

Flexographic Mounting Systems Selection Guide

Balancing solids and dots for customer satisfaction



Product	Application	ng Tap	Manufactu	red Target	Description	Plates	Cylinders/	Color	Features
Number	Thickness	mm	Thickness Inches		p		Sleeves		
3M [™] Flexon									
411DL	0.015	0.38	0.015	0.38	Gray double coated tape	P/R	SS/S/K	Gray	Gray vinyl products with a
412DL	0.020	0.51	0.020	0.51	with a soft rubber adhesive	P/R	SS/S/K	Gray	high adhesion.
447DL	0.010	0.25	0.010	0.25	on each side of a vinyl carrier. Available in single	P/R	SS/S/K	Gray	Helps reduce edge lifting.
					and double liner.				Helps minimize pin holing on
									solid work.
413DL 414DL	0.015 0.020	0.38 0.51	0.015 0.020	0.38 0.51	Black double coated tape with a firm rubber adhesive	P/R P/R	SS/S/K SS/S/K	Black	Black vinyl - lower adhesion.
	0.020	0.01	0.020	0.01	on each side of a vinyl carrier.	.,	00,0,11		Higher temperature and solvent resistance.
					Available in double liner only.				Helps minimize pin holing
									on solids.
3M [™] Cushic	on-Mount [*]	[™] Solid I	Printing T	apes					
929 933	0.060 0.015	1.52 0.38	0.062 0.017	1.57 0.43	Rubber adhesive on each side of a high density	Р	SS/S/K SS/S/K	Tan Tan	Highest density 3M [™] Cushion- Mount [™] products.
939	0.015	0.50	0.017	0.43	elastomeric foam.	P P	SS/S/K	Tan	Use for solid and bold line work
949	0.020	0.51	0.022	0.56	Differential adhesive with a	R	SS/S/K	Tan	Helps reduce cylinder bounce a
	0.020	0.01	0.022	0.00	high density elastomeric foam.	iii	00,0,11		higher speeds.
3M [™] Con	nbinatio	n Print	ting Tap	es					
					Printing Tapes				
E1815 &					Differential acrylate adhesive				Better solid ink density than the
1815M	0.015	0.38	0.017	0.43	system on each side of a foam carrier, protected by	Р	SS/S/K	Blue	standard combination printing tapes.
E1820 & 1820M	0.020	0.51	0.022	0.56	a release liner on one side.	Р	SS/S/K	Blue	Clean removal from plate
									and print cylinder.
E1715 &					Differential acrylate adhesive				Quality results when plate
1715M	0.015	0.38	0.017	0.43	system on each side of a foam carrier, protected by a	Р	SS/S/K	Teal	contains slightly more solids in a combination of solid
E1720 & 1720M	0.020	0.51	0.022	0.56	release liner on one side.	Р	SS/S/K	Teal	and halftone images.
E1015,1015 &					Differential acrylate adhesive				Most versatile 3M [™]
1015M	0.015	0.38	0.017	0.43	system on polyethylene foam.	Р	SS/S/K	White	Cushion-Mount [™] tape product
E1015-15 & 1015-15	0.015	0.38	0.015	0.38		Р	SS/S/K	White	Effectively prints most types
E1020, 1020	0.010	0.00	0.010	0.00			00,0,11	WIIILO	of flexographic printing.
& 1020M	0.020	0.51	0.022	0.56		Р	SS/S/K	White	
E1020-20 & 1020-20	0.020	0.51	0.020	0.51		Р	SS/S/K	White	
1020R	0.020	0.51	0.022	0.56		P/R	SS/S/K	White	
E1040 & 1040 E1060. 1060 &	0.040 0.060	1.02 1.52	0.042 0.062	1.07 1.57		P P	SS/S/K SS/S/K	White White	
1060M	0.000	1.02	0.002	1.07			00,0,11	Willo	
E1915 &					Differential acrylate adhesive				Most versatile 3M™
1915M	0.015	0.38	0.017	0.43	system on each side of a foam carrier, protected by	Р	SS/S	Pink Berry	Cushion-Mount [™] tape products
E1920 & 1920M	0.020	0.51	0.022	0.56	a release liner on one side.	Р	SS/S	Pink Berry	Effectively prints most types of flexographic printing.
E1920S & 1920S	0.020	0.51	0.022	0.56		Р	S/K	Pink Berry	or novographic printing.
		4 т							
3M [™] Proc	ess Prin	ung I	apes						
E1115 9					Differential conditioned basis				Batter tone reproduction
E1115 & 1115	0.015	0.38	0.017	0.43	Differential acrylate adhesive system on low-density	Р	SS/S	Tan	Better tone reproduction than the standard combination
E1115-15 &	0.015	0.00	0.015	0.00	polyethylene foam.	п	00/0	Top	printing tapes.
1115-15 E1120 & 1120	0.015 0.020	0.38 0.51	0.015	0.38 0.56		P P	SS/S SS/S	Tan Tan	Clean removal from plate and print cylinder.
E1120 & 1120 E1120-20 &	0.020	0.01	0.022	0.00		1	00/0	ian	· · · · · · · · · · · · · · · · · · ·
1120-20	0.020	0.51	0.020	0.51		Р	SS/S	Tan	
1120K	0.020	0.51	0.022	0.56		Р	S/K	Tan	
E - Air Release	Liner I	M - Modif	ied Plate Sid	de Adhesior	n DL - Double Liner	K - Compo	site Sleeve	S - Uretha	ne Sleeve

A wide choice of adhesives, foams, and thickness for the results your customers demand

When your customer wants solid ink and crisp lines, you'll want firm, high density mounting tape. For halftone work where dot gain is a

concern, a softer tape optimizes reproduction. And when solids and dots share the plate, a combination tape can properly balance the result. From the 3M selection at right, you can find exactly what you need for the quality customers expect. And you'll find choices for meeting your handling and production requirements:



0% HIGHLIGHT

40% MIDTONE

REVERSE

POSITIVE

- · Mounting ease and positioning accuracy
- · Clean removal from plate and cylinder
- Adhesive type and strength

For example, tapes designated with an "E" are Easy Mount products that virtually eliminate air bubbles and edge lifting, yet remove easily without plate damage.

Carrier density...

To meet reproduction requirements, the foam carrier gets progressively softer from series 18, 17, 10, 19, and 11.

Beyond technology and product...

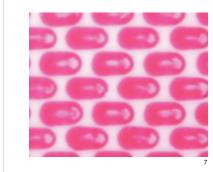
3M flexographic sales specialists and technical service engineers can help you select the optimum tape and use it with maximum effectiveness.

Manufactured under a 3M quality system registered to ISO 9002 standards.

3M[™] Solid Printing Tapes When your customer wants solid ink coverage and crisp line work

Solid Printing Tapes with Vinyl Carrier

Solid Printing Tapes with Foam Carrier







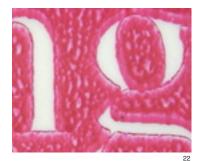


- · Maximum firmness and high density for uniform coverage of solids when halftone dot reproduction is not critical
- Minimum pin holing

Tapes: 411DL, 412DL, 413DL, 414DL, 447DL









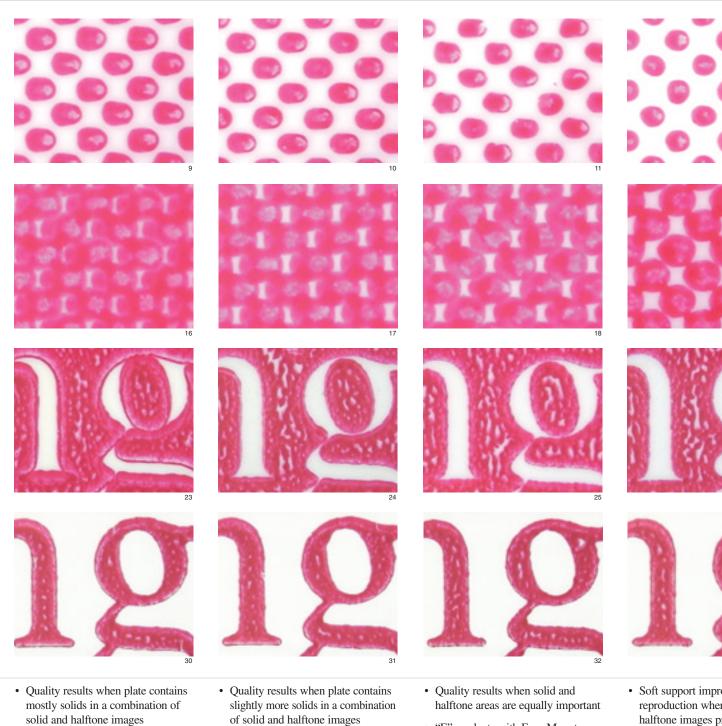
- · Compression and recovery helps reduce cylinder bounce and deliver more consistent solid print quality
- · High density ink coverage

Tapes: 929, 933, 939, 949

3M[™] Combination Printing Tapes When you need to consistently balance solid and dot reproduction on the same job

Firm Combination Printing Tapes with Foam Carrier

Medium Firm Combination Printing Tapes with Foam Carrier **Standard Combination Printing Tapes with Foam Carrier** Soft Combination **Printing Tapes with**



· "E" products with Easy Mount technology and "M" products for modified plate side adhesion

Tapes: E1015/E1020, 1015/1020, 1015M/1020M, 1020R, E1040, 1040, E1060, 1060

NOTE ON SOLID AND DOTS REPRODUCTION: 40x magnification on dots; 20x on positive and reverse type; process magenta ink on 2 mil polyethylene film; 1 mil impression at 88 fpm, 800 line, 2.4 b R - Rubber Plates S - Urethane Sleeve K - Composite Sleeve

• "E" products with

technology and "N

modified plate sid

E1920S, 192

Tapes: E1915/E192

solid and halftone images

• "E" products with Easy Mount technology and "M" products for modified plate side adhesion

Tapes: E1815/E1820, 1815M/1820M

DL - Double Liner

E - Air Release Liner

- of solid and halftone images
- · "E" products with Easy Mount technology and "M" products for modified plate side adhesion

Tapes: E1715/E1720, 1720M

M - Modified Plate Side Adhesion



Foam Carrier



oves tone process and redominate

Easy Mount A" products for e adhesion

0, 1915M/1920M, 0S

cm.



3M[™] Process Printing Tapes When customers want high quality process work



- Low density maximizes dot reproduction for high quality process work and screen printing
- "E" products with Easy Mount technology and "K" product for mounting plates to fiberglass or composite sleeves

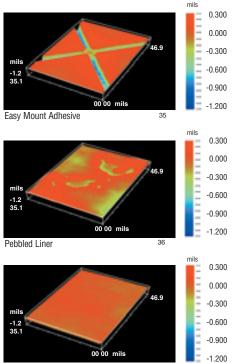
Tapes: E1115/E1120, 1115/1120, 1120K

E-Series Tapes with Easy Mount Adhesive

On easy with reduced air entrapment

Unlike flat or pebbled liners, E-Series liners are crosshatched on both sides with unique microchannels that allow air to flow throughout the adhesive. Improved airflow virtually eliminates air bubble problems for easier application. Air bleeds from between the tape and plate, and between the tape and cylinder or sleeve for virtually error-free mounting. Setup is shorter with smoother surfaces for cleaner print quality and higher productivity.

Microscopic view of adhesive surface measured with interferometer





Stays on with reduced edge-lifting

Exclusive 3M plate-side adhesive maintains tight contact between tape and plate to dramatically reduce edge lifting. Saves the prep time, downtime, and labor of sealing plate edges.

Peels off easily to reduce plate damage

E-series tapes grip tightly but peel off so easily you can virtually eliminate plate back treatment. You're less likely to damage plates, so save time, labor, and money.

Air-free print quality

- Prevent blemishes in screen and process printing
- Help assure proper registration

3M[™] Thin Tapes

When a thicker caliper or cushion is unnecessary, these tapes can mount both rubber and photopolymer plates. Some are also repositionable.

Product Number	Tape Thickness Inch (mm)	Description	Compressible Sleeves	Corrugated	Rotary Letterpress	Make Ready	Features
415	0.004" (0.10)	Double coated tape with a medium-firm acrylic adhesive on each side of a polyester carrier.		Х	Х		Good adhesion to a wide range of surfaces; can be used for Cameron Press applications.
442KW	0.004" (0.10)	Double coated tape with a firm rubber adhesive on each side of a polyester carrier.		Х	х		Plate mounting applications requiring a thin tape to bond rubber or photopolymer plates to metal cylinders.
443	0.005" (0.13)	Double coated tape with a soft rubber adhesive on each side of a polyester carrier.		х	х		Mounting applications requiring a thin tape to bond polyester, fiberglass, and other surfaces.
465	0.002" (0.05)	Acrylic adhesive transfer tape.		х		Х	Small area plate build-up or make-ready. Also used to mount primed rubber plates.
927	0.002" (0.05)	Acrylic adhesive transfer tape.		х		Х	Corrugated plate mounting applications where repositionability and removability are not required.
950	0.005" (0.13)	Acrylic adhesive transfer tape.		Х			Corrugated plate mounting applications where repositionability and removability are not required.
2205	0.005" (0.13)	Double coated film tape with differential acrylic adhesive on a polyester film carrier.		Х			Adhesives designed specifically for corrugated flexo mounting. Removes cleanly and easy to reposition
9500	0.005" (0.13)	High performance acrylic adhesive on each side of a polyester carrier.	Х		Х		Thin tape plate mounting applications requiring higher performance than 443 Tape.

All tapes listed on this chart have been used successfully on non-compressible sleeves.

3M[™] Flexographic Mounting Aids

3M[™] Cylinder Mount Build-Up Tape 1640

For use with any 3M flexographic tape to add 0.040" thickness.

3M[™] Primer 94

Helps hold the leading and trailing edges of the plate to prevent edge lifting.

3M[™] Jet-melt[™] Adhesives 3762LM, 3776LM, or 3792LM Used with **3M[™] Polygun[™] LT Applicator** to seal plate edges against ink and solvent penetration that causes edge lifting.

3M[™] Aluminum Foil Tape 425, 3M[™] Vinyl Tape 471, or 3M[™] Polyester Film Tape 850

Seals plate edges against ink and solvent penetration that causes edge lifting.

Scotch® Magic Tape 810

Secures proofing paper to a proofer/mounter with good adhesion but simple removal from the proofing cylinder.

PRODUCT USE: All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

WARRANTY AND LIMITED REMEDY: Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product or refund the purchase price.

LIMITATION OF LIABILITY: Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

3M

Industrial Business Industrial Adhesives and Tapes Division

Customer Response Center 900 Bush Avenue, Building 21-1W-10 St. Paul, MN 55144-1000 1-800-362-3550 www.3M.com/industrialtape