

SECTION 09-94 10 - ARCHITECTURAL SURFACING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. 3M™ DI-NOC™ Architectural Finishes.
- B. LEED requirements: Refer to Section 01-8112 and Section 01-8113 for information regarding VOC limits, recycled content, regional materials, and required documentation.

1.02 RELATED SECTIONS

Note: Delete any section below not relevant to this project; add others as required.

- A. Section 06 20 00 – Finish Carpentry
- B. Section 06 40 00 – Architectural Woodwork
- C. Section 12 30 00 – Manufactured Casework

1.03 QUALITY ASSURANCE

- A. Supplier: Obtain all products in this section from a single supplier.
- B. Installer: Installation shall be performed by a trained and qualified installer, specialized and experienced in work required for this project.

1.04 SUBMITTALS

- A. Submit manufacturer's product data for specified products.
- B. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including dimensions, anchorage, and accessories.
- C. Closeout Submittals:
 - 1. Submit operation and maintenance data for installed products, including precautions against harmful cleaning materials and methods.
 - 2. Submit durability or warranty documents specified herein.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- B. Deliver products in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Store products protected from weather, temperature, and other harmful conditions as recommended by supplier. Product must remain in original plastic bag and boxes and have storage conditions as follows:

- 1. 95 °F (35 °C) maximum temperature
- 2. Out of Sunlight
- 3. Clean dry area
- 4. Original container
- 5. Do not stack boxes over six (6) units high. Excessive weight can damage the film
- 6. Relative humidity below 80 percent

- D. Handle products in accordance with manufacturer's instructions.
- E. Total shelf life: 2 years. Up to 2 years unprocessed, OR process within 1 year *and* apply within 1 year of processing.

1.06 WARRANTY- DURABILITY

- A. Manufacturer's Warranty: Submit manufacturer's standard warranty document executed by authorized company official.
 - 1. Standard Product Durability: See Product Bulletins and Color Sample Book for individual pattern and texture rating.
 - a. Outdoor films: 4 years. Desert Southwest is slightly less- see Product Bulletins.
 - b. Indoor films with no direct UV light exposure -12 years.

1.07 EXTRA MATERIALS

- A. Furnish extra material, described below, at time of installation. Deliver in protective packaging for storage and label contents appropriately.
- B. 1. Amount of additional material of each pattern used will vary depending upon the use and the pattern type.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Approved manufacturers:
 - 3M Company
 - 3M Center,
 - Building 220-12E-04
 - PO Box 33220 USA
 - General Info: 1-800-374-6772
 - Technical Info: 1-800-328-3908
- B. Standard: Design based upon DI-NOC™ Architectural Finishes with pressure-sensitive adhesive and air release channels.

2.02 MATERIAL PROPERTIES

- A. Architectural surfacing to be approximately 8.5 mils thick including adhesive layer.

- B. The product must be exterior rated, where applicable.
- C. Product must meet Class A/ Class I flame spread rating requirement of 0-25, smoke 0-400, based on ASTM E-84 / UL-723
- D. Emission of formaldehyde (JP). Test Method: JIS A1901 or JIS A1460. Related ISO: ISO 16000-3, ISO/DIS 1000-6, ISO 16017-1 Highest grade: F****
- E. Abrasion Resistance (JIS K7204) Taber® Abraser Abrasion wheel : CS-17 Loading weight : 1kg Cycles- 7,000 cycles with no pattern change on surface.
- F. Chemical and Stain resistance. No changes with 24 hour exposure (at 23°C) for Coffee, Tea, Cola, Milk, Wine, Ketchup, Vinegar, Olive oil, Lemon juice, Salt solution(1%), Household ammonia(10%), Soap solution(1%), Formalin(36%), Citric acid solution (10%), HCL (10%), NaOH (10%), or Ethyl Alcohol.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrate(s) for compliance with requirements for non-porous, smooth surface and other conditions affecting the performance of work in this section. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Scheduling of installation by Owner or its representative implies that substrate and conditions are prepared and ready for product installation. Proceeding with installation implies installer's acceptance of substrate and conditions.

3.02 PREPARATION

- A. Comply with manufacturer's instructions for surface preparation.
- B. Clean substrate of substances that could impair the overlay's bond, including mold, mildew, oil, grease, incompatible primers and dirt.
- C. Prepare non-porous substrates to achieve a smooth, dry, clean surface, free of flaking, unsound coatings, cracks and defects.
- D. Prepare porous surfaces per instruction of 3M Product Bulletin D1 for the DI-NOC material.
- E. Install substrates with no gaps or overlaps. Form smooth, wrinkle-free, bubble-free surface for finished installation.

3.03 APPLICATION

- A. Application must be performed by qualified installer. Comply with manufacturer's installation instructions applicable to products and applications indicated, except where more stringent requirements apply.
- B. Apply architectural surface over properly prepared substrate.
- C. Install overlay with no gaps or wire seams.
- D. For three-dimensional constructions, such as rounded, arched, beveled, stepped forms, heat product to mold to substrate so that pattern has a continuous, realistic, even appearance. Verify pattern as some do not allow three-dimensional forming.
- E. Remove air bubbles, wrinkles, blisters and other defects.

3.04 SCHEDULE

Note: When more than one type of surfacing is specified in this section, it will be necessary to identify where each type is to be used. A schedule may be useful for that purpose, if the types are not to be indicated on the drawing. The following is a suggested format for such a schedule, with an example.

- A. Room:
 - 1. Fixture:
 - a. Horizontal Surfaces Exposed to View: Design Category, Product number.
 - b. Vertical Surfaces Exposed to View: Design Category, Product number.
 - c. Semi-exposed Surfaces: Design Category, Product number.
 - d. Shaped Goods: Design Category, Product number.
 - e. Moldings: Design Category, Product number.

3.05 CLEANING

- A. Use cleaning methods recommended by architectural surfacing manufacturer for applicable environment.

END OF SECTION