SECTION 12 48 13

ENTRANCE FLOOR MATS AND FRAMES

**MAXtread™**

PART 1 – GENERAL

1. SUMMARY
	1. Section Includes
		1. Entrance floor mats, grids, and frame assemblies.
	2. Related Requirements
		1. Division 03 - Cast-In-Place Concrete: For concrete floor slab recess, and grouting frames into recess.
		2. Division 07 - Damp-proofing.
		3. Division 23 - Sanitary Waste and Vent Piping: For floor drain if applicable.
2. REFERENCES

A. ASTM B 221-93 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes

B. AAMA 606.1 Voluntary Guide Specifications and Inspection Methods for Integral Color Anodic Finishes for Architectural Aluminum

C. AAMA 607.1 Voluntary Guide Specifications and Inspection Methods for Clear Anodic Finishes for Architectural Aluminum.

D. ASTM C1028 Static Coefficient of Friction

1. COORDINATION
	1. If product is to be recessed, coordinate with concrete work so that products are available for placing integrally with floor slabs.
2. SUBMITTALS
	1. Product Data: Manufacturers product specifications, installation and maintenance instructions.
	2. Shop Drawings: Show layout and types of mats and frames not less than half-scale sections of typical installations, details of patterns or designs, anchors, and accessories, and field measurements of slab recess to receive frames grates (if applicable).
	3. Samples for Selection Purposes: Actual sections of mat and frame material in a convenient but representative size showing full range of colors, textures, finishes and patterns available for each type of floor grate and frame specified.
	4. Samples for Verification Purposes: Not less than 6 inch square sections of grate material and 6 inch length of frame material in selected colors and finishes for each type of grate and frame specified.
	5. Installation, Operations and Maintenance data.
	6. LEED Submittals:

1. Product Data for Credit IEQ 5: Indoor Chemical and Pollutant Source Control: Employ permanent entryway systems at least 10 feet long in the primary direction of travel to capture dirt and particulates entering the building at regularly used exterior entrance.

1. WARRANTY
	1. Provide manufacturer's written warranty.
	2. Warrant materials and fabrication against defects after completion and final acceptance of Work.
	3. Repair defects, or replace with new materials, faulty materials or fabrication developed during the warranty period at no expense to Owner.

PART 2 - PRODUCTS

1. ACCEPTABLE MANUFACTURERS

Provide **MAXtread™** flexible mat

Nystrom

9300 73rd Avenue North

Minneapolis, MN 55428

PH: 800.547.2635

FX: 800.317.8770

1. DESIGN CRITERIA
	1. Rolling Load: 500 lbs/wheel.
2. ENTRANCE SYSTEM FLOOR GRATE
	1. Model: **MAXtread™** flexible mat
	2. Vinyl Mat
	3. Mat Design: Sections are a nominal .25 inches (6.4mm) square ribs with nominal .230 inch x.312 inch (5.8mm x 7.9mm) openings over.25 inch (6.4mm) half rounds 1.25 inch (31.8mm) apart. Carpet inserts are 1.157 inches (29.4mm) wide. The mat is secured with a patented retainer system. (***Mats without retainers are unacceptable***.)
	4. Construction: Injection molded PVC.
	5. **TREADS** **INSERTS** **(SPECIFIER TO SELECT TREAD BELOW AND DELETE OTHERS)**
		* 1. **MAXtread™** flexible mat with TuffScrub carpet tread. Crimped solution-dyed 2750 denier polypropylene fibers tufted into a woven double backing and glued tread rails. Carpet weight shall be 26 oz. /yd². Available colors include: Charcoal and Walnut.
			2. **MAXtread™** flexible mat with TuffScrub carpet tread. Crimped solution-dyed 2750 denier polypropylene fibers tufted into a woven double backing and secured to rails with a hook and loop system. Carpet weight shall be 26 oz. /yd². Available colors include: Charcoal and Walnut.
3. ENTRANCE SYSTEM FLOOR GRATE FRAME **(SPECIFIER TO SELECT ONE BELOW AND DELETE OTHERS).**
4. Aluminum Frame: Extruded 6063-T5 aluminum alloy
5. Frame Finish: mill, clear or color anodized.
6. Construction: Frames shall be shipped in 72 inch sections to each jobsite. Mounting:
	1. **LTR, Aluminum mechanically attached, Level Bed Transition frame**,.4 inch to .6 inch (10.6 mm to 15.2) transition profile; 1 inch (25.4mm) overall depth.
	2. **LTO, Aluminum mechanically attached, Level Bed Transition frame with overhang**, ,.4 inch to .6 inch (10.6 mm to 15.2) transition profile; 1 inch (25.4mm) overall depth.
	3. **LCH,**  **Aluminum mechanically attached, Level Bed Channel frame,** ½ inch (12.7 mm) channel profile; 3/4 inch (19 mm) overall depth.
	4. **SAM**, **Surface mounted, mechanically attached frame**. 2.3 inch (59 mm) profile; .625 inch (15.9 mm) overall depth. Frame finish shall be supplied in mill.
	5. **SV, Surface mounted, Vinyl attached frame**, shall have an overall depth of 1/2 inch (12.7mm) deep with a 3 inch (76.2mm) profile. Frame finish shall be black.

PART 3 - EXECUTION

1. EXAMINATION
2. Products must be placed on a flat and level substrate. Substrate shall meet tolerance of 1/8 inch over 10 feet in accordance with ACI 302.
3. Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper or timely completion.
	* + 1. Do not proceed until unsatisfactory conditions have been corrected.
4. INSTALLATION
5. Install products in accordance with manufacturer’s instructions, at locations shown and with top of products level with adjoining finished flooring where applicable.
6. Coordinate top of product surfaces with swinging doors to provide under-door clearance.

1. Provide necessary shims, spacers, and anchorages for proper location and secure attachment of frames to concrete.

2. For installation in terrazzo flooring, contact manufacturer.

1. ADJUSTING AND CLEANING

A. Adjust top surface of assembly to be flush with adjacent finishes.

B. Coordinate top of surfaces with doors that swing across surface to provide adequate under door clearance.

C. Clean dirt and debris from frame recess before installing floor system.

1. PROTECTION
2. Upon completion of frame installations, provide temporary filler of plywood or fiberboard in grate recesses, and cover frames with plywood protective flooring. Maintain protection until construction traffic has ended and Project is near time of Substantial Completion.
3. Install product when no further wheeled construction traffic will occur and wet type operations including painting and decorating are complete.

END OF SECTION