



Cushion-Mount™ Plus Plate Mounting Tapes with Easy Mount Adhesive and High Plateside Adhesion 40 and 60 mil Tapes

E1040H • E1060H • E1840H • E1860H • E1040 • E1060 • E1840 • E1860

Technical Data

September, 2010

Product Description

3M™ Cushion-Mount™ Plus Plate Mounting Tapes with Easy Mount Adhesive and High Plateside Adhesion are designed for mounting flexographic print plates to cylinders or sleeves. This family of foam mounting tapes provides excellent print quality for combination printing, process printing, solids and line work. 3M now offers a range of 40 and 60 mil cushioned plate mounting tapes for your flexographic printing needs.

Features

- 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 the plate.
- The adhesive on the lined side (plate side) of the tape is designed for mounting of photopolymer plates, excellent holding power on-press with high plateside adhesion 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.
- Consistent caliper control allows the printer to use multiple lots of material on a print job to optimize print quality.

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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 Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Firm Combination Plate Mounting Tapes	
		E1040H	E1060H	E1840H	E1860H
Carrier		Standard White Foam		Firm Blue Foam	
Type of Printing		Combination of Solid and Tone reproduction where process and solids are equally important.		Combination of Solid and Line with minimal tone reproduction.	
Application Thickness	in (mm)	0.040 (1.016)	0.060 (1.524)	0.040 (1.016)	0.060 (1.524)
Thickness					
Tape	in (mm)	0.042 (1.017)	0.062 (1.525)	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)
Slit 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)	35 (562)	35 (562)
Compression Deflection					
10% Compression	lb/in ² (kPa)	15 (104)	15 (104)	20 (138)	20 (138)
25% Compression	lb/in ² (kPa)	25 (172)	25 (172)	40 (275)	40 (275)
Peel Adhesion (Modified ASTM-D3330)					
Non-linered side - Stainless Steel	oz/in (N/100mm)	60 (65)	60 (65)	60 (65)	60 (65)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	50 (55)	50 (55)	55 (60)	50 (55)
Non-linered side - Polyester	oz/in (N/100mm)	55 (60)	65 (71)	55 (60)	55 (60)
Non-linered side - Urethane - A	oz/in (N/100mm)	65 (71)	70 (77)	65 (71)	65 (71)
Non-linered side - Urethane - B	oz/in (N/100mm)	50 (55)	55 (60)	55 (60)	55 (60)
Peel Adhesion (Modified ASTM-D3330)					
Linered side - Photopolymer	oz/in (N/100mm)	45 (50)	35 (38)	60 (66)	60 (66)
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 Standard Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Firm Combination Plate Mounting Tapes	
		E1040	E1060	E1840	E1860
Carrier		Standard White Foam		Firm Blue Foam	
Type of Printing		Combination of Solid and Tone reproduction where process and solids are equally important.		Combination of Solid and Line with minimal tone reproduction.	
Application Thickness	in (mm)	0.040 (1.016)	0.060 (1.524)	0.040 (1.016)	0.060 (1.524)
Thickness					
Tape	in (mm)	0.042 (1.017)	0.062 (1.525)	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)
Slit 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)	35 (562)	35 (562)
Compression Deflection					
10% Compression	lb/in ² (kPa)	15 (104)	15 (104)	20 (138)	20 (138)
25% Compression	lb/in ² (kPa)	25 (172)	25 (172)	40 (275)	40 (275)
Peel Adhesion (Modified ASTM-D3330)					
Non-linered side - Stainless Steel	oz/in (N/100mm)	60 (65)	60 (65)	60 (65)	60 (65)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	50 (55)	50 (55)	55 (60)	50 (55)
Non-linered side - Polyester	oz/in (N/100mm)	55 (60)	65 (71)	55 (60)	55 (60)
Non-linered side - Urethane - A	oz/in (N/100mm)	65 (71)	70 (77)	65 (71)	65 (71)
Non-linered side - Urethane - B	oz/in (N/100mm)	50 (55)	55 (60)	55 (60)	55 (60)
Peel Adhesion (Modified ASTM-D3330)					
Linered side - Photopolymer	oz/in (N/100mm)	18 (20)	12 (14)	15 (18)	15 (17)
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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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.

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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ISO 9001:2000

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