



Double Coated Removable Foam Tape

4658F

Technical Data

September, 1998

(Supersedes February, 1998)

Product Description Tape 4658F is a 1/32 in. (0.8 mm) Double Coated Removable Foam Tape.

Construction

Product	Tape 4658F	
Adhesive Type:	Acrylic 100 (A-20)*	
Foam Type:	Acrylic	
Thickness:	Nominal	1/32 in., 0.031 in. (.08 mm)
	Tolerance	± 10%
Color:	Clear	
Release Liner:	0.003 in. (.08 mm) Clear Film	
Approximate Density:	lb./ft ³	60
Foam Only	(kg/cm ³)	(960)

*Acrylic 100 (A-20) is a firm acrylic pressure sensitive adhesive system. It features high ultimate bond strength, very good high temperature and solvent resistance and very high shear holding power.

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.

Peel Adhesion:

To Stainless Steel Room Temperature 90° Angle Peel 12 in./minute Jaw Speed (308 mm/min.) 72 hour Dwell ASTM D-3330	15 lb./in. width (263 N/100 mm)
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Static Shear:

1/2 in. ² (3.23 cm ²) overlap	72°F (22°C)	1000 g.
Will hold listed gram weight	120°F (49°C)	750 g.
for 10,000 minutes. ASTM D-3654	150°F (66°C)	500 g.

Temperature Resistance:

Short Term (Minutes, Hours)	212°F (100°C)
Long Term (Days, Weeks)	175°F (80°C)

U.V. Resistance: Excellent resistance to direct exposure to sunlight or other sources of ultraviolet (U.V.) light.

Solvent Resistance: No apparent degradation when exposed to splash testing of most hydrocarbon solvents.

Shelf Life: 24 months from date of manufacture when stored in original cartons at 70°F (21°C) and 50% relative humidity.

Available Sizes

Standard Stock Sizes:
1/2 in. x 27 yds. (12 mm x 25 m)
3/4 in. x 27 yds. (19 mm x 25 m)
1 in. x 27 yds. (25 mm x 25 m)

Slitting Tolerance: ± 1/32 in., ± 0.031 in. (± 0.8 mm)

Maximum Width: 46¹/₂ in. (1.18 m)

Maximum Roll Length: 175 yds. (160 m)

Contact your BSD sales representative for maximum roll length for widths less than 1 in.

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.

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Application Techniques (continued)

- To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Typical surface cleaning solvents are isopropyl alcohol (rubbing alcohol) and water or heptane. **Note:** Be sure to follow manufacturer's precautions and directions for use when using solvents.
- Ideal tape application temperature is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive may become too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

Design Considerations

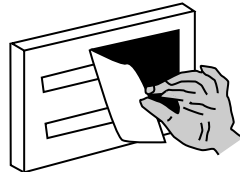
- As a general rule, four square inches of tape should be used for each pound of weight to be supported in static load. More or less tape may be required depending upon the particular application. User evaluation is, therefore, required to determine optimal tape usage.
- Care should be used when bonding to surfaces with very low internal strength such as painted plaster board, fabric or cloth, wallpaper, blown vinyl, etc. since delamination of that surface may occur.
- Care should also be taken with wood veneers and highly polished wood as very glossy surfaces may leave an image when the tape is removed.

Removal Techniques

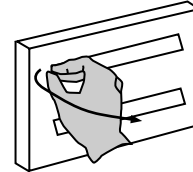
For rigid surfaces, lever or pry apart the substrates to break the bond.



For flexible surfaces, peel back slowly to ensure clean removal.



To remove tape from substrate, pull back corner and peel off quickly.



Application Ideas

- Signs
- Smoke Alarms
- Point of Purchase and other Displays
- Holding Electronic Accessories
- Dispensers
- Nameplates
- Exhibitions
- Air Fresheners
- Picture Frame Tabs

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550. Address correspondence to: 3M Bonding Systems Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-809-750-3000. In Mexico, phone: 5-728-2180.

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ISO 9002

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