

AQUACRETE

PRODUCT #1082

Epoxy Polymer Flooring Systems

PRODUCT DESCRIPTION

AquaCrete is a two (2) component, water-based high build self-leveling slurry system for medium to heavy-duty general use applications. **AquaCrete** is formulated by combining polymeric emulsion technology with a high filler load to create semi-permeable micro pores, which allows the coating to breathe. This unique technology permits applications where moisture vapor transmission problems exist. **AquaCrete** cures as a matte finish but a topcoat of **1057 DecoFinish E57** may be applied 1 to 3 mils DFT without adverse effect on its water vapor permeability qualities.

AquaCrete is formulated specifically for either interior or exterior use on dry or moist (no free standing water) substrates. And in application temperatures at not less than 40°F (5°C). It has zero VOC, meets USDA guidelines and exhibits improved UV stability over standard epoxy clear coats.

AquaCrete is a self-priming system typically applied at 1/8" to 3/16" by gauge rake or notch trowel, then spike rolled to aid in self-leveling. Shrinkage is less than 5% when cured.

For best application results, pre-condition the material to between 70°F

(21°C) and 80°F (27°C) if the substrate temperature is below 72°F (22°C).

AquaCrete may be applied over 2 to 3 day old concrete, provided it has been properly cured at 70°F (21°C) with good ventilation, and the surface is properly shot blasted and prepared.

| Degrees | Recoat Time 1/8" | Pot Life 1 Gal |
|--------------------------|------------------|----------------|
| AquaCrete 77°F | 6-8 hrs. | 45 Min. |

The above table assumes ambient temperature, material and substrate are equal and material is applied 1/8" in thickness.

USES

Typical uses for the **AquaCrete** include:

- Virtually all Industrial flooring
- Warehouse aisles
- Food and related processing facilities
- Automotive repair facilities
- Pharmaceutical facilities

And, wherever the following flooring properties are a requirement:

- Slip-resistant surface
- Increased ease of maintenance
- Excellent abrasion resistance
- Durability and sanitary protection

TYPICAL PHYSICAL PROPERTIES

| Physical Characteristics | AquaCrete 1082 |
|--------------------------|-----------------------|
| Hardness, Shore D | |
| 1 Day | 60 |
| 3 days | 70 |
| 14 Days | 82 |
| Bond Strength | 500 |
| ACI 503 | 100% Concrete Failure |
| Tensile Strength | 1250 PSI |
| Compressive Strength | 5600 PSI |
| ASTM D695 | |
| Abrasion Resistance | |
| ASTM D 5178-91 | 156 Grams Loss |
| Tabor Abrasion | |
| 1000 cycles | |
| Viscosity 77 Degrees F. | 500-700 cps |
| Viscosity 60 Degrees F. | 1300-1600 cps |
| Solids Content (WT) | 85% |
| Solids Content (VOL) | 70% |
| Volume Mix Ratio | 4:1 |

ADVANTAGES

- Water Vapor Permeable - Successful applications have been applied where vapor transmission was below 13 lbs/1000 sq. ft./24 hour period
- Long pot life and fast cure time

- Provides a highly durable and protective flooring system
- No offensive odors during installation
- Meets USDA guidelines
- Volume mix ratio: 4:1
- Easy clean up using water
- Matte Finish
- Easy to apply self-leveling system and may be applied up to 3/16" in one coat
- Very low shrinkage
- Higher temperature resistance than most conventional epoxy systems
- Exhibits good stain resistance to oils, brake fluids and other automotive fluids

LIMITATIONS

- Direct sunlight will cause slight discoloration
- Requires a protective top coat for enhanced UV resistance
- Do not apply below 40°F (5°C)
- Not suitable in areas of harsh chemical use

COLOR and TEXTURES

- Available in nine (4) standard colors. (Pewter Gray, Tile Red, Charcoal Gray and Saber Gray)
- Various slip-resistant textures available using Aluminum Oxide or **ThermalGrip**

PRODUCT APPLICATION

AquaCrete is typically applied to concrete. Concrete surfaces shall be abrasive blasted to remove surface

contaminants and laitance. Oil and grease shall be removed if present. Refer to the Thermal-Chem Surface Preparation guideline for complete surface preparations.

Premix the Part B (Hardener) (4 parts) using a slow speed drill and Jiffy mixer for one minute or until uniform exercising caution not to whip air into the material.

Pour the Part A (Resin)(1 Part) into the Part B and mix using a slow speed drill and Jiffy mixer for 3 minutes or until uniform. Do not whip air into the mix.

Apply 1/8" to 3/16" slurry using a gauge rake or notch trowel. Spike roll using 11/16" spikes to aid self-leveling and to remove entrapped air.

Random broadcast DecoFlakes to enhance the aesthetic image. Do not broadcast DecoFlakes to rejection.

If a topcoat is required, and if the floor is being installed primarily due to water vapor problems, limit the topcoat to 1 to 3 mils DFT.

PRODUCT AVAILABILITY

Products are manufactured and available through the Thermal-Chem Corporation, 2120 Roberts Drive, Broadview, IL 60155 U.S.A.

Tel: 800/635-3773 ■ 847/288-9090
Fax: 847/288-9091

E-Mail: sales@thermalchem.com

Website: www.thermalchem.com

TECHNICAL/SPECIFICATION SERVICES

Additional Product Data, complete Technical Support and Product Specifications are all available through the Thermal-Chem Corporation or their local representatives.

Every reasonable precaution and effort has been taken in the manufacturer of all Thermal-Chem products to comply with the published product data. Actual product performance may vary slightly due to environmental influences and/or conditions.

PRODUCT HANDLING

Read the Material Safety Data Sheet thoroughly before use.

Warning: For professional use only. Avoid contact of uncured material with skin and eyes. Contact with skin may result in irritation. Wash skin with soap and water. If contact with eyes should occur, flush with water for 15 minutes and seek immediate medical attention.

LIMITED WARRANTY

Thermal-Chem Corporation warrants its product to be of good quality and will replace any product proved defective. Satisfactory results depend not only upon quality products but also upon many factors beyond our control. Therefore, except for such replacement, **THERMAL-CHEM CORP. MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR**

PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and Thermal-Chem Corporation shall have no other liability with respect thereto, including without limitation, liability for incidental or consequential damages. Any claim regarding product defect must be received in writing within one hundred and eighty (180) days from the date of shipment. No claim will be considered without such written notice or after the specified time interval. The user shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith.