



TECHNICAL SPECIFICATIONS
University Village #3 Interior Painting
Contract: PC-2014-004-PBHVACR

Delaware State University
1200 North DuPont Highway
Dover, DE 19901- 2277

Point of Contact
Jessica Wilson
(302) 857-6272
(302) 857-6278

**SECTION 01 11 00
SUMMARY OF WORK**

BASE BID: Paint all suites including walls, doors, and trim. Furniture will be moved as necessary by others. Furniture in occupied rooms will have furniture centrally locate all furnishings. Contractor shall be responsible for protecting all furnishings remaining in spaces. One color of paint will be selected. Walls will be eggshell finish. Trim will be semi-gloss finish. Project shall carry allowance of \$20,000 for patching of existing walls, as directed by the owner.

a. **Alternate #1:** Provide additional cost to the base bid to paint:

- The 21(twenty-one) suite ceilings on the first floor.
- The 21(twenty-one) suite ceilings on the second floor.
- The 21(twenty-one) suite ceilings on the third floor.
- The 21(twenty-one) suite ceilings on the fourth floor.

b. **Alternate #2:** Provide additional cost to the base bid to paint:

- The first floor corridors walls and trim.
- The second floor corridors walls and trim.
- The third floor corridor walls and trim.
- The fourth floor corridor walls, ceilings, and trim.

c. **Alternate #3:** Provide additional cost to the base bid to paint:

- First floor vestibule that spans 2-stories.
- The third floor lounge walls, ceilings, and trim
- The fourth floor lounge walls, ceilings, and trim.
- The second floor study room walls, ceilings, and trim.
- The third floor study room walls, ceilings, and trim.
- The fourth floor study room walls, ceilings, and trim.
- The first floor laundry room walls, ceilings, and trim.
- The second floor laundry room walls, ceilings, and trim.
- The third floor laundry room walls, ceilings, and trim.
- The fourth floor laundry room walls, ceilings, and trim.

d. **Alternate #4:** Provide additional cost to the base bid to paint the three stairways from the ground floor (first floor) to the fourth floor (four total floors), walls ONLY.

END OF SECTION

**SECTION 09 90 00
PAINTING AND COATINGS**

PART 1 GENERAL

1.1. SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints and other coatings.
- C. Scope: Prepare and paint all interior new work and patching and all exterior lintels.

1.2. REFERENCE STANDARDS

- 1. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency.
- 2. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications.
- 3. NACE (IMP) - Industrial Maintenance Painting; NACE International; Edition date unknown.
- 4. SSPC (PM1) - Good Painting Practice: SSPC Painting Manual, Vol. 1; Society for Protective Coatings.

1.3. DEFINITIONS

- A. Conform to ASTM D 16 for interpretation of terms used in this section.

1.4. SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on all finishing products and special coatings, including VOC content.
- C. Samples: Submit two paper chip samples, 1 X 1 inch in size illustrating range of colors and textures available for each surface finishing product scheduled.
- D. Samples: Submit two painted samples, illustrating selected colors and textures for each color and system selected with specified coats cascaded. Submit on aluminum sheet, 6 x 6 inch in size.
- E. Certification: By manufacturer that all paints and coatings comply with VOC limits specified.
- F. Certification: By manufacturer that all paints and coatings do not contain any of the prohibited chemicals specified; GreenSeal GS-11 certification is not required but if provided shall constitute acceptable certification.
- G. Manufacturer's Instructions: Indicate special surface preparation procedures and substrate conditions requiring special attention.
- H. Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.

1.5. QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum 5 years documented experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum 5 years' experience.

1.6. REGULATORY REQUIREMENTS

- A. Conform to applicable code for flame and smoke rating requirements for products and finishes.

1.7. DELIVERY, STORAGE, AND HANDLING

- 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.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.8. FIELD CONDITIONS

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- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- D. Minimum Application Temperature for Varnish Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

1.9. EXTRA MATERIALS

- A. See Section 01 60 00 - Product Requirements, for additional provisions.
- B. Supply 1 gallon of each color; store where directed.
- C. Label each container with color, type, texture, and room locations in addition to the manufacturer's label.

PART 2 PRODUCTS

2.1. MANUFACTURERS

- A. Provide all paint and coating products used in any individual system from the same manufacturer; no exceptions.
- B. Paints:
 - 1. Olympic-US: www.olympic.com
 - 2. Duron, Inc: www.duron.com.
 - 3. Sherwin Williams: www.sherwin-williams.com
 - 4. Benjamin Moore & Co: www.benjaminmoore.com.
 - 5. "Green Screen" paint:
 - a. Filmtools House Brand Chroma Key Green paint (non-reflective matte finish).
 - b. Rosco 5711 Chroma Key Green Video point.
- C. Substitutions: See Section 01 60 00 - Product Requirements.

2.2. PAINTS AND COATINGS - GENERAL

- A. Paints and Coatings: Ready mixed, unless intended to be a field-catalyzed coating.
 - 1. Provide paints and coatings of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
 - 3. Supply each coating material in quantity required to complete entire project's work from a single production run.
 - 4. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
- B. Primers: Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.
- C. Chemical Content: The following compounds are prohibited:
 - 1. Aromatic Compounds: In excess of 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).
 - 2. Acrolein, acrylonitrile, antimony, benzene, butyl benzyl phthalate, cadmium, di(2-ethylhexyl) phthalate, di-n-butyl phthalate, di-n-octyl phthalate, 1,2-dichlorobenzene, diethyl phthalate, dimethyl phthalate, ethylbenzene, formaldehyde, hexavalent chromium, isophorone, lead, mercury, methyl ethyl ketone, methyl isobutyl ketone,

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methylene chloride, naphthalene, toluene (methylbenzene), 1,1,1-trichloroethane, vinyl chloride.

2.3. PAINT SYSTEMS - INTERIOR

- A. Paint - Wood, Opaque, Acrylic, Latex, 2 Coat:
 - 1. Eggshell: Two coats of latex enamel and primer in one.
- B. Paint CI-OP-3L - Concrete/Masonry, Opaque, Acrylic, Latex, 2 Coat:
 - 1. One coat of block filler.
 - 2. Eggshell: Two coats of latex enamel and primer in one.
- C. Paint GI-OP-3L - Gypsum Board/Plaster, Acrylic, Latex, 2 Coat:
 - 1. Eggshell: Two coats of latex enamel and primer in one.

2.4. COLOR SCHEDULE

- A. Color selected by owner from manufacturer's standard range of colors.

2.5. ACCESSORY MATERIALS

- B. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality.
- C. Patching Material: Latex filler.
- D. Fastener Head Cover Material: Latex filler.

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.
- 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. Gypsum Wallboard: 12 percent.
 - 2. Plaster and Stucco: 12 percent.
 - 3. Masonry, Concrete, and Concrete Unit Masonry: 12 percent.
 - 4. Interior Wood: 15 percent, measured in accordance with ASTM D4442.
 - 5. Exterior Wood: 15 percent, measured in accordance with ASTM D4442.
 - 6. Concrete Floors and Traffic Surfaces: 8 percent.

3.2. PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to coating application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- D. Surfaces: Correct defects and clean surfaces which affect work of this section. Remove or repair existing coatings that exhibit surface defects.
- E. Marks: Seal with shellac or stain blocker those which may bleed through surface finishes.
- F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- G. Concrete and Unit Masonry Surfaces to be Painted: Remove dirt, loose mortar, scale, salt or alkali powder, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.

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- H. Gypsum Board Surfaces to be Painted: Fill minor defects with filler compound. Spot prime defects after repair.
- I. Galvanized Surfaces to be Painted: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
- J. Corroded Steel and Iron Surfaces to be Painted: Prepare using at least SSPC-PC 2 (hand tool cleaning) or SSPC-SP 3 (power tool cleaning) followed by SSPC-SP 1 (solvent cleaning).
- K. Uncorroded Uncoated Steel and Iron Surfaces to be Painted: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by power tool wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime after repairs.
- L. Interior Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

3.3. APPLICATION

- A. Exterior Wood to Receive Opaque Finish: If final painting must be delayed more than 2 weeks after installation of woodwork, apply primer within 2 weeks and final coating within 4 weeks.
- B. Apply products in accordance with manufacturer's instructions.
- C. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
- D. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- E. Apply each coat to uniform appearance.
- F. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply as many coats as necessary for complete hide.
- G. Sand wood and metal surfaces lightly between coats to achieve required finish.
- H. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- I. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.4. FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection.

3.5. CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.6. PROTECTION

- A. Protect finished coatings until completion of project.
- B. Touch-up damaged coatings after Substantial Completion.

END OF SECTION