

SECTION 09 91 00 -

PAINTING PART 1 -

GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Surface Preparation.
 - 2. Field application of paints, stains, varnishes, and other coatings (PTG, PTS).
 - 3. See Schedules and Interior and Exterior Elevations on the Contract Documents for finished surfaces.
- B. Related Sections:
 - 1. Finish Schedule on the Contract Documents.

1.3 SUBMITTALS

- 1. Product data - Submit product data sheets for each product.
- 2. Samples:
 - a. Submit ten (10) draw down cards of each painted samples (brush outs/draw downs), illustrating selected colors and textures for each color and systems selected with specified coats cascaded.
 - 1) Primer 25%
 - 2) 1st coat 50% Finish
 - 3) 2nd coat 100% Finish
 - b. Submit on suitable backing, 8x10 inch size.

1.4 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. Title 19 CCR, Public Safety, State Fire Marshall Regulations
 - 2. Title 24 CCR, Part 1 - Building Standards Administrative Code
 - 3. Title 24 CCR, Part 2 - California Building Code, VOL. 1&2 (CBC) (IBC, as Amended by

CA

4. Title 24 CCR, Part 3 - California Electrical Code (CEC) (2017 NEC, as Amended by CA)
5. Title 24 CCR, Part 4 - California Mechanical Code (CMC) (IAPMO UMC, as Amended by CA)
6. Title 24 CCR, Part 5 - California Plumbing Code (CPC) (IAPMO UPC, as Amended by CA)
7. Title 24 CCR, Part 9 - California Fire Code (CFC) (2018 IFC, as Amended by CA)
8. Title 24 CCR, Part 10 - California Existing Building Code
9. Title 24 CCR, Part 11 - California Green Building Standards Code (Calgreen Code)
10. Title 24 CCR, Part 12 - California Reference Standards (Partial List)
11. Americans with Disabilities Act (ADA), Title II or Title III.

1.5 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges or relative humidity is outside the required ranges by the paint product manufacturer.
- B. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

C. Environment Requirements:

1. Comply with manufacturer's recommendations as to environmental conditions under which coatings and coating systems can be stored and applied.
2. Stucco: Provide a PH test of the stucco that shows compliance with PH requirements of the paint manufacturer. Do not apply paint to stucco at PH levels over 10 or the max amount recommended by the paint manufacturer, whichever is less.
3. Do not paint when there is a threat of rain within 24 hours or when surface or air temperatures are at or below 40 degrees.
4. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC Content limit for coatings that do not meet the definitions for specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Non-flat or non-flat high gloss coating based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board, suggested Control Measure, and the corresponding Flat, Non-flat or Non-flat-High gloss VOC limit on Table 5.504.4.3 shall apply. *"TABLE 5.504.4.3-VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS" (Cal Green Compliance)*
5. Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on the use of certain toxic compounds and ozone depleting substances. In Sections 94522(c)(2) and (d)(2) of the California Code of Regulations, Title 17, commencing with Section 94520 and in areas under the jurisdiction of the Bay Area Air Quality Management District, (additionally) comply with the percent VOC by weight of product limits of Regulation 8 Rule 49. *"TABLE 5.504.4.3-VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS" (Cal Green Compliance)*

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace paint that fails in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 1 year.
- B. Installer Warranty: 1 year.

1.8 EXTRA STOCK

- A. Provide following with District's permission:
 - 1. Minimum 2 gallons of each product and each color in an original unopened.
 - a. Color spot each lid.
 - b. Identify with formula, location, product and date on the lid.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Paints:
 - 1. Dunn-Edwards.
 - 2. Sherwin Williams
 - 3. Or equal (Reference substitution requirements in Division 01 Section)

2.2 PAINTS AND COATINGS

- A. Ready mixed, except field-catalyzed coatings.
- B. Prepare pigments:
 - 1. To a soft paste consistency, capable of being readily and uniformly dispersed to a homogenous coating.
 - 2. For good flow and brushing properties.
 - 3. Capable of drying or curing free of streaks or sags.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces are ready to receive Work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application. Do not proceed unless substrate

is suitable.

- C. Test shop-applied primer for compatibility with subsequent cover materials.
- D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Plaster and Gypsum Wallboard: 12 percent.
 - 2. Interior Wood: 15 percent, measured in accordance with ASTM D-4442.
 - 3. Exterior Wood: 15 percent, measured in accordance with ASTM D-4442.

3.2 PREPARATION OF SURFACE

- A. General:
 - 1. Clean all exterior walls and surfaces of loose and scaly paint, dirt, dust, chalk, and other foreign matter by water-blasting using care not to damage substrate followed by hand scraping, sanding or wire brushing after surfaces are dry. Mildew must be treated with household bleach solution and rinsed thoroughly.
 - 2. Work shall be performed to the acceptance of project Inspector of Record
 - 3. Patch, caulk, set protruding nails and repair all surfaces and cracks where necessary with suitable patching materials and smooth off to match adjacent surfaces.
 - 4. Sand Glossy surfaces to dull surface and remove residue.
 - 5. Remove mildew from affected surfaces with a solution of Tri-Sodium Phosphate and bleach. Rinse with clean water and allow to dry completely.
 - 6. Existing surfaces to be recoated shall be thoroughly cleaned and de-glossed by sanding or other means prior to priming and painting. Patched and bare areas shall be spot primed with the same primer as specified for new work.
 - 7. Rusty metal: Scrape, sand or wire wheel, feathering edges to sound coating. Dust surfaces. Topcoat.
 - 8. Remove soil and body oils completely from surfaces, including handrails, door edges and posts. Treat with Liquid Sandpaper or Dull-N-Bond.
 - 9. Remove hardware, accessories, plates, fixtures and similar items not to be finished. Reinstall at completion.
 - 10. Paint edges of sink cut-outs.
- B. Galvanized Surfaces: Remove all oils and contamination from galvanized surfaces scheduled to be painted by washing with a compliant solvent wash.
- C. Ferrous Metal: Remove grease, rust, scale, dirt and dust from ferrous metal surfaces. Primer coat shall be applied not less than 30 minutes, nor more than 3 hours after preparation of surface.
- D. Primed Metal: Sand and scrape shop primed metal to remove loose primer and rust. Touch-up bare, abraded and damaged areas with metal primer. Feather edges to make touch-up patches inconspicuous.

E. Wood Surfaces:

1. Remove dust, grit and foreign matter from wood surfaces. Sand surfaces and dust clean. Spot prime knots, pitch streaks and sappy sections with a stain blocking primer where surfaces are to be painted. Fill nail holes, cracks and other defects after priming and spot

- prime repairs after patching material has fully cured to the acceptance of the project Inspector of Record
 - 2. Wood surfaces with peeling areas are to have edges of broken paint film sanded to a feather edge.
 - 3. Back prime wood trim. Paint tops, bottoms, edges and cut-outs of doors.
 - F. Plaster Surfaces:
 - 1. Plaster surfaces shall be dry and free from efflorescence, encrustations and foreign matter. Fill cracks, holes and imperfections, smoothing repairs to match adjacent texture. Allow repairs to fully cure before priming to the acceptance of project Inspector of Record.
 - 2. Prime plaster surfaces with specified primer. Caulk all cracks.
 - G. Gypsum Board: Gypsum board shall be dusted clean and free from encrustations and other foreign matter to the acceptance of project Inspector of Record.
 - H. Preparation of other surfaces shall be performed following specific recommendations of the coating manufacturer.
- 3.3 APPLICATION
- A. Apply products in accordance with manufacturer's instructions.
 - B. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
 - C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
 - D. Apply each coat to uniform appearance. Apply each coat of paint slightly darker than preceding coat unless otherwise approved
 - E. Sand wood surfaces lightly between coats to achieve required finish.
 - F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust particles just prior to applying next coat.
 - G. Stipple all edges and corners to conceal brush marks.
 - H. Doors: Paint entire door unless otherwise noted, including door top and bottom edge surfaces.
 - I. Paint entire trim element. Painting of faces only is unacceptable. Trim surfaces must be

wrapped with the trim color and not "faced off" or "Hollywooded".

- J. Tinting: Tint each primer a lighter shade to facilitate identification of each coat where multiple coats of the same material are applied. Tint primer to match the color of the finish coat. Submit ten (10) draw down cards of each painted samples (brush outs), illustrating selected colors and textures for each color and systems selected with specified coats cascaded.
 - 1) Primer 25%

- 2) 1st coat 50% Finish
- 3) 2nd coat 100% Finish
- 4) Sequence of work should meet approved draw down cards submitted per section 1.3 Submittals.
- 5) Each coat shall be inspected prior to application of following coat by Inspector of Record.

3.4 PROTECTION

- A. Protect work of other trades and items not intended to receive paint. Install "wet paint" signs to protect newly painted surfaces.

3.5 CLEANING

- A. Protection - Carefully protect areas where work is in progress from damage.
 1. Provide and spread clean drop cloths when and where required to provide the necessary protection.
 2. Immediately clean-up all accidental spatter, spillage, misplaced paint and restore the affected surface to its original condition.
- B. Clean-up:
 1. At completion of work, remove all materials, supplies, debris and rubbish and leave each area in a clean, acceptable condition.
 2. Collect waste material which may constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.6 SURFACES TO BE FINISHED

- A. Paint all new work and areas affected by new work, unless noted otherwise.
- B. Do not paint or finish the following items:
 1. Items fully factory-finished unless specifically noted.
 2. Fire rating labels, equipment serial number and capacity labels.
- C. Mechanical and Electrical: Use paint systems defined for the substrates to be finished.
 1. Paint all insulated and exposed pipes occurring in finished areas to match background surfaces, unless otherwise indicated.
 2. Paint shop primed items occurring in finished areas.
 3. Paint interior surfaces of air ducts and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint.
 4. Paint dampers exposed behind louvers, grilles and convector and baseboard cabinets to match face panels.

3.7 EXTERIOR PAINT SCHEDULE (SOURCE CAL POLY PAINT STANDARD DATED MAY 2022)

- 1. Reference 3.3.J Application – Tinting for application requirements**
- 2. Concrete, Stucco and Masonry (Other than Concrete Masonry Units): Provide the following finish systems over exterior concrete, stucco and brick masonry surfaces:**

1st Coat : Dunn Edwards Superloc Int/Ext Masonry/Bonding primer (SLPR00)
2nd Coat : Dunn Edwards Evershield Exterior Eggshell Paint (EVSH30)
3rd Coat : Dunn Edwards Evershield Exterior Eggshell Paint (EVSH30)

OR

1st Coat : Loxon Int/Ext Acrylic Masonry Primer (A24W8300) 2nd
Coat : Super-Paint Exterior Acrylic Satin Enamel(A89W1151) 3rd
Coat : Super- Paint Exterior Acrylic Satin Enamel(A89W1151)

- 3. Concrete Masonry Units: Provide the following finish systems over exterior concrete masonry units:**

1st Coat : Dunn Edwards Premium Smooth Blocfil Int/Ext (SBPR00)
2nd Coat : Dunn Edwards Evershield Exterior Eggshell Paint (EVSH30)
3rd Coat : Dunn Edwards Evershield Exterior Eggshell Paint (EVSH30)

OR

1st Coat : Heavy Duty Int/Ext Acrylic Block Filler (B42W46)
2nd Coat : Super-Paint Exterior Acrylic Satin Enamel (A89W1151)
3rd Coat : Super-Paint Exterior Acrylic Satin Enamel (A89W1151)

- 4. Wood: Provide the following semi-transparent stain finish system over exterior wood:** 1st Coat : Old Masters Ascend Exterior Waterbed Clear Finish - Satin (OM-71101-1) 2nd Coat: Old Masters Ascend Exterior Waterbed Clear Finish - Satin (OM-71101-1)

OR

1st Coat : Woodscapes Waterbase Polyurethane Semi-Transparent Stain (A15T5)
2nd Coat : Woodscapes Waterbase Polyurethane Semi-Transparent Stain (A15T5)

- 5. Wood: Provide the following solid color stain finish system over exterior wood:**

1st Coat : Dunn Edwards Acri-hues Exterior Flat (ACHS10) 2nd
Coat : Dunn Edwards Acri-hues Exterior Flat (ACHS10)

OR

1st Coat : Woodscapes Exterior Acrylic Solid Color Stain
(A15W51) 2nd Coat : Woodscapes Exterior Acrylic Solid Color
Stain (A15W51)

- 6. Wood: Provide the following paint system over exterior wood surfaces:** 1st Coat : Dunn Edwards Ultra-grip Premium Int/Ext Primer (UGPR00) 2nd Coat : Dunn Edwards Evershield Exterior Eggshell Paint

(EVSH30) 3rd Coat : Dunn Edwards Evershield Exterior Eggshell Paint
(EVSH30)

OR

1st Coat : Multi purpose Int/Ext Acrylic Primer (B51W450)
2nd Coat : Super-paint Exterior Acrylic Satin Enamel (A89W1151)
3rd Coat : Super-paint Exterior Acrylic Satin Enamel (A89W1151)

7. Ferrous Metal: Provide the following finish system over exterior ferrous metal (primer is not required on shop-primed items):

1st Coat : Dunn Edwards Endura-prime Int/Ext Rust Preventative Metal Primer (ENPR00)
2nd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or Semi- gloss
(ENCT30 or ENCT50)

3rd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or Semi- gloss
(ENCT30 or ENCT50)

OR

1st Coat : Pro-Cryl Universal Acrylic Metal Primer (B66W310)
2nd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint (B66W651)
3rd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint (B66W651)

8. Zinc-coated Metal: Provide the following finish system over exterior zinc-coated (galvanized metal) surfaces:

1st Coat : Dunn Edwards Ultrashield Galvanized Metal Primer (ULGM00)
2nd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or
Semi- gloss (ENCT30 or ENCT50)

3rd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or Semi- gloss
(ENCT30 or ENCT50)

OR

1st Coat : Pro-Cryl Universal Acrylic Metal Primer (B66W310)
2nd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint (B66W651)
3rd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint (B66W651)

9. Aluminum: Provide the following finish system over exterior aluminum surfaces:

1st Coat : Dunn Edwards Ultrashield Galvanized Metal Primer (ULGM00)
2nd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or
Semi- gloss (ENCT30 or ENCT50)

3rd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or Semi- gloss
(ENCT30 or ENCT50)

OR

1st Coat : Pro-Cryl Universal Acrylic Metal Primer (B66W310)
2nd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint (B66W651)
3rd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint (B66W651)

IF ANY SURFACE IS NOT LISTED ABOVE, PLEASE REACH OUT TO GET RECOMMENDATION

3.8 INTERIOR PAINT SCHEDULE (SOURCE CAL POLY PAINT STANDARD DATED MAY 2022)

1. Reference 3.3.J Application – Tinting for application requirements

2. Concrete and Masonry (other than Concrete Masonry Units): Provide the following paint system over interior concrete and brick masonry surfaces:

1st Coat : Dunn Edwards Superloc Int/Ext Masonry/Bonding primer (SLPR00)
2nd Coat : Dunn Edwards Everest Interior Eggshell Paint (EVER30)
3rd Coat : Dunn Edwards Everest Interior Eggshell Paint (EVER30)

OR

1st Coat : Loxon Int/Ext Acrylic Masonry Primer (A24W8300) 2nd Coat : Super-Paint Interior Acrylic Satin Enamel (A87W1151) 3rd Coat : Super-Paint Interior Acrylic Satin Enamel (A87W1151)

3. Concrete Masonry Units: Provide the following finish systems over interior concrete masonry units:

1st Coat : Dunn Edwards Premium Smooth Blocfil Int/Ext (SBPR00) 2nd Coat : Dunn Edwards Everest Interior Eggshell Paint (EVER30) 3rd Coat : Dunn Edwards Everest Interior Eggshell Paint (EVER30)

OR

1st Coat : PrepRite Int/Ext Acrylic Block Filler (B25W25)
2nd Coat : Super-Paint Interior Acrylic Satin Enamel (A87W1151) 3rd Coat : Super-Paint Interior Acrylic Satin Enamel (A87W1151)

4. Gypsum Board - Flat finish on ceilings: Provide the following finish systems over interior gypsum board ceiling surfaces:

1st Coat : Dunn Edwards Ultra-grip Premium Int/Ext Primer (UGPR00) 2nd Coat : Dunn Edwards Acri-Wall Flat Zero VOC Paint (ACWL10) 3rd Coat : Dunn Edwards Acri-Wall Flat Zero VOC Paint (ACWL10)

OR

1st Coat : Premium Interior Acrylic Wall & Wood primer (B28W8111) 2nd Coat : Pro Mar 400 Zero VOC Interior Acrylic Flat (B30W4651) 3rd Coat : Pro Mar 400 Zero VOC Interior Acrylic Flat (B30W4651)

5. Gypsum Board - Satin Finish: Provide the following finish system over interior gypsum board:

1st Coat : Dunn Edwards Ultra-grip Premium Int/Ext Primer

(UGPR00) 2nd Coat : Dunn Edwards Everest Interior Eggshell Paint
(EVER30)

3rd Coat : Dunn Edwards Everest Interior Eggshell Paint (EVER30)

OR

1st Coat : Premium Interior Acrylic Wall & Wood primer (B28W8111) 2nd

Coat : Super-Paint Interior Acrylic Satin Enamel (A87W1151) 3rd
Coat : Super-Paint Interior Acrylic Satin Enamel (A87W1151)

6. Gypsum Board - Semi-gloss Finish: Provide the following finish system over interior gypsum board:

1st Coat : Dunn Edwards Ultra-grip Premium Int/Ext Primer (UGPR00) 2nd Coat : Dunn Edwards Everest Interior Semi-gloss Paint (EVER50) 3rd Coat : Dunn Edwards Everest Interior Semi-gloss Paint (EVER50)

OR

1st Coat : Premium Interior Acrylic Wall & Wood primer (B28W8111)
2nd Coat : Super-Paint Interior Acrylic Semi-gloss Enamel (A88W1151) 3rd Coat : Super-Paint Interior Acrylic Semi-gloss Enamel (A88W1151)

7. Wood - Paint Grade: Provide the following paint finish system over new interior wood surfaces:

1st Coat : Dunn Edwards Ultra-grip Premium Int/Ext Primer (UGPR00) 2nd Coat : Dunn Edwards Everest Interior Semi-gloss Paint (EVER50) 3rd Coat : Dunn Edwards Everest Interior Semi-gloss Paint (EVER50)

OR

1st Coat : Premium Interior Acrylic Wall & Wood primer (B28W8111) 2nd Coat : Pro Classic Interior Acrylic Semi-gloss Enamel (B31W1151) 3rd Coat : Pro Classic Interior Acrylic Semi-gloss Enamel (B31W1151)

8. Wood - Stain Grade: Provide the following stain finish system over new interior wood surfaces:

1st Coat : Old Masters Int/Ext Oil stain 2nd Coat : Old Masters Sanding Sealer
3rd Coat : Old Masters Masters Armor - Satin (OM-72101-1) 4th Coat : Old Masters Masters Armor - Satin (OM-72101-1)

OR

1st Coat : Wood Classics Interior Oil Stain (A49T804)
2nd Coat : Zar Ultra Max Waterborne Oil Modified Sanding Sealer
3rd Coat : Zar Ultra Max Interior Waterborne Oil Modified Polyurethane Varnish - Satin 4th Coat : Zar Ultra Max Interior Waterborne Oil Modified Polyurethane Varnish - Satin

- 9. Ferrous Metal: Provide the following paint finish system over interior ferrous metal:** 1st Coat : Dunn Edwards Endura-prime Int/Ext Rust Preventative Metal Primer (ENPR00) 2nd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or Semi- gloss (ENCT30 or ENCT50)
3rd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or Semi- gloss (ENCT30 or ENCT50)

OR

1st Coat : Pro-Cryl Universal Acrylic Metal Primer (B66W310)
2nd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint
(B66W651) 3rd Coat. : Pro Industrial HP Acrylic Eggshell or Semi-gloss
Paint (B66W651)

10. Zinc-coated Metal: Provide the following finish system over interior zinc-coated (galvanized metal) surfaces:

1st Coat : Dunn Edwards Ultrashield Galvanized Metal Primer (ULGM00)
2nd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or
Semi- gloss (ENCT30 or ENCT50)
3rd Coat : Dunn Edwards Endura-Coat Int/Ext DTM Acrylic Eggshell Paint or
Semi- gloss (ENCT30 or ENCT50)

OR

1st Coat : Pro-Cryl Universal Acrylic Metal Primer (B66W310)
2nd Coat : Pro Industrial HP Acrylic Eggshell or Semi-gloss Paint
(B66W651) 3rd Coat. : Pro Industrial HP Acrylic Eggshell or Semi-gloss
Paint (B66W651)

IF ANY SURFACE IS NOT LISTED ABOVE, PLEASE REACH OUT TO GET RECOMMENDATION

3.9 COLORS

- A. To be selected by Architect from Manufacturers standard color palette and as scheduled on the "Finish Schedule" provided in the plans. All Colors shall be accepted by the Cal Poly Project Manager prior to Architect Approval of sample "draw downs" and ordering

END OF SECTION 09 91 00