SECTION 124816

ENTRANCE FOOT GRILLES

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.2 DESCRIPTION OF WORK

- A. Work Included: Provide labour, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
 - 1. Recessed aluminum foot grilles and frames.
- B. Related Work: The following items are not specified in this Section:
 - 1. Section 033000 CAST-IN-PLACE CONCRETE for concrete work, including forming, placing, and finishing concrete floor slabs, and for concrete materials for grouting and filling around and under recessed mats and frames.
 - 2. Section 124813 ENTRANCE FOOT GRILLES for foot grilles.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
 - 1. Include construction details, material descriptions, dimensions of individual components, profiles and finishes.
- B. Shop Drawings: Show the following:
 - 1. Items penetrating foot grilles and frames, including door control devices.
 - 2. Divisions between grille sections.
 - 3. Perimeter floor moldings.
- C. Samples for Verification: For each type of product indicated.
 - 1. Foot Grille: 12-inch- square, assembled sections of foot grille.
 - 2. Frame Members: 12-inch- long Sample of each type and colour.
- D. Maintenance Data: For foot grilles and frames to include in maintenance manuals.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain foot grilles and frames through one source from a single manufacturer.

1.5 PROJECT CONDITIONS

A. Field Measurements: Take field measurements before fabrication to the greatest extent practical. Coordinate fabrication schedule with construction so that work can be performed without delays due to fabrication and delivery.

1.6 COORDINATION

A. Coordinate size and location of recesses in concrete with installation of finish floors to receive foot grilles and frames.

PART 2 - PRODUCTS

2.1 ENTRANCE FOOT GRILLES

A. Basis-of-Design Manufacturer: K.N. Crowder Mfg., Inc., Toll Free Tel: 866-999-1KNC (1562). Internet: <u>www.kncrowder.com</u>.

B. **FG-22: Aluminum I-beam tread bar**

- 1. Tread Bar Dimensions: 1/2" x 1/8" x 1-1/2" [12.7 x 3.2 x 38.1 mm] Aluminum alloy 6061-T6
- 2. Tread Spacing: 11/16" [17.5 mm] on centre
- 3. Assembled with 3/8" [9.5 mm] threaded steel rods and nylon spacers
- 4. Frame Options Aluminum alloy 6063-T5: Choose 1 frame: Type [GA] [GB] [GC] Frames require assembly and will be supplied with corner brackets and set screws
- 5. Optional Pan: Choose 1 type: [Evaporation] [Drain]
 - a. [Drain pan shall be supplied with 3-5/8" [92 mm] diameter cutout and stainless steel strainer assembly]
- 6. Pan Material: Choose 1 material: [20 ga. galvanized steel] [16 ga. aluminum] [20 ga. stainless steel]
- 7. Finish: [Standard Mill finish]
- 8. Optional design: [Cross-cut] for non-directional or angled pedestrian foot traffic
- 9. Load Ratings:
 - a. Tread Bar, 36" [915 mm] Long: 980 lbs/ft² [4784 kg/m²] with 1/8" [3.2 mm] deflection
 - Tread Bar, 48" [1219 mm] Long: 300 lbs/ft² [1465 kg/m²] with 1/8" [3.2 mm] deflection

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrate for compliance with requirements for location, sizes, minimum recess depth, and other conditions affecting installation of foot grilles and frames.
 - 1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install recessed foot grille frames to comply with manufacturer's written instructions. Set top of grille at height recommended by manufacturer for most effective cleaning action; coordinate top of grille surfaces with bottom of doors that swing across grilles to provide clearance between door and grille.
 - 1. Install necessary shims, spacers, and anchorages for proper location and secure attachment of frames.
 - 2. Install grout and fill around. Finish grout and fill smooth and level.

3.3 PROTECTION

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

END OF SECTION