

Technical Data/ Product Specifications



Safety-Walk™ Cushion Matting 5270

1.0 Product Description

The product is a nonwoven floor matting made from continuous vinyl filaments with a flat solid top surface. The mat is suitable for heavy duty foot traffic in dry or wet areas and is motor oil resistant. The mat provides a comfortable surface for standing or walking.

2.0 Intended Use

For use as an anti-fatigue mat in areas where workers are standing or walking, such as factory assembly and production areas including areas exposed to grease and/or oil. The mat is intended to reduce muscle discomfort and body aches due to fatigue in such areas.

3.0 Standard Sizes

Widths:
3 ft. and 4 ft. (0.9m and 1.2m)

Lengths:
2 ft to 30 ft. (0.6m to 9.1m) in 1-foot increments

Edging

5270 without edging

5270E with black integral edging on lengths and black nosing on 3 foot and 4 foot widths

5270YE with yellow integral edging on lengths and black nosing on 3 foot and 4 foot widths

- Glue-on edging is available in black and yellow at additional cost
- Partial edged material is available as a special request and additional cost

4.0 Colors

Matting:

Black

Edging:

Black, Yellow

Other colors as special request

5.0 Requirements

Detailed Requirements:

<u>Property</u>	<u>Typical Values</u>
Weight (minimum) ASTM D-418-68 Sec. 9-16	10.0 lb/yd ² (4.5 kg/m ²)
Thickness (minimum)* ASTM D-418-68 Sect. 35-1	0.65 inches (16.5mm)
* Product may be compressed in package. Thickness is recovered loft.	
Noise Reduction Coefficient, NRF ASTM D-423-90A	15%
Coefficient of Friction Mil-D1795D (sh)	
- Dry	1.60
- Oily	0.44
Flammability DOC FF 1-70 (Pill Test) ASTM E-648 (Flooring Radiant) Panel Test*	Passes 0.75 watts/cm ² (no ignition)
* Recommended critical average radiant flux to be greater than 0.25 for residential and commercial use, greater than 0.5 for institutional applications.	
Electrical Properties DC Insulation Resistance ASTM D-257	2.0-2.3 x 10 ¹⁰ ohms
Dielectric strength (ASTM D-149)	19.9-20.3 kilovolts
Volume Resistivity (ASTM D-257)	2.0 x 10 ¹⁰ ohms-cm
Chemical Resistance*	
* All test 7 days @ 72°F (22°C) unless otherwise noted	
Water	Excellent*
10% Salt Water	Excellent
Chlorinated Water	Excellent
Tri-Sodium Phosphate	Excellent
Acid chrome Plating Solution	Good
Lithographic Solution (3M-K-11)	Excellent
1% Detergent Solution	Excellent
Glycerine	Excellent
Peanut Oil	Excellent

5.0 Requirements (continued)	24% Sulfuric Acid 10% Hydrochloric Acid Ethyl Alcohol Sodium Hydroxide Ammonium Persulfate Ferric Chloride Hexane Methylene Chloride (Paint Remover) Mineral Spirits Gasoline Motor Oil Diesel Fuel	Excellent Excellent Excellent Excellent Excellent Excellent Good Poor Good Good Excellent Good
		* Excellent – No observed effect on product Good – Product stiffens or discolors slightly Poor – Product becomes unsuitable for use. 3M™ Safety-Walk™ Cushion Matting 5270 should not be used where it will regularly contact these chemicals.
6.0 Packaging and Marking	Packaging Pre-Cut Mats – one per carton Rolls – one per carton	Marking Each carton shall be marked with product name, size, color, and manufacturer’s trade name.
7.0 Installation, Seaming, and Edging	<p>3M™Safety-Walk™ Cushion Matting 5270 is designed to be installed with the continuous solid side up; this side will be on the inside of the roll when received.</p> <p>Custom Cutting</p> <p>The 3M™Safety-Walk™ Cushion Matting 5270 can be easily custom cut without edges fraying. Length and width dimensions may change during use. Wall-to-wall installations are not recommended.</p> <p>Tools needed:</p> <ul style="list-style-type: none"> - 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 to lie 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. <p>Seaming</p> <p>The 3M™Safety-Walk™ Cushion Matting 5270 can be seamed together to make mats wider or longer than standard sizes.</p>	

7.0 Installation, Seaming, and Edging (continued)

Materials needed:

3M™ Matting Seaming Tape (kit or roll)

3M™ Matting Adhesive (one 3-ounce [88 ml] tube of adhesive will seam 15 linear feet [4.5 m] of matting).

- Before seaming, be certain that the matting is relaxed and not stretched. Unroll matting and allow to lie 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.
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 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 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

Beveled edging can be easily applied to the 3M™Safety-Walk™ Cushion Matting 5270 to form a tapered edge.

Tools and materials needed:

- Utility knife
- Straight edge, 3-4 feet long (0.9m – 1.2 meters)
- 3M™ Matting High Profile Edging
- 3M™ Matting Adhesive (one 3-ounce [88 ml] tube of adhesive will adhesive apply approximately 15 linear feet [4.5m] 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 no stretch or pull on matting when applying edging.

**7.0 Installation,
Seaming, and Edging
(continued)**

Apply edging to opposite side of matting where most people will walk. Recommended maximum edge length is 12 feet (3.6 meters).

1. Arrange mat on floor so that side 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 groove.
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 edging to maintain pressure on the bond. Allow to dry undisturbed for at least 8 hours before placing it into service.

**8.0 Cleaning and
Maintenance**

Daily Maintenance

- Shake mat vigorously to remove debris.
- Clean up debris under and around mat and place mat, on a clean dry floor.
- Damp mop top surface of mat and return to service.

Periodic Maintenance

- Remove debris (see daily maintenance).
- For difficult to remove oil, grease, and/or debris, spray or mop on a general purpose cleaner or non-chlorinated degreaser prior to cleaning.
- Scrub solid top surface of mat with a deck brush.
- Rinse off.
- Allow to dry before placing back in service.

**9.0 Weight and Cube per
Case**

<u>Size</u>	<u>Approximate Weight</u>	<u>Cube</u>
3 ft. x 5 ft.	22 lb.	1.208 cu. ft.
4 ft. x 6 ft.	31 lb.	1.587 cu. ft.
3 ft. x 20 ft.	73 lb.	3.978 cu. ft.
4 ft. x 20 ft.	95 lb.	5.581 cu. ft.

3M Branch Sales Offices

ANCHORAGE

11151 Calaska Circle
Anchorage, AK 99515
Telephone: 907/522-5200
Facsimile: 907/522-1645

CONTINENTAL UNITED STATES

Customer Service Department
3M Center Building 223-5S-07
St. Paul, MN 55144-1000
Order Entry 1-800-852-9722
Facsimile: 1-800-447-0408

HONOLULU

4443 Malaai Street
Honolulu, HI 96818
Mail to: P.O. Box 30048
Honolulu, HI 96820
Telephone: 808/422-2721
Facsimile: 808/422-9557

3M CANADA

1840 Oxford Street East
London, Ontario, Canada
N5V 3G2
Mail to: P.O. Box 5757
London, Ontario, Canada
N6A 4T1
Telephone: 800/364-3577
Facsimile: 800/479-4453

Important Notice:

This flyer is intended to be an introductory summary. The information provided is based upon typical conditions and is believed to be reliable; however, due to the wide variety of intervening factors 3M does not warrant that the results will necessarily be obtained. All details concerning product specifications and terms of sale are available from 3M.

3M

Commercial Care Division

St. Paul, MN 55144-1000
1-800-852-9722
www.3M.com/commcare

3M and Safety-Walk are trademarks of 3M Company.

Copyright © 2001, 3M IPC. All rights reserved.

70-0710-3582-1 Rev. A