UNIVERSITY OF MICHIGAN
ARCHITECTURE, ENGINEERING AND CONSTRUCTION

ARCHITECTURE & ENGINEERING
326 East Hoover, Mail Stop B
Ann Arbor, MI 48109-1002
Phone: 734-764-3414
Fax: 734-936-3334

BuildingName
The Description of the Project
P00000000 0000

DOCUMENTS

SPECIFICATION DIVISION 9

NUMBER SECTION DESCRIPTION

END OF CONTENTS TABLE

DIVISION 09 FINISHES
SECTION 09900 - PAINTING

JULY 2011 – UPDATED TO ADD LOW VOC PRODUCTS TO INTERIOR PAINT SCHEDULE AND TO REMOVE MOST NON-COMPLIANT VOC PRODUCTS AS OPTIONS FOR INTERIOR PAINTS. REFER TO DESIGN GUIDELINE 09900 FOR INFORMATION ON PERMISSIBLE EXCEPTIONS TO LOW VOC PRODUCTS.

SECTION ALSO REFORMATTED TO MEET CURRENT UM STANDARDS.

GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including Standard General Conditions, Supplemental General Conditions, Division 01 Specification Sections, and other applicable Specification Sections, apply to this Section.

B. Related Sections:

LIST BELOW CONTAINS ITEMS THAT ARE USUALLY SHOP PRIMED AND MATERIALS THAT MIGHT BE SPECIFIED IN THIS SECTION. REVISE TO SUIT THE PROJECT. VERIFY THAT SECTION TITLES LISTED BELOW ARE CORRECT FOR THIS PROJECT'S SPECIFICATIONS. IF ROOM FINISH SCHEDULE IS TO BE INCLUDED AS A SEPARATE SPECIFICATION SECTION ADD THAT SECTION TO THE LIST BELOW. INCLUDE SECTION BELOW FOR ALL TYPES OF EPOXY PAINT.

1. Section 01140: Work Restrictions for special protections for epoxy painting work.
2. Section 05120: Structural Steel for shop priming structural steel.
3. Section 05500: Metal Fabrications for shop priming ferrous metal.
4. Section 06402: Interior Architectural Woodwork for shop finishing interior architectural woodwork.
5. Section 08110: Steel Doors and Frames for shop priming steel doors and frames.
6. Section 08211: Wood Doors for pre-finished wood doors.
7. Section 09255: Gypsum Board Assemblies for surface preparation for gypsum board.
8. Section 09925: Electrostatically Applied Coatings for electrically charged, spray-applied coatings.
9. Division 15: Mechanical.
10. Division 16: Electrical.

1.2 SUMMARY

A. Section Includes:

1. Surface preparation and field painting of the following:

ADJUST LIST BELOW TO SUIT THE PROJECT.

a. Exposed exterior items and surfaces.
b. Exposed interior items and surfaces.

c. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.

1.3 DEFINITIONS

STANDARD TERMS USED BY THE COATINGS INDUSTRY ARE DEFINED IN ASTM D 16.

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

DELETE GLOSS RANGES BELOW NOT REQUIRED FOR THE PROJECT. STANDARD GLOSS RANGES WERE DEVELOPED BY THE NATIONAL PAINT AND COATINGS ASSOCIATION (NPCA).

1. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
2. Eggshell refers to low-sheen finish with a gloss range between 5 and 20 when measured at a 60-degree meter.
3. Satin refers to low-sheen finish with a gloss range between 15 and 35 when measured at a 60-degree meter.
4. Semigloss refers to medium-sheen finish with a gloss range between 30 and 65 when measured at a 60-degree meter.
5. Full gloss refers to high-sheen finish with a gloss range more than 65 when measured at a 60-degree meter.

B. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, covers for finned-tube radiation, grilles, and similar components are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.

1.4 SUBMITTALS

EXPAND PARA AND SUBPARAS BELOW TO SUIT THE PROJECT AND PRODUCTS REQUIRED.

A. Product Data: For each paint system specified. Include block fillers and primers.

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

RETAIN PARAGRAPH BELOW FOR LEED PROJECTS.

B. LEED Submittals:

1. Product Data for Credit EQ 4.2: For paints and coatings, including printed statement of VOC content.

REVISE PARA BELOW IF COLORS ARE PRESELECTED AND SPECIFIED OR SCHEDULED.

C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for each type of finish-coat material indicated.

RETAIN BELOW WITH OR WITHOUT ABOVE.

D. Samples for Verification: Of each color and material to be applied, with texture to simulate actual conditions.

1.5 MAINTENANCE MATERIAL SUBMITTALS

A. 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.

REVISE BELOW TO SUIT PROJECT.

1. Paint: **5** percent, but not less than **1 gallon** of each material and color applied.

1.6 QUALITY ASSURANCE

A. Manufacturers and Products: The products and manufacturers specified in this Section establish the standard of quality for the Work. Subject to compliance with all requirements, provide specified products from the manufacturers named in Part 2.

B. Reference Standards: Products in this section shall be built, tested, and installed in compliance with the specified quality assurance standards; latest editions, unless noted otherwise.

1. ASTM D16 Standard Terminology for Paint, Related Coatings, Materials, and Applications.

C. Source Limitations: Obtain block fillers, primers, and undercoat materials for each coating system from the same manufacturer as the finish coats.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.

1. Protect 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 application.

ADD SPECIAL REQUIREMENTS FOR FIRE PROTECTION, HEATING, VENTILATION, AND OTHER SPECIAL CONDITIONS FOR STORAGE AREAS ON-SITE, IF NECESSARY.

1.8 SITE CONDITIONS

REVISE 2 PARAS BELOW TO SUIT THE PROJECT REQUIREMENTS AND MATERIALS TO BE USED.

A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 and 90 deg F.

B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 and 95 deg F.

DELETE BELOW IF NO EXTERIOR PAINTING WORK INCLUDED.

C. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

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

REVISE WARRANTY PER PROJECT. LONGER WARRANTY PERIOD MAY BE APPROPRIATE FOR CERTAIN TYPES OF WORK. INCLUDE THIS ARTICLE IN EVERY SPECIFICATION SECTION.

1.9 WARRANTY

A. Provide a complete parts and labor warranty for a minimum of one year from the date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products in the paint schedules.

B. Manufacturers:

1. Benjamin Moore & Co.
2. ICI Paints (Devoe Coatings and Dulux Paints).
3. International Protective Coatings.
4. O'Leary Paint Co.
5. PPG Industries, Inc.
6. Pratt & Lambert Paints.
7. Sherwin-Williams Co.
8. Tnemec.

2.2 PAINT MATERIALS, GENERAL

ALWAYS RETAIN PARA BELOW. SYSTEMS COULD FAIL IF COATINGS ARE INCOMPATIBLE.

A. Material Compatibility:

1. Provide materials for use 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.

RETAIN VALUES BELOW UNLESS AREA BEING PAINTED MEETS EXCEPTIONS LISTED IN DESIGN GUIDELINE 09900. VALUES LISTED COMPLY WITH LEED-NC, LEED-CI, OR LEED-CS CREDIT EQ 4.2 (AS OF 7/2011); COORDINATE WITH PRODUCTS.

B. VOC Content for Interior Paints: 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)].

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. Anticorrosive 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.

C. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified. Paint-material containers not displaying manufacturer's product identification will not be acceptable.

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Examine substrates, areas, and conditions, with the Applicator present, under which painting will be performed for compliance with paint application requirements.

1. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
2. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.

IF EPOXY PAINTING WORK IS PART OF THE PROJECT INCLUDE THE FOLLOWING PARAGRAPH.

B. Provide seven days' notice to the Owner's Representative prior to the application of epoxy paints.

COORDINATE PRIMERS SPECIFIED IN OTHER SECTIONS WITH UNDERCOATS AND FINISH MATERIALS SPECIFIED IN THIS SECTION TO ENSURE COMPATIBILITY OF MATERIALS. SOME FINISH-COAT MATERIALS, SUCH AS LACQUERS AND EPOXIES, LIFT OIL AND OLEORESINOUS AIR-DRY PRIMERS. A LONG-OIL FINISH COAT MAY CRAWL AND HAVE POOR ADHESION WHEN USED OVER ZINC-DUST PHENOLIC OR BAKED PRIMERS.

C. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.

1. Notify the Architect about anticipated problems using the materials specified over substrates primed by others.

EXPAND PARA AND SUBPARA BELOW IF ADDITIONAL REQUIREMENTS ARE NECESSARY TO SATISFY UNUSUAL PROJECT CIRCUMSTANCES.

D. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.

USUALLY DELETE BELOW AND NOTE PATCHING WORK ON THE DRAWING. IF BELOW IS RETAINED, USE ONLY FOR EXISTING SURFACES WHEN PLASTER/DRYWALL TRADES ARE NOT ENGAGED ON THE PROJECT. THE INTENT OF THE REQUIREMENT BELOW IS TO REPAIR A FEW ANCHOR HOLES, DIMPLES AND SIMILAR PROBLEMS. DO NOT EXPECT PAINTERS TO BE RESPONSIBLE FOR LARGE AREA REPAIR, DRYWALL BOARD INSTALLATION, OR TAPING.

E. Repair Of Existing Plaster And Drywall Surfaces: Spackle and sand smooth minor surface imperfections in existing drywall and plaster surfaces. Repair is limited to imperfections of not more than 2 sq. inches in area and 3/8 inch in depth.

F. Cleaning, General: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease before cleaning.

1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

DELETE BELOW IF EXISTING PAINT WILL NOT BE COVERED BY NEW PAINT.

2. Clean previously painted surfaces to remove dirt, masking tape, labels, adhesives, and other materials that would either be deleterious to adhesion of, or show through, new paint.

ALWAYS RETAIN PARA AND SUBPARAS BELOW THAT SPECIFY SURFACE PREPARATION. PROPER SURFACE PREPARATION IS ESSENTIAL FOR SATISFACTORY COATING PERFORMANCE. EXPAND REQUIREMENTS, IF NECESSARY, TO INCLUDE SPECIAL PROCEDURES REQUESTED BY MFRS OR TO SATISFY SPECIAL PROJECT CONDITIONS.

G. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.

COORDINATION OF SHOP-APPLIED PRIMERS WITH FINISH COATS IS CRITICAL. SEE THE "COORDINATION OF WORK" PARA IN THE "EXAMINATION" ARTICLE. IF COMPATIBILITY PROBLEMS DEVELOP, IT MAY BE NECESSARY TO PROVIDE BARRIER COATS OVER SHOP-APPLIED PRIMERS OR REMOVE THE PRIMER AND REPRIME THE SUBSTRATE.

1. Provide barrier coats over incompatible primers or remove and reprime.
2. For coatings applied over previously painted surfaces, test application to check for lifting and other adhesion problems. Perform test in an isolated area where practicable.

DELETE SUBPARAS BELOW IF CEMENTITIOUS SURFACES ARE NOT TO BE PAINTED, OR REVISE TO SUIT THE PROJECT.

3. Cementitious Materials: Prepare concrete, concrete masonry block, cement plaster, and mineral-fiber-reinforced cement panel surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
   a. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
   b. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's written instructions.

DELETE SUBPARA BELOW IF PROCEDURE IS NOT REQUIRED.

   c. Clean concrete floors to be painted with a 5 percent solution of muriatic acid or other etching cleaner. Flush the floor with clean water to remove acid, neutralize with ammonia, rinse, allow to dry, and vacuum before painting.

DELETE SUBPARAS BELOW IF WOOD SURFACES ARE NOT TO BE PAINTED, OR REVISE TO SUIT THE PROJECT.

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

DELETE SUBPARAS BELOW IF THESE REQUIREMENTS ARE SPECIFIED IN OTHER SECTIONS.

   b. Prime, stain, or seal wood to be painted immediately on delivery. Prime edges, ends, faces, undersides, and backsides of wood, including cabinets, counters, cases, and paneling.
   c. When transparent finish is required, backprime with finish product.
   d. Backprime paneling on interior partitions where masonry, plaster, or other wet wall construction occurs on backside.
   e. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately on delivery.

REVISE SUBPARAS BELOW TO SUIT THE PROJECT.

5. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with the Steel Structures Painting Council's (SSPC) recommendations.

DELETE SUBPARA BELOW IF TREATMENT IS NOT REQUIRED.

   a. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.

DELETE SUBPARA BELOW IF TOUCHUP PAINTING OF SHOP-APPLIED PRIMERS WILL BE DONE BY THE MATERIAL ERECTOR OR INSTALLER.

   b. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by paint manufacturer, and touch up with the same primer as the shop coat.
6. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

H. Materials Preparation: Mix and prepare paint materials according to manufacturer's written instructions.

1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
3. Use only thinners approved by paint manufacturer and only within recommended limits.

THE FOLLOWING PARA CAN STAND ALONE FOR NEW CONSTRUCTION, BUT NEEDS EXPANSION FOR RENOVATION WORK. INCLUDE APPROPRIATE SUBPARAGRAPHS BELOW FOR REVOVATION.

3.2 APPLICATION, GENERAL

THE FOLLOWING PARA CAN STAND ALONE FOR NEW CONSTRUCTION, BUT NEEDS EXPANSION FOR RENOVATION WORK. INCLUDE APPROPRIATE SUBPARAS BELOW FOR RENOVATION.

A. Paint exposed surfaces of all new work, except where the paint schedules or provisions of this Section indicate that a surface or material is not to be painted or is to remain natural. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.

1. Walls: Where walls are scheduled, include the following surfaces in addition, unless otherwise indicated:

EDIT THE LIST BELOW TO SUIT THE PROJECT. REMINDER: SCHEDULE WALLS OF NEW MECHANICAL ROOMS AND ELEVATOR SHAFTS FOR PAINTING (ON DRAWING).

a. Surfaces of wall mounted items previously painted in existing construction.
b. Exposed portions of pipes, ducts, conduit, outlet and junction boxes and convector covers (regardless of factory finish).
c. Columns, both engaged and free-standing within the scheduled area.
d. Access panels.
e. Doors and door frames.

DELETE FACSIA/SOFFIT BELOW IF INCLUDED WITH CEILING PAINT.

f. Gypsum fascia and soffits.
g. Woodwork and trim.
h. Handrails, including brackets and escutcheons.

DELETE BELOW IF NO CEILINGS SCHEDULED TO RECEIVE PAINT. NOTE: IF NEW CLGS ARE ACOUSTIC PANELS (NOT SCHEDULED TO BE PAINTED), AND SOFFITS ARE TO BE PAINTED, INCLUDE UNDER "WALLS" ABOVE OR PROVIDE SPECIAL NOTE BELOW.

2. Ceilings: Where ceilings are scheduled, include the following in addition to ceilings, unless otherwise indicated:

EDIT THE LIST BELOW TO SUIT THE PROJECT.

a. Surfaces of ceiling mounted items previously painted in existing construction.
b. Access panels.
c. Gypsum ceilings, soffits, fascia and trim.
d. Exposed portions of structural slabs.
e. Exposed interior steel and iron work.
f. Exposed portions of pipes, ducts, conduit, junction boxes.

USUALLY RETAIN BELOW.

3. Where floors are scheduled, include the following in addition to floors, unless otherwise indicated:

EDIT LIST BELOW TO SUIT PROJECT.

Base band 4-inches above finished floor.

a. Base band 6-inches above finished floor.

DELETE BELOW IF NO STAIRS.

4. Where stairwell walls are scheduled, include the following in addition to walls, unless otherwise indicated:
   a. Exposed portions of stringers, risers, support brackets, tread and landing pan edges.
   b. Underside of stairs, including tread and landing pans.
   c. Handrails, guards and infill panels.
   d. Exposed anchors and fasteners.

PARAS BELOW ARE TYPICAL PAINTING REQUIREMENTS FOR MECHANICAL. REVISE IN CONSULTATION WITH MECHANICAL ENGINEER.

B. Mechanical Work: Painting of mechanical work is limited to the following:

DELETE PARA BELOW IF NO EXTERIOR MECHANICAL ITEMS TO BE PAINTED.

1. Exterior: Unless otherwise indicated, paint the following:

LIST BELOW CONTAINS MECHANICAL ITEMS THAT MAY BE FIELD PAINTED. ADD OR DELETE ITEMS TO SUIT THE PROJECT.

   a. Structural supports for mechanical equipment.
   b. Mechanical equipment (except pre-finished equipment).
   c. Piping (except insulated piping), pipe hangers, and supports.
   d. Ductwork.
   e. Accessory items.

DELETE PARA BELOW IF NO INTERIOR MECHANICAL ITEMS TO BE PAINTED.

2. Interior Occupied Areas and Stairways: Unless otherwise indicated, paint the following when exposed to view in finished construction:

LIST BELOW CONTAINS MECHANICAL ITEMS THAT MAY BE FIELD PAINTED. ADD OR DELETE ITEMS TO SUIT THE PROJECT.

   a. Structural supports for mechanical equipment.
   b. Mechanical equipment (except pre-finished equipment).
   c. Piping (except insulated piping), pipe hangers, and supports.
   d. Convector covers.
   e. Ductwork.

TYPICALLY DELETE BELOW. INSULATION IS RARELY PAINTED.

   f. Insulation on pipe and ductwork.
   g. Accessory items.
   h. Fire suppression system piping.

3. Interior Service Areas (Equipment Rooms, Mechanical Rooms, and Utility Spaces): Unless otherwise indicated, paint the following items when exposed to view in finished construction:

LIST BELOW CONTAINS MECHANICAL ITEMS THAT MAY BE FIELD PAINTED. ADD OR DELETE ITEMS TO SUIT THE PROJECT.

a. Structural supports for mechanical equipment.
b. Mechanical equipment (except pre-finished equipment).
c. Piping (except insulated piping), pipe hangers, and supports.
d. Accessory items.
e. Fire suppression system piping.

RETAIN BELOW IF FIRE SUPPRESSION (SPRINKLERS) ARE INCLUDED IN THE PROJECT.

4. Interior Spaces, Concealed Above Acoustic Ceilings: Unless otherwise indicated, paint the following:
a. Fire suppression piping, 3-inch diameter and larger.

PARA BELOW IS AN EXAMPLE OF PAINTING REQUIREMENTS FOR ELECTRICAL. DELETE IF NO PAINTING OF ELECTRICAL WORK IS INCLUDED IN PROJECT, OR REVISE TO SUIT THE PROJECT.

C. Electrical Work: Painting of electrical work is limited to the following:

1. Exterior: Unless otherwise indicated, paint the following:

REVISE THREE PARAGRAPHS BELOW AFTER CONSULTATION WITH ELECTRICAL ENGINEER. NOTE THAT INSTRUCTIONS FOR PAINTING JUNCTION BOXES FOR IDENTIFICATION PURPOSES ARE COVERED IN 16050.

a. Structural supports for electrical equipment, including unpainted cut ends of Unistrut.
2. Interior Occupied Areas: Unless otherwise indicated, paint the following when items exposed to view in finished construction:

LIST BELOW CONTAINS ELECTRICAL ITEMS THAT ARE USUALLY FIELD PAINTED. ADD OTHER ITEMS TO SUIT THE PROJECT.

a. Structural supports for electrical equipment.
3. Interior Service Areas (Equipment Rooms, Stairs and Utility Spaces): Unless otherwise indicated, paint the following items exposed to when view in finished construction:

LIST BELOW CONTAINS ELECTRICAL ITEMS THAT ARE USUALLY FIELD PAINTED. ADD OTHER ITEMS TO SUIT THE PROJECT.

a. Structural supports for electrical equipment.

3.3 APPLICATION

REVISE THIS ARTICLE TO SUIT THE PROJECT. ADD SPECIAL RESTRICTIONS ON APPLICATION METHODS, IF REQUIRED.

A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.

1. Paint colors, surface treatments, and finishes are indicated in the schedules.
2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
3. Provide finish coats that are compatible with primers used.
4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, covers for finned-tube radiation, grilles, and similar components are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.
5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.

BELOW IS OPTIONAL. CONSIDER DELETING.

6. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
7. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
8. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.

DELETE SUBPARA BELOW IF CASEWORK IS PREFINISHED.

9. Finish interior of wall and base cabinets and similar field-finished casework to match exterior.
10. Brackets and Standards: Paint standards before installation of brackets, and allow to dry thoroughly. Paint brackets before installation on standards.
11. Sand lightly between each succeeding enamel or varnish coat.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

INSERT RESTRICTIONS OR LIMITS ON USE OF SPRAY EQUIPMENT IF NECESSARY TO SUIT SPECIAL PROJECT CONDITIONS.

1. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
2. Omit primer on metal surfaces that have been shop primed and touchup painted.
3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.

REVISE PARA BELOW IF THE OWNER'S REQUIREMENTS OR OTHER SPECIAL PROJECT CONDITIONS RESTRICT OR LIMIT USE OF SPRAY EQUIPMENT FOR PAINT APPLICATION. SOME OWNERS PROHIBIT OR RESTRICT THE USE OF SPRAY ON THEIR PROJECTS. SPRAY APPLICATION OF PAINTS CAN DAMAGE SENSITIVE ELECTRONIC OPERATING EQUIPMENT AND MIGHT CAUSE PROBLEMS FOR PERSONNEL IN OCCUPIED BUILDINGS.

C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being painted.
2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required. Spray apply coating to the following items:
   a. Shelf standards and brackets.
   b. Laboratory bench reagent shelving supports and brackets.

D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.

E. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.

USUALLY DELETE BELOW - THIS IS INTENDED FOR ANIMAL ROOMS, BIO-HAZARD ROOMS, OR FOOD-PREPARATION AREAS WHERE PINHOLES IN CONCRETE BLOCK MUST BE ELIMINATED. INDICATE LOCATIONS ON DRAWINGS.

F. Block Filler for Special High-Build, Tile-Like Application: In indicated rooms and areas, apply block filler in accordance with manufacturer's written instructions, and the following special requirements:

1. Below-Ceiling Application: Apply multiple coats of block filler, sufficient in number to fill all voids in concrete masonry walls, in preparation for specified topcoat applications resulting in a finished surface coating that is without voids and tile-like. Apply coating using airless spray followed by back-rolling to force material into voids. Remove excess material by squeegeeing the surface. Remove excess material from masonry joints with a paint brush.

G. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing.

H. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

DELETE FINISHES BELOW IF NONE IS IN THE PROJECT. INDICATE LOCATIONS IN THE FINISH SCHEDULES.

I. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, runs, cloudiness, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.

1. Provide satin finish for final coats.

J. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.

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

3.4 COMMISSIONING

A. Perform the commissioning activities as outlined in the Division 1 Section titled Commissioning and other requirements of the Contract Documents.

3.5 ADJUSTING, CLEANING, PROTECTION

A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site.

DELETE SUBPARA BELOW IF FINAL CLEANING IS NOT DONE BY THE PAINTER.

1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.
2. Dispose wash water from latex paint to the sanitary sewer. Excess latex paint shall be salvaged for reuse or solidified for disposal with other construction materials. Dry empty latex paint cans and dispose with other construction materials. Contact UM OSEH Hazardous Materials (734-763-4568) to arrange for disposal of alkyd paints and solvents.

B. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.

C. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.

1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

USE THE SCHEDULES BELOW AS A GUIDE ONLY. SEE MANUFACTURER'S CATALOGS OR AIABAS SECTION B09900 FOR ADDITIONAL INFORMATION AND SELECTIONS, INCLUDING ODOR-FREE AND "GREEN" COATINGS.

3.6 INTERIOR PAINT SCHEDULE

A. Interior Paint Systems, General: Products of Benjamin Moore are listed below, unless otherwise indicated. Provide indicated products or, subject to compliance with requirements, equivalent products of other approved manufacturers. Apply coatings at manufacturer's recommended spreading rate to achieve indicated dry film thicknesses.

1. Where "Industrial" coating is indicated, provide Moore's "Industrial and Maintenance Coatings" products; or equivalent of other, listed approved manufacturers.
2. Where "Professional" coating is indicated, provide Moore's "Professional Coatings" products; or equivalent of other, listed approved manufacturers.

ADD COLOR INFORMATION TO EACH PRODUCT IF SCHEDULED HERE.

RETAIN ONE OF THE FOLLOWING 3 OPTIONS

B. Colors: Match colors indicated in "Schedule" articles of this Section, and as follows:

C. Colors: Match colors indicated in "Finish Schedule" on Drawings, and as follows:

IF COLORS ARE INCLUDED IN A SEPARATE DIVISION 9 ROOM FINISH SCHEDULE SECTION USE OPTION BELOW.

D. Colors: Match colors indicated in Finish Schedule Section and as follow:.

ALWAYS RETAIN BELOW

1. Fire suppression system piping: High-gloss "OSHA" red.

GENERALLY INCLUDE BELOW. NOTE THAT COLOR CODING OF PLUMBING PIPE IS NOT REQUIRED.

2. Paint uninsulated piping, ductwork and conduit to match wall or ceiling color to which it is mounted.

E. Concrete (non-wear surfaces): Provide indicated "Professional" or "Industrial" coating systems over interior concrete and brick masonry surfaces:

BELOW IS A LOW-LUSTER (EGGSHELL OR SATIN), ACRYLIC-ENAMEL FINISH OVER INTERIOR CONCRETE AND OTHER CEMENTITIOUS SURFACES.

1. Low-Luster, Acrylic Blended Latex Finish: Two finish coats over a primer.
   a. Primer Coat: Acrylic; total dry thickness 7 mils.
      1) Insl-X AquaPruf Masonry Waterproofer XA12-01.

SELECT PRIMER ABOVE OR ONE OF TWO LISTED BELOW. ABOVE FOR SEVERE MOISTURE CONDITIONS (WALLS ONLY); IT IS FROM A COMPANY OWNED BY BENJAMIN MOORE AND IS COMPATIBLE WITH BENJAMIN MOORE PRODUCTS.

   b. Primer Coat: 100% acrylic, interior primer; total dry film thickness of not less than 0.95 mils.
      1) Super Spec Masonry Sealer N066.

USE PRIMER ABOVE ON UNPAINTED CONCRETE. CONSIDER USE OF PRIMER BELOW ON PREVIOUSLY PAINTED SURFACES.

   a. Primer: Latex-based, interior primer; total dry film thickness of not less than 1.2 mils.
      1) Super Spec Latex Enamel Undercoater & Primer Sealer 253.
   b. Finish Coats: Eggshell, acrylic-latex, interior enamel; total dry film thickness of not less than 2.6 mils.
      1) Super Spec Latex Eggshell Enamel 274.
      2) Color: SELECT.

BELOW IS A SEMI-GLOSS, ACRYLIC-ENAMEL FINISH OVER INTERIOR CONCRETE AND OTHER CEMENTITIOUS SURFACES.

2. Semi-Gloss, Vinyl Acrylic Latex Finish: Two finish coats over a primer.
   a. Primer Coat: Acrylic; total dry thickness 7 mils.
      1) Insl-X AquaPruf Masonry Waterproofer XA12-01.

SELECT PRIMER ABOVE OR ONE OF TWO LISTED BELOW. ABOVE FOR SEVERE MOSITURE CONDITIONS; IT IS FROM A COMPANY OWNED BY BENJAMIN MOORE AND IS COMPATIBLE WITH BENJAMIN MOORE PRODUCTS.

   b. Primer Coat: 100% acrylic, interior primer; total dry film thickness of not less than 0.95 mils.
      1) Super Spec Masonry Sealer N066.

USE PRIMER ABOVE ON UNPAINTED CONCRETE. CONSIDER USE OF PRIMER BELOW ON PREVIOUSLY PAINTED SURFACES

   c. Primer: Latex-based, interior primer; total dry film thickness of not less than 1.2 mils.
      1) Super Spec Latex Enamel Undercoater & Primer Sealer 253.
   d. Finish Coats: Semi-gloss, acrylic-latex, interior enamel; total dry film thickness of not less than 2.2 mils.
      1) Super Hide Latex Semi-Gloss Enamel 283.
      2) Color: SELECT.

BELOW IS A VOC-COMPLIANT SEMI-GLOSS WATERBORNE EPOXY FINISH FOR CONCRETE AND OTHER CEMENTITIOUS SURFACES. IT PROVIDES GOOD CHEMICAL AND ABRASION RESISTANCE, GOOD CLEANABILITY AND WIDE COLOR RANGE.

3. Semi-Gloss, Acrylic Epoxy Finish: Two finish coats over a primer.
   a. Primer Coat: Acrylic; total dry thickness 7 mils.
      1) Insl-X AquaPruf Masonry Waterproofer XA12-01.

SELECT PRIMER ABOVE OR BELOW. ABOVE FOR SEVERE MOISTURE CONDITIONS; IT IS FROM A COMPANY OWNED BY BENJAMIN MOORE AND IS COMPATIBLE WITH BENJAMIN MOORE PRODUCTS.

   b. Primer Coat: 100% acrylic, interior primer; total dry film thickness of not less than 0.95 mils.
      1) Super Spec Masonry Sealer N066.
   c. Finish Coats: Semi-gloss, two-component 1acrylic epoxy coating; total dry film thickness of not less than 3.0 mils.
      1) Super Spec HP Acrylic Epoxy Coating P43-86.
      2) Color: SELECT.

BELOW IS A NON-VOC-COMPLIANT TILE-LIKE EPOXY FINISH OVER INTERIOR CONCRETE. COLOR CHOICES MAY BE LIMITED. DO NOT USE FOR MOST APPLICATIONS (SEE DESIGN GUIDELINE 09900 FOR PERMISSIBLE EXCEPTIONS). IF USING IN OCCUPIED BUILDINGS REVIEW CAREFULLY THE IMPACT ON BUILDING OCCUPANTS AND SPECIAL WORK RESTRICTIONS, DUE TO THE PRODUCTION OF TOXIC FUMES. CONSIDER OFF-HOUR APPLICATION.

4. Polyamide Epoxy High Gloss Coating: Two finish coats; no primer required
   a. Finish Coats: High gloss two-component polyamide epoxy; total dry thickness 4.0 mils.
      1) Super Spec HP Polyamide Epoxy Coating P36.
      2) Color: SELECT.

F. Concrete (wear surfaces): Provide the indicated "Industrial" coating systems over interior concrete floor surfaces:

BELOW IS A 100% SOLIDS LOW-VOC FULL-GLOSS TWO-COMPONENT WATERBORNE AMINE CURED EPOXY ENAMEL FINISH OVER INTERIOR CONCRETE FLOORS SUBJECT TO MODERATE WEAR AND CHEMICAL ATTACK. IF USING IN OCCUPIED BUILDINGS REVIEW CAREFULLY THE IMPACT ON BUILDING OCCUPANTS AND SPECIAL WORK RESTRICTIONS, DUE TO THE PRODUCTION OF TOXIC FUMES. CONSIDER OFF-HOUR APPLICATION. DELETE SAND IN TOP COAT IF SMOOTH FINISH IS DESIRED.

1. High Gloss 100% Solids Epoxy Finish: Two finish coats over an undercoat.

SELECT PRIMER BELOW FOR NEW OR UNCOATED CONCRETE AND MODIFY SENTENCE ABOVE TO DELETE REFERENCE TO AN UNDERCOAT. PREVIOUSLY PAINTED CONCRETE DOES NOT NEED A PRIMER.

   a. Undercoat: Semi gloss, moisture-tolerant, waterborne polyamide epoxy sealer; total dry thickness 1.5 mils.
      1) Super Spec HP Fast Dry Epoxy Floor Sealer/Finish P41.
   b. Finish Coats: Semi-gloss polyamide epoxy with sand admixture to produce light non-slip texture; total dry thickness 2.5 mils.
      1) Super Spec HP Anti-Slip Aggregate P67.
      2) Super Spec HP 100% Solids Floor Epoxy P40.

3) Color: SELECT.

G. Concrete Masonry Units: Provide the indicated "Professional" or "Industrial" coating systems over interior concrete masonry block units:

BELOW IS A LOW-LUSTER (EGGSHELL OR SATIN), ACRYLIC-ENAMEL FINISH OVER INTERIOR CONCRETE MASONRY BLOCK UNITS.

1. Low-Luster, Acrylic-Enamel Finish: Two finish coats over a block filler for new work.

A SECOND COAT OF BLOCK FILLER MAY BE NEEDED OVER VERY COARSE CONCRETE MASONRY SUBSTRATES. MOST MFRS RECOMMEND TEST PAINTING AN INCONSPICUOUS AREA BEFORE APPLYING PAINT.

a. Block Filler (new work only): High build latex block filler; dry film thickness of not less than 8.5 mils.
   1) Super Spec Masonry Hi-Build Block Filler 206.

ABOVE PRODUCT FOR NEW OR UNCOATED MASONRY, BELOW PRIMER FOR PREVIOUSLY PAINTED SURFACES.

b. Primer (over existing painted surfaces): Acrylic-latex primer; dry film thickness of not less than 1.2 mils.
   1) Fresh Start Interior/Exterior Latex Primer 023-00.

c. Finish Coats: Low-luster (eggshell), acrylic-latex, interior enamel; total dry film thickness of not less than 2.6 mils.
   1) Super Spec Latex Eggshell Enamel 274.
   2) Color: SELECT.

2. Semi-Gloss, Vinyl Acrylic Latex Finish: Two finish coats (over a block filler for new work).

A SECOND COAT OF BLOCK FILLER MAY BE NEEDED OVER VERY COARSE CONCRETE MASONRY SUBSTRATES. MOST MFRS RECOMMEND TEST PAINTING AN INCONSPICUOUS AREA BEFORE APPLYING PAINT.

a. Block Filler (new work only): High build latex block filler; total dry film thickness of not less than 8.5 mil.
   1) SuperSpec Masonry Hi-Build Block Filler 206.

ABOVE PRODUCT FOR NEW OR UNCOATED MASONRY, BELOW PRIMER FOR PREVIOUSLY PAINTED SURFACES.

a. Primer (over existing painted surfaces): Acrylic-latex primer; dry film thickness of not less than 1.2 mils.
   1) Fresh Start Interior/Exterior Latex Primer 023-00.

b. Finish Coats: Semi-gloss, acrylic-latex, interior enamel; total dry film thickness of not less than 2.0 mils.
   1) Super Hide Latex Semi-Gloss Enamel 283.
   2) Color: SELECT.

BELOW IS A VOC-COMPLIANT WATERBORNE EPOXY FINISH OVER INTERIOR CONCRETE.

3. Semi-Gloss, Acrylic Epoxy Finish: Two finish coats over a primer.

TWO FINISH COATS OVER A BLOCK FILLER FOR NEW WORK.

a. Block Filler (new work only): Waterborne high solids epoxy block filler; dry film thickness of not less than 9.8 mils.
1) Waterborne Epoxy Block filler P31.

ABOVE PRODUCT FOR NEW OR UNCOATED MASONRY, BELOW PRIMER FOR PREVIOUSLY PAINTED SURFACES.

b. Primer (over existing painted surfaces): Acrylic-latex primer; dry film thickness of not less than 1.2 mils.
1) Fresh Start Interior/Exterior Latex Primer 023-00.

c. Finish Coats: Semi-gloss, two-component acrylic epoxy coating; total dry film thickness of not less than 3.0 mils.
1) Super Spec HP Acrylic Epoxy Coating P43-86.

BELOW IS A HIGH-BUILD NON-VOC COMPLIANT SYSTEM FOR ELIMINATING CMU PINHOLES AND CREATING A TILE-LIKE SURFACE. THIS SYSTEM IS ONLY APPROPRIATE FOR ANIMAL ROOMS AND BIO-HAZARD ROOMS WHERE PINHOLES ARE NOT ACCEPTABLE. IF USING IN OCCUPIED BUILDINGS REVIEW CAREFULLY THE IMPACT ON BUILDING OCCUPANTS AND SPECIAL WORK RESTRICTIONS, DUE TO THE PRODUCTION OF TOXIC FUMES. CONSIDER OFF-HOUR APPLICATION.

4. High Gloss, High-Build, Polyamide Epoxy Enamel Finish: Two finish coats over multiple coats of block filler.

CONSIDER ADDING THE "FRESH START" PRIMER IN 3B ABOVE AS A BARRIER COAT BETWEEN NEW FILLER AND PREVIOUSLY PAINTED SURFACES WHERE APPLICABLE.

a. Block Filler: Waterborne high solids epoxy block filler; dry film thickness of not less than 9.8 mils per coat.
1) Waterborne Epoxy Block Filler P31.

b. Second and Third Coats: High gloss two component polyamide epoxy enamel; total dry film thickness of not less than 4 mils.
1) Super Spec HP Polyamide Epoxy P36.
2) Color: SELECT.

H. Gypsum Board and Plaster: Provide the indicated "Professional" or "Industrial" coating systems over interior gypsum board and plaster surfaces:

BELOW IS A LOW-LUSTER (EGGSHELL OR SATIN), ACRYLIC-ENAMEL FINISH OVER INTERIOR GYPSUM BOARD WALL AND CEILING SURFACES.

1. Low-Luster, Acrylic-Enamel Finish: Two finish coats over a primer.
a. Primer: Latex-based, interior primer; total dry film thickness of not less than 1.2 mils.
1) Super Spec Latex Enamel Undercoater & Primer Sealer 253.

b. Finish Coats: Low-luster (eggshell), acrylic-latex, interior enamel; total dry film thickness of not less than 2.6 mils.
1) Super Spec Latex Eggshell Enamel 274.
2) Color: SELECT.

BELOW IS A SEMIGLOSS, ACRYLIC-ENAMEL FINISH OVER INTERIOR GYPSUM BOARD WALL AND CEILING SURFACES.

2. Semigloss, Acrylic-Enamel Finish: Two finish coats over a primer.
   a. Primer: Latex-based, interior primer; total dry film thickness of not less than 1.2 mils.
      1) Super Spec Latex Enamel Undercoater & Primer Sealer 253.
   b. Finish Coats: Semigloss, acrylic-latex, interior enamel; total dry film thickness of not less than 2.4 mils.
      1) Super Spec Latex Semigloss Enamel 276.
      2) Color: SELECT.

BELOW IS A VOC-COMPLIANT WATERBORNE EPOXY FINISH WITH GOOD WATER RESISTANCE FOR APPLICATION ON INTERIOR GYPSUM BOARD WALL AND CEILING SURFACES. DO NOT USE FOR MOST APPLICATIONS (SEE DESIGN GUIDELINE 09900 FOR PERMISSIBLE EXCEPTIONS).

3. Waterborne Acrylic Epoxy Finish: Two finish coats over a primer.
   a. Primer: Acrylic-latex primer; dry film thickness of not less than 1.2 mils.
      1) Fresh Start Interior/Exterior Latex Primer 023-00.
   b. Finish Coats: Semi-gloss, two-component acrylic epoxy coating; total dry film thickness of not less than 3.0 mils.
      1) Super Spec HP Acrylic Epoxy Coating P43-86.

BELOW IS A HIGH-BUILD SYSTEM FOR ELIMINATING CMU PINHOLES AND CREATING A TILE-LIKE SURFACE. THIS SYSTEM IS ONLY APPROPRIATE FOR ANIMAL ROOMS AND BIO-HAZARD ROOMS WHERE PINHOLES ARE NOT ACCEPTABLE. IF USING IN OCCUPIED BUILDINGS REVIEW CAREFULLY THE IMPACT ON BUILDING OCCUPANTS AND SPECIAL WORK RESTRICTIONS, DUE TO THE PRODUCTION OF TOXIC FUMES. CONSIDER OFF-HOUR APPLICATION.

4. High Gloss, High-Build, Polyamide Epoxy Enamel Finish: Two finish coats over primer.
   a. Finish Coats: Full-gloss polyamide epoxy enamel; total dry film thickness of not less than 4 mils.
      1) Super Spec HP Polyamide Epoxy P36.
      2) Color: SELECT.

I. Woodwork - Opaque Finish: Provide the indicated "Professional" paint coating systems over interior wood surfaces:

BELOW IS A LOW-LUSTER (EGGSHELL), ACRYLIC-ENAMEL FINISH OVER INTERIOR GYPSUM BOARD WALL AND CEILING SURFACES.

1. Low-Luster (Eggshell), Acrylic-Enamel Finish: Two finish coats over a wood undercoater.
   a. Undercoat: Acrylic blended latex interior wood undercoater; total dry film thickness of not less than 0.8 mils.
      1) Super Hide Interior Latex Primer/Undercoater 284.
   b. Finish Coats: Low-luster (eggshell), acrylic-latex, interior enamel; total dry film thickness of not less than 2.0 mils.

1) Super Hide Latex Eggshell Enamel C286.
2) Color: SELECT.

BELOW IS A SEMIGLOSS, ACRYLIC-ENAMEL FINISH OVER INTERIOR GYPSUM BOARD WALL AND CEILING SURFACES.

2. Semigloss, Acrylic-Enamel Finish: Two finish coats over a wood undercoater.
   a. Undercoat: Acrylic blended latex interior wood undercoater; total dry film thickness of not less than 0.8 mils.
      1) Super Hide Interior latex Primer/Undercoater 284.
   b. Finish Coats: Semi-gloss, acrylic-latex, interior enamel; total dry film thickness of not less than 2.0 mils.
      1) Super Hide Latex Semi-Gloss Enamel 283.
      2) Color: SELECT.

TYPICALLY, DELETE BELOW AND SPECIFY SHOP FINISHES IN WOODWORK OR WOOD DOOR SECTION. USE BELOW ONLY IF THERE ARE NO OTHER OPTIONS.

J. Stained Woodwork: Provide the indicated stained finishes over new, interior woodwork:

PRODUCTS BELOW ARE WATERBORNE VOC COMPLIANT FINISHES.

1. Waterborne, Low-Luster, Polyurethane: Two finish coats of solvent based, clear polyurethane over an alkyd, interior wood stain. Wipe wood filler before applying stain.

DELETE PASTE-WOOD FILLER COAT BELOW ON TIGHT-GRAINED WOOD SUCH AS BIRCH. RETAIN FILLER COAT ON OAK AND WALNUT AND SIMILAR OPEN-GRAIN WOODS.

   a. Filler Coat: Paste-wood filler.
      1) Benwood Interior Wood Finishes Wood Grain Filler 238.
   b. Stain Coat: Waterborne, interior wood stain.
      1) Benwood Interior Wood Finishes Waterborne Stain 205.
      2) Color: SELECT.
   c. First and Second Finish Coats: Waterborne, acrylic polyurethane finish.
      1) Benwood Stays Clear Low Luster N423.

BELOW IS A WATERBORNE CLEAR HIGH-GLOSS POLYURETHANE FINISH OVER INTERIOR WOODWORK STAINED WITH A WATERBORNE STAIN.

2. Waterborne, High Gloss, Polyurethane: Two finish coats of solvent based, clear polyurethane over an alkyd, interior wood stain. Wipe wood filler before applying stain.

DELETE PASTE-WOOD FILLER COAT BELOW ON TIGHT-GRAINED WOOD SUCH AS BIRCH. RETAIN FILLER COAT ON OAK AND WALNUT AND SIMILAR OPEN-GRAIN WOODS.

   a. Filler Coat: Paste-wood filler.
      1) Benwood Interior Wood Finishes Wood Grain Filler 238.
   b. Stain Coat: Water base interior wood stain.
      1) Benwood Interior Wood Finishes Waterborne Stain 205.

2) Color: SELECT.

c. First and Second Finish Coats: Waterborne, acrylic polyurethane finish.

1) Benwood Stays Clear Gloss N422.

TYPICALLY, DELETE BELOW AND SPECIFY SHOP FINISHES IN WOODWORK OR WOOD DOOR SECTION. USE BELOW ONLY IF THERE ARE NO OTHER OPTIONS.

K. Natural-Finish Woodwork: Provide the indicated clear finishes over new, interior woodwork:

BELOW IS A WATERBORNE CLEAR LOW-LUSTER POLYURETHANE FINISH OVER INTERIOR WOODWORK.

1. Waterborne, Low-Luster Polyurethane Finish: 2 finish coats of solvent based, clear-satin polyurethane.

DELETE PASTE-WOOD FILLER COAT BELOW ON TIGHT-GRAINED WOOD SUCH AS BIRCH. RETAIN FILLER COAT ON OAK AND WALNUT AND SIMILAR OPEN-GRAIN WOODS.

a. Filler Coat: Paste-wood filler.

1) Benwood Interior Wood Finishes Wood Grain Filler 238.

b. First and Second Finish Coats: Waterborne, acrylic polyurethane finish.

1) Benwood Stays Clear Low Luster N423.

BELOW IS A WATERBORNE CLEAR HIGH-GLOSS POLYURETHANE FINISH OVER INTERIOR WOODWORK.

2. Waterborne, High-Gloss Polyurethane Finish: 2 finish coats of waterborne, clear, high-gloss polyurethane.

DELETE PASTE-WOOD FILLER COAT BELOW ON TIGHT-GRAINED WOOD SUCH AS BIRCH. RETAIN FILLER COAT ON OAK AND WALNUT AND SIMILAR OPEN-GRAIN WOODS.

a. Filler Coat: Paste-wood filler.

1) Benwood Interior Wood Finishes Wood Grain Filler 238.

b. First and Second Finish Coats: Waterborne, acrylic polyurethane finish.

1) Benwood Stays Clear Gloss N422.

L. Ferrous Metal: Provide the indicated "Professional" or "Industrial" coating systems over factory-primed ferrous metal:

BELOW FOR A LOW-LUSTER (EGGSHELL OR SATIN), ACRYLIC-ENAMEL FINISH OVER INTERIOR FERROUS METAL.

1. Low-Luster, Acrylic-Enamel Finish: Two finish coats over a factory-applied primer, or indicated primer as applicable.

a. Primer (for factory-unprimed work): Waterborne, rust-inhibitive, acrylic primer; total dry film thickness of not less than 2.0 mils.

1) SuperSpec HP Acrylic Metal Primer P04.

b. Finish Coats: Low-luster (eggshell), acrylic-latex, interior enamel; total dry film thickness of not less than 2.6 mils.

1) Super Spec Latex Eggshell Enamel 274.

2) Color: SELECT.

BELOW IS AN ACRYLIC-LATEX-BASED, SEMIGLOSS ENAMEL FINISH OVER INTERIOR FERROUS METAL. THIS FINISH IS AN ALTERNATIVE TO SOLVENT-BASED, SEMIGLOSS ENAMELS.

2. Semigloss, Acrylic-Enamel Finish: Two finish coats over a factory-applied primer, or indicated primer as applicable.
   a. Primer (for factory-unprimed work): Waterborne, rust-inhibitive, acrylic primer; total dry film thickness of not less than 2.0 mils.
      1) SuperSpec HP Acrylic Metal Primer P04.
   b. Finish Coats: Semi-gloss, acrylic-latex, interior enamel; total dry film thickness of not less than 2.0 mils.
      1) Super Hide Latex Semi-Gloss Enamel 283.
      2) Color: SELECT.

BELOW IS A VOC COMPLIANT HIGH GLOSS WATERBORNE EPOXY FINISH OVER INTERIOR FERROUS METAL.

3. Epoxy Finish: Two finish coats over a factory-applied primer coat, or indicated primer as applicable.
   a. Primer for Factory-Unprimed Metals: Waterborne acrylic epoxy primer; total dry film thickness of not less than 2 mils.
      1) Waterborne Polyamide Epoxy Primer P42-70.
   b. Finish Coats: Full-gloss acrylic epoxy; total dry film thickness of not less than 2.0 mils.
      1) Super Spec HP Waterborne Polyamide Epoxy High Gloss Enamel P42.
      2) Color: SELECT.

M. Zinc-Coated Metal: Provide the indicated "Professional" or "Industrial" coating systems over zinc-coated metal:

WATER-BASED PRODUCTS ARE LISTED BELOW. BELOW IS A LOW-LUSTER (EGGSHELL OR SATIN), ACRYLIC-ENAMEL FINISH OVER INTERIOR GALVANIZED METAL.

1. Low-Luster, Acrylic-Enamel Finish: Two finish coats over a factory-applied primer, or indicated primer as applicable.
   a. Primer (for factory-unprimed work): Quick-drying, rust-inhibitive, acrylic-enamel primer; total dry film thickness of not less than 1.8 mils.
      1) IronClad Alkyd Low Lustre Metal and Wood Enamel 363.
   b. Second and Third Coats: Low-luster (eggshell), acrylic-latex, interior enamel; total dry film thickness of not less than 2.6 mils.
      1) Super Spec Latex Eggshell Enamel 274.
      2) Color: SELECT.

BELOW IS AN ACRYLIC-LATEX-BASED, SEMIGLOSS ENAMEL FINISH OVER INTERIOR GALVANIZED METAL. THIS FINISH IS AN ALTERNATE TO SOLVENT-BASED, SEMIGLOSS ENAMELS.

2. Semigloss, Acrylic-Enamel Finish: Two finish coats over a factory-applied primer, or indicated primer as applicable.

a. Primer (for factory-unprimed work): Quick-drying, rust-inhibitive, alkyd-based primer; total dry film thickness of not less than 1.8 mils.
   1) IronClad Alkyd Low Lustre Metal and Wood Enamel 363.
b. Second and Third Coats: Semi-gloss, acrylic-latex, interior enamel; total dry film thickness of not less than 2.0 mils.
   1) Super Hide Latex Semi-Gloss Enamel 283.
   2) Color: SELECT.

BELOW IS A HIGH GLOSS WATERBORNE EPOXY FINISH OVER INTERIOR GLAVANIZED METAL.

3. Epoxy Finish: Two finish coats over a factory-applied primer coat, or indicated primer as applicable.
   a. Primer (for factory-unprimed zinc-coated metal): Waterborne acrylic epoxy primer; total dry film thickness of not less than 4 mils.
      1) Waterborne Polyamide Epoxy Primer P42-70.
   b. Finish Coats: Full-gloss acrylic epoxy; total dry film thickness of not less than 3.0 mils.
      1) Super Spec HP Waterborne Polyamide Epoxy High Gloss Enamel P42.
      2) Color: SELECT.

3.7 EXTERIOR PAINT SCHEDULE

A. Exterior Paint Systems, General: Products of Benjamin Moore are listed below, unless otherwise indicated. Provide indicated products or, subject to compliance with requirements, equivalent products of other approved manufacturers. Apply coatings at manufacturer's recommended spreading rate to achieve indicated dry film thicknesses.

1. Where "Industrial" coating is indicated, provide Moore's "Industrial and Maintenance Coatings" products; or equivalent of other, listed approved manufacturers.
2. Where "Professional" coating is indicated, provide Moore's "Professional Coatings" products; or equivalent of other, listed approved manufacturers.

ADD COLOR INFORMATION TO EACH PRODUCT IF SCHEDULED HERE.

BELOW IS A FLAT VINYL ACRYLIC FINISH OVER EXTERIOR CONCRETE AND STUCCO. NOT ALL MFRS REQUIRE USE OF A PRIMER OVER THIS SUBSTRATE.

B. Concrete and Cement Plaster (for Non-Wear Surfaces): Provide the indicated "Professional" coating systems over exterior concrete, cement plaster surfaces:

1. Flat Alkyd-Modified Vinyl Acrylic Latex Finish: Two finish coats over a primer.
   a. Primer: Alkali-resistant, exterior, acrylic-latex sealer; total dry film thickness of not less than 0.7 mils.
      1) Acrylic Masonry Sealer 066.

b. Finish Coats: Flat, exterior, alkyd modified vinyl acrylic latex paint; total dry film thickness of not less than 2.4 mils.
1) Super Spec Flat Latex House Paint 171.
2) Color: SELECT.

C. Concrete Masonry Units: Provide the indicated "Professional" coating systems over exterior concrete masonry units:

BELOW IS A FLAT ACRYLIC FINISH OVER EXTERIOR CONCRETE MASONRY BLOCK.

1. Flat Latex Based Finish: Two finish coats over a block filler.
a. Block Filler: High-performance, latex block filler; total dry mill thickness of not less than 8.1 mils.
1) Super Craft Latex Block Filler 285.
b. Finish Coats: Flat, exterior, acrylic-latex paint; total dry film thickness of not less than 2.4 mils.
1) Super Spec Flat Latex House Paint 171.
2) Color: SELECT.

D. Exterior Gypsum Soffit Board: Provide the indicated "Professional" coating systems over exterior gypsum soffit board:

BELOW IS A FLAT ACRYLIC FINISH OVER EXTERIOR GYPSUM SOFFIT BOARDS.

1. Flat Alkyd Modified Vinyl Acrylic Latex Finish: Two system finish coats over a primer.
a. Primer: Exterior, alkyd primer; total dry film thickness of not less than 1.8 mils.
1) Super Spec Alkyd Exterior Primer 176.
b. Finish Coats: Flat, exterior, alkyd modified vinyl acrylic latex paint; total dry film thickness of not less than 2.4 mils.
1) Super Spec Flat Latex House Paint 171.
2) Color: SELECT.

BELOW IS A LOW-LUSTER (EGGSHELL OR SATIN) ACRYLIC FINISH OVER EXTERIOR GYPSUM SOFFIT BOARDS.

2. Low Luster Acrylic Blended Latex Finish: Two system finish coats over a primer.
a. Primer: Exterior, alkyd primer; total dry film thickness of not less than 1.8 mils.
1) Super Spec Alkyd Exterior Primer 176.
b. Finish Coats: Flat, exterior, alkyd modified vinyl acrylic latex paint; total dry film thickness of not less than 2.0 mils.
1) Super Spec Low Luster Latex House Paint 185.
2) Color: SELECT.

E. Wood Trim: Provide the indicated "Professional" coating systems over exterior wood trim:

BELOW IS A WATER-BASED, FLAT, ACRYLIC-ENAMEL FINISH OVER EXTERIOR WOOD TRIM, INCLUDING BLEEDING WOODS SUCH AS CEDAR AND REDWOOD.

1. Flat Alkyd Modified Vinyl Acrylic Latex Finish: Two finish coats over a solvent-thinned primer.
   a. Primer: Exterior, solvent-thinned latex primer; total dry film thickness of not less than 1.4 mils.
      1) Moorwhite Primer 100.
   b. Finish Coats: Flat, exterior, alkyd modified vinyl acrylic latex paint; total dry film thickness of not less than 2.4 mils.
      1) Super Spec Flat Latex House Paint 171.
      2) Color: SELECT.

F. Ferrous Metal: Provide the indicated "Professional" or "Industrial" coating systems over exterior ferrous metal.

BELOW IS A LOW LUSTER, ALKYD-ENAMEL FINISH OVER EXTERIOR NON-RUSTED FERROUS METAL.

1. Low Luster, Alkyd-Enamel Finish: Two finish coats over a factory-applied primer, or an alkyd primer as applicable.
   a. Primer (unprimed work only) : Quick-drying, rust-inhibitive, alkyd-based primer, as recommended by the manufacturer for this substrate; total dry film thickness of not less than 1.3 mils.
      1) IronClad Alkyd Low Luster Metal and Wood Enamel 163.
   b. Finish Coats: Semigloss, alkyd, exterior enamel; total dry film thickness of not less than 2.6 mils.
      1) IronClad Alkyd Low Luster Metal and Wood Enamel 163.
      2) Color: SELECT.

BELOW IS A HIGH GLOSS, ALKYD-ENAMEL FINISH OVER EXTERIOR NON-RUSTED FERROUS METAL.

2. High Gloss, Alkyd-Enamel Finish: Two finish coats over a factory-applied primer, or an alkyd primer as applicable.
   a. Primer (unprimed work only) : Quick-drying, rust-inhibitive, alkyd-based primer, as recommended by the manufacturer for this substrate; total dry film thickness of not less than 1.3 mils.
      1) IronClad Alkyd Low Luster Metal and Wood Enamel 163.
   b. Finish Coats: High gloss, alkyd, exterior enamel; total dry film thickness of not less than 3.4 mils.
      1) Impervo High Gloss Enamel 133.
      2) Color: SELECT.

BELOW IS A POLYURETHANE BASED, FULL GLOSS FINISH OVER EXTERIOR FERROUS METAL. THIS IS A DURABLE, FADE-PROOF EXTERIOR COATING SYSTEM SUITABLE FOR HANDRAILS AND OTHER EXPOSED-TO-ABUSE WORK.

3. Polyurethane Finish: Two finish coats over an alkyd primer.
   a. Primer: Alkyd primer formulated with a rust-inhibiting agent; total dry film thickness of not less than 2.0 mils.
      1) Alkyd Metal Primer M06.
   b. First and Second Coats: High gloss urethane alkyd enamel; total dry film thickness of not less than 4.0 mils.
      1) Urethane Alkyd Enamel M22.
      2) Color: SELECT.

G. Zinc-Coated Metal: Provide the indicated "Professional" or "Industrial" coating systems over exterior zinc-coated (galvanized) metal surfaces:

BELOW IS A LOW-LUSTER, ALKYD-ENAMEL FINISH OVER EXTERIOR GALVANIZED METAL.

1. Low Luster, Alkyd-Enamel Finish: Two finish coats over a factory-applied primer, or a galvanized metal primer as applicable.
   a. Primer (unprimed work only) : Quick-drying, rust-inhibitive, alkyd-based primer, as recommended by the manufacturer for this substrate; total dry film thickness of not less than 1.3 mils.
      1) IronClad Alkyd Low Luster Metal and Wood Enamel 163.
   b. Finish Coats: Low luster, alkyd, exterior enamel; total dry film thickness of not less than 2.6 mils.
      1) IronClad Alkyd Low Luster Metal and Wood Enamel 163.
      2) Color: SELECT.

BELOW IS A HIGH GLOSS, ALKYD-ENAMEL FINISH OVER EXTERIOR GALVANIZED METAL.

2. High Gloss, Alkyd-Enamel Finish: Two finish coats over a factory-applied primer, or a galvanized metal primer as applicable.
   a. Primer (for factory-unprimed work): Quick-drying, rust-inhibitive, alkyd-based primer; total dry film thickness of not less than 1.6 mils.
      1) IronClad Alkyd Low Lustre Metal and Wood Enamel 163.
   b. Second and Third Coats: High gloss, exterior, alkyd enamel; total dry film thickness of not less than 3.4 mils.
      1) Impervo Alkyd High Gloss Metal & Wood Enamel 133.

BELOW IS A POLYURETHANE BASED, HIGH GLOSS FINISH OVER EXTERIOR FERROUS METAL. THIS IS A DURABLE, FADE-PROOF EXTERIOR COATING SYSTEM SUITABLE FOR HANDRAILS AND OTHER EXPOSED-TO-ABUSE WORK.

3. Polyurethane Finish: Two finish coats over a acrylate primer.
   a. Primer: Elastomeric acrylate primer formulated with a rust-inhibiting agent; total dry film thickness of not less than 0.1 mils.
      1) Bonding Primer M15.
   b. First and Second Finish Coats: High gloss urethane alkyd enamel; total dry film thickness of not less than 4.0 mils.
      1) Urethane Alkyd Enamel M22.
      2) Color: SELECT.

H. Aluminum: Provide the indicated "Industrial" coating system over exterior aluminum surfaces:

BELOW IS A POLYURETHANE BASED, HIGH GLOSS FINISH OVER EXTERIOR FERROUS METAL. THIS IS A DURABLE, FADE-PROOF EXTERIOR COATING SYSTEM SUITABLE FOR HANDRAILS AND OTHER EXPOSED-TO-ABUSE WORK.

1. Polyurethane Finish: Two finish coats over a acrylate primer.

a. Primer: Elastomeric acrylate primer formulated with a rust-inhibiting agent; total dry film thickness of not less than 0.1 mils.
   1) Bonding Primer M15.
b. Finish Coats: High gloss urethane alkyd enamel; total dry film thickness of not less than 4.0 mils.
   1) Urethane Alkyd Enamel M22.
   2) Color: SELECT.

END OF SECTION 09900