3M

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

L1820

L1720

L1520

L1020

L1320

L1920, L1920S

L1220

L1120

Technical Data January, 2015

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

L1820 • L1720 • L1520 • L1020 • L1320 • L1920 • L1920S • L1220 • L1120

Typical Physical Properties Note: The following technical information and data should be considered representative and Performance 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 L1720	3M™ Cushion-Mount™ Plus Medium Combination Plate Mounting Tapes L1520
		L1820		
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	0.020	0.020	0.020
	(mm)	(0.508)	(0.508)	(0.508)
Thickness				
Tape	in	0.022	0.022	0.022
	(mm)	(0.559)	(0.559)	(0.559)
Film Liner	in	0.0045	0.0045	0.0045
	(mm)	(0.114)	(0.114)	(0.114)
Lot to Lot Tolerance	in	±0.0015	±0.0015	±0.0015
	(mm)	(±0.038)	(±0.038)	(±0.038)
Typical Application Area Caliper Variation	in	±0.0004	±0.0004	±0.0004
	(mm)	(±0.010)	(±0.010)	(±0.010)
Roll Length	yd	25	25	25
	(m)	(22.9)	(22.9)	(22.9)
Maximum Width	in	54	54	54
	(mm)	(1371.6)	(1371.6)	(1371.6)
Minimum Width	in	2	2	2
	(mm)	(50.8)	(50.8)	(50.8)
Slitting Tolerance	in	±1/32	±1/32	±1/32
	(mm)	(±0.794)	(±0.794)	(±0.794)
Density	lb/ft³	32	30	29
	(kg/m³)	(512)	(480)	(465)
Compression Deflection		,		,
10% Compression	lb/in²	35	30	26
	(kPa)	(241)	(207)	(180)
25% Compression	lb/in²	60	50	40
	(kPa)	(414)	(345)	(276)
Durometer ASTM-D2240 Shore A		72	68	67
Peel Adhesion (Modified AS	TM-D3330)			
Non-linered side -	oz/in	55	55	55
Stainless Steel	(N/100mm)	(60)	(60)	(60)
Non-linered side -	oz/in	65	65	65
Composite Sleeve	(N/100mm)	(71)	(71)	(71)
Non-linered side -	oz/in	68	68	68
Polyester	(N/100mm)	(75)	(75)	(75)
Non-linered side -	oz/in	70	70	70
Urethane - A	(N/100mm)	(77)	(77)	(77)
Non-linered side -	oz/in	60	55	55
Urethane - B	(N/100mm)	(66)	(60)	(60)
Peel Adhesion (Modified AS	,	. ,	. ,	,
Linered side -	oz/in	15	15	15
Photopolymer	(N/100mm)	(16)	(16)	(16)
Solvent Resistance	·			
Water		Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent
Alcohols		Good	Good	Good
Acetates	۰,-	Fair	Fair	Fair
Heat Resistance	°F	120	120	120
	(°C)	(49)	(49)	(49)

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 representative and Performance or typical only and should not be used for specification purposes.

Characteristics

Product		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
		L1020	L1320	L1920
Adhesive		Differential Acrylate	Differential Acrylate	Differential Acrylate
Polyethylene Carrier		Standard White Foam	Medium Soft Yellow Foam	Light Medium 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	0.020	0.020	0.020
	(mm)	(0.508)	(0.508)	(0.508)
Thickness				
Tape	in	0.022	0.022	0.022
	(mm)	(0.559)	(0.559)	(0.559)
Film Liner	in	0.0045	0.0045	0.0045
	(mm)	(0.114)	(0.114)	(0.114)
Lot to Lot Tolerance	in	±0.0015	±0.0015	±0.0015
	(mm)	(±0.038)	(±0.038)	(±0.038)
Typical Application Area Caliper Variation	in	±0.0004	±0.0004	±0.0004
	(mm)	(±0.010)	(±0.010)	(±0.010)
Roll Length	yd	25	25	25
	(m)	(22.9)	(22.9)	(22.9)
Maximum Width	in	54	54	54
	(mm)	(1371.6)	(1371.6)	(1371.6)
Minimum Width	in	2	2	2
	(mm)	(50.8)	(50.8)	(50.8)
Slitting Tolerance	in	±1/32	±1/32	±1/32
	(mm)	(±0.794)	(±0.794)	(±0.794)
Density	lb/ft³	28	27	26
	(kg/m³)	(450)	(433)	(416)
Compression Deflection				
10% Compression	lb/in²	15	12	10
	(kPa)	(104)	(49)	(70)
25% Compression	Ib/in²	30	25	20
	(kPa)	(207)	(172)	(138)
Durometer ASTM-D2240 Shore A		65	63	60
Peel Adhesion (Modified AS	TM-D3330)			
Non-linered side -	oz/in	55	55	30
Stainless Steel	(N/100mm)	(60)	(60)	(33)
Non-linered side -	oz/in	65	65	28
Composite Sleeve	(N/100mm)	(71)	(71)	(31)
Non-linered side -	oz/in	60	60	35
Polyester	(N/100mm)	(66)	(66)	(39)
Non-linered side -	oz/in	80	80	45
Urethane - A	(N/100mm)	(88)	(88)	(50)
Non-linered side -	oz/in	65	65	35
Urethane - B	(N/100mm)	(71)	(71)	(39)
Peel Adhesion (Modified AS	TM-D3330)			
Linered side -	oz/in	15	15	15
Photopolymer	(N/100mm)	(16)	(16)	(16)
Solvent Resistance				
Water		Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent
Alcohols		Good	Good	Good
Acetates		Fair	Fair	Fair
Heat Resistance	°F	120	120	120
	(°C)	(49)	(49)	(49)

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 representative and Performance or typical only and should not be used for specification purposes.

Characteristics

Product		3M™ Cushion-Mount™ Plus Light Medium Combination Plate Mounting Tapes	3M [™] Cushion-Mount [™] Plus Light Combination Plate Mounting Tapes	3M [™] Cushion-Mount [™] Plus Process Plate Mounting Tapes
		L1920S	L1220	L1120
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	0.020	0.020	0.020
	(mm)	(0.508)	(0.508)	(0.508)
Thickness				
Tape	in	0.022	0.022	0.022
	(mm)	(0.559)	(0.559)	(0.559)
Film Liner	in	0.0045	0.0045	0.0045
	(mm)	(0.114)	(0.114)	(0.114)
Lot to Lot Tolerance	in	±0.0015	±0.0015	±0.0015
	(mm)	(±0.038)	(±0.038)	(±0.038)
Typical Application Area Caliper Variation	in	±0.0004	±0.0004	±0.0004
	(mm)	(±0.010)	(±0.010)	(±0.010)
Roll Length	yd	25	25	25
	(m)	(22.9)	(22.9)	(22.9)
Maximum Width	in	54	54	54
	(mm)	(1371.6)	(1371.6)	(1371.6)
Minimum Width	in	2	2	2
	(mm)	(50.8)	(50.8)	(50.8)
Slitting Tolerance	in	±1/32	±1/32	±1/32
	(mm)	(±0.794)	(±0.794)	(±0.794)
Density	lb/ft³	26	25	24
	(kg/m³)	(416)	(400)	(384)
Compression Deflection				
10% Compression	lb/in²	10	8	5
	(kPa)	(70)	(56)	(35)
25% Compression	lb/in²	20	17	10
	(kPa)	(138)	(104)	(70)
Durometer ASTM-D2240 Shore A		60	58	55
Peel Adhesion (Modified AS	TM-D3330)			
Non-linered side -	oz/in	55	30	30
Stainless Steel	(N/100mm)	(60)	(33)	(33)
Non-linered side -	oz/in	65	28	28
Composite Sleeve	(N/100mm)	(71)	(31)	(31)
Non-linered side -	oz/in	50	35	35
Polyester	(N/100mm)	(55)	(39)	(39)
Non-linered side -	oz/in	75	50	50
Urethane - A	(N/100mm)	(82)	(55)	(55)
Non-linered side -	oz/in	70	35	35
Urethane - B	(N/100mm)	(77)	(39)	(39)
Peel Adhesion (Modified AS	TM-D3330)			
Linered side -	oz/in	15	15	15
Photopolymer	(N/100mm)	(16)	(16)	(16)
Solvent Resistance Water Alkanes Alcohols Acetates		Excellent Excellent Good Fair	Excellent Excellent Good Fair	Excellent Excellent Good Fair
Heat Resistance	°F	120	120	120
	(°C)	(49)	(49)	(49)

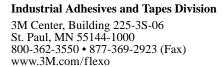
$3M^{\text{\tiny TM}}$ Cushion-Mount $^{\text{\tiny TM}}$ Plus Plate Mounting Tapes with Easy Mount Adhesive

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