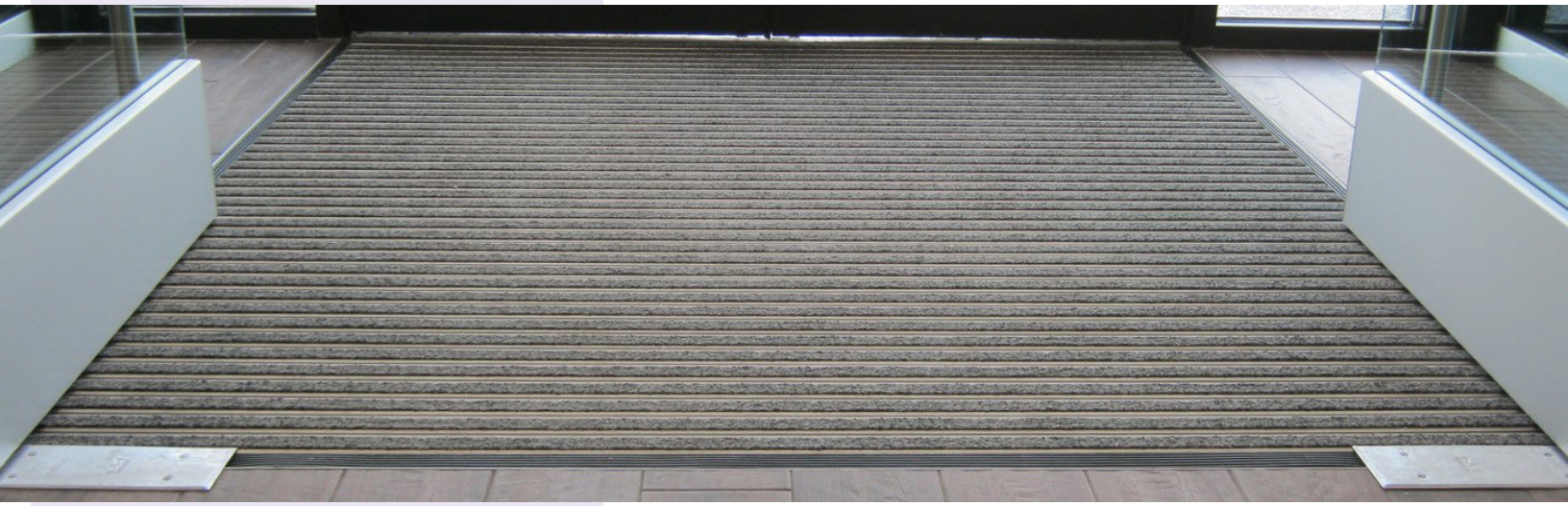
MATWORKS
PROTECT EVERY STEP

Product Specifications Sheet

ProGrate Grid System



This premium grate system combines durability, safety, and aesthetics with customizable interlocking tiles and a variety of surface options for superior traction, aggressive debris removal, and a clean, stable entryway.

- Great for high traffic areas, these mats allow drainage for water and snow while collecting dirt and debris.
- Develop unique color variations to create the perfect entrance and creating a lasting impression.
- The aluminum hinged rails are easily replaced after many years of pedestrian traffic and maintenance. Available with aluminum or rubber hinges.
- The rubber hinged mats are perfect for collecting dirt, grime, and moisture while the soft hinges absorb noises from foot traffic.
- Installation services available.

Product Specifications	Information
Material Construction	Aluminum rails w/ aluminum hinge
Rail Material	6063-T52 Aluminum
Rail Spacing	2" in. on center
Drainage Openings	1" x 3/16" slotted
Installation	Recessed or surface mounted
Overall Thickness	3/8" in.
Traffic Classification	Heavy Traffic
Insert Surface Construction	Alumininm, Polyproylene, Nylon or Vinyl
Acoustic Performance	Rigid / minimal sound absorption

Product Specifications	Testing Standards	Information
Slip Resistance	ASTM D2047	Varies by insert
Flammability	ASTM E648	Class dependent on insert
Smoke Density	ASTM E662	Pass dependent on insert
Rolling Load Capacity	Internal Test Method	Up to 400 lbs per wheel
Structural Load / Deflection	ISO 105 E01	High structural rigidity
Corrosion Resistance	ISO 105 C06	Aluminum corrosion resistant
Durability / Wear	ISO 105 X12	High durability (heavy traffic)
Electrostatic Propensity	ASTM E648	Dependent on insert
Dirt & Moisture Removal	ASTM E662	High (bi-directional scraping)

SECTION 09 68 13 – ENTRANCE GRID SYSTEM

PART 1 – GENERAL

1.1 SUMMARY

A. Furnish and install modular entrance mat systems designed for high-performance debris and moisture removal at building entrances.

B. System shall consist of aluminum rail construction with hinge connections and interchangeable insert materials.

C. . Work includes:

- Entrance mat system (ProGrate™)
- Frame systems (recessed or surface-mounted)
- Insert materials
- Accessories and transitions

1.2 REFERENCES

Comply with the following standards, as applicable:

- ASTM B221 – Aluminum Extrusions
- ASTM B117 – Corrosion Resistance (Salt Spray)
- ASTM D2047 – Slip Resistance (insert dependent)
- ASTM E648 – Radiant Panel (insert dependent)
- ASTM E662 – Smoke Density (insert dependent)
- ASTM D3884 – Wear Resistance (insert dependent)
- AATCC 134 – Electrostatic Propensity (insert dependent)

1.3 SUBMITTALS

A. Product Data: Manufacturer's technical data and performance characteristics.

B. Shop Drawings: Layout, frame details, dimensions, and transitions.

C. Samples:

- Rail and hinge section
- Insert material samples (carpet, brush, vinyl, aluminum)

D. Maintenance Instructions and warranty documentation.

1.4 QUALITY ASSURANCE

A. Manufacturer shall specialize in entrance flooring systems.

B. Installation shall be performed in accordance with manufacturer's instructions.

C. Provide all system components from a single source.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packaging.

B. Store flat in a dry, protected environment.

1.6 PROJECT CONDITIONS

A. Verify substrate conditions prior to installation.

B. Coordinate with adjacent trades to ensure proper recess depth and transitions.

1.7 WARRANTY

A. Provide manufacturer's standard warranty for materials and workmanship.

PART 2 – PRODUCTS

2.1 MANUFACTURER

Basis of Design: ProGrate™ Aluminum Entrance System
Manufacturer: **MatWorks**
Location: LaGrange, Georgia
Website: www.thematworks.com

2.2 ENTRACE MAT SYSTEM

A. General Construction

- Roll-up modular entrance system consisting of parallel aluminum rails connected by hinge systems.
- Designed for recessed or surface-mounted applications.
- System shall allow for easy roll-up for cleaning and maintenance.

2.3 MATERIALS (Rails)

A. Material: 6063-T52 extruded aluminum
B. Spacing: 2 inches on center
C. Thickness: 3/8 inch overall system thickness
D. Drainage: Slotted openings (1" x 3/16") for water, snow, and debris removal

2.4 ALUMINUM HINGE SYSTEM

A. Construction: Aluminum rails with aluminum hinge connection
B. Performance:
- High structural rigidity
- Designed for heavy traffic environments
- Load capacity: Up to 400 lbs per wheel

C. Acoustic Performance:
- Minimal sound absorption (rigid system)

D. Application:
- Exterior entrances
- High-traffic commercial environments

2.5 INSERT OPTIONS

A. Insert materials shall be interchangeable and selected based on performance requirements:
- Carpet (nylon)
- Polypropylene brush
- Diamond peak vinyl
- Serrated anodized aluminum

B. Inserts shall:
- Provide scraping, wiping, and moisture removal performance
- Be replaceable without removing entire mat system

PART 2 – PRODUCTS CONTINUED

2.6 PREFORMANCE REQUIREMENTS

A. Slip Resistance (Insert Dependent):
- ASTM D2047 – Varies by insert

B. Flammability (Insert Dependent):
- ASTM E648 – Class dependent on insert

C. Smoke Density (Insert Dependent):
- ASTM E662 – Pass dependent on insert

D. Rolling Load Capacity:

Internal Test Method
- Aluminum Hinge: Up to 400 lbs/wheel
- Rubber Hinge: 300–400 lbs/wheel

E. Structural Performance:

ASTM E84 (reference for system integrity)
- Aluminum Hinge: High rigidity
- Rubber Hinge: Moderate flexibility

F. Corrosion Resistance:
- ASTM B117 – Aluminum components corrosion resistant

G. Durability / Wear (Insert Dependent):
- ASTM D3884

H. Electrostatic Propensity (Insert Dependent):
- AATCC 134

I. Dirt & Moisture Removal:

Internal Test Method
- Aluminum Hinge: High (bi-directional scraping)
- Rubber Hinge: Moderate to high

2.7 FRAME OPTIONS

A. Provide frame systems compatible with installation type:
- Pit-embedded frames
- Pit-affixed frames
- Surface-applied frames

B. Frames shall:
- Match system thickness
- Provide safe transition with adjacent flooring

PART 3 – EXECUTION

3.1 EXAMINATION

A. Verify substrate is level, clean, and properly prepared.
B. Confirm recess depth matches system thickness.
C. Ensure door clearances are adequate.

3.2 PREPARATION

A. Remove debris, dust, and contaminants.
B. Coordinate installation with adjacent flooring systems.

3.3 INSTALLATION

A. **Recessed Installation**
- Install mat system within recessed frame.
- Ensure flush alignment with surrounding flooring.
- Provide full support across entire system.

B. Surface Installation
- Install mat directly over finished floor.
- Provide reducer transitions at exposed edges.

C. General Requirements
- Install system square and aligned.
- Ensure mat rolls freely for maintenance access.
- Confirm proper fit and alignment of inserts.

3.4 CLEANING & MAINTENANCE

A. Daily cleaning:
- Sweep or vacuum to remove debris
- Use crevice tools to clean between inserts

B. Periodic maintenance:
- Clean inserts with mild detergent and water
- Use carpet cleaner for deeper cleaning where required

3.5 PROTECTION

A. Remove debris, dust, and contaminants.
B. Coordinate installation with adjacent flooring systems.