

3M™ Safety-Walk™ Slip-Resistant Materials

Technical Data/ Product Specification July 2011

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, Gray #770

Custom sizes: Available upon request

3M[™] Safety-Walk[™] Slip-Resistant General Purpose Tapes and Treads – 600 Series

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

Standard sizes:

Refer to Standard Product Chart (Page 2)

Colors: Black #610, Clear #620, and

Safety Yellow #630

Custom sizes: Available upon request

3M™ Safety-Walk™ Slip-Resistant 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 plating or flat surfaces with rivets or 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™ Slip-Resistant 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 Gray #370

Custom sizes and colors:

Available upon request

3M™ Safety-Walk™ Slip-Resistant 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

Primer 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

Edge Sealing Compound 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

Rubber Hand Roller 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"

Standard Product Chart

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

	Coarse 700 Series		General Purpose 600 Series			Conformable 500 Series		Medium Resilient 300 Series		Fine Resilient 200 Series	
Size	Black* #710	Gray #770	Black #610	Safety Yellow #630	Clear #620	Black #510	Safety Yellow #530	Black #310	Gray #370	White #280	Clear #220
3/4" x 24"			Х								
5 ½" x 5 ½"			Х								
6" x 24"	Х		Х			Х		Х			
4" x 30'	Х										
6" x 30'	Х										
24" x 30'	Х	Х									
3/4" x 60'			Х								
1" x 60'			Х	Х	Х			Х	Х	Х	Х
2" x 60'			Х	Х	Х	Х	Х	Х	Х	Х	Х
4" x 60'			Х	Х	Х	Х	Х	Х	Х	Х	
6" x 60'			Х			Х	Х	Х	Х	Х	
12" x 60'			Х			Х		Х	Х	Х	Х
18" x 60'			Х			Х		Х	Х		
24" x 60'			Х			Х		Х	Х		
36" x 60'			Х					Х	Х		
48" x 60'			Х					Х			

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	Х	Х	0						
Construction equipment									
Forklifts	Χ	X	0						
Cherry pickers	^								
Steps, stairs, and platforms		X	0						
Recreational vehicles									
Snowmobiles									
ATVs									
Garden tractors	Х	X	0						
Lawn mowers									
Wet & oily areas	Х								
Loading docks									
Cold storage	.,	.,							
Catwalks	Х	X	0						
Platforms/ramps									
Ladders									
Step stools		X	0						
Scaffolds			-						
Airplane decks/cargo holds									
Trains									
Semi-trailers	Х		0						
Buses Ships decks	^	X	0						
Water skis									
Surf boards									
Jet skis				Χ					
Boats				^					
Swimming pools									
Pool accessories									
Diving boards				X					
Bath area									
Showers				X	X				
Bathtubs					X				
Conveyors									
Pulleys				X					
Food service area*		Х		X					
Machine shops									
Auto repair shops	V								
Garages	Х								

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™ Slip-Resistant General Purpose and Coarse Tapes and Treads: Conformance to Military Specification MIL-C-24667 (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 General Purpos 700 Series 600 Series			Conformable 500 Series	Medium Resilient 300 Series	Fine Resilient 200 Series	Test Method		
Color	Black #710 Gray #770	Black #610	Safety Yellow #630 Clear #620	Black #510 Safety Yellow #530	Black #310 Gray #370	Clear #220 White #280			
Applied Thickness (in.) (mm)	.048 1.22	.028 .711	.036 .914	.036 .914	.045 1.14	.023 .584	MIL-C-24667 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-C-24667 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/cm2 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 E648-95 (NFPA253)		
Fire Retardancy, Smoke Density and Toxicity: Surface Flammability T3003 Aluminum Substrate	Pass	Pass	Pass	Pass	-	-	IMO A653(16) & MSC 61- (67		
(Baggage) T3003 Aluminum Substrate (Interior surface)	Pass Pass	Pass Pass	Pass Pass	Pass Pass	-	-	FAA 25.855-F- FAA 28.853-F-		
Smoke Density (Dm corrected) Flaming Non-Flaming	-	57 60	47 47	8 9	78 244	153 170	ASTM E662-95 (NFPA258)		

Dynamic Coefficient of Friction

Surface	Condition							
Rubber	Dry	1.05	1.04	1.02	1.04	1.06	1.29	
	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	MIL-C-24667
Leather	Dry	0.65	0.74	0.78	0.72	0.73	0.66	SHIPS*
	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	
	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	MIL-C-24667
Leather	Dry	0.90	1.00	1.05	1.04	0.81	0.82	SHIPS*
	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.)
Volume (ml/dmsq.)	V8	-	-	-	-	-	51130 (ZH1/571)

^{*} Supersedes Military Specification MIL-D-17951-E to which this product is also qualified.

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.

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

	Type of 3M™ Safety-Walk™ Slip-Resistant Material								
Chemical	Coarse 700 Series			Conformable 500 Series	Medium Resilient 300 Series	Fine Resilient 200 Series			
Color	Black #710 Gray #770	Black #610	Safety Yellow #630 Clear #620	Black #510 Safety Yellow #530	Black #310 Gray #370	Clear #220 White #280			
Water	R	R	R	R	R	R			
Bleach	R	R	1	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	1	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	1	I	I	I	NR	NR			

R = Recommended, generally not for continuous immersion.

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***	Х	X	No
Rough or smooth porous concrete		X	Yes
Painted or coated smooth concrete		X	No
Vinyl tile/marble/terrazzo/ceramic		Х	No
Quarry Tile****		X	Yes

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

I = Recommended for intermittent exposure only

NR = Not recommended

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

^{**} Use detergent, degreaser or stripping chemical as appropriate.

^{***} Untreated and treated wood must be painted before application of any 3M™ Safety-Walk™ Slip-Resistant Materials.

^{****} Not recommended for use in commercial kitchens.

Directions for use:

Surface Preparation Instructions:

 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)

- 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.
- Referring to the Surface Preparation Table (Page 5), use appropriate cleaner or solvent wipe to clean surface. After cleaning, allow to dry thoroughly.

Priming Instructions:

- Prime clean, dry surfaces with 3M[™] Safety-Walk[™] Primer, especially:
 - a. Uncoated concrete surfaces.
 - 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 5).
 - Use a paint brush to apply a thin coat of Safety-Walk primer where treads are to be placed.
 - 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

- 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.
- 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.
- 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.
- 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.
- On steps, apply tread 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 3M[™] 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[™] General Purpose Adhesive Remover (08987) 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

- All surfaces must be clean, dry and at recommended temperature before applying product.
- Rough or porous surfaces must be primed with 3M[™] Safety-Walk[™] Primer for proper adhesion.
- 3M[™] Safety-Walk[™] Rubber Hand Roller should be used to assure a firm bond when applying all Safety-Walk slip-resistant materials.
- 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. 3M™ Safety-Walk™ Slip-Resistant Material can be applied on most painted surfaces that are in good condition. The material will adhere as well as the base paint. Painted surfaces must be thoroughly dry before application of any 3M™ Safety-Walk™ Slip-Resistant Material.
- Treated or untreated wood must be painted prior to application of 3M™ Safety-Walk™ Slip-Resistant Material.
- Do not apply 3M[™] Safety-Walk[™] Slip-Resistant Material over surfaces with constant water contact or moisture seepage.
- Do not apply 3M[™] Safety-Walk[™] Slip-Resistant Material over grouting. Also, avoid cracks in concrete and breaks in all surfaces.
- 3M[™] Safety-Walk[™] Slip-Resistant Materials are not recommended for quarry tile in commercial kitchens.
- 10. Store product in its original carton, preferably at 40°F (4°C) to 100°F(37.7°C). Humidity range of 40% to 60%.
- 11. It is recommended to use the product within five years from the date product is received.

Important Notice to Purchaser

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the performance and useful life of 3M™ Safety-Walk™ Slip-Resistant Tapes and Treads 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[™] Safety-Walk[™] Slip-Resistant Tapes and Treads products will be free from defects in material and manufacture at the time of purchase from 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[™] Safety-Walk[™] Slip-Resistant Tapes and Treads 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.

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