

SECTION 12 48 13  
ENTRANCE FLOOR MATS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Roll up rail mats.
  - 2. Recessed frames.

1.2 ACTION SUBMITTALS

- A. Product Data: Technical data addressing construction details, material descriptions, dimensions of individual components and profiles, preparation and installation requirements, and finishes for floor mats and frames.
- B. Shop Drawings:
  - 1. Items penetrating floor mats and frames, including door control devices.
  - 2. Divisions between mat sections.
  - 3. Perimeter floor frames.
  - 4. Custom Graphics: Scale drawing indicating colors.
- C. Samples: Submit samples in standard sizes:
  - 1. Floor Mat: Assembled sections of floor mat.
  - 2. Tread Rail: Sample of each type and color.
  - 3. Frame Members: Sample of each type and color.

1.3 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For floor mats and frames to include in maintenance manuals.

1.4 COORDINATION

- A. Coordinate size and location of recesses in concrete to receive floor mats and frames.

1.5 EXTRA MATERIAL

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Resilient Tile Entrance Mats: Full size tile units equal to 2 percent of amount installed, but no fewer than 10 units.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide roll up rail mats and frames capable of withstanding the following loads and stresses within limits and under conditions indicated:
  - 1. Uniform floor load of 300 lbf/sq. ft. (14.36 kN/sq. m).
  - 2. Wheel load of 350 lb (159 kg) per wheel.
- B. Accessibility Standard: Comply with applicable provisions in the DOJ 2010 ADAAG Standards for Accessible Design and ICC A117.1.

### 2.2 ROLL UP RAIL MATS

- A. Basis of Design: PediTred SA by CS Group. Subject to compliance with requirements, products by one of the following may also be acceptable:
  - 1. Forbo Industries, Inc.
  - 2. JL Industries, Inc.; a division of the Activar Construction Products Group.
  - 3. Pawling Corporation.
- B. Roll up, Aluminum Rail Hinged Mats: Extruded aluminum tread rails 1-1/2 inches (38 mm) wide by 3/8 inch (9.5 mm) thick, sitting on continuous vinyl cushions.
  - 1. Tread Inserts: Plain serrated aluminum treads 1/4 inch (6.4 mm) high, 28-oz./sq. yd. (950 g/sq. m) weight, level cut, nylon pile, fusion bonded carpet.
  - 2. Color: Selected by Architect.
  - 3. Rail Color: Clear.
  - 4. Hinges: EPDM.
  - 5. Mat Size: As indicated.

### 2.3 FRAMES

- A. Recessed Frames: Standard extrusion.
  - 1. Extruded Aluminum: ASTM B 221 (ASTM B 221M), Alloy 6061-T6 or Alloy 6063-T5, T6, or T52.
    - a. Color: Selected by Architect.

### 2.4 CONCRETE FILL AND GROUT MATERIALS

- A. Provide concrete fill and grout equivalent in strength to cast in place concrete slabs for recessed mats and frames. Use aggregate no larger than one-third fill thickness.

### 2.5 FABRICATION

- A. Floor Mats: Shop fabricate units to greatest extent possible in sizes indicated. Unless otherwise indicated, provide single unit for each mat installation; do not exceed

manufacturer's recommended maximum sizes for units that are removed for maintenance 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.

- B. Recessed Frames: As indicated, for permanent recessed installation, complete with corner pins or reinforcement and anchorage devices.
  - 1. Fabricate edge frame members in single lengths or, where frame dimensions exceed maximum available lengths, provide minimum number of pieces possible, with hairline joints equally spaced and pieces spliced together by straight connecting pins.
- C. Coat concealed surfaces of aluminum frames that contact cementitious material with manufacturer's standard protective coating.

## 2.6 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and floor conditions for compliance with requirements for location, sizes, minimum recess depth, and other conditions affecting installation of floor mats and frames.
- B. Proceed with installation after correcting unsatisfactory conditions.

### 3.2 INSTALLATION

- A. Install recessed mat frames and mats to comply with manufacturer's written instructions so that tops of mats will be flush with adjoining finished flooring. Set mats with tops at height recommended by manufacturer for most effective cleaning action; coordinate tops of mat surfaces with bottoms of doors that swing across mats to provide clearance between door and mat.
  - 1. For installation in terrazzo flooring areas, allow for grinding and polishing of terrazzo without grinding surface of recessed frames. Coordinate with other trades as required.
  - 2. Install necessary shims, spacers, and anchorages for proper location, and secure attachment of frames.
  - 3. Install grout and fill around frames and, if required to set mat tops at proper elevations, in recesses under mats. Finish grout and fill smooth and level.
  - 4. Delay setting mats until construction traffic has ended.
- B. Install surface type units to comply with manufacturer's written instructions; coordinate with entrance locations and traffic patterns.

1. Anchor fixed surface type frame members to floor with devices spaced as recommended by manufacturer.

### 3.3 PROTECTION

- A. After completing frame installation and concrete work, provide temporary filler of plywood or fiberboard in recesses and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and Project is near Substantial Completion.

END OF SECTION