

SECTION 09730

EPOXY RESIN FLOORING WITH INTEGRAL COVE BASE

PART 1 GENERAL

1.01 SUMMARY

A. Related Sections:

1. 03300 - Cast-in-Place Concrete.
2. 09000 - Patching and Finishes.
3. 09900 - Painting.
4. 09905 - Epoxy Resin Wall Finish.

1.02 REFERENCES

A. American Society for Testing and Standards (ASTM):

1. F710-92 Standard Practice for Preparing Concrete Floors and other Monolithic Floors to Receive Resilient Flooring.

1.03 SUBMITTALS

A. Manufacturer's specifications, recommendations, and installation instructions for specified underlayment and topping materials. Include the following:

1. Manufacturer's published data, or letter of certification, or certified testing laboratory report, indicating each material complies with specified requirements and is intended for application shown.
2. Manufacturer's standard color chart.
3. Manufacturer's top coat skid-resistance chart ranging from fine to coarse.

B. Samples: Provide 4 inch by 4 inch minimum samples in the color and finish as selected by the A/E.

1. Provide a minimum of 3 samples per color and finish as selected by the A/E.
2. The epoxy resin composition flooring samples shall be applied to a rigid backing.

1.04 QUALITY ASSURANCE

A. Applicator: Submit evidence in writing that intended applicator is approved by the flooring materials

manufacturer.

- B. Compliance: Upon completion of work submit report signed by an authorized representative of applicator certifying compliance with the flooring manufacturer's recommended procedures and specifications.
- C. Pre-Installation Conference:
  - 1. Arrange a meeting not less than 30 days before starting work.
  - 2. Attendance: General Contractor, A/E, the Board's representative, manufacturer's representative, and installer's representative.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Check delivered material to job-site for completeness and shipping damage before starting work.
- B. Materials used shall be factory pre-weighed and prepackaged in single, easy to manage batches.
- C. Store materials in a dry and enclosed area, protected from exposure to moisture. Maintain temperature of storage area between 68 and 90 degrees F.

1.06 PROJECT CONDITIONS

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*NOTE TO SPECIFIER: Modify the following to suit existing project conditions.*  
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- A. Allow for concrete substrate to properly cure concrete substrate for a minimum of 28 days.
  - 1. If manufacturer requirements are stricter than the minimum required 28 days curing time, comply with manufacturer's requirements.
- B. Work area shall be free of other trades during installation, and for a minimum period of 24 hours after installation.
- C. Protect finished floor from damage by subsequent trades.

1.07 WARRANTY

- A. Manufacturer shall furnish a single written warranty covering both material and labor for a period of 5 years

from date of substantial completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Epoxy Resin Composition Flooring:

1. Dex-O-Tex: Decorflor and Cheminert KD.
2. Dur-A-Flex: Dur-A-Quartz.
3. Selby: Selbaclad, Selba Twede HD.
4. Master Builders: Morritex.
5. StonHard, Inc.: Stonshield HRI.

B. Slip Retardant Epoxy Resin Coating:

1. Dex-O-Tex: Posi-tred "O".
2. Accepted equivalent.

2.02 MATERIALS

A. Epoxy Resin Composition Flooring:

1. Basecoat:

- a. Thickness: 1/4".
- b. Color: Selected by the A/E from the basecoat manufacturer's stock color selection.

2. Top Coat:

- a. Colored, skid-resistant, orange peel texture, non-abrasive topping in quantity as recommended by the basecoat manufacturer for use with the specified basecoat.
- b. Color: Matching basecoat color.

3. Skid-Resistance: Selected by the A/E from the basecoat manufacturer's stock selection showing a smooth skid-resistance and with a coefficient of friction of at least 0.5.

4. Underlayment: As recommended by the basecoat manufacturer.

5. Joint Sealant Materials: As produced by manufacturer of epoxy resin composition flooring system for type of service and joint condition indicated.

B. Slip Retardant Epoxy Resin Coating:

1. Skid-resistant, metallic oxide aggregate course topping in quantity as recommended by the basecoat manufacturer for use with the specified basecoat.
2. Skid-Resistance: Dry and wet coefficient of friction of at least 0.8.

PART 3 EXECUTION

3.01 INSPECTION

- A. Do not proceed with the work of this section until conditions detrimental to the proper and timely completion of the work have been corrected in an acceptable manner.
- B. At kitchen areas, notify M-DCPS Food and Nutrition at least 48 hours before application of epoxy resin flooring.
- C. Existing Slopes To Floor Drains: Before starting work, verify existing slopes to floor drains function properly and do not leave standing water or "bird baths". If such conditions are found to exist, notify the A/E before proceeding with the work.

3.02 PREPARATION

- A. Comply with ASTM F710, manufacturer's recommendations, and as specified for surface preparation of new and existing substrates.
- B. Remove fixed and movable equipment before application of impervious flooring material. Reinstall after application of impervious flooring materials is complete.
- C. Moisture Tests:
  1. Determine whether the concrete slab is adequately dry for flooring installation.
  2. Test concrete slabs in new construction or existing slabs on grade for manufacturer's allowable moisture content by one of the following:
    - a. The protimeter electrical conductivity survey master moisture test instrument.
    - b. Calcium chloride test.
- D. Concrete shall be smooth and level, with maximum surface

variations not exceeding 1/8" in a 10 foot radius. Grind down ridges and other irregularities.

1. Fill cracks, holes, and depressions with latex cement underlayment as recommended by the flooring manufacturer.

E. Cleaning Before Installation:

1. Clean substrate surfaces to be free of paint, wax, oil, grease or other materials that can effect bonding and smoothness of basecoat materials. Provide a clean, dry, and neutral substrate.
2. Shot-blast concrete surfaces as required to obtain optimum bond of flooring to concrete.
  - a. Remove sufficient material to provide a sound surface free of laitance, glaze, efflorescence, and any bond-inhibiting curing compounds or form release agents.
  - b. Remove grease, oil, and other penetrating contaminates.
  - c. Repair damaged and deteriorated concrete to acceptable condition.
  - d. Leave surfaces free of dust, dirt, laitance, and efflorescence.

3.03 INSTALLATION

A. Application:

1. Apply troweled epoxy resin composition flooring with integral 4 inch high cove base by an applicator approved by the manufacturer of the flooring materials.
2. Apply without seams according to shop drawings and the flooring manufacturer's printed instructions.
3. New flooring thickness shall be uniform to maintain existing slope to floor drain, chip a minimum of 12 inches around floor drain to maintain new flooring thickness at the drain.

- B. Patching or Repair: Patch or repair cracks and level uneven areas with specified underlayment materials according to underlayment manufacturer's recommendations.

3.04 ADJUSTING AND CLEANING

- A. Use cleaning materials and procedures recommended by flooring manufacturer.

- B. Contractor is responsible for protection and cleaning of surfaces after final coats.

3.05 PROTECTION

- A. Protect installed floor from damage and wear during overall construction operation. Contractor shall comply with manufacturer's recommendations for protective materials.

END OF SECTION

Project Name  
Project No.

**M-DCPS MASTER  
SPECIFICATION GUIDELINES**

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