

# 3M

## Cushion-Mount™ Plus Tapes

1815M, 1820M

1720M

1015M, 1020M, 1015, 1020, 1020R, 1040, 1060

1915M, 1920M, 1920S

1115, 1120, 1120K

Technical Data

May, 2006

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### Product Description

3M™ Cushion-Mount™ Plus Tapes are designed for mounting flexographic print plates to cylinders or sleeves. This family of foam mounting tapes provides excellent print quality for process, combination, and solid printing.

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### Features

- Offers a complete range of foam densities providing excellent print quality from process to combination to solid printing.
- Consistent caliper control allows the printer to use multiple foam densities on a print job to optimize print quality.
- The adhesive on the lined side (plate side) of the tape is designed for mounting of photopolymer plates, excellent holding power on-press and clean plate removal when demounting.
- The adhesive on the non-lined side (cylinder side) of the tape is designed for mounting to flexographic printing cylinders or sleeves, providing easy application at mounting and clean removability when demounting.

# 3M™ Cushion-Mount™ Plus Tapes

1815M • 1820M • 1720M • 1015M • 1020M • 1015 • 1020 • 1020R  
1040 • 1060 • 1915M • 1920M • 1920S • 1115 • 1120 • 1120K

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

Product	3M™ Cushion-Mount™ Plus Firm Combination Printing Tapes		3M™ Cushion-Mount™ Plus Medium Firm Combination Printing Tape	3M™ Cushion-Mount™ Plus Standard Combination Printing Tapes		
	1815M	1820M	1720M	1015M	1020M	
Adhesive	Differential Acrylate		Differential Acrylate	Differential Acrylate		
Polyethylene Carrier	Firm Blue Foam		Medium Firm Teal Foam	Standard White Foam		
Type of Printing	Combination of solid and line with minimal tone reproduction		Combination of solid and line with tone reproduction and fine reverses	Combination of solid and line with tone reproduction and fine reverses		
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)	0.020 (0.508)	0.015 (0.381)	0.020 (0.508)
Thickness						
Tape	in (mm)	0.017 (0.432)	0.022 (0.559)	0.022 (0.559)	0.017 (0.432)	0.022 (0.559)
Paper Liner	in (mm)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)
Lot to Lot Tolerance	in (mm)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)
Typical Application Area Caliper Variation	in (mm)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)
Roll Length	yd (m)	25 (22.9)	25 (22.9)	25 (22.9)	25 (22.9)	25 (22.9)
Maximum Width	in (mm)	54 (1371.6)	54 (1371.6)	54 (1371.6)	54 (1371.6)	54 (1371.6)
Minimum Width	in (mm)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)
Slitting Tolerance	in (mm)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)
Density	lb/ft³ (kg/m³)	32 (512)	32 (512)	30 (480)	28 (450)	28 (450)
Compression Deflection						
10% Compression	lb/in² (kPa)	35 (241)	35 (241)	30 (207)	15 (103)	15 (103)
25% Compression	lb/in² (kPa)	60 (414)	60 (414)	50 (345)	30 (207)	30 (207)
Durometer ASTM-D2240 Shore A		72	72	68	65	65
Peel Adhesion (Modified ASTM-D3330)						
Non-linered side - Stainless Steel	oz/in (N/100mm)	55 (60)	55 (60)	55 (60)	55 (60)	55 (60)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	65 (71)	65 (71)	65 (71)	65 (71)	65 (71)
Non-linered side - Polyester	oz/in (N/100mm)	60 (66)	60 (66)	60 (66)	60 (66)	60 (66)
Non-linered side - Urethane - A	oz/in (N/100mm)	70 (77)	70 (77)	70 (77)	70 (77)	70 (77)
Non-linered side - Urethane - B	oz/in (N/100mm)	60 (66)	60 (66)	60 (66)	55 (60)	55 (60)
Peel Adhesion (Modified ASTM-D3330)						
Linered side - Photopolymer	oz/in (N/100mm)	65 (71)	65 (71)	65 (71)	65 (71)	65 (71)
Linered side - Rubber	oz/in (N/100mm)	NA	NA	NA	NA	NA
Solvent Resistance						
Water		Excellent	Excellent	Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent	Excellent	Excellent
Alcohols		Good	Good	Good	Good	Good
Acetates		Fair	Fair	Fair	Fair	Fair
Heat Resistance	°F (°C)	120 (49)	120 (49)	120 (49)	120 (49)	120 (49)

# 3M™ Cushion-Mount™ Plus Tapes

1815M • 1820M • 1720M • 1015M • 1020M • 1015 • 1020 • 1020R  
 1040 • 1060 • 1915M • 1920M • 1920S • 1115 • 1120 • 1120K

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

Product	3M™ Cushion-Mount™ Plus Standard Combination Printing Tapes		3M™ Cushion-Mount™ Plus Standard Combination Printing Tape	3M™ Cushion-Mount™ Plus Standard Combination Printing Tapes		
	1015	1020	1020R	1040	1060	
Adhesive	Differential Acrylate		Differential Acrylate	Differential Acrylate		
Polyethylene Carrier	Standard White Foam		Standard White Foam	Standard White Foam		
Type of Printing	Combination of solids and tone reproduction where solids and process are equally important		Combination of solids and tone reproduction where solids and process are equally important	Combination of solids and tone reproduction where solids and process are equally important		
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)	0.020 (0.508)	0.040 (1.016)	0.060 (1.524)
Thickness						
Tape	in (mm)	0.017 (0.432)	0.022 (0.559)	0.022 (0.559)	0.042 (1.017)	0.062 (1.525)
Paper Liner	in (mm)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)
Lot to Lot Tolerance	in (mm)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)
Typical Application Area Caliper Variation	in (mm)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)
Roll Length	yd (m)	25 (22.9)	25 (22.9)	25 (22.9)	50 ft. (15.4)	50 ft. (15.4)
Maximum Width	in (mm)	54 (1371.6)	54 (1371.6)	54 (1371.6)	54 (1371.6)	54 (1371.6)
Minimum Width	in (mm)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)
Slitting Tolerance	in (mm)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)
Density	lb/ft³ (kg/m³)	28 (450)	28 (450)	28 (450)	28 (450)	28 (450)
Compression Deflection						
10% Compression	lb/in² (kPa)	15 (103)	15 (103)	15 (103)	15 (103)	15 (103)
25% Compression	lb/in² (kPa)	30 (207)	30 (207)	30 (207)	25 (172)	25 (172)
Durometer ASTM-D2240 Shore A		65	65	65	40	38
Peel Adhesion (Modified ASTM-D3330)						
Non-linered side - Stainless Steel	oz/in (N/100mm)	55 (60)	55 (60)	55 (60)	55 (60)	55 (60)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	65 (71)	65 (71)	65 (71)	60 (66)	60 (66)
Non-linered side - Polyester	oz/in (N/100mm)	60 (66)	60 (66)	60 (66)	50 (55)	50 (55)
Non-linered side - Urethane - A	oz/in (N/100mm)	70 (77)	70 (77)	70 (77)	65 (71)	60 (66)
Non-linered side - Urethane - B	oz/in (N/100mm)	55 (60)	55 (60)	55 (60)	55 (60)	55 (60)
Peel Adhesion (Modified ASTM-D3330)						
Linered side - Photopolymer	oz/in (N/100mm)	80 (87)	80 (87)	68 (74)	55 (60)	50 (55)
Linered side - Rubber	oz/in (N/100mm)	NA	NA	30 (33)	NA	NA
Solvent Resistance						
Water		Excellent	Excellent	Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent	Excellent	Excellent
Alcohols		Good	Good	Good	Good	Good
Acetates		Fair	Fair	Fair	Fair	Fair
Heat Resistance	°F (°C)	120 (49)	120 (49)	120 (49)	120 (49)	120 (49)

# 3M™ Cushion-Mount™ Plus Tapes

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

Product	3M™ Cushion-Mount™ Plus Medium Soft Process Printing Tapes			3M™ Cushion-Mount™ Plus Soft Process Printing Tapes			
	1915M	1920M	1920S	1115	1120	1120K	
Adhesive	Differential Acrylate			Differential Acrylate			
Polyethylene Carrier	Medium Soft Pink Foam			Soft Tan Foam			
Type of Printing	Combination of solids and tone reproduction where process printing is important			Tone reproduction where process printing is important			
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)	0.020 (0.508)	0.015 (0.381)	0.020 (0.508)	0.020 (0.508)
Thickness							
Tape	in (mm)	0.017 (0.432)	0.022 (0.559)	0.022 (0.559)	0.017 (0.432)	0.022 (0.559)	0.022 (0.559)
Paper Liner	in (mm)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)
Lot to Lot Tolerance	in (mm)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)
Typical Application Area Caliper Variation	in (mm)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)
Roll Length	yd (m)	25 (22.9)	25 (22.9)	25 (22.9)	25 (22.9)	25 (22.9)	25 (22.9)
Maximum Width	in (mm)	54 (1371.6)	54 (1371.6)	54 (1371.6)	54 (1371.6)	54 (1371.6)	54 (1371.6)
Minimum Width	in (mm)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)
Slitting Tolerance	in (mm)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)
Density	lb/ft³ (kg/m³)	26 (416)	26 (416)	26 (416)	24 (384)	24 (384)	24 (384)
Compression Deflection							
10% Compression	lb/in² (kPa)	10 (70)	10 (70)	10 (70)	5 (35)	5 (35)	5 (35)
25% Compression	lb/in² (kPa)	20 (138)	20 (138)	20 (138)	10 (70)	10 (70)	10 (70)
Durometer ASTM-D2240 Shore A		60	60	60	55	55	55
Peel Adhesion (Modified ASTM-D3330)							
Non-linered side - Stainless Steel	oz/in (N/100mm)	30 (33)	30 (33)	55 (60)	30 (33)	30 (33)	NA
Non-linered side - Composite Sleeve	oz/in (N/100mm)	28 (31)	28 (31)	65 (71)	28 (31)	28 (31)	65 (71)
Non-linered side - Polyester	oz/in (N/100mm)	35 (39)	35 (39)	50 (55)	35 (39)	35 (39)	NA
Non-linered side - Urethane - A	oz/in (N/100mm)	35 (39)	35 (39)	55 (60)	35 (39)	35 (39)	65 (71)
Non-linered side - Urethane - B	oz/in (N/100mm)	30 (33)	30 (33)	50 (55)	30 (33)	30 (33)	65 (71)
Peel Adhesion (Modified ASTM-D3330)							
Linered side - Photopolymer	oz/in (N/100mm)	65 (71)	65 (71)	65 (71)	65 (71)	65 (71)	65 (71)
Linered side - Rubber	oz/in (N/100mm)	NA	NA	NA	NA	NA	NA
Solvent Resistance							
Water		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohols		Good	Good	Good	Good	Good	Good
Acetates		Fair	Fair	Fair	Fair	Fair	Fair
Heat Resistance	°F (°C)	120 (49)	120 (49)	120 (49)	120 (49)	120 (49)	120 (49)

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**Storage** Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% relative humidity in the original carton.

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

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**Product Use** All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

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**ISO 9001:2000**

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



**Industrial Business  
Industrial Adhesives and Tapes Division**

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