

APPENDIX O - REBLENDED POST-CONSUMER LATEX PAINT

PART 1 - GENERAL

1. Summary

1.1. This appendix includes information on the following:

- A. Interior and exterior paint, scheduled with re-blended post-consumer latex paint
- B. Products supplied but not installed in the context of this appendix
- C. Products installed but not supplied in the context of this appendix
- D. Related sections

1.2. Measurement Procedures: The contractor shall provide a breakdown on the gallons and percentage of post-consumer content materials used in an applicable product.

1.3. Payment Procedures: With each payment, the contractor shall submit information contained in this Summary section, in addition to other payment procedures that administrators may request.

1.4. Alternates: The painting subcontractor may contribute excess paint to the owner's feedstock. The owner's representative and the paint manufacturer shall review the feedstock. As stipulated by the owner and the manufacturer, this contribution might be deducted from the cost of the re-blended latex paint supplied for the project.

2. References

- A. ASTM D 652 - Standard Test Method for Consistency of Paints Using the Sommer Viscometer
- B. ASTM D 1210 - Standard Test Method for Fineness of Grind of Dispersion of Pigment- Vehicle Systems by Hegman-Type Gage
- C. ASTM 1475 - Standard Test Method for Density of Liquid Coatings, Inks, and Related Products
- D. ASTM E 70 - Standard Test Method for pH of Aqueous Solutions with the Glass Electrode
- E. ASTM D 2805 - Standard Test Method for Hiding Power of Paints by Reflectometry (Spectrometer)
- F. ASTM D 3960 - Standard Test Method for Determining Volatile Organic Compound/Content (VOC) for Paints and Related Coatings

3. Definitions

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

3.2. Re-blended Latex Paint Product: A residential or commercial consumer product that is and shall be made with a minimum of 80 percent post-consumer recycled material. Re-blended latex paint may be mixed with some virgin materials such as resins and colorants. Based on manufacturer's recommendation, re-blended latex paint shall be intended for use as specified in Section 2.03B.

3.3. Feedstock: A manufacturer's raw material, which can be made of either virgin, post-consumer recycled or post-industrial material. Post-consumer recycled material and post-industrial recycled material can be used as an ingredient in a manufacturing process as an effective substitute for virgin material products.

3.4. Post-consumer recycled material: A finished material that normally would be disposed of as a solid waste. This includes post-industrial recycled material, but does not include material made from manufactured or converted waste. This material also has completed its lifecycle as a consumer item.

3.5. Post-industrial recycled material: Material byproducts created during the original manufacturing process.

3.6. Virgin material: Products made with 100 percent new raw materials. It contains no recycled material.

4. Description

4.1. Each batch of re-blended post-consumer latex paint must be tested for physical properties following generally accepted laboratory procedures and/or the following ASTM methods:

4.1.1. ASTM D 652 - Viscosity. The working properties shall be satisfactory, the paint shall show no tendency to sag or run and it shall level to a smooth surface of satisfactory appearance. Specification: 90-110 KU.

4.1.2. ASTM D 1210 - Fineness of Grind. Filtered to 375 microns for sprayer tip orifice size of 0.015 or filtered to 370 microns for sprayer tip orifice size of 0.014 as measured in accordance with ASTM D 1210.

4.1.3. ASTM D 145 - Weight per Gallon. Test by Gardo Physical Density cup or similar. Specification: 10 pounds to 11-1/2 pounds per gallon as measured in accordance with ASTM D 1475.

4.1.4. ASTM E 70 - Alkalinity. Test by measuring pH via a meter apparatus. A pH of 8-1/2 to 10 is acceptable.

4.1.5. Hide: Submit upon request, the test of Leneta wet film-application draw down panel or similar at 3 mils.

4.1.6. ASTM D 3960 - Periodically test VOC of paints and related coatings to ensure that they meet national VOC laws.

5. Submittals

5.1. Product Data Tests and Sample Draw Downs

5.1.1. Submit two painted samples that are a minimum of 8 inches by 8 inches. They shall illustrate the pre-selected colors for each system selected with the specified coats cascaded. Submit on stiff paper-backed material.

5.1.2. Identify each sample by finish formula, color name and number.

5.1.3. Select colors prior to commencement of work.

5.2. Quality Assurance/Control Submittals

- A. Design data and test reports
- B. Certificates of ASTM tests
- C. Manufacturer's instructions
- D. Qualification statements

5.3. Submittals at Project Closeout: Submit maintenance data on cleaning, touch-up and painted surfaces.

6. Quality Assurance

6.1. Qualifications

6.1.1. Manufacturer Qualifications: Company shall have documented experience in re-blending latex paint as specified in section 5.

6.1.2. Applicator Qualifications: Company shall have documented experience performing the work of this section. Minimum of two years of experience is preferred.

6.2. Regulatory Requirements: Comply with all current Environmental Protection Agency (EPA), state or local requirements that limit VOCs for architectural and industrial coatings.

7. Delivery Storage and Handling

- 7.1. Deliver paint in sealed original labeled containers that bear the manufacturer's name, types of paint, brand name, color designation and instructions for mixing and/or reducing.
- 7.2. The post-consumer recycled material shall be delivered to the manufacturer as a pre-sorted feedstock ready for re-blending. The paint subcontractor shall provide an accurate estimate of the total quantity of each color to be used.
- 7.3. The paint manufacturer shall retain any waste paint after testing and re-blending to be recycled.
- 7.4. Store paint materials at an ambient temperature of 45 degrees F (7 degrees C) and a maximum temperature of 90 degrees F (32 degrees C). Store the materials in a ventilated area as required by the manufacturer's instructions.
- 7.5. The painting subcontractor shall recycle, upon availability in the marketplace, all applicable materials such as paint containers and paint.

8. Project and Site Conditions

8.1. Project and Site Environmental Requirements

- 8.1.1. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- 8.1.2. Provide lighting levels of 80 foot-candles measured mid-height at substrate surface to be finished.
- 8.1.3. The minimum temperature for applying latex paints is 45 degrees F (7 degrees C) for interiors unless required otherwise by the manufacturer's instructions. Provide adequate ventilation and sufficient heating to maintain the minimum temperature 24 hours before and 48 hours after the application of finishes.
- 8.1.4. The contractor shall properly ventilate and exhaust the areas where the paint is applied. Take care and coordinate interior remodeling projects that are done in phases to avoid painting fumes building up. Coordinate with the owner and the contractor before applying the paint.

9. Warranty: No warranty.

PART 2 - PRODUCTS

1. Acceptable Manufacturers: Subject to compliance with the specified requirements, provide products of one of the following. Substitutions: Refer to Section 01600 - Product Requirements.

2. Materials: All re-blended latex paint, including but not limited to finish coat and primer, must meet the following requirements:

- A. Conform to all specified requirements for non-hazardous material contents
- B. Contain a minimum of 80 percent post-consumer recycled material. Preference shall be given to a manufacturer that uses feedstock that originated in Minnesota, unless it can be shown that the supply of feedstock in Minnesota has been depleted for use in this contract.
- C. Conform to all specified performance and application requirements
- D. Primer is to be reprocessed as a first preference and be re-blended as specified in item A. Primer material must perform as specified for the paint system.

3. Re-Blended Latex Paint

3.1. General Requirements: Ready-mixed re-blended paint products shall have the following properties:

- A. A soft paste consistency that is capable of being readily and uniformly dispersed to a homogeneous coating
- B. Good flow and easy brushing
- C. Capable of drying or curing without streaks or sags

3.2. Provide re-blended latex paint that is formulated for the following applications and finish:

3.2.1. Applications: Gypsum board, plaster, masonry, concrete block and wood

3.2.2. Finishes: Flat

3.3. Paint shall be available in 1-gallon and 5-gallon containers. Clearly mark on containers that the paint is re-blended. Indicate color and finish.

3.4. All paint shall be delivered to the job site in the manufacturer's original containers and labeled according to requirements specified in Part 1.

4. Accessories

A. Accessory Materials: Primers, paint thinners and other materials not indicated but required to achieve the specified, commercial-quality finishes

- B. Patching Material: Latex filler
- C. Fastener Head Cover Material: Latex filler

5. Source Quality Control

5.1. Within an acceptable range, samples for color shall fall within a Delta "E" range of ± 2.5 . Touch-up must be from the original re-blended batch with the original finish coat. Removing, refinishing or repainting shall not be in compliance with specified requirements until such requirements are met.

5.2. The manufacturer shall test the supplied paint materials in accordance with the specified standards to verify that they meet performance requirements.

5.3. Each batch of paint shall be tested for viscosity, fineness of grind, weight per gallon and alkalinity.

5.4. The manufacturer shall submit test results as part of project submittals for approval.

PART 3 - EXECUTION

1. Examination: Examine the areas and conditions under which painting is to be applied and notify the contractor in writing of detrimental conditions that would effect the work being done timely and properly. Do not proceed with the work until unsatisfactory conditions have been corrected.

2. Preparation

2.1. PROHIBITED: Painting over surfaces where moisture content exceeds that permitted in manufacturer's printed directions.

2.2. PROHIBITED: Applying paint to surfaces that have blistered and burned due to excessive alkalinity of finish paint.

2.3. PROHIBITED: Stirring surface film into the material. Remove the film and, if necessary, strain the material before using.

2.4. General

2.4.1. Remove and protect hardware, lighting fixtures and similar items before painting. Protect finished surfaces in areas where paint is being applied with clean drop cloths and suitable masking.

2.4.2. Clean surfaces to be finished as required to remove oil grease, dust and dirt. Sand where necessary to properly prepare surfaces to receive finish.

2.5. Surface Preparation

2.5.1. For Cement Materials: Prepare cement surfaces that include concrete and concrete block by removing efflorescence, chalk, dust, dirt, grease and oils. Determine alkalinity (pH) and percentage of moisture content of surfaces to be painted by testing appropriately. Acceptable tests are as follows: For cement, maximum 17 percent humidity and pH between 7 and 10; for wood and gypsum board, maximum 15 percent humidity.

2.5.2. For Wood: Clean wood surfaces to be painted of dirt, oil, and other foreign substances with scrapers, mineral spirits and sandpaper as required. Use sandpaper to smooth finished surfaces that are exposed to view, and dust off.

2.5.2.1. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer before applying primer coat. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood-filler. Sandpaper smooth when dried.

2.5.2.2. Prime, stain or seal wood required to be painted immediately upon delivery to job site. Prime edges, ends, faces, undersides and backsides of such wood, including interior millwork and trim.

2.5.3. For Gypsum Wallboard Surfaces: Fill scratches, nicks and uneven areas with joint compound or spackle, and sand flush with the surface.

2.5.4. For Existing Surfaces, Except Metals: Clean thoroughly by removing loose, scaly and other defective film. Fill holes and cracks. Remove gloss from painted surfaces by washing and sanding, and touch-up bare spots with appropriate primer.

2.6. Materials

2.6.1. Mix and prepare painting materials in accordance with the manufacturer's printed instructions.

2.6.2. Store materials that are not in use in tightly covered containers. Keep containers used to store, mix and apply paint clean, and free of foreign materials and residue.

2.6.3. Stir materials before application to produce a mixture of uniform density, and stir as required during the application of the materials.

3. Application

3.1. PROHIBITED: Applying finishing coats of paint before other trade groups have completed their work in the area to be painted.

3.2. PROHIBITED: Applying re-blended paint to ferrous and galvanized metals, wood and metal doors and frames, floors and glass.

3.3. PROHIBITED: Painting over code-required labels such as Underwriters Laboratories and Factory Mutual, as well as painting over equipment identification, performance rating, name and nomenclature plates.

3.4. If color and finish are not designated, the architect shall be notified for clarification.

3.5. Apply paint evenly and smoothly without runs, sags, brush marks, laps, streaks, unfinished patches and other blemishes. Apply each coat to produce uniformly thick film. Ensure that the film on all surfaces, including edges, corners and crevices is as thick as that of adjacent painted surfaces.

3.6. Apply paint in accordance with the manufacturer's directions. Use equipment and techniques best suited for substrate and type of material being applied.

3.7. Brush out flow on each coat as required by the characteristics of the materials, or as the manufacturer recommends.

3.8. The primer coat shall be suitable for each surface and compatible in each case with the finish paint.

3.9. Allow each coat to dry thoroughly before applying the next coat.

3.10. The primer coat on concrete block shall be tinted to the approximate shade of the final coat. Touch-up suction spots or "hot spots" in concrete that are evident after applying the first coat. Touch-up before applying the second coat to produce an even finish coat.

3.11. Properly prepare and touch-up scratches, abrasions and other disfigurements and remove foreign matter before applying the following coat. Use a featheredge to spot-prime and spot-coat adjacent coats to produce a smooth and level surface.

3.12. Fill nail holes with suitable filler.

3.13. Finish recesses the same as adjoining rooms. Finish other surfaces the same as nearest or adjoining surfaces unless otherwise shown.

3.14. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment and furniture with prime coat only before final installation of equipment.

3.15. Comply with VOC levels for proper ventilation as per manufacturer's specifications and MSDS.

4. Adjusting and Cleaning

4.1. After the other trade groups have completed their work, touch-up and restore damaged and defaced painted surfaces.

4.1.1. The trade group that damaged such surfaces shall be charged for the cost of touch-up painting at no additional cost to the owner.

4.1.2. Notify the contractor immediately about damaged surfaces.

4.2. Remove discarded paint materials, rubbish, cans and rags from the project site at the end of each workday.

4.3. When painting is completed, clean window glass and other paint-splattered surfaces. Properly wash and scrap surfaces to remove splattered paint. Use care not to scratch and otherwise damage finished surfaces.

5. Protection

5.1. Protect work finished under this section and the work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct damage by cleaning, repairing or replacing, and repainting.

5.2. Provide "Wet Paint" signs as required to protect freshly painted surfaces. When painting is completed, remove temporary wrappings that others have provided to protect their work.

6. Paint Schedules

6.1. Prior to construction, the architect shall furnish the selected colors from the manufacturer's standard color palette for the surfaces to be painted.

6.2. Provide the following paint systems for the various substrates as indicated:

6.2.1. Wood (Interior-Opaque): one coat of acrylic stain-blocking multi-purpose primer and two coats of re-blended latex paint

6.2.2. Gypsum Board: one coat of re-blended latex wall primer and two coats of re-blended latex paint

6.2.3. Plaster: one coat of latex wall primer and two coats of re-blended latex paint

6.2.4. Concrete Block: one coat of re-blended latex block filler and one coat of re-blended latex paint

6.2.5. Masonry: one coat of re-blended latex block filler and one coat of re-blended latex paint

6.3. If substrate is not among those specified above, consult with the architect for direction.

6.4. Paint Color Key

PT-1: _____

Color:

Finish:

PT-2: _____

Color:

Finish:

PT-3: _____

Color:

Finish:

PT-4: _____

Color:

Finish:

End of Appendix O – Re-Blended Post-Consumer Latex Paint
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