

4 TO 1 EPOXY

2 COMPONENT | 4 TO 1 MIX RATIO EPOXY

PRODUCT DESCRIPTION

E2U Epoxy is a two component, high performance modified cycloal-iphatic epoxy concrete floor coating system. Its epoxy chemistry provides excellent bonding characteristics. It can be applied as a 12 to 50 mil coating system. Paint Chips or Color Quartz can be broadcast into E2U Epoxy to create a custom look. Its design features provide for the highest industrial and commercial demands.

COLOR PIGMENTS

E2U Epoxy is available with standard premixed colors or in clear base with pourable pigment color kits.

STOCK PIGMENTS

- Clear
- Light Gray
- Medium Gray
- Dark Gray
- White
- Black
- Tan

- Beige
- Tile Red
- Safety Red
- Safety Blue
- Safety Green
- Safety Yellow

APPLICATIONS

The uniqueness and universality of E2U Epoxy's chemistry facilitates the applications where USDA Food & Beverage and other regulatory requirements must be obtained. i.e. food manufacturing and preparation, pharmaceutical manufacturing and dispensaries, clean rooms, commercial kitchens, laboratories and more. Other areas of use include: garage floors, rest rooms, manufacturing facilities, automotive showrooms and schools.

PRODUCT DATA

Volumetric Ratio	4 to 1
Solids —	
Coverage —	— 100 SF/gal. at 16 mil
Coverage -	– 200 SF/gal. at 8 mil
Application Temperature	55°-90°F
Thinning —	Not Required
Pot Life -	15-20min.
Working Time on Floor	15-20 min.
Cure Time	8 hrs
Cure Time	20 hrs
Full Cure -	3-5 days
Critical Re-Coat Time	10 hrs
Re-Coat Time With Accelerator	
Shelf Life	12 months
USDA Food & Beverage	Meets Req.
VOC	less than 50 g/l

Note: Color kits provide the user with stock versatility. By broadcasting Paint Chips or Silica Sand, endless color and texture combinations can be created. Other colors are available at an additional charge.

ADVANTAGES

- Essentially odorless
- Self-priming over properly
- prepared substrate
- VOC Compliant
- High color stability
- High gloss
- Withstands medium traffic as thin as 12 mil
- Chemically resistant
- No amine blush

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	7,800 psi	ASTM C 695
Flexural Strength	3,700 psi	ASTM D 790
Tensile Strength	3,900 psi	ASTM D 638
Bond to Concrete	350 psi	ASTM D 4541 (Concrete fails at this point)
Taber Abrasion	75-80 Mgs	ASTM D 4060
Flammability	Self-extinguishing	
Hardness, Shore D	84	ASTM D 2240
Flash Point	>200°F	



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PACKAGING

1.25 GALLON KITS	5 GALLON KITS
PART A 1 GAL	PART A — 4 GAL
PART B 1/4 GAL	PART B 1 GAL

PATCHING

Voids, cracks and imperfections will be seen in finished coating if the concrete is not patched correctly. Patch concrete with E2U Patch. After the patching material is cured, diamond grind patch. If another patching material is used, contact a E2U technical representative for a compatible and approved alternative.

CLEAN UP

E2U Epoxy, while in an un-reacted state, may be cleaned up with hot water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening. Lastly, a strong solvent like methylene chloride may be required if resin is nearly set up

TESTING

All surfaces are not the same. It is recommended that a sample area be done

before the start of the project. The test should be done on-site, using the proposed method by the assigned applicator to insure proper adhesion and color.

CONCRETE PREPERATION

Before coating is applied, concrete must be:

- Dry No wet areas
- Clean Contaminants removed
- Profiled Diamond grinding using 30/40 Grit diamonds to a CSP rating of "2"
- Sound All cracks and spalled areas repaired

Note: Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying and scabbling are all acceptable methods.

MIXING

The ratio of E2U 4 to 1 Epoxy is 4 to 1. That is, four parts A (resin) to one part B (hardener). Mix the following with a drill and mixing paddle. Note: If using a drill mixer, use a low speed (not to exceed 300 rpm) to prevent air entrapment.

- 1. Premix 1 gallon of Part A for 30-45 seconds.
- 2. Add 1/4 gallon of Part B and mix for another 60-90 seconds.
- 3. E2U Epoxy is designed to be immediately poured on the floor. Leaving mixed product in the container will greatly reduce pot life. Once poured out on the

floor, 20-30 minutes of working time can generally be expected.

APPLICATION INSTRUCTIONS

Application of E2U Epoxy for a nominal 20 to 30 mil coating system is applied

in two coats and in one pass as a top coat. For estimation purposes, use 200 SF per gallon in either case.

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 1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings) the air expands and can cause out gassing in the coating. It is safer to apply
- coatings in the late afternoon, especially for exterior applications.

 2. Optimum ambient temperature should be between 55-90°F during application. Note: Cure times are affected by ambient and slab temperatures. Temperatures of 55°F and lower can slow cure times. Temperatures of 85°F and higher will speed up working and times.
- 3. Apply approximately 200 SF per gallon (100 SF per gallon for a top coat over Industrial Quartz systems) by immediately pouring out on surface in a ribbon, while walking and pouring at the same time until bucket is empty.
- 4. Using a squeegee on a pole, pull E2U Epoxy over substrate. As a first coat over bare concrete, pull resin as thin as possible while still wetting out concrete and uniformly covering surface. This allows trapped air to escape more easily. To apply in a single coat over an Industrial Epoxy system, pull at about 200 SF per gallon.
- 5. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.
- 6. Lastly, back roll in the opposite direction as step 6.
- 7. Apply second coat by repeating steps 1-7 the within 12 hours. Failure to recoat during this window may result in fish eyes. Always sand floor after 12 hours before recoat.



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CHIP/SILICA SAND BROADCAST INSTRUCTIONS

Chip Broadcast

- 1. Following Step 6 above. Broadcast Color Chips/Micro Chips (at 16 lbs. per 100 sq. ft.) by tossing them into the air and allowing them to gently rain down into the wet resin.
- 2. For a random broadcast, use 1 lb. of chips per 100 sq. ft..
- 3. Allow to cure. Then scrape the basecoat with a drywall scraper in all directions. Vacuum small pieces and dust. Silica Sand Broad cast
- 1. Following Step 6 above, gently throw the silica sand up into the air, allowing it to fall without lumping in one spot or moving the resin. Do this until the floor is totally saturated with the silica sand and the resin will not accept any more. This generally requires 1/2 to 3/4 lbs. per sq. ft.. Allow to dry for 6-8 hours.
- 4. Sweep floor and stone any high spots.
- 5. Your Polyasparite top coat SQFT coverage per gallon will vary depending on the type of coating you are going over Consult Tech Support prior to application.

WARNING! SLIP AND FALL PRECAUTIONS

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slipresistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. E2U 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. E2U or its sales agents will not be responsible for injury incurred in a slip and fall accident.

Handling Precautions

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin. Some individuals may be allergic to epoxy resin. Protective gloves and clothing are recommended.

WARRANTY

flooring system that into the responsible after date of purchase. Please refer to the Limited Material warranty for additional clarification.

KEEP OUT OF REACH OF CHILDREN

MADE IN USA