



Cushion-Mount™ Plus Tapes with Easy Mount Adhesive

E1815, E1820

E1715, E1720

E1015, E1020, E1040, E1060

E1915, E1920, E1920S

E1115, E1120

Technical Data

November, 2005

Product Description

3M™ Cushion-Mount™ Plus Tapes with Easy Mount Adhesive 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.

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.
- Use the 3M proprietary Easy Mount liner, creating micro-channels in both adhesive surfaces. The crosshatched pattern creates a continuous and permanent network of micro-channels in the adhesive, allowing air to escape from between the tape and cylinder/sleeve and between the tape and plate.
- 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 with Easy Mount Adhesive

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E1060 • E1915 • E1920 • E1920S • E1115 • E1120

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.

Characteristics

Product	3M™ Cushion-Mount™ Plus Firm Combination Printing Tapes		3M™ Cushion-Mount™ Plus Medium Firm Combination Printing Tapes		
	E1815	E1820	E1715	E1720	
Adhesive	Differential Acrylate		Differential Acrylate		
Polyethylene Carrier	Firm Blue Foam		Medium Firm Teal Foam		
Type of Printing	Combination of solid and line with minimal tone reproduction		Combination of solid and line with tone reproduction and fine reverses		
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)	0.015 (0.381)	0.020 (0.508)
Thickness					
Tape	in (mm)	0.017 (0.432)	0.022 (0.559)	0.017 (0.432)	0.022 (0.559)
Film Liner	in (mm)	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)
Typical Application Area Caliper Variation	in (mm)	±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)
Maximum Width	in (mm)	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)
Slitting Tolerance	in (mm)	±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)	30 (480)
Compression Deflection					
10% Compression	lb/in² (kPa)	35 (241)	35 (241)	30 (207)	30 (207)
25% Compression	lb/in² (kPa)	60 (414)	60 (414)	50 (345)	50 (345)
Durometer ASTM-D2240 Shore A		72	72	68	68
Peel Adhesion (Modified ASTM-D3330)					
Non-linered side - Stainless Steel	oz/in (N/100mm)	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)
Non-linered side - Polyester	oz/in (N/100mm)	68 (75)	68 (75)	68 (75)	68 (75)
Non-linered side - Urethane - A	oz/in (N/100mm)	70 (77)	70 (77)	70 (77)	70 (77)
Non-linered side - Urethane - B	oz/in (N/100mm)	60 (66)	60 (66)	55 (60)	55 (60)
Peel Adhesion (Modified ASTM-D3330)					
Linered side - Photopolymer	oz/in (N/100mm)	25 (28)	25 (28)	25 (28)	25 (28)
Solvent Resistance					
Water		Excellent	Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent	Excellent
Alcohols		Good	Good	Good	Good
Acetates		Fair	Fair	Fair	Fair
Heat Resistance	°F (°C)	120 (49)	120 (49)	120 (49)	120 (49)

3M™ Cushion-Mount™ Plus Tapes with Easy Mount Adhesive

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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 Standard Combination Printing Tapes		3M™ Cushion-Mount™ Plus Standard Combination Printing Tapes		
	E1015	E1020	E1040	E1060	
Adhesive	Differential Acrylate		Differential Acrylate		
Polyethylene Carrier	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		
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)	0.040 (1.016)	0.060 (1.524)
Thickness					
Tape	in (mm)	0.017 (0.432)	0.022 (0.559)	0.042 (1.017)	0.062 (1.525)
Film Liner	in (mm)	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)
Typical Application Area Caliper Variation	in (mm)	±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)	50 ft. (15.4)	50 ft. (15.4)
Maximum Width	in (mm)	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)
Slitting Tolerance	in (mm)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)	±1/32 (±0.794)
Density	lb/ft ³ (kg/m ³)	28 (450)	28 (450)	28 (450)	28 (450)
Compression Deflection					
10% Compression	lb/in ² (kPa)	15 (104)	15 (104)	15 (104)	15 (104)
25% Compression	lb/in ² (kPa)	30 (207)	30 (207)	25 (172)	25 (172)
Durometer ASTM-D2240 Shore A		60	60	40	38
Peel Adhesion (Modified ASTM-D3330)					
Non-linered side - Stainless Steel	oz/in (N/100mm)	55 (60)	55 (60)	55 (60)	65 (71)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	65 (71)	65 (71)	58 (63)	65 (71)
Non-linered side - Polyester	oz/in (N/100mm)	60 (66)	60 (66)	55 (60)	65 (71)
Non-linered side - Urethane - A	oz/in (N/100mm)	80 (88)	80 (88)	70 (77)	80 (88)
Non-linered side - Urethane - B	oz/in (N/100mm)	65 (71)	65 (71)	50 (55)	55 (60)
Peel Adhesion (Modified ASTM-D3330)					
Linered side - Photopolymer	oz/in (N/100mm)	25 (28)	25 (28)	18 (20)	12 (14)
Solvent Resistance					
Water		Excellent	Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent	Excellent
Alcohols		Good	Good	Good	Good
Acetates		Fair	Fair	Fair	Fair
Heat Resistance	°F (°C)	120 (49)	120 (49)	120 (49)	120 (49)

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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 Medium Soft Process Printing Tape	3M™ Cushion-Mount™ Plus Soft Process Printing Tapes		
	E1915	E1920	E1920S	E1115	E1120	
Adhesive	Differential Acrylate		Differential Acrylate	Differential Acrylate		
Polyethylene Carrier	Medium Soft Pink Foam		Medium Soft Pink Foam	Soft Tan Foam		
Type of Printing	Combination of solids and tone reproduction where process printing is important		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)
Thickness						
Tape	in (mm)	0.017 (0.432)	0.022 (0.559)	0.022 (0.559)	0.017 (0.432)	0.022 (0.559)
Film 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)	26 (416)	26 (416)	26 (416)	24 (384)	24 (384)
Compression Deflection						
10% Compression	lb/in² (kPa)	10 (70)	10 (70)	10 (70)	5 (35)	5 (35)
25% Compression	lb/in² (kPa)	20 (138)	20 (138)	20 (138)	10 (70)	10 (70)
Durometer ASTM-D2240 Shore A		63	63	63	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)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	28 (31)	28 (31)	65 (71)	28 (31)	28 (31)
Non-linered side - Polyester	oz/in (N/100mm)	35 (39)	35 (39)	50 (55)	35 (39)	35 (39)
Non-linered side - Urethane - A	oz/in (N/100mm)	45 (50)	45 (50)	75 (82)	50 (55)	50 (55)
Non-linered side - Urethane - B	oz/in (N/100mm)	35 (39)	35 (39)	70 (77)	35 (39)	35 (39)
Peel Adhesion (Modified ASTM-D3330)						
Linered side - Photopolymer	oz/in (N/100mm)	25 (28)	25 (28)	25 (28)	25 (28)	25 (28)
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)

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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.

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

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