

Tnemec Standard Paint Schedule

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes surface preparation and field application of high-performance coating systems to items and surfaces scheduled.

Related Sections include the following:

1. Division 5 Section "Structural Steel" for shop priming structural steel.
2. Division 5 Section "Formed-Metal Fabrications" for shop-primed ferrous metal.
3. Division 9 Section "Painting" for general field painting.

- B. Alternates: Refer to Division 1 Section "Alternates" for description of Work in this Section affected by alternates.

1.3 DEFINITIONS

- A. Standard coating terms defined in ASTM D 16 apply to this Section.

- B. Gloss ranges used in this Section include the following:

1. Semi-gloss refers to medium-sheen finish with a gloss range between 30-65, when measured with a 60° meter.
2. High gloss refers to high-sheen finish with a gloss range more than 65 when measured with a 60° meter.

- C. Environments: The following terms are used in Part 2 of this Section to distinguish between different corrosive exposures:

1. "Severe Environments" are highly corrosive industrial atmospheres with sustained exposure to high humidity and condensation and with frequent cleaning using strong chemicals. Environments with heavy concentrations of strong chemical fumes and frequent splashing and spilling of harsh chemical products are severe environments.
2. "Moderate Environments" are corrosive industrial atmospheres with intermittent exposure to high humidity and condensation, occasional mold and mildew development, and regular cleaning with strong chemicals. Environments with exposure to heavy concentrations of chemical fumes and occasional splashing and spilling of chemical products are moderate environments.
3. "Mild Environments" are atmospheres with normal exposure to moderate humidity and condensation, occasional mold and mildew development, and infrequent cleaning with strong chemicals. Environments with low levels of mild chemical fumes and occasional splashing and spilling of chemical products are mild environments. Normal outdoor weathering is also considered a mild environment.

1.4 SUBMITTALS

- A. Product Data: For each coating system indicated, include block fillers and primers.

1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference the specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each material specified.

- B. Certification by manufacturer that products supplied comply with requirements indicated that limit the number of VOCs in coating products.
- C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for each type of finish-coat material indicated.
 - 1. After color selection, Architect will furnish color chips for surfaces to be coated.
- D. Samples for Verification: For each color and material to be applied, with texture to simulate actual conditions, on representative samples of the actual substrate.
 - 1. Provide stepped Samples defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
 - 2. List of material and application for each coat of each sample. Label each sample for location and application.
 - 3. Submit samples on the following substrates for Architect's review of color and texture:
 - a. Concrete: Provide two 4" (100mm) square samples for each color and finish.
 - b. Concrete Masonry: Provide two 8" (200-mm) square samples of masonry, with mortar joint in the center, for each finish and color.
 - c. Wood: Provide two 12" (300-mm) square samples of each color and material on hardboard.
 - d. Ferrous and Nonferrous Metal: Provide two 4" (100-mm) square samples of flat metal and two 8" (200-mm) long samples of solid metal for each color and finish.
- E. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced applicator who has completed high-performance coating system applications similar in material and extent to those indicated for project and whose work has a record of successful in-service performance.
- B. Source Limitations: Obtain primers and undercoat materials for each coating system from the same manufacturer as the finish coats.
- C. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample of each type of coating and substrate required. Comply with procedures specified in PDCA P5. Duplicate finish of approved sample submittals.
 - 1. Architect will select one room, area, or surface to represent surfaces and conditions for application of each type of coating and substrate.
 - a. Wall Surfaces: Provide samples on at least 100 sq. ft. (9 sq. m) of wall surface.
 - b. Small Areas and Items: Architect will designate items or areas required.
 - 2. After permanent lighting and other environmental services have been activated, apply coatings in this room or to each surface as specified. Provide the required sheen, color, and texture of each surface.
 - a. After finishes are accepted, architect will use the room or surface to evaluate coating systems of a similar nature.
 - 3. Final approval of colors will be from benchmark samples.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label with the following information:
 - 1. Name or Title of Material
 - 2. Product Description (generic classification or binder type)
 - 3. Manufacturer's Stock Number and Date of Manufacture
 - 4. Contents by Volume, for Pigment and Vehicle Constituents
 - 5. Thinning Instructions
 - 6. Application Instructions
 - 7. Color Name and Number
 - 8. Handling Instructions and Precautions
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 60° F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
 - 1. Protect materials from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and applying coatings.

1.7 PROJECT CONDITIONS

- A. Apply coatings only when temperature of surfaces to be coated and surrounding air temperatures are between 60°- 95° F.
- B. Do not apply coatings in snow, rain, fog, or mist; when relative humidity exceeds 85% at temperatures less than 5° F above the dew point; or to damp or wet surfaces.
 - 1. Allow wet surfaces to dry thoroughly and attain temperature and conditions specified before proceeding with or continuing coating operation.
- C. Except as otherwise specified, materials shall be first line products of the following manufactures:
 - 1. Special Coatings:
 - a. Tnemec Company

1.8 MATERIALS

- A. Products specified are as manufactured by those of Tnemec Company unless otherwise indicated; similar products of acceptable manufacturers listed in Paragraph 1.7 may be furnished in lieu of those listed. Tnemec products are listed to establish a baseline of performance criteria, other manufacturers need to meet or exceed this noted performance.
 - 1. Quality: Select primary products of the system from the products of a single manufacturer.

PART 2 – EXECUTION

2.1 INSPECTION OF SURFACES

- A. Examine surfaces to be coated and report any conditions that would adversely affect the appearance or performance of the coating system and which cannot be put into an acceptable condition by the preparatory work specified herein.
- B. Do not proceed with surface preparation and application until surfaces are acceptable. Commencement of application of coating to any surface shall be construed as acceptance or surfaces as being proper to receive the finish, and any defects in work resulting from such accepted surfaces shall be corrected by the applicator without additional cost to the owner.

2.2 SURFACE PREPARATION

A. General:

1. Dislodge dirt, plaster nibs, plaster spatter and other dry material by scraping or brushing. Remove dust and loose material by brushing, sweeping, vacuuming, or blowing with high pressure air.
2. Remove oil, wax and grease by scraping off heavy deposits and cleaning with mineral spirits or a hot trisodium phosphate solution followed by a clean water rinse.
3. Verify that surfaces to be coated are dry, clean, and free of dust, dirt, oil, wax, grease, or other contaminants.
4. Apply test patch to existing painted surfaces to check adhesion. Remove any loose paint and spot prime.

B. Gypsum Board:

1. Fill nicks, scratches, holes, and uneven spots with Tnemec Series 215 Tape Coat.

C. Protection: Protect work of other trades, whether to be painted or no, against damage by painting and finishing work. Correct any damage by cleaning, repairing or replacing, and repainting as acceptable to architect.

1. Provide "Wet Paint" signs as required to protect newly painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations.
2. At the completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces.

2.3 FINISH PAINTING SCHEDULE

A. Exterior Paint Schedule: Basis of design are products manufactured by Tnemec and Benjamin Moore. Equivalent products may be submitted for approval to the Engineer subject to review of compliance with performance and properties of the named products.

1. Exterior Wood – Natural (Penetrating Clear Preservation System)
Coat 1: Moore's Penetrating Clear Wood Finish and Preservative
Coat 2: Same as Coat 1
2. Exterior Masonry to be Painted
Coat 1: Tnemec Series 156 Enviro-Crete at 6.0-8.0 mils DFT
Coat 2: Tnemec Series 156 Enviro-Crete at 6.0-8.0 mils DFT
3. Exterior Masonry and Concrete to be Stained
Coat 1: Chemprobe Prim-A-Pel H20 100-125 sq. /gal
Coat 2: Chemprobe Conformal Stain WB 100-110 sq. /gal
4. Exterior Plaster, Glazed Brick, Previously Painted Masonry, and Previously Painted Concrete.
Coat 1: Tnemec Series 151 Elasto-Grip at 1.0-1.5 mils DFT
Coat 2: Tnemec Series 156 Enviro-Crete at 6.0-8.0 mils DFT
Coat 3: Tnemec Series 156 Enviro-Crete at 6.0-8.0 mils DFT
5. Exterior Ferrous Metal
(Surface Preparation: SSPC-SP6)
Coat 1: Tnemec Series 394 PerimePrime (shop applied) at 2.5-3.5 mils DFT
Coat 2: Tnemec Series V69 Hi-Build Epoxoline II at 3.0-5.0 mils DFT
Coat 3: Tnemec Series 1095 Endura-Shield at 2.0-3.0 mils DFT

Note: For extended color and gloss performance substitute Tnemec Series 1071/1072 Fluoronar or Tnemec Series 1078 Fluoronar Metallic at 2.0-3.0 mils DFT for Coat 3.

6. Exterior Galvanized Metal and Non-Ferrous Metals (Except Aluminum) (not finished under sections 05120, 05500) - (Surface Preparation: SSPC-SP16, Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals. Brush-Off Blast Cleaning to achieve a minimum 1 mil anchor profile.)

Coat 1: Tnemec Series V69 Hi-Build Epoxoline II (shop applied) at 2.0-3.0 mils DFT
Coat 2: Tnemec Series 1095 Endura-Shield at 2.0-3.0 mils DFT

Note: For extended color and gloss performance substitute Tnemec Series 1071/1072 Fluoronar or Tnemec Series 1078 Fluoronar Metallic at 2.0-3.0 mils DFT for Coat 3.

7. Exterior Aluminum - (Surface Preparation: SSPC-SP1 & sanding w/ Scotch Bright pads to a uniform profile of 1.0 mils)

Coat 1: Tnemec Series V69 Hi-Build Epoxoline II at 2.0-3.0 mils DFT
Coat 2: Tnemec Series 1095 Endura-Shield at 2.0-3.0 mils DFT

Note: For extended color and gloss performance substitute Tnemec Series 1071/1072 Fluoronar or Tnemec Series 1078 Fluoronar Metallic at 2.0-3.0 mils DFT for Coat 3.

B. Interior Paint Schedule:

1. Interior Wood-Painted (Satin Latex System)

Coat 1: Moore's Latex Enamel Underbody
Coat 2: Moore's Satin
Coat 3: Same as Coat 2

2. Interior Wood-Transparent (Satin Water Base Polyurethane System)

Coat 1: Sealer/wash coat
Coat 2: Benwood Architectural Penetrating Stain
Coat 3: Benwood Paste Wood Filler (Tinted)
Coat 4: Satin Urethane
Coat 5: Same as Coat 4

3. Interior Drywall and Plaster (Eggshell** Latex System)

Coat 1: Moore's Latex Quick Dry Prime Seal or Latex Enamel Underbody
Coat 2: Moore's Horizon Line Interior
Coat 3: Same as Coat 2

Note**: Provide Moore's Vinyl Latex flat finish on ceilings

4. Interior Drywall and Plaster (Variegated Paint System)

Coat 1: Polomyx 202/208 or wall primer
Coat 2: Polomyx "All Acrylic" tone on tone finish at 175 sq. ft. per gallon

5. Interior Concrete and CMU (High Performance System) (LEED NC 3.0)

Coat 1: Tnemec Series 1254 EpoxoBlock WB at 100 sq. ft. per gallon (CMU only)
Coat 2: Tnemec Series 1224 Epoxoline WB at 2.0-3.0 mils DFT
Coat 3: Tnemec Series 1081 Endura-Shield WB at 2.0-3.0 mils DFT (2 Full Coats)

6. Interior Concrete Floors (Moderate Traffic) (LEED NC 3.0)
(Surface Preparation: Shot blast all surfaces)

Coat 1: Tnemec Series 287 Enviro-Tread at 3.0-4.0 mils DFT
Coat 2: Tnemec Series 287 Enviro-Tread at 3.0-4.0 mils DFT

7. Interior Miscellaneous Ferrous Metal (LEED NC 3.0)

(Surface Preparation: SSPC-SP3)

Coat 1: Tnemec Series 1224 Epoxoline WB at 4.0-6.0 mils DFT (shop applied)
Coat 2: Tnemec Series 1028 / 1029 Enduratone at 2.0-3.0 mils DFT
Coat 3: Same as Coat 2

8. Interior Non-Ferrous and Galvanized Metal
(Surface Preparation: SSPC-SP16, Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals. Brush-Off Blast Cleaning to achieve a minimum 1 mil anchor profile.) (LEED NC 3.0)
Coat 1: Tnemec Series V69 Hi-Build Epoxoline II at 2.0-3.0 mils DFT (shop applied)
Coat 2: Tnemec Series 1028 / 1029 Enduratone at 2.0-3.0 mils DFT
 9. Interior Exposed Steel & Joist, Ductwork, etc. (dry areas only) (LEED NC 3.0)
Coat 1: Tnemec Series 115 Uni-Bond DF at 2.5-4.0 mils DFT
 10. CMU and Concrete to Receive High Performance Acrylic System (LEED NC 3.0)
Coat 1: Tnemec Series 1254 EpoxoBlock WB at 100 sq. ft. per gallon (CMU only)
Coat 2: Tnemec Series 1028/1029 Enduratone at 2.0-3.0 mils DFT
Coat 3: Same as Coat 2
 11. Drywall to Receive Special Coatings (LEED NC 3.0)
Coat 1: Tnemec Series 1224 Epoxoline WB at 4.0-6.0 mils DFT
Coat 2: Tnemec Series 1080/1081 Endura-Shield WB at 2.5-3.5 mils DFT
Coat 3: Tnemec Series 1080/1081 Endura-Shield WB at 2.5-3.5 mils DFT
 12. Mechanical Room Floors to Receive Coating (LEED NC 3.0)
Bonding Coat: 1 full coat of RD-Unifix, waterborne impregnation primer to prepared surfaces at 1.0-2.0 mils DFT
Fabric Membrane: RD-Woven Fleece applied into 2-coats of RD-E Deck waterborne elastomeric acrylic dispersion applied over floor and up verticals to a height of 6' at 8.0-10.0 mils DFT per coat.
Waterproof Coat: RD- E Deck Slurry waterborne elastomeric coating applied over all surfaces to smooth off laps and butt joints at 18.0-20.0 mils DFT
Finish Coat: 1 full coat of RD-Monograff waterborne polyurethane coating in color selected by architect at 3.0-4.0 mils DFT
- Note: Use RD-Acrykit sealant for all transitions. Detail all penetrations and terminations using RD- E Deck and Woven Fleece following prime coat application.
13. Odorless Concrete Floor Sealer (LEED NC 3.0)
Coat 1: Ashford Formula by Curecrete Chemical Company
 14. Anti-Microbial Coating System (LEED NC 3.0)
(Drywall/Concrete/CMU – Tnemec 130 Envirofill on CMU Only)
Coat 1: Tnemec Series 151 Elasto-Grip FC at 1.0-1.5 mils DFT
Coat 2: Tnemec Series 158 Bio-Lastic at 6.5-7.5 mils. DFT (minimum)
Coat 3: Tnemec Series 158 Bio-Lastic at 6.5-7.5 mils DFT (minimum)
- Note: Series 158 Bio-Lastic must meet minimum 13 mils DFT
15. Anti- Graffiti - Coating Over New Precast/Concrete/Brick
Coat 1: Chemprobe V626 Dur-A-Pell GS at 100-125 sq. ft. per gallon
Coat 2: Chemprobe V626 Dur-A-Pell GS at 100-125 sq. ft. per gallon

16. Fiberglass Reinforced Wall Systems- (For Clean and Sterile Spaces) (LEED NC 3.0)
- Substrate: Cement Board / (High Impact or conventional Drywall* Qualified)
- Base Coat: For Cement-Board For cement-board substrates use Series 215 Surfacing Substrates: Epoxy applied to achieve a filled, smooth surface approximately 1/16 inch. Fiberglass joint tape to be embedded with Series 215 at all joints.
- For Hard-Board Base coat material shall be Tnemec Series 215. Substrates: Fiberglass joint tape to be embedded at all joints. (Note: designer needs to coordinate with wallboard section (09260) of document).
- Prime Coat: Tnemec Series 201 Epoxoprime applied by roller to 150 sq. ft. per gallon.
- Intermediate Bedding Coat: Tnemec Series 280 Tnemec-Glaze applied at a rate of 125 sq. ft. per gallon into the wet film, imbed Series 273C FM. Butt seams, smoothing the mat to saturation with additional application of Series 280 Tnemec-Glaze at a rate of 150 sq. ft. per gallon. Following bedding coat cure, sand the surfaces to remove any raised fiber and or excess material.
- Intermediate Filling Coat: Tnemec Series 27WB Typoxy applied at a rate of 150 sq. ft. per gallon.
- Finish Coat: TWO Coats of Tnemec Series 1081 Endura-Shield WB applied to achieve 2.0-3.0 mils DFT. Color as selected by owner.
17. CMU to Be Coated (Coating System No Mat-Reinforcement) (LEED NC 3.0)
- Block Fill: Tnemec Series 1254 EpoxoBlock WB at 100 sq. /ft. per gallon.
- Prime Coat: Tnemec Series 27WB Typoxy to all surfaces at 6.0-8.0 mils DFT
- Intermediate Coat: Tnemec Series 1081 Endura-Shield WB at 2.0-3.0 mils DFT
- Topcoat: Tnemec Series 1081 Endura-Shield WB at 2.0-3.0 mils DFT
18. System #2 Concrete Masonry Block (Using Fiberglass) (LEED NC 3.0)
- Trowel Fill Coat: Tnemec Series 215 Surfacing Epoxy applied at minimum rate of 20-40 sq. ft. per gallon. Parge entire surface with Series 215. Into the wet film imbed Series 273 Fiberglass Mat. Butt seams, smoothing the mat to saturation with Series 280 Tnemec-Glaze applied at a rate of 150 sq. ft. per gallon. Following cure, sand the surfaces to remove any raised fiber and/or excess material.
- Topcoat: Apply additional coat of Tnemec Series 27WB Typoxy at a rate of 150 sq. ft. per gallon.
- Finish Coat: TWO Coats of Tnemec Series 1081 Endura-Shield WB roller applied to achieve 2.5-3.0 DFT (minimum)
19. Drywall to Be Coated with High Performance Glaze Wall Coating (non-reinforced) (LEED NC 3.0)
- Prime Coat: Tnemec Series 1224 Epoxoline WB at 6.0-8.0 mils DFT
- Intermediate Coat: Tnemec Series 1081 Endura-Shield WB at 2.0-3.0 mils DFT
- Topcoat: Tnemec Series 1081 Endura-Shield WB at 2.0-3.0 mils DFT
20. Drywall and Ceilings – Antibacterial Coating (LEED NC 3.0)
- Prime Coat: Tnemec Series 151 Elasto-Grip FC at 1.0-1.5 mils DFT
- Coat 2: Tnemec Series 158 Bio-Lastic at 6.5-7.5 mils. DFT (minimum)
- Coat 3: Tnemec Series 158 Bio-Lastic at 6.5-7.5 mils DFT (minimum)

Note: Series 158 Bio-Lastic must meet 13.0 mils DFT

21. CMU To Receive Antibacterial Coating (LEED NC 3.0)

Prime Coat: Tnemec Series 1254 EpoxoBlock WB at 100 sq. ft. per gallon.

Coat 1: Tnemec Series 158 Bio-Lastic at 6.5-7.5 mils. DFT (minimum)

Coat 2: Tnemec Series 158 Bio-Lastic at 6.5-7.5 mils DFT (minimum)

Note: Series 158 Bio-Lastic must meet 13.0 mils DFT

NOTE –All Specifications should include:

Inspection of coating surfaces shall be per PDCA-P5-04 Standard and shall be free of runs sags, visually uniform and bleed through imperfections.

Temporary Protection for interior vertical and horizontal use. Potential surface features could include: mill work, fixtures, glass, curtainwall, case work and other vertical features where contact may abrade or damage finishes. Materials to be protected could include: vertical stone, marble, wall coverings, glass, curtain wall, paint, and fabrics. Temporary protection for interior flooring subjected to light traffic (ladders and roller staging). Shall meet LEED v4 and be FR Rated per NFPA- 701 and ASTM E648.

1. ENTRY POINT PROPLEXFR 380, lightweight 1.9 lb. flexible Polypropylene sheets for interior use, 3mm board at 380 grams/m2. Material shall be waterproof, non-warping when wet, light weight, and may be reused multiple times before recycling.

Specifier Notes: This product selection guide is written according to the Construction Specifications Institute (CSI) Format, including *Master Format*, *Section Format*, and *Page Format*, contained in the *CSI Manual of Practice*.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the drawings.

Delete all “Specifier Notes” when editing this section.

Specifier Notes: This section covers Tnemec high-performance coating systems for commercial facilities.

This schedule is only a guide listing various coating system options for various environments and should not be used as a final specification. Additional coating systems not listed in this schedule are available and may be more appropriate for your coating application. To finalize this coatings schedule, please contact www.rightergroup.com

Most coatings specified contain organic solvents. Consult Righter Group for compliance to local VOC regulations.

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