



POLYMER CONCRETE

URETHANE CEMENT

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

E2U Polymer Concrete is also referred to as "Urethane cement", which is specifically designed for harsh environments where chemical, thermal shock and abrasions resistance are required. It is a three (3) component and self-leveling. Gauge rake and Spike Roller applied at thickness. E2U formula makes the flooring system resistant to growth of Microbial/bacterial.

PRODUCT DATA

COMPONENT	3 Component
Solids	100%(+/- 1%)
Application Temp	50°-90°F
Thinning	Not Required
Pot Life	2 min. Designed for Immediate Pour
Working Time	10 min.
Cure Time	8-12 Hours (Foot-traffic)
Full Cure	24-48 Hours (Heavy-traffic)
USDA Food & Beverage	Meets Req.
VOC	0 m/l
Coverage	45 SF/Kit ($1/8"$) <small>Finish Floor will be $3/8$ thickness with 30 grit sand broadcast to refusal and top coat sealer</small>

AVAILABLE COLORS

- Gray

SHELF LIFE

Part A	One year after purchase
Part B	One year after purchase
Part C	Six months after purchase

PACKAGING

Part A	8 lbs.
Part B	7.5 lbs.
Part C	40 lbs.

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	9,800 psi	ASTM C 579
Flexural Strength	3,700 psi	ASTM D 790
Tensile Strength	3,900 psi	ASTM D 638
Bond to Concrete	400 psi	ASTM D 4541 (Concrete fails at this point)
Impact Resistance	PASS @ 125 mils	ASTM D-2794
Abrasion Resistance	5 mg loss / CS-17 Wheel, 1000 cycles	ASTM D 4060
Hardness, Shore D	15	ASTM D 2240
Flash Point	>200°F	



CONCRETE PREPARATION

Before coating is applied, concrete must be:

- Free of dirt, waxes, curing agents and other foreign materials
- Clean – Contaminants removed
- Profiled – Shot Blast to CSP of 4
- Sound – All cracks and spalled areas repaired

Note: Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting is the only acceptable method. Mechanically profile the floor to a minimum CSP 4-5

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.

MIXING

Ensure all components are between 50 - 90°F. E2U Polymer Concrete kits are pre-measured, consisting of one jug of resin, one jug of hardener, one bag of aggregate. Pour entire contents of Part A & Part B into 5gal bucket or larger and mix well for 30 seconds. Slowly add Part C while under agitation. It is important to “wet-out” all parts of mix, scraping the bottom and sides of bucket. Mixing bucket and mixer/blades should be scrapped out thoroughly and cleaned with solvents such as acetone, xylene. Prepare only the amount you can use in 5 minutes at 78°F. (Higher temperatures reduce work time). Do not leave the mixed material in the bucket longer than 3 minutes. Incomplete mixing will cause an inconsistent finish.

NOTE: Do not mix this product in direct sunlight or when temperatures exceed 90°F. Set up the mixing station as near to the work area as possible. Use a high speed drill w/mixing paddle. Exposure to high temperatures will reduce the working time. If using a drill mixer, use a high speed (1,000 to 1,500 RPM) to ensure thorough mixing. DO NOT MIX UNTIL READY FOR IMMEDIATE USE.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with acetone.

APPLICATION INSTRUCTIONS

Please see application instruction sheet.

APPLICATIONS

- Food manufacturing & processing facilities
- Chemical processing plants
- Pharmaceutical plants
- Commercial kitchens
- Bottling sanitizing & wash areas
- Cold rooms & freezers

ADVANTAGES

- High resistance to chemical, impact and abrasion
- Solvent free - VOC Compliant
- Superior adhesion to various substrates
- Self Priming & no top coat is required
- Thermal stability
- Does not support the growth of fungus or bacteria
- Fast curing & installation time
- Can be applied to 7-10 day old concrete
- Wide temperature in-service range
- Meets USGBC LEED criteria

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 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

E2U products are warranted for one year after date of purchase. Please refer to the Limited Material warranty for additional clarification.



MADE IN USA

KEEP OUT OF REACH OF CHILDREN