# **3M Double Coated Vinyl Foam Tapes** 4432 • 4416 • 4408

Technical Data					December, 2000	
				(Supe	ersedes September, 1998	
Product Description	<b>Tape 4432</b>	1/32 in	1/32 in. (0.8 mm) Double-Coated Vinyl Foam Tape			
	<b>Tape 4416</b>	1/16 in. (1.6 mm) Double-Coated Vinyl Foam Tape				
	<b>Tape 4408</b>	1/8 in. (3.2 mm) Double-Coated Vinyl Foam Tape				
Construction	Products		Tape 4432	Tape 4416	Tape 4408	
	Adhesive Type	ə:*		430		
	Adhesive Carr	rrier: Closed Cell Polyvinyl C		d Cell Polyvinyl Chloride	Foam	
	Thickness: N	Iominal	1/32 in. 0.031 in. (0.8 mm)	1/16 in. 0.0625 in. (1.6 mm)	1/8 in. 0.125 in. (3.2 mm)	
	Т	olerance	0.025-0.040 in. (0.64-102 mm)	0.045-0.080 in. (1.14-2.03 mm)	0.110-0.150 in. (2.29-3.81 mm)	
	Tape Color:		Black or White	Black or White	Black Only	
	Release Liner	:		0.003 in. (0.08 mm) 62# Densified Kraft Green Plaid Paper		

Approximate Density: Foam only			
lb./ft. <sup>3</sup>	35	20	20
(kg/m <sup>3</sup> )	(560)	(320)	(320)

\*Adhesive 430 is a firm acrylic pressure sensitive adhesive which features both high initial adhesion and good high temperature holding power.

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

### Characteristics

**Typical Physical** 

Properties and Performance

Products	Tape 4432	Tape 4416	Tape 4408
Normal Tensile: (T-Block) 1 in. <sup>2</sup> (6.45 cm <sup>2</sup> ) Jaw Speed 2"/min. (50 mm/min.)	Adhe	60 psi (414 kPa) sive strength exceeds foam sti	rength.
Static Shear: (As measured by static shear weight held for 100 hr.) 1/2 sq. in overlap 72°F 120°F	1000 g 250 g	500 g 125 g	500 g 125 g
Temperature Resistance: Short Term (Minutes, Hours)	200°F (93°C)	200°F (93°C)	200°F (93°C)
Long Term (Days, Weeks)	150°F (66°C) 150°F (66°C) 150°F		150°F (66°C)
Solvent Resistance:	No apparent degradation v solvents.	vhen exposed to splash testing	g of most hydrocarbon
UV Resistance:	No apparent degradation w	hen exposed for seven days in	U.V. chamber.
Cold Flex at -20°F (-30°C):	Slight cracking occurs whe	en flexed around a 1/4 in. (6.4 r	mm) mandrel.
Thermal Conductivity:	0.0	36 BTU Ft./Ft. <sup>2</sup> Hr. °F (0.062W/i	m•K)
Dielectric Strength:	300 volts/mil (300 volts/0.0254 mm)	150 volts/mil (150 volts/0.0254 mm)	50 volts/mil (50 volts/0.0254 mm)
Shelf Life:	18 months from date of ma and 50% relative humidity.	nufacture when stored in origi	nal cartons at 70°F (21°C)

#### **Available Sizes**

Roll Length (Subject to minimum order requirements): Standard	72 yds. (65.8 m)	36 yds. (32.9 m)	36 yds. (32.9 m)
Maximum	175 yds. (160 m)	100 yds. (91.4 m)	50 yds. (45.7 m)
Roll Width: (Subject to minimum order requirements: Minimum	1/4 in., 0.250 in., (6.4 mm)	1/4 in., 0.250 in., (6.4 mm)	1/4 in., 0.250 in., (6.4 mm)
Maximum	46 in. (1168 mm)	46 in. (1168 mm)	46 in. (1168 mm)
Slitting Tolerance:		± 1/32 in. ± 0.031 in. ± (0.8 mm)	

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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.		
	• To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Typical surface cleaning solvents are isopropyl alcohol and water (rubbing alcohol) or heptane. <b>Note:</b> Be sure to follow manufacturer's precautions and directions for use when using solvents.		
	• Ideal tape application temperature range 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 becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.		
Application Ideas	• These products are designed for general purpose mounting and joining, and may offer one piece removal in some applications. Surfaces and conditions for removal should be tested by the user to determine fitness for the user's particular purpose. The high degree of conformability of these tapes make them ideal for joining many rough irregular surfaces, and the closed-cell foam can make good water and air seals in certain applications.		

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Recognition/ Certification	<b>MSDS:</b> 3M has not prepared MSDSs for these products which are not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R. 1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, the products should not present a health and safety hazard. However, use or processing of the products in a manner not in accordance with the directions for use may affect their performance and present potential health and safety hazards.
	<b>TSCA:</b> These products are defined as articles under the Toxic Substances Control Act and therefore, are exempt from inventory listing requirements.
For Additional Information	To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550 or visit www.3M.com/bonding. 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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### 3M:

<u>4408-3/8"x36yd</u> <u>4408-1/2"x36yd</u> <u>4408-3/4"x36yd</u> <u>4408-2"x36yd</u> <u>4416B-3/8"x36yd</u> <u>4416B-3/4"x36yd</u> <u>4416B-3/4"x36yd</u> <u>4416B-3/4"x36yd</u> <u>4416B-3/4"x36yd</u> <u>4416B-3/4"x36yd</u> <u>4416W-1/2"x36yd</u> <u>4416W-3/4"x36yd</u> <u>4416W-1"x36yd</u> <u>4416W-1"x36yd</u> <u>4416W-1"x36yd</u> <u>4416W-1"x36yd</u> <u>4416W-1"x36yd</u> <u>4416W-1"x36yd</u> <u>4432B-1/2"x72yd</u> <u>4432B-3/4"x72yd</u> <u>4432W-1/2"x72yd</u> <u>4432W-3/4"x72yd</u> <u>4432-1"X72YDS-WHITE</u> <u>4432-1X72YDS-BLACK</u>