

Technical Data Sheet

3M™ Durable Floor Marking Tape 971

Product Description

3M™ Durable Floor Marking Tape 971 & 971L are designed to withstand scuffing from general warehouse equipment and traffic typically found in shipping/receiving and storage areas. Its combination of rubber adhesive and thick vinyl backing provides a strong bond to the floor yet promotes one piece, clean removals. The tape is ideal for 5S lean manufacturing initiatives.



Product Features

- Thick vinyl backing resists abrasion caused by general warehouse equipment and traffic while maintaining their vivid colors.
- The unique adhesive provides a strong bond to most floors and excellent holding power yet provides clean one-piece removal from many surfaces.
- Finished tape as applied can withstand standard floor cleaning procedures.
- Self-wound tape construction allows ability to use with 3M™ Lane Marking Applicator M1 (with modifications).
- Easy release liner version for ability to die cut shapes.
- Ideal for 5S lean manufacturing initiatives.

Technical Information Note











The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Property	Values	Additional Information
Backing	Vinyl	
Adhesive Type	Rubber	
Color	Yellow, White, Red, Blue, Orange and Green	
Liner Thickness	0.05 mm	
Total Tape Thickness (mil)	19 mil	View 
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.49 mm	View 
Test Method: ASTM D3652		

Liner Thickness 2 mil

Typical Performance Characteristics

Property	Values	Additional Information
Tensile Strength	68 N/cm	View 
Test Method: ASTM D3759		
180° Peel Adhesion	26.8 N/cm	View 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	38 oz/in	View 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
Tensile Strength (lb/in)	68 lb/in	View 
Test Method: ASTM D3759		
Elongation at Break (%)	250 %	View 
Test Method: ASTM D3759		
Long Term Temp C	49 °C	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	4 °C	View 
Test Condition: Long Term (day, weeks)		
Long Term Temp F	120 °F	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	40 °F	View 
Test Condition: Long Term (day, weeks)		
Liner Release	14 g/cm width	View 
Test Method: ASTM D3330		
Liner Release	1.3 oz/in	

View 

Test Method: ASTM D3330

Available Sizes

Property	Values	Additional Information
Standard Roll Length	32.9 m	
Standard Roll Length	36 yd	

Storage and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% relative humidity in the original packaging material. To obtain best performance, use 3M™ Durable Floor Marking Tape within 18 months from date of manufacture.

Bottom Matter

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550 • 877-369-2923 (fax)
www.3M.com

Trademarks

3M is a trademark of 3M Company.

Handling/Application Information

Application Techniques

1. After completing the surface preparation process 3M™ Durable Floor Marking Tape can then be applied to the surface of the intended application. Optimal adhesion is obtained when both the tape and intended surface are within a temperature range of 60° to 80°F (16° to 27°C).
2. When applying the tape in long straight lines a chalk line may be used as a guide line (figure 1).
3. To apply the tape, remove a portion of the liner from one end of the tape and firmly tack it down to the floor. Gently pull liner away from tape at an angle as it is being applied by hand, following the chalk line (figure 2).
4. Where joints are required, such as at corners and splices, a miter joint or butt joint is recommended (see figure 3 and figure 4).
5. Once the tape has been applied, a weighted roller, hand roller, or 3M™ Hand Applicator PA1-B Blue is recommended to help fully adhere the adhesive of the tape to the application surface.

Surface Preparation

1. Surfaces to be marked with 3M™ Durable Floor Marking Tape should be as clean, dry and smooth as possible. Floors may require cleaning to remove all traces of oils, grease, moisture, and any accumulation of waxes, coatings, finishes as well as dust, dirt and other grime.
2. Cleaning solutions should be chosen that do not leave residues or waxes on the surface to which the tape is to be applied. Always allow sufficient time for thorough drying of the cleaning solution prior to application of the tape.

3. Freshly sealed surfaces, including, but not limited to, concrete, varnished or waxed floors should be allowed to dry thoroughly prior to application of the tape.

Note: Be sure to follow manufacturer's precautions and directions for use when using cleaning solutions or sealers. Wear appropriate personal protective equipment when sandblasting, scraping, sanding or grinding.

Removal Techniques

1. To help minimize damage to the surface and to encourage clean removal it is recommended that the 3M™ Durable Floor Marking Tape be lifted gently at a corner then pulled up at a perpendicular angle.

2. If there is any adhesive residue, it may be softened by use of 3M™ Citrus Based Cleaner or many common solvents such as heptane, toluene or methyl ethyl ketone.*

*Be sure to follow the manufacturer's precautions and directions for use when using solvents. Prior to using any solvent to help remove adhesive residues, it is strongly recommended that the solvent be tested to determine compatibility in an inconspicuous location with the underlying surface finish.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b00051534/=rud
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=971

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

Information

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit www.3M.com.