

SECTION 07190

MOISTURE MITIGATION SYSTEMS

PART 1 GENERAL

1.01 DIVISION OF RESPONSIBILITIES TERMINOLOGY: **NOT USED**

1.02 SUMMARY: The Contractor shall provide Moisture Mitigation if the new or existing concrete subfloor exceeds the finish flooring or adhesive manufacturer's measured Moisture Emission limits

1.03 RELATED WORK:

- A Section 03310- Concrete Floor Preparation
- B Section 09650- Resilient Flooring.
- C Section 09660- Resilient Sheet Flooring
- D Section 09670- Epoxy Finish on Concrete

1.04 SUBMITTAL: No product submittal is required for the work of this Section IF provided per the construction documents Any Request for Product Substitution must be submitted per Section 01340- Submittals

1.05 WARRANTY: Provide the Moisture Mitigation System manufacturer product warranty in the Building Maintenance Manual per Section 01700-Contract Closeout.

PART 2 PRODUCTS

2.01 MOISTURE MITIGATION FOR VINYL COMPOSITION TILE AND VINYL SHEET FLOORING:

- A. The acceptable moisture emission level for Vinyl Composition Tile and Vinyl Sheet Flooring may not exceed 5.0 pounds per 1000 square feet per 24 hours.
- B. Moisture Mitigation Treatment: The Contractor shall provide concrete slab treatment using products by Koester American Corporation, Virginia Beach VA (757-425-1206; www.koesterusa.com). Application shall be by a manufacturer-approved applicator.
 - 1. For Moisture Emission Level of over 5.0 to 10.0 pounds per 1000 square feet per 24 hours, and pH less than 14: Provide Koester VAP I pH single coat vapor control treatment
 - 2. For Moisture Emission Level of over 10.0 to 25.0 pounds per 1000 square feet per 24 hours, and pH less than 14: Provide Koester VAP I 2000 single coat vapor control treatment
- C. Acceptable Alternative Moisture Mitigation Treatment: The Contractor shall provide Creteseal CS2000, concrete slab vapor control treatment using product by Creteseal Concrete Waterproofing Products Inc , Anaheim CA (800-278-4273, www.creteseal.com).

2.02 MOISTURE MITIGATION FOR EPOXY FLOORING:

- A. The acceptable moisture emission level for Epoxy Flooring may not exceed 3.0 pounds per 1000 square feet per 24 hours

- B. Concrete surfaces may be shot-blasted for concrete moisture testing, but must be shot-blasted for the subsequent epoxy flooring installation.
 - 1. For concrete moisture testing, the steel bead shot size should be a #230 to #280 mesh profile to obtain a satisfactory surface, or as may be alternatively recommended by the Moisture Mitigation product manufacturer.
 - 2. For shot-blast preparation required for epoxy flooring installation, refer to Section 09670-Epoxy Finish on Concrete.
- C. Moisture Mitigation Treatment: The Contractor shall provide concrete slab treatment using products by Koester American Corporation, Virginia Beach VA (757-425-1206; www.koesterusa.com). Application shall be by a manufacturer-approved applicator.
 - 1. For Moisture Emission Level of over 3.0 to 10.0 pounds per 1000 square feet per 24 hours, and pH less than 14: Provide Koester VAP I pH single coat vapor control treatment.
 - 2. For Moisture Emission Level of over 10.0 to 25.0 pounds per 1000 square feet per 24 hours, and pH less than 14: Provide Koester VAP I 2000 single coat vapor control treatment.
- D. Acceptable Alternative Moisture Mitigation Treatment: The Contractor shall provide Creteseal CS2000, concrete slab vapor control treatment using product by Creteseal Concrete Waterproofing Products Inc., Anaheim CA (800-278-4273, www.creteseal.com).

PART 3 EXECUTION

- 3.01 SURFACE CONDITIONS: The Contractor shall examine the areas and conditions under which work of this Section will be provided, shall correct conditions detrimental to the timely and proper completion of the work, and shall NOT proceed until unsatisfactory conditions are corrected.
- 3.02 CONCRETE FLOOR SHOTBLAST: Clean all surfaces to receive moisture vapor reduction system. Shotblast all floors and clean surfaces with vacuum to remove all residue off the substrate. Remove all defective materials, and foreign matter such as dust, adhesives, leveling compounds, paint, dirt, floor hardeners, bond breakers, oil, grease, curing agents, form release agents, efflorescence and laitance. Repair all cracks, expansion joint, control joints, and open surface honeycombs and fill in accordance with product manufacturer recommendations. Inform moisture mitigation system manufacturer if concrete additives like chlorides or any other soluble compounds that can contaminate surfaces have been used in the concrete mix. Reinforcing fibers must be burned off, scraped and vacuumed. Do not Acid Etch.
- 3.03 CONCRETE FLOOR PREPARATION:
 - A. A cementitious underlayment system with an approved epoxy primer, if required by the flooring manufacturer, may be used to level and smooth surfaces after shotblasting the floor on top of the water vapor reduction system. The underlayment system utilized must be installed in accordance with the underlayment system manufacturer's printed instructions and within the specified limits. No underlayment system containing gypsum shall be allowed.
 - B. When water based adhesives are utilized in the floor covering installation, use an approved underlayment system with primer prior to the installation of the flooring system. Please consult the adhesive manufacturer for their minimum recommended thickness of cementitious underlayment to absorb excess moisture in the adhesive. Leveling of the substrate shall not be considered part of the water vapor reduction system.

3 04 INSTALLATION: Install all work of this section in strict accordance with the construction details, requirements of governmental agencies having jurisdiction, and the manufacturer's recommended installation procedures.

END OF SECTION

