3M

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

L1815, L1820

L1715, L1720

L1515, L1520

L1015, L1020

L1315, L1320

L1915, L1915S, L1920S, L1920

L1215, L1220

L1115, L1120

Technical Data March, 2017

Product Description

3MTM Cushion-MountTM 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. This product is designed to provide easy and clean removal of printing plates across a wide range on printing applications with excellent resistance to plate lifting.

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 linered 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-linered 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

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Typical Physical Properties Note: The following technical information and data should be considered and Performance Characteristics

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		3M™ Cushion-Mount™ Plus		3M™ Cushion-Mount™	
		Firm Combination		Medium Firm Combination		Plus Medium Combination	
		Plate Mounting Tapes		Plate Mounting Tapes		Plate Mounting Tapes	
		L1815	L1820	L1715	L1720	L1515	L1520
Adhesive		Differentia	l Acrylate	Differentia	al Acrylate	Different	ial Acrylate
Polyethylene Carrier		Firm Blu	ie Foam	Medium Fire	m Teal Foam	Medium F	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	0.015	0.020	0.015	0.020	0.015	0.020
	(mm)	(0.0381)	(0.508)	(0.0381)	(0.508)	(0.0381)	(0.508)
Thickness							
Tape	in	0.017	0.022	0.017	0.022	0.017	0.022
	(mm)	(0.432)	(0.559)	(0.432)	(0.559)	(0.432)	(0.559)
Film Liner	in	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045
	(mm)	(0.114)	(0.114)	(0.114)	(0.114)	(0.114)	(0.114)
Lot to Lot Tolerance	in	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015
	(mm)	(±0.038)	(±0.038)	(±0.038)	(±0.038)	(±0.038)	(±0.038)
Typical Application Area	in	±0.0004	±0.0004	±0.0004	±0.0004	±0.0004	±0.0004
Caliper Variation	(mm)	(±0.010)	(±0.010)	(±0.010)	(±0.010)	(±0.010)	(±0.010)
Roll Length	yd	25	25	25	25	25	25
	(m)	(22.9)	(22.9)	(22.9)	(22.9)	(22.9)	(22.9)
Maximum Width	in	54	54	54	54	54	54
	(mm)	(1371.6)	(1371.6)	(1371.6)	(1371.6)	(1371.	(1371
Minimum Width	in (mm)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2 (50.8)	2
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
Density	lb/ft³	32	32	30	30	29	29
	(kg/m³)	(512)	(512)	(480)	(480)	(465)	(465)
Compression Deflection				` ,	,		
10% Compression	Ib/in²	35	35	30	30	26	26
	(kPa)	(241)	(241)	(207)	(207)	(180)	(180)
25% Compression	Ib/in²	60	60	50	50	40	40
	(kPa)	(414)	(414)	(345)	(345)	(276)	(276)
Durometer ASTM-D2240 Shore A		72	72	68	68	67	67
Peel Adhesion (Modified AS	TM-D3330)						
Non-linered side -	oz/in	55	55	55	55	55	55
Stainless Steel	(N/100mm)	(60)	(60)	(60)	(60)	(60)	(60)
Non-linered side -	oz/in	65	65	65	65	65	65
Composite Sleeve	(N/100mm)	(71)	(71)	(71)	(71)	(71)	(71)
Non-linered side -	oz/in	68	68	68	68	68	68
Polyester	(N/100mm)	(75)	(75)	(75)	(75)	(75)	(75)
Non-linered side -	oz/in	70	70	70	70	70	70
Urethane - A	(N/100mm)	(77)	(77)	(77)	(77)	(77)	(77)
Non-linered side -	oz/in	60	60	55	55	55	55
Urethane - B	(N/100mm)	(66)	(66)	(60)	(60)	(60)	(60)
Peel Adhesion (Modified AS	TM-D3330)						
Linered side -	oz/in	15	15	15	15	15	15
Photopolymer	(N/100mm)	(16)	(16)	(16)	(16)	(16)	(16)
Solvent Resistance Water Alkanes Alcohols		Excellent Excellent Good	Excellent Excellent Good	Excellent Excellent Good	Excellent Excellent Good	Excellent Excellent Good	Excellent Excellent Good
Acetates		Fair	Fair	Fair	Fair	Fair	Fair
Heat Resistance	°F	120	120	120	120	120	120
	(°C)	(49)	(49)	(49)	(49)	(49)	(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		3M™ Cushion-Mount™ Plus		3M™ Cushion-Mount™ Plus	
		Standard Combination Plate		Medium Soft Process Plate		Light Medium Combination	
		Mounting Tapes		Mounting Tapes		Plate Mounting Tapes	
Froudct		L1015	L1020	L1315	L1320	L1915	L1920
Adhesive		Differential	Acrylate	Differenti	al Acrylate	Different	ial Acrylate
Polyethylene Carrier		Standard W	hite Foam	Medium Sof	Yellow Foam	Light Mediu	ım Pink Foam
Type of Printing		Combination of solids and tone reproduction where solids and process are equally 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	0.015	0.020	0.015	0.020	0.015	0.020
	(mm)	(0.0381)	(0.508)	(0.0381)	(0.508)	(0.0381)	(0.508)
Thickness							
Tape	in	0.017	0.022	0.017	0.022	0.017	0.022
	(mm)	(0.432)	(0.559)	(0.432)	(0.559)	(0.432)	(0.559)
Film Liner	in	0.0045	0.0045	0.0045	0.0045	0.0045	0.0045
	(mm)	(0.114)	(0.114)	(0.114)	(0.114)	(0.114)	(0.114)
Lot to Lot Tolerance	in	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015
	(mm)	(±0.038)	(±0.038)	(±0.038)	(±0.038)	(±0.038)	(±0.038)
Typical Application Area	in	±0.0004	±0.0004	±0.0004	±0.0004	±0.0004	±0.0004
Caliper Variation	(mm)	(±0.010)	(±0.010)	(±0.010)	(±0.010)	(±0.010)	(±0.010)
Roll Length	yd	25	25	25	25	25	25
	(m)	(22.9)	(22.9)	(22.9)	(22.9)	(22.9)	(22.9)
Maximum Width	in	54	54	54	54	54	54
	(mm)	(1371.6)	(1371.6)	(1371.6)	(1371.6)	(1371.6)	(1371.6)
Minimum Width	in	2	2	2	2	2	2
	(mm)	(50.8)	(50.8)	(50.8)	(50.8)	(50.8)	(50.8)
Slitting Tolerance	in	±1/32	±1/32	±1/32	±1/32	±1/32	±1/32
	(mm)	(±0.794)	(±0.794)	(±0.794)	(±0.794)	(±0.794)	(±0.794)
Density	lb/ft³	28	28	27	27	26	26
	(kg/m³)	(450)	(450)	(433)	(433)	(416)	(416)
Compression Deflection							
10% Compression	Ib/in²	15	15	12	12	10	10
	(kPa)	(104)	(104)	(49)	(49)	(70)	(70)
25% Compression	Ib/in²	30	30	25	25	20	20
	(kPa)	(207)	(207)	(172)	(172)	(138)	(138)
Durometer ASTM-D2240 Shore A		65	65	63	63	60	60
Peel Adhesion (Modified AS	TM-D3330)						
Non-linered side -	oz/in	55	55	55	55	30	30
Stainless Steel	(N/100mm)	(60)	(60)	(60)	(60)	(33)	(33)
Non-linered side -	oz/in	65	65	65	65	28	28
Composite Sleeve Non-linered side -	(N/100mm) oz/in	(71) 60	(71) 60	(71) 60	(71) 60	(31)	(31)
Polyester	(N/100mm)	(66)	(66)	(66)	(66)	(39)	(39)
Non-linered side -	oz/in	80	80	80	80	45	45
Urethane - A	(N/100mm)	(88)	(88)	(88)	(88)	(50)	(50)
Non-linered side -	oz/in	65	65	65	65	35	35
Urethane - B	(N/100mm)	(71)	(71)	(71)	(71)	(39)	(39)
Peel Adhesion (Modified AS	TM-D3330)						
Linered side -	oz/in	15	15	15	15	15	15
Photopolymer	(N/100mm)	(16)	(16)	(16)	(16)	(16)	(16)
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	120	120	120	120	120	120
	(°C)	(49)	(49)	(49)	(49)	(49)	(49)

3M™ Cushion-Mount™Plus Plate Mounting 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.

		3M™ Cushion-Mount™ Plus Standard Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Medium Soft Process Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Light Medium Combination Plate Mounting Tapes		
Product		L1915S	L1920S	L1215	L1220	L1115	L1120	
Adhesive	Adhesive		Differential Acrylate		Differential Acrylate		Differential Acrylate	
Polyethylene Carrier		Light Medium Pink Foam		Light Orange 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 (0.0381)	0.020 (0.508)	0.015 (0.0381)	0.020 (0.508)	0.015 (0.0381)	0.020 (0.508)	
Thickness			0.022					
Tape	in (mm)	0.017 (0.432)	(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	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015	±0.0015	
Tunical Analization A	(mm)	(±0.038)	(±0.038)	(±0.038)	(±0.038)	(±0.038)	(±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	25	25	25	25	25	
Maximum Width	in	(22.9) 54	(22.9) 54	(22.9) 54	(22.9) 54	(22.9) 54	(22.9) 54	
	(mm)	(1371.6)	(1371.6)	(1371.6)	(1371.6)	(1371.6)	(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	26	26	25	25	24	24	
Compression Deflection	(kg/m³)	(416)	(416)	(400)	(400)	(384)	(384)	
10% Compression	lb/in² (kPa)	10 (70)	10 (70)	8 (56)	8 (56)	5 (35)	5 (35)	
25% Compression	lb/in² (kPa)	20 (138)	20 (138)	17 (104)	17 (104)	10 (70)	10 (70)	
Durometer ASTM-D2240 Shore A	(iti u)	60	60	58	58	55	55	
Peel Adhesion (Modified ASTM-D3330)								
Non-linered side - Stainless Steel	oz/in (N/100mm)	55 (60)	55 (60)	30 (33)	30 (33)	30 (33)	30 (33)	
Non-linered side - Composite Sleeve	oz/in (N/100mm)	65 (71)	65 (71)	28 (31)	28 (31)	28 (31)	28 (31)	
Non-linered side -	oz/in	50	50	35	35	35	35	
Polyester Non-linered side -	(N/100mm) oz/in	(55) 75	(55) 75	(39) 50	(39) 50	(39) 50	(39) 50	
Urethane - A	(N/100mm)	(82)	(82)	(55)	(55)	(55)	(55)	
Non-linered side - Urethane - B	oz/in (N/100mm)	70 (77)	70 (77)	35 (39)	35 (39)	35 (39)	35 (39)	
Peel Adhesion (Modified ASTM-D3330)								
Linered side - Photopolymer	oz/in (N/100mm)	15 (16)	15 (16)	15 (16)	15 (16)	15 (16)	15 (16)	
Solvent Resistance	•							
Water		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	
Alkanes		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	
Alcohols Acetates		Good Fair	Good Fair	Good Fair	Good Fair	Good Fair	Good Fair	
Heat Resistance	°F	120	120	120	120	120	120	
	(°C)	(49)	(49)	(49)	(49)	(49)	(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 two years from date of manufacture.
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ISO 9001



Industrial Adhesives and Tapes Division

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