Floorometry® 101 (FL 101)

Suggested Specification
Section 124813
Entrance Floor Mats and Frames

Part 1 General

1.02 References

A. American Society for Testing and Materials (ASTM)

B. The Carpet and Rug Institute (CRI)

C. The National Floor Safety Institute (NFSI)

D. International Organization for Standardization (ISO)

1.03 Submittals

A. General: Submit the following in accordance with conditions of contract and Division 1 specification section 013000.

B. Product data for each type of floor mat/grid and frame specified including manufacturer's specifications and installation instructions.

C. Shop drawings in sufficient detail showing layout of mat/grid and frame specified including details indicating construction relative to materials, direction of traffic and accessories.

D. Maintenance data in the form of manufacturer's printed instructions for cleaning and maintaining floor mats/grids.

1.04 Quality Assurance

A. Slip resistance in accordance with ASTM D-2047-96, Coefficient of Friction, minimum 0.60 for accessible routes. *[Specifier note: Slip and fall accidents are a major concern in commercial entranceways. We recommend that approved systems be certified by the manufacturer as meeting a minimum coefficient of friction of 0.60, when tested in wet conditions.]*

B. Standard rolling load performance is 500 lb./wheel with larger loading requirements as specified (load applied to a solid 5" x 2" wide polyurethane wheel, 1000 passes without damage). *[Specifier note: For entranceways in businesses such as retail outlets, airports, banks, and casinos, rolling load performance is a critical factor. We recommend that units with the highest practical loading capability be specified for such entrances.]*

C. Single Source Responsibility: Obtain floor grids and frames from one source of a single manufacturer.

D. Utilize superior stainless steel components- type 304

E. Utilize a manufacturer that is ISO 9001 & 14001 certified.

1.05 Delivery, Storage and Handling

A. Deliver materials to the project site ready for use and fabricated in as large sections and assemblies as practical, in unopened original factory packaging clearly labeled to identify manufacturer.

1.06 Project Conditions

A. Field measurements: Check actual openings for grids by accurate field measurements before fabrication. Record actual measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of work.

B. Recessed Conditions: IMPORTANT: Coordination with Division 03 00 00 Concrete specifications is required. For proper installation, the concrete recess must be flat and smooth throughout. If the recess is formed by a concrete contractor, the pour dimensions may require leveling grout to achieve the proper depth and a smooth finish. The final recess depth will match the specified product and must be field verified. For proper frame installation, the side walls of the concrete recess must also be straight and smooth. Inconsistencies with the recess and side walls must be remediated prior to product installation.

Part 2 Products

2.01 Manufacturers

A. Drawings and specifications are based on manufacturer's literature from **Construction Specialties, Inc**., unless otherwise indicated.

2.02 Materials

A. Aluminum - ASTM 221, alloys 6061-T5, 6063-T6, 6210-T5, and 6005-T5 for extrusions, sheet, or plate.

B. Stainless Steel - - Type 304 Stainless Steel

2.03 Floor Mats/Grids

Product Designation

Common Mud Plate and Bond Breaker

Each Floorometry® product includes a common mud plate and bond breaker. The aluminum mud plate attaches to the floor substrate with the manufacturer's recommended adhesive (by others). Integral to the mud plate is the bond breaker, preventing the flooring adhesive from bonding to the top surface of the product. The bond breaker also provides the base of the collection reservoir which contains all contaminates removed and collected from foot traffic. Top surface sections are removable, interchangeable, and can be quarter turned, utilizing common integral attachment clips allowing for periodic maintenance by vacuuming the reservoir or power washing the product. Each mud plate comes with four alignment pins to ensure a proper and quick connection of the removable surface to the common base. Surface removal tools to be included.

Manufacturer's Recommended Adhesives (supplied by others)

All Floorometry products require the use of the following approved adhesives:

A. Henry ® 130 Thin Spread Floor Tile Adhesive - Note: Interior Only

B. Laticrete Latapoxy ® 300 Adhesive - Note: Interior or Exterior use

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Mud plate and bond breaker as described above. Top surface shall be manufactured from T-304 stainless steel alloy materials. Inserts are .090" [2.3 mm] wide S/S bars with a .145" [3.7 mm] gap in quantities and arrangement as detailed. Each module size is 18" x 18" x 3/4" [457.2 mm x 457.2mm x 19.6mm].

Each standard module provides a 57.5% free area for fall through potential. All products include a .090" [2.3 mm] thick S/S perimeter band with a horizontal drain feature. All components are tack welded. Product surface removable and replaceable. All modules packaged 6 per box for coverage: (13.5 sq ft - [1.25 sq M]). Module finish is mill. Options available. Weight is 11.8 lbs [5.4 kg] per module (Box - 72 lbs [32.6 kg]).

Include only if option selected. (Geometric Option: The surface of the module can also be cut to include custom geometries as required.) Note - Contact the manufacturer for specifics of your application.

Specifier note: Floorometry tiles include stainless steel banded edges on all sides of each individual tile. Therefore, a standard perimeter frame is not required. The stainless steel banding will provide a smooth perimeter transition, and will protect the edges of both the Floorometry tile and the surrounding flooring. Trims from the manufacturer of the surrounding floor surface would be sufficient if desired.

Performance Data

All Floorometry Products include the following performance characteristics:

A. Certified by the NFSI as safe walking surface meets .6 wet SCOF
B. 101, 201 & 301 provide a minimum 500 lb per wheel rolling load. 401 provides a minimum 250 lb per wheel rolling load (Surface material selection can improve capacity).
C. Class I Fire Rated
D. Considered permanent grille or grate as recommended in LEED IAQ Credit 5
E. 101, 201, and 301 remove 98% of foot traffic contaminants within 18' of walking surface