

# 3M™ Metal Foil Tapes

Expanding  
choices  
for applications  
SUCCESS

Performance and  
price as you need it

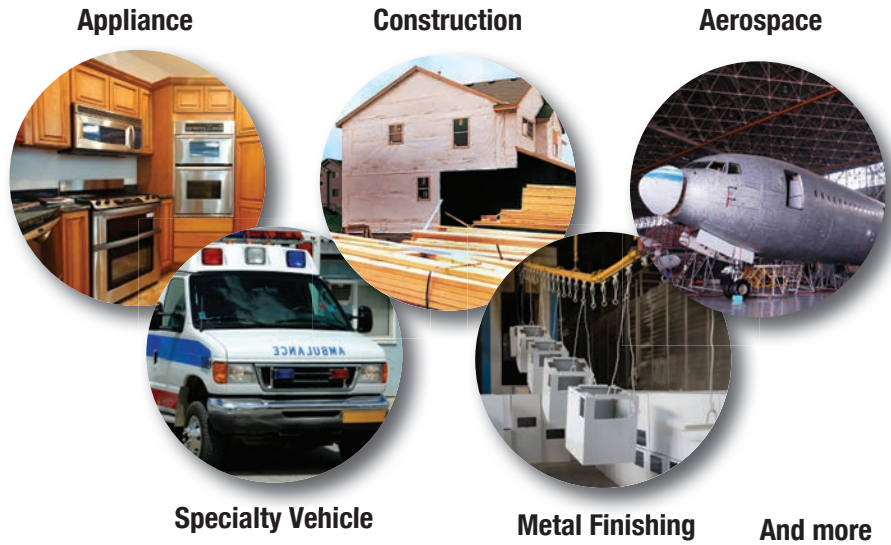


# 3M™ Metal Foil Tapes reflecting, wrapping, masking, sealing, and more from air ducts to washing machines

With 3M metal foil tapes, select from combinations of conformable backings and adhesives to meet application demands in many markets:

- Aerospace
- Appliance
- Construction
- Electronics
- Machinery
- Manufacturing
- Metal Finishing
- MRO
- Plastics
- Specialty Vehicle
- Transportation
- and more

Applications range from heat shielding to paint strip masking, light reflection to wire harness wrapping, thermal conductivity to duct sealing.



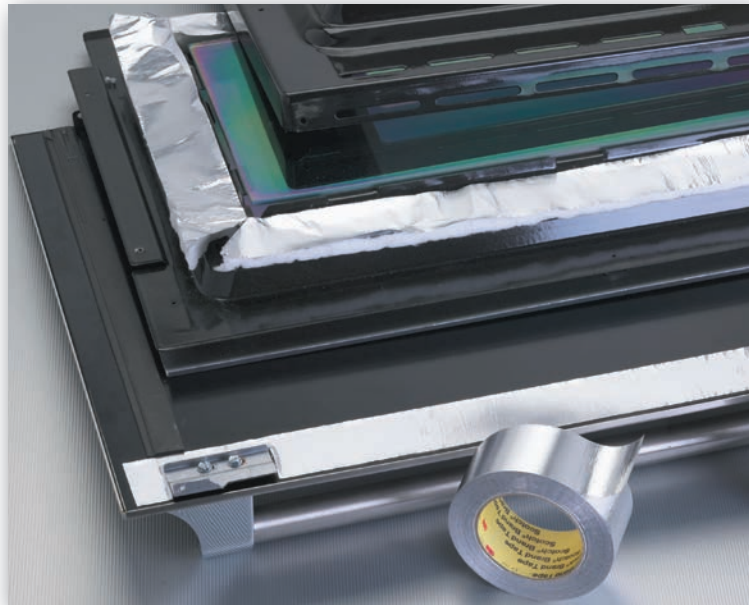
## Standard Aluminum Foil Tapes

Select acrylic, rubber, or silicone adhesives and conformable backings ranging from 1.2 to 12 mils.

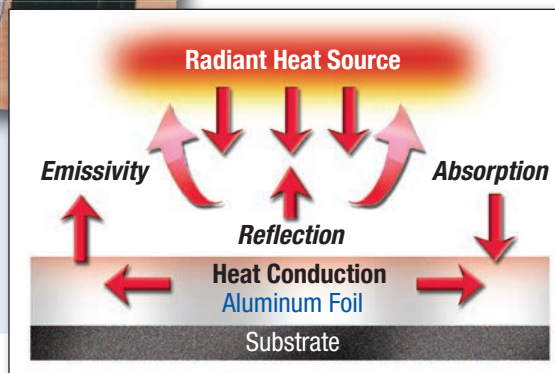
- Resist flame, moisture, weather, dirt, UV degradation, and most chemicals
- Thermally conductive for heating and cooling efficiency
- Reflect heat and light



2 With high heat reflectivity and thermal conductivity, 3M™ Aluminum Foil Tapes protect heat-sensitive components near lights in a garage door opener housing.



3M™ Aluminum Foil Tape bonds on contact as heat shielding inside an oven door. Helps keep the exterior cool to the touch behind the handle and around the window perimeter.



## Standard Aluminum Foil Tapes

Product Number	Backing Thickness (mils)	Total Thickness (mils)	Liner/SW (self-wound)	Adhesive	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. (N/100 mm)	Temperature Range °F (C°)	Features
ASTM Test Method:		D-3652	D-3652		D-3330	D-3759		
<b>Premium Performance Aluminum Foil Tapes</b>								
425	2.8	4.6	SW	Acrylic	47 (51)	30 (525)	-65 to 300°F (-54 to 149°C)	Most versatile aluminum tape. L-T-80B, SAE AMS T-23397, UL 723 Classified, UL 746C Recognized, F.A.R. 25.853.
427	2.8	4.6	Liner		50 (55)	30 (525)		Linered version of 425.
431	1.9	3.1	SW		41 (45)	19 (338)		Conformable aluminum tape. UL 723 Classified.
433	2.0	3.6	SW	Silicone	40 (44)	20 (350)	-65 to 600°F (-54 to 316°C)	Silicone adhesive for high temperature resistance; MIL-T-47014, F.A.R. 25.853, UL 746C Recognized; smooth easy unwind; clean, straight edges with minimal wrinkling.
433L	2.0	3.5	Liner		38 (42)	20 (350)		Linered version of 433.
438	5.0	7.2	SW	Acrylic	43 (47)	59 (1033)	-65 to 300°F (-54 to 149°C)	Thickest non-reinforced aluminum tape for heat resistance; smooth easy unwind; clean, straight edges with minimal wrinkling. UL 723 Classified.
439	1.9	3.1	Liner		41 (45)	18 (315)		Linered version of 431.
3338	5.0	7.0	Liner		45 (49)	50 (876)	-30 to 300°F (-34 to 149°C)	66 lb. moisture stable liner.
33801	2.0	4.0	Liner		40 (44)	20 (350)	-30 to 425°F (-34 to 218°C)	High temperature acrylic adhesive at 425°F. UL 723 Classified.
33806	3.0	5.0	Liner	Acrylic	40 (44)	30 (525)		High temperature acrylic adhesive at 425°F
<b>General Purpose Aluminum Foil Tapes</b>								
3311	2.0	3.6	Liner	Rubber	90 (98)	17 (298)	-10 to 180°F (-23 to 82°C)	UL 723 listed.
3369	1.2	2.4	Liner	Acrylic	35 (38)	10 (180)	-30 to 260°F (-34 to 127°C)	Thinnest aluminum foil tape. UL 723 Classified.
3381	1.4	2.7	Liner		40 (44)		-30 to 250°F (-34 to 121°C)	40 lb. natural kraft paper liner. UL 723 Classified.
1449	1.4	2.6	SW		37 (40)	19 (333)	-25 to 250°F (-32 to 121°C)	1.4 mil backing; thin aluminum foil tape for conformability.
33803	1.8	3.6	Liner	Rubber	90 (99)	15 (263)	0 to 175°F (-18 to 79°C)	High tack rubber adhesive. 40 lb. liner. UL 723 Classified.
97065	1.8	3.25	Liner	Acrylic	40 (44)		-30 to 250°F (-34 to 121°C)	60 lb. moisture stable liner. Good for die-cut applications.
1450	1.9	3.1	SW	Rubber	114 (125)	19 (333)	-40 to 200°F (-40 to 93°C)	High tack adhesive for good, instant adhesion to many surfaces.
3380	2.0	3.25	Liner	Acrylic	40 (44)	10 (175)	-30 to 260°F (-34 to 127°C)	40 lb. natural kraft paper liner. Good for narrow slit rolls. UL 723 Classified.
4380	2.0	3.25	SW		40 (44)	10 (175)	-30 to 300°F (-34 to 149°C)	General purpose aluminum foil tape.
34383	2.8	4.5	SW		40 (44)	30 (525)	-30 to 260°F (-34 to 127°C)	General purpose aluminum foil tape.
3363	3.0	5	Liner					40 lb. natural kraft paper liner. Good for narrow slit rolls. UL 723 Classified.
3367	3.0	4.4	Liner					66 lb. moisture stable liner. Good for die-cut applications.

This data has not been verified. Additional testing is required.

**NOTE:** This technical information and data should be considered representative or typical only and should not be used for specification purposes.

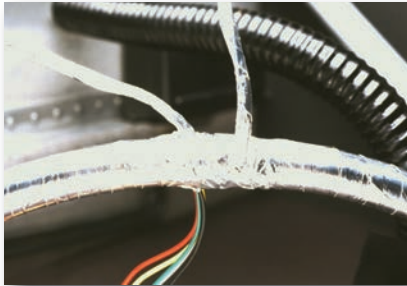


Conformable 3M™ Aluminum Foil Tape securely holds copper cooling tubes to refrigerator panels. Thermal conductivity helps maximize cooling efficiency.

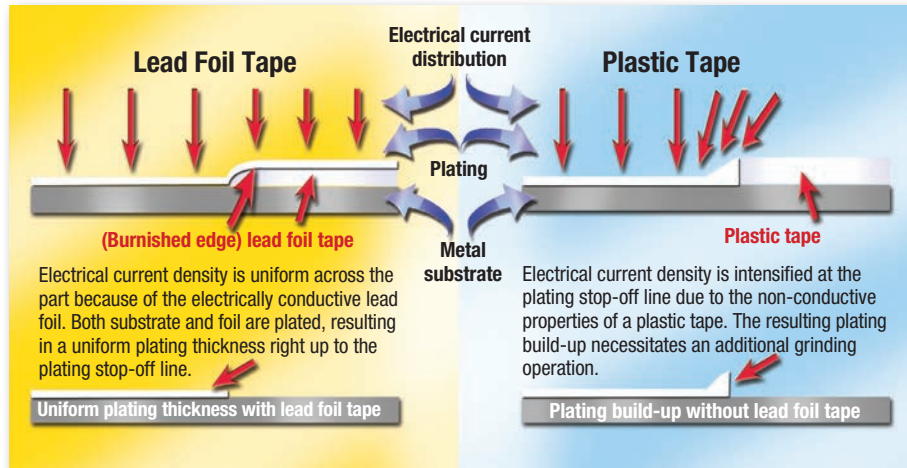
# Specialty Foil Tapes

Select a 3M specialty metal tape for applications such as:

- Lead foil tape for acid-resistant masking during electroplating and anodizing; radiopacity for x-ray markers
- Copper foil tape with or without conductive adhesive for EMI/RFI shielding
- Glass cloth-reinforced aluminum foil tape for bundling wire harnesses
- Stainless steel tape for sealing and protecting of stainless steel surfaces



Tear-resistant 3M™ Reinforced Aluminum Foil Tape 363 bundles wire harnesses and helps protect wires, cables, and other flexible parts from heat.



Product Number	Backing Thickness (mils)	Total Thickness (mils)	Liner/SW (self-wound)	Adhesive	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. (N/100 mm)	Temperature Range °F (°C)	Features
ASTM Test Method:		D-3652	D-3652		D-3330	D-3759		
<b>Lead Foil Tapes</b>								
420	4.7	6.8	Liner	Rubber	45 (49)	20 (350)	-60 to 225°F (-51 to 107°C)	Linered plating tape.
421	4.0	6.3	SW		31 (34)	15 (263)		Self-wound plating tape.
4201	5.0	6.5	Liner	Acrylic	40 (44)	20 (350)	-30 to 225°F (-34 to 121°C)	Permanent acrylic adhesive.
34201	5.0	6.25		Rubber	50 (55)	20 (350)	0 to 180°F (-18 to 82°C)	Removable rubber adhesive.
<b>Copper Foil Tapes</b>								
3313	1.4	3.0	Liner	Conductive Acrylic	30 (33)	33 (578)	0 to 250°F (-18 to 121°C)	EMI/RFI shielding. UL 510 Recognized.
3324	1.25	2.9		Acrylic	40 (44)	20 (350)	-30 to 225°F (-34 to 121°C)	EMI/RFI shielding.
3325	1.5	3.0		40 (44)	28 (491)	0 to 225°F (-18 to 107°C)	EMI/RFI shielding. UL 510 Recognized.	
33315	1.5	3.3		35 (39)	28 (491)	-30 to 300°F (-34 to 149°C)	"Tinned," corrosion resistant.	
33316	1.5	3.0		Conductive Acrylic	30 (33)	33 (578)	0 to 250°F (-18 to 121°C)	"Tinned," corrosion resistant. UL 510 Recognized.
<b>Stainless Steel Foil Tape</b>								
3361	2.0	3.8	Liner	Acrylic	40 (44)	100 (1751)	-30 to 250°F (-34 to 121°C)	Corrosion resistant.
<b>Specialty Foil Tapes</b>								
363	3.4	7.3	SW	Silicone	52 (57)	135 (2364)	-65 to 600°F (-54 to 316°C)	Aluminum foil/glass cloth. Highest temperature metal foil tape.
363L	3.4	7.3	Liner		52 (57)			Linered version of 363.
1430	5.0	5.5	SW	Acrylic	22 (24)	19 (333)	-65 to 300°F (-54 to 106°C)	Aluminum foil/non-woven laminate Flexible wrapping tape.
3302	2.0	3.6	Liner	Conductive Acrylic	30 (33)	20 (350)	0 to 225°F (-18 to 107°C)	Aluminum foil tape. EMI/RFI shielding. UL 510 Recognized.

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# HVAC and Construction Tapes

Select from a variety of 3M™ Metal Foil Tapes for any residential or commercial site application including rigid and flexible HVAC duct work.



To seal fiberglass duct board and flexible duct systems, 3M™ Foil Tape 3340 meets the performance requirements for UL 181A-P and UL 181B-FX.

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With aggressive adhesive and dead soft aluminum, 3M™ Foil Tape 3380 seals and secures seams and joints for long-term durability. UL 723 Listed for duct sealing and general repairs.

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3M™ FSK Facing Tape 3320 is engineered specifically as a vapor retardant tape to seal mineral wool foil-faced insulation, bare sheet metal ducts, and blanket style fiberglass duct insulation.

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Product Number	Backing Thickness (mils)	Total Thickness (mils)	Liner/SW (self-wound)	Adhesive	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. (N/100 mm)	Temperature Range °F (°C)	Features
ASTM Test Method:		D-3652	D-3652		D-3330	D-3759		
<b>HVAC Construction</b>								
3320	6.0	6.7	Liner	Acrylic	81 (89)	40 (712)	-20 to 175°F (-29 to 79°C)	Aluminum foil/scrim/laminate. UL 723 Classified.
3340	2.0	4.0			30 (33)	20 (350)	-30 to 250°F (-34 to 121°C)	Aluminum foil tape. for use with rigid and flexible ducts. UL 181 A-P and 181 B-FX Listed.
3350	1.6	3.1	SW		33 (36)	36 (631)	-30 to 230°F (-34 to 110°C)	Polypropylene tape for use with flexible ducts. UL 181 B-FX Listed.
3380	2.0	3.25	Liner		40 (43)	10 (175)	-30 to 260°F (-34 to 127°C)	General purpose aluminum foil tape. Go to product for this market. UL 723 Classified.
3381	1.4	3.0			40 (44)	10 (180)	-40 to 250°F (-40 to 121°C)	Value grade aluminum foil tape. UL 723 Classified.
3382	2.5	4.2			50 (55)	30 (525)	-40 to 300°F (-40 to 149°C)	Foil/PET laminate, tear resistance. Roof and gutter repair tape.

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# 3M™ Sound Damping Foils

## when quiet is the sound of quality

### Reduce noise and vibration in many applications

With pressure sensitive viscoelastic acrylic polymer on dead soft aluminum foil, 3M™ Sound Damping Foils quiet noise and reduce vibration in many areas for Aerospace, Automotive, Appliances, Construction, and MRO (Maintenance and Repair).

- Reduce structure-borne noise in metal and composite panels and support structures
- Optimized acrylic converts vibrational energy to negligible heat that readily dissipates
- Reduce vibrational fatigue to decrease wear and tear on parts and lower the risk of part loosening and displacement
- Effective damping with as little as 10% surface coverage
- Pressure sensitive for easy self-fixturing application
- Long aging performance
- Good performance over a wide temperature range
- Lined construction provides ability to die-cut product



Applied with a 3M™ PA-1 Wiper to the inside of a car door, 3M™ Damping Foil 2552 effectively damps noise and vibration with as little as 10% surface coverage. Optimized acrylic on a dead soft aluminum constraining layer converts vibrational energy to negligible heat that readily dissipates.



3M™ Damping Foil 2552 on the inside of a washing machine reduces structure-borne noise and reduces vibrational fatigue to decrease the risk of part loosening and displacement.



3M™ Damping Foil 435 between the ribs and stringers of an aircraft fuselage helps reduce vibrational fatigue and noise inside the passenger cabin.

Product/Color	Tape Structure (Backing/Adhesive)	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. (N/100 mm)	Temperature Range °F (°C)	Features
ASTM Test Method:		D-3652	D-3652	D-3330	D-3759		
<b>Damping Foils</b>							
434/Silver	Aluminum/VEP <sup>1</sup>	5.5 (0.14)	7.5 (0.19)	65 (71)	53 (928)	-76 to 68°F (-60 to 20°C) <sup>2</sup>	Low temperature vibration damping. <sup>3</sup>
435/Silver		8.0 (0.20)	13.5 (0.34)		84 (1470)		
436/Silver		12.0 (0.31)	17.5 (0.45)		126 (2205)		
2542/Silver		5.0 (0.13)	10 (0.25)	65 (71)	40 (700)	-25 to 175°F (-32 to 80°C) <sup>2</sup>	Thinner, general purpose vibration damping.
2552/Silver		10.0 (0.25)	15 (0.38)	65 (71)	80 (1400)		General purpose vibration damping. <sup>3</sup>
4014/Silver	Aluminum-Urethane/Acrylic	3.0 (0.076)	250 (6.35)	N/A	N/A	-94 to 86°F (-70 to 30°C) <sup>2</sup>	Foil/foam sheet laminate. <sup>3</sup>

<sup>1</sup> Viscoelastic polymer <sup>2</sup> Optimum damping temperature <sup>3</sup> The specimen passed the requirements of FAR 25.853 (a)(1)(ii) per AMDT.25-83 tested in composite on aluminum backer.

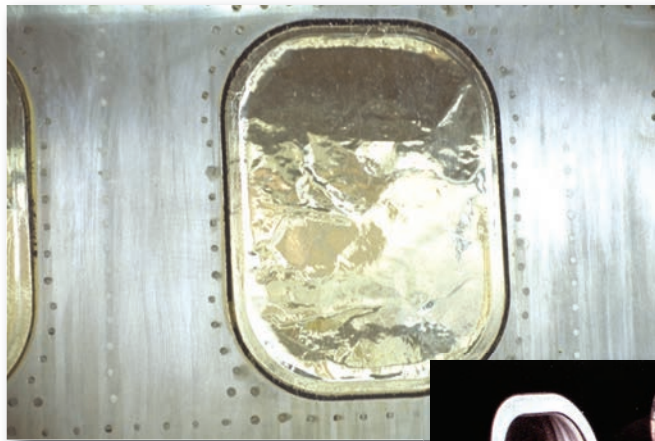
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# Converting 3M Foil Tape Technologies to the form and fit you need for applications success

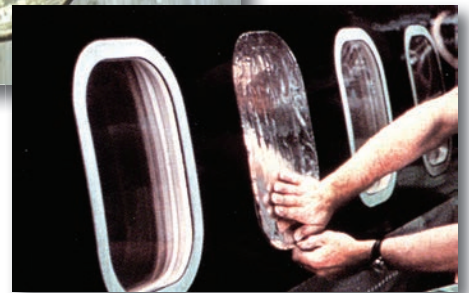
3M Converters match 3M™ Foil Tapes to customer requirements with the exact form, fit, and functionality. Converter expertise includes part design, quick prototyping, slitting, and die-cutting. Applications range from small, intricate copper foil EMI/RFI shields for sensitive electronics to precisely fitted masks for commercial aircraft windows during paint stripping.

Many 3M™ Metal Foil Tapes are lined for easy handling and productive processing. For example, General Purpose Aluminum Foil Tape 3367 features a 66# moisture stable liner for die-cutting. The 40# kraft liner on General Purpose Aluminum Foil Tape 3380 holds shape and position when slit into narrow rolls.



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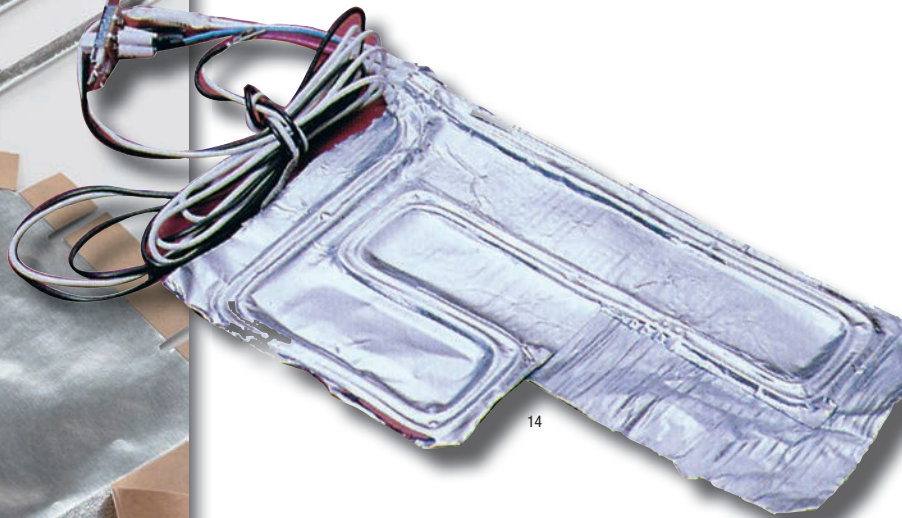
With conformability and chemical resistance, die-cut masks of 3M™ Aluminum Foil Tape protect aircraft windows during harsh chemical paint stripping.



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