

ADDENDUM NO. 1

PROJECT MANUAL

**WASHINGTON UNION HIGH SCHOOL
STUDENT SERVICES**

**Project No.: 5613
DSA File No. 10-H19
DSA App No. 02-123307
November 7 2025**



This Addendum and Addendum drawings form a part of the Contract Documents. It modifies the original Project Manual and Drawings. Bidders are required to acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to acknowledge receipt of each addendum may subject bidder to disqualification.

Project No. 5613

GENERAL

PROJECT MANUAL

- 1-01 **PROJECT MANUAL, SPECIFICATION SECTION 000110 – TABLE OF CONTENTS:** Replace specification section in its entirety.
- 1-02 **PROJECT MANUAL, SPECIFICATION SECTION 084113 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS:** Add specification section in its entirety.
- 1-03 **PROJECT MANUAL, SPECIFICATION SECTION 099000 – PAINTING:** Add specification section in its entirety.

END ADDENDUM NO. 1

5613 WASHINGTON UNION HIGH SCHOOL
STUDENT SERVICES
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SECTION 84113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Exterior storefront framing.
 - 2. Storefront framing for punched openings.
 - 3. Exterior manual-swing entrance doors and door-frame units.

- B. Related Requirements:

- 1. Section 0871000 "Door Hardware" for door hardware to be incorporated in aluminum storefront doors.
 - 2. Section 088000 "Glazing" for class types for the entrances and windows..

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

- B. Shop Drawings: For aluminum-framed entrances and storefronts. Include plans, elevations, sections, full-size details, and attachments to other work.

- 1. Include details of provisions for assembly expansion and contraction and for draining moisture occurring within the assembly to the exterior.
 - 2. Include full-size isometric details of each vertical-to-horizontal intersection of aluminum-framed entrances and storefronts, showing the following:
 - a. Joinery, including concealed welds.
 - b. Anchorage.
 - c. Expansion provisions.
 - d. Glazing.
 - e. Flashing and drainage.
 - 3. Show connection to and continuity with adjacent thermal, weather, air, and vapor barriers.

- C. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.

- D. Delegated-Design Submittal: For aluminum-framed entrances and storefronts indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Energy Performance Certificates: For aluminum-framed entrances and storefronts, accessories, and components, from manufacturer.
 - 1. Basis for Certification: NFRC-certified energy performance values for each aluminum-framed entrance and storefront.
- C. Product Test Reports: For aluminum-framed entrances and storefronts, for tests performed by manufacturer and witnessed by a qualified testing agency.
- D. Sample Warranties: For special warranties.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For aluminum-framed entrances and storefronts to include in maintenance manuals.
- B. Maintenance Data for Structural Sealant: For structural-sealant-glazed storefront to include in maintenance manuals. Include ASTM C 1401 recommendations for post-installation-phase quality-control program.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
- B. Product Options: Information on Drawings and in Specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.
 - 1. Do not change intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If changes are proposed, submit comprehensive explanatory data to Architect for review.

1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of aluminum-framed entrances and storefronts that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:

- a. Structural failures including, but not limited to, excessive deflection.
 - b. Noise or vibration created by wind and thermal and structural movements.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - d. Water penetration through fixed glazing and framing areas.
 - e. Failure of operating components.
 2. Warranty Period: 10 years from date of Substantial Completion.
- B. Special Finish Warranty: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of factory-applied finishes within specified warranty period.
1. Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 2. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Comply with performance requirements specified, as determined by testing of aluminum-framed entrances and storefronts representing those indicated for this Project without failure due to defective manufacture, fabrication, installation, or other defects in construction.
1. Aluminum-framed entrances and storefronts shall withstand movements of supporting structure including, but not limited to, story drift, twist, column shortening, long-term creep, and deflection from uniformly distributed and concentrated live loads.
 2. Failure also includes the following:
 - a. Thermal stresses transferring to building structure.
 - b. Glass breakage.
 - c. Noise or vibration created by wind and thermal and structural movements.
 - d. Loosening or weakening of fasteners, attachments, and other components.
 - e. Failure of operating units.
- B. Structural Loads:
1. Basic Wind Speed: 110 MPH.
- C. Deflection of Framing Members: At design wind pressure, as follows:
1. Deflection Normal to Wall Plane: Limited to [edge of glass in a direction perpendicular to glass plane not exceeding 1/175 of the glass edge length for each individual glazing lite or an amount that restricts edge deflection of individual glazing lites to 3/4 inch (19.1 mm), whichever is less.

2. Deflection Parallel to Glazing Plane: Limited to 1/360 of clear span or 1/8 inch whichever is smaller
- D. Structural: Test according to ASTM E 330 as follows:
1. When tested at positive and negative wind-load design pressures, assemblies do not evidence deflection exceeding specified limits.
 2. When tested at 150 percent of positive and negative wind-load design pressures, assemblies, including anchorage, do not evidence material failures, structural distress, or permanent deformation of main framing members exceeding 0.2 percent of span.
 3. Test Durations: As required by design wind velocity, but not less than 10 seconds.
- E. Air Infiltration: Test according to ASTM E 283 for infiltration as follows:
1. Fixed Framing and Glass Area:
 - a. Maximum air leakage of 0.06 cfm/sq. ft. at a static-air-pressure differential of 1.57 lbf/sq. ft
 2. Entrance Doors:
 - a. Pair of Doors: Maximum air leakage of 1.0 cfm/sq. ft at a static-air-pressure differential of 1.57 lbf/sq. ft.
 - b. Single Doors: Maximum air leakage of 0.5 cfm/sq. ft. at a static-air-pressure differential of 1.57 lbf/sq. ft..
- F. Water Penetration under Static Pressure: Test according to ASTM E 331 as follows:
1. No evidence of water penetration through fixed glazing and framing areas when tested according to a minimum static-air-pressure differential of 20 percent of positive wind-load design pressure, but not less than 6.24 lbf/sq. ft.
- G. Seismic Performance: Aluminum-framed entrances and storefronts shall withstand the effects of earthquake motions determined according to SCE/SEI 7
1. Seismic Drift Causing Glass Fallout: Complying with criteria for passing based on building occupancy type when tested according to AAMA 501.6 at design displacement and 1.5 times the design displacement.
- H. Energy Performance: Certify and label energy performance according to NFRC as follows:
1. Thermal Transmittance (U-factor): Fixed glazing and framing areas shall have U-factor of not more than 0.45 Btu/sq. ft. x h x deg F as determined according to NFRC 100.
 2. Solar Heat Gain Coefficient: Fixed glazing and framing areas shall have a solar heat gain coefficient of no greater than 0.45 as determined according to NFRC 200.
 3. Condensation Resistance: Fixed glazing and framing areas shall have an NFRC-certified condensation resistance rating of no less than 25 as determined according to NFRC 500.
- I. Thermal Movements: Allow for thermal movements resulting from ambient and surface temperature changes:
1. Temperature Change: 120 deg F ambient; 180 deg F material surfaces.
 2. Designed to produce tensile or shear stress of less than 20 psi

2.2 MANUFACTURERS

- A. Source Limitations: Obtain all components of aluminum-framed entrance and storefront system, including framing and accessories, from single manufacturer.

2.3 FRAMING

- A. Framing Members: Manufacturer's extruded- or formed-aluminum framing members of thickness required and reinforced as required to support imposed loads.
 - 1. Construction: Thermally improved
 - 2. Glazing System: Retained mechanically with gaskets on four sides
 - 3. Glazing Plane front
 - 4. Finish: Clear anodic finish.
 - 5. Fabrication Method: Field-fabricated stick system.
- B. Materials:
 - 1. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
 - a. Sheet and Plate: ASTM B 209
 - b. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221.

2.4 ENTRANCE DOOR SYSTEMS

- A. Entrance Doors: Manufacturer's standard glazed entrance doors for manual-swing operation.
 - 1. Door Construction: 1-3/4-inch overall thickness, with minimum 0.125-inch- thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods.
 - 2. Door Design: Medium stile; 3-1/2-inch nominal width.
 - 3. Glazing Stops and Gaskets: Beveled, snap-on, extruded-aluminum stops and preformed gaskets.
 - a. Provide nonremovable glazing stops on outside of door.

2.5 ENTRANCE DOOR HARDWARE

- A. Entrance Door Hardware: Hardware not specified in this Section is specified in Section 087110 "Door Hardware."
- B. General: Provide entrance door hardware as specified in Section 087110 Door Hardware.
 - 1. Opening-Force Requirements:
 - a. Egress Doors: Not more than 5 lbf to release the latch and not more than 15 lbf set the door in motion and not more than 5 lbf to open the door to its minimum required width

- C. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of entrance door hardware are indicated in "Entrance Door Hardware Sets" Article. Products are identified by using entrance door hardware designations as follows:
 - 1. Named Manufacturers' Products: Manufacturer and product designation are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in "Entrance Door Hardware Sets" Article.
 - 2. References to BHMA Standards: Provide products complying with these standards and requirements for description, quality, and function.
- D. Cylinders: As specified in Section 087110 "Door Hardware"
- E. Strikes: Provide strike with black-plastic dust box for each latch or lock bolt; fabricated for aluminum framing.
- F. Operating Trim: BHMA A156.6.
- G. Weather Stripping: Manufacturer's standard replaceable components.
 - 1. Compression Type: Made of ASTM D 2000, molded neoprene, or ASTM D 2287, molded PVC.
 - 2. Sliding Type: AAMA 701/702, made of wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing.
- H. Weather Sweeps: Manufacturer's standard exterior-door bottom sweep with concealed fasteners on mounting strip.
- I. Silencers: BHMA A156.16, Grade 1.

2.6 GLAZING

- A. Glazing: Comply with Section 088000 "Glazing."
- B. Glazing Gaskets: Manufacturer's standard sealed-corner pressure-glazing system of black, resilient elastomeric glazing gaskets, setting blocks, and shims or spacers.
- C. Glazing Sealants: As recommended by manufacturer

2.7 ACCESSORIES

- A. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.
 - 1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.
 - 2. Reinforce members as required to receive fastener threads.
- B. Anchors: Three-way adjustable anchors with minimum adjustment of 1 inch that accommodate fabrication and installation tolerances in material and finish compatible with adjoining materials and recommended by manufacturer.

1. Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts complying with ASTM A 123 or ASTM A 153 requirements.
- C. Concealed Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing compatible with adjacent materials
- D. Bituminous Paint: Cold-applied asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos, formulated for 30-mil thickness per coat.

2.8 FABRICATION

- A. Form or extrude aluminum shapes before finishing.
- B. Fabricate components that, when assembled, have the following characteristics:
 1. Profiles that are sharp, straight, and free of defects or deformations.
 2. Accurately fitted joints with ends coped or mitered.
 3. Physical and thermal isolation of glazing from framing members.
 4. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
 5. Provisions for field replacement of glazing from exterior.
 6. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
- C. Mechanically Glazed Framing Members: Fabricate for flush glazing without projecting stops.
- D. Storefront Framing: Fabricate components for assembly using shear-block system
- E. Entrance Door Frames: Reinforce as required to support loads imposed by door operation and for installing entrance door hardware.
 1. At exterior doors, provide compression weather stripping at fixed stops.
- F. Entrance Doors: Reinforce doors as required for installing entrance door hardware.
 1. At pairs of exterior doors, provide sliding-type weather stripping retained in adjustable strip and mortised into door edge.
 2. At exterior doors, provide weather sweeps applied to door bottoms.
- G. Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.
- H. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.

2.9 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

2.10 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

2.11 INSTALLATION

A. General:

- 1. Comply with manufacturer's written instructions.
- 2. Do not install damaged components.
- 3. Fit joints to produce hairline joints free of burrs and distortion.
- 4. Rigidly secure nonmovement joints.
- 5. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration and to prevent impeding movement of moving joints.
- 6. Seal perimeter and other joints watertight unless otherwise indicated.

B. Metal Protection:

- 1. Where aluminum is in contact with dissimilar metals, protect against galvanic action by painting contact surfaces with materials recommended by manufacturer for this purpose or by installing nonconductive spacers.
- 2. Where aluminum is in contact with concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.

C. Set continuous sill members and flashing in full sealant bed as specified in Section 079200 "Joint Sealants" to produce weathertight installation.

D. Install components plumb and true in alignment with established lines and grades.

E. Install operable units level and plumb, securely anchored, and without distortion. Adjust weather-stripping contact and hardware movement to produce proper operation.

F. Install glazing as specified in Section 088000 "Glazing."

G. Entrance Doors: Install doors to produce smooth operation and tight fit at contact points.

- 1. Exterior Doors: Install to produce weathertight enclosure and tight fit at weather stripping.
- 2. Field-Installed Entrance Door Hardware: Install surface-mounted entrance door hardware according to entrance door hardware manufacturers' written instructions using concealed fasteners to greatest extent possible.

2.12 ERECTION TOLERANCES

A. Erection Tolerances: Install aluminum-framed entrances and storefronts to comply with the following maximum tolerances:

- 1. Plumb: 1/8 inch in 10 feet; 1/4 inch in 40 feet

2. Level: 1/8 inch in 20 feet 1/4 inch in 40 feet
3. Alignment:
 - a. Where surfaces abut in line or are separated by reveal or protruding element up to 1/2 inch wide, limit offset from true alignment to 1/16 inch
 - b. Where surfaces are separated by reveal or protruding element from 1/2 to 1 inch wide, limit offset from true alignment to 1/8 inch
 - c. Where surfaces are separated by reveal or protruding element of 1 inch wide or more, limit offset from true alignment to 1/4 inch
4. Location: Limit variation from plane to 1/8 inch in 12 feet 1/2 inch over total length.

END OF SECTION 084113

SECTION 099000 - PAINTING

PART 1: GENERAL

1.1 SUMMARY:

- A. Included: Paint or otherwise finish all interior and exterior exposed surfaces, except as specifically excluded herein and as customarily excluded by general practices of the industry.
- B. Work Not Included:
 - 1. Do not include painting which is specified under other sections.
 - 2. Unless otherwise indicated, painting is not required on surfaces in concealed areas and inaccessible areas such as furred spaces, foundation spaces, utility tunnels, pipe spaces and duct shafts.
 - 3. Metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze, and similar finished materials will not require painting under this Section except as may be specified herein.
 - 4. Do not paint any moving parts of operating units; mechanical or electrical parts such as valve operators, linkages, sensing devices, and motor shafts, unless otherwise indicated.
 - 5. Do not paint over any required labels or equipment identification, performance rating, name, or nomenclature plates.
 - 6. Do not paint piping, conduit, panels and similar items in mechanical rooms, except when mechanical, storage, janitor or other such rooms are scheduled to receive a painters or integrally colored finish.
- C. Related Sections:
 - 1. Paint: Priming or priming and finishing of certain surfaces are specified to be factory performed or installer performed under other pertinent sections.

1.2 DEFINITIONS:

- A. All coating system materials include primers, emulsions, epoxy, enamels, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

1.3 SUBMITTALS:

- A. General: Submit the following according to Conditions of the contract and Division 1 Specifications Sections.
- B. Product Data: For each paint system specified:
 - 1. Manufacturer's technical information, including label analysis, instructions for handling, storage and application of each material.
 - 2. Material listing by cross referencing specific coating, finish system and application. Identify each material by the manufacturers catalog numbers and classification.
 - 3. Indicate by transmittal that a copy of each manufacturer's instructions have been submitted to the applicator.
- C. Certification: Manufacturers certification that products supplied comply with local regulations controlling use of volatile organic compounds (V.O.C.'s)

- D. Samples: Provide manufacturers color charts for initial color selection.
- E. Samples: For verification purposes provide four 12"x12" swatches of color and finish for each system specified on actual substrate and texture scheduled to receive finishes.

1.4 QUALITY ASSURANCE:

- A. Qualifications of Manufacturers: Products used in the work of this Section shall be produced by manufacturers regularly engaged in manufacture of painting products and with a history of successful production acceptable to the Architect.
- B. Applicator Qualifications:
 - 1. Provide at least one person who shall be present at all times during execution of the work of this Section, who shall be thoroughly familiar with the specified requirements and the materials and methods needed for their execution, and who shall direct all work performed under this Section.
 - 2. Provide adequate numbers of workmen skilled in the necessary crafts and properly informed of the methods and materials to be used.
- C. Single-Source Responsibility: Provide primers and undercoat paint products produced by the same manufacturers as the finish coats.
- D. Paint Coordination:
 - 1. Provide finish coats which are compatible with the prime coats used.
 - 2. Review other sections of these Specifications as required, verifying the prime coats to be used and assuring compatibility of the total coating system for the various substrata.
 - 3. Upon request, furnish information on the characteristics of the specific finish materials to ensure that compatible prime coats are used.
 - 4. Provide barrier coats over noncompatible primers, or remove the primer and reprime as required.
 - 5. Notify the Architect in writing of anticipated problems in using the specified coating systems over prime coating supplied under other sections.
- E. Field Samples: On wall surfaces and other exterior and interior components, duplicate finishes of prepared samples. Provide full-coat finish samples on at least 100 sq. ft. of surface until required sheen, color, and texture are obtained; simulate finished lighting conditions for review of in-place work.
 - 1. Final acceptance of colors will be from job-applied samples.
 - 2. The Architect will select one room or surface to represent surfaces and conditions for each type of coating and substrate to be painted. Apply coatings in this room or surface according to the schedule or as specified.
 - a. After finishes are accepted, this room or surface will be used to evaluate coating systems of a similar nature.

1.5 PRODUCT HANDLING:

- A. Delivery of Materials: Deliver all materials to the job site in original, new, and unopened containers bearing the manufacturer's name and label showing at least the following information:
 - 1. Name or title of the material

2. Product description
 3. Manufacturer's stock number and date of manufacture
 4. Contents by volume, for pigment and vehicle constituents
 5. Thinning instructions
 6. Application instructions
 7. Color name and number
 8. M.S.D.S. sheets for each product specified.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg. C). 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.

1.6 JOB CONDITIONS:

- A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F. (10 deg C) and 90 deg F (32 deg C).
- B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 deg. F (7 deg C) and 95 deg F (35 deg C).
- 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 (3 deg C) 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 the manufacturer during application and drying periods.

1.7 PROTECTION:

- A. Protect adjacent surfaces from damage or defacement resulting from the work of this Section.

1.8 EXTRA STOCK:

- A. Amount: Upon completion of the work of this Section, deliver to the Owner an extra stock equaling 5% of each color, type, and gloss of paint used on the work.
- B. Packaging: Tightly seal each container and clearly label with the contents and location used.

PART 2: PRODUCTS

2.1 PAINT MATERIALS:

- A. Design is based upon the use of paint products manufactured by PPG Industries, Inc., and the systems of that manufacturer are listed in the SCHEDULE OF PAINT SYSTEMS included in PART 3 of this Section. Commensurate products and systems of Dunn Edwards, Sherwin-Williams Company, Kelly-Moore or approved equal will be considered for approval. Products must comply with requirements of current regulations of the California Air Resources Board and local authority having jurisdiction.

- B. Durability: Provide paints of durable and washable quality. Do not use paint materials which will not withstand normal washing as required to remove pencil marks, ink, ordinary soil, and similar material without showing discoloration, loss of gloss, staining, or other damage.
- C. Colors and Glosses: The Architect will select colors to be used in the various types of paint specified and will be the sole judge of acceptability of the various glosses obtained from the material proposed to be used in the work.
- D. Undercoats and Thinners: Provide undercoat paint produced by the same manufacturer as the finish coat. Use only the thinners recommended by the paint manufacturer, and use only to the recommended limits. Insofar as practicable, use undercoat, finish coat, and thinner material as parts of a unified system of paint finish.

2.2 APPLICATION EQUIPMENT:

- A. General: For application of the approved paint, use only such equipment as is recommended by the manufacturer of the particular paint, and as reviewed by the Architect.
- B. Compatibility: Prior to actual use of application equipment, use all means necessary to verify that the proposed equipment is actually compatible with the material to be applied and that the integrity of the finish will not be jeopardized by use of the proposed application equipment.

2.3 OTHER MATERIALS: All other materials, not specifically described but required for a complete and proper installation of the work of this Section, shall be new, first-quality of their respective kind, and as selected by the Contractor subject to review by the Architect.

PART 3: EXECUTION

3.1 SURFACE CONDITIONS:

- A. Inspection: Prior to installation of the work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where the work of this Section may properly commence. Verify that painting may be completed in strict accordance with the original design and with the manufacturers' recommendations as reviewed by the Architect.
- B. Discrepancies: Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.

3.2 MATERIALS PREPARATION:

- A. General:
 - 1. Mix and prepare painting materials in strict accordance with the manufacturer's recommendations.
 - 2. Store materials not in actual use in tightly covered containers.
 - 3. Maintain containers used in storage, mixing, and application of paint in a clean condition, free from foreign materials and residue.
- B. Stirring: Stir all materials before application and as required during application to produce a uniform mixture. Do not stir surface film which may develop into the material; strain the material if necessary before using.

3.3 SURFACE PREPARATION:

A. General:

1. Perform all preparation and cleaning procedures in strict accordance with the paint manufacturer's recommendations as approved by the Architect.
2. Remove all removable items which are in place and are not scheduled to receive paint finish, or provide surface-applied protection prior to surface preparation and painting operations.
3. Following completion of painting in each space or area, reinstall the removed items by using workmen skilled in the necessary trades.
4. Clean and prepare each surface to be painted prior to applying paint or surface treatment.
5. Schedule the cleaning and painting so that dust and other contaminants from the cleaning process will not fall onto wet newly painted surfaces.

B. Preparation of Wood Surfaces:

1. Clean all wood surfaces until they are free from dirt, oil, and all other foreign substance.
2. Smooth all finished wood surfaces exposed to view, using the proper sandpaper. Where so required, use varying degrees of coarseness in sandpaper to produce a uniformly smooth and unmarred wood surface.
3. Unless specifically directed by the Architect, do not proceed with painting of wood surfaces until the moisture content of the wood is 12% or less as measured by a moisture-meter.

C. Preparation of Metal Surfaces:

1. Thoroughly clean all surfaces until they are completely free from dirt, oil, and grease.
2. On galvanized surfaces, prepare per paint manufacturer's recommendations for specified paint system.
3. Allow to dry thoroughly before application of paint.

D. Preparation of Concrete, Plaster or Gypsum Wallboard Surfaces:

1. Thoroughly clean all surfaces until they are free of dust, dirt, oil and grease.
2. Patch holes and cracks to render patch as imperceptible as reasonably possible.

E. Surfaces Not Mentioned:

1. Prepare surfaces not mentioned above in accordance with manufacturer's printed directions. In the absence of manufacturer's directions, prepare in accordance with procedures customarily employed, subject to review by the Architect.

3.4 PAINT APPLICATION:

A. General:

1. Slightly vary the color of succeeding coats. Do not apply additional coats until the complete coat has been inspected. Only the inspected and reviewed coats of paint will be considered in determining the number of coats applied.
2. Sand and dust between enamel coats to remove all defects visible to the unaided eye from a distance of five feet.
3. On all removable panels and all hinged panels, paint the back sides to match the exposed sides.

B. Drying:

1. Allow sufficient drying time between coats. Modify the period as recommended by the material manufacturer to suit adverse weather conditions.

C. Brush Application: Brush out and work all brush coats onto the surfaces in an even film. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, and other surface imperfections will not be acceptable.

D. Spray Application:

1. Confine spray application to metal framework and similar surfaces where hand brush work would be inferior.
2. Wherever spray application is used, apply each coat to provide the equivalent hiding of brush-applied coats. Do not double back with spray equipment for the purpose of building up film thickness of two coats in one pass.

E. Exposed Plumbing, Mechanical and Electrical Items:

1. Except when specified otherwise, paint conduits, pipes, ducts, grilles, registers, vents, access panels and similar items to match adjacent wall and/or ceiling finish. Paint visible surfaces behind registers, etc., flat black. Do not paint valve stems and bonnets.

F. Doors: In addition to both faces of doors, paint all four edges. Paint surfaces inaccessible after doors are installed prior to hanging.

G. Drawers and Shelves: Provide one coat of clear lacquer or approved equal to all interior surfaces of drawers, concealed shelves and the interior of casework at shelves.

H. Repainting: Extend finish material to a corner or similar transitional line, i.e., blend-in paint at patched area. When required, painting an entire wall may be necessary to achieve a reasonably imperceptible appearance at patched area.

I. Completed work shall match the approved samples for color, texture, and coverage. Remove, refinish, or repaint all work not in compliance with specified requirements.

3.5 PAINT SYSTEMS:

A. Paint system scheduled and noted on drawings. Refer to the complete corresponding paint systems as hereinafter specified. Major areas only are scheduled, but all miscellaneous items and areas within the room or space shall be treated with a suitable system.

B. The number of coats specified is the minimum number acceptable. If full coverage is not obtained with the specified number, additional coats shall be applied without additional cost to the Owner, as necessary to produce a finish acceptable to Architect.

3.6 SURFACES NOT SPECIFIED:

A. Other surfaces not included in the above schedule but which are scheduled or otherwise required to be painted shall be prepared and painted with a system selected by the Contractor subject to Architect's review.

PAINT SYSTEMS SCHEDULE

Paint systems used on this project are identified by an X in the finish schedule designation.

Surface		Finish Schedule Designation			Manufacturer's System Designation	
A. Interior						
(1)	Gypsum Drywall	P12.B	Semi-Gloss Latex Emulsion	1 st Coat	6-2	PPG Speedhide Interior Latex Primer Sealer 6-2.
				2 nd Coat	12-510	PPG SPEEDHIDE® Pro-EV Interior Enamel Latex Semi-Gloss 12-510 Series.
				3 rd Coat	12-510	PPG SPEEDHIDE® Pro-EV Interior Enamel Latex Semi-Gloss 12-510 Series.
		P14.B	Semi-Gloss Latex	1 st Coat	90-912	PPG Pitt-Tech® Plus Interior/Exterior DTM Industrial Primer 90-912 Series.
				2 nd Coat	90-912	PPG Pitt-Tech® Plus Interior/Exterior DTM Industrial Primer 90-912 Series.
				3 rd & 4 th Coat	12-510	PPG SPEEDHIDE® Pro-EV Interior Enamel Latex Semi-Gloss 12-510 Series.
(7)	Interior Acoustical Ceiling Tile/ Tectum Board Spray Applied	P18.A	Latex	2 nd Coat	90-912	PPG Pitt-Tech® Plus Interior/Exterior DTM Industrial Primer 90-912 Series.
B. Exterior						
(1)	Exterior Plaster, Concrete	P50.D	Elastomeric (Smooth) 5 yr. warranty	1 st Coat	4-503	PPG PERMA-CRETE® Concrete and Stucco Primer 4-503.
				2 nd Coat	4-110	PPG PERMA-CRETE® Pitt-Flex Elastomeric Coating 4-110.
				Spray Application	4-110	PPG PERMA-CRETE® Pitt-Flex Elastomeric Coating 4-110.
(4)	Exterior Ferrous Metal	P55.C	Semi-Gloss	1 st Coat	90-912	PPG Pitt-Tech® Plus Interior/Exterior DTM Industrial Primer 90-912 Series.
				2 nd Coat	90-912	PPG Pitt-Tech® Plus Interior/Exterior DTM Industrial Primer 90-912 Series.
				3 rd & 4 th Coat	78-45	PPG Sun-Proof Exterior Semi-Gloss Acrylic Latex 78-45 Series.
(5)	Exterior Galvanize	P56.C	Semi-Gloss	1 st Coat	90-912	PPG Pitt-Tech® Plus Interior/Exterior DTM Industrial

Surface		Finish Schedule Designation			Manufacturer's System Designation	
	d Metal					Primer 90-912 Series.
				2 nd & 3 rd Coat	78-45	PPG Sun-Proof Exterior Semi-Gloss Acrylic Latex 78-45 Series.

END OF SECTION 099000