

SECTION 09800
SPECIAL COATINGS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to this section.

1.2 SUMMARY

- A. This Section includes applying special coating systems to items and surfaces scheduled, including surface preparation, prime coats and topcoats.
- B. Types of special coating systems required for the project include:
 - 1. Special coatings for interior use include the following:
 - a. Polyester-epoxy coating.
- C. Related Sections: The following sections contain requirements that relate to this section:
 - 1. General painting is specified in Division 9 section "Painting"

1.3 SUBMITTALS

- A. Submit the following according to Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for each coating system specified, including block fillers and primers.
 - 1. Provide the manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each material proposed for use.
 - 2. List each material and cross-reference the specific coating, finish system, and application. Identify each material by the manufacturer's catalog number and general classification.
 - 3. Certifications by the manufacturer that products supplied comply with local regulations controlling the use of volatile organic compounds (VOC's).
- C. Samples for initial color selection in the form of manufacturer's color charts.

1.4 QUALITY ASSURANCE

- A. Engage an experienced applicator who has successfully completed coating system applications similar in material and extent to those indicated for the Project.
- B. Single Source Responsibility: Provide primers and undercoat material produced by the same manufacturer as the finish coats for each type of coating. Use only thinners recommended by the manufacturer, and only within recommended limits.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the manufacturer's original, new, unopened packages and containers bearing manufacturer's name and label and the following information:

1. Name or title of material.
2. Product description (generic classification or binder type).
3. Manufacturer's name, stock number and date of manufacture.
4. Contents by volume, for major pigment and vehicle constituents.
5. Thinning instructions.
6. Application instructions.
7. Color name and number.
8. Handling instruction and precautions.

1.6 PROJECT CONDITIONS

- A. Apply coatings only when the temperature of surfaces to be coated and surrounding air temperatures are between 45° F and 95° F.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products of one of the following:
 1. Devoe and Raynolds Co. (Devoe).
 2. The Glidden Company. (Glidden).
 3. Benjamin Moore and Co. (Moore).

2.2 SPECIAL COATING MATERIALS, GENERAL

- A. Material Compatibility: Provide block fillers, finish coat materials and related materials that are compatible with one another and the substrates indicated under conditions of service and application as demonstrated by the manufacturer based on testing and field experience.
- B. Material Quality: Provide the highest grade of the various coatings as regularly manufactured by acceptable coating manufacturers. Materials not displaying manufacturer's identification as a best-grade product will not be acceptable.
- C. Colors: Provide color selections made by the Architect from the manufacturer's full range of standard colors.

2.3 MASONRY BLOCK FILLERS

- A. Masonry Block Fillers: Provide the manufacturer's recommended factory-formulated concrete masonry block fillers that are compatible with the finish materials indicated.
- B. Available Products: Subject to compliance with requirements, block fillers that may be incorporated in the work include, but are not limited to, the following:
- C. Block Fillers Under High-Performance, Polyester-Epoxy Coatings:
 - a. Devoe: 52901 Bloxfil Int/Ext Acrylic Latex Block Filler
 - b. Glidden: 5317 Ultra-Hide Block Filler
 - c. Moore: Moorcraft Interior and Exterior Block Filler #173

2.4 PRIMERS AND SEALERS

- A. Primer/Sealers: Provide the manufacturer's recommended factory-formulated primer/sealers that are compatible with the substrate and finish materials indicated:
 1. Pigmented Sealers Under High-Performance, Polyester-Epoxy Coatings:

- a. Devoe: 12735 Tru-Glaze Epoxy Primer
- b. Glidden: 5295/5299 Glidden Polyamide Epoxy
- c. Moore: Tile-Like Catalyzed Architectural Coatings – High Gloss Enamel #371 and #370.

2.5 INTERMEDIATE COAT MATERIALS

- A. Intermediate Coat Materials: Provide the manufacturer's recommended, intermediate coat materials that are compatible with the substrate, primers or base coat materials, and the finish materials indicated.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Intermediate Coat Under Polyester-Epoxy Coatings:
 - a. Devoe: 124XX Tru-Glaze-4 Epoxy Coating
 - b. Glidden: 300 Spred Wood Undercoat.
 - c. Moore: Tile-Like Catalyzed Architectural Coatings – High Gloss Enamel #371.

2.6 INTERIOR FINISH-COAT MATERIALS

- A. Interior Finish Coat Materials: Provide the manufacturer's recommended factory formulated interior finish coat materials.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. High Performance, Polyester-Epoxy Coating, High Gloss:
 - a. Devoe: 260-K-XXXX Devran 260 Ceramic Epoxy Polyester Coating
 - b. Glidden: 5550-5552 Glid-Tile Epoxide
 - c. Moore: Ironclad Tile-Like Catalyzed Coatings – Clear Glaze Gloss 371/378

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions under which coating will be performed for compliance with requirements for application of coatings. Surfaces to receive coatings must be thoroughly dry before coatings are applied.
 - 1. Do not proceed with application until unsatisfactory conditions have been corrected.
 - 2. Start of coating work will be construed as the Applicator's acceptance of surfaces within particular area.
- B. Coordinating Work: Review sections in which other coatings are provided to ensure compatibility of the total systems for various substrates. On request, furnish information on the characteristics of specified finish materials to ensure compatible primers.
 - 1. Notify the Architect of problems anticipated using the coatings specified over substrates primed by others.

3.2 PREPARATION

- A. General: Remove hardware, hardware accessories, plates, machined surfaces, light fixtures, and similar items already in place that are not to be coated, or provide surface-applied protection prior to surface preparation and coating. Remove these items if necessary for

complete coating for the items and adjacent surfaces. Following the coating operations in each space or area, have removed items reinstalled by workers skilled in the trades involved.

- B. **Cleaning:** Before applying coatings or surface treatments, clean the substrates of substances that could impair bond of the various coatings. Schedule the cleaning and coating application so dust and other contaminants will not fall on wet, newly coated surfaces.
- C. **Surface Preparation:** Perform surface preparation and cleaning in compliance with the manufacturer's instructions for the particular substrate conditions, and as specified.
- D. **Provide barrier coats over incompatible primers, or remove and reprime.**
 - 1. **Cementitious Surfaces:** Prepare surfaces of concrete, concrete masonry, cement plaster and similar surfaces to receive special coatings. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze.
 - a. Use abrasive blast cleaning methods if recommended by the coating system manufacturer.
 - b. Determine alkalinity and moisture content of surfaces to be coated by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish coats to blister and burn, correct this condition before application. Do not apply coatings over surfaces where moisture content exceeds that permitted in the manufacturer's printed directions.
 - c. Acid-etch concrete floor surfaces schedule to receive special coatings with a five-percent solution of muriatic acid or other proprietary cleaner. Flush the floor with clean water to remove acid, and neutralize with ammonia and rinse; allow to dry, then vacuum.
- E. **Material Preparation:** Carefully mix and prepare materials in compliance with the coating manufacturer's directions.
 - 1. Maintain containers used in mixing and application of coatings according to the manufacturer's directions.
 - 2. Stir materials before applying to produce a mixture of uniform density, and as required during application. Do not stir surface film into the material. Remove film and, if necessary, strain the coating material before using.
 - 3. Use only the type of thinners approved by the manufacturer and only within recommended limits.
- F. **Tinting:** Tint each under coat a lighter shade to facilitate identification of each coat where multiple coats of the same materials are to be applied. Tint undercoats to match the color of the finish coat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.

3.3 APPLICATION

- A. Apply special coatings by brush, roller, spray or other applicators according to the manufacturer's directions. Use brushes best suited for the material being applied. Use rollers as recommended by the manufacturer for the material and texture required.
 - 1. Do not apply coatings over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable coating film.

2. Coating colors, surfaces treatments and finishes are indicated in the "Schedules" of the contract documents.
 3. Provide finish coats compatible with the primers used.
 4. The number of coats and film thickness required is the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Where sanding is required in accordance with the manufacturer's directions, sand between applications to produce a smooth, even surface.
 5. When undercoats or other conditions show through the final coat, apply additional coats until the cured film has a uniform coating finish, color and appearance. Give special attention to edges, corners, crevices, welds, exposed fasteners, and similar surfaces to ensure that they receive a dry film thickness equivalent to that of flat surfaces.
 6. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, covers for finned tube radiation, grilles, and similar components are in place in areas to be coated. Extend coatings in these areas as required to maintain the system integrity and provide desired protection.
 - a. Coat surfaces behind movable equipment and furniture the same as similar exposed surfaces.
 - b. Coat the back sides of access panels, removable or hinged covers, and similar hinged items, to match exposed surfaces.
 - c. Omit primer on metal surfaces that have been shop-primed and touch-up painted.
- B. Scheduling Coating: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for coating as soon as practicable after preparation and before subsequent surface deterioration.
1. Allow sufficient drying time between successive coats. Do not recoat until the coating has dried so it feels firm and does not deform or feel sticky under moderate thumb pressure and where applying another coat does not cause undercoat to lift or lose adhesion.
- C. Application Procedures: Apply coatings by brush, roller, spray, or other applicators according to the manufacturer's directions.
1. Brushes: Use brushes best suited for the material applied.
 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 3. Spray Equipment: Use spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- D. Minimum Coating Thickness: apply each material at not thinner than the manufacturer's recommended spreading rate. Provide total dry film thickness of the entire system as recommended by the manufacturer.
- E. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.
- F. Prime Coats: Before application of finish coats, apply a prime coat, as recommended by the manufacturer, to material required to be coated or finished, and which has not been prime coated by others.

1. Recoat primed and sealed substrates where there is evidence of suction spots or unsealed areas in the first coat, to assure a finish coat with no burn-through or other defects due to insufficient sealing.
- G. Brush Application: Brush-out and work brush coats into surfaces in an even film. Eliminate cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Neatly draw glass lines and color breaks.
1. Apply primers and first coats by brush unless the manufacturer's instructions permit use of mechanical applicators.
- H. Mechanical Applications: Use mechanical methods to apply coating when permitted by the manufacturer's recommendations and governing regulations.
1. Wherever using spray applications, apply each coat to provide the equivalent hiding of brush-applied coats. Do not double-back with spray equipment building-up firm thickness of two coats in one pass, unless recommended by building manufacturer.

3.4 CLEANING

- A. Clean-Up: At the end of each work day, remove rubbish, empty cans, rags and other discarded materials from the site.
1. After completing work, clean glass and spattered surfaces. Remove spattered coatings by washing, scraping or other proper methods, using care not to scratch or damage adjacent finished surfaces.

3.5 PROTECTION

- A. Protect work of other trades, whether to be coated or not, against damage from coating. Correct damage by cleaning, repairing, replacing, and recoating as acceptable to the Architect. Leave in an undamaged condition.
1. Provide "Wet Paint" signs to protect newly-coated finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of coating operations.
 2. At completion of other trades' construction activities, touch-up and restore damaged or defaced coated surfaces.

END OF SECTION