Floor Seal Technology, Inc. Distributed by ZeroDocs.com

Utilize this section to specify water vapor emission control for fully cured below-grade, slab-on-grade and slab on deck concrete floors.

High moisture vapor content in floors can result in loss of adhesion of the finish flooring materials and damage to the finish materials themselves.

Work of this section is included in the contract and deductive unit price to allow competitive bidding for resilient, resinous, carpet, terrazzo and wood flooring systems.

Moisture vapor testing should always be performed to determine substrates conditions before flooring is installed under HVAC controlled environment.

For assistance in selecting decorative concrete material samples, contact Floor Seal Technology, Inc. calling 800-572-2344 or visit [www.floorseal.com](http://www.floorseal.com)

Michael Nicodemus

Architectural Representative

(916) 532-5115

[Michael.nicodemus@floorseal.com](mailto:Michael.nicodemus@floorseal.com)

**SECTION 09 61 39 – WATER VAPOR EMISSION CONTROL**

1. **GENERAL**
   1. SUBMITTALS
      1. Action Submittals:
         1. Product Data: Manufacturer’s descriptive data and product attributes for emission control system.
         2. Samples: [Selection samples.] [Verification samples.]
      2. Informational Submittals:
         1. Test Results: Third party water vapor transmission rate for installed products.

C. Close-Out Submittals:

1. Executed copy of manufacturers’ warranty.

2. Installers workmanship warranty.

* 1. ADMINISTRATIVE REQUIREMENTS
     1. Mockup: [25] [\_\_] square feet.
  2. QUALITY ASSURANCE
     1. Manufacturer Qualifications:
        1. Firm specializing in work of this Section with a minimum of 10 years’ documented experience.
     2. Installer Qualifications:
        1. Firm specializing in work of this Section with minimum [10] [\_\_] years’ experience.
        2. Factory employed personnel.
     3. Perform manufacturers recommended adhesion testing to ASTM D7234.
     4. Provide third party verification of materials water vapor transmission rate to ASTM E96/E96M.
     5. Manufacturers’ approval of concrete mix design and onsite installations meet warranty requirements.

1.4 WARRANTY

1. Manufacturer’s 15 year warranty for material defects and performance to remain moisture resistant. Includes repair and replacement of finished flooring system at no cost to Owner.
2. Installer’s 15 year installation workmanship warranty covering 100-percent of the cost for installation defects as determined by Manufacturer.
3. **PRODUCTS**
   1. MANUFACTURERS
      1. Contract documents are based on Floor Seal Technology, Inc. [www.floorseal.com](http://www.floorseal.com)
         1. [\_\_\_\_\_\_\_\_\_\_]
      2. Substitutions: [Refer to Division 01.] [Not permitted.]
   2. MATERIALS
      1. Water Vapor Emission Control:
         1. Product: MES-100.
         2. Type: Two-component, moisture-alkaline tolerant epoxy meeting ASTM F3010.
         3. Perm rating: 0.10 when tested to ASTM E96.
         4. Alkali-pH resistance: up to 14pH.
         5. Vapor Emission: up to 25 lbs. when tested to ASTM F1869.
         6. Adhesion: 845psi or 100-percent concrete cohesive failure when tested to ASTM D7234.
   3. ACCESSORIES
      1. Primer: Manufacturer recommended non-pours primer for securing cast-underlayment.
      2. Cast-Underlayment:
         1. Description: Moisture tolerant, Portland cement based.
         2. Compressive strength: Minimum 5,000 PSI when tested to ASTM C109.
4. **EXECUTION**
   1. EXAMINATION
      1. Prior to installing finish floor materials on [below-grade] [on-grade] [above-grade] concrete substrates, test surfaces in accordance with the following:
         1. Alkalinity:
            1. Test method: Measure pH according to ASTM F710.
            2. Acceptable results: pH between 8 and 10.
         2. Moisture vapor transmission:
            1. Test method: Perform anhydrous calcium chloride test to ASTM F1869.
            2. Acceptable results: Maximum 5 pounds per 1000 square feet in 24 hours.
         3. Relative humidity:
            1. Test method: Perform relative humidity test using in situ probes to ASTM F2170.
            2. Acceptable results: Maximum 75 percent.
      2. Install water vapor emission control in areas exceeding specified results.
   2. PREPARATION
      1. Mechanically profile surface to ICRI No. 3 profile.
      2. Clean surfaces of debris and contaminates.
   3. INSTALLATION
      1. Apply water vapor emission control in accordance with manufacturer’s instructions.
      2. Prime surface to receive cast-underlayment.
      3. Install underlayment to nominal 1/8-thickness from wall to wall; feather edge to match adjacent elevations for flooring compatibility.
   4. FIELD QUALITY CONTROL
      1. Perform required inspection and material requirements to maintain manufacturer’s warranty.

END OF SECTION