



# Flame Retardant Double Coated Tape 9377

Technical Data

March, 2008

## Product Description

3M™ Flame Retardant Double Coated Tape 9377 is a very high-tack adhesive system used for carpet installation on interior floors and stairs of an aircraft. This product has a specially formulated black acrylic based adhesive on one side that attaches to the carpet and a white rubber based adhesive that provides a permanent bond to the aircraft floorboard.

## Construction

<b>Adhesive Type:</b> Black side: White side:	Tackified Acrylic, Film liner side Synthetic Rubber
<b>Adhesive Carrier:</b>	Polypropylene
<b>Adhesive Thickness:</b> (mils)	11
(microns)	279
<b>Areal Density:</b> (gm/Sq. M.)	305
<b>Thickness Tolerance:</b>	± 15%
<b>Adhesive Color:</b>	White for floorboard side Black for carpet side

## Typical Physical Properties

**Note:** The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

### Temperature Performance

#### Operating Ranges:

Short Term: (minutes/hours) 250°F (121°C)

Long Term: (weeks/months) 180°F (82°C)

**Relative Solvent Resistance:** Very Good

**U.V. Resistance:** Very Good

## Available Sizes

<b>Core Size:</b>	3.0 in. (76.2 mm)
<b>Available Widths:</b>	2 in. (Custom sizes also available)
<b>Available Lengths:</b>	25 yds.
<b>Normal Slitting Tolerance:</b>	± 1/32 in. (0.8 mm)
<b>Precision Slitting Capability:</b>	± 0.004 in. (0.10 mm)

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## Typical Peel Adhesions

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### Peel Adhesion (ASTM D3330 - Modified for 90°)

Surface:	Oz./in. (N/100 mm)	Faceside	Backside
Stainless Steel:	Initial	27 (30)	86 (93)
	72 Hr. Room Temp.	27 (30)	114 (127)
	Ultimate (72 Hr., 158°F [70°F])	45 (50)	102 (114)

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## Typical Static Shear Performance

**Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.**

### Shear Adhesion (ASTM D3654, 1" x 1" Overlap)      Minutes to Fail

#### Surface

Stainless Steel:	1000 gm, Room Temp.	66
	500 gm, 158°F (70°C)	10

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## Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm **application pressure** helps develop better adhesive contact and improve bond strength. 15 psi momentary pressure is typical.

Ideal tape **application temperature** range is 70°F to 100°F (21°C to 37°C). Initial tape application to surface at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once applied, low temperature holding is generally satisfactory. Surfaces should be **clean and dry** prior to bonding. Recommend a final surface cleaning with a mixture of 50% isopropyl alcohol and water.\*

**\*Note:** When using solvents, extinguish all ignition sources, including pilot lights, and follow the manufacturer's precautions and directions for use.

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## Application Ideas

- Formulated for applications requiring flame retardency and high bond strength to a wide variety of substrates.
- These attributes and choice of this product thickness, makes the product ideally suited to applications in aerospace, marine, electronic, automotive and building construction applications on both smooth and textured substrates.

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**Storage** Store under normal conditions of 70°F (21°C) and 50% relative humidity in the original carton.

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**Shelf Life** To obtain best performance, use this product within 24 months from date of manufacture.

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**Certification/Recognition** 3M™ Flame Retardant Double Coated Tape 9377 is designed for use in applications that must comply with the 12 second vertical burn requirements of Federal Aviation Regulations FAR 25.853. It also meets or exceeds the following requirements:

- FVMSS 302
- RoHs and WEEE compliant
- Airbus Specification AIMS10-05-014
- Boeing Specification BMS5-133D
- Bombardier Specification BAMS 535-002

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