

# 09 05 61 – Moisture Mitigation System

## DIVISION 9 – Finishes



### STATEMENT OF PURPOSE & BACKGROUND

- Scope:
  - Fluid applied moisture mitigation system to suppress excessive moisture vapor emission in new or existing interior concrete slabs, on-grade or below-grade, prior to installation of toppings and floor finishes where shown or specified.
  - Perform anhydrous calcium chloride test in accord with ASTM F1869, and/or relative humidity test ASTM F2170, *Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes*.
    - Perform RH tests early in the project and again during construction to determine if alternative adhesive methods or products should be used due to high moisture readings.
    - Perform RH tests on both new and existing concrete slabs.
    - Moisture limit for most flooring adhesives is generally  $\leq 85\%$  RH.
    - Contact Owner and Architect if readings exceed this limit to determine if alternative floor finishes such as polished concrete should be used instead of adhesive-applied finish materials.
- If a concrete slab has no vapor barrier underneath, or if the moisture levels in the slab exceed the maximums allowable for the specified flooring adhesive, a topical moisture mitigation system shall be used that conforms to ASTM F3010 *Standard Practice for Two-Component Resin-Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings*.
  - Statement of goals:
    - Provide a flooring substrate suitable for installation of finish floor systems, including leveling or topping compound and finish floor materials.
    - Controls transmission of moisture vapor to levels allowable by selected topping and floor finish.
  - Revision history of section:
    - 10/23/2018 (date of adoption)
    - 03/26/2021

### SELECTION AND APPLICATION CRITERIA

- System shall be a two-component modified epoxy system designed to seal concrete and reduce moisture vapor transmission prior to applying finished flooring.

### OUTLINE SPECIFICATION

- Part 1 General
  - Two-Part, one coat epoxy resin system
  - For RH readings up to 100%
  - Permeability: 0.06 perms
- Part 2 Products
  - Referenced Manufacturer:
    - Ardex Engineered Cements: MC Rapid; [www.ardexamericas.com](http://www.ardexamericas.com)
    - All other products submitted for approval must be suitable for the RH readings of any particular interior concrete slab.
  - Acceptable Manufacturers, provided compliance with requirements:
    - Schonox, EPA Rapid
    - Mapei, Planiseal MSP

- Koster VAP I 2000 – Zero VOC
  - Any substitution requests must be **approved, in writing, in advance, by the Architect and the Owner**, in accordance with the provisions of the Contract.
  - Confirm the products specified meet the requirements of the project.
  - Confirm with the manufacturer their installation recommendations, applications and warranties.
- Part 3 Execution
    - Per Consultant and / or manufacturer specification.
    - Installation must be by an installer trained and/or certified by the manufacturer.
    - Warranty: 20 year limited warranty.
    - Bidders may be required to submit a Unit Price per Square Foot for a Moisture Mitigation System on a per-project basis.

End of Section