts A to 1 part B. If using pigmented material, stir part A well, bringing settled pigments up from bottom of container before adding part B. **Proportion the amounts carefully and mix for 2 full minutes using a low speed drill, scraping the bottom and sides of the mixing vessel. If using the paste material, remember that mixing is more difficult. Incomplete homogenization will result in improper cure.**

### Application Recommendations

Epoxy 300 Flex can be applied by brush, roller, notched trowel or airless spray. Epoxy 300 Flex Paste is usually applied with a flexible putty knife. For detailed instructions on industrial joint repair, see Arizona Polymer Flooring Application Manual.

### Handling Precautions

Do not breathe vapors. Use appropriate respirator with green band cartridge to protect against methyl amine vapors. Avoid contact with skin; wear protective gloves. Read Material Safety Data Sheet before using.

### Slip and Fall Precautions

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slip-resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Arizona Polymer Flooring 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. Arizona Polymer Flooring or its sales agents will not be responsible for injury incurred in a slip and fall accident.