

DESIGN CRITERIA

1. Related Sections: See Division 03 Section Cast-In-Place Concrete and Cast-In-Place Concrete; Division 09 Section Resilient Tile; Division 09 Section Resinous Flooring; Division 09 Section Tile
2. This section specifies the preparation of new concrete floor slabs for installation of floor covering and testing of existing concrete floor slabs for moisture and pH. Section applies to all floors identified in the contract document to receive the following types of floor coverings:
 - A. Resilient Tile Flooring
 - B. * Resinous Flooring (see item 4.D. below)
 - C. Tile Flooring
3. Concrete Slab Moisture Testing: Testing is to be performed by an experienced, independent, testing agency employed and paid by the design AE during design. Construction contractor should perform slab moisture testing only when new concrete slab is constructed. AE should assume a new slab will have high moisture content and will require remedial floor coating.

Provide testing as listed below.

- A. Moisture Vapor Emission Testing.
 - B. Internal Relative Humidity Testing.
 - C. pH Testing.
4. Moisture Remediation: Test results in excess of that tolerated by flooring systems specified must be corrected prior to flooring application. Apply remedial floor coating over entire floor area that is to receive aforementioned floor coverings.
 - A. Remediation Basis of Design as follows:
 1. Patching Compound: Ardex Moisture Resistant Patch (MRF) or Ardex Transportation Repair Mortar (TRM).
 2. Crack Repair: Ardex ArdiFix two part polyurethane repair compound, Ardex Ardiseal for moving joints.
 3. Primer: Ardex P82 Primer.
 4. Remedial Floor Coating: Ardex MC Rapid epoxy moisture control system; with Ardex K15 or K13 self-leveling underlayment.
 5. Self-Leveling Underlayment: Ardex K15 or K13.
 - B. Provide all other Manufacturer required products for a complete remediation system.
 - C. Infilling Existing Concrete Slabs: Where existing concrete slab is removed and new concrete slab installed, extend the moisture remedial floor coating a minimum of 12" beyond the joint between the existing concrete slab and new concrete slab around the entire perimeter of new slab. Remediation Basis of Design at infill concrete slabs is as follows:

1. Install Vapor Retarder in the infill area. Connect to existing Vapor Retarder under existing slab.
 2. Fill with new concrete as specified.
 3. Install Ardifix Joint Filler.
 4. Prep, including shot blast, for Ardex membrane system 12" on each side on the infill.
 5. Install the Ardex membrane system as specified 12" on each side of the infill.
 6. Install self-leveling if required.
 7. Install finish flooring system.
- D. * Remediation for Resinous Flooring to follow Manufacturers remediation system (Basis of Design is outlined in Resinous Flooring 09 67 23 specifications) and warranted by the Resinous Flooring Manufacturer.
5. The design AE is responsible for ensuring the drawings and specifications are edited to include all appropriate moisture remediation requirements for each project. Slab moisture requirements should be explicitly identified as a general note on the Room Finish Schedule sheet and reference specification section 09 05 61 Common Work Results for Floor Preparation.

END OF SECTION