



Acrylic Foam Tape 4257

Technical Data Sheet

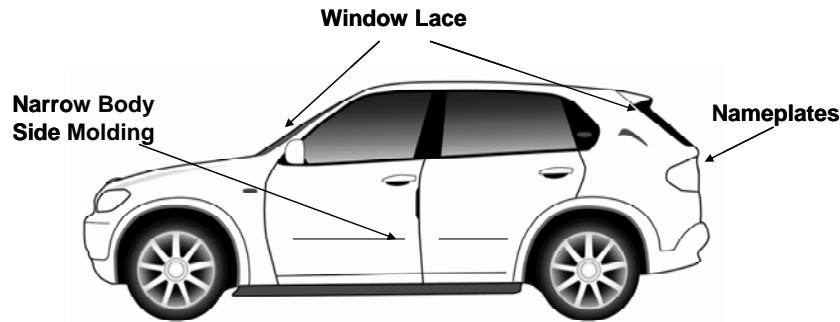
April 2009

Supersedes Technical Data Sheet dated November 2008

General Description

3M™ Acrylic Foam Tape (AFT) 4257 is a thin, gray, acrylic foam tape used in a variety of automotive applications. 3M AFT 4257 is used where bonding surfaces are well matched or where the parts to be bonded are thin and flexible. 3M AFT 4257 has AR-5 adhesive on the liner side of the product for bonding to automotive paint surfaces, and DS-4 adhesive on the non-liner side of the product for bonding to the exterior trim part. 3M AFT 4257 is equivalent to 3M™ Acrylic Foam Tape 4215 used by Japanese OEMs but offers an adhesive system designed for bonding to North American paint systems.

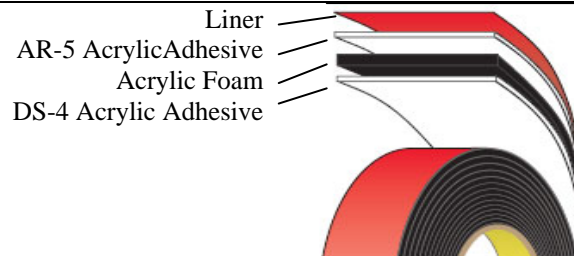
Applications



Shelf Life

One year from date of receipt by customer when stored at 22°C (72°F) and 50% relative humidity.

Product Construction



Physical Properties

Values shown are typical values not to be used for specification purposes.

Thickness	0.38 mm (±0.05 mm) (0.015 in ±0.002 in)
Density	736 kg/m ³ (±80 kg/m ³) (46 lb/ft ³ ±5 lb/ft ³)

Roll Width and Length (Planetary)

3M™ Acrylic Foam Tapes are available in the following standard widths. Millimeter widths rounded to the nearest whole numbers (7, 8, 9 mm . . .) and 1/8 inch increments starting with 1/4 inch (0.25, 0.375, 0.50, 0.625 inch . . .).

Minimum widths:
4 mm Levelwound
5 mm Planetary

Roll Width	Roll Width Tolerance	Roll Length (maximum)
Planetary Rolls		
< 9 mm (< 0.354 in)	+/- 0.38 mm (+/-0.015 in.)	132 meters (144 yards)
10 - 12 mm (0.394 - 0.472 in)	+/- 0.38 mm (+/-0.015 in.)	160 meters (175 yards)
13 - 18 mm (0.512 - 0.709 in)	+/- 0.38 mm (+/-0.015 in.)	330 meters (360 yards)
> 18 mm (> 0.709 in.)	+/- 0.76 mm (+/- 0.030 in.)	330 meters (360 yards)
Levelwound Rolls		
4 - 16 mm (0.157 - 0.630 in.)	+/- 0.38 mm (+/-0.015 in.)	900 meters (984 yards)

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Performance Properties

Performance tests are run using standard test procedures. These values presented are typical values not to be used for specification purposes.

1. Breakaway and Continuing Peel

72 hrs at 22°C (72°F)	Breakaway Peel	67 N/12.7 mm	(15 lbs/.5 in)
	Continuing Peel	13 N/12.7 mm	(3 lbs/.5 in)
72 hrs at 70°C (158°F)	Breakaway Peel	67 N/12.7 mm	(15 lbs/.5 in)
	Continuing Peel	13 N/12.7 mm	(3 lbs/.5 in)
72 hrs at 38°C /100% RH (100°F/100%RH)	Breakaway Peel	67 N/12.7 mm	(15 lbs/.5 in)
	Continuing Peel	13 N/12.7 mm	(3 lbs/.5 in)



Breakaway and continuing peel tests are run with 12.7 mm (0.5 in) wide tape on PVC test bars. Tests were run on base coat/clear coat paint at a separation rate of 305 mm/min (12 in/min).

2. Static Shear

Exceeds 100 hours at 70°C (158°F). Static shear tests are run with 12.7 mm (0.5 in) wide by 50.8 mm (2 in) long tape on PVC test bars, 6.8 kg (15 lbs) roll-down against stainless steel. Static weight is 250 gm (0.55 lbs)



Contact Information

The information provided in this technical document is intended as a guide for this product. For more information, and help selecting a 3M product for an application, please contact a 3M technical service representative.

Regulatory

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