

SECTION 09714
ELECTRO-STATIC DISSIPATIVE WATER-BASED
EPOXY RESIN COMPOSITION FLOORING
Dex-O-Tex Electro-Flor "W"

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 electro-static dissipative water-based epoxy resin composition flooring and integral base 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. Drain flange shall be finished flush with substrate.)
- C. Moisture Vapor Barrier – Division 7
(Note to Specifier: Moisture Vapor Barrier should be incorporated if moisture vapor transmission rates are above recommended levels. 3 pounds of moisture vapor transmission per 100 square feet over a 24 hour period is the maximum acceptable level.)

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 the water-based epoxy resin composition flooring specified herein.
- C. LEED Submittals:
1. Product Data for Credit MR 4.1 and Credit MR 4.2: For products having recycled content, submit documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
 - a. Include statement indicating costs for each product having recycled content.
 - b. Include LEED Product Information Form for LEED Credits MR 4.1 and 4.2.
 2. Product Data for Credit EQ 4.2: For field applied, interior, paints coatings and primers, include printed statement of VOC content indicating compliance with Credit requirements.
 - a. Include LEED Product Information Form for LEED Credit EQ 4.2.
 3. Provide additional documentation for products as required to achieve each Credit(s).
- D. Samples for initial selection purposes in form of manufacturer's color charts showing full range of colors and finishes available.
1. Submit 2-1/2" x 4" samples of color chips from color chart selection designated by the Architect.

- E. Material certificates signed by manufacturer certifying that the epoxy resin composition flooring complies with requirements specified herein.
- F. Maintenance Instructions: Submit manufacturer's written instructions for recommended maintenance practices.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer or applicator who has specialized in installing resinous flooring types similar to that required for this project and who is acceptable to manufacturer of primary materials.
- B. Single-Source Responsibility: Obtain materials, including primers, resins, hardening agents, and finish or sealing coats, from a single manufacturer.
- C. Qualified Materials: Request for material approvals for any products other than the specified products must be submitted to the architect two weeks prior to the bid, including complete application specification, physical characteristics, and chemical resistance data. 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, or construction manager.

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 water-based epoxy resin composition flooring manufacturer's directions for maintenance of ambient and substrate temperature, moisture, humidity, ventilation, and other conditions required to properly execute and protect work.
- B. Lighting: Permanent lighting will be in place and working before installing resinous flooring.

PART 2.00 PRODUCTS

2.01 MATERIALS

- A. Electro-Static Dissipative, self-leveling water-based epoxy resin composition flooring shall be Electro-Flor "W" as manufactured by Crossfield Products Corp., Rancho Dominguez, California, and Roselle Park, New Jersey.

2.02 PROPERTIES

- A. Colors: As indicated, or if not otherwise indicated, as selected by Architect from manufacturer's standard colors.
- B. Physical Properties: Provide a flooring system that meets or exceeds the listed minimum physical property requirements when tested according to the referenced standard test method in parentheses.

Electrical Transmission Properties	
Floor-to-Floor Resistance (ASTM F150)	one megaohm to one billion ohms
Surface Hardness (ASTM D2240)	75 Shore D
Flexibility (ASTM D522)	3.3%
1 inch mandrel	

Adhesion (ASTM D4541)	520 psi
Water Absorption (ASTM D570)	1 week @ 77 degrees F-0.79%
Abrasion Resistance (ASTM D4060)	CS-17 wheels; 1kgms; 1000 cycles – 260-280 mg

2.03 SUPPLEMENTAL MATERIALS

- A. Optional Waterproofing Membrane: Type recommended or produced by manufacturer of water-based epoxy resin composition flooring system for type of service and floor condition indicated. **(Note to Specifier: The use of waterproof membrane is optional and is generally confined to suspended floors and in rooms having floor drains and subject to very wet spillage and service. All areas requiring membrane treatment should be clearly shown on plans and finish schedules.)**

PART 3.00 - EXECUTION

3.01 INSPECTION

- A. Examine the areas and conditions where the water-based epoxy resin composition flooring 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 in a manner acceptable to the Architect.
- B. Test for moisture vapor transmission. Notify Architect immediately if moisture vapor transmission exceeds manufacturers recommended levels.

3.02 PREPARATION

- A. Substrate: Perform preparation and cleaning procedures according to flooring manufacturer's instructions for particular substrate conditions involved, and as specified. Provide clean, dry, and neutral substrate for flooring application.
- B. Concrete Surfaces: Shot-blast, or power scarify as required to obtain optimum bond of flooring 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. Repair damaged and deteriorated concrete to acceptable condition. Leave surface free of dust, dirt, laitance, and efflorescence.
- C. Materials: Mix resin hardener and aggregate when required and prepare materials according to flooring system manufacturer's instructions.

3.03 APPLICATION

- A. General: Apply each component of water-based epoxy resin composition flooring system according to manufacturer's directions to produce a uniform monolithic surface of thickness indicated.
- B. Apply two coats of water-based epoxy bondcoat/primer by roller over the entire surface to be coated. Allow to cure a minimum of 2 or 3 hours, between coats, and 6 to 12 hours until no longer tacky prior to subsequent coats.
- C. Apply two coats of electrically conducting bodycoat in appropriate resistance range for the electrical-static dissipative flooring system as indicated.
- D. Apply two coats of maintenance sealer.
- F. Test conductivity 6-12 hours after completion.

3.04 CURING, PROTECTION AND CLEANING

- A. Cure water-based epoxy resin composition flooring materials according to manufacturer's recommendations, taking care to prevent contamination during application stages and before completing curing process.
- B. Close application area for a minimum of 24 hours.
- C. Follow manufacturer's recommendations for cleaning.

END OF SECTION

DEX-O-TEX PRODUCT LINE
Crossfield Products Corp.
www.dexotex.com

3000 E. Harcourt Street
Rancho Dominguez, CA 90221
Tel: (310) 886-9100
Fax: (310) 886-9119

140 Valley Road
Roselle Park, NJ 07204
Tel: (908) 245-2800
Fax: (908) 245-2583