

mica tapes

Mica Mat® 77877

- ▶ Proven performance with epoxy and polyester VPI resin systems
- ▶ Improved flexibility for easier coil manufacture
- ▶ Suitable for applications to 180°C
- ▶ Low binder content for good penetration
- ▶ Three-ply construction offers strong mechanical properties
- ▶ Useful for both machine and hand taping operations

General description

Mica Mat® 77877 is a three-ply mica paper tape laminate with non-woven polyester mat and woven glass cloth bonded with an advanced epoxy resin to either side of 3 mil high performance calcined mica paper. This combination of materials produces a tape with excellent mechanical strength for hand and machine taping as well as excellent resin penetration properties. Improved flexibility allows for ease of application and good conformability to complicated coil geometries.

Application

This mica tape can be used in a variety of AC and DC motor applications where a high degree of conformability is required. It should be used with a compatible VPI resin, either epoxy or polyester. Please contact a Von Roll Isola representative for suggestions and exceptions. The properties of the resin will determine the final thermal, mechanical and electrical properties for the system.

Processing

Mica Mat® 77877 may be applied through either hand or machine taping methods. The particular resin selected for processing will determine the proper cure cycle.

Health and safety

Material Safety Data Sheets defining the known hazards and describing safety precautions appropriate for this product are available upon request from Von Roll USA, Inc., 200 Von Roll Drive, Schenectady, New York 12306 (518) 344-7100. Similar information sheets for solvents and other chemicals used with this product may be obtained from the appropriate supplier and used accordingly.

Shelf life

Mica Mat® 77877 tape should exhibit no shelf life limitations when stored up to one year under normal room temperature conditions of 77°F(25°C) and 50% relative humidity.

Availability

Mica Mat® 77877 tape and wrapper is available in rolls from 5/8" to 36" (15.8 to 914mm) in width from Von Roll USA, Inc. or from authorized Von Roll distributors. For the name of your distributor or for more information on this product, contact our Customer Service department, (518) 344-7100.

Specifications

The properties shown above are typical values only, and should not be used as a basis for preparing specifications. Contact our Customer Service department, (518) 344-7100 for assistance in preparation of specifications for your specific system application.

The product properties set forth in this data sheet are based on the results of testing of typical material produced by the affiliated companies of Von Roll Holding Ltd. (underneath referred as Von Roll). Some variation in product properties is typical. Comments or suggestions relating to any subject other than product properties are offered only to call the end-user's or other person's attention to considerations which may be relevant in the independent determination of the use and/or manner of use of product. Von Roll does not claim or warrant that the use of its product will have the results described in this data sheet or that the information provided is complete, accurate or useful. The user should test the product to determine its properties and its suitability for the intended use. Von Roll expressly disclaims any liability for any damage, harm, injury, cost or expense to any person resulting directly or indirectly from that person's reliance on any information contained in this data sheet. Nothing contained in this data sheet constitutes representation or warranty as to any matter whatsoever. Von Roll makes no warranties whatsoever in this data sheet, expressed or implied, including any implied warranty or fitness for a particular use or purpose. Von Roll shall in no event be liable for incidental, exemplary, punitive or consequential damages.

		Value	Test norm
Dimensions			
Total thickness	mils (mm)	6.7 (0.170)	
Weight			
Glass fabric	lbs/syd (g/m ²)	0.050 (27)	
Total weight	lbs/syd (g/m ²)	0.357 (193)	
Resin content	%	8	
Mica Mat weight	lbs/syd (g/m ²)	0.217 (118)	
Polyester mat weight	lbs/syd (g/m ²)	0.050 (27)	
Dimensions			
Glass fabric	mils (mm)	2.0 (0.050)	
Mica Mat	mils (mm)	3.0 (0.076)	
Polyester mat	mils (mm)	1.4 (0.035)	
Mechanical properties			
Stiffness	mg	≤900	Gurley
Tensile strength	lb/in (N/cm)	70 (122)	ASTM D-828
Elongation at break	%	<2	
Electrical properties			
Dielectric strength, Short Time	V/mil(kV/mm)	>450 (17.7)	ASTM D-149