



DECOCOLOR FLOORING SYSTEM

Part 1 - GENERAL

General Provisions

- A. Work to be covered by this section, under written specification or by drawing, shall comply with all provisions of the contract documents.

Work Included

- A. All work to be provided in this section shall include material, labor, and equipment necessary to furnish the complete installation of a DecoColor Flooring System, as specified in documents for this project and/or the finish schedules contained in the drawings; including but not limited to the following:
1. Surface preparation
 2. Concrete repairs [as needed]
 3. Joint filling/sealing [if applicable]
 4. Moisture vapor barrier coating [if necessary]
 5. Application of an appropriate primer [if necessary]
 6. Installation of the resinous DecoColor Flooring System

Related Sections

- A. Concrete (if Applicable)
1. Concrete shall be allowed to cure for (the minimum period required for the product specified) or for a minimum of 28 days.
 2. Concrete Slab-on-grade or below-grade construction shall be installed over an effective moisture vapor barrier beneath the slab (refer to Part 2 - Supplemental of this section). Placed concrete should be moisture cured.
 3. No curing compounds or similar surface contaminants, which would impede the adhesion of the resinous flooring system to the substrate, shall be used for curing the placed concrete.
 4. Concrete shall be sloped to drains according to the requirements of the specific project or shall meet ACI-301 guidelines for placing and finishing concrete, and noted in drawings and/or specifications.

Submittals

Submit the following in accordance with the provisions and conditions listed in Division 1 and/or in compliance with other documents or conditions as outlined in the specifications for this project.

- A. Submit current manufacturer's technical data and literature for DecoColor Flooring System as specified in this section.
- B. Submit the color chart for the specified product/system and/or a cured physical sample of the selected flake color blend as approved by the Architect, Owner, and/or their agent, from the manufacturer's standard selection series.
- C. Submit a letter from the manufacturer certifying that the DecoColor Flooring System complies with this specification.

Quality Assurance

- A. Component Materials: All component/material(s) used for the installation of this DecoColor Floor System must be furnished by the same manufacturer (Thermal-Chem Corporation 2550 Edgington St. Franklin Park, IL 60131) in order to ensure optimum adhesion to the substrate and compatibility of the integral components. This shall include the prime coat and vapor barrier coating (if required), and all epoxy and urethane coatings.
- B. Installer: Enlist a contractor experienced in the installation of a epoxy resinous floor systems, approved in writing by the manufacturer, and who can perform within the scope of work required to complete the contract for this section of the project.

Delivery, Storage and Handling

- A. Materials shall be delivered in the manufactures original undamaged and unopened containers. Each container shall be clearly marked with the following:
 - Product Name and Number
 - Manufacture's Name
 - Component designation (A, B, etc)
 - Product Mix Ratio
 - Health and Safety information
- B. All materials shall be stored in a dry location at a minimum temperature of 55⁰ F (12.8⁰ C).
- C. The contractor shall promptly inspect the delivered materials to assure that quantities are correct, comply with the requirements and are not damaged

Warranty

- A. A joint written warranty shall be provided for this project for a period of one (1) year from the date of completion of the floor installation. The written warranty shall cover the material(s) as provided by the manufacturer to install the floor system and the contractor shall warranty the workmanship and labor to install the floor system. The labor and material guarantee shall include loss of bond and wear-through to the concrete substrate from normal use.
- B. Not included in the warranty are damage due to structural design deficiencies including but not limited to slab cracking from lateral, vertical or rotational movement, and gouging or other damage due to fork lifts, other equipment, delamination caused by vapor transmission, Acts of God, or other elements beyond the scope of protection of this system nor causes not related to

the system materials. Thermal-Chem and the contractor shall have no other liability with respect there to, including without limitation, liability for incidental or consequential damages.

- C. In case of a warranty claim, the owner will notify the manufacturer and contractor in writing within 30 days of the first appearance of problems covered under this warranty. The owner will provide free and unencumbered access to the area during normal working hours for warranty claim repairs. Property protection is also the owner's responsibility. Remedy is limited to direct repair of the DecoColor Flooring System.

Part 2 - PRODUCTS

Materials

The DecoColor Flooring System shall consist of:

- Base Coat: ArmorClad (Pigmented) Product # 735 applied at 120 - 140 sq. ft. per gallon.
- Top Coat: ArmorBond Resurfacer (Pigmented) Product # 731 applied at 100 to 120 sq. ft. per gallon.
- Optional Wear Coat - **UV Exposure:** DecoFinish E-57 (Urethane) Product # 1057 **OR** ArmorFinish E-81 Product # 1061 (**NO ODOR Urethane**) applied at 300 sq. ft. per gallon.

Note: White aluminum oxide may be broadcast and back rolled into the urethane coat for skid resistance

Product Characteristics

- A. Color: Shall be selected from the manufacturer's Solid color chart, or as otherwise determined, selected, and approved by the Architect and/or Owner.
- B. Components: All resinous liquid materials shall all be specifically formulated for this type of application at an installation temperature (ambient & substrate) of not less than 50⁰ F.
- C. Physical Properties:
- | | |
|--|--|
| 1. Compression Strength (ASTM D-695) | 10,250 psi (min) |
| 2. Hardness (ASTM D-2240) | Shore "D" 75-85 |
| 3. Adhesion (ACI-503) | >350 100 % concrete failure |
| 4. Tabor Abrasion (ASTM D-1044)
(CS-17 wheel) | loss / 1000 cycles
35-40 mg. (max.) |
| 5. Tensile Elongation (ASTM D-638) | 5.4% +/- 1 |
| 6. Impact Resistance (ASTM D2794) | 160 in./lb |
| 7. Freeze Thaw Resistance (ASTM C666) | Passes |

Special Note: If temperatures (ambient & substrate) are less than 40⁰ F at the time of installation consult Thermal-Chem immediately, cold cure versions of the above materials are available.

Supplemental

- A. When applicable, a drawing of the finished floor layout (drawn to scale) and/or a room finish schedule shall be provided by the Architect, to the installer prior to the commencement of work.
- B. Where the potential for moisture vapor transmission is high, and/or an adequate barrier beneath the slab is suspect or verification that a vapor barrier has NOT been installed, the Thermal-Chem's VaporGard Product # 211coating system can be applied prior to installation of the DecoColor Flooring system.

Part 3 - EXECUTION

Examination and Inspection

- A. Verification Of Conditions:
 - 1. The Installer shall be responsible for inspecting all substrate surfaces that will receive the DecoColor Flooring System.
 - 2. Before commencing the installation, the contractor shall notify the Architect and/or Owner of any detrimental or unsatisfactory conditions, which exist, and would delay the completion of this project, interfere with the execution of the contract, or be the cause for a defective or faulty installation.
 - 3. Work shall not proceed until all conditions and/or layout modifications have been satisfied and approved by the Architect and/or Owner. Application of any material(s) shall signify that the surfaces, conditions or changes have been inspected and satisfied, and have been accepted by the installation contractor.

Surface Preparation

- A. Surface Conditions: The existing substrate surface must be clean and free of any laitance, dirt, debris, and/or any deleterious foreign substance that could impede the proper adhesion of the DecoColor Floor System to the substrate.

Create a surface profile with a steel shot blast machine and/or dust-free diamond grinder for surfaces and edges.

Verify that surface is dry and perfectly clean, free of all oil, grease, detergent film, sealers and /or curing compounds.

Thoroughly rout and vacuum all non-moving cracks and surface deviations, then fill with patching compound comprised of 100% solids epoxy and aggregate.

Key in all drains, grind or build up edges between joints to a point of equal height
Saw cut to a depth of ¼" around all areas to be patched and chip out deteriorated concrete down to clean sound concrete, prime and patch with Thermal-Chem product No. 726

Saw cut to a depth of ¼" around all areas to be patched and chip out deteriorated concrete down to clean sound concrete, prime and patch with Thermal-Chem product No. 726 ArmorPrime and Thermal-Chem Grout and Patch Sand #A-100.

- B. Once the surface has been adequately cleaned and prepared, the following determinations shall be made and documented:
1. Ambient and surface temperatures.
 2. pH values of the concrete substrate.

Installation

- A. Apply each component of the DecoColor Flooring System in accordance with manufacturer's written System Installation Guide and strictly adhere to mixing and installation methods, recoat windows, cure times and environmental restrictions.

Protection of Finished System

- A. Cure the DecoColor System materials in accordance with manufacturer's directions taking care to prevent contamination during stages of the installation and prior to completion of the curing process
- B. Protect the DecoColor System from damage and wear during other phases of the construction operation, using temporary coverings if required. Remove temporary covering just prior to final inspection.
- C. Clean the DecoColor System just prior to final inspection, using material procedures acceptable to the system manufacturer.
- D. Some cleaners will affect the color, gloss or texture of your polymer floor surfaces. To determine how the cleaner will perform, first test each cleaner in a small area, utilizing your cleaning technique. If no deleterious effects are observed, continue with the procedure. For recommendations regarding types of cleaners, contact the system manufacturer.

Manufacturer

Any questions or comments regarding the contents of this Specification, for technical questions or assistance, and/or questions with regard to specific installation procedures, contact the manufacturer:

Thermal-Chem Corporation
2550 Edgington Street
Franklin Park, Illinois, USA, 60131

Phone: 800.635.3773
847.288.9090
Fax: 847.288.9091
E-Mail: sales@thermalchem.com
Website: www.thermalchem.com