

3M Safety-Walk™ Slip-Resistant Materials

Technical Data

December 2002

Product Descriptions:

3M™ Safety-Walk™ Coarse Tapes and Treads 700 Series

The product consists of large abrasive particles bonded by a tough, durable polymer to a dimensionally stable plastic film. The reverse side is coated with a pressure-sensitive adhesive covered by a removable protective liner.

Standard sizes:

Refer to Standard Product Chart (Page 2)

Colors: Black #710

Custom Sizes:

Available upon request.

3M™ Safety-Walk™ General Purpose Tapes and Treads 600 Series

The product consists of abrasive particles bonded by a tough, durable polymer. The reverse side is coated with a pressure-sensitive adhesive covered by a removable protective liner.

Standard sizes:

Refer to Standard Product Chart (Page 2)

Colors: Black #610, Clear #620, Brown #660 and Safety Yellow #630

Custom sizes:

Available upon request.

3M™ Safety-Walk™ Conformable Tapes and Treads 500 Series

The product consists of abrasive particles bonded by a tough, durable polymer to aluminum foil. The reverse side is coated with a pressure-sensitive adhesive covered by a removable protective liner. The

product is designed to stretch and conform to irregular surfaces such as diamond tread metal, screw heads, ladder rungs, etc.

Standard sizes:

Refer to Standard Product Chart (Page 2)

Colors: Black #510 and Safety Yellow #530

Custom sizes:

Available upon request.

3M™ Safety-Walk™ Medium Resilient Tapes and Treads 300 Series

The product consists of dimensionally stable plastic film coated with a textured resilient surface. The reverse side is coated with a pressure-sensitive adhesive covered by a removable protective liner.

Standard sizes:

Refer to Standard Product Chart (Page 2)

Colors: Black #310 and Grey #370

Custom sizes and colors:

Available upon request

3M™ Safety-Walk™ Fine Resilient Tapes and Treads 200 Series

The product consists of a fine textured resilient top surface. The reverse side is coated with a pressure-sensitive adhesive covered by a removable protective liner.

Standard sizes:

Refer to Standard Product Chart (Page 2)

Colors: White #280 and Clear #220.

Accessories:

3M™ Safety-Walk Primer #901

Primer #901 is a solvent-based adhesive. It is to be applied to rough or porous surfaces before application of adhesive-backed products. One quart covers approximately 35 square feet.

Size: 1 quart can

3M™ Safety-Walk™ Edge Sealing Compound #902

Edge Sealing Compound #902 is a liquid, solvent-based sealer in a convenient tube applicator. The product seals the exposed edges of Safety-Walk slip-resistant materials, providing extra protection from excessive moisture or liquids. One five-ounce tube seals approximately 75 to 100 linear feet.

Size: 5 oz. tube

3M™ Safety-Walk™ Rubber Hand Roller #903

Rubber Hand Roller #903 helps provide a firm bond when Safety-Walk slip-resistant materials are applied.

Size:

Roller – 1 3/8" diameter x
2" wide.

Overall length – 6"

3M™ Citrus Base Industrial Cleaner

Citrus Base Industrial Cleaner is used for softening adhesive residue after removal of Safety-Walk slip-resistant materials.

Size: 24 oz. aerosol can

Standard Product Chart

3M™ Safety-Walk™ Slip-Resistant Tapes and Treads Standard Sizes and Colors

Size	Coarse 700 Series	General Purpose 600 Series			Conformable 500 Series		Medium Resilient 300 Series		Fine Resilient 200 Series	
	Black #710	Black #610	Brown #660 and Safety Yellow #630	Clear #620	Black #510	Safety Yellow #530	Black #310	Grey #370	White #280	Clear #220
¾" x 24"		X								
5 ½" x 5 ½"		X			X					
6" x 24"	X	X			X		X	X		
4" x 30'	X									
6" x 30'	X									
12" x 30'	X									
18" x 30'	X									
24" x 30'	X									
¾" x 60'		X								
1" x 60'		X	X	X			X	X	X	X
2" x 60'		X	X	X	X	X	X	X	X	X
4" x 60'		X	X	X	X	X	X	X	X	
6" x 60'		X			X	X	X	X	X	
12" x 60'		X			X		X	X	X	X
18" x 60'		X			X		X	X		
24" x 60'		X			X		X	X		
36" x 60'		X					X	X		
48" x 60'		X					X			
¾" x 17"									X	X

Custom sizes available upon request for all materials.

Custom colors available upon request for Medium Resilient materials.

Product Selection Guide

Type of 3M™ Safety-Walk™ Slip-Resistant Tapes and Treads					
Applications	Coarse 700 Series	General Purpose 600 Series	Conformable 500 Series	Medium Resilient 300 Series	Fine Resilient 200 Series
Farm Machinery	X	X	0		
Construction equipment Forklifts Cherry pickers	X				
Steps, stairs, and platforms		X	0		
Recreational vehicles Snowmobiles ATVs Garden tractors Lawn mowers	X	X	0		
Wet & oily areas Loading docks Cold storage Catwalks Platforms/ramps	X				
Ladders Step stools Scaffolds		X	0		
Airplane decks/cargo holds Trains Semi-trailers Buses Ships decks	X		0		
Water skis Surf boards Jet skis Boats				X	
Swimming pools Pool accessories Diving boards				X	
Bath area Showers				X	X
Bathtubs					X
Conveyors Pulleys				X	
Food service area*		X		X	
Machine shops Auto repair shops Garages	X				

X – Recommended for flat or smooth surfaces

0 – Recommended around corners or for irregular surfaces

* – Not recommended for application on greasy quarry tiles

3M™ Safety-Walk™ General Purpose and Coarse Slip-Resistant Tapes and Treads: Conformance to Military Specification MIL-D-17951E (SH) is only available via military orders or special product request (SPR).

Typical Properties

Type of 3M™ Safety-Walk™ Slip-Resistant Tapes and Treads							
	Coarse 700 Series	General Purpose 600 Series		Conformable 500 Series	Medium Resilient 300 Series	Fine Resilient 200 Series	Test Method
Color	Black #710	Black #610	Yellow #630 Brown #660 Clear #620	Black #510 Safety Yellow #530	Black #310 Grey #370	Clear #220 White #280	
Applied Thickness (in.) (mm)	.048 1.22	.028 .711	.036 .914	.036 .914	.045 1.14	.023 .584	MIL-D- 17951E SHIPS
Applied Weight (oz.)ft. ² (g/m)	5.51 1,720	2.4 732	2.4 732	2.8 854	2.7 827	2.1 640	MIL-D- 17951E SHIPS
Minimum Application Temperature	40°F (4°C)	40°F (4°C)	40°F (4°C)	40°F (4°C)	40°F (4°C)	50°F (10°C)	
Maximum Service Temperature	175°F (79°C)	175°F (79°C)	150°F (66°C)	175°F (79°C)	175°F (79°C)	150°F (66°C)	3M-SW- 29.0
Flammability Average Critical Radiant Flux W/cm ² NFPA 101 GSA Classification	-	>1.08 Type I Class A	>1.02 Type I Class A	1.02 Type I Class A	0.37 Type II Class B	>1.08 Type I Class A	ASTM E648-95a (NFPA253)
T3003 Aluminum Substrate		Pass		Pass			FAA 25.855-F-1
Smoke Density (Dm corrected) Flaming Non-Flaming	-	57 60	47 47	8 9	78 244	153 170	ASTM E662-95a (NFPA258)
OUS Flammability	Class 0 Class 1	-	-	-	-	-	BS (UK) 476 Part 6 BS (UK) 476 Part 7

Dynamic Coefficient of Friction

Surface	Condition							
Rubber	Dry	1.05	1.04	1.02	1.04	1.06	1.29	MIL-D- 17951E SHIPS
	Water	1.00	1.02	1.05	0.94	0.83	0.86	
	Oil	0.76	0.87	0.90	0.95	0.31	0.35	
Leather	Dry	0.65	0.74	0.78	0.72	0.73	0.66	
	Water	0.83	1.19	1.14	1.14	0.77	0.79	
	Oil	N/A	N/A	N/A	N/A	N/A	N/A	

Static Coefficient of Friction

Surface	Condition							
Rubber	Dry	1.24	1.40	1.30	1.38	1.06	1.38	MIL-D- 17951E SHIPS
	Water	1.14	1.30	1.25	1.25	0.84	0.81	
	Oil	1.05	1.17	1.31	1.28	0.51	0.58	
Leather	Dry	0.90	1.00	1.05	1.04	0.81	0.82	
	Water	1.05	1.64	1.48	1.46	0.81	0.93	
	Oil	N/A	N/A	N/A	N/A	N/A	N/A	

Slip Resistance

Value							
Friction(dry)	R13	-	-	-	-	-	DIN(Ger.) 51130
Volume (ml/dmsq.)	V8	-	-	-	-	-	(ZH1/571)

N/A = Not Applicable

Chemical Resistance

Use this guide to help select the proper 3M™ Safety-Walk™ Slip-Resistant Tapes and Treads when exposure to chemicals is anticipated. Recommendations are based on samples bonded to stainless steel after seven days immersion.

- Clear Fine Resilient material may turn cloudy during continuous immersion in water. It will regain clarity after it dries.
- Colors may be affected by exposure to some chemicals.

Chemical	Type of 3M™ Safety-Walk™ Slip-Resistant Material					
	Coarse 700 Series	General Purpose 600 Series		Conformable 500 Series	Medium Resilient 300 Series	Fine Resilient 200 Series
	Black #710	Black #610	Yellow #630 Brown #660 Clear #620	Black #510 Safety Yellow #530	Black #310 Grey #370	Clear #220 White #280
Water	R	R	R	R	R	R
Bleach	R	R	I	I	R	R
1% Hydrochloric Acid	R	R	R	R	R	R
1% Sodium Hydroxide	R	R	NR	NR	R	R
Detergent (1% Dreft in Water)	R	R	R	R	R	R
Soap (1% Ivory Flakes in Water)	R	R	R	R	R	R
Isopropyl Alcohol	R	R	R	R	R	I
Motor Oil	R	R	R	R	R	R
Hydraulic Fluid (Skydrol 500B)	R	R	R	I	R	NR
Peanut Oil	R	R	R	R	R	R
Methyl Ethyl Ketone	I	I	I	I	I	NR
Mineral Spirits	NR	NR	NR	NR	NR	NR
Gasoline (Unleaded)	NR	NR	IC	NR	NR	NR
Trichloroethylene	NR	NR	NR	NR	NR	NR
25% Sulfuric Acid Water	R	R	I	IC	R	R
50% Antifreeze in Water	R	R	R	R	R	R
Windshield Washer Fluid	R	R	R	R	R	R
Diesel Fuel	I	I	I	I	NR	NR

R = Recommended, generally not for continuous immersion.

I = Recommended for intermittent exposure only

NR = Not recommended

IC = Can stand incidental contact, provided cleaning/rinsing is performed after exposure.

Surface Preparation Table

Surface	Solvent Wipe*	Strip Floor Finish; Degrease; Wash and Rinse**	Prime Coat Recommended
Bare metal/polyethylene/polypropylene	X		No
Painted metal or plastic/painted wood/gel-coated fiberglass/epoxy-coated floor***	X	X	No
Rough or smooth porous concrete		X	Yes
Painted or coated smooth concrete		X	No
Vinyl tile/marble/terrazzo/ceramic		X	No
Quarry Tile****		X	Yes

* Use solvent suitable for removing grease and oil. Follow manufacturer's directions for proper handling.

** Use detergent, degreaser or stripping chemical as appropriate.

*** Untreated and treated wood must be painted before application of any 3M™ Safety-Walk™ products.

**** Not recommended for use in commercial kitchens.

Directions for use:

Surface Preparation Instructions:

1. Make sure surface is clean, dry, smooth and above minimum application temperature when applying 3M™ Safety-Walk™ Slip-Resistant material. Repair or replace any broken or damaged surface.

Minimum application temperatures:

Coarse
General Purpose
Medium Resilient
Conformable
40°F (4°C)

Fine Resilient
50°F (10°C)

2. Remove chipped, cracked or peeled paint prior to applying Safety-Walk material.
3. Remove loose residue from surface.
4. Floor finish should be removed from floor prior to application.
5. Referring to the Surface Preparation Table (Page 6), use appropriate cleaner or solvent wipe to clean surface. After cleaning, allow to dry thoroughly.

Priming Instructions

1. Prime clean, dry surfaces with 3M™ Safety-Walk™ Primer, especially:
 - a. Uncoated concrete surfaces.
 - b. Coated, painted or porous concrete if surface is excessively rough.
 - c. Other porous surfaces.
2. Priming Instructions
 - a. Properly clean the surface following the Surface Preparation Table (Page 6).
 - b. Use a paint brush to apply a thin coat of Safety-Walk primer where treads are to be placed.
 - c. Allow the primed area to dry thoroughly (no evidence of stickiness or tackiness) before applying Safety-Walk

slip-resistant material.
Approximate drying time is 15 minutes.

Application Instructions:

Tools Needed:

Rubber Hand Roller or
Rubber Mallet

1. Individual pieces should be spaced a minimum of ½" apart and a maximum of 2" apart.
2. Round the corners of any pieces cut from rolls.
3. Peel protective liner back about 2" from one end and position piece on surface. IMPORTANT: Minimize touching adhesive with fingers.
4. Continue to remove liner. Press firmly in place as liner is removed.
5. For small pieces: Peel liner off piece. Holding piece by its edges, curve it gently with the adhesive side out. Align the middle of the piece over the middle of the target surface and press down.
6. Finally, press into firm contact with surface using a rubber hand roller by starting in middle and rolling out towards edges.
7. For applying 3M™ Safety-Walk™ Conformable Tapes and Treads, use a soft-headed rubber mallet to ensure product conformability to surface. Pound edges extra hard.
8. On steps, apply Safety-Walk material ½" from stair edge to prevent edge curl and premature wear.

Maintenance Instructions:

- To maintain product effectiveness, the application should be inspected periodically.
- To ensure that Safety-Walk slip-resistant materials are kept free of dirt and other residue that might impair functionality:
 - Coarse, General Purpose and Conformable tapes and treads should be deck brushed regularly.

- Medium and Fine Resilient Treads should be mopped or deck brushed regularly.
- Use appropriate degreaser/cleaner as a general maintenance liquid to keep material and surrounding surfaces dirt and grease free.
- To remove and replace worn or torn material:
 - Start by pulling up old material. Use of a heat gun may assist in this process.
 - After removal of old material, use 3M™ Citrus Base Industrial Cleaner or an equivalent product to soften adhesive residue and allow scraping of surface in preparation for product replacement.

Important for Proper Application and Service Life

1. All surfaces must be clean, dry and at recommended temperature before applying product.
2. Rough or porous surfaces must be primed with 3M™ Safety-Walk™ Primer for proper adhesion.
3. 3M™ Safety-Walk™ Rubber Hand Roller should be used to assure a firm bond when applying all Safety-Walk slip-resistant materials.
4. For extra protection from excessive moisture or liquids, use 3M™ Safety-Walk™ Edge Sealing Compound. Safety-Walk slip-resistant materials are not recommended for continuous immersion in water.
5. Safety-Walk material can be applied on most painted surfaces that are in good condition. Safety-Walk material will adhere as well as the base paint. Painted surfaces must be thoroughly dry before application of Safety-Walk slip-resistant material.
6. Treated or untreated wood must be painted prior to application of Safety-Walk slip-resistant material.

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|--|--|---|
| <p>7. Do not apply Safety-Walk material over surfaces with constant water contact or moisture seepage.</p> <p>8. Do not apply Safety-Walk material over grouting. Also, avoid cracks in concrete and breaks in all surfaces.</p> | <p>9. Safety-Walk slip-resistant materials are not recommended for quarry tile in commercial kitchens.</p> <p>10. Store product in its original carton, preferably at 40°F (4°C) to 100°F(37.7°C).</p> | <p>Humidity range of 40% to 60%.</p> <p>11. It is recommended to use the product within five years from the date product is received.</p> |
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Important:

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.

Limited Warranty:

Except where prohibited by law, the following is made in lieu of all express or implied rights, warranties and conditions, statutory or otherwise. 3M warrants that its 3M™ Safety-Walk™ Slip-Resistant Tapes and Treads will be free from defects in material and manufacture at time of purchase. There are many factors that can affect the performance and useful life of this product; i.e. the type and preparation of the surface, the conditions of use or exposure, etc. Due to the variety of factors that can affect the use and performance of this product, most of which are uniquely within user's knowledge and control, it is essential that user (a) determines whether or not this product is fit for the desired purpose, (b) suitable for user's method of application, (c) adequately maintained and (d) is replaced at end of useful life.

Limitation of Remedies and Liability: 3M's only obligation shall be to repair or replace, at 3M's option, such quantity of the material proved to be defective. 3M shall not be liable for any injury, loss or damage, direct, indirect, incidental, special or consequential arising out of the use of this product.

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