SECTION 12485

FOOT GRILLES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes recessed foot grilles and frames.

1.2 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of foot grille and frame.
- B. Shop Drawings: Show fabrication, assembly, joint locations, installation details, layout, plans, elevations, full-scale sections, details of patterns or designs, anchors, and accessories for foot grilles and frames.
- C. Samples for Selection: For each product requiring finish and color selections.
- D. Maintenance Data: For cleaning and maintaining foot grilles. Include in maintenance manuals.

E. LEED Submittal:

- 1. Credit MR 2.1 and 2.2: Comply with Division 1 Section "Construction Waste Management."
- 2. Product Data for Credit MR 4.1 and Credit MR 4.2: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
 - a. Include statement indicating costs for each product having recycled content.
- 3. Credit MR 5.1: Product Data indicating location of material manufacturer for regionally manufactured materials.
 - a. Include statement indicating cost and distance from manufacturer to Project for each regionally manufactured material.

1.3 QUALITY ASSURANCE

A. Accessibility Requirements: In addition to requirements of authorities having jurisdiction, provide installed foot grilles that comply with Section 4.5 in the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."

1.4 **PROJECT CONDITIONS**

A. Field Measurements: Verify blocked-out openings in floors by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish opening dimensions and proceed with fabricating foot grilles and frames without field measurements. Coordinate floor construction to ensure that actual opening dimensions correspond to established dimensions.

1.5 COORDINATION

A. Coordinate size and location of oversized recesses in concrete work to receive foot grilles and frames. Defer frame installations until building enclosure is completed and related interior finish work is in progress. Concrete, reinforcement, and formwork requirements are specified in Division 3 Section "Cast-in-Place Concrete."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers and Products: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Mats, Inc.: Safe Track.

2.2 MATERIALS

A. Extruded Aluminum: ASTM B 221 (ASTM B 221M), alloy 6061-T6 or alloy 6063-T5, T6, or T52 as standard with manufacturer. Coat surface of frame in contact with cementitious materials with manufacturer's standard protective coating.

2.3 FRAMES

A. 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.

2.4 FOOT GRILLES

- A. General: Provide manufacturer's standard foot grille assemblies consisting of treads of type and profile indicated, joined together by cross members or interlocked, and with support legs (if any) and other components needed to produce a complete installation.
- B. Aluminum Foot Grilles: Provide manufacturer's standard foot grilles with extruded members, top-surfaced tread rails, and as follows:
 - 1. Tread Rails: Extruded-aluminum tread rails with extruded-aluminum frame.
 - 2. Tread Rail Spacing: 1-1/2 inches (38 mm) o.c. with 1/8- to 3/16-inch- (3- to 4.8-mm-) wide openings between treads.
 - 3. Aluminum Finish: Mill.
 - 4. Top Surface: Plain aluminum, cross cut square pattern.

2.5 SUPPORT SYSTEM

A. Level Bed Applications: Provide manufacturer's standard vinyl cushion support system.

2.6 FABRICATION

- A. Shop fabricate foot grilles to greatest extent possible in sizes as indicated. If not 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.
- B. 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.

2.7 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Mill Finish: AA-M10 (Mechanical Finish: as fabricated; no other applied finish unless buffing is required to remove scratches, welding, or grinding produced in fabrication process).

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install recessed foot grilles and frames to comply with manufacturer's written instructions at locations indicated and with top of foot grilles and frames in relationship to one another and to adjoining finished flooring as recommended by manufacturer. Set foot grille tops at height for most effective cleaning action. Coordinate top of foot grille surfaces with doors that swing across grilles to provide clearance under door.

3.2 PROTECTION

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

END OF SECTION