



# 3M™ Nomad™ Heavy Traffic Unbacked Scraper Matting 8100

Technical Data Sheet  
April 2014

## 1) Product Description

The product is an unbacked, non-woven, open and porous floor matting made from continuous vinyl filaments bonded together. The matting is motor oil resistant and suitable for heavy duty foot traffic in dry or wet areas. It also serves to scrape off and collect dirt which helps prevent dirt from being tracked into a building.

## 2) Intended Use

For use as an entryway mat outside or inside entrances to buildings, in recessed well mat areas, or other areas exposed to heavy foot traffic.

## 3) Colors

Black, Brown, Gray, Blue, Green, Red

## 4) Physical Requirements

The product is made of an oil resistant all-vinyl nonwoven continuous filament bonded together to form a durable and motor oil, water, weather and environmentally resistant mat suitable for heavy foot traffic.

### *Property:*

### *Typical Values:*

#### Weight

ASTM D-418-68

8.2 lb/yd<sup>2</sup> (4.5/kg/m<sup>2</sup>)

#### Thickness

ASTM D418-68

0.66 inches (16.8 mm)

\* Product may be compressed in package. Thickness is recovered loft.

#### Flammability

DOC FF 1-70 (Pill Test)

Passes

ASTM E-648, NFPA-253 &

>0.7 watts/cm<sup>2</sup>, NFPA Class 1

FTM Standard 372

Radiant Panel Test

Recommended critical average radiant flux to be greater than 0.25 for residential and commercial use, greater than 0.5 for institutional applications





ASTM 662-95 Smoke Density  $D_M=404$

**Microbiological Properties**

ASTM G-21-90 Passes – Inhibiting to fungal growth in the mat

**Electrical Properties**

Dielectric Strength (ASTM D 149) 12.0 Kilovolts

Volume Resistivity (ASTM D 257)  $7.2 \times 10^4$  ohms-cm

Electrostatic Propensity Step Scuff

AATCC 134, Neolite soles +1 KV 2.13 KV

Positive Positive

Extended Use Temperature -10F to 120F (-23C to 49C)

*Chemical Resistance- All tests 7 days @ 72°F (22°C) unless otherwise noted*

Water	Excellent
10% Salt Water	Excellent
Chlorinated Water	Excellent
Tri-Sodium Phosphate	Excellent
5% Detergent Solution	Excellent
Peanut Oil	Good
Cooking Oil	Good
24% Sulfuric Acid	Excellent
10% Hydrochloric Acid	Excellent
Ethyl Alcohol	Good
Sodium Hydroxide	Excellent
Hexane	Good
Methylene Chloride (Paint Remover)	Poor
Mineral Spirits	Good
Gasoline	Good
Motor Oil	Excellent
Diesel Fuel	Good
Transmission Fluid	Excellent
25% Acetic-Acid	Good
Brake Fluid	Good
Excellent – no observed effect on product. Good – Product slightly stiffens or discolors. Poor – Product becomes unsuitable for use.	



## 5) Installation, Seaming and Edging

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Open the box and roll the mat out in the area to be covered and allow it to reach room temperature. If the mat is to be cut, see custom cutting instructions below.

**Custom Cutting:** 3M™ Nomad™ Heavy Traffic Unbacked Scraper Matting 8100 can be easily custom cut without edges fraying. Length and width dimensions may change during use. Wall-to-wall installations are not recommended.

*Tools needed:*

- Utility knife
  - Straight edge, 3-4 feet (0.9m – 1.2m) long
- If matting is to be cut to close specifications, be certain it is relaxed and not stretched. Unroll matting and allow the matting to lay undisturbed for 24 hours at room temperature.
  - Use a utility knife and straight edge for cutting. Do not use scissors.
  - If it is necessary to move matting after cutting, roll it loosely to avoid stretching.

*Recessed Well Installation:*

1. Place mat into recessed well with edge of mat firmly against one end.
2. Unroll mat slowly until it covers the area with excess matting resting outside of well.
3. Let mat relax undisturbed in place for a minimum of two hours (preferably overnight). NOTE: Mat temperature must be between 50°F (10°C) and 90°F (32°F) when installed.
4. If necessary, cut mat to width using a straight edge and utility knife (see Custom Cutting).
5. Cut mat length, adding ¼ inch for each foot of recessed well length (2 cm added per meter). EXAMPLE: If recessed well is 6 feet (2 meters) long, mat should be 6 feet 1 ½ inches (2.04 meters) long.
6. Tuck oversized end of matting into recessed well and work material into place with hands or feet.

**Seaming:**

3M™ Nomad™ Heavy Traffic Unbacked Scraper Matting 8100 can be seamed together to make mats wider or longer than standard size.

*Materials needed:*

- 3M™ Matting Seaming Tape (kit or roll)
  - 3M™ Matting Adhesive (one 3-ounce tube of adhesive will seam 15 linear feet [4.5 meters] of matting)
- Before seaming, be certain that matting is relaxed and not stretched. Unroll matting and allow it to lay undisturbed for 24 hours at room temperature. Avoid stretching or pulling on mat when seaming.
  - Use Pieces from the same roll to assure that color, shade, and texture are the same.
  - Maximum recommended mat size is 80 sq. Ft. (7.2 sq. meters). You may want to use smaller mats for ease of handling and maintenance.



### *Seaming Details:*

1. Place pieces of matting to be seamed side by side on a clean surface.
2. Unroll 3M™ Matting Seaming Tape between the two pieces of matting to be joined. Cut tape to length.
3. Position the pieces of matting on seaming tape so that each piece's edge covers half the width of tape. Be sure the pieces of matting touch at the tape center but do not overlap or buckle.
4. Fold back the edge of one piece of matting along the full seam length.
5. Apply a continuous wavy bead of adhesive ¼ inch (6mm) from the outside edge of the exposed half of seaming tape.  
NOTE: When applying adhesive, work rapidly. Adhesive may cause wrinkling of seaming tape if matting is not joined within ten minutes.
6. Return the folded edge of matting to its original position and apply moderate pressure to bond adhesive.
7. Fold back the second piece of matting along the full length of seam.
8. Apply two additional beads of adhesive; the first along joint of seaming tape and first piece of matting, and the second in a wavy pattern ¼ inch (6mm) from the outside edge of the exposed half of seaming tape.
9. Return folded edge of the second piece of matting back to its original position and press firmly. At the same time, gently push both pieces of matting together to eliminate any gaps.
10. Place a weight, such as a board, along the full length of seam to maintain pressure on the bond. Allow to dry undisturbed for at least 8 hours before placing it into service.

### *Applying Matting Edging:*

Edging can be easily applied to 3M™ Nomad™ Heavy Traffic Unbacked Scraper Matting 8100 to form a tapered edge.

#### *Tools and Materials Needed:*

- Utility Knife
  - Straight edge, 3-4 feet long (1-1.3 meters)
  - 3M™ Matting Edging – Medium Profile
  - 3M™ Matting Adhesive (one 3-ounce tube of adhesive will apply approximately 15 linear feet of edging)
- Before applying edging ensure that matting and edging are relaxed and not stretched. Unroll matting and edging and allow to lie undisturbed for 24 hours at room temperature. Do not stretch or pull on matting when applying edging.
  - Apply edging to opposite side of matting where most people will walk. Recommended maximum edge length is 12 feet (4 meters).
1. Arrange mat on floor so that sides to be edged are straight. Trim edges with a utility knife (not scissors) and a straight edge if necessary (see Custom Cutting).
  2. Cut a piece of edging the same length as the edge of mat.
  3. Place edging flat on the floor, grooved side up.
  4. Apply two beads of adhesive liberally to the top of edging.
  5. Place edge of mat on top of edging groove containing adhesive. Gently work mat snugly into the corner of edging groove to ensure a good fit.
  6. Place a weight, such as a board, along the full length of the edging to maintain pressure on the bond. Allow to dry undisturbed for at least 8 hours before placing it into service.



During packaging, vinyl matting products can become compressed. This is a natural occurrence due to the weight and pressure that can be experienced during the packaging, shipping and storage process. Usually the vinyl mat will re-loft itself within 24 hours after it is removed from the package. If the mat does not meet the fullness and appearance expected in that time frame, the vinyl mat may be re-lofted. Here are the steps for installation and re-lofting of the vinyl mat.

### *Re-lofting Mat*

1. Unroll the matting and allow the mat to reach room temperature, allow the mat to reach room temperature or a minimum of 72° F (22°C) for 24 hours.
2. For areas that need additional re-lofting, pass a hair dryer over the area that is to be re-lofted, with the hair dryer set at medium or high temperature and a distance of a minimum 4 inches to 8 inches (10.6 mm to 20.3 mm) away from the matting at all times during the process.

## 6) Cleaning and Maintenance

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### *Daily Maintenance*

1. **Vacuum daily.** Use an upright beater-brush dry vacuum adjusted to its most powerful setting. Move vacuum slowly over mat to allow time for dirt to be picked up.
2. In heavier traffic areas or at pivot points, rotate matting end for end when repositioning.
3. Important: Floor under mat must also be kept clean (swept and/or damp mopped underneath mat). The underside of the mat must be clean and damp mopped in heavy dust and debris areas.

### *Weekly Maintenance:*

1. Remove matting from service.
2. Turn matting over and run beater bar, dry vacuum on back side of matting.
3. Pick up matting.
4. Clean up dirt/debris from floor (sweep, vacuum, damp mop, etc.)
5. Place matting back in service and vacuum top surface of matting.



3M™ Nomad™ and 3M™ Safety-Walk™ vinyl matting has been certified by the National Floor Safety Institute (NFSI) as providing a "high traction" backing. NFSI tested these 3M™ mats using its NFSI 101-C Test Method for Measuring Dry Transitional Coefficient of Friction (TCOF) of Floor Mat Backing Materials and found each mat to have a TCOF of greater than 0.05. According to NFSI, mats lacking the high-traction backing offered by 3M™ matting are more prone to movement, which can increase the risk of migration, buckling, and curling, which, in turn, can contribute to slip, trips, and falls.

#### Important Notice:

**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the performance of 3M™ Nomad™ Entrance Matting System products, including the type and preparation of the surface, and the conditions of use. User is solely responsible for evaluating the product and determining whether it is fit for user's particular purpose and adequately maintained.

**Warranty, Limited Remedy and Disclaimer:** 3M warrants that its 3M™ Nomad™ Entrance Matting System products, if used as recommended, will be free from defects in material and manufacture for the period of one year from the date of purchase from 3M or 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M™ Nomad™ Entrance Matting System product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. This warranty does not cover product failure arising out of product abuse or misuse, or the failure to properly install or maintain the product.

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