



## SECTION 097200

### DIGITALLY PRINTED VINYL WALLCOVERING MURALS

#### PART 1 - GENERAL

##### 1.01 SUMMARY

- A. Provide digitally printed wallcovering vinyl wallcovering, complete.
- B. Related Sections
  - 1. Section 16500 - Lighting: Permanent during installation.
  - 2. Section 09250 - Gypsum Board: Wall Substrates.
  - 3. Section 09900 - Painting: Preparation and priming of substrate surfaces.

##### 1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM):
  - 1. E 84 Test Method for Surface Burning Characteristics of Building Materials.
- B. Wallcovering Association (WA):
  - 1. WA-101-2011 Quality Standard for Polymer Coated Fabric Wallcovering.
- C. Federal Specifications (FedSpec):
  - 2. CCC-W- 408A Wallcovering, Vinyl Coated
- D. Underwriters Laboratory, Inc. (UL)
  - 1. UL 723: Test for Surface Burning Characteristics of Building Materials
- F. National Fire Protection Agency (NFPA)
  - 1. NFPA 101 Life Safety Code
  - 2. NFPA 286 Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
  - 3. CAN/ULC-S102 Test for Surface Burning Characteristics of Building Materials and Assemblies

##### 1.03 SUBMITTALS

- A. Submit one Color Proof for approval prior to manufacture of a full size miniature mural.
- B. Submit one full size miniature strike-off for approval prior to the manufacture of full size mural.

- C. Submit manufacturers' product data and installation instructions for each digitally printed wallcovering mural, adhesive and accessory required.
  - 1. Include data on physical properties, fire hazard classification and fire detection characteristics of wallcovering.
  - 2. Include manufacturer's recommendations for maximum permissible moisture content of substrates.
- D. Submit full-size samples, 54 inches wide by 36 inches long, cut from current production of each ground wallcovering selected to demonstrate quality, weight, color and embossing.
- E. Submit manufacturer's written product certification that all furnished wallcovering ground meets or exceeds the specification requirements. Include certified copies of tests specified.
- F. Submit wallcovering ground manufacturer's written instructions for recommended maintenance of each type of wallcovering required.

#### 1.04 QUALITY ASSURANCE

- A. **Manufacturer:** Provide each type of digitally printed vinyl wallcovering mural required produced by one manufacturer whose published product literature clearly indicates compliance of wallcovering ground with specified requirements.
- B. **Applicator:** Installation by skilled commercial wallcovering applicators with no less than three years of documented experience installing wallcovering murals of the types and extent specified for the project.
- C. **Material Standards:** Provide materials that meet or exceed Federal Specification CCC-W-408A and WA-101 Quality Standard for Polymer Coated Fabric Wallcovering for Type I and Type II wallcovering.
- D. **Physical Properties:** Provide wallcovering with the following physical properties when tested in accordance with ASTM D751.
  - 1. Total weight: 21 oz./lin. yd
  - 2. Tensile Strength: 50 X 55 Minimum (W x F)
  - 3. Tear Strength: 25 X 25 Minimum (W x F)
- E. **Fire Hazard Classification:** Provide materials that comply with Class A fire rating when tested in accordance with ASTM E84.
- F. **Underwriters Laboratories approval:** Provide materials that have been tested and approved by Underwriters Laboratories.
- G. **Smoke Toxicity:** Provide materials that have been tested for smoke toxicity and approved for use by New York City Materials and Equipment Acceptance Division (MEA).
- H. **Fire Detection Characteristics:** Provide materials that have been laboratory tested for the Early Warning Effect® in accordance with ASTM E 603. Submit test results certifying that when one square foot section of the material is heated to 300 degrees F, the wallcovering emits an odorless, colorless non-toxic vapor that will activate an ionization smoke detector.
- I. **Low Emissions:** Provide materials that meet the requirements of California Integrated Waste Management Board's Special Environmental Requirements Specification CA 01350 for low emitting materials.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver digitally printed vinyl wallcovering mural to the project site in unbroken and undamaged wrappings and clearly labeled with the manufacturer's identification label, quality or grade, UL label and sidemark.
- B. Store materials in a clean, dry storage area with temperature maintained above 55 degrees with normal humidity.
- C. Store material in a flat position to prevent damage to roll-ends. Do not cross stack material. Support material off the floor in a manner to prevent sagging and warping.

1.06 PROJECT CONDITIONS

- A. Do not apply digitally printed wallcovering mural when surface and ambient temperatures are outside the temperature ranges required by the wallcovering manufacturer.
- B. Provide continuous ventilation and heating facilities to maintain substrate surface and ambient temperatures above 60 degrees F unless required otherwise by manufacturer's instructions.
- C. Apply adhesive only when substrate surface temperature or ambient temperature is above 60 degrees F, or relative humidity is below 40 percent.
- D. Maintain constant recommended temperature and humidity for at least 72 hours prior to, throughout the installation period and for 72 hours after wallcovering installation completion.
- E. Provide not less than an 80 foot candles per square foot lighting level minimum measured mid height at substrate surfaces.

1.07 WARRANTY

- A. Submit manufacturer's 5 year written warranty against manufacturing defects.

**PART 2 - PRODUCTS**

2.01 MANUFACTURERS

- A. Digitally Printed Wallcovering Mural: **Koroseal** Digitally Printed Wallcovering Murals manufactured by Koroseal Interior Products, LLC. Contact sales representative\_\_\_\_\_.

2.02 MATERIALS

- A. Wallcovering: Koroseal Digital Surfaces Wallcovering , Pattern: \_\_\_\_\_. Type II conforming to Federal Specification CCC-W-408A and WA-101-A using test methods given in Federal Specification CCC-T-191 b excepted as otherwise specified.
  - 1. Total Weight: 21 ounces per linear yard.
  - 2. Backing Weight: 3.1 ounces per linear yard.
  - 3. Vinyl Weight: 17.9 ounces per linear yard
  - 4. Thickness: 0.018 to 0.026 inches
  - 5. Fabric backing and content: Poly-Cotton Woven

- B. Digital Image: Owner/Architect to provide PDF file of image to be digitally printed with UV inks on Koroseal Digital Surfaces Type II Wallcovering

## 2.03 ACCESSORIES

- A. Adhesives: Koroseal A-848-B Heavy-Duty Premixed vinyl adhesive.
- B. Substrate Primer/Sealer: White pigmented alkyd or acrylic/latex base primer specifically formulated for use with vinyl wallcoverings.
- C. [Optional] Metal Moldings: Extruded aluminum, alloy 6063-T5, long lengths, with fine satin mechanical finish and class 2 clear architectural anodic coating conforming to AA M21A31 designed for use with vinyl wallcoverings.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates and installation conditions.
- C. Test substrates with a suitable moisture meter and verify that moisture content does not exceed 4 percent
- D. Verify substrate surfaces are clean, dry, smooth, structurally sound and free from surface defects and imperfections that would show through the finished surface.
- E. Evaluate all painted surfaces for the possibility of pigment bleed-through.
- F. Notify the contractor and architect in writing of any conditions detrimental to the proper and timely completion of the installation. Beginning of installation means acceptance of surface conditions.

### 3.02 INSTALLATION

- A. Allow digitally printed vinyl wallcovering mural to acclimatize to the area of installation a minimum of 24 hours before installation.
- B. Before cutting, examine image and color and determine that they are the correct image and color as specified for the correct location.
- C. Read and follow the instructions in the manufacturer's installation sheet contained in each roll of the digitally printed vinyl wallcovering mural.
- D. Use adhesive recommended by the wallcovering manufacturer.
- E. Install each panel in sequence as indicated on the drawings.
- F. If there are variations in color or image that are considered to be excessive, notify the manufacturer's representative for an inspection before any further wallcovering is installed.
- G. Smooth wallcovering to the hanging surface using a stiff bristled sweep brush to eliminate air bubbles, wrinkles, gaps and overlaps.
- H. Remove excess adhesive along finished seams immediately after each wallcovering strip applied. Use clean warm water, a natural sponge and clean towels. Change water often to maintain water cleanliness.

3.02 CLEAN-UP COMPLETION

- A. Upon completion of the work, remove surplus materials, rubbish and debris resulting from the wallcovering installation. Leave areas in neat clean and orderly condition.

END OF SECTION