

EPOXY 300 FLEX

PRODUCT DESCRIPTION

Epoxy 300 FLEX is a 100% solids, medium viscosity, flexible epoxy system. It has excellent elongation, hardness, and impact resistance. The material forms a tenacious bond to concrete and properly prepared metal. **Epoxy 300 FLEX Paste** is a thickened paste version for easy joint and crack filling. A **Fast Cure** version is available where cold weather cure down to 40°F 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 would include wood decks, suspended concrete slabs, mechanical rooms, and exterior aggregate-filled flooring. **Epoxy 300 Flex** may be used as a coating material for properly prepared aluminum and on steel ship decks.

USES

- Manufacturina
- Pharmaceutical
- Mechanical Rooms
- Warehouse
- Retail
- Health Care & Institutional
- Correctional Facilities
- Veterinary/Animal Care

ADVANTAGES

- Flexible underlayment for other floor systems
- Creates effective waterproofing membrane
- Bonds to steel for marine applications

COLORS

Clear & 18 Standard colors available.

PACKAGING

Supplied in complete A+B 1.5 gallon (5.7 L), 15 gallon (56.8 L) or 165 gallon (625 L) (clear only) total volume mixed units. Mix ratio 2A: 1B. APF Epoxy 300 FLEX Paste is supplied in 0.75 (2.8 L) & 1.5 (5.7 L) gallon complete units.

Mixing Ratio by Volume VOC Clear & Fast Cure Clear VOC Pigmented & Fast Cure Pigmented 19 g/l Solids Content, by Volume Hardness, Shore D (ASTM D-2240) Tensile Strength psi (ASTM D-638) Elongation, % (ASTM D-638) Compressive Strength, psi (ASTM D-695) Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) 2 g/l 19 g/l 100% 78 78 1,100 25,000 25,000 9,850 9,850 Flexural Strength, psi (ASTM D-790) 9,680 >350 psi, concrete fails		
VOC Clear & Fast Cure Clear VOC Pigmented & Fast Cure Pigmented Solids Content, by Volume Hardness, Shore D (ASTM D-2240) Tensile Strength psi (ASTM D-638) Elongation, % (ASTM D-638) Compressive Strength, psi (ASTM D-695) Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch Light Traffic Test Cure, Dry to Touch Light Traffic ~16 Hours ~6 Hours Light Traffic ~12 Hours	TECHNICAL DATA	
VOC Pigmented & Fast Cure Pigmented 19 g/l Solids Content, by Volume 100% Hardness, Shore D (ASTM D-2240) Tensile Strength psi (ASTM D-638) Elongation, % (ASTM D-638) Compressive Strength, psi (ASTM D-695) Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch Light Traffic 71 Days Fast Cure, Dry to Touch Light Traffic ~12 Hours ~6 Hours Light Traffic ~12 Hours	Mixing Ratio by Volume	2A:1B
Solids Content, by Volume Hardness, Shore D (ASTM D-2240) Tensile Strength psi (ASTM D-638) Elongation, % (ASTM D-638) Compressive Strength, psi (ASTM D-695) Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch Light Traffic Tast Cure, Dry to Touch Light Traffic ~16 Hours ~6 Hours Light Traffic ~12 Hours Light Traffic ~12 Hours	VOC Clear & Fast Cure Clear	2 g/l
Hardness, Shore D (ASTM D-2240) Tensile Strength psi (ASTM D-638) Elongation, % (ASTM D-638) Compressive Strength, psi (ASTM D-695) Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch Light Traffic Full Cure Fast Cure, Dry to Touch Light Traffic ~12 Hours ~6 Hours Light Traffic ~12 Hours	VOC Pigmented & Fast Cure Pigmented	19 g/l
Tensile Strength psi (ASTM D-638) Elongation, % (ASTM D-638) Compressive Strength, psi (ASTM D-695) Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch Light Traffic Tensile Cure Touch Light Traffic Tensile Shear Strength to Steel ASTM Light Traffic Touch Light Traffic Touch Touch	Solids Content, by Volume	100%
Elongation, % (ASTM D-638) 60% Compressive Strength, psi (ASTM D-695) 25,000 Yield Strength, psi (ASTM D-695) 9,850 Flexural Strength, psi (ASTM D-790) 9,680 Bond Strength to Concrete (ASTM D-4541) 7350 psi, concrete fails Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch ~12 Hours Light Traffic ~16 Hours Full Cure ~7 Days Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Hardness, Shore D (ASTM D-2240)	78
Compressive Strength, psi (ASTM D-695) Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch Light Traffic Full Cure Fast Cure, Dry to Touch Light Traffic ~16 Hours ~6 Hours Light Traffic ~12 Hours	Tensile Strength psi (ASTM D-638)	1,100
Yield Strength, psi (ASTM D-695) Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch ~12 Hours Light Traffic ~16 Hours Full Cure ~7 Days Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Elongation, % (ASTM D-638)	60%
Flexural Strength, psi (ASTM D-790) Bond Strength to Concrete (ASTM D-4541) Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch ~12 Hours Light Traffic ~16 Hours Full Cure ~7 Days Fast Cure, Dry to Touch ~12 Hours Light Traffic ~16 Hours	Compressive Strength, psi (ASTM D-695)	25,000
Bond Strength to Concrete (ASTM D-4541) 7	Yield Strength, psi (ASTM D-695)	9,850
Tensile Shear Strength to Steel ASTM D-1002 Cure Time (77°F) Dry to Touch ~12 Hours Light Traffic ~16 Hours Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Flexural Strength, psi (ASTM D-790)	9,680
D-1002 Cure Time (77°F) Dry to Touch ~12 Hours Light Traffic ~16 Hours Full Cure ~7 Days Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Bond Strength to Concrete (ASTM D-4541)	•
Dry to Touch ~12 Hours Light Traffic ~16 Hours Full Cure ~7 Days Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Tensile Shear Strength to Steel ASTM D-1002	347 psi
Light Traffic ~16 Hours Full Cure ~7 Days Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Cure Time (77°F)	
Full Cure ~7 Days Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Dry to Touch	~12 Hours
Fast Cure, Dry to Touch ~6 Hours Light Traffic ~12 Hours	Light Traffic	~16 Hours
Light Traffic ~12 Hours	Full Cure	~7 Days
o	Fast Cure, Dry to Touch	~6 Hours
Cure times are dependent on temperature and humidity	Light Traffic	~12 Hours
	Cure times are dependent on temperature and hu	midity

SURFACE PREPARATION

Concrete must be cured for at least 30 days and be clean, structurally sound, and free of wax, loose paint or curing compounds. Concrete should be shot blasted to achieve a surface minimum texture of ICRI 3 - 4. Refer to ICRI Technical Guidelines 310-330 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. Acid etching is not recommended and will void Manufacturer's warranty. Carefully follow the guidelines listed in the Arizona Polymer Flooring published application instructions available at www.apfepoxy.com. Vacuum prepared concrete surface to remove all dust. Previously coated surfaces that are soundly adhered must be mechanically cleaned and abraded to achieve uniformly gloss-free, open texture. Steel surfaces should be prepared to SSPC-SP10 / NACE 2 Near-White Blast Cleaning standard.





EPOXY 300 FLEX

MIXING

APF EPOXY 300 FLEX is packaged in pre-measured and bulk units. Proper proportioning and mixing are critical for success. Mixing ratio is 2A: 1B. Premix both components for 2 minutes prior to blending. Drum units should be mechanically premixed with electric or pneumatic drum head mixer. Do not attempt to hand mix. Be sure to move the drill around the mixing container scraping the sidewalls and bottom.

Add color pack if required to A component and blend thoroughly before adding B component. Bone-117, Safety Blue-077, Safety Red-083, Safety Yellow-063 & White-000 require 1 quart color pack loading for adequate hiding and coverage.

Add component B to component A and mix with medium speed drill mixer for three [3] minutes. Distribute material immediately after complete mixing.

APPLICATION

Apply with brush, roller or notched trowel. May be sprayed with airless spray equipment.

For membrane, joint treatment applications, refer to appropriate APF Application Instructions.

CONCRETE MOISTURE

Test for concrete moisture in accordance with ASTM F2170–19. If moisture is indicated to be in excess of 85%, apply APF Vapor-Solve® system in accordance with the published technical data sheet. Consult APF Technical Service for further information.

LIMITATIONS

- Prior to application, measure and confirm that ambient temperature and humidity conditions are at least 5°F over dew point.
- Will discolor and chalk in sunlight. Exterior applications not recommended.
- High humidity/low temperature will prolong cure time
- Use of kerosene or propane forced air heating equipment

SHELF LIFE

One [1] year from date of manufacture in original unopened container. Store away from heat sources between $50^{\circ}F$ and $85^{\circ}F$ ($10^{\circ}C - 30^{\circ}C$).

HANDLING & SAFETY

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin; wear protective gloves. User must read and understand Safety Data Sheet before using. APF Safety Data Sheets are available at www.apfepoxy.com

APF 300 FLEX PDS 02.17.2021

STANDARD WARRANTY STATEMENT

ICP BUILDING SOLUTIONS GROUP, the owner of Arizona Polymer Flooring, warrants that the product is produced within specifications and is free from defect. No warranty shall be in effect until ICP Building Solutions Group Terms and Conditions of Sales are met, including payment and cooperative promotional considerations. ICP Building Solutions Group warrants that the covered product is free of defect and suitable for the specified purpose for a period of one (1) year from the date of shipment, provided the product is installed within its published shelf life, in strict conformance with specifications, and/or written project-specific installation guidance from authorized representation. ICP Building Solutions Group warrants only when product is handled, stored, mixed and applied in accordance with published recommendations. It is purchaser responsibility to initiate any claim against this warranty within a reasonable time. If determined by ICP that the product does not meet this warranty, the liability of ICP Building Solutions Group shall be limited to refund of the purchase price or provision of replacement product, neither needing to exceed the affected area as determined by a person authorized to perform technical representation for ICP Building Solutions Group. To obtain a replacement or refund the customer must provide written notice containing full details of the non-conformity suspected. The purchaser, owner or their representative shall notify ICP Building Solutions Group, in writing, within five (5) working days concerning any potential defect, or as needed before conditions deteriorate and increase repair costs. ICP Building Solutions Group reserves the right to inspect the non-conforming material prior to replacement. ICP Building Solutions Group may in its discretion refund the purchase price received by ICP Building Solutions Group in lieu of replacing the material. Except for the expressed warranty stated above, there are no other warranties, expressed or implied, including without limitation, any i

