



# Acrylic Foam Tape 5390

Technical Data Sheet

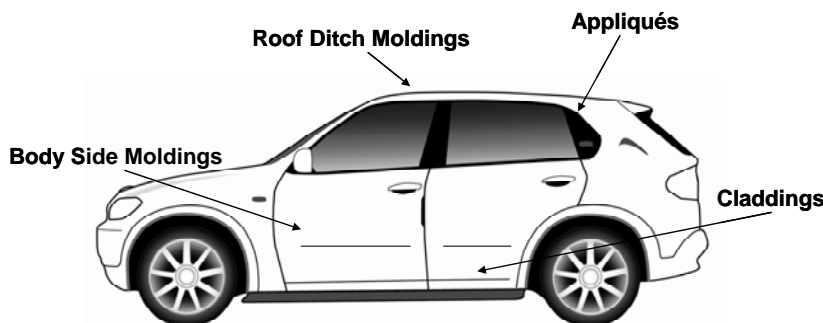
December 2008

Supersedes Technical Data Sheet dated November 2008

## General Description

3M™ Acrylic Foam Tape (AFT) 5390 is a thick, gray, double-coated acrylic foam tape used in a variety of automotive applications. 3M AFT 5390 is used for applications where bonding surface contours are poorly matched and a thick foam is required. The acrylic foam core of 3M AFT 5390 has unique viscoelastic properties that allow it to elongate and relax when put under load, minimizing stress on the adhesive bond line. 3M AFT 5390 has AR-7 adhesive on both sides of the foam for bonding to a variety of automotive surfaces.

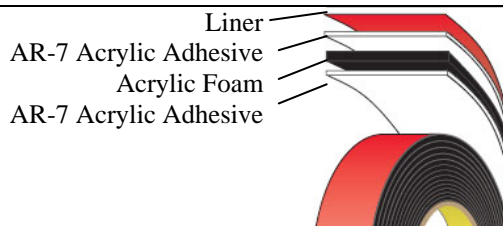
## Applications



## 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	2.3 mm ( $\pm 0.23$ mm) (0.090 in $\pm 0.009$ in)
Density	688 kg/m <sup>3</sup> ( $\pm 80$ kg/m <sup>3</sup> ) (43 lb/ft <sup>3</sup> $\pm 5$ lb/ft <sup>3</sup> )

## 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  
6 mm Planetary

Roll Width	Roll Width Tolerance	Roll Length (maximum)
Planetary Rolls		
6 - 9 mm (0.236 - 0.375 in)	+/- 0.38 mm (+/-0.015 in.)	33 meters (36 yards)
10 - 18 mm (0.394 - 0.709 in)	+/- 0.38 mm (+/-0.015 in.)	66 meters (72 yards)
> 18 mm (> 0.709 in.)	+/- 0.76 mm (+/- 0.030 in.)	66 meters (72 yards)
Levelwound Rolls		
4 - 16 mm (0.157 - 0.630 in.)	+/- 0.38 mm (+/-0.015 in.)	500 meters (547 yards)

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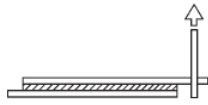
## 3M™ Acrylic Foam Tape 5390

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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	124 N/12.7 mm	(28 lbs/.5 in)
	Continuing Peel	53 N/12.7 mm	(12 lbs/.5 in)
72 hrs at 70°C (158°F)	Breakaway Peel	156 N/12.7 mm	(35 lbs/.5 in)
	Continuing Peel	571 N/12.7 mm	(16 lbs/.5 in)
72 hrs at 38°C /100% RH (100°F/100%RH)	Breakaway Peel	111 N/12.7 mm	(25 lbs/.5 in)
	Continuing Peel	49 N/12.7 mm	(11 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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