RELATED DOCUMENTS:

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

PART 1: GENERAL

DESCRIPTION OF WORK:

Extent of painting work is shown on drawings and schedules, and as herein specified.

The work includes painting and finishing of all interior and exterior exposed items and surfaces throughout project, except as otherwise indicated.

Surface preparation, priming and coats of paint specified are in addition to shop-priming and surface treatment specified under other sections of work.

"**PAINT**" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate or finish coats.

Paint all exposed surfaces, unless otherwise noted, whether or not colors are designated in "schedules", except where natural finish of material is specifically noted as a surface not to be painted. Where items or surfaces are not specifically mentioned, paint same as adjacent similar materials or areas. If color or finish is not designated, Architect will select these from standard light colors available for materials systems specified. Where indicated, "accent" colors are medium to deep shades, which shall require no more than one additional paint coat.

Following categories of work are not included as part of field-applied finish work, or are included in other sections of these specifications.

Shop Priming: Unless otherwise specified, shop priming of ferrous metal items is included under various sections for structural steel, miscellaneous metal, hollow metal work, and similar items. Also, for fabricated components such as architectural woodwork, wood casework, and shop-fabricated or factory-built mechanical and electrical equipment or accessories.

Pre-Finished Items: Unless otherwise indicated, do not include painting when factory-finishing or installer finishing is specified for such items as (but not limited to) metal toilet enclosures, prefinished partition systems, acoustic materials, architectural woodwork and casework, finished mechanical and electrical equipment including light fixture, switchgear and distribution cabinets, elevator entrance frames, doors and equipment.

Do not paint over any code-required labels, such as Underwriters' Laboratories and Factory Mutual, or any equipment identification, performance rating, name, or nomenclature plates.

SUBMITTALS:

Product Data: Submit manufacturer's technical information including paint label analysis and application instructions for each material proposed for use.

Samples: Submit samples for Architect's review of color and texture only. Provide a listing of material and application for each coat of each finish sample.

On 12"x12" hardboard, provide sample of each color and material, with texture to simulate actual conditions. On CMU face shell, provide sample of each color and material, with texture to simulate actual

conditions Resubmit samples as requested by Architect until acceptable sheen, color, and texture is achieved.

Wall Mockup: Paint 10'x10' section of wall with permanent lighting illumination for Architect's review and approval, prior to ordering paint materials.

Epoxy Paint Product Data: Epoxy paint manufacturer shall provide documentation that the epoxy product is tested and approved for application in such locations and for application on the surface material that is being used, and use is in compliance 2012 NC Building Code Sections 1210.2 and 1210.3; and in compliance with 2012 Plumbing code Sections 419.3 and 417.4.1 for providing smooth, hard non-absorbent surfaces adjacent to urinals and water closets and shower heads.

DELIVERY AND STORAGE:

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

- Name or title of material
- Fed. Spec. number, if applicable
- Manufacturer's stock number and date of manufacturer
- Manufacturer's name
- Contents by volume, for major pigment and vehicle constituents
- Thinning instructions
- Application instructions
- Color name and number

JOB CONDITIONS:

Apply water-base paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50 degrees F (10 degrees C) and 90 degrees F (32 degrees C), unless otherwise permitted by paint manufacturer's printed instructions.

Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between 45 degrees F (7 degrees C) and 95 degrees F (35 degrees C), unless otherwise permitted by paint manufacturer's printed instructions.

Do not apply paint in snow, rain, fog or mist; or when relative humidity exceeds 85%; or to damp or wet surfaces; unless otherwise permitted by paint manufacturer's printed instructions.

Painting may be continued during inclement weather if areas and surfaces to be painted are enclosed and heated within temperature limits specified by paint manufacturer during application and drying periods.

PART 2: PRODUCTS

COLORS AND FINISHES:

Color Pigments: Pure, non-fading, applicable types to suit substrates and service indicated.

Paint Coordination: Provide finish coats which are compatible with prime paints used. Review other sections of these specifications in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates.

Federal Specifications establish minimum acceptable quality for paint materials. Provide written certification from paint manufacturer that materials provided meet or exceed these minimums.

Provide undercoat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer, and use only within recommended limits.

EXTERIOR PAINT SYSTEMS:

A. GALVANIZED METAL - (G60 Galvanized Steel; including Structural Steel Columns, Beams, Miscellaneous Structural Steel Members, Miscellaneous Steel Framing, Miscellaneous Stair & Ornamental Iron excluding treads, Catwalks excluding steel bar grating and treads, Fire Escapes, Hydrants). Note: G90 hot-dipped galvanized surfaces shall not be painted.

1. Acrylic Systems

a. Gloss Finish

i. Surface Preparation: Refer to Part 3 Surface Preparations of these specifications for Cleaning & Testing/Evaluations; Manufacturer's guidelines and recommendations stand as requirements of this work.

ii. 1st Coat: S-W Pro-Cryl Universal Primer, B66-310 Series (10 mils wet, 4.0 mils dry film thickness)

iii. 2nd Coat: S-W Sher-Cryl HPA High Performance Acrylic, B66-300 Series (10 mils wet, 4 mils dry film thickness)

iv. 3rd Coat: S-W Sher-Cryl HPA High Performance Acrylic, B66-300 Series (10 mils wet, 4 mils dry film thickness)

B. METAL - (Shop Primed Metal Doors and Frames/ Panels, etc.)

1. Acrylic Systems

a. Gloss Finish

i. Surface Preparation: Manufacturer's guidelines and recommendations stand as requirements of this work

ii. 1st Coat: S-W Pro Industrial Multi-Surface Acrylic, B66-500 Series

iii. 2nd Coat: S-W Pro Industrial Multi-Surface Acrylic, B66-500 Series (4 mils wet, 2 mils dry per coat)

C. EXTERIOR BRICK WATERPROOFING - (Apply to Existing Exterior Brick Masonry where indicated on Drawings)

1. Silane/Siloxane Penetrating Water Repellant Sealer Systems

a. Transparent / No Gloss Finish

i. Surface Preparation: Manufacturer's guidelines and recommendations stand as requirements of this work

ii. 1st Coat: W. R. Meadows INTRAQUARD Silane/Siloxane Sealing compound (50 sq. ft. per gallon)

iii. 2nd Coat: W. R. Meadows INTRAGUARD Silane/Siloxane Sealing compound (50 sq. ft. per gallon)

INTERIOR PAINT SYSTEMS

A. MASONRY/CONCRETE - (Walls & Ceilings, Concrete Beams, Concrete Roof Decks, Poured Concrete, Precast Concrete, Unglazed Brick or Block CMU, Cement Board)

1. Alkyd Enamel Systems

a. Semi-Gloss Finish

i. 1st Coat: Loxon Block Surfacer, LX01W0200 (1 to 2 coats tinted and rolled in to fill all pits and pores completely, 16 wet mils, 8.8 dry mils).

ii. 2nd Coat: S-W Pro-Classic Interior Alkyd Semi-Gloss, B34 Series

iii. 3rd Coat: S-W Pro-Classic Interior Alkyd Semi-Gloss, B34 Series (4 mils wet, 1.6 mils dry per coat)

B. WET AREAS - (All Food Service Area walls, All Toilets and Restrooms CMU walls and Gypsum Board Walls and Ceilings, All Shower Wall and Ceilings, All High Moisture Areas). NOTE: Epoxy paint manufacturer shall provide documentation that the epoxy product is tested and approved for application in such locations and for application on the surface material that is being used.

1. Epoxy Systems

a. Gloss Finish

i. 1rst Coat for Existing Walls Oil Based Painted: S-W Extreme Bonding Primer, B51W00150 (3.1 mils wet, 0.9 mils dry)

ii. 1st Coat New CMU: S-W Loxon Block Surfacer, LX01W0200 (1 to 2 coats tinted and rolled in to fill all pits and pores completely, 16 wet mils, 8.8 dry mils).

iii. 1st Coat New Gyp. Bd.: S-W ProMar 200 Zero VOC Latex Primer, B28W02600 (4 mils wet, 1.0 mils dry)

iv. 2nd Coat: S-W Water Based Catalyzed Epoxy Gloss, B73-300 Series (8 mils wet, 4 mils dry)

v. 3rd Coat: S-W Water Based Catalyzed Epoxy Gloss, B73-300 Series (8 mils wet, 4 mils dry)

C. CONCRETE FLOORS – (Auditorium Floors, Shop Floors, Utility Equipment Platforms, Custodial Spaces, Stairwells, Electrical Equipment Rooms, Boiler Rooms).

1. Urethane Systems

    a. Gloss Finish (gray pigment)

        i. 1st Coat: Pressure wash, and SSPC prep

        ii. 2nd Coat: S-W Armorseal Rexthane I, B65-60 Series Gloss (3.0 – 4.5 mils wet, 2.0 – 3.0 dry)

        iii. 3rd Coat: S-W Armorseal Rexthane I, B65-60 Series Gloss (3.0 – 4.5 mils wet, 2.0 – 3.0 dry), (shop floors with anti-slip additive)

D. METAL – (Structural Steel Columns, Joists, Trusses, Beams, Miscellaneous Structural Steel Members, Miscellaneous & Ornamental Iron, Sashes, Doors, Door Frames, Partitions, Cabinets, Lockers, Radiators, Wall Louvers, Pumps, Motors, Machines, Convectors, Ducts [Ventilating], Electrical Raceways & Conduits, Elevator Cabs, Copper, Non-Galvanized Metal)

1. Alkyd Systems

    a. Gloss Finish

        i. 1st Coat: S-W Kem Bond HS, Universal Metal Primer, B50 Series (10 mils wet, 3.8 mils dry film thickness)

        ii. 2nd Coat: S-W Industrial Enamel - Alkyd Gloss Enamel, B54-100 Series

        iii. 3rd Coat: S-W Industrial Enamel - Alkyd Gloss Enamel, B54-100 Series (9 mils wet, 3.9 mils dry per coat)

2. Dryfall Systems (EXPOSED CEILINGS; Structure, Ceilings, Ductwork, Conduits, where Scheduled)

    a. Flat Sheen Finish

        i. 1st Coat: S-W Pro-Cryl Universal Primer, B66-310 Series (10 mils wet, 4.0 mils dry film thickness)

        ii. 2nd Coat: S-W Waterborne Acrylic Dry Fall, B42BW3 (9.0 mils wet, 3.5 mils dry)

        iii. 3rd Coat: S-W Waterborne Acrylic Dry Fall, B42BW3 (9.0 mils wet, 3.5 mils dry)

E. METAL - (Galvanized)

1. Alkyd Systems

    a. Gloss Finish

        i. Surface Preparation: Refer to Part 3 Surface Preparations of these specifications for Cleaning & Testing/Evaluations; Manufacturer's guidelines and recommendations stand as requirements of this work.

        ii. 1st Coat: S-W Pro Industrial Pro-Cryl Primer, B66-1300 Series (10 mils wet, 3.8 mils dry film thickness)

iii. 2nd Coat: S-W Industrial Enamel - Alkyd Gloss Enamel, B54-100 Series

iv. 3rd Coat: S-W Industrial Enamel - Alkyd Gloss Enamel, B54-100 Series (9 mils wet, 3.9 mils dry per coat)

F. NON-TEXTURED SMOOTH DRYWALL (Walls, Ceilings, Gypsum Board, Wood Pulp Board, Plaster Board, Etc.)

1. Alkyd Enamel Systems

a. Satin Finish (UNLESS NOTED OTHERWISE)

b. FLAT SHEEN WHITE for drywall prosceniums, bulkheads, overhead drywall ceilings

c. Base Coat: SHEETROCK Brand First Coat (drywall finishing surface coat for equalizing textures, coordinate with 09250)

i. 1st Coat: S-W Premium Wall & Wood Primer, B28W08111 (4 mils wet, 1.6 mils dry)

ii. 2nd Coat: S-W Pro-Classic Interior Alkyd Satin, B33 Series

iii. 3rd Coat: S-W Pro-Classic Interior Alkyd Satin, B33 Series (4 mils wet, 1.7 mils dry per coat)

G. CANVAS PIPE WRAP (exposed to view)

1. Latex Systems

a. Flat Finish

i. 1st Coat: S-W PrepRite 200 Latex Primer, B28W200 (add fungicidal agent) (4 mils wet, 1.2 mils dry)

ii. 2nd Coat: S-W ProMar 200 Latex Flat B30W200 Series (4 mils wet, 2 mils dry)

iii. 3rd Coat: S-W ProMar 200 Latex Flat B30W200 Series (4 mils wet, 2 mils dry)

J. BONDING PRIMER (Does not apply to existing or new “Spectraglaze” block): (Interior Hard, Slick, Glossy Surfaces such as Existing Oil Based Wall Paint, Existing Painted CMU, PVC Piping, Plastics, Glass, Laminate, Aluminum, Varnished Woodwork, Ceramic Wall Tile, Glazed Block, Fluoropolymer Coatings)

1. Acrylic Systems

b. S-W Extreme Bonding Primer, B51W00150 (3.1 mils wet, 0.9 mils dry)

PART 3: EXECUTION

INSPECTION:

Applicator must examine areas and conditions under which painting work is to be applied and notify Contractor in writing of conditions detrimental to proper and timely completion of manner acceptable to Applicator.

Starting of painting work will be construed as Applicator's acceptance of surfaces and conditions within any particular area.

Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to formation of a durable paint film.

SURFACE PREPARATION:

General: Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions, SSPC-SP, and as herein specified, for each particular substrate condition.

SSPC-SP: Steel Structures Paint Council Surface Preparation Specification

Clean surfaces to be painted before applying paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Program cleaning and painting so that contaminants from cleaning process will not fall onto wet, newly-painted surfaces.

Wood: Clean wood surfaces to be painted. Remove dirt, oil, or other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sandpaper smooth those finished surfaces exposed to view, and dust off. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer, before application of priming coat. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood-filler. Sandpaper smooth when dried.

Ferrous Metals: Clean ferrous surface, which are not galvanized or shop-coated, of oil, grease, dirt, loose mill scale and other foreign substances by solvent or mechanical cleaning.

Touch-up shop-applied primed coats wherever damaged or bare, where required by other sections of these specifications. Clean and touch-up with same type shop primer.

Galvanized Surfaces:

Hot-Dipped Galvanizing: Allow hot-dipped galvanized items to weather 6 months prior to surface preparations, and then steam clean per SSPC-SP 1. Do not use hydrocarbon solvents, vinegar or other mild acids for cleaning hot dipped galvanized surfaces. After cleaning, perform spot testing for any manufacturer’s pre-treatments, using the procedure from ASTM D2092, Method B201, Volume 06.01. After pre-treatments testing, apply 2’ x 2’ paint test patch for evaluation of paint surface adhesion. Evaluate the adhesion at three locations of the surface area, by performing a tape adhesion test per ASTM Method D3359. Grade the tape adhesion of the coating by following ratings as set forth in ASTM D3359-97.

Galvalume: Clean free of grease, oil, dirt, soil, and other surface contaminants with hydrocarbon free solvent cleaner. Perform a light brush blasting per SSPC-SP7 if necessary. After cleaning, apply 2’ x 2’ paint test patch for evaluation of paint surface adhesion. Evaluate the adhesion at three locations of the surface area, by performing a tape adhesion test per ASTM Method D3359. Grade the tape adhesion of the coating by following ratings as set forth in ASTM D3359-97.

Special Food Service Area Wall Preparation: Special preparation will be required to assure that required Food Service area CMU wall surfaces are pointed and patched is in strict accordance with the drawing’s CMU surface preparation General Notes for on-site approval by local Health Department. All work resulting from inspection comments and requirements are to be provided at no additional cost.

Previously Coated Surfaces:
Maintenance painting will frequently not permit or require removal of old coatings prior to repainting. However, all surface contaminants such as oil, grease, loose paint, mill scale, dirt, foreign matter, rust, mold, mildew, efflorescence, and sealers must be removed to assure sound bonding to the tightly adhering old paint. Glossy surfaces of old paint films must be clean and dulled, and/or sanded before repainting. Thorough washing with an abrasive cleaner will clean and dull in one operation, or wash thoroughly and dull by sanding. Spot prime any bare areas with appropriate primer. Adhesion to existing glossy surfaces may require bonding primers.

Adhesion Testing: Check for adhesion by applying a test patch of the recommended coating system, covering at least 2 to 3 square feet. Allow to dry one week before testing adhesion per ASTM D3359. If the coating system adhesion fails, report findings to Architect. Provide bonding primers where adhesion testing has failed or is in question.

Existing Stained Wood:
Wood must dry and cleaned of dirt, grease, wax, polish, and marks. Old finishes in poor condition should be completely removed and the surface treated as a new surface. Sand wood to a smooth surface with 100-120 grit paper. Remove sanding dust with a vacuum or tack cloth. Avoid sanding wood that has only stain on it, sanding will remove some of the stain creating an uneven appearance. Sand down bare spots and scratches, and stain to match adjacent color. Very lightly scuff sand between finish coats, 180 grit paper or finer, removing any raised graining. Perform adhesion testing, identifying any presence of any sanding sealer, which can prevent bonding and cause peeling.

SURFACE RESTORATIONS

Existing surfaces requiring restoration, including but not limited to existing steel door frames or existing window frame surfaces, require total surface cleaning complete, down to bare sound metal, in accordance with the applicable SSPC method required, and then surfaces immediately primed with applicable primer coats in DFT thicknesses required, prior to further ensuing work sequences; i.e. finish paint coats, re-glazings, frame preparations for hardware.

In addition to the Part 3 SURFACE PREPARATIONS specified, removal of all rust from existing surfaces may require sand blasting. Adhere to sandblasting requirements complying with 02070 Selective Demolition.

Once metal sections have been cleaned of all corrosion, small holes, depressions, and uneven areas resulting from rusting are to be filled with a patching material and sanded smooth to eliminate pockets where water can accumulate, and primed coated. Patching material shall be of high content steel fibers in an epoxy binder, similar to industrial steel repair or auto body patching materials

LEAD-BASED PAINT RENOVATION, REPAIR, AND PAINTING:

Applicators who perform painting renovations in housing or child occupied facilities built before 1978 must be certified by the Health Hazards Control Unit (HHCU). All work shall comply with requirements as published by the EPA Lead-Based Paint Renovation, Repair and Painting Rule in the Code of Federal Regulations.

Samples: For determining whether components are free of lead-based paint, certified applicators may collect paint chip samples and submit samples to a laboratory recognized by NLLAP for analysis. Required paint chip samples documentation shall be prepared and maintained by the certified applicator for three years.

MATERIALS PREPARATION:

Mix and prepare painting materials in accordance with manufacturer's directions.

Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.

APPLICATION:

General: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.

Apply additional coats when undercoats, stains or other conditions show through final coat of paint, until paint film is of uniform finish, color and appearance, and complete hide. Give special attention to insure that surfaces, including edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

Special Food Service Area Wall Application: Roll-in two coats of masonry block filler coating in Food Service areas as necessary to completely fill all pits and pores prior to application of top coats. Final finished topcoat in Food Service areas to be free of all pits and pores, with a smooth completely washable surface. Apply additional coats when final coat of paint does not uniformly fill all pits and pores. Provide all work described as necessary to obtain an on-site approval by local Health Department.

Finish exterior doors on tops, bottoms and side edges same as exterior faces, unless otherwise indicated.

Sand lightly between each succeeding enamel or varnish coat.

Omit first coat (primer) on metal surfaces which have been shop-primed and touch-up painted, unless otherwise indicated.

Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to those items exposed in occupied spaces.

Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements.

CLEAN-UP AND PROTECTION:

Clean-Up: During progress of work, remove from site discarded paint materials, rubbish, cans and rags at end of each work day.

Upon completion of painting work, clean window glass and other paint-spattered surfaces. Remove spattered paint by proper methods of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

Protection: Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.

Provide "Wet Paint" signs as required to protect newly-painted finishes. Remove temporary protective wrappings provided by others by protection of their work, after completion of painting operations.

At the completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces.

EXTRA STOCK:

Furnish extra paint in manufacturer's sealed shipping containers. Provide one gallon for each type and color of paint applied in the project. Containers shall only be opened by the painter manufacturer/supplier to formulate required colors/mixes. These extra materials shall not be opened or used by the Contractor without written permission from the Owner. Place a label, protected by clear plastic on the lid of each container with the following typewritten information:

1. Paint Manufacturer
2. Product name and number
3. Mixing and color formulation
4. Painting contractor
5. Date that the paint container is put in the Owner's inventory
6. Room or area number where the paint applied was used

END OF SECTION