

MASTER SPECIFICATION

SECTION 12 48 13 FURNISHINGS – ENTRANCE FLOOR MATS AND FRAMES

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes: [Entrance matting systems, including vinyl foot grids]
- B. Related Sections: Section(s) related to this section include:
 - 1. Section 03 01 30 - Cast-In-Place Concrete.
 - 2. Section 08 11 19 - Steel Doors and Frames.
 - 3. Section 08 14 33 - Stile and Rail Wood Doors.
 - 4. Section 08 71 00 - Door Hardware.

1.02 REFERENCES

- A. Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. The Standards listed here are identified with a designation number, title or other designation established by the issuing authority.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM C1028 Static Coefficient of Friction
 - 2. ASTM E648 Critical Radiant Flux
 - 3. ASTM D3884 Abrasion Resistance
- C. LEED v3 and LEED v4

1.03 SYSTEM DESCRIPTION

- C. Performance Requirements: Provide [vinyl grid entrance floor mat system], which has been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.

1.04 SUBMITTALS

- A. General: Submit listed submittals in accordance with the Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product data: Submit product data, including manufacturer's specification sheet and installation instructions for specified products. Include methods of installation and substrate preparation for each type of substrate.
- C. Sustainable Design Submittals: For projects requiring LEED submittal based on LEED v3

1. Submit documentation substantiating that Vinyl-Grid Black contains a minimum of 100% pre-consumer recycled content. Vinyl-Grid Gray contains a minimum of 32% pre-consumer recycled content and therefore contributes to Materials & Resources Credit 4.
 2. Submit documentation substantiating that the project is located within 500 miles of the manufacturing facility and therefore contributes to Materials & Resources Credit 5.
 3. Submit documentation substantiating that the project has permanently installed Vinyl-Grid that is at least ten feet in length and therefore contributes to Indoor Environmental Quality Credit 5.
- D. Sustainable Design Submittals: For projects requiring LEED submittal based on LEED v4
1. Submit documentation substantiating that Vinyl-Grid Black contains 100% pre-consumer and Vinyl-Grid Gray contains a minimum of 32% pre-consumer recycled content and therefore contributes to Materials & Resources Sourcing of Raw Materials Credit.
 2. Submit documentation substantiating that the project is located within 100 miles of the manufacturing facility and therefore contributes to Materials & Resources Regional Material Credit.
 3. Submit documentation substantiating that the project has permanent entryway system at least ten feet in length that is maintained on a weekly basis and therefore contributes to Indoor Environmental Quality Enhanced Indoor Air Quality Strategies Credit.
- E. Shop drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors, patterns and textures.
- F. Samples: Submit samples for each type and color of exposed entrance mat, frames and accessories required. Provide samples of mat materials.
- G. Quality Assurance Submittals: (1) Certified test reports showing compliance with specified performance characteristics and physical properties, and (2) Manufacturer's Installation Instructions.
- H. Closeout Submittals: (1) Cleaning & Maintenance Data (Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance), and (2) Warranty.

1.05 QUALITY ASSURANCE

- A. Installer: Installer should be highly experienced in performing work of this section, having previously done work similar to that required for this project.

1.06 SEQUENCING/SCHEDULING

- A. Ordering: Comply with Manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
- B. Delivery: Deliver materials in Manufacturer's original, unopened, undamaged packaging.
- C. Storage: Store materials at temperature and in humidity conditions recommended by manufacturer and protect from exposure to harmful weather conditions.
- D. Installation: Except as otherwise indicated herein, sequencing or scheduling for performance of work of this section in relation with other work is Contractor's option. Delay installation of mats until near time of substantial completion for the project.

1.07 PROJECT CONDITIONS

- A. Temperature: Maintain temperature where products will be installed before, during and after installation as recommended by Manufacturer.
- B. Field Measurements: Where possible, verify actual measurements by field measuring before fabrication and include measurements in shop drawings. To avoid construction delays, coordinate field measurements and fabrication schedule based upon construction progress.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

- A. Provide Vinyl-Grid 3/8" Open-Back Vinyl Grating by Amarco Products. 5 Powder Horn Dr. Warren, NJ 07059. Tel: 866-688-6287. Fax: 732-302-1120. Website: www.amarcomats.com. Email: info@amarcomats.com

2.02 MATERIALS

- A. Vinyl Foot Grille: Constructed from 30% post-industrial recycled polyvinyl chloride (PVC) if gray or other colors, and up to 100% post-industrial recycled PVC if black. Welded in a non-hinged, grille design with an embossed non-skid surface, (**non-embossed surfaces not acceptable**) to sizes indicated with the following characteristics:
 1. **Vinyl-Grid:** Extruded PVC Grid, [black] [gray] color. (Note to specifier: Custom colors upon request; minimums may apply.)
- B. Framing and Nosing Accessories for Vinyl Foot Grille
 1. **Recessed Application:** Vinyl-Grid 3/8": use "J" frame, mill finish aluminum, or "R" frame. Optional: 3/8" "T" Section Divider.
 2. **Surface Mounted Application:** 3/8" inches grid and beveled, heavy-duty attached nosing.
- C. Product Testing for Vinyl Foot Grille
 1. ASTM C1028 Static Coefficient of Friction: Wet .54; Dry .66
 2. ASTM E648 Critical Radiant Flux: Class 1
 3. ASTM D3884 Abrasion Resistance: 0.4% loss after 1,000 cycles (Taber abrader)
 4. LEED v3
 - a. IEQ Credit 5: Vinyl Grid is designed for permanent installation.
 - b. MR Credit 4: Black – 100% pre-consumer recycled; Gray – 32% pre-consumer recycled
 - c. MR Credit 5: Material must be manufactured within 500 miles of the project location.
 5. LEED v4
 - a. MR Sources of Raw Materials Credit: Black 100% pre-consumer and Gray 32% pre-consumer
 - b. MR Regional Material Credit: Material must be manufactured within 100 miles of project location.
 - c. IEQ Enhanced Indoor Air Quality Strategies Credit: Vinyl Grid is a LEED acceptable permanent entryway system.

2.03 PRODUCT SUBSTITUTIONS

- A. Substitutions: No substitutions permitted.

PART 3 – EXECUTION

3.01 SUBSTRATE PREPARATION

- A. Examine substrates and conditions where floor mats will be installed. Do not proceed with installation until unsatisfactory conditions are corrected. Sub floor shall be clean and dry, and within acceptable tolerances.

3.02 INSTALLATION

- A. Sizes: Shop-fabricate units of floor mat to greatest extent possible in sizes as indicated. 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 joints in mats are necessary, space symmetrically and away from normal traffic lanes. Miter corner joints in framing elements with hairline joints or provide prefabricated corner units without joints. Where possible, verify sizes by field measurement before shop fabrication.
- B. Accessories: [Where indicated for recessed or wall-to-wall installations, provide aluminum framework as recommended by manufacturer.] [Where indicated for surface mount installations, provide tapered vinyl grid edge moldings with flanges cold-welded to back of mat.]
- C. General: Strictly comply with manufacturer's installation instructions and recommendations. Coordinate installation with adjacent work to ensure proper clearances and to prevent tripping hazards.

3.03 CLEANING AND PROTECTION

- A. General Cleaning: Refer to Manufacturer's Cleaning and Maintenance Instructions.
- B. Owner's Personnel: Instruct Owner's personnel in proper maintenance procedures.
- C. Protection: Protect installed product and finish surfaces from damage during construction and until acceptance.

END OF SECTION