

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

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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

Family Group

Link Tags:

- 971
- 971

Products	Backing	Adhesive Type	Tensile Strength	Long Term Temp F
971	Vinyl	Rubber	68 N/cm	120 °F

ISO Statement

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

Information

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