

**OKLAHOMA STATE UNIVERSITY - BUILDING DESIGN STANDARDS**

## PART 1 GENERAL

## 1.01 SUBMITTALS:

- A. Submit three sets of samples with scheduled color product type, color formula and texture to simulate actual conditions on 12 inch x 12 inch hardboard for Architect and Physical Plant Services Project Manager review.
- B. Resubmit samples, if requested, until required sheen, color and texture is achieved.
- C. On actual wood surfaces, provide 4 inch x 8 inch samples of each natural and stained wood finish.
- D. On actual wall surfaces and other building components, duplicate painted finishes of acceptable samples, as directed by Physical Plant Services Staff.
- E. At beginning of project, provide a complete summary list of specific manufacturer's products, color identification numbers, manufacturer technical data sheets and MSDS Sheets that will be applied in this project. List shall compare each color number with each specified or selected color number. A copy of this list shall be given to the appropriate PHYSICAL PLANT SERVICES Project Manager, and Structural Analyst in Tech PM Shop.
- F. **LEED EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings. Provide documentation from the manufacturer identifying the VOC and chemical component limits for all indoor paints and finishes.**

## 1.02 QUALITY ASSURANCE:

- A. Conform to Painting and Decorating Contractors of America "Architectural Specification Manual".
- B. All materials shall be applied free from runs, sags, wrinkles, streaks, shiners and brushmarks.
- C. All materials shall be applied uniformly. If any reduction of the coating's viscosity is necessary, it shall be done in accordance with the manufacturer's label directions.
- D. New plaster and other masonry surfaces shall not be primed until it has been determined these substrates have dried sufficiently to safely accept paint. Unacceptable moisture content should be reported to the architect or the project manager.
- E. No exterior painting shall be undertaken if air or surface temperature is below 50 degrees F nor immediately following rain or until frost, dew or condensation has evaporated.

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- F. A minimum interior temperature of 65 degrees F shall be maintained during the actual application and drying of the paint, and until occupancy of the building occurs.
- G. Adequate ventilation shall be maintained at all time to control excessive humidity which will adversely affect the curing of coatings. The Contractor is solely responsible for maintaining suitable temperature and ventilation.
- H. Before painting begins, all other crafts shall have completed their work, and shall have removed all dirt and debris resulting therefrom. The rooms or areas are to be left in broom clean condition.
- I. Enamel and varnish undercoats are to be sanded smooth prior to the recoating. Tops and bottoms of doors are to be finished in the same manner as door facing, after the carpenters complete fitting of them.

**1.03 MAINTENANCE :**

- A. Extra Materials:
  - 1. Leave on premises, where directed by the Physical Plant Services Project Manager, a list of all colors, formulas and applied room number(s) on the lid(s).
  - 2. All material shall be in one gallon containers, tightly sealed and clearly marked with manufacture's name, color number or formula, base number and sheen.
- B. Removal: Remove all trash, empty cans, solvents and all painting related materials each day.

**PART 2 PRODUCTS****2.01 MANUFACTURERS:**

- A. Benjamin Moore & Company
- B. Diamond Vogel
- C. The Glidden Company
- D. Kelly Moore
- E. KWAL Howells, Inc.
- F. PPG Industries
- G. Sherwin Williams Company

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I. Substitutions must be pre-approved by Physical Plant Services Project Manager and Physical Plant Services Paint Shop.

2.02 MATERIALS:

Materials submitted for approval may be asked to match OSU's standard off-white color sample for testing. Testing shall include, but is not limited to; accurate color match, hiding capabilities, touchup capabilities, sheen match and other performance characteristics. Materials submitted for approval by Physical Plant Services staff of exterior finishes shall be weather resistant with colors approved by Physical Plant Services staff.

A. Quality:

1. Multi-colored Interior Coatings:

- a. When feasible, all public areas, hallways, stairwells, lounges, classrooms, etc. shall be coated with a multi-colored coating equal to or better than Zolatone.
- b. Materials not displaying the manufacturer's identification as a standard, best-grade product will not be acceptable.
- c. **ALWAYS USE MATERIALS WITH LOWEST V.O.C. AVAILABLE.**

**LEED EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings. Provide documentation from the manufacturer identifying the VOC and chemical component limits for all indoor paints and finishes. Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.**

- d. Waterborne or latex acrylic coatings shall be used unless prior approval for substitution is obtained.
- e. Material Safety data sheets and technical product data sheets must be included with O&M Manuals for all products used.

B. Color:

1. The standard interior color is "OSU Bone". The formula for "OSU Bone" is 9/48, L-8/48 in a gallon of white paint.
2. All exterior painted surfaces shall be painted with Pittsburg Paint Company's "Manor White". The formula for "Manor White" is C-24, L-36 per gallon of pastel base.

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## 2.03 VOLUME SOLID CONTENTS

When applied at a rate of 400 square foot per gallon obtaining a MIL thickness when dry of a minimum of 1.3 MILS, the minimum acceptable Volume Solid Content must be A (see list below) minimum and angular specular sheen should be B (see list below).

	A	B
Flat Finish	38%	0-5 @ 60°
Eggshell or Satin Finish	36%	14-30 @ 60°
Semi-Gloss Finish	34%	30-45 @ 60°
Gloss Finish	34%	50-70 @ 60°

These could apply to both interior and exterior products, with the possible "satin" or "pearl" addition.

- A. Resin & Titanium: When conventional coatings are used, the white base in each category shall contain the minimum resin and titanium content as follows:

Paint Type	% Resin	% TiO <sub>2</sub>
Alkyd Enamel	30%	18%
Latex Enamel	20%	17%
Latex Flat Wall	14%	16%
Latex Exterior Flat	18%	20%

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FROM FEDERAL REGISTRY VOLUME U3, No. 176 AS PUBLISHED SEPTEMBER 19,  
1999

**TABLE 1 TO SUBPART D VOLATILE  
ORGANIC COMPOUND (VOC) CONTENT  
LIMITS FOR  
ARCHITECTURAL COATINGS**

(Unless otherwise specified, limits are expressed in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation excluding the volume of any water, exempt compounds, or colorant added to tint bases.)

<b>Coating Category</b>	<b>Grams VOC per Liter</b>	<b>Pounds VOC per Gallon</b>
Antenna coatings	530	4.4
Antifouling coatings	450	3.8
Antigraffiti coatings	600	5.0
Bituminous coatings and mastics	500	4.2
Bond breakers	600	5.0
Calcimine recoater	475	4.0
Chalkboard resurfacers	450	3.8
Concrete curing compounds	350	2.9
Concrete curing and sealing compounds	700	5.8
Concrete protective coatings	400	3.3
Concrete surface retarders	780	6.5
Conversion varnish	725	6.0
Dry fog coatings	400	3.3
Extreme high durability coatings	800	6.7
Faux finishing/glazing	700	5.8

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**Fire-Retardant/Resistive Coatings:**

Clear	850	7.1
Opaque	450	3.8

**Flat Coatings:**

Exterior coatings	250	2.1
Interior coatings	250	2.1
Floor coatings	400	3.3
Flow coatings	650	5.4
Form release compounds	450	3.8
Graphic arts coatings (sign paints)	500	4.2
Heat reactive coatings	420	3.5
High temperature coatings	650	5.4
Impacted immersion coatings	780	6.5
Industrial maintenance coatings	450	3.8
Lacquers (including lacquer sanding sealers)	680	5.7
Magnesite cement coatings	600	5.0
Mastic texture coatings	300	2.5
Metallic pigmented coatings	500	4.2
Multicolored coatings	580	4.8
Nonferrous ornamental metal lacquers and surface protectants	870	7.3

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**Non-Flat Coatings:**

Exterior coatings	380	3.2
Interior coatings	380	3.2
Nuclear coatings	450	3.8
Pretreatment wash primers	780	6.5
Primers and undercoaters	350	2.9

**Quick-Dry Coatings:**

Enamels	450	3.8
Primers, sealers, and undercoaters	450	3.8
Repair and maintenance thermoplastic coatings	650	5.4
Roof coatings	250	2.1
Rust preventative coatings	400	3.3
Sanding sealers (other than lacquer sanding sealers)	550	4.6
Sealers (including interior clear wood sealers)	400	3.3

**Shellacs:**

Clear	730	6.1
Opaque	550	4.6

**Stains:**

Clear and semitransparent	550	4.6
Opaque	350	2.9
Low solids	120b	1.0b

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Stain controllers	720	6.0
Swimming pool coatings	600	5.0
Thermoplastic rubber coatings and mastics	550	4.6
Traffic marking coatings	150	1.3
Varnishes	450	3.8
Waterproofing sealers and treatments	600	5.0
<b>Wood Preservatives:</b>		
Below ground wood preservatives	550	4.6
Clear and semitransparent	550	4.6
Opaque	350	2.9
Low solids	120b	1.0b
Zone marking coatings	450	3.8

English units are provided for information only. Compliance will be determined based on the VOC content limit, as expressed in metric units.

Units are grams of VOC per liter (pounds of VOC per gallon) of coating, including water and exempt compounds, thinned to the maximum thinning recommended by the manufacturer.

**END OF SECTION 09910**