

m2 Anti-Slip Tape

Hazard Warning Tape

Technical Data Sheet



Product Description:

Premium Long Life Durable Self Adhesive Anti-Slip Tape which incorporates a bonded and sealed 60-grit Aluminium Oxide, on an EN71 Low Temperature Resistant PVC Film which has been coated with a highly water and shrink resistant Acrylic Co-Polymer Pressure Sensitive Adhesive, protected by an easy-to-remove Release Liner

Applications:

Ideal use for commercial, industrial and private areas. Usable on smooth, wet substrates or substrates smeared with oil or grease, with high traffic and low forklift traffic. Warning of hazardous areas (black/yellow for permanent hazardous areas, red/white for temporary hazardous areas).

- Internal and external areas
- Entrances, passages, paths
- Steps, slopes, ramps
- Smooth metal surfaces
- Machines, vehicles
- Kitchens, canteens
- Terraces, shelters

Properties:

- Excellent slip-prevention rated to R13 according to BGR 181
- Strong, long life adhesive
- Durable, highly wear and tear resistant
- Resistant to most chemicals and mineral oils
- Forklift traffic resistant
- Usable on nearly all surfaces
- Can be walked on immediately after installation

Sizes:

- Available in rolls with standard widths of 19 mm to 914 mm width, 18,3 m length (stock articles)
- Available in rolls with individual width, 18,3 m length (non-stock articles)
- Pre-cut strips (stock articles)
- Custom die cuts (non-stock articles)

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Components

Grit Tape:
- Epoxy Top Coat
- 60-grit Aluminium Oxide
- Acrylic Co-Polymer Adhesive
- EN71 Low Temperature Resistant PVC Film
- Acrylic Pressure Sensitive Co-Polymer Adhesive
Release Liner:
- Silicone
- Paper

Property	Test Method	Result
Thickness	Micrometer	
- Total (Grit Tape + Release Liner)		1,00mm
- Grit Tape		0,80mm
- Adhesive		0,05mm
Overall Mass (Grit Tape + Release Liner)	Electronic Balance	850g/m ²
Tensile Strength (Grit Tape)	ASTM D882	
- Machine Direction		7500g/25mm
- Across Machine Direction		6500g/25mm
Elongation at Break	ASTM D882	
- Machine Direction		50%
- Across Machine Direction		25%
180 Degree Peel Adhesion on Stainless Steel	DIN EN 1939	38,5N/10mm
90 Degree Peel Adhesion on Stainless Steel	PSTC 14	
- 1 hour		1600g/25mm
- 24 hours		1800g/25mm
Rolling Ball Tack - Number 15 Ball	ASTM 3121-06	10cm
Adhesive Shear	PSTC 107	48 hours
Release Force	PSTC 8	30g/25mm
Conical Mandrel Bend Test	ASTM D522	5cm

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After Heat Aging at 70° C for 168 hours	As per methods above	
- Adhesion and Tensile properties shall not decline by more than 15%		
- Release property shall not increase by more than 25%		
- There shall be no color change or other change in appearance		
- Product shall bend over a 25mm Mandrel without cracking		
Mounted Shrinkage 10x10cm on Stainless Steel @ 70°C/168 hr		0,50mm
Slip Resistance	DIN 51130	R13
Slip Resistance	Wessex Pendulum Test	
- Dry		75
- Wet		75
REACH Compliance	REACH	Yes
RoHs Compliance	RoHs	Yes
Service Temperature Range		-40°C to +80°C
Service Duration		1 Million Crossings
Shelf Life (+15°C to +30°C, dry)		24 Months
Oil-, Chemical-, UV-Resistance		
- Engine oil, gear oil, hydraulic oil, fuel		good
- Liquid anti-freeze, liquid soap, water		good
- Sulphuric acid, alcohol		good
- UV		good
Recommended Accessories		
- 3M Scotch-Weld Tape Primer 83 for porous and structured substrates		
- 3M Scotch-Weld Contact Rubber Adhesive 2141 for wooden, concrete asphalt and rubber substrates		
- 3M Edge Sealing Compound for permanent moisture or on structured substrates		
- Rubber Roller for best activation of pressure sensible adhesion		

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Installation Instruction

Important Notice:

Our anti-slip tapes are do-it-yourself products. They can be installed quickly and easily and do not require any special skills. Just follow the Preparation, Installation and Maintenance Instructions to achieve best results. Failure to do so might result in below par performance.

1. Ambient Conditions

- a) Surface must be firm, smooth, dry, clean, non-flaking, non-porous and free from waxes and oils.
- b) Do not apply our anti slip tapes on surfaces that are permanently wet and on quarry tiles in commercial kitchens.
- c) Paint and lacquers must be thoroughly dry, free of residual solvents, surface waxes and silicones.
- d) **Minimum Temperature for proper Application must be $>+12^{\circ}\text{C}$ constantly** for a combined period of at least 48 hours (24 hours before application and 24 hours after application).
- e) Pay attention to expected weather conditions when installing outside.

2. Surface Preparation

- a) Remove dirt, grease, dust and chipped, cracked or peeled paint from surface. Strip waxed floors prior to washing. Use appropriate cleaner or solvent wipe to clean surface.
- b) Degreasing wash is recommended for porous concrete, painted concrete, vinyl tiles, marble and terrazzo ceramic. Strip off floor finish from vinyl, marble and terrazzo ceramic tiles before washing.
- c) Solvent wiping is recommended for bare metal, polyethylene and polypropylene.
- d) Solvent wiping or a degreasing wash is recommended for painted metal, painted plastics, painted wood, gel-coated fibre glass and epoxy floors.
- e) Following a degreasing wash you should rinse twice and dry the surface completely. Wait at least one hour before application of tapes, making sure that the surfaces are completely dry.
- f) Following solvent wiping give solvents 10 minutes to fully evaporate before application of tapes.
- g) If you do not use a primer (see no. 3.) warm the surface and tapes prior to actual application.

3. Prime Coat

Prime Coat is recommended for proper adhesion on the following surfaces:

- All treated and untreated Wood surfaces, if not already lacquer sealed.
- All Concrete and Asphalt surfaces.
- All rough or smooth, porous surfaces.

Priming Instructions:

- a) Properly clean the floor following "Surface Preparation" procedure.
- b) Use a paint brush and paint on a thin coat (0.5mm) of primer where the anti slip tapes are to be applied.

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- c) Allow the primed area to dry thoroughly for 10-20 minutes (depending on temperature) and make sure there is no evidence of stickiness or tackiness. (all solvent must have evaporated).
- d) Primers are not recommended for clear grade tapes due to loss of the transparency benefit.

4. Application

- a) If you are not applying custom made die cut sheets then cut pieces from a roll of tape. Maximum length of pieces should not exceed 1m.
- b) **Always round the corners.** Trim with a suitable cutting tool.
- c) Important notice before application:
On steps, apply tapes 5-10mm from stair edge to prevent edge curl and premature wear.
Do not bridge over grouting, cracks or breaks in all surfaces. Cut into smaller pieces.
Individual pieces should be spaced a minimum of 5-10mm and a maximum of 50mm apart.
Do not bend anti slip tapes.
- d) Peel protective liner back about 50 mm from one end and position piece on surface. Note: minimize touching (contaminating) adhesive with fingers.
- e) Continue to remove the protective release liner and press the tape firmly into place as the liner is removed.
- f) For small pieces, peel liner off piece at a time. Holding the 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.
- g) Finally press into firm contact with surface using a rubber hand roller (hard rubber, roll width should not exceed 70mm) by starting in middle and rolling out towards edges. Avoid air enclosures and press extra strong along edges.
- h) For applying Conformable treads, hammer the tape use a soft-headed rubber mallet to ensure that the product conforms to the surface. Pound edges extra hard.
- i) After application anti slip tapes can be walked on immediately. However, adhesion requires up to 72 hours in achieving full performance. Temperature should not decrease substantially within this time frame.

5. Edge Sealing

For extra protection from excessive moisture or liquids (not constant moisture) use a clear Edge Sealing Compound to protect the edges of anti slip tapes against penetration of liquids.
After edge sealing the anti slip tape must not be walked within 2-3 hours and it needs about 2-3 days to fully dry the edge sealing compound. Heavy duty traffic must not use the area during this period.

6. Cleaning and Maintenance

Periodically inspect product application to maintain product effectiveness and ensure serviceability. Regularly scrub the treads with a stiff bristle brush to ensure that they are kept free of dirt and other residue that might impair functionality. General Purpose, Coarse & Conformable treads should be deck-brushed regularly. Resilient materials should be mopped or deck-brushed regularly. Use appropriate degreaser/cleaner as a general maintenance cleaner, wash and rinse with water to keep material and surrounding surfaces free of soil and grease.

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Additional Installation Instructions

1. Overview of the surface preparation

	Cleaning with solvents ²⁾	or	Cleaning with floor cleaner	Primer/ Adhesion layer ²⁾
Metals, blank	•	or	•	no
Metals, coated	•	or	•	if necessary adhesion layer
Wood, untreated				Primer
Wood, coated	•	or	•	if necessary Primer
Concrete, Screed, Cement ¹⁾			•	Primer
Cement, sealed, coated			•	Primer
GRP	•	or	•	if necessary adhesion layer
Plastics, coated			•	no
Vinyl-Asbestos-Tiles			•	no
Terrazzo/Marble			•	no
Ceramic tiles ¹⁾	•	or	•	if necessary adhesion layer
Epoxy coated floors			•	no

¹⁾ For concrete, screed, cement and ceramic tiles-consider the followed instructions.

²⁾ Recommendation:

Solvents– acetone, commercial

Primer – 3M Scotch-Weld 2141

Adhesive layer – 3M Scotch-Weld 83 adhesive layer

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2. Chart for ceramic tiles and concrete

Type of floor lining	Surface	Installation of anti-slip tapes possible	Ambience	Inplements ³⁾
Glazed Stoneware tile	structured	yes	dry areas	Adhesive layer and poss. Edge Sealing
		no	humid areas	
		no	outdoors	
	even	yes	dry areas	
		yes	humid areas	Edge Sealing
		no	outdoors	
Unglazed Stoneware tile Concrete Screed,Cement	structured	no		
	even	yes	dry areas	Edge Sealing
		no	humid areas	
		no	outdoors	
Mosaic stoneware	Strictly not!			
Sure of step tiles glazed or unglazed	Strictly not!			

³⁾ Recommendation:

Adhesive layer – 3M Scotch-Weld 83

Edge Sealing– 3M Safety Walk Edge Sealing