

SECTION [07 26 00] [09 61 00]
[Vapor Barriers] [Flooring Treatments]

Specifier Note: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-part format. This section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building codes. Coordinate this section with other specification sections and the drawings. Delete all “Specifier Notes” when editing this section.

Specifier Note: This guide specification is provided as a start point for the design professional. Any modifications to the specification are the responsibility of the design professional. Contact Vexcon Chemicals with any questions regarding this product.

PART 1 - GENERAL**1.1 RELATED DOCUMENTS**

- A. Drawings and Provisions of the Contract, including General, Supplementary and Special Conditions, applicable Division “O” Sections and Division 1 Sections, apply to this Section.
- B. The Owner will employ and pay for the services of an independent testing agency to provide calcium chloride moisture tests on the concrete floor slabs of the designated areas to receive the flooring materials. Moisture tests must be performed, and results confirmed in writing with copies sent to the Owner, Project Manager, General Contractor, and to Flooring Installer, immediately after they are performed.

1.2 SUMMARY

- A. Extent of flooring and accessories is shown on drawings and in schedules and includes the following types:
 - 1 [Type of flooring]

1.3 SPECIAL CONDITIONS

- A. Portions of the work (materials and/or installation) covered by this section are a part of the “Furnished by Owner” program. Refer to Section 01020 – Furnished by Owner (FBO) of the specification and the drawings for the extent of the FBO scope.

1.4 PROJECT CONDITIONS

- A. Before attempting the installation of the Brand and product name, a visit to the job site is required to confirm conditions and floor measurements. The entire area shall be well lighted in order for the installer to properly prepare the substrate and install the new flooring. Close spaces to traffic before, and for at least 12 hours after installation. This will minimize the chance of damage to the new floor. To minimize problems related to subfloor moisture and building expansion or contraction, the area to receive flooring shall be in operation and heated or air conditioned to the temperatures as listed below, for at least one week prior to the installation of the flooring. Portable heaters are not acceptable. Deliver all flooring materials and adhesives to the job site 48 hours in advance. For a 48 hour period before installation, during installation, and for a 48 hour period after installation, the temperature of the flooring material, adhesives, the space to receive flooring, and the subfloor shall be between 65 and 80 degrees Fahrenheit. Thereafter, the minimum temperature is 55 degrees Fahrenheit.
- B. Type of flooring and accessories after other building finishing operations, including painting, have been completed. Do not install flooring over concrete slabs until the slabs have been cured to ASTM standards and have been treated with the specified moisture control product. In all cases, moisture tests must be performed, results confirmed in writing, and requirements met, before installation may commence.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- A. Type of Flooring: Brand Name, style: Composition. Meeting the color and type to be as indicated on the drawings.
 - 1 Contact:
Manufacturer of the Flooring product
Address
Phone
 - 2 Substitutions will not be allowed.
- B. Transitions / Reducers:
 - 1 Vinyl flooring to carpet –as an example of what is required for the project.
 - 2 Substitutions will not be allowed.
- C. Adhesive: Provide adhesive as recommended by flooring manufacturer for use on concrete slab substrates, which is compatible with the selected Moisture Correction System listed below. Use recommended adhesive by Brand Name of Flooring.
- D. Vinyl Wall Base:

2.2 FLOOR LEVELER/UNDERLAYMENT - GYPSUM BASED FLOOR LEVELER

PRODUCTS WILL NOT BE ALLOWED.

- A. Floor Patching Underlayment (Cementitious Type): Use Vexcon Chemicals, **MoistureBloc Surface Bond**, then [MoistureBloc SLU] or [MoistureBloc Patch FP] by Vexcon Chemicals, for filling and repair of holes, cracks, depressions, saw cuts, etc.
- B. Skim Coat and Patching Compound: Use Vexcon Chemicals, MoistureBloc Surface Bond, and then MoistureBloc Patch FP.

2.3 MOISTURE CORRECTION SYSTEM: To always be used under the Brand Name and style type; even when the Calcium Chloride test results are below 3#’s/1000sq.ft./24 hours.

- A. Once the Calcium Chloride test results are known, use the appropriate product for the identified level of problem.
 - 1 **MoistureBloc Universal** as manufactured by Vexcon Chemicals, Tel: (888) 839-2661. Contact the MoistureBloc Brand Manager
 - a. For Moisture Level reduction from 9#/1000 sq.ft./24 hours to under 3#’s
 - b. For reactive and non-reactive adhesives and LEED projects
 - 2 **MoistureBloc One Step** as manufactured by Vexcon Chemicals, Tel: (888) 839-2661. Contact the MoistureBloc Brand Manager
 - a. For Moisture Level reduction from 9#/1000 sq.ft./24 hours to under 3#’s
 - b. For non-reactive adhesives or where water based products are required and LEED projects
 - 3 **MoistureBloc Emulsion Vapor Reduction System** as manufactured by Vexcon Chemicals, Tel: (888) 839-2661. Contact the MoistureBloc Brand Manager
 - a. For Moisture Level reduction from 15#/1000 sq.ft./24 hours to under 3#’s
 - b. For reactive or non-reactive adhesives or where water based products are required
 - 4 **MoistureBloc Vapor Reduction System FT** as manufactured by Vexcon Chemicals, Tel: (888) 839-2661. Contact the MoistureBloc Brand Manager
 - a. For Moisture Level reduction from 15#/1000 sq.ft./24 hours to under 3#’s
 - b. For reactive or non-reactive adhesives
 - 5 **MoistureBloc MX Emulsion System** as manufactured by Vexcon Chemicals, Tel: (888) 839-2661. Contact the MoistureBloc Brand Manager
 - a. For Moisture Level reduction from 27#/1000 sq.ft./24 hours to under 3#’s
 - b. For use where low odor water based products are required
 - 6 **MoistureBloc MX System** as manufactured by Vexcon Chemicals, Tel: (888) 839-2661. Contact the MoistureBloc Brand Manager
 - a. For Moisture Level reduction from 27#/1000 sq.ft./24 hours to under 3#’s
- B. Product to be applied by a manufacturer’s approved installation contractor.

3.1 INSTALLATION

- A. Pre-installation Inspection: The flooring installer, the Contractor and the Owner shall examine the flooring substrate and all other conditions under which flooring installation is to be performed. Flooring work shall not proceed until all conditions meet manufacturer's specifications and are acceptable to the Owner. Particular attention shall be paid to the moisture content of the concrete slab (maximum 3 lbs. of water/1000 sq. ft. of slab in a 24-hour period when tested by Owner's independent laboratory, and shown to be in accord with the ASTM F1869-98 calcium chloride test) and to the use of the specified type of adhesive recommended by the Manufacturer for proper adhesion of the flooring.
- B. Installation: Install in strict accordance with flooring manufacturer's recommendations for type(s) of materials, project conditions, and intended use.
- C. **MOISTUREBLOC MOISTURE CONTROL APPLIED TO FRESH CONCRETE AS A CURE. REFERENCE TO SECTION 03 30 00 – CAST IN PLACE CONCRETE (03 39 23 – Membrane Concrete Curing)**
1. Concrete that is to be subsequently covered with flooring material should be cured with MoistureBloc Top Coat [Emulsion], [FT] Step 2 after the concrete has been properly finished and the bleed water has ceased to come to the surface. Concrete must be set enough to cut joints and cleaned of joint residue.
 - a. Apply as soon as possible after the concrete has received final finishing, just as the water sheen disappears. If application is delayed concrete must be kept wet (preferably by water spray-mist) until MoistureBloc Top Coat [Emulsion], [FT] Step 2 can be applied. If concrete is allowed to dry, use **StarSeal EF Safe Etch**, product data sheet OP100, to clean and prepare the surface.
 - b. Apply one coat of MoistureBloc Top Coat [Emulsion], [FT] Step 2 at 300 sq.ft./gal. Allow to dry. After 72 hours drying and curing time, if the MoistureBloc Top Coat [Emulsion], [FT] Step 2 film is undamaged, the application of the specified MoistureBloc System can continue as directed for Existing Slabs. (Section 3.1,D5)
 - i. Floor must not be walked on during 72 hour curing period.
 - ii. If time to floor covering is delayed use Vexcon's **Certi-Vex Talc Release** and cover floor with builder's board for protection.
 - iii. Remove protection when ready to proceed to 3.1 D5.
 2. Curing material must meet the requirements of ASTM C-1315 and ASTM C-1315 Section 8.9 Adhesion of tile cements.

Specification Note: Contact Vexcon to discuss this section

D. ON EXISTING SLABS ON GRADE, DO NOT INSTALL NEW FLOORING OVER EXISTING CONCRETE SEALERS OR CURING COMPOUNDS. IN ALL EXISTING CONSTRUCTION, SUBFLOOR MUST BE CLEAN, DRY AND THE SLAB MUST PASS THE MOISTURE CONTROL SYSTEM MANUFACTURER'S WATER ABSORPTION TEST.

1. New concrete slabs can be cured with Moisture Control System, See section 3.1, C for details.
2. The general contractor will be responsible to see that the concrete floor is broom clean and free of all paint, curing compounds, dry wall compound, grout, dust, solvent, wax, grease, oil, asphalt sealing compounds, dirt and other extraneous materials. The surface must be hard and dense and free from powder or flaking.
3. The general contractor will mark the areas to receive the moisture correction system with a chalk line. A moisture absorption test must be performed throughout the chalked off areas: A drop of water should penetrate into the concrete under 2 minutes. The concrete must be clean, dry and water absorbent prior to applying the Moisture Control sealer. The sealer shall be applied to an area approximately 6" beyond the chalked off area. Should this test fail, sanding grinding or chemical removal will be required in accordance with Paragraph D, 4, a-c or contact the Moisture control manufacturer for cleaning recommendations.
4. The flooring contractor shall be responsible for the necessary preparation for installation. Preparation shall include surface preparation, moisture correction system installation, patching, leveling, and final cleaning.
 - a. Floor preparation must be tested in accordance with moisture control system manufacturer's absorption test.
 - b. Mechanical Removal: Use either a planetary or counter rotating head machine with an overlapping capability and Metal bond diamonds aggressive enough to reveal fresh concrete on 100% of the floor or
 - i. Scrubbed or Sanded Clean Finish: Wet concrete surfaces thoroughly and scrub or sand with nylon bristle brushes or grit screens
 - c. Chemical Treatment Removal:
 - i. Use MoistureBloc Adhesive Remover per manufacturer's instructions to remove adhesive.
 - ii. Use MoistureBloc Stripper to remove curing compounds, sealers and other film forming materials.
5. The concrete floor slab shall be tested for moisture levels, and the contractor shall contact Vexcon for the appropriate MoistureBloc System.

- a. Moisture testing shall be done on all concrete slabs regardless of age or grade level. The tests shall be performed by an independent laboratory hired by the Owner. Test cleaned sections of concrete for moisture using a calcium chloride test kit in accord with ASTM F1869-98. Follow the instructions included with the kit. A minimum of three tests must be conducted for the first 1,000 square feet of flooring, with one additional test for each 1,000 square feet of flooring thereafter. The moisture emission from the concrete slab shall not exceed 3 lb. per 1,000 square feet per 24 hours.
 - b. The areas to receive the specified moisture correction system must be at least 65 degrees Fahrenheit and no more than 80 degrees Fahrenheit for 48 hours before commencing installation. Installer shall verify that general contractor has complied with temperature requirements prior to placing moisture tests.
6. Application of the Moisture Correction System shall be done in strict accordance with manufacturer's installation instructions, and allowed to cure as described in the installation procedure.
 7. After application of moisture control material, all holes, grooves, expansion joints, and other depressions must be filled with manufacturer approved Brand Name primer/bonding agent and latex underlayment, and troweled smooth and feathered even with the surrounding surface.
 8. Apply all floor levelers/underlayment after the installation of moisture correction system. Unless leveler patching compound manufacturer approves their material for initial moisture levels in 3.1, D, 5,a. Apply per manufacturer's recommendations in areas where required for type(s) of materials, project conditions and intended use.
 9. The flooring contractor shall inspect the floor before installing flooring. Any hollows, wrinkles or areas that were scratched or damaged by other trades must be corrected to the satisfaction of the flooring contractor.
 10. Adhesive Bond Testing: Adhesion testing shall be conducted to ensure that a satisfactory bond can be obtained with the recommended adhesive over any substrate in question. Adhere 3' x 3' sections of the flooring and allow to set for 3-7 days. Check for bond strength at that time by removing the test material.
- E. Apply adhesive recommended by flooring manufacturer in strict accordance with manufacturer's instructions.
1. Use only adhesive recommended by Brand of Flooring for their products, and which are compatible with the selected moisture correction system.
- F. Protect the floor: Protecting the floor after installation is important, to prevent permanent damage to the floor. Keep foot traffic off the floor for 12 hours after installation. Keep rolling loads, fixtures, and furniture off the floor for 24 hours. Heavy objects set on a new floor may cause permanent indentation, adhesive oozing

between seams, or other damage. The longer the floor is left undisturbed after the installation, the stronger the adhesive bond will be. Flooring should be installed after all other finishing and construction operations have been completed. If additional construction must be undertaken after the floor is installed, leave the floor undisturbed for 24 hours, then cover the floor (with building paper, cardboard, plywood, or a combination of these materials) to prevent damage or staining of the new floor, until the space is ready to be occupied. After construction is completed, remove protective coverings from the floor, sweep or vacuum, strip and polish according to the **Brand Name COMMERCIAL MAINTENANCE PROCEDURES**. Do not wash the floor or begin maintenance program for seven (7) days after installation. Sweep and damp mop the floor to keep looking good prior to opening.

G. PREVENTATIVE MEASURES

- 1 Floor Protectors should be used to minimize damage from the bottoms of chair legs.
- 2 Window Coverings should be used to protect the floor from damage due to direct sunlight.
- 3 Plywood or other boards should be used to protect the floor when moving heavy objects such as furniture, fixtures, displays or appliances. **DO NOT MOVE HEAVY OBJECTS DIRECTLY ACROSS THE FLOOR!**
- 4 Good Maintenance Practices should be used to keep the floor clean, which will minimize wear, scuffing, scratching, etc. See the appropriate **Brand Name Commercial Maintenance Procedures**.

H. INITIAL MAINTENANCE PROCEDURES SUMMARY

- 1 Begin initial maintenance after 5-7 days after the floor is installed. Obtain a copy of the Brand Name Maintenance Guide for complete instructions.

END OF SECTION