



Cushion-Mount™ Plus Plate Mounting Tapes with Easy Mount Adhesive

E1815, E1820

E1715, E1720

E1515, E1520

E1015, E1020, E1040, E1060

E1315, E1320

E1915, E1915S, E1920, E1920S

E1215, E1220,

E1115, E1120

Technical Data

July, 2010

Product Description

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

E1815 • E1820 • E1715 • E1720 • E1515 • E1520 • E1015 • E1020 • E1040 • E1060

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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.

Characteristics

Product		3M™ Cushion-Mount™ Plus Firm Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Medium Firm Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Medium Combination Plate Mounting Tapes	
		E1815	E1820	E1715	E1720	E1515	E1520
Adhesive		Differential Acrylate		Differential Acrylate		Differential Acrylate	
Polyethylene Carrier		Firm Blue Foam		Medium Firm Teal Foam		Medium Purple 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)	0.015 (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)	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)	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)	32 (512)	32 (512)	30 (480)	30 (480)	29 (465)	29 (465)
Compression Deflection							
10% Compression	lb/in² (kPa)	35 (241)	35 (241)	30 (207)	30 (207)	26 (180)	26 (180)
25% Compression	lb/in² (kPa)	60 (414)	60 (414)	50 (345)	50 (345)	40 (276)	40 (276)
Durometer ASTM-D2240 Shore A		72	72	68	68	67	67
Peel Adhesion (Modified ASTM-D3330)							
Non-linered side - Stainless Steel	oz/in (N/100mm)	55 (60)	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)	65 (71)
Non-linered side - Polyester	oz/in (N/100mm)	68 (75)	68 (75)	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)	70 (77)	70 (77)
Non-linered side - Urethane - B	oz/in (N/100mm)	60 (66)	60 (66)	55 (60)	55 (60)	55 (60)	55 (60)
Peel Adhesion (Modified ASTM-D3330)							
Linered side - Photopolymer	oz/in (N/100mm)	25 (28)	25 (28)	25 (28)	25 (28)	25 (28)	25 (28)
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)

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

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E1315 • E1320 • E1915 • E1915S • E1920 • E1920S • E1215 • E1220 • E1115 • E1120

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

Product		3M™ Cushion-Mount™ Plus Standard Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Standard Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Medium Soft Process Plate Mounting Tapes	
		E1015	E1020	E1040	E1060	E1315	E1320
Adhesive		Differential Acrylate		Differential Acrylate		Differential Acrylate	
Polyethylene Carrier		Standard White Foam		Standard White Foam		Medium Soft Yellow 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 process printing is important	
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)	0.040 (1.016)	0.060 (1.524)	0.015 (0.381)	0.020 (0.508)
Thickness							
Tape	in (mm)	0.017 (0.432)	0.022 (0.559)	0.042 (1.017)	0.062 (1.525)	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)	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)	50 ft. (15.4)	50 ft. (15.4)	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)	28 (450)	28 (450)	28 (450)	28 (450)	27 (433)	27 (433)
Compression Deflection							
10% Compression	lb/in² (kPa)	15 (104)	15 (104)	15 (104)	15 (104)	12 (49)	12 (49)
25% Compression	lb/in² (kPa)	30 (207)	30 (207)	25 (172)	25 (172)	25 (172)	25 (172)
Durometer ASTM-D2240 Shore A		65	65	40	38	63	63
Peel Adhesion (Modified ASTM-D3330)							
Non-linered side - Stainless Steel	oz/in (N/100mm)	55 (60)	55 (60)	55 (60)	65 (71)	55 (60)	55 (60)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	65 (71)	65 (71)	58 (63)	65 (71)	65 (71)	65 (71)
Non-linered side - Polyester	oz/in (N/100mm)	60 (66)	60 (66)	55 (60)	65 (71)	60 (66)	60 (66)
Non-linered side - Urethane - A	oz/in (N/100mm)	80 (88)	80 (88)	70 (77)	80 (88)	80 (88)	80 (88)
Non-linered side - Urethane - B	oz/in (N/100mm)	65 (71)	65 (71)	50 (55)	55 (60)	65 (71)	65 (71)
Peel Adhesion (Modified ASTM-D3330)							
Linered side - Photopolymer	oz/in (N/100mm)	25 (28)	25 (28)	18 (20)	12 (14)	25 (28)	25 (28)
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)

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

E1815 • E1820 • E1715 • E1720 • E1515 • E1520 • E1015 • E1020 • E1040 • E1060

E1315 • E1320 • E1915 • E1915S • E1920 • E1920S • E1215 • E1220 • 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.

Product		3M™ Cushion-Mount™ Plus Light Medium Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Light Medium Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Light Combination Plate Mounting Tapes	
		E1915	E1920	E1915S	E1920S	E1215	E1220
Adhesive		Differential Acrylate		Differential Acrylate		Differential Acrylate	
Polyethylene Carrier		Light Medium Pink Foam		Light Medium Pink Foam		Light Orange	
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		Combination of solids and tone reproduction where process printing is important	
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)	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)	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)	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)	26 (416)	25 (400)	25 (400)
Compression Deflection							
10% Compression	lb/in² (kPa)	10 (70)	10 (70)	10 (70)	10 (70)	8 (56)	8 (56)
25% Compression	lb/in² (kPa)	20 (138)	20 (138)	20 (138)	20 (138)	17 (104)	17 (104)
Durometer ASTM-D2240 Shore A		60	60	60	60	58	58
Peel Adhesion (Modified ASTM-D3330)							
Non-linered side - Stainless Steel	oz/in (N/100mm)	30 (33)	30 (33)	55 (60)	55 (60)	35 (38)	35 (38)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	28 (31)	28 (31)	65 (71)	65 (71)	34 (38)	34 (38)
Non-linered side - Polyester	oz/in (N/100mm)	35 (39)	35 (39)	50 (55)	50 (55)	44 (49)	44 (49)
Non-linered side - Urethane - A	oz/in (N/100mm)	45 (50)	45 (50)	75 (82)	75 (82)	65 (71)	65 (71)
Non-linered side - Urethane - B	oz/in (N/100mm)	35 (39)	35 (39)	70 (77)	70 (77)	44 (49)	44 (49)
Peel Adhesion (Modified ASTM-D3330)							
Linered side - Photopolymer	oz/in (N/100mm)	25 (28)	25 (28)	25 (28)	25 (28)	25 (28)	25 (28)
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)

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

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E1315 • E1320 • E1915 • E1915S • E1920 • E1920S • E1215 • E1220 • E1115 • E1120

Typical Physical Properties and Performance 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 Process Plate Mounting Tapes	
		E1115	E1120
Adhesive		Differential Acrylate	
Polyethylene Carrier		Soft Tan Foam	
Type of Printing		Tone reproduction where where process printing is important	
Application Thickness	in (mm)	0.015 (0.381)	0.020 (0.508)
Thickness Tape	in (mm)	0.017 (0.432)	0.022 (0.559)
Film Liner	in (mm)	0.0045 (0.114)	0.0045 (0.114)
Lot to Lot Tolerance	in (mm)	±0.0015 (±0.038)	±0.0015 (±0.038)
Typical Application Area Caliper Variation	in (mm)	±0.0004 (±0.010)	±0.0004 (±0.010)
Roll Length	yd (m)	25 (22.9)	25 (22.9)
Maximum Width	in (mm)	54 (1371.6)	54 (1371.6)
Minimum Width	in (mm)	2 (50.8)	2 (50.8)
Slitting Tolerance	in (mm)	±1/32 (±0.794)	±1/32 (±0.794)
Density	lb/ft³ (kg/m³)	24 (384)	24 (384)
Compression Deflection			
10% Compression	lb/in² (kPa)	5 (35)	5 (35)
25% Compression	lb/in² (kPa)	10 (70)	10 (70)
Durometer ASTM-D2240 Shore A		55	55
Peel Adhesion (Modified ASTM-D3330)			
Non-linered side - Stainless Steel	oz/in (N/100mm)	30 (33)	30 (33)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	28 (31)	28 (31)
Non-linered side - Polyester	oz/in (N/100mm)	35 (39)	35 (39)
Non-linered side - Urethane - A	oz/in (N/100mm)	50 (55)	50 (55)
Non-linered side - Urethane - B	oz/in (N/100mm)	35 (39)	35 (39)
Peel Adhesion (Modified ASTM-D3330)			
Linered side - Photopolymer	oz/in (N/100mm)	25 (28)	25 (28)
Solvent Resistance			
Water		Excellent	Excellent
Alkanes		Excellent	Excellent
Alcohols		Good	Good
Acetates		Fair	Fair
Heat Resistance	°F (°C)	120 (49)	120 (49)

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

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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 all products, except 3M™ Cushion-Mount™ Plus Plate Mounting Tapes with Easy Mount Adhesive E1040 and E1060, within two years from date of manufacture. For Cushion-Mount Tapes E1040 and E1060 use within one year from date of manufacture.
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Technical Information	The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.
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Product Use	Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for 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.



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