

# SECTION 097200

**DIGITALLY PRINTED VINYL WALLCOVERING MURALS**

**PART 1 - GENERAL**

* 1. SUMMARY
     1. Provide digitally printed wallcovering vinyl wallcovering, complete.
     2. 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.
  2. REFERENCES
     1. American Society for Testing and Materials (ASTM):
        1. E 84 Test Method for Surface Burning Characteristics of Building Materials.
     2. Wallcovering Association (WA):
        1. WA-101-2011 Quality Standard for Polymer Coated Fabric Wallcovering.
     3. Federal Specifications (FedSpec):

2. CCC-W- 408A Wallcovering, Vinyl Coated

* + 1. Underwriters Laboratory, Inc. (UL)
       1. UL 723: Test for Surface Burning Characteristics of Building Materials

1. 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

* 1. CAN/ULC-S102 Test for Surface Burning Characteristics of Building Materials and

Assemblies

* 1. SUBMITTALS
     1. Submit one Color Proof for approval prior to manufacture of a full size miniature mural.
     2. Submit one full size miniature strike-off for approval prior to the manufacture of full size mural.
     3. 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.
     4. 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.
     5. Submit manufacturer's written product certification that all furnished wallcovering ground meets or exceeds the specification requirements. Include certified copies of tests specified.
     6. Submit wallcovering ground manufacturer's written instructions for recommended maintenance of each type of wallcovering required.
  2. QUALITY ASSURANCE
     1. 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.
     2. 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.
     3. 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.
     4. 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)
     5. Fire Hazard Classification: Provide materials that comply with Class A fire rating when tested in accordance with ASTM E84.
     6. Underwriters Laboratories approval: Provide materials that have been tested and approved by Underwriters Laboratories.
     7. 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).
     8. 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.
     9. 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.
  3. PRODUCT DELIVERY, STORAGE AND HANDLING
     1. 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.
     2. Store materials in a clean, dry storage area with temperature maintained above 55 degrees with normal humidity.
     3. 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.
  4. PROJECT CONDITIONS
     1. Do not apply digitally printed wallcovering mural when surface and ambient temperatures are outside the temperature ranges required by the wallcovering manufacturer.
     2. Provide continuous ventilation and heating facilities to maintain substrate surface and ambient temperatures above 60 degrees F unless required otherwise by manufacturer's instructions.
     3. Apply adhesive only when substrate surface temperature or ambient temperature is above 60 degrees F, or relative humidity is below 40 percent.
     4. 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.
     5. Provide not less than an 80 foot candles per square foot lighting level minimum measured mid height at substrate surfaces.
  5. WARRANTY
     1. Submit manufacturer’s 5 year written warranty against manufacturing defects.

# PART 2 - PRODUCTS

* 1. MANUFACTURERS
     1. Digitally Printed Wallcovering Mural: **Koroseal** Digitally Printed Wallcovering Murals manufactured by Koroseal Interior Products, LLC. Contact sales representative .
  2. MATERIALS
     1. 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
     2. Digital Image: Owner/Architect to provide PDF file of image to be digitally printed with UV inks on Koroseal Digital Surfaces Type II Wallcovering
  3. ACCESSORIES
     1. Adhesives: Koroseal A-848-B Heavy-Duty Premixed vinyl adhesive.
     2. Substrate Primer/Sealer: White pigmented alkyd or acrylic/latex base primer specifically formulated for use with vinyl wallcoverings.
     3. [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

* 1. EXAMINATION
     1. Examine substrates and installation conditions.

1. Test substrates with a suitable moisture meter and verify that moisture content does not exceed 4 percent
2. Verify substrate surfaces are clean, dry, smooth, structurally sound and free from surface defects and imperfections that would show through the finished surface.
3. Evaluate all painted surfaces for the possibility of pigment bleed-through.
4. 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.
   1. INSTALLATION
      1. Allow digitally printed vinyl wallcovering mural to acclimatize to the area of installation a minimum of 24 hours before installation.
      2. Before cutting, examine image and color and determine that they are the correct image and color as specified for the correct location.
      3. Read and follow the instructions in the manufacturer's installation sheet contained in each roll of the digitally printed vinyl wallcovering mural.
      4. Use adhesive recommended by the wallcovering manufacturer.
      5. Install each panel in sequence as indicated on the drawings.
      6. 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.
      7. Smooth wallcovering to the hanging surface using a stiff bristled sweep brush to eliminate air bubbles, wrinkles, gaps and overlaps.
      8. 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.
   2. CLEAN-UP COMPLETION
      1. 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