### SECTION 12484 ENTRANCE MATS AND GRATES

### Part 1 - General

### 1.01 Summary

- A. This section includes the following types of Flooring Systems:
  - 1. Entrance Grating and Framing Assemblies
- B. Related Sections
  - 03300 "Cast-In-Place Concrete" and 03600 "Grout" for cast-in-place and grouting of recessed frame

### 1.02 References

- A. American Society for Testing and Materials (ASTM)
- B. National Fire Protection Agency (NFPA)
- C. The Aluminum Association, Inc.
- D. The Carpet and Rug Institute (CRI)
- E. The National Floor Safety Institute (NFSI)
- F. Surface Flammability of Carpets and Rugs (CFR 16 Part 1630 and 1631)

#### 1.03 Submittals

- A. Submit the following in accordance with specification section 01300 and contract requirements.
- B. Product data for each type of entrance grating and frame to include:
  - 1. Product detail drawing including product cross-section and technical information.
  - 2. Manufacturer's product specification, installation instructions.
  - 3. Manufacturer's maintenance and cleaning instructions.
  - 4. Shop drawings showing traffic direction, dimensions, sectioning, insert types and colors, metal finishes and framing.
- C. Product samples representing the assembled grating with the selected insert and insert color selector, and frame assembly including installation accessories.

### 1.04 Quality Assurance

- A. Flammability: Critical radiant flux 0.45 watts/m² or greater, in accordance with ASTM E 648. Life Safety Code® NFPA 101, Class 1 Interior Floor Finish Testing and Classification.
- B. Slip Resistance: Coefficient of friction 0.60 or greater, in accordance with ASTM D 2047 tested in wet conditions.
- C. Rolling Load: No deformation with 350 lb/wheel and minimum of 2500 passes. Load applied to a 5" diameter, 2" wide solid polyurethane wheel.
- D. Single Source: Obtain entrance grating and frames from a single source to ensure dimensional compatibility.

## 1.05 Delivery, Storage and Handling

A. Deliver materials in unopened original factory packaging, labeled to identify product and manufacturer. Store in controlled environment. To avoid damage do not stack other material on top of matting or frames.

### 1.06 Project Conditions

A. Coordinate installation of recess frame with concrete construction. Install frames to ensure dimensions provided in shop drawings are maintained. Finished recess must be flat and level. Defer frame installation until related interior finish work is in progress.

## Part 2 - Products

## 2.01 Manufacturers

A. Supply entrance grating and frames as manufactured by the Architectural Products Division of Pawling Corporation, 32 Nelson Hill Road, Wassaic, NY 12592. Other manufacturers must comply with requirements indicated in this specification, products data, and shop drawings. Product Specification

Pro •Tek® Systems Entrance Matting & Gratings

Architectural Building Products since 1945

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#### 2.02 Materials

- A. Aluminum: ASTM B221, alloy 6063-T5 for extrusions.
- B. Architectural Bronze: ASTM B455, alloy 385 for extrusions.

### 2.03 Entrance Grating

- A. Aluminum: Pawling Corporation model RGA-200 Drain-Well® Entrance Grating. Manufactured from aluminum alloy 6063-T5 tread-rail extrusions spaced on 1" centers, secured to 5/16"-18 threaded steel cross-support rods spaced at 12" centers perpendicular to tread rails. Tread rails shall be positioned using molded high density polyethylene (HDPE) spacers at each cross support. HDPE spacers to maintain 3/16" opening between treads. Spacers shall extend below grating to provide noise reducing cushion for contact with substrate. Tread rails are standard in mill finish.
- B. Bronze: Pawling Corporation model RGB-200 Drain-Well<sup>®</sup> Entrance Grating. Manufactured from solid bronze alloy 385 tread-rail extrusions spaced on 1" centers, secured to 5/16"-18 threaded steel cross-support rods spaced at 12" centers perpendicular to tread rails. Tread rails shall be positioned using molded high density polyethylene (HDPE) spacers at each cross support. HDPE spacers to maintain 3/16" opening between treads. Spacers shall extend below grating to provide noise reducing cushion for contact with substrate. Tread rails are standard in satin finish.

### C. Framing

- 1. Aluminum: Model RGF-200, alloy 6063-T5 extruded aluminum recessed framing. Installed frame provides 1/2" exposed perimeter trim and 13/16" deep recess. Available in mill finish only. Installer to use self-leveling screed to ensure smooth, flat recess.
- 2. Bronze: Model RGFB-200, alloy 385 extruded solid bronze recessed framing. Installed frame provides 1/2" exposed perimeter trim and 13/16" deep recess. Standard in satin finish. Installer to use self-leveling screed to ensure smooth, flat recess.

#### Part 3 - Execution

### 3.01 Examination

A. Examine substrate and area where grating is to be installed. Do not proceed until unsatisfactory conditions have been corrected.

#### 3.02 Installation

- A. Install products in accordance with manufacturer's installation instructions.
- B. Recessed opening must be flat, 1/8" in 10'-0", and free of debris before grating is installed.

## 3.03 Protection

A. Protect installed frames from damage by using temporary plywood filler in recess opening. Cover exposed frames with similar materials until construction traffic is minimized. Install gratings when project is near substantial completion and no further wheeled traffic or major construction operations will affect grating.

# 3.04 Cleaning

A. Include grating and recess in a routine cleaning and maintenance program. Regular cleaning will maximize functionality, appearance, and life span of the product. Refer to manufacturer's cleaning and maintenance instructions for additional information.