

SECTION 12 4813

ENTRANCE FLOOR MATS AND FRAMES

PART 1 GENERAL

1.1 SUMMARY

- A. Work of this Section includes the following:
 - 1. Recessed foot grilles and frames.
 - 2. Resilient walk-off mats.
- B. Related Documents and Sections: Examine Contract Documents for requirements that directly affect or are affected by Work of this Section. A list of those Documents and Sections include, but is not limited to the following:
 - 1. General provisions of the Contract, including General and Supplementary Conditions, and Division 01 General Requirements Specification Sections.
 - 2. Section 08 4113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS.

1.2 SUBMITTALS

- A. Product Data: Include construction details, material descriptions recycled material content, dimensions of individual components and profiles, and finishes.
- B. Samples
 - 1. Initial for Selection: Submit printed color charts or sample chains indicating manufacturer's complete range to determine color, texture, shape, and/or composition for each type of material finish indicated.
 - 1. Final Selection: Submit products for acceptance, those required prior to manufacturing to verify close tolerances, shapes and/or specifically required aesthetics.
 - a. Floor Mat: 12 inch square, assembled sections of floor mat
 - b. Frame Members: 12 inch long sample of each type and color
- C. Maintenance data in the form of manufacturer's printed instructions for cleaning and maintaining floor grids.

1.3 QUALITY ASSURANCE

- A. Qualifications:
 - 2. Manufacturer Qualifications: A firm experienced a minimum five (5) years in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.
 - 1. Installer Qualifications: Perform installation with skilled, experienced and trained workmen supervised by trained personnel who shall have at least three (3) years successful experience in installations of similar size and scope.
- B. Performance Requirements
 - 1. Structural Performance: Provide foot grilles and frames capable of withstanding the following loads and stresses:
 - a. Uniform floor load of 300 lbf/sq. ft..

- C. Source Limitations: Obtain floor mats and frames through one source from a single manufacturer.
- D. Accessibility Requirements: Provide installed floor mats that comply with ADA accessibility regulations and with ICC/ANSI A117.1.

PART 2 PRODUCTS

2.1 ROLL-UP RAIL ENTRANCE MATS

- A. Available Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. C/S Group.
 - 2. Architect acceptable equivalent.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide G4 PediTred as manufactured by Construction Specialties, Inc.
 - 1. Construction: Roll-up, aluminum-rail hinged mats shall be extruded 6105-T5 aluminum alloy with 3/4" deep tread rails joined by an EPDM hinge and cushion to compromise the overall grid length (traffic direction). The hinge shall be complete with perforations between each tread rail for drainage, unless otherwise specified. Rail finish to be standard mill or one of 9 optional colors offered by manufacturer. (Call factory for custom colors.) Choose from anodized or heavy-duty powder coat finish. Unit must withstand 1000 lb. wheel loads (load applied to a 5" x 2" wide polyurethane wheel, 1000 passes without damage).
 - 2. Tread Insert: MonoTuft HD™ Carpet shall meet CRI standard for good indoor air quality. Fibers shall include a minimum of 100, 12 mil monofilament fibers per square inch. Available in one of 21 standard colors as offered by manufacturer. Each carpet fiber and monofilament shall be fusion-bonded to a rigid two-ply backing to prevent fraying and supplied in continuous splice-free lengths. Anti-static carpet fibers shall contain antimicrobial additive and be treated with Scotchgard® to reduce soiling. Carpet weight shall be 33-oz./yd².
 - a. Color: Castle Gray.
 - 3. Frame: None.
- C. Level Base Frame shall be a 1" deep recessed frame in 6063-T6 aluminum alloy with a 1/4" wide exposed surface. Black EPDM filler trims shall be furnished as required, when standard 1 1/2" tread spacing cannot be maintained. Installer shall use recommended latex screed to ensure level base. Frame color shall be supplied in standard mill finish. Mill finish frames in contact with concrete to be primer coated.

2.2 ENTRANCE GRILLES

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Kadee Industries, Inc. KD98 model. or a comparable product by one of the following:
 - 1. C/S Group.
 - 2. J. L. Industries, Inc.
- B. Materials
 - 1. Stainless Steel: Type 304. as standard with manufacturer. Coat surface of frame in contact with cementitious materials with manufacturer's standard protective coating.
 - 2. Stainless-Steel Angles: ASTM A 276 or ASTM A 479/A 479M, corrosion resistant, Type 304.
- C. General: Provide manufacturer's standard foot-grille assemblies consisting of treads of type and

profile indicated, interlocked or joined together by cross members, and with support legs (if any) and other components needed to produce a complete installation.

D. Stainless-Steel Foot Grilles:

1. Surface Treads: 0.071-by-0.177-inch wire with 0.125-inch- wide slot openings between wires.
2. Support Rods: Spaced 1 inch o.c., welded to each wire.
3. Pit Grating: 1-1/8 inches deep.
4. Lockdown: Hidden.
5. Frame: Stainless-steel angle.
6. Finish: No. 4.
7. Grille Size: As indicated.

E. Lockdown: Manufacturer's standard.

F. Frames: Provide manufacturer's standard frames of size and style for grille type, for permanent recessed installation in subfloor, complete with installation anchorages and accessories. Unless otherwise indicated, fabricate frame of same material and finish as grilles.

G. Support System:

1. Level Bed Applications: Provide manufacturer's standard, vinyl cushion support system.
2. Manufacturer's standard 0.060-inch- thick, metal sheet drain pan [with NPS 2 (DN 50) drain outlet for each floor grille unit]. Coat bottom of pan with protective coating recommended by manufacturer.
 - a. Drain Pan Material: Stainless steel.
3. Stainless Steel Floor Plate: 14 gauge stainless steel plate engraved to match pattern of foot grille. Mechanically fasten plate to concrete floor slab with concealed fasteners.

H. Fabrication:

1. Shop fabricate foot grilles to greatest extent possible in sizes as indicated. Unless otherwise indicated, provide each grille as a single unit; do not exceed manufacturer's recommended maximum sizes for units that are removed for maintenance and cleaning. Where joints in grilles are necessary, space symmetrically and away from normal traffic lanes.
2. Fabricate 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.

I. Finishes, General:

1. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
2. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates and floor conditions for compliance with requirements for location, sizes, and other conditions affecting installation of floor mats.
1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install surface-type units to comply with manufacturer's written instructions at locations indicated; coordinate with entrance locations and traffic patterns.
- B. Install floor mats and frames to comply with manufacturer's written instructions and conforming to ADA accessibility regulations and with ICC/ANSI A117.1.

END OF SECTION