

## PART 1 - GENERAL

## 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. SUMMARY
  - 1. Section includes surface preparation and the application of paint systems on interior substrates.
    - a. Concrete.
      - 1) Concrete Masonry Units.
      - 2) Steel.
      - 3) Galvanized metal.
      - 4) Gypsum board.
      - 5) Wood.
      - 6) Aluminum.
- C. DEFINITIONS
  - 1. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
    - a. Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
    - b. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
    - c. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
    - d. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
    - e. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
    - f. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.
- D. ACTION SUBMITTALS
  - 1. Product Data: For each type of product. Include preparation requirements and application instructions.
    - a. Samples for Initial Selection: For each type of topcoat product.
      - 1) Product List: For each product indicated, include the following:
        - (a) Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
        - (b) Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.
        - (c) VOC content.
- E. CLOSEOUT SUBMITTALS
  - 1. Coating Maintenance manual: Manual: Upon conclusion of the project, the Contractor or paint manufacturer/supplier shall furnish a coating maintenance manual, such as Sherwin-Williams "Custodian Project Color and Product Information" report or equal. Manual shall include an Area Summary with finish schedule, Area Detail designating where each product/color/finish was used, product data pages, Material Safety Data Sheets, care and cleaning instructions, touch-up procedures, and color samples of each color and finish used.
- F. MAINTENANCE MATERIAL SUBMITTALS
  - 1. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

- a. Paint: 5 percent, but not less than 1 gal. (3.8 L) of each material and color applied.
2. Coating Maintenance manual: Manual: Upon conclusion of the project, the Contractor or paint manufacturer/supplier shall furnish a coating maintenance manual, such as Sherwin-Williams "Custodian Project Color and Product Information" report or equal. Manual shall include an Area Summary with finish schedule, Area Detail designating where each product/color/finish was used, product data pages, Material Safety Data Sheets, care and cleaning instructions, touch-up procedures, and color samples of each color and finish used.

#### G. QUALITY ASSURANCE

1. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - a. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
    - 1) Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
      - (a) Other Items: Architect will designate items or areas required.
    - 2) Final approval of color selections will be based on mockups.
      - (a) If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
    - 3) Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
      - (a) Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

#### H. DELIVERY, STORAGE, AND HANDLING

1. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
  - a. Maintain containers in clean condition, free of foreign materials and residue.
    - 1) Remove rags and waste from storage areas daily.
2. Delivery and Handling: Deliver products to Project site in an undamaged condition in manufacturer's original sealed containers, complete with labels and instructions for handling, storing, unpacking, protecting, and installing. Packaging shall bear the manufacturer's label with the following information:
  - a. Product name and type (description).
    - 1) Batch date.
    - 2) Color number.
    - 3) VOC content.
    - 4) Environmental handling requirements.
    - 5) Surface preparation requirements.
    - 6) Application instructions.

#### I. FIELD CONDITIONS

1. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
  - a. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.
  - b. Lead Paint: It is not expected that lead paint will be encountered in the Work.

## PART 2 - PRODUCTS

## 2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Sherwin-Williams Company.
  2. Benjamin Moore & Co.
  3. PPG Architectural Finishes, Inc.

## 2.02 PAINT, GENERAL

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."
- B. Material Compatibility:
1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- C. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior paints and coatings applied at Project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
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|--|----------|
| 1. Flat Paints and Coatings:                                     | 50 g/L.  |
| 2. Nonflat Paints and Coatings:                                  | 150 g/L. |
| 3. Dry-Fog Coatings:   | 400 g/L. |
| 4. Primers, Sealers, and Undercoaters:                           | 200 g/L. |
| 5. Anti-corrosive and Antirust Paints Applied to Ferrous Metals: | 250 g/L. |
| 6. Zinc-Rich Industrial Maintenance Primers:                     | 340 g/L. |
| 7. Pretreatment Wash Primers:                                    | 420 g/L. |
| 8. Floor Coatings:   | 100 g/L. |
| 9. Shellacs, Clear:  | 730 g/L. |
| 10. Shellacs, Pigmented:   | 550 g/L. |
- D. Colors: As selected by Architect from manufacturer's full range.
1. 30 percent of surface area will be painted with deep tones.

## 2.03 BLOCK FILLERS

- A. Block Filler, Latex, Interior/Exterior: MPI #4.
1. Sherwin-Williams - PrepRite Int/Ext Block Filler, B25W25, at 75-125 sq. ft. per gal (2.4 to 4.9 sq. m per l) .
  2. Benjamin Moore - Super Spec - Int/Ext High-Build Block Filler - 206/K206 (75-100 sq. ft. / gal = 4.2 mdf per coat), VOC 55 g/l, CHPS
  3. Or approved equal..

## 2.04 PRIMERS/SEALERS

- A. Primer Sealer, Latex, Interior: MPI #50.
1. Sherwin-Williams - Pro Mar 200 Zero - Interior Latex Primer - B28W02600/B28WQ2600
  2. Benjamin Moore - Eco Spec WB -- #372 Ultra Spec 500 Latex Primer N534 (0 g/l), 50 X-Green

- a. PPG - Speedhide Interior Latex - Quick-Drying #6-2
- B. Primer Sealer MPI #60.
  - 1. Sherwin-Williams - Protective & Marine - Armorseal Tread-Plex - B90W111
  - 2. Benjamin-Moore - Insul-X Tough Shield Floor and Patio TS-3 (<200 g/l)
  - 3. Or approved equal.
- C. Primer Sealer, Interior, Institutional Low Odor/VOC: MPI #149.
  - 1. Sherwin-Williams - ProMar 200 Zero - Interior Latex Primer - B28W02600/B28WQ2600
  - 2. Benjamin-Moore - Eco Spec WB - Interior Latex Primer - N372/Benjamin Moore - Ultra Spec 500 Latex Primer N534 +(0 g/l), MPI 149 X-Green,
  - 3. PPG - Speedhide Zero Interior Zero VOC - #6-4900XI
- D. Primer, Latex, for Interior Wood: MPI #39.
  - 1. Sherwin-Williams - PrepRite ProBlock Primer Sealer - B51-620 Series, at 4.0 mils wet, 1.4 mils dry.
  - 2. Benjamin Moore - Fresh Start - High Hiding All Purpose Primer - 046/K046 Fresh Start N023 Primer, CHPS Certified
  - 3. Or approved equal.
- E. Primer, Alkyd, Anti-Corrosive, for Metal: MPI #79.
  - 1. Sherwin-Williams - Protective & Marine - Kem Bond HS - B50WZ4 (E2)
  - 2. Benjamin Moore - Super Spec HP - D.T.M. Alkyd Low Lustre - #P23 - Alkyd Metal Primer P06, 1.9 mdf, VOC - 313 (E1).(E2)
  - 3. Rustoleum - High Performance - 7400 System - #2082402 - (E2)
  - 4. Or approved equal
- F. Primer, Alkyd, Quick Dry, for Metal: MPI #76.
  - 1. Sherwin-Williams - Protective & Marine - Kem Bond HS Universal Alkyd Primer - B50WZ0004 (E3)
  - 2. Benjamin Moore - Super Spec Rapid Dry Gloss Enamel #P20Corotech Universal Metal Primer V131, 2.1 mdf, 333 g/l.
  - 3. Or approved equal.
- G. Primer, Galvanized, Water Based: MPI #134.
  - 1. Sherwin Williams - Pro Industrial - Pro-Cryl Universal Primer - B66W310 (E2)
  - 2. Benjamin Moore Super Spec HP Acrylic Metal Primer P04/KP04.
  - 3. Or approved equal.

## 2.05 WATER-BASED PAINTS

- A. Latex, Interior, Flat, (Gloss Level 1): MPI #53.
  - 1. Sherwin-Williams - Solo - Interior/Exterior 100% Acrylic Flat - A74W00051 (E3)
  - 2. Benjamin Moore - Eco Spec WB Interior Latex Flat Finish N373/F373 (E3)
  - 3. PPG - Speedhide - Interior Flat Latex - #6-70 - (E3).
  - 4. Or approved equal.
- B. Latex, Interior, (Gloss Level 4): MPI #43 (Pearl / Satin / Low Lustre)
  - 1. Sherwin-Williams - ProMar 200 Zero VOC - Interior Latex Semi-Gloss, B31-2600 Series - (E3)
  - 2. Benjamin Moore - Regal Select - Premium Interior Paint Pearl Finish- #550/K550 - Ultra Spec 500 Latex Semi Gloss N539 (0 g/l), 43 X-Green(E3).
  - 3. Or approved equal.
- C. Latex, Interior, Institutional Low Odor/VOC, Flat (Gloss Level 1): MPI #143.

1. Sherwin-Williams - Harmony - Interior Acrylic Latex Flat - B05W01051 (E3)
  2. Benjamin Moore - Eco Spec WB - Interior Latex Paint - Flat n373/F373 Ultra Spec 500 Latex Eggshell N538 (0 g/l), MPI #143 X-Green, CHPS Certified.(E3).
  3. Or approved Equal.
- D. Latex, Interior, Institutional Low Odor/VOC, (Gloss Level 3): MPI #145
1. Sherwin Williams Promar 200 Zero VOC - Interior Latex Flat - #B30WO2651/B30WQ2651 - (E3).
  2. Benjamin Moore - Eco Spec WB - Interior Eggshell Finish - N374/F374-Ultra Spec500 Latex Eggshell N538 (0 g/l), MPI # 145 X-Green, CHPS Certified. (E3).
  3. PPG Speedhide Zero - Interior Zero VOC Latex Flat - #6-4110XI - (E3).
- E. Latex, Interior, High Performance Architectural, (Gloss Level 2): MPI #138.
1. Sherwin-Williams - SuperPaint - Interior Latex Satin - A87W001151/A87WQ1151 (E3)
  2. Benjamin Moore Regal Select Waterborne Interior Paint - Eggshell Finish #549, 1.5 mdf, (0 g/l), MPI #138 X-Green, CHPS Certified..
  3. Or approved equal.

## 2.06 SOLVENT-BASED PAINTS

- A. Epoxy Primer MPI #212
1. Sherwin-Williams - Protective & Marine - ArmorSeal 33 Epoxy Primer - B58AQ33/B60VQ33 (E3)
  2. Or approved Equal
- B. Alkyd, Quick Dry, Semi-Gloss (Gloss Level 5): MPI #81.
1. Corotech Alkyd Enamel Semi-Gloss V231, 2.0 - 2.5 mdf, 389 g/l.
  2. Or approved equal.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers. Where acceptability of substrate conditions is in question, apply samples and perform in-situ testing to verify compatibility, adhesion, and film integrity of new paint application.
1. Report in writing conditions that may affect application, appearance, or performance of paint.
- B. Substrate Conditions:
1. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
    - a. Concrete: 12 percent.
    - b. Masonry (Clay and CMU): 12 percent.
    - c. Wood: 15 percent.
    - d. Gypsum Board: 12 percent.
  2. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
1. Application of coating indicates acceptance of surfaces and conditions.

## 3.02 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
  - 1. Concrete Floors: Remove oil, dust, grease, dirt and other foreign materials. Comply with SSPC-SP-13/NACE 6 or ICRI 03732.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceed that permitted in manufacturer's written instructions.
  - 1. SSPC-SP 3, "Power Tool Cleaning."
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
  - 1. SSPC-SP 2, "Hand Tool Cleaning."
  - 2. SSPC-SP 3, "Power Tool Cleaning."
  - 3. SSPC-SP 7/NACE No. 4, "Brush-off Blast Cleaning."
  - 4. SSPC-SP 11, "Power Tool Cleaning to Bare Metal."
- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections and abraded areas of shop paint and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop primed surfaces.
- H. Galvanized Metal Surfaces: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- I. Aluminum Substrates: Remove loose surface oxidation.
- J. Wood Substrates:
  - 1. Scrape and clean knots and apply coat of knot sealer before applying primer.
  - 2. Sand surfaces that will be exposed to view and dust off.
  - 3. Prime edges, ends, faces, undersides and backsides of wood.
  - 4. after priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- K. Cotton or Canvas Insulation Covering Substrates: Remove dust, dirt and other foreign material that might impair the bond of paints to substrates.

## 3.03 APPLICATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
  - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
  - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
  - 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
  - 1. Unless otherwise specified or noted, paint all "unfinished" conduits, piping, hangers, ductwork and other mechanical and electrical equipment with color and texture to match adjacent surfaces, in the following areas:
    - a. where exposed-to-view in all exterior and interior areas.
    - b. in all interior high humidity interior areas.
    - c. in all boiler room, mechanical and electrical rooms.
  - 2. In unfinished areas leave exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment in original finish and touch up scratches and marks.
  - 3. Touch up scratches and marks on factory painted finishes and equipment with paint as supplied by manufacturer of equipment.
  - 4. Do not paint over nameplates.
  - 5. Paint the inside of all ductwork where visible behind louvers, grilles and diffusers for a minimum of 460 mm (18") or beyond sight line, whichever is greater, with primer and one coat of matt black (non-reflecting) paint.
  - 6. Paint the inside of light valances gloss white.
  - 7. Paint disconnect switches for fire alarm system and exit light systems in red enamel.
  - 8. Paint red or band all fire protection piping and sprinkler lines in accordance with mechanical specification requirements and the AHJ. Keep sprinkler heads free of paint.
  - 9. Paint yellow or band all natural gas piping in accordance with mechanical specification requirements and the AHJ.
  - 10. Backprime and paint face and edges of plywood service panels for telephone and electrical equipment before installation to match adjacent wall surface. Leave equipment in original finish except for touch-up as required, and paint conduits, mounting accessories and other unfinished items.
    - a. Uninsulated plastic piping.
    - b. Pipe hangers and supports.
    - c. Metal conduit.

- d. Plastic conduit.
  - e. Tanks that do not have factory-applied final finishes.
  - f. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material. Coordinate the installation of required piping labels with the installing contractor in order to schedule painting prior to application of labels.
11. Paint the following work where exposed in occupied spaces:
- a. Equipment, including panelboards.
  - b. Uninsulated metal piping.
  - c. Uninsulated plastic piping.
  - d. Pipe hangers and supports.
  - e. Metal conduit.
  - f. Plastic conduit.
  - g. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
  - h. Other items as directed by Architect.
12. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

### 3.04 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
- 1. Contractor shall touch up and restore painted surfaces damaged by testing.
  - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

### 3.05 PROTECTION

- A. Protect all exterior surfaces and areas, including landscaping, walks, drives, all adjacent building surfaces (including glass, aluminum surfaces, etc.) and equipment and any labels and signage from painting operations and damage by drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.
- B. Protect all interior surfaces and areas, including glass, aluminum surfaces, etc. and equipment and any labels and signage from painting operations and damage by drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.
- C. Erect barriers or screens and post signs to warn of or limit or direct traffic away or around work area as required.

### 3.06 CLEANING

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site. Keep work area free from an unnecessary accumulation of tools, equipment, surplus materials and debris.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Remove combustible rubbish materials and empty paint cans each day and safely dispose of same in accordance with requirements of authorities having jurisdiction.



- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.07 INTERIOR PAINTING SCHEDULE

- A. Concrete and Clay Masonry Substrates, Non-traffic Surfaces:
1. Institutional Low-Odor/VOC Latex System: (MPI INT 3.1M).
    - a. Prime Coat: Primer sealer, interior, institutional low odor/VOC, MPI #149. Sherwin-Williams - ProMar 200 Zero - Interior Latex Primer - B28W02600/B28WQ2600 (E3)
    - b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat
    - c. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3), MPI #145.
- B. Concrete Substrates, Traffic Surfaces:
1. Latex Floor Enamel System: (MPI INT 3.2A)
    - a. Prime Coat: Floor paint, latex, slip-resistant, matching topcoat.
    - b. Topcoat: Floor paint, latex slip-resistant, low gloss (maximum Gloss Level 3), MPI #60: Sherwin-Williams - ArmorSeal Tread-Plex, B90 Series at 1.5 to 2.0 mils dry per coat.
  2. Clear Acrylic System, Gloss Finish: (MPI INT 3.2F)
    - a. First Coat: MPI #99 - Sherwin-Williams - H&C Concrete Sealer Wet Look Water Base, at 100 to 200 sq. ft. per gal (2.4 to 4.9 sq. m per l).
    - b. Second Coat: MPI #99 - Sherwin-Williams - H&C Concrete Sealer Wet Look Water Base, at 100 to 200 sq. ft. per gal (2.4 to 4.9 sq. m per l).
  3. Concrete Stain System (Water-based): (MPI INT 3.2E)
    - a. First Coat: Sherwin-Williams - H&C Concrete Stain Solid Color Water Based at 50 to 300 sq. ft. per gal.
    - b. Second coat: Sherwin-Williams - H&C Concrete Stain Solid Color Water Based at 50 to 300 sq. ft. per gal.
  4. Concrete Substrates, Non-Slip - High Performance Traffic Surfaces: (MPI INT 3.2L)
    - a. Pigmented Polyurethane over Epoxy Slip-Resistant Deck Coating System:
      - 1) Prime Coat: Epoxy, gloss, (Gloss Level 6), MPI #212: S-W Armorseal 1000 HS, B67W2001 Series, at 2.5 to 4.0 mils dry, per coat.
      - 2) Intermediate: Polyurethane, gloss matching topcoat.
      - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 6), MPI #212: S-W Armorseal HS Polyurethane, B65W220 Series, at 2.0 to 3.0 mils dry, per coat, with manufacturer's recommended slip-resistant aggregate.
- C. CMU Substrates
1. High-Performance Epoxy Paint System: (MPI INT 4.2G)
    - a. Block Filler: Block filler, epoxy, MPI #116: S-W Kem Cati-Coat HS Epoxy Filler/Sealer, at 10 to 20 mils dry, per coat.
    - b. Intermediate Coat: Epoxy, high-build, low gloss, MPI #108: S-W Macropoxy 646 Fast Cure Epoxy, B58 Series, at 5 to 10 mils dry, per coat.
    - c. Topcoat: Polyurethane, two-component, pigmented, semi-gloss, (Gloss Level 5), MPI #72: S-W Acrolon 218 HS Acrylic Polyurethane, B65-650 Series, at 3.0 to 6.0 mils dry, per coat.
  2. Latex System: (MPI INT 4.2A)
    - a. Block Filler: Latex Block Filler, MPI #4 X-Green: Sherwin-Williams - Prep-Rite Block Filler, B 25W25, at 100 to 200 SFT. per gal.
    - b. Intermediate coat: Latex interior, matching topcoat.
    - c. Topcoat: Latex, interior flat (Gloss Level 1), MPI #53 X-Green / #143 X-Green): S-W Pro Mar 200 Zero VOC Latex Flat, B30-2600 Series applied to achieve 1.6 mils dry per coat.

- d. Topcoat: Latex, interior flat (Gloss Level 2), MPI #44 X-Green / #144 X-Green): S-W Pro Mar 200 Zero VOC Latex Low Sheen Enamel, B24-2600 Series applied to achieve 1.6 mils dry per coat.
  - e. Topcoat: Latex, interior eggshell (Gloss Level 3), MPI #52 X-Green / #145 X-Green): S-W Pro Mar 200 Zero VOC Latex Eg-Shel, B20-2600 Series applied to achieve 1.7 mils dry per coat.
  - f. Topcoat: Latex, interior semi-gloss (Gloss Level 4), MPI #43 X-Green: S-W Pro Mar 200 Zero VOC Latex Eg-Shel, B31-2600 Series applied to achieve 1.6 mils dry per coat.
  - g. Topcoat: Latex, interior gloss (Gloss Level 5, MPI #54: S-W Pro Mar 200 Zero VOC Latex Gloss, B11-2200 Series applied to achieve 1.5 mils dry per coat.
- D. Metal Substrates:
- 1. Latex System: (MPI INT 5.1Q)
    - a. Prime Coat: Primer, rust-inhibitive, water-based, MPI #107: S-W Pro-Industrial Pro-Cryl Universal Primer, B66-310 Series at 2.0 to 4.0 mils dry.
    - b. Intermediate Coat: Water-based acrylic interior, matching Topcoat.
    - c. Topcoat: Water based acrylic, gloss (Gloss Level 5), MPI #147 X-Green, S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series at 2.5 to 4.0 mils dry per coat.
  - 2. Water-Based Dry-Fall System: (MPI INT 5.1C)
    - a. Two Top Coats: Dry-fall latex, eggshell, MPI #131/155: S-W Pro Industrial Waterborne Acrylic DryFall Eg-Shel, B42-2 Series, at 6.0 mils wet, 1.9 mils dry per coat.
- E. Galvanized-Metal Substrates:
- 1. Pigmented Polyurethane System: (MPI INT 5.4C)
    - a. Prime Coat: Primer as recommended in writing by topcoat manufacturer.
    - b. Intermediate Coat: Polyurethane, two-component, pigmented, matching topcoat.
    - c. Topcoat: Polyurethane, two-component, pigmented, gloss: Sherwin-Williams - Water Based Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.
- F. Aluminum (Not Anodized or Otherwise Coated) Substrates:
- 1. Pigmented Polyurethane System:
    - a. Prime Coat: Primer, vinyl wash: Sherwin-Williams - DTM Wash Primer, B71Y1, at 0.7 to 1.3 mils dry, per coat.
    - b. Intermediate Coat: Polyurethane, two-component, pigmented, matching topcoat.
    - c. Topcoat: Polyurethane, two-component, pigmented, gloss: Sherwin-Williams - Water based Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.
- G. Wood Substrates:
- 1. Water-Based Light Industrial Coating System:
    - a. Prime Coat: Primer sealer, latex, interior, MPI #39: S-W PrepRite ProBlock Primer Sealer, B51-620 Series, at 4.0 mils wet, 1.4 mils dry (E3)
    - b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
    - c. Topcoat: Light industrial coating, interior, water based, eggshell, (Gloss Level 3), MPI #151: Sherwin Williams - Pro Industrial Pre-Catalyzed Water Based Epoxy, K45-151 Series, at 4.0 mils wet, 1.5 mils dry, per coat (E1)
  - 2. Stain & Varnish
    - a. Stain: MPI #90: Sherwin Williams - Wood Classics 250 - A49-800 Series (E3)
    - b. Intermediate Coat: Sherwin Williams - Classics Waterborne Polyurethane Varnish - Satin - 4.0 mils wet, 1.0 mils dry.
    - c. Topcoat: Sherwin Williams - Classics Waterborne Polyurethane Varnish - Satin - 4.0 mils wet, 1.0 mils dry.
- H. Gypsum Board Substrates:

1. Latex System: (INT 9.2A)
  - a. Prime Coat: Primer, latex, interior, MPI #149 X-Green: S-W Pro Mar 200 Zero VOC Latex Primer, B28W2600, at 4.0 mils wet, 1.5 mils dry.
  - b. Intermediate Coat: Latex, interior, matching topcoat.
  - c. Topcoat: Latex, interior, flat (Gloss Level 1), MPI #53 X-Green/#143 X-Green: S-W Pro Mar 200 Zero VOC Latex Flat, B30-2600 Series, at 4.0 mils wet, 1.6 mils dry, per coat.

**END OF SECTION**