**SECTION 09 91 23**

**INTERIOR PAINTING**

**PART 1 GENERAL**

1. SECTION INCLUDES
   1. Interior paint and coating systems
2. RELATED SECTIONS
   1. See related sections of the specifications for surface preparation, primers, and finishes provided by others.
3. REFERENCES
   1. ASTM D16 - Standard Terminology for Paint, Related Coating, Materials, and Applications
   2. ASTM D3359 – Standard Test Methods for Measuring Adhesion by Tape Test
   3. ASTM D3960 – Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings
   4. ASTM D4442– Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood Base Materials
   5. EPA – Method 24 - Surface Coatings
   6. GS-11 Green Seal – Standard for Paints and Coatings
   7. LEED for Schools 2009 latest edition by USGBC
   8. NACE International (National Association of Corrosion Engineers) - Industrial Maintenance Painting
   9. NPCA (National Paint and Coatings Association) - Guide to U.S. Government Paint Specifications
   10. Paint - Certified Product List - Florida Department of Agriculture and Consumer Services
   11. PDCA (Painting and Decorating Contractors of America) - Architectural Painting Specifications Manual
   12. PDCA Standard P1-04 Touchup Painting and Damage Repair; Financial Responsibility
   13. PDCA Standard P5-04 Benchmark Sample Procedures for Paint and other Decorative Coating System
   14. South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coating
   15. SSPC (Steel Structures Painting Council) - Steel Structures Painting Manual
   16. SSPC-SP 1 – Solvent Cleaning
4. DEFINITIONS
   1. Conform to ASTM D16 for interpretation of terms used in this section.
5. SUBMITTALS
   1. Submit under provisions of Section 01 33 00.
   2. Product Data: Provide the manufacturer’s data sheets and Safety Data Sheets on each paint and coating product and at a minimum shall include:
      1. Product characteristics
      2. Surface preparation instructions and recommendations
      3. Primer requirements and finish specifications
      4. Storage and handling requirements
      5. Application methods
      6. Cautions and VOC levels
   3. Selection Samples:
      1. Submit a complete set of color chips representing the full range of manufacturer’s color samples available.
      2. Submit two 9" x 9" samples illustrating selected colors and textures for each type.
6. QUALITY ASSURANCE
   1. Pre-Application meeting:
      1. Prior to contractor starting to apply any material covered in this section, there shall be a meeting with the following representatives invited Facility Services, Architect, Contractor, Subcontractor, and Material Supplier.
      2. Meeting shall discuss mockups, surface condition, surface preparation, material application, and inspection procedures.
         1. Prepare all mockups in accordance with PDCA P5-04.
   2. The Contractor shall request the following in progress field inspections and the Owner's representative shall approve each inspection prior to proceeding with the next step.
      1. Following surface preparation and prior to priming
      2. Following priming and prior to applying finish coats
      3. Following application of finish coats
      4. All inspections shall follow FS normal procedure for verifying surface conditions and materials applied.
   3. Determine VOC (Volatile Organic Compound) content of solvent borne and water borne paints and related coating in accordance with EPA Method 24 or ASTM D3960.
      1. Interior architectural paints shall comply with Green Seal GS-11.
      2. Anti-corrosive paints shall comply with Green Seal GS-11.
      3. Clear wood finishes shall comply with SCAQMD #1113.
7. QUALIFICATIONS
   1. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum 5-years documented experience.
   2. Applicator: Company specializing in performing the work of this section with minimum 5-years documented experience, certified by the manufacture.
8. REGULATORY REQUIREMENTS
   1. Conform to applicable code for flame and smoke rating requirements for finishes.
   2. Comply with applicable environmental health and safety regulations
9. FIELD SAMPLES
   1. Provide interior field sample at an outside corner condition with finish extending minimum 10' both directions and selected height; include doorjamb, and other interior finished.
   2. Locate where directed by Architect and Owner.
   3. Accepted sample may remain as part of the work, upon approval of the Architect.
10. DELIVERY, STORAGE, AND HANDLING
    1. Deliver, store, protect, and handle products to site under provisions of Section 01 60 00, follow manufacturer’s requirements.
    2. Deliver products to site in manufacturer’s unopened containers with the following labeling and information:
       1. Product name and type (description)
       2. Application & use instructions
       3. Surface preparation instructions
       4. VOC content
       5. Environmental issues; i.e. cleanup requirements, disposal requirements, etc
       6. Batch date
       7. Color number and name
    3. Storage:
       1. Store paint materials in a properly ventilated area at the temperature range r required by the manufacturer'.
       2. Store and dispose of hazardous and regulated materials/wastes in accordance with local, state, and federal requirements.
11. PROJECT CONDITIONS
    1. Do not apply materials when surface and ambient temperatures are below 40°F, or below the manufacturer’s requirements.
    2. Do no interior work on unprotected surfaces if it is raining or moisture from any source is present or expected before finishes can dry or attain proper cure.
       1. Allow surfaces to dry and attain required temperatures and conditions before proceeding or continuing previously started work.
    3. Follow manufacturer's directions for extremes and dew point requirements.
       1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results.
       2. Do not apply coatings under environmental conditions outside manufacturer's absolute limits.
    4. Provide lighting level of 80 foot-candles measured mid-height at substrate surface.
    5. Dispose of waste in accordance with applicable regulations see 1.10 C. 2.
    6. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work in accordance with paint manufacturer’s written requirements. Beginning new work upon the existing substrate will be understood to indicate that the Contractor has accepted the existing conditions as compliant with the manufacturer’s requirements.

**PART 2 PRODUCTS**

1. MANUFACTURERS
   1. Acceptable Manufacturers
      1. The painting schedule is based on products manufactured by the Sherwin-Williams Company.
      2. The owner’s representative will consider equal products by other manufacturers for approval in accordance with paragraph 1.45
   2. Paints
      1. Benjamin Moore & Co.
      2. PPG Paints, Inc.
      3. Sherwin-Williams Company
      4. STO Corp
   3. Owner will consider requests for substitutions in accordance with provisions of the specifications.
2. INTERIOR PAINTING SCHEDULE
   1. Concrete (Walls, Ceilings, Poured, Precast, Unglazed Brick, Cement Board, Tilt-Up, and Cast-In Place)

Flat Sheen:

Benjamin Moore & Co.

Primer: Benjamin Moore’s Acrylic Masonry Sealer 608

First and Second Coats: Eco Spec Flat N373

PPG Paints

Primer: Perma-Crete Alkali Resistant Primer, 4-603XI

First and Second Coats: Pure Performance Interior Flat 9-100 Series

Sherwin-Williams Company (The)

Primer: Loxon® Masonry Primer, LX02W0050

First and Second Coats: Harmony Low Odor Interior Latex Flat, B5 Series

Semi-Gloss Finish

Benjamin Moore & Co.

Primer: Moore’s Acrylic Masonry Sealer 608

First and Second Coats: Ultra Spec 500 T546

PPG Paints

Primer: Perma-Crete Alkali Resistant Primer, 4-603XI

First and Second Coats: Pitt Tech Plus 4216 HP Semi-Gloss DTM Enamel, 4216 Series

Sherwin-Williams Company (The)

Primer: Loxon® Masonry Primer, LX02W0050

First and Second Coats: Pro Industrial Semi-Gloss Acrylic B66W651 Series

Gloss Finish

Benjamin Moore & Co.

Primer: Moore’s Acrylic Masonry Sealer 608

First and Second Coats: Ultra Spec 500 T546

PPG Paints

Primer: Perma-Crete Alkali Resistant Primer, 4-603XI

First and Second Coats: Pitt Tech Plus Gloss DTM Enamel, 90-1310 Series

Sherwin-Williams Company (The)

Primer: Loxon® Masonry Primer, LX02W0050

Pro Industrial Gloss Acrylic B66W611 Series.

* + - * 1. Concrete (Walls, Ceilings, Poured, Precast, Unglazed Brick, Cement Board, Tilt-Up, and Cast-In Place) Water-Based Catalyzed Epoxy finish

Semi-Gloss Finish

Benjamin Moore & Co.

First and Second Coats: Corotech Command V392

PPG Paints

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-599

Sherwin-Williams Company (The)

Primer: Water-based Catalyzed Epoxy, B70W211/B60V25

Gloss Finish

Benjamin Moore & Co.

First and Second Coats: Corotech Command V390

PPG Paints

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-598

Sherwin-Williams Company (The)

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V15

* + - * 1. Concrete Floor- Painted (with anti-slip additive)

Benjamin Moore & Co.

First and Second Coats: Inls-X Sure Step Acrylic Anti-Lip Coating SU-0XXX

PPG Paints

First and Second Coats: Floor, Porch & Deck Satin Latex, 3-510 Series

Sherwin-Williams Company (The)

First and Second Coats:: Tread-Plex Primer B90 Series

* + - * 1. Concrete Floor- Clear Sealer

Benjamin Moore & Co.

First and Second Coats: Corotech Moisture Tolerant Quick Set Epoxy Sealer V156

PPG Paints

First and Second Coats: Perma-Crete Plex-Seal™ WB Clear Sealer 4-6200

Sherwin-Williams Company (The)

First and Second Coats:: H&C Concrete Sealer Wet Look Water-based

* + - * 1. Masonry (Ceiling)

Low Sheen

Benjamin Moore & Co.

First and Second Coats: Benjamin Moore Latex Dry Fall 395

PPG Paints

First and Second Coats: Speedhide Super Tech WB Dry-Fog 6-724XI

Sherwin-Williams Company (The)

First and Second Coats:: Water-based Acrylic Dry-Fall, B42W2

* + - * 1. Masonry (CMU, Split-Face, Scored, Smooth, High-Density, Low- Density, Fluted)

Eggshell Finish

Benjamin Moore & Co.

Primer: Ultra Spec Masonry High Build Block Filler 571

First and Second Coats: Ultra Spec 500 Eggshell 538

PPG Paints

Primer: Speedhide Latex Block Filler 6-7

First and Second Coats: Pure Performance Interior Eggshell 9-300XI Series

Sherwin-Williams Company (The)

Primer: PrepRite® Block Filler, B25W25

First and Second Coats: Harmony Low Odor Interior Latex Eg-Shel, B9 Series

STO Corp

Primer: STOPrime Block Surfacer HP

First and second coats: StoColor Acryl Plus

Semi-Gloss Finish

Benjamin Moore & Co.

Primer: High-Ultra Spec Masonry High Build Block Filler 571

First and Second Coats: Ultra Spec 500 Semi-Gloss T546

PPG Paints

Primer: PermaCrete Concrete Block & Masonry Surfacer/Filler 4-100XI

First and Second Coats: Pitt Tech Plus 4216 HP Semi-Gloss DTM Enamel, 4216 Series

Sherwin-Williams Company (The)

Primer: Loxon® Block Surfacer, LX01 Series

First and Second Coats: Pro Industrial Semi-Gloss Acrylic, B66-650 Series.

Gloss Finish

Benjamin Moore & Co.

Primer: Ultra Spec Masonry High Build Block Filler 571

First and Second Coats: Ultra Spec 500 T546

PPG Paints

Primer: PermaCrete Concrete Block & Masonry Surfacer/Filler 4-100XI

First and Second Coats: Pitt Tech Plus Gloss DTM Enamel, 90-1310 Series

Sherwin-Williams Company (The)

Primer: Loxon® Block Surfacer, LX01 Series

First and Second Coats: Pro Industrial Gloss Acrylic, B66-600 Series

* + - * 1. Masonry (CMU, Split-Face, Scored, Smooth, High-Density, Low- Density, Fluted)- Water-Based Epoxy System

Semi-Gloss Finish

Benjamin Moore & Co.

Primer: Ultra Spec Masonry High Build Block Filler 571

First and Second Coats: Corotech Command V392

PPG Paints

Primer: PermaCrete Concrete Block & Masonry Surfacer/Filler 4-100XI

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-599

Sherwin-Williams Company (The)

Primer: Loxon® Block Surfacer, LX01 Series

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V25

Gloss Finish

Benjamin Moore & Co.

Primer: Ultra Spec Masonry High Build Block Filler 571

First and Second Coats: Corotech Command V390

PPG Paints

Primer: Ultra Spec Masonry High Build Block Filler 571

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-598

Sherwin-Williams Company (The)

Primer: Loxon® Block Surfacer, LX01 Series

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V15

* + - * 1. Metal – (Aluminum, Galvanized)

Semi-Gloss Finish

Benjamin Moore & Co.

Primer (Unpainted Surfaces): Corotech Acrylic Metal Primer V110

First and Second Coats: Ultra Spec HP DTM Acrylic Semi-Gloss HP 29

PPG Paints

Primer: Pitt-Tech Plus Int/Ext DTM Industrial Primer, 4020 Series

First and Second Coats: Pitt Tech Plus 4216 HP Semi-Gloss DTM Enamel, 4216 Series

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-1310 Series

First and Second Coats: Pro Industrial Semi-Gloss Acrylic B66W651 Series

Gloss Finish

Benjamin Moore & Co.

Primer: Corotech Acrylic Metal Primer V110

First and Second Coats: Ultra Spec HP DTM Acrylic Gloss, HP28

PPG Paints

Primer: Pitt-Tech Plus Int/Ext DTM Industrial Primer, 4020 Series

First and Second Coats: Pitt Tech Plus Gloss DTM Enamel, 90-1310 Series

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-1310 Series

First and Second Coats: Pro Industrial Gloss Acrylic B66W611 Series.

* + - * 1. Metal – (Aluminum, Galvanized)- Epoxy System

Semi-Gloss Finish

Benjamin Moore & Co.

Primer (Unpainted Surfaces): Corotech Acrylic Metal Primer V110

First and Second Coats: Corotech Command V392

PPG Paints

Primer: Pitt-Tech Int/Ext DTM Industrial Primer, 90-712 Series

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-599

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-1310 Series

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V25

Gloss Finish

Benjamin Moore & Co.

Primer (Unpainted Surfaces): Corotech Acrylic Metal Primer V110

First and Second Coats: Corotech Command V390

PPG Paints

Primer: Pitt-Tech Int/Ext DTM Industrial Primer, 90-712 Series

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-598

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-1310 Series

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V15

* + - * 1. Metal – (Galvanized; Ceiling, Ductwork)

Low Sheen

Benjamin Moore & Co.

Benjamin Moore Latex Dry Fall Flat 395

PPG Paints

Speedhide Super Tech WB Dry-Fog 6-724XI

Sherwin-Williams Company (The)

First and Second Coats: Water-based Acrylic Dry-Fall, B42W181

* + - * 1. METAL - (Structural Steel Columns, Joists, Trusses, Beams, Miscellaneous & Ornamental Iron, Structural Iron, Ferrous Metal)

Eggshell Finish

Benjamin Moore & Co.

Primer: Corotech Acrylic Metal Primer V110

First and Second Coats: Ultra Spec HP DTM Acrylic Low Lustre HP25

PPG Paints

Primer: Pitt-Tech Plus Int/Ext DTM Industrial Primer, 4020 Series

First and Second Coats: Speedhide Interior Eggshell Latex, 6-411 Series

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-310 Series

First and Second Coats: ProMar 200 Zero Eg-Shel, B20 Series

Semi-Gloss Finish

Benjamin Moore & Co.

Primer: Corotech Acrylic Metal Primer V110

First and Second Coats: Ultra Spec HP DTM Acrylic Semi-Gloss HP29

PPG Paints

Primer: Pitt-Tech Plus Int/Ext DTM Industrial Primer, 4020 Series

First and Second Coats: Pitt Tech Plus 4216 HP Semi-Gloss DTM Enamel, 4216 Series

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-1310 Series

First and Second Coats: Pro Industrial Semi-Gloss Acrylic B66W651 Series.

Gloss Finish

Benjamin Moore & Co.

Primer: Corotech Acrylic Metal Primer V110

First and Second Coats: Ultra Spec HP DTM Acrylic Gloss HP28

PPG Paints

Primer: Pitt-Tech Plus Int/Ext DTM Industrial Primer, 4020 Series

First and Second Coats: Pitt Tech Plus Gloss DTM Enamel, 90-1310 Series

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-310 Series

First and Second Coats: Pro Industrial Gloss Acrylic B66W611 Series.

* + - * 1. METAL - (Structural Steel Columns, Joists, Trusses, Beams, Miscellaneous & Ornamental Iron, Structural Iron, Ferrous Metal)- Epoxy System

Gloss Finish

Benjamin Moore & Co.

Primer: Corotech Acrylic Metal Primer V110

First and Second Coats: Corotech Command V390

PPG Paints

Primer: Pitt-Tech Int/Ext DTM Industrial Primer, 90-712 Series

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-598

Sherwin-Williams Company (The)

Primer: Pro Industrial Pro-Cryl® Universal Primer, B66-1310 Series

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V15

* + - * 1. Dryfall Waterborne System

Low Sheen

Benjamin Moore & Co.

Benjamin Moore Latex Dry Fall Flat 395

PPG Paints

Speedhide Super Tech WB Dry-Fog 6-724XI

Sherwin-Williams Company (The)

First and Second Coats: Water-based Acrylic Dry-Fall, B42W2

* + - * 1. Wood (Walls, Ceilings, Doors, Trim)- Painted

Eggshell Finish

Benjamin Moore & Co.

Primer: Fresh Start Acrylic Primer 046

First and Second Coats: Eco Spec N374

PPG Paints

Primer: SEAL GRIP Interior/Exterior 100% Acrylic Universal Primer/Sealer 17-921XI

First and Second Coats: Pure Performance Interior Eggshell 9-300XI Series

Sherwin-Williams Company (The)

Primer: PrepRite® ProBlock® Latex Primer, B51 Series

First and Second Coats: Superpaint Air Purifying Satin, a87 Series

Semi-Gloss Finish

Benjamin Moore & Co.

Primer: Fresh Start Acrylic Primer 046

First and Second Coats: Eco Spec N376

PPG Paints

Primer: SEAL GRIP Interior/Exterior 100% Acrylic Universal Primer/Sealer 17-921XI

First and Second Coats: Pitt Tech Plus 4216 HP Semi-Gloss DTM Enamel, 4216 Series

Sherwin-Williams Company (The)

Primer: PrepRite® ProBlock® Latex Primer, B51 Series

First and Second Coats: Pro Industrial Semi-Gloss Acrylic B66W651 Series.

Gloss Finish

Benjamin Moore & Co.

Primer: Fresh Start Acrylic Primer 046

First and Second Coats: Eco Spec N376

PPG Paints

Primer: SEAL GRIP Interior/Exterior 100% Acrylic Universal Primer/Sealer 17-921XI

First and Second Coats: Pitt Tech Plus Gloss DTM Enamel, 90-1310 Series

Sherwin-Williams Company (The)

Primer: PrepRite® ProBlock® Latex Primer, B51 Series

First and Second Coats: Pro Industrial Gloss Acrylic B66W611 Series.

* + - * 1. Wood (Walls, Ceilings, Doors, Trim)- Stain and Varnish System

Satin Finish

PPG Paints

First: Deft Wood Stain Interior Oil Based DFT400 Series

Second and Third Coats: Deft Polyurethane Interior Water-based Acrylic DFT159

Sherwin-Williams Company (The)

First: Minwax 250 Stains

Second and Third Coats: Wood Classics Waterborne Polyurethane Varnish, A68 Series

Gloss Finish

PPG Paints

First: Deft Wood Stain Interior Oil Based DFT400 Series

Second and Third Coats: Deft Polyurethane Interior Water-based Acrylic DFT157

Sherwin-Williams Company (The)

First: Minwax 250 Stains

Second and Third Coats: Wood Classics Waterborne Polyurethane Varnish, A68 Series

* + - * 1. Drywall (Walls, Ceiling, etc.)

Flat Finish

Benjamin Moore & Co.

Primer: Eco Spec Waterborne Interior Latex Primer N372

First and Second Coats: Eco Spec Flat N373

PPG Paints

Primer: Pure Performance® Interior Latex Primer, 9-900

First and Second Coats: Pure Performance Interior Flat 9-100 Series

Sherwin-Williams Company (The)

Primer: Harmony Low Odor Interior Latex Primer, B11W900

First and Second Coats: Harmony Low Odor Interior Latex Flat, B5 Series

Eggshell Finish

Benjamin Moore & Co.

Primer: Natura Latex Primer, 511

First and Second Coats: Natura Latex Eggshell, 513

PPG Paints

Primer: Pure Performance® Interior Latex Primer, 9-900

First and Second Coats: Pure Performance Interior Eggshell 9-300XI Series

Sherwin-Williams Company (The)

Primer: Harmony Low Odor Interior Latex Primer, B11W900

First and Second Coats: Superpaint Air Purifying Interior Latex Satin, A87 Series

Semi-Gloss Finish

Benjamin Moore & Co.

Primer: Eco Spec Waterborne Interior Latex Primer N372

First and Second Coats: Eco Spec Semi-Gloss N376

PPG Paints

Primer: Pure Performance® Interior Latex Primer, 9-900

First and Second Coats: Pure Performance Interior Semi-Gloss 9-500 Series

Sherwin-Williams Company (The)

Primer: PrepRIte Problock Latex Primer, B51 Series

First and Second Coats: Harmony Low Odor Interior Latex Semi-Gloss, B10 Series

* + - * 1. Drywall (Walls, Ceiling, etc.)- Water-based Epoxy System

Semi-Gloss Finish

Benjamin Moore & Co.

Primer: Fresh Start High Hiding All Purpose Primer 046

First and Second Coats: Corotech Command V392

PPG Paints

Primer: Speedhide Interior Latex Sealer Quick-Drying Primer, 6-2

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-599

Sherwin-Williams Company (The)

Primer: ProMar 200 Interior Latex Primer, B28W2600

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V25

Gloss Finish

Benjamin Moore & Co.

Primer: Fresh Start High Hiding All Purpose Primer 046

First and Second Coats: Corotech Command V390

PPG Paints

Primer: Speedhide Interior Latex Sealer Quick-Drying Primer, 6-2

First and Second Coats: Pitt-Glaze WB Water-Borne Acrylic Epoxy 16-551/16-598

Sherwin-Williams Company (The)

Primer: ProMarn 200 Interior Latex Primer, B28W2600

First and Second Coats: Water-based Catalyzed Epoxy, B70W211/B60V15

1. MATERIALS – GENERAL REQUIREMENTS
   1. Paints and Coatings - General
      1. Unless otherwise indicated, provide factory-mixed coatings.
      2. When required, mix coatings to correct consistency in accordance with manufacturer's instructions before application.
      3. Do not reduce, thin, or dilute coatings or add materials to coatings unless approved in manufacturer's product instructions.
      4. Confirm VOC’s need by using the products SDS sheets.
   2. Requirements for USGBC 2009 LEED for Schools
      1. Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the following criteria:
         1. Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993; Errata posted 10/31/2007; Second Edition, September 2006.
         2. Under Requirements, add to the end of the first bullet point, “Primers must meet the VOC limit for non-flat paint.”
         3. Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03 Anti-Corrosive Paints Second Edition January 7, 1997.
         4. Clear wood finishes and stains applied to interior elements: Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.
      2. Interior Coatings GS-11 VOC content limits:

|  |  |
| --- | --- |
| Coating Types | VOC weight in grams/liter of product minus water |
| Non-Flat | 150 |
| Flat | 50 |

1. ACCESSORIES
   1. Coating application accessories:
      1. Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required, per manufacturer’s specifications.

**PART 3 EXECUTION**

1. Paint Finish
   1. High traffic areas (corridors, cafeteria, kitchen, auditorium gymnasium, media center, reception areas, etc) shall be semi-gloss.
   2. Restrooms shall be epoxy – semi gloss
   3. Other areas designers choice
2. EXAMINATION
   1. Verify site conditions under provisions of Section 01 31 00.
   2. Do not begin application of coatings until substrates have been properly prepared; notify Owner’s Representative of unsatisfactory conditions before proceeding.
   3. If substrate preparation is the responsibility of another installer, notify Owner’s Representative of unsatisfactory preparation before proceeding.
   4. Proceed with work only after conditions are corrected and approved by all parties, otherwise application of coatings will be considered as an acceptance of surface conditions.
   5. Test shop applied primer for compatibility with subsequent cover materials.
   6. Measure moisture content of surfaces using an electronic moisture meter, DO NOT apply finishes unless moisture content of surfaces are below the following maximums:
      1. Plaster and Gypsum Wallboard: 12%
      2. Masonry, Concrete, and Concrete Unit Masonry: 12%
      3. Interior Wood: 15%,
      4. Concrete Floors: 8%
3. SURFACE PREPARATION
   1. The surface shall be dry and in sound condition.
      1. Remove all oil, dust, dirt, loose rust, peeling paint, or other contamination to ensure good adhesion.
      2. Specifically, in new construction, all surfaces shall be dry-wiped just prior to painting to remove miscellaneous dust and debris.
   2. Remove or mask electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
   3. Correct defects and clean surfaces that affect work of this section.
      1. Remove existing coatings that exhibit loose surface defects.
   4. Seal with shellac any marks, which may bleed through surface finishes.
   5. Impervious Surfaces:
      1. Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach.
      2. Rinse with clean water and allow surface to dry.
   6. Aluminum Surfaces Scheduled for Paint Finish:
      1. Remove all oil, grease, dirt, oxide, and other foreign material by cleaning per SSPC-SP1 Solvent Cleaning.
   7. Block/Unit Masonry (Cinder and Concrete)
      1. Remove all loose mortar and foreign material.
      2. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement, and hardeners.
      3. Let concrete and mortar cure at least 30 days at 75°F unless the manufactures products are designed for application prior to the 30-day period.
      4. The pH of the surface and moisture content must be in accordance with the paint manufacturer’s recommendations prior to painting.
   8. Concrete:
      1. Remove contamination by washing with an appropriate cleaner, rinse thoroughly.
      2. The pH of the surface and moisture content shall be in accordance with the paint manufacturer’s recommendations prior to painting.
      3. Allow the surface to thoroughly dry.
      4. Fill bug holes, air pockets, and other voids under another section with a cement-patching compound of sufficient cohesive strength to support the specified coating system.
   9. Cement:
      1. Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly.
         1. Allow the surface to dry thoroughly.
         2. The pH of the surface and moisture content should be in accordance with the paint manufacturer’s recommendations prior to painting.
   10. Drywall – Interior:
       1. Shall be clean, dry and all dust removed prior to painting.
       2. All nail heads must be set and spackled.
       3. Tape all joints and cover with a joint compound.
       4. Spackled nail heads and tape joints shall be sanded smooth.
   11. Galvanized Surfaces:
       1. Clean per SSPC-SP1 using detergent and water or a degreasing cleaner to remove greases and oils.
       2. Apply a test area, priming as required.
       3. Allow the coating to cure in accordance with the manufacturer’s recommendation before testing.
       4. Perform adhesion tests in accordance with ASTM D3359 Adhesion by Tape Test.
       5. If adhesion is poor, then notify Owner’s representative that additional surface preparation under another section is necessary to remove pre-treatments or contaminants that interfere with adhesion of the coating.
   12. Insulated Coverings: Remove dirt, grease, and oil from canvas and cotton.
   13. Plaster Surfaces:
       1. Shall allow to thoroughly dry for at least 30 days before painting, unless the manufacturer’s products are designed for application prior to the 30-day period.
          1. Bare plaster must be cured and hard prior to painting.
          2. Correct any soft, porous, or powdery plaster per requirements under another section of the specifications.
   14. Steel: Structural, Plate, etc:
       1. Check other sections for additional surface preparation and shop priming of bare steel surfaces.
       2. Surface preparation shall include appropriate SSPC recommended methods.
       3. Shop primer shall be compatible with the field-applied coatings.
       4. Surfaces shall be dry and clean prior to the application of field-applied coatings.
       5. Remove all contaminants in accordance with SSPC-SP1 Solvent Cleaning.
   15. Wood:
       1. Shall be clean and dry, then prime and paint as soon as possible.
       2. Scrape, sand, and spot prime knots and pitch streaks before a full priming coat is applied.
       3. Patch all nail holes and imperfections with a wood filler or putty and sand smooth after application of primer.
   16. Wood and Metal Doors Scheduled for Painting: Seal top and bottom edges with primer.
4. APPLICATION/INSTALLATION
   1. Mix, thin, and apply all coatings and products in accordance with manufacturer's instructions.
   2. Do not apply coatings to wet or damp surfaces.
      1. Wait at least 30 days before applying to new concrete or masonry, or follow manufacturer’s procedures to apply appropriate coatings prior to 30 days.
      2. Test new concrete for moisture content.
   3. Apply coatings using methods recommended by manufacturer.
   4. Uniformly apply coatings without runs, drips, or sags, without brush marks, and with consistent sheen to achieve a properly painted surface in accordance with PDCA Standard P1-04.
   5. Apply coatings at spreading rate required to achieve the manufacturer’s recommended dry film thickness.
   6. The coated surface shall be inspected and accepted by the Owner’s Representative.
5. FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT
   1. Refer to Division 21, 22, 23, 26, 27, & 28 for schedule of color-coding and identification banding of equipment, ductwork, piping, and conduit.
   2. Paint shop primed equipment.
   3. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
   4. Prime and paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars, and supports, in finished areas, except where items are pre-finished.
   5. Paint interior surfaces of air ducts, and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint, to visible surfaces.
      1. Paint dampers exposed behind louvers and grilles to match face panels.
   6. Paint exposed conduit and electrical equipment occurring in finished areas.
   7. Paint both sides and edges of plywood backboards for electrical and telephone equipment before installing equipment.
   8. Color code equipment, piping, conduit, and exposed ductwork in accordance with requirements indicated.
      1. Color band and identify with flow arrows, names, and numbering.
   9. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.
6. TOUCH UP and DAMAGE REPAIR
   1. Contractor shall repair all deficiencies in coating application in accordance with PDCA Standard P1-04.
   2. Inform Owner’s representative of all damage to properly painted surfaces and receive authorization prior to performing damage repair.

#### END OF SECTION