

July, 2010

3M[™] Cushion-Mount[™] Plus Plate Mounting Tapes with Easy Mount Adhesive E1220

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.

Product 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.



Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Property	Values				
Tape Thickness	0.559 mm	22 mil			
Application Thickness	0.508 mm	20 mil			
Film Thickness	0.114 mm	4.5 mil			
Lot to Lot Tolerance	± 0.038 mm	± 1.5 mil			
Typical Application Area Caliper Variation	± 0.01 mm	± 0.4 mil			
Adhesive	Differential Acrylate				
Adhesive Carrier	Light Orange				
Density	400 kg/m³	25 lb/ft³			
Type of Printing	Combination of solid and line with tone reproduction where process printing is important				
Compression Deflection: 10% Compression	56 kPa	8 lb/in²			
Compression Deflection: 25% Compression	104 kPa	17 lb/in²			

Peel Adhesion (Non-linered side)		Substrate
3.8 N/cm	35 oz/in	Stainless Steel
3.8 N/cm	34 oz/in	Composite Sleeve
4.9 N/cm	44 oz/in	Polyester (PET)
7.1 N/cm	65 oz/in	Urethane - A
4.9 N/cm	44 oz/in	Urethane - B

Property: Peel Adhesion (Non-linered side) Method: ASTM D3330 (modified)

Typical Cured Characteristics

Shore A Hardness: 58

Methods ASTM D2240

Typical Performance Characteristics

Property	Values		Method	Substrate
Peel Adhesion (Linered Side)	2.8 N/cm	25 oz/in	ASTM D3330 (modified)	Photopolymer
Heat Resistance	49 °C	120 °F		

Solvent Resistance

Water - Excellent Alkanes - Excellent Alcohols - Good Acetates - Fair

Available Sizes

Property	Values				
Standard Roll Length	22.9 m	25 yd			
Minimum Available Width	50.8 mm	2 in			
Maximum Available Width	1371.6 mm	54 in			
Normal Slitting Tolerance	± 0.794 mm	± 1/32 in			

Storage and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% relative humidity in the original carton. To obtain best performance, use within two years from date of manufacture.

Information

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and 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. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Trademarks

3M and Cushion-Mount are trademarks of 3M Company.

References

Safety Data Sheet (SDS)

https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=E1220

Family Group

	E1815	E1715	E1720	E1515	E1520	E1015	E1020	E1040	E1060	E1820	E1320	E1915	E1915S
Tape Thickness (mm)	0.432	0.432	0.559	0.432	0.559	0.432	0.559	1.017	1.525	0.559	0.559	0.432	0.559
Application Thickness (mm)	0.381	0.381	0.508	0.381	0.508	0.381	0.508	1.016	1.524	0.508	0.508	0.381	0.508
Film Thickness (mm)	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114
Adhesive	Differen tial Acrylate												

Table continued on next page

Family Group (continued)

	E1815	E1715	E1720	E1515	E1520	E1015	E1020	E1040	E1060	E1820	E1320
Adhesive Carrier	Firm Blue Foam	Medium Firm Teal Foam	Medium Firm Teal Foam	Medium Purple Foam	Medium Purple Foam	Standard White Foam	Standard White Foam	Standard White Foam	Standard White Foam	Firm Blue Foam	Medium Soft Yellow Foam
Shore A Hardness	72	68	68	67	67	65	65	40	38	72	63
Type of Printing	Combinati on of solid and line with minimal tone reproducti on	Combinati on of solid and line with tone reproducti on and fine reverses	Combinati on of solid and line with tone reproducti on where solids and process are equally important	Combinati on of solid and line with tone reproducti on where solids and process are equally important	Combinati on of solid and line with tone reproducti on where solids and process are equally important	Combinati on of solid and line with tone reproducti on where solids and process are equally important	Combinati on of solid and line with minimal tone reproducti on	Combinati on of solid and line with tone reproducti on where process printing is important			

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.