SECTION 09910

COMMERCIAL PAINTING

1.GENERAL

1.1. SECTION INCLUDES

A. Interior and exterior painting, including surface preparation for projects in the United States.

1.2. RELATED SECTIONS

A. Section 05500 - Metal Fabrications.

B. Section 06200 - Finish Carpentry.

C. Section 06400 - Architectural Woodwork.

1.3. REFERENCES

A. Green Seal Standard GS-11; May 20, 1993.

B. US Green Building Council, (USGBC) - Green Seal standards for LEED paint credits.

C. Occupational Safety and Health Act (OSHA) - Safety Standards.

D. American National Standards Institute (ANSI) - Performance Standards.

E. Paint Decorating Contractors of America (PDCA) - Application Standard.

F. National Paint and Coatings Association (NPCA) - Gloss Standard.

G. American Society for Testing Materials (ASTM) - Testing Methods.

H. Master Paint Institute (MPI #) - Established paint categories and standards.

I. Ozone Transmission Commission (OTC) - Established levels of Volatile Organic Compounds.

J. SCAQMD 1168 - South Coast Air Quality Management District Rule #1168; October 3, 2003.

K. SSPC (PM1) - Steel Structures Painting Manual, Vol. 1, Good Painting Practice; Society for Protective Coatings; 1993, Third Edition.

L. SSPC (PM2) - Steel Structures Painting Manual, Vol. 2, Systems and Specifications; Society for Protective Coatings; 1995, Seventh Edition.

M. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.

1.4. DEFINITIONS

A. Commercial as used in this Section refers to a product well suited for a commercial application.

B. DFT as used in this Section refers to the Dry Film Thickness of the coating.

C. Enamel refers to any acrylic or alkyd (oil) base paint which dries leaving an eggshell, pearl, satin, semi-gloss or high gloss enamel finish.

D. DTM as used in this Section refers to paint that is applied Direct To Metal.

E. LEED as used in this Section refers to Leadership in Energy and Environmental Design. Products listed meet LEED criteria for environmentally safe interior primers, paints and coatings.

F. OTC as used in this Section refers to the Ozone Transmission Commission. OTC has established the following VOC levels for the Northeastern United States. Products shall meet the following OTC limits for VOC's.
   1. Interior flat paints: 100 grams per liter or less, per gallon.
   2. Interior enamels: 150 grams per liter or less, per gallon.
   3. Interior stains: 250 grams per liter or less, per gallon.
   4. Interior primers: 200 grams per liter or less, per gallon.
   5. Rust preventive coatings: 400 grams per liter or less, per gallon.
   6. Dry fog coatings: 400 grams per liter or less, per gallon.
   7. Floor coatings: 250 grams per liter or less, per gallon.

G. Premium as used in this Section refers to the best quality product "top of the line".

H. VOC as used in this Section refers to Volatile Organic Compounds found in primers, paints, sealers and stains. The level of VOCs appears after each product listed in the Schedule in grams per liter (g/L).

I. Paints are available in a wide range of sheens or glosses, as measured by a gloss meter from a 60 and/or 85 degree angle from vertical, as a percentage of the amount of light that is reflected. The following terms are used to describe the gloss of our products. The list below is provided for general guidance; refer to the technical data sheet for the actual gloss/sheen level for each product.
   1. Flat - Less than 5 Percent.
   2. Eggshell - 5 - 20 Percent.
   3. Satin - 20 - 35 Percent.
   4. Semi-Gloss - 30 - 65 Percent.
   5. Gloss - Over 65 Percent.

1.5. SUBMITTALS

A. Provide submittals prior to commencement of work, allowing 10 days for approval prior to scheduled procurement.

B. Product Data: Provide a complete list of all products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category.
   2. Cross-reference to specified paint system(s) that the product is to be used in; include description of each system.

C. Samples: Submit three paper samples, 5 inches by 7 inches (127mm x 178mm) in size, illustrating selected colors for each color and system selected with specified coats cascaded.

D. Manufacturer's Instructions: Indicate special surface preparation procedures.

E. Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and

coated surfaces.

1.6. QUALITY ASSURANCE

A. Manufacturer Qualifications: All primary products specified in this section will be supplied by a single manufacturer with a minimum of ten years experience.

B. Installer Qualifications: All products listed in this section are to be applied by a Painting Contractor with a minimum of five years demonstrated experience in surface preparation and field application of the same type and scope as specified.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
   1. Mock-up areas designated by Architect.
   2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
   3. Approved mock-up areas will serve as the standard for remaining Work.
   4. Refinish mock-up area as required to produce acceptable Work.

1.7. DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

C. Disposal:
   1. Never pour leftover coating down any sink or drain. Use up material on the job or seal can and store safely for future use.
   2. Do not incinerate closed containers.
   3. For specific disposal or recycle guidelines, contact the local waste management agency or district. Recycle whenever possible.

1.8. PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.9. WARRANTY

A. Inspection of all surfaces to be coated must be done by the manufacturer's representative to insure proper preparation prior to application. All thinners, fillers, primers and finish coatings shall be from the same manufacturer to support a product warranty. Products other than those submitted shall be accompanied by a letter stating its fitness for use and compatibility.

B. At project closeout, provide to the Owner or owner's representative an executed copy of the Manufacturer's standard form outlining the terms and conditions of and any exclusions to their Limited Warranty against Manufacturing Defect.

1.10. EXTRA MATERIALS

A. At project closeout, supply the Owner or owner's representative one gallon of each product for touch-up purposes. Cans shall be clearly marked with color name, number and type of paint.

B. At project closeout, provide the color mixture name and code to the Owner or owner's representative for accurate future color matching.

2.PRODUCTS

2.1. MANUFACTURERS

A. Acceptable Manufacturer: Benjamin Moore and Co., which is located at: 101 Paragon Dr ; Montvale, NJ 07645; Toll Free Tel: 866-708-9181; Email: info@benjaminmoore.com; Web:www.benjaminmoore.com

B. Requests for Substitutions: to be reviewed by Owner and Architect.

2.2. MATERIALS - GENERAL

A. Volatile Organic Compound (VOC) Content:
1. Provide coatings that comply with the most stringent requirements specified in the following:
a. 40 CFR 59, Subpart D-National Volatile Organic Compound Emission Standards for Architectural Coatings.
b. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.

B. Compatibility: Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

2.3. MIXING AND TINTING

A. Except where specifically noted in this section, all paint shall be ready-mixed and pre-tinted. Agitate all paint prior to and during application to ensure uniform color, gloss, and consistency.

B. Thinner addition shall not exceed manufacturer's printed recommendations. Do not use kerosene or other organic solvents to thin water-based paints.

2.4. INTERIOR PAINT SYSTEMS- UNITED STATES

A. CONCRETE - (Walls and Ceilings, Poured Concrete, Precast Concrete, Unglazed Brick, Cement Board, Tilt-Up, Cast-In-Place) including PLASTER - (Walls, Ceilings).
1. Latex Systems:
a. Gloss Finish High Performance:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Ultra Spec D.T.M. Acrylic Gloss Enamel HP28 (142 g/L), MPI # 114, X-Green 114, 154, X-Green 154, 164, LEED 2009, LEED V4.
3. 3rd Coat: Benjamin Moore Ultra Spec D.T.M. Acrylic Gloss Enamel HP28 (142 g/L), MPI # 114, X-Green 114, 154, X-Green 154, 164, LEED 2009, LEED V4.
b. Semi-Gloss Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540

(0 g/L), MPI # 54, X-Green 54, 147, X-Green 147, 141, X-Green 141, LEED 2009, LEED V4.

3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540 (0 g/L), MPI # 54, X-Green 54, 147, X-Green 147, 141, X-Green 141, LEED 2009, LEED V4.

c. Semi-Gloss Finish:
   1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540 (0 g/L), MPI # 54, X-Green 54, 147, 147 X-Green, 141, X-Green 141, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540 (0 g/L), MPI # 54, X-Green 54, 147, X-Green 147, 141, X-Green 141, LEED 2009, LEED V4, CHPS Certified.

d. Semi-Gloss Finish High Performance
   1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540 (0 g/L), MPI # 54, X-Green 54, 147, X-Green 147, 141, X-Green 141, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540 (0 g/L), MPI # 54, X-Green 54, 147, X-Green 147, 141, X-Green 141, LEED 2009, LEED V4, CHPS Certified.

e. Eggshell/ Satin Finish:
   1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Latex Eggshell N538 (0 g/L), MPI # 52, X-Green 52, 145, X-Green 145, 139, X-Green 139, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Latex Eggshell N538 (0 g/L), MPI # 52, X-Green 52, 145, X-Green 145, 139, X-Green 139, LEED 2009, LEED V4, CHPS Certified.

f. Low Sheen Finish:
   1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0 g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0 g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.

g. Flat Finish:
   1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.

2. Alkyd System:
   a. Gloss Finish (Water Base)
      1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.

2. 2nd Coat: Benjamin Moore Advance Waterborne Interior Alkyd High Gloss N794 (48 g/L), MPI # 157, X-Green 157, LEED 2009, LEED V4.
3. 3rd Coat: Benjamin Moore Advance Waterborne Interior Alkyd High Gloss N794 (48 g/L), MPI # 157, X-Green 157, LEED 2009, LEED V4.

b. Semi-Gloss Finish (Water Base):
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Semi-Gloss 793 (48 g/L), LEED 2009, LEED V4, CHPS Certified.
3. 3rd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Semi-Gloss 793 (48 g/L), LEED 2009, LEED V4, CHPS Certified.

c. Eggshell Finish (Water Base):
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Satin 792 (48 g/L), LEED 2009, LEED V4, CHPS Certified.
3. 3rd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Satin 792 (48 g/L), LEED 2009, LEED V4, CHPS Certified.

3. Epoxy Systems (Water Base):

a. Gloss Finish:
1. 1st Coat: Corotech 100% Solid Epoxy Pre-Primer V155 (6 g/L), LEED 2009.
2. 2nd Coat: Corotech Waterborne Amine Epoxy V440 (206 g/L).
3. 3rd Coat: Corotech Waterborne Amine Epoxy V440 (206 g/L).

b. Gloss Finish
1. 1st Coat: Corotech 100% Solid Epoxy Pre-Primer V155 (6 g/L), LEED 2009.
2. 2nd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
3. 3rd Coat: Corotech Acrylic Epoxy V450 (168 g/L).

c. Semi-Gloss Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Semi-Gloss V341 (71 g/L), LEED 2009.
3. 3rd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Semi-Gloss V341 (71 g/L), LEED 2009.

d. Eggshell Finish
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97 g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.
3. 3rd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.

B. METAL: Aluminum, Galvanized.

1. Latex Systems:

a. Semi-Gloss Finish High Performance:
1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540 (0 g/L), MPI # 54, X-Green 54, 147, X-Green 147, 141, X-Green 141,

LEED 2009, LEED V4.

3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Gloss N540 (0 g/L), MPI # 54, X-Green 54, 147, X-Green 147, 141, X-Green 141, LEED 2009, LEED V4.

b. Gloss Finish High Performance:
   1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
   2. 2nd Coat: Benjamin Moore Ultra Spec D.T.M. Acrylic Gloss Enamel HP28 (142 g/L), MPI # 114, X-Green 114, 154, X-Green 154, 164, LEED 2009, LEED V4.
   3. 3rd Coat: Benjamin Moore Ultra Spec D.T.M. Acrylic Gloss Enamel HP28 (142 g/L), MPI # 114, X-Green 114, 154, X-Green 154, 164, LEED 2009, LEED V4.

c. Satin Finish:
   1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Semi-Gloss N539 (0 g/L), MPI # 43, X-Green 43, 146, X-Green 146, 140, X-Green 140, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Semi-Gloss N539 (0 g/L), MPI # 43, X-Green 43, 146, X-Green 146, 140, X-Green 140, LEED 2009, LEED V4, CHPS Certified.

d. Semi-Gloss High Performance:
   1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
   2. 2nd Coat: Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel, HP29 (147 g/L), MPI # 141, X-Green 141, 153, X-Green 153, LEED 2009, LEED V4.
   3. 3rd Coat: Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel, HP29 (147 g/L), MPI # 141, X-Green 141, 153, X-Green 153, LEED 2009, LEED V4.

e. Eggshell Finish:
   1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Latex Eggshell N538 (0 g/L), MPI # 52, X-Green 52, 145, X-Green 145, 139, X-Green 139, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Latex Eggshell N538 (0 g/L), MPI # 52, X-Green 52, 145, X-Green 145, 139, X-Green 139, LEED 2009, LEED V4, CHPS Certified.

f. Low Sheen Finish:
   1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
   2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0 g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.
   3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0 g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.

g. Flat Finish:
    1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
    2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.
    3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.

h. Flat Finish:
    1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
    2. 2nd Coat: Benjamin Moore Natura Waterborne Interior Flat Finish 512 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.
    3. 3rd Coat: Benjamin Moore Natura Waterborne Interior Flat Finish 512 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.

2. Alkyd System:
    a. Gloss Finish Waterborne Alkyd:
        1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
        2. 2nd Coat: Benjamin Moore Advance Waterborne Interior Alkyd High Gloss N794 (48 g/L), MPI # 157, X-Green 157, LEED 2009, LEED V4.
        3. 3rd Coat: Benjamin Moore Advance Waterborne Interior Alkyd High Gloss N794 (48 g/L), MPI # 157, X-Green 157, LEED 2009, LEED V4.
    b. Semi-Gloss Finish Waterborne Alkyd:
        1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
        2. 2nd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Semi-Gloss 793 (48 g/L), LEED 2009, LEED V4, CHPS Certified.
        3. 3rd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Semi-Gloss 793 (48 g/L), LEED 2009, LEED V4, CHPS Certified.

3. Epoxy System (Water Base):
    a. Gloss Finish:
        1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
        2. 2nd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
        3. 3rd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
    b. Gloss Finish:
        1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
        2. 2nd Coat: Corotech Waterborne Urethane Gloss V540 (10 g/L), LEED Credit.
        3. 3rd: Coat: Corotech Waterborne Urethane Gloss V540 (10 g/L), LEED Credit.
    c. Semi-Gloss Finish:
        1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED

Credit.
2. 2nd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
3. 3rd Coat: Corotech Acrylic Epoxy V450 (168 g/L).

d. Eggshell/Low Luster Finish:
1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.
3. 3rd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.

C. METAL - (Structural Steel Columns, Joists, Trusses, Beams, Miscellaneous and Ornamental Iron, Structural Iron, Ferrous Metal)

1. Latex Systems:

a. Gloss Finish High Performance:
1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
2. 2nd Coat: Corotech Acrylic DTM Enamel Gloss V330 (199 g/L), MPI # 154, 164, LEED 2009, LEED V4.
3. 3rd Coat: Corotech Acrylic DTM Enamel Gloss V330 (199 g/L), MPI # 154, 164, LEED 2009, LEED V4.

b. Semi-Gloss Finish:
1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
2. 2nd Coat: Corotech Acrylic DTM Enamel Semi-Gloss V331 (204 g/L), MPI # 153.
3. 3rd Coat: Corotech Acrylic DTM Enamel Semi-Gloss V331 (204 g/L), MPI # 153.

c. Semi-Gloss Finish High Performance:
1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Semi-Gloss V341 (71 g/L), LEED 2009.
3. 3rd Coat Corotech Pre-Catalyzed Waterborne Epoxy Semi-Gloss V341 (71 g/L), LEED 2009.

d. Eggshell Finish High Performance:
1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.
3. 3rd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.

e. Low Sheen Finish:
1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.
3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.

f. Flat Finish:
1. 1st Coat: Benjamin Moore Super Spec® HP Acrylic Metal Primer

P04 (47 g/L), MPI # 107, X-Green 107, 134, LEED 2009, CHPS Certified.
2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.
3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.

2. Alkyd System:
   a. Gloss Finish Waterborne Alkyd:
      1. 1st Coat: Benjamin Moore Super Spec® HP Alkyd Metal Primer P06 (323 g/L), MPI # 79.
      2. 2nd Coat: Benjamin Moore Advance Waterborne Interior Alkyd High Gloss N794 (48 g/L), MPI # 157, X-Green 157, LEED 2009, LEED V4.
      3. 3rd Coat: Benjamin Moore Advance Waterborne Interior Alkyd High Gloss N794 (48 g/L), MPI # 157, X-Green 157, LEED 2009, LEED V4.
   b. Semi-Gloss Finish Waterborne Alkyd:
      1. 1st Coat: Benjamin Moore Super Spec® HP Alkyd Metal Primer P06 (323 g/L), MPI # 79.
      2. 2nd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Semi-Gloss 793 (48 g/L), LEED 2009, LEED V4, CHPS Certified.
      3. 3rd Coat: Benjamin Moore Advance Waterborne Interior Alkyd Semi-Gloss 793 (48 g/L), LEED 2009, LEED V4, CHPS Certified.
3. Epoxy System (Water Base):
   a. Gloss Finish:
      1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
      2. 2nd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
      3. 3rd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
   b. Semi-Gloss Finish:
      1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
      2. 2nd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
      3. 3rd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
   c. Eggshell Finish:
      1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
      2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.
      3. 3rd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.
4. Urethane System (Water Base):
   a. Gloss Finish:
      1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
      2. 2nd Coat: Corotech Waterborne Urethane Gloss V540 (10 g/L), LEED Credit.
      3. 3rd Coat: Corotech Waterborne Urethane Gloss V540 (10 g/L), LEED Credit.

D. WOOD - (Walls, Ceilings, Doors, Trim):
   1. Latex Systems:

a. Gloss Finish:
    1. 1st Coat: Benjamin Moore Fresh Start Multi-Purpose Primer N023 (44 g/L), MPI # 6, 17, X-Green 17, 39, 137, X-Green 137, LEED Credit, CHPS Certified.
    2. 2nd Coat: Coronado Rust Scat Waterborne Acrylic Gloss 80 (224 g/L), MPI # 114, 154, LEED Credit.
    3. 3rd Coat: Coronado Rust Scat Waterborne Acrylic Gloss 80 (224 g/L), MPI # 114, 154, LEED Credit.
b. Semi - Gloss Finish:
    1. 1st Coat: Benjamin Moore Fresh Start Multi-Purpose Primer N023 (44 g/L), MPI # 6, 17, X-Green 17, 39, 137, X-Green 137, LEED Credit, CHPS Certified.
    2. 2nd Coat: Coronado Rust Scat Waterborne Acrylic Semi-Gloss 90 (134 g/L), MPI # 153, LEED Credit.
    3. 3rd Coat: Coronado Rust Scat Waterborne Acrylic Semi-Gloss 90 (134 g/L), MPI # 153, LEED Credit.
c. Eggshell / Satin Finish:
    1. 1st Coat: Benjamin Moore Fresh Start Multi-Purpose Primer N023 (44 g/L), MPI # 6, 17, X-Green 17, 39, 137, X-Green 137, LEED Credit, CHPS Certified.
    2. 2nd Coat: Benjamin Moore Waterborne Satin Impervo N314 (137 g/L), MPI # 43, LEED Credit.
    3. 3rd Coat: Benjamin Moore Waterborne Satin Impervo N314 (137 g/L), MPI # 43, LEED Credit.
d. Flat Finish:
    1. 1st Coat: Benjamin Moore Fresh Start Multi-Purpose Primer N023 (44 g/L), MPI # 6, 17, X-Green 17, 39, 137, X-Green 137, LEED Credit, CHPS Certified.
    2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.
    3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.

E. DRYWALL - (Walls, Ceilings, Gypsum Board and similar items)
1. Latex Systems:
    a. Satin Finish:
        1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
        2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Semi-Gloss N539 (0 g/L), MPI # 43, X-Green 43, 146, X-Green 146, 140, X-Green 140, LEED 2009, LEED V4, CHPS Certified
        3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Semi-Gloss N539 (0 g/L), MPI # 43, X-Green 43, 146, X-Green 146, 140, X-Green 140, LEED 2009, LEED V4, CHPS Certified
    b. Semi-Gloss System:
        1. 1st Coat: Benjamin Moore Eco Spec WB Primer N372 (0 g/L) MPI # 50, X-Green 50, 149, X-Green 149, LEED V4 CHPS Certified.
        2. 2nd Coat: Benjamin Moore Eco Spec WB Semi-Gloss N376 (0 g/L) MPI # 54, X-Green 54, LEED V4, CHPS Certified.
        3. 3rd Coat: Benjamin Moore Eco Spec WB Semi-Gloss N376 (0 g/L) MPI # 54, X-Green 54, LEED V4, CHPS Certified.

c. Eggshell / Satin System:
    1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
    2. 2nd Coat: Benjamin Moore Ultra Spec 500 Latex Eggshell N538 (0 g/L), MPI # 52, X-Green 52, 145, X-Green 145, 139, X-Green 139, LEED 2009 LEED V4, CHPS Certified.
    3. 3rd Coat: Benjamin Moore Ultra Spec 500 Latex Eggshell N538 (0 g/L), MPI # 52, X-Green 52, 145, X-Green 145, 139, X-Green 139, LEED 2009, LEED V4, CHPS Certified.
d. Eggshell / Satin System:
    1. 1st Coat: Benjamin Moore Eco Spec WB Primer N372 (0 g/L) MPI # 50, X-Green 50, 149, X-Green 149, LEED V4 CHPS Certified.
    2. 2nd Coat: Benjamin Moore Eco Spec WB Eggshell N374 (0 g/L), MPI # 52, X-Green 52, 139, X-Green 139, X- Green 145, LEED V4, CHPS Certified.
    3. 3rd Coat: Benjamin Moore Eco Spec WB Eggshell N374 (0 g/L), MPI # 52, X-Green 52, 139, X-Green 139, X-Green 145, LEED V4, CHPS Certified.
e. Low Sheen System:
    1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
    2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0 g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.
    3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Low Sheen N537 (0 g/L), MPI # 44, X-Green 44, 144, X-Green 144, LEED 2009, LEED V4, CHPS Certified.
f. Flat System
    1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
    2. 2nd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.
    3. 3rd Coat: Benjamin Moore Ultra Spec 500 Interior Latex Flat N536 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED 2009, LEED V4, CHPS Certified.
g. Flat System:
    1. 1st Coat: Benjamin Moore Eco Spec WB Primer N372 (0 g/L) MPI # 50, X-Green 50, 149, X-Green 149, LEED V4 CHPS Certified.
    2. 2nd Coat: Benjamin Moore Eco Spec WB Flat N373 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED V4.
    3. 3rd Coat: Benjamin Moore Eco Spec WB Flat N373 (0 g/L), MPI # 53, X-Green 53, 143, X-Green 143, LEED V4.

2. Epoxy System (Water Base):
    a. Gloss System:
        1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
        2. 2nd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
        3. 3rd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
    b. Semi-Gloss System:

1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
2. 2nd Coat: Corotech Acrylic Epoxy V450 (168 g/L).
3. 3rd Coat: Corotech Acrylic Epoxy V450 (168 g/L).

c. Semi-Gloss System:
1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Semi-Gloss V341 (71 g/L), LEED 2009.
3. 3rd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Semi-Gloss V341 (71 g/L), LEED 2009.

d. Eggshell/Low Luster System:
1. 1st Coat: Benjamin Moore Ultra Spec 500 Interior Latex Primer N534 (0 g/L), MPI # 50, X-Green 50, 149, X-Green 149, LEED 2009, LEED V4, CHPS Certified.
2. 2nd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.
3. 3rd Coat: Corotech Pre-Catalyzed Waterborne Epoxy Eggshell V342 (73 g/L), MPI # 151, LEED 2009.

F. Concrete - (Floors, non-vehicular):
1. Latex Systems:
a. Semi-Gloss System:
1. 1st Coat: Insl-X Tough Shield Floor and Patio TS-3 (167 g/L).
2. 2nd Coat: Insl-X Tough Shield Floor and Patio TS-3 (167 g/L).

b. Satin System:
1. 1st Coat: Insl-X Tough Shield Floor and Patio TS-3 (167 g/L).
2. 2nd Coat: Insl-X Tough Shield Floor and Patio TS-3 (167 g/L).

2.5. EXTERIOR PAINT SYSTEMS - UNITED STATES

A. CONCRETE (Cementitious Siding, Flexboard, Transite Board, Shingles (Non-Roof), Common Brick, Stucco, Tilt-up, Precast, and Poured-in-place Cement).
1. Latex Systems:
a. Gloss Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Ben Waterborne Exterior Soft-Gloss 543 (45 g/L), MPI # 11.
3. 3rd Coat: Benjamin Moore Ben Waterborne Exterior Soft-Gloss 543 (45 g/L), MPI # 11.

b. Semi-Gloss Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Regal Select Exterior High-Build Soft-Gloss N403 (43 g/L), MPI # 11, 311.
3. 3rd Coat: Benjamin Moore Regal Select Exterior High-Build Soft-Gloss N403 (43 g/L), MPI # 11, 311.

c. Satin Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Ultra Spec EXT Satin N448 (46 g/L), MPI

15.
3. 3rd Coat: Benjamin Moore Ultra Spec EXT Satin N448 (46 g/L), MPI # 15.

d. Satin Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Regal Select Exterior High-Build Low Lustre N401 (40 g/L), MPI # 15, 315.
3. 3rd Coat: Benjamin Moore Regal Select Exterior High-Build Low Lustre N401 (40 g/L), MPI # 15, 315.

e. Flat Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore ben Waterborne Exterior Flat 541 (44 g/L), MPI # 10.
3. 3rd Coat: Benjamin Moore ben Waterborne Exterior Flat 541 (44 g/L), MPI # 10.

f. Flat Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Regal Select Exterior High-Build Flat Finish N400 (42 g/L) MPI # 10.
3. 3rd Coat: Benjamin Moore Regal Select Exterior High-Build Flat Finish N400 (42 g/L) MPI # 10.

g. High Build Coating:
1. 1st Coat: Coronado Texcrete WB Acrylic Masonry Waterproofer Smooth Finish 3194 (90 g/L), LEED Credit.

2. Elastomeric System: Not including cementitious siding, Flexboard, Transite board or shingles (non-roof).

a. Flat Finish:
1. 1st Coat: Benjamin Moore Super Spec® Interior/Exterior Acrylic High Build Masonry Primer N068 (97g/L), MPI # 3, LEED 2009.
2. 2nd Coat: Benjamin Moore Super Spec® Masonry 100% Acrylic Elastomeric Coating Flat 056 (99 g/L).
3. 3rd Coat: Benjamin Moore Super Spec® Masonry 100% Acrylic Elastomeric Coating Flat 056 (99 g/L).

B. CONCRETE: Concrete Floors (non-vehicular), Patios, Porches, Steps and Platforms.

1. Acrylic System Water-Based:

a. Floor Finish:
1. 1st Coat: Benjamin Moore Floor & Patio Latex Enamel Low Sheen N122 (45 g/L), LEED 2009.
2. 2nd Coat: Benjamin Moore Floor & Patio Latex Enamel Low Sheen N122 (45 g/L), LEED 2009.

C. METAL: Aluminum, Galvanized.

1. Latex Systems:

a. Gloss Finish:
1. 1st Coat: Benjamin Moore Ultra Spec EXT Gloss Finish N449 (46 g/L) MPI # 11.
2. 2nd Coat: Benjamin Moore Ultra Spec EXT Gloss Finish N449 (46 g/L) MPI # 11.

b. Gloss Finish- Early Moisture Resistant Finish
1. 1st Coat: Benjamin Moore Ultra Spec D.T.M. Acrylic Gloss Enamel

HP28 (142 g/L), MPI # 114, X-Green 114, 154, X-Green 154, 164, LEED 2009, LEED V4.

2. 2nd Coat: Benjamin Moore Ultra Spec D.T.M. Acrylic Gloss Enamel HP28 (142 g/L), MPI # 114, X-Green 114, 154, X-Green 154, 164, LEED 2009, LEED V4.

c. Semi-Gloss Finish:
   1. 1st Coat: Benjamin Moore Ultra Spec HP Acrylic DTM Semi-Gloss Enamel HP29 (147 g/L), MPI # 141, X-Green 141, 153, X-Green 153, LEED 2009.
   2. 2nd Coat: Benjamin Moore Ultra Spec HP Acrylic DTM Semi-Gloss Enamel HP29 (147 g/L), MPI # 141, X-Green 141, 153, X-Green 153, LEED 2009.

d. Satin Finish:
   1. 1st Coat: Benjamin Moore Ultra Spec EXT Satin N448 (46 g/L), MPI # 15.
   2. 2nd Coat: Benjamin Moore Ultra Spec EXT Satin N448 (46 g/L), MPI # 15.

e. Satin Finish- Early Moisture Resistant Finish:
   1. 1st Coat: Benjamin Moore Regal Select Exterior High-Build Low Lustre N401 (40 g/L), MPI # 15, 315.
   2. 2nd Coat: Benjamin Moore Regal Select Exterior High-Build Low Lustre N401 (40 g/L), MPI # 15, 315.

f. Flat Finish:
   1. 1st Coat: Benjamin Moore Ultra Spec Exterior Flat Finish N447 (45 g/L), MPI # 10.
   2. 2nd Coat: Benjamin Moore Ultra Spec Exterior Flat Finish N447 (45 g/L), MPI # 10.

g. Flat Finish- Early Moisture Resistant Finish:
   1. 1st Coat: Benjamin Moore Regal Select Exterior High-Build Flat Finish N400 (42 g/L) MPI # 10.
   2. 2nd Coat: Benjamin Moore Regal Select Exterior High-Build Flat Finish N400 (42 g/L) MPI # 10.

D. METAL: Misc. Iron, Ornamental Iron, Structural Iron and Steel, Ferrous Metal.
   1. Latex Systems:
      a. Gloss Finish
         1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
         2. 2nd Coat: Benjamin Moore Ultra Spec EXT Gloss Finish N449 (46 g/L) MPI # 11.
         3. 3rd Coat: Benjamin Moore Ultra Spec EXT Gloss Finish N449 (46 g/L) MPI # 11.
      b. Semi-Gloss Finish
         1. 1st Coat: Corotech Acrylic Metal Primer V110 (199 g/L), LEED Credit.
         2. 2nd Coat: Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel, HP29 (147 g/L), MPI # 141, X-Green 141, 153, X-Green 153, LEED 2009, LEED V4.
         3. 3rd Coat: Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel, HP29 (147 g/L), MPI # 141, X-Green 141, 153, X-Green 153, LEED 2009, LEED V4.EXECUTION

2.6. EXAMINATION

A. The Contractor shall review the product manufacturer's special instructions for surface preparation, application, temperature, re-coat times, and product limitations.

B. The Contractor shall review product health and safety precautions listed by the manufacturer.

C. The Contractor shall be responsible for enforcing on site health and safety requirements associated with the Work.

D. Do not begin installation until substrates have been properly prepared.

E. Ensure that surfaces to receive paint are dry immediately prior to application.

F. Ensure that moisture-retaining substrates to receive paint have moisture content within tolerances allowed by coating manufacturer. Where exceeding the following values, promptly notify Architect and obtain direction before beginning work.
   1. Concrete and Masonry: 3-5 percent. Allow new concrete to cure a minimum of 28 days.
   2. Exterior Wood: 17 percent.
   3. Interior Wood: 15 percent.
   4. Interior Finish Detail Woodwork, Including Trim, and Casework: 10 percent.
   5. Plaster and Gypsum: 15 percent.
   6. Concrete Slab-On-Grade: Perform calcium chloride test over 24 hour period or other acceptable test to manufacturer. Verify acceptable moisture transmission and pH levels.

G. Examine surfaces to receive coatings for surface imperfections and contaminants that could impair performance or appearance of coatings, including but not limited to, loose primer, rust, scale, oil, grease, mildew, algae, or fungus, stains or marks, cracks, indentations, or abrasions.

H. Correct conditions that could impair performance or appearance of coatings in accordance with specified surface preparation procedures before proceeding with coating application.

2.7. PREPARATION - GENERAL

A. Clean surfaces thoroughly prior to coating application.

B. Do not start work until surfaces to be finished are in proper condition to produce finished surfaces of uniform, satisfactory appearance.

C. Stains and Marks: Remove completely, if possible, using materials and methods recommended by coating manufacturer; cover stains and marks which cannot be completely removed with isolating primer or sealer recommended by coating manufacturer to prevent bleed-through.

D. Remove Mildew, Algae, and Fungus using materials and methods recommended by coating manufacturer.

E. Remove dust and loose particulate matter from surfaces to receive coatings immediately prior to coating application.

F. Remove or protect adjacent hardware, electrical equipment plates, mechanical grilles and louvers, lighting fixture trim, and other items not indicated to receive

coatings.

G. Move or protect equipment and fixtures adjacent to surfaces indicated to receive coatings to allow application of coatings.

H. Protect adjacent surfaces not indicated to receive coatings.

I. Prepare surfaces in accordance with manufacturer's instructions for specified coatings and indicated materials, using only methods and materials recommended by coating manufacturer.

2.8. SURFACE PREPARATION

A. Concrete and Concrete Masonry: Clean surfaces free of loose particles, sand, efflorescence, laitance, form oil, curing compounds, and other substances which could impair coating performance or appearance.

B. Concrete Floors: Remove contaminants which could impair coating performance or appearance. Verify moisture transmission and alkaline-acid balance recommended by coating manufacturer; mechanically abrade surface to achieve 80-100 grit medium-sandpaper texture.

C. Existing Coatings:
1. Remove surface irregularities by scraping or sanding to produce uniform substrate for coating application; apply one coat primer of type recommended by coating manufacturer for maximum coating adhesion.
2. If presence of lead in existing coatings is suspected, cease surface preparation and notify Architect immediately.

D. Gypsum Board: Repair cracks, holes and other surface defects with joint compound to produce surface flush with adjacent surfaces.

E. Masonry Surfaces - Restored: Remove loose particles, sand, efflorescence, laitance, cleaning compounds and other substances that could impair coating performance or appearance.

F. Metals - Aluminum, Mill-Finish: Clean and etch surfaces with a phosphoric acid-water solution or water based industrial cleaner. Flush with clean water and allow to dry, before applying primer coat.

G. Metals - Copper: Clean surfaces with pressurized steam, pressurized water, or solvent washing.

H. Metals - Ferrous, Unprimed: Remove rust or scale, if present, by wire brush cleaning, power tool cleaning, or sandblast cleaning; remove grease, oil, and other contaminants which could impair coating performance or appearance by solvent cleaning, with phosphoric-acid solution cleaning of welds, bolts and nuts; spot-prime repaired welds with specified primer.

I. Metals - Ferrous, Shop-Primed: Remove loose primer and rust, if present, by scraping and sanding, feathering edges of cleaned areas to produce uniform flat surface; solvent-clean surfaces and spot-prime bare metal with specified primer, feathering edges to produce uniform flat surface.

J. Metals - Galvanized Steel (not passivated): Clean with a water-based industrial strength cleaner, apply an adhesion promoter followed by a clean water rinse.

Alternately, wipe down surfaces using clean, lint-free cloths saturated with xylene or lacquer thinner; followed by wiping the surface dry using clean, lint-free cloths.

K. Metals - Galvanized Steel, Passivated: Clean with water-based industrial strength cleaner. After the surface has been prepared, apply recommended primer to a small area. Allow primer to cure for 7 days, and test adhesion using the "cross-hatch adhesion tape test" method in accordance with ASTM D 3359. If the adhesion of the primer is positive, proceed with a recommended coating system for galvanized metal.

L. Metals - Stainless Steel: Clean surfaces with pressurized steam, pressurized water, or water-based industrial cleaner.

M. Plaster: Repair cracks, holes and other surface defects as required to maintain proper surface adhesion. Apply patching plaster or Joint compound and sand to produce surface flush with adjacent undamaged surface. Allow a full cure prior to coating application as recommended by the patching compound manufacturer's recommendations.

N. Polyvinyl Chloride (PVC) Pipe: remove contaminants and markings with denatured alcohol scuff sand and wipe with solvent for maximum adhesion. Test adhesion before starting the job.

O. Fiberglass Doors - remove contaminants with cleaning solvent (alcohol) scuff sand and wipe. Test adhesion of primer before starting job.

P. Textiles - Insulated Coverings, Canvas or Cotton: Clean using high-pressure air and solvent of type recommended for material.

Q. Wood:
1. Seal knots, pitch streaks, and sap areas with sealer recommended by coating manufacturer; fill nail recesses and cracks with filler recommended by coating manufacturer; sand surfaces smooth.
2. Remove mill marks and ink stamped grade marks.
3. Apply primer coat to back of wood trim and paneling.

R. Wood Doors: Seal door tops and bottoms prior to finishing.

S. Wood Doors - Field-Glazed Frames and Sash: Prime or seal glazing channels prior to glazing.

2.9. APPLICATION - GENERAL

A. Application of primers, paints, stains or coatings, by the Contractor, will serve as acceptance that surfaces were properly prepared in accordance with the manufacturer's recommendation.

B. Apply each coat to uniform coating thickness in accordance with manufacturer's instructions, not exceeding manufacturer's specified maximum spread rate for indicated surface; thins, brush marks, roller marks, orange-peel, or other application imperfections are not permitted.

C. Allow manufacturer's specified drying time, and ensure correct coating adhesion, for each coat before applying next coat.

D. Inspect each coat before applying next coat; touch-up surface imperfections with

coating material, feathering, and sanding if required; touch-up areas to achieve flat, uniform surface without surface defects visible from 5 feet (1.5 m).

E. Remove dust and other foreign materials from substrate immediately prior to applying each coat.

F. Where paint application abuts other materials or other coating color, terminate coating with a clean sharp termination line without coating overlap.

G. Where color changes occur between adjoining spaces, through framed openings that are of same color as adjoining surfaces, change color at outside stop corner nearest to face of closed door.

H. Re-prepare and re-coat unsatisfactory finishes; refinish entire area to corners or other natural terminations.

2.10. CLEANING

A. Clean excess coating materials, and coating materials deposited on surfaces not indicated to receive coatings, as construction activities of this section progress; do not allow to dry.

B. Re-install hardware, electrical equipment plates, mechanical grilles and louvers, lighting fixture trim, and other items that have been removed to protect from contact with coatings.

C. Reconnect equipment adjacent to surfaces indicated to receive coatings.

D. Relocate to original position equipment and fixtures that have been moved to allow application of coatings.

E. Remove protective materials.

2.11. PROTECTION AND REPAIR

A. Protect completed coating applications from damage by subsequent construction activities until completion of painting project.

B. Touch-up coatings damaged by subsequent construction activities.

END OF SECTION