

## **SECTION 12 48 13**

### **ENTRANCE FLOOR MATS AND FRAMES**

#### **1 – GENERAL**

##### **1.01 SUMMARY**

- A. Section includes: Entrance floor mats and frames, including fibered roll good entrance systems
- B. Related requirements:
  - 1. Drawings and General Provisions of the Contract (including General and Supplementary Conditions and Division 1 References Section)
  - 2. Section 03: Concrete (subfloors)
  - 3. Section 06: Wood (subfloors)
  - 4. Section 07: Thermal and moisture protection

##### **1.02 REFERENCE STANDARDS**

- A. ASTM International
  - 1. ASTM D149 Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies
  - 2. ASTM D2859 Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials
  - 3. ASTM E662 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
  - 4. ASTM D257 Standard Test Methods for DC Resistance or Conductance of Insulating Materials
- B. Other referenced documents
  - 1. NFPA: National Fire Protection Association
  - 2. Consumer Products Safety Commission (CPSC) FF 1-70: Pill Test
  - 3. Department of Commerce (DOC) FF 1-70: Pill Test
  - 4. AAATCC: American Association of Textile Chemists and Colorists
  - 5. LEED-NC v. 3

##### **1.03 ADMINISTRATIVE REQUIREMENTS**

- A. Coordination: Install entrance matting after finishing operations, including painting and ceiling operations, have been completed.
- B. Preinstallation Meetings: Meet to confirm project requirements, substrate conditions, manufacturer's installation instructions and warranty requirements in compliance with Division 1 requirements.

##### **1.04 ACTION SUBMITTALS**

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures.
- B. Product Data: For specified products, submit latest edition of product supplier's technical specifications data (available from [www.amarcomats.com](http://www.amarcomats.com)).
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components.

- D. Samples: Submit selection and verification samples showing the required finishes, colors, designs, and textures for flooring, as well as samples of adhesives and applicable accessories such as nosing, frames, etc.

#### **1.05 INFORMATION SUBMITTALS**

A. Test and Evaluation Reports

1. Product test reports: As required by Conditions of the Contract and Division 1 Regulatory Requirements Section, submit test certificates from an independent test laboratory showing compliance with specified performance characteristics and physical properties.
2. Compatibility and adhesion test reports: Submit test reports confirming adhesive's effectiveness with the product(s) specified.

B. Manufacturer Instructions: For specified products, submit latest editions of product supplier's installation and cleaning & maintenance instructions (available from [www.amarcomats.com](http://www.amarcomats.com))

C. Sustainable Design Submittals: For projects requiring LEED submittal based on LEED-NC version 3

1. Submit documentation substantiating that the project is located within 500 miles of the manufacturing facility and therefore contributes to Materials & Resources Credit 5.

#### **1.06 CLOSEOUT SUBMITTALS**

A. Warranty documentation: For specified products and accessories, submit product supplier's warranty documents (available from [www.amarcomats.com](http://www.amarcomats.com))

#### **1.07 QUALITY ASSURANCE**

- A. Installer: Installer shall be highly experienced in performing work of this section, having previous done fiber roll goods installation work similar to that required for this project.
- B. Testing Agency: Agency(ies) shall be independent and qualified to perform the specified product tests.

#### **1.08 DELIVERY, STORAGE, AND HANDLING**

A. General: Comply with Division 1 Product Requirements Section

B. Delivery and Acceptance Requirements: Comply with the product supplier's ordering and lead time requirements to avoid construction delays, and to allow material to acclimatize as required in the specified product's installation instructions. Accept delivery of materials only if they are in unopened, undamaged packaging that bears the name and brand of the manufacturer/product supplier, project identification, and shipping and handling instructions.

C. Storage and Handling Requirements: Store material -- including any adhesive and accessories -- in the original packaging (as delivered) in areas that are enclosed and weather tight with the permanent HVAC system set at a temperature of between 65°F and 80°F for a minimum of 48 hours prior to commencement of installation. In addition, comply with storage and handling requirements listed on product packaging, and described in the latest edition of the product's installation instructions (available from [www.amarcomats.com](http://www.amarcomats.com))

#### **1.09 AMBIENT SITE CONDITIONS**

The permanent HVAC system shall be operational and set at a temperature of between 65°F and 80°F for a minimum of 48 hours prior to commencement of installation, during the

time of installation, and for 48 hours after installation has been completed. Thereafter, minimum temperature shall be 55°F.

## 2 – PRODUCTS

### 2.01 MANUFACTURERS

A. Supplier: Amarco Products. 5 Powder Horn Dr. Warren, NJ 07059. Tel: 866-688-6287. Fax: 732-302-1120. Website: [www.amarcomats.com](http://www.amarcomats.com). Email: [info@amarcomats.com](mailto:info@amarcomats.com)

B. Substitutions: no substitutions permitted.  
*[Specifier note: edit this paragraph to suit project requirements. If substitutions are permitted, edit text. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.]*

C. Product: **3M 8150 Coiled Vinyl Mat**

Construction: Nonwoven continuous vinyl filaments with cushioned vinyl backing  
Width: [3'] [4']  
Length: approximately 60'  
Standard sizes: [3' x 5'] [3' x 20'] [4' x 6'] [4' x 20']  
Thickness: 9/16"  
Weight: 122.4 ounces/square yard  
Colors: [Black] [Blue][Brown] [Gray] [Green] [Red]

D. Performance: Physical properties of the entrance matting shall conform to the following minimums:

Safety

Surface flammability ASTM D2859: Pass (equal to CPSC FF 1-70)  
Smoke density ASTM E662: Passes  
Flammability NFPA 253: > 0.7 watts/cm<sup>2</sup>

Performance

Dielectric strength ASTM D149: 12 kV  
Chemical resistance AATCC 134: resistant to most chemicals  
Electrostatic propensity AATCC 134: step: 0.5 kV; scuff: 1.38 kV  
Volume resistance ASTM D257: 7.2 x 10<sup>11</sup> ohms-cm

LEED

MR Credit 5 Material must be manufactured within 500 of project location

### 2.02 ACCESSORY PRODUCTS

A. Matting Tape: [3M Matting Seaming Tape] [3M Stay-in-Place Matting Tape 130] [3M Stay-in-Place Matting Tape 140]

B. Other: [3M Matting Adhesive]

## 3 – EXECUTION

### 3.01 EXAMINATION

A. Overall: Follow guidelines laid out in Division 01, Section 01 71 00 – Examination and Preparation as well as Section 01 43 00 – Quality Assurance.

B. Verification of Conditions: Subfloors shall be clean and dry. Inspect all substrates and subfloors for proper tolerances, and report any discrepancies to the general contractor in writing.

C. Preinstallation Measurements: Verify actual measurement by field measuring before any onsite cutting, if applicable. To avoid construction delays, coordinate field measurements based upon construction progress.

D. Evaluation and Assessment: See the state requirements for the project location.

**3.02 SURFACE PREPARATION**

- A. Follow guidelines laid out in Division 01, Section 01 71 00 – Examination and Preparation.
- B. Concrete subfloors: Where concrete subfloors are present, all work required to put the concrete subfloor in acceptable condition shall be the responsibility of the general contractor. See the state requirements for the project location.

**3.03 INSTALLATION**

- A. Follow Division 01 relevant guidelines, and the latest edition of the manufacturer's installation instructions (available from [www.amarcomats.com](http://www.amarcomats.com))
- B. Interface with Other Work: If transitions are required to and/or from the specified entrance matting, contact Amarco Products for suitable transition material.
- C. Sizes: Where not indicated otherwise, provide single unit for each mat installation, but do not exceed manufacturer's maximum size recommendation for units intended for removal and cleaning. Where possible, verify sizes by field measurement before shop fabrication.
- D. Accessory selection: Where indicated for recessed or wall-to-wall applications provide aluminum framework as recommended by manufacturer. Where indicated for surface-mounted applications, provide tapered vinyl moldings with flanges sewn to back of mat on all four sides with mitered corners.

**3.04 CLEANING**

- A. General: Clean up job site, including sweeping or dust mopping the floor to remove all dirt or grit, and put all waste in general contractor's dumpster. Follow overall cleaning guidelines described in Division 01.
- B. Initial Maintenance: Conduct a full initial maintenance following the latest edition of the manufacturer's maintenance instructions (available from [www.amarcomats.com](http://www.amarcomats.com)). Instruct owner's cleaning staff in proper maintenance procedures.

**3.05 CLOSEOUT ACTIVITIES**

Follow state requirements and Division 01 Section 01 76 00 – Protecting Installed Construction and Section 01 78 00 – Closeout Submittals requirements for these activities.

**END OF SECTION**