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# 3M™ Heavy Duty Aluminum Foil Tape 438

## Product Description

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

## Product Features

- Flame resistant. Meets U.L. 723, Class “L” low flammability rating (File R 7311).
- Meets requirements of FAR 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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## 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		Method
Color	Shiny Silver		
Total Tape Thickness	0.18 mm	7.2 mil	ASTM D3652
Backing Thickness	0.13 mm	5 mil	ASTM D3652
Backing	Aluminum Foil		
Adhesive	Acrylic		
Approximate Weight	0.0109 g/m/24 mm	0.0217 lb/yd/in	
Water Vapor Transmission Rate	0.77 g/m <sup>2</sup> /24 hr	0.05 g/100 in <sup>2</sup> /24 hr	ASTM D3833

## Typical Performance Characteristics

Property	Values		Method	Substrate
Peel Adhesion	4.7 N/cm	43 oz/in	ASTM D3330	Stainless Steel
Tensile Strength	103 N/cm	59 lb/in	ASTM D3759	
Elongation at Break	10 %		ASTM D3759	
Temperature Use Range	-54 to 149 °C	-65 to 300 °F		

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## Available Sizes

Property	Values	
Standard Roll Length	55 m	60 yd

## Handling/Application Information

### 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 and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton. To obtain best performance, use this product within 24 months from date of manufacture.

### Industry Specifications

UL 723, Class “L” low flammability rating (File R 7311)  
FAR 25.853(a)

### References

#### Safety Data Sheet (SDS)

[https://www.3m.com/3M/en\\_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en\\_US&co=ptn&q=438](https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=438)

### ISO Statement

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

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## Information

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