

# 3M<sup>™</sup> Acrylic Foam Tape 4257

**Technical Data Sheet** 



Converter, and Fabricator www.jbc-tech.com



3M<sup>™</sup> Acrylic Foam Tape 4257 is a 0.38 mm (0.015 in) thick, gray, doublecoated acrylic foam tape used in a variety of automotive applications where bonding surfaces are well matched or where the parts to be bonded are thin and flexible.

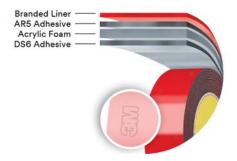
Product features of 3M AFT 4257 include:

- Bonds to a variety of automotive substrates.
- Provides high final adhesion and peel strength.

3M AFT 4257 has AR5 adhesive on the liner side of the product for bonding to automotive paint surfaces, and DS6 adhesive on the non-liner side of the product for bonding to the exterior trim part. 3M AFT 4257 is equivalent to 3M<sup>™</sup> Acrylic Foam Tape 4215 used by Japanese OEMs but offers an adhesive system designed for bonding to North American paint systems.

Potential applications of 3M AFT 4257 are the attachment of window lace, nameplates, and narrow body side molding.

## **Product Construction**



## Liner Options

See the technical update "<u>3M™ Acrylic Foam and Acrylic Plus Tapes: Product</u> <u>Constructions</u>" for liner and tabbing information.

### **Physical Properties**

	4257		
Thickness Range	0.38 mm (±0.05 mm) (0.015 in ±0.002 in)		
Density Range	736 kg/m3 (±80 kg/m3) (46 lb/ft3 ±5 lb/ft3)		

## Roll Width and Length

3M<sup>™</sup> Acrylic Foam Tapes are available in the following standard widths. Millimeter widths -- rounded to the nearest whole number-- and 1/8-inch increments starting with 1/4 inch.

Minimum widths: 4 mm Levelwound, 5 mm Planetary (Standard versions)

Roll Width	Roll Width Tolerance	Roll Length (max)				
Planetary Rolls						
< 7 mm (< 0.276 in)	+/- 0.38 mm (+/-0.015 in)	66 M (72 yds)				
7 - 9 mm (0.276 - 0.375 in)	+/- 0.38 mm (+/-0.015 in)	99 M (108 yds)				
10 - 18 mm (0.394 – 0.709 in)	+/- 0.38 mm (+/-0.015 in)	160 M (175 yds)				
> 18 mm (> 0.709 in)	+/- 0.76 mm (+/- 0.030 in)	160 M (175 yds)				
Levelwound Rolls						
4 – 16 mm (0.157 – 0.630 in)	+/- 0.38 mm (+/-0.015 in)	900 M (984 yds)				

## **Performance Properties**

Typical performance of 3M<sup>™</sup> Acrylic Foam Tape 4257 is shown below. Peel and shear values depend on plastic substrate characteristics and/or paint composition. These values are for reference only.

#### Breakaway and Continuous Peel

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

Breakaway and continuous 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).

#### 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).



## Shelf Life

One year from date of receipt by customer when stored at 4°C - 38°C (40°F - 100°F) and 0 - 95% relative humidity. Optimum storage conditions are 22°C (72°F) and 50% relative humidity.

## **Regulatory Information**

Please refer to the product label and Safety Data Sheet (SDS) for health and safety information before using. Observe proper handling precautions as outlined in the SDS, which is available on request or at <u>www.3M.com/msds</u>.

The product is published as a material entry and is available for access on <u>www.mdsystem.com</u>. For product IMDS I.D. number, email requests to <u>3M-IMDSrequest@mmm.com</u>.

## **Contact Information**

The information provided in this technical document is intended as a guide for this product. For more information or help in selecting a 3M product for an application, please contact your 3M technical service representative or call 1-800-328-1684.

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