RESINOUS FLOORING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Resinous flooring (fluid-applied flooring) systems.

B. Related Requirements:

1. Resilient Flooring for room base installed by this section.

1.2 PRE-INSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Meet with Project Manager and Purchasing agent.
2. Review methods and procedures related to installation, including manufacturer's written instructions and requirements for a mock-up.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product. Include manufacturer's technical data, application instructions, and recommendations for each resinous flooring component required.

B. Samples for Initial Selection: For each type of exposed finish required.

C. Samples for Verification: For each resinous flooring system required, 6 inches square, applied to a rigid backing by Installer for this Project.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For resinous flooring to be included in maintenance manuals.S

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storage and mixing with other components.

1.7 FIELD CONDITIONS

A. Environmental Limitations: Comply with resinous flooring manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and other conditions affecting resinous flooring application.

B. Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring application.

C. Close spaces to traffic during resinous flooring application and for 24 hours after application unless manufacturer recommends a longer period.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Flooring products shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

B. Flammability: Self-extinguishing according to ASTM D635.

2.2 MANUFACTURERS

A. Source Limitations: Obtain primary resinous flooring materials, including primers, resins, hardening agents, grouting coats, and topcoats, from single source from single manufacturer. Obtain secondary materials, including patching and fill material, joint sealant, and repair materials, of type and from manufacturer recommended in writing by manufacturer of primary materials.

2.3 RESINOUS FLOORING - Acrylic

A. Acrylic Flooring System: Installed as a seamless floor.

1. Application: Restrooms, Locker rooms, Art rooms as indicated on the Drawings.

B. Products:

1. Arizona Polymer Flooring, Inc.
2. BASF Corporation.
3. Duraflex, Inc.

4. TMI Coatings
5. Tnemec Inc..
6. HP Spartacote
7. Bidder may submit Request for Substitution PRIOR TO BID.

C. System Characteristics:
1. Color and Pattern: Will be determined after contract award.
2. Wearing Surface: Textured for slip resistance, medium.
3. Overall System Thickness: 2 mm.
4. Federal Agency Approvals: USDA approved for food-processing environments.

D. Patching and Fill Material: Resinous product of or approved by resinous flooring manufacturer and recommended by manufacturer for application indicated.

E. Primer: As recommended by manufacturer.

F. Broadcast and Stain application.

G. Aggregates: Manufacturer’s standard aggregate for broadcast.

H. System Physical Properties: Provide resinous flooring system with the following minimum physical property requirements when tested according to test methods indicated:
1. Tensile Strength: 4,800 psi minimum according to ASTM D638.
2. Flexural Modulus of Elasticity: 2.6 x 10_6 psi minimum according to ASTM C580.
3. Impact Resistance: No chipping, cracking, or delamination and not more than 1/16-inch permanent indentation according to MIL-D-3134J.
4. Abrasion Resistance: 0.03 gm maximum weight loss according to ASTM D4060.
5. Hardness: 60 Shore D according to ASTM D2240.
6. Critical Radiant Flux: 0.45 W/sq. cm or greater according to NFPA 253.
7. Coefficient of Friction (Dry): > 1.0 according to ASTM F1679.
8. Slip Resistance Index (Wet): > 0.71 according to ASTM F1679.

2.5 ACCESSORIES

A. Cove Base: Provide Schluter brand DILEX cove base metal trim or approved equivalent.
1. Application: Aluminum base in restrooms. Stainless steel base in Kitchen and food prep areas.

B. Moisture Mitigation: Provide the following where slab moisture content exceeds flooring manufacturer’s written guidelines.
1. Moisture mitigation products shall have a VOC content of 50 g/L or less.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for alkalinity and moisture content, and other conditions affecting performance of the Work.
1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
2. Verify that concrete sub-floor surfaces are ready for flooring installation by testing for moisture emission rate and alkalinity.

B. Verify that substrates are smooth and flat within the tolerances specified for that type of work and are ready to receive flooring.
1. Unsatisfactory conditions shall be corrected by Contractor using self-leveling underlayment. No extras will be allowed for "additional required preparation."

C. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Prepare and clean substrates according to resinous flooring manufacturer's written instructions for substrate indicated. Provide clean, dry substrate for resinous flooring application.

B. Concrete Substrates: Provide sound concrete surfaces free of laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil, and other contaminants incompatible with resinous flooring.
1. Mitigation: Where slab alkalinity or moisture content exceeds manufacturer’s written guidelines, apply moisture mitigation product according to manufacturer’s written instructions.

C. Patching and Filling: Use patching and fill material to fill holes and depressions in substrates according to manufacturer's written instructions.

D. Resinous Materials: Mix components and prepare materials according to resinous flooring manufacturer's written instructions.

3.3 INSTALLATION

A. Apply components of resinous flooring system according to manufacturer's written instructions to produce a uniform, monolithic wearing surface of thickness indicated.

1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate, and optimum inter-coat adhesion.
2. Cure resinous flooring components according to manufacturer's written instructions. Prevent contamination during application and curing processes.

B. Broadcast and Stain Application: Per manufacturer’s written instructions.

C. Troweled or Screeded Body Coats: Apply troweled or screeded body coats in thickness indicated for flooring system. Hand or power trowel and grout to fill voids. When body coats are cured, remove trowel marks and roughness using method recommended by manufacturer.

1. Take special care with manufacturer requirements for temperatures prior to, during, and after installation.
2. Broadcast aggregate for Level 2 texture.

3.4 PROTECTION

A. Protect resinous flooring from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by resinous flooring manufacturer.