



Heavy Duty Aluminum Foil Tape 438

Technical Data

May 2017

Product Description 3M™ Heavy Duty Aluminum Foil Tape 438 has a transparent acrylic adhesive to use when a heavier weight foil is required.

Product Construction	Backing	Adhesive	Color	Standard Roll Length
	Aluminum foil	Acrylic	Shiny silver	60 yds. (55 m)

Typical Physical Properties

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

		ASTM Test Method
Adhesion to Steel:	43 oz./in. width (47 N/100 mm)	D-3330
Tensile Strength:	59 lbs./in. width (1033 N/100 mm)	D-3759
Elongation at Break:	10%	D-3759
Backing Thickness:	5.0 mils (0.13 mm)	D-3652
Tape Thickness:	7.2 mils (0.18 mm)	D-3652
Temperature Use Range:	-65° to 300°F (-54° to 149°C)	
Water Vapor Transmission Rate:	0.05 gms H ₂ O/100 sq. in./24 hrs. (0.77 g/m ² /24 hrs.)	D-3833
Weight:	0.0217 lbs./yd./in. width (0.0109 kg/m/24 mm)	

Features

- Flame resistant. Meets U.L. 723, Class “L” low flammability rating (File R 7311).
- Meets requirements of F.A.R. 25.853(a).
- Foil backing provides an excellent reflective surface for both heat and light.
- Aluminum foil backing and acrylic adhesive system combine to offer long aging both indoors and out.
- The high coefficient of expansion offered by the aluminum allows expansion and contraction with changes in temperatures, along with thermal conductivity.
- Performs in a range from -65° to over 300°F (-54° to 149°C). Higher temperatures for shorter periods of time.

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- Application Ideas**
- Barrier, protector and thermal conductor in appliance (electronics) industry.
 - Use when customer specification calls for a 5-mil (0.13 mm) foil as a barrier for vinyl coated wires in many applications in appliance industry.
 - Patch tears in skins of aircraft and truck trailers.

Storage Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

Shelf Life To obtain best performance, use this product within 24 months from date of manufacture.

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ISO 9001

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

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