

SECTION 03550
POLYACRYLATE COMPOSITION UNDERLAYMENT
Miracote Repair Mortar

PART 1.00 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.02 WORK INCLUDED

- A. Work of this Section includes all labor, materials, equipment and services necessary to complete the polyacrylate resin composition underlayment as scheduled on the drawings and/or specified herein.

1.03 RELATED WORK

- A. Concrete - Section 03300.
(Note to Specifier: Concrete should be either water cured or cured using sodium silicate curing compounds only. Other types of curing compounds are generally not acceptable. Concrete should be cured for a minimum of 28 days.)
- B. Floor drains - Division 15.
(Note to Specifier: Floor drains, clean-outs, etc. should be of the "floor-flange" type as manufactured for use with composition floors by most major drain manufacturers.)

1.04 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Product Data: Submit manufacturer's technical data, application instructions and general recommendations for waterproof flooring.
- C. Samples:
 - 1. Submit 2-1/2" x 4" samples of underlayment as designed by the Architect.
- D. Material certificates signed by manufacturer certifying that the polyacrylate resin composition underlayment complies with requirement specified herein.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer or applicator who has specialized in installing resinous polyacrylate types similar to that required for this Project and who is acceptable to manufacturer of primary materials.
- B. Single-Source Responsibility: Obtain polyacrylate resin composition materials from a single manufacturer.
- C. Qualified Materials: Request for material approvals for any products other than the specified product must be submitted to the architect two weeks prior to the bid, including complete application specification and physical characteristics. Any request after this date will not be accepted. Failure of performance requires immediate removal and replacement of unapproved substituted material with those originally specified at no cost to the owner, Architect, construction

manager, or general contractor.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in original packages and containers with seals unbroken and bearing manufacturer's labels containing brand name and directions for storage and mixing with other components.
- B. Store materials to comply with manufacturer's directions to prevent deterioration from moisture, heat, cold, direct sunlight, or other detrimental effects.

1.07 PROJECT CONDITIONS

- A. Environmental Conditions: Comply with polyacrylate resin composition underlayment manufacturer's directions for maintenance of ambient and substrate temperature, moisture, humidity, ventilation, and other conditions required to execute and protect Work.
- B. Lighting: Permanent lighting will be in place and working before installing resinous polyacrylate.

PART 2.00 - PRODUCTS

2.01 MATERIALS

- A. Trowel applied polyacrylate resin composition underlayment shall be Miracote Repair Mortar as manufactured by Crossfield Products Corp., Rancho Dominguez, California; and Roselle Park, New Jersey.

2.02 PROPERTIES

- A. Physical Properties:
Provide polyacrylate system that meets or exceeds the listed minimum physical property requirements when tested according to the referenced standard test method in parentheses.

Compressive Strength (ASTM C 109):	5,140 psi.
Flexural Strength(ASTM C78):	1,268 psi
Flexural Modulus of Elasticity (ASTM C 580):	2,415 psi.
Indentation (MIL-D-3134):	0.005" max.
Impact Resistance (Gardner Impact Tester):	No chipping, cracking, or delamination and not more than 0.014" indentation
Adhesion (A.C.I. Comm. No. 503.1):	>400 psi (100% failure in concrete)
Shear Bond Strength (ASTM C-882)	410 psi

PART 3.00 - EXECUTION

3.01 INSPECTION

- A. Examine the areas and conditions where the polyacrylate resin composition underlayment is to be installed and notify the Architect of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected by the Contractor in a manner acceptable to the Architect.

3.02 PREPARATION

- A. Substrate: Perform preparation and cleaning procedures according to polyacrylate manufacturer's instructions for particular substrate conditions involved, and as specified. Provide clean, dry, and neutral substrate for polyacrylate underlayment application.
- B. Concrete Surfaces: Shot-blast, acid etch or power scarify as required to obtain optimum bond of polyacrylate to concrete. Remove sufficient material to provide a sound surface free of laitance, glaze, efflorescence, and any bond-inhibiting curing compounds or form release agents. Remove grease, oil, and other penetrating contaminants. Remove damaged and deteriorated concrete. Leave surface free of dust, dirt, laitance, and efflorescence.
- C. Materials: Mix resin catalyst and aggregate when required, and prepare materials according to polyacrylate underlayment system manufacturer's instructions.

3.03 APPLICATION

- A. General: Apply each component of polyacrylate resin composition underlayment system according to manufacturer's directions to produce a uniform monolithic surface of thickness indicated.
- B. Bond Coat: Apply bondcoat/primer over prepared substrate at manufacturer's recommended spreading rate.
- C. Body Coat: Over fresh bondcoat/ primer, trowel apply polyacrylate mortar mix at nominal thickness as specified; hand or power trowel. When cured, sand or grind if necessary to remove trowel marks or roughness.
(Note to Specifier: Miracote Repair Mortar may be applied in any thickness from 0 to 2" thickness in one application, or any thickness in multiple applications for leveling or sloping as required, note on drawings specific application parameters.)

3.04 CURING, PROTECTION AND CLEANING

- A. Cure polyacrylate resin composition underlayment materials according to manufacturer's directions, taking care to prevent contamination during application stages and before completing curing process. Close application area for a minimum of 24 hours.

END OF SECTION