

3M Solutions for Web Processing

From
paper
to press
& package



Productivity and performance
throughout paper mills and
printing plants



Solutions to keep the work flowing and your customers coming back

For decades, 3M products have been at work in paper mills and printing plants helping to improve the quality of the work that goes out and the efficiency of how it gets done. From paper web splicing to plate mounting and packaging the finished job, you can rely on 3M for solutions and service throughout an operation.

For your convenience in evaluating 3M products, this catalog is organized by plant function and work flow. You'll also find products effective just about anywhere for maintenance and worker safety.

Solutions through Service –

3M representatives are located throughout the United States, Canada, and other countries for product assistance.



2



3



4

Table of Contents

Pressroom Systems

3M™ Flexographic Plate Mounting Systems	4-7
Plate Edge Sealing	8-9
Other Mounting Essentials	9
3M™ Splicing Systems	10-13
3M™ Non-Repulpable Splicing Tapes	11-12
3M™ Repulpable Splicing Tapes for Printing	13
3M™ Splicing Aids	14
3M™ Web Handling Systems	15

Converting and Bindery

Scotch® ATG Adhesive Systems	16
3M™ Extended Liner Tapes	17
3M™ Polyester Tapes for Edging and Reinforcing	18
Scotch® Tear Strip Tapes	18

Paper Making and Converting

3M™ Repulpable Tapes for Paper Mills and Paper Converters	19-20
---	-------

Packaging and Shipping

Scotch® and Tartan™ Box Sealing Tapes	21
Scotch® Manual Dispensers	22
3M-Matic™ Case Sealers	23

Maintenance and Safety

3M™ Aerosol Products	24
3M™ Duct Tapes and Cloth Tapes	25
3M™ Masking Tapes	26
3M™ Scotch-Weld™ Threadlockers	27
3M™ Scotch-Weld™ Concrete Repair Products	27
3M™ Vinyl Tapes	28
3M™ Safety-Walk™ Cushion Matting	29
3M™ Folded Sorbent	29
3M™ Clean-Walk Mats	30

Numerical Table of Contents

Product Number	Page	Product Number	Page	Product Number	Page	Product Number	Page	Product Number	Page
94	9	901	20	3743	21	9740	10, 11	E1715H	5, 6
200	26	903	9	3762LM	8	9741	10, 11	E1720	5, 6
200a3	23	905	10, 13, 20	3776LM	8	9741R	10, 11	E1720H	5, 6
203	26	906	20	3779	21	9785	8	E1815	4, 6
231	26	908	16	3792LM	8	9913	8	E1815H	4, 6
231A	26	910	20	3798LM	8	9916	8	E1820	4, 6
235	14	913	10, 13	3900	25	9921	8	E1820H	4, 6
255	21	920XL	17	3939	25	9922	8	E1840	4, 6
302	21	924	16	5401	15	9925XL	17	E1840H	4, 6
305	21	926	16	5421	15	9926XL	17	E1860	4, 6
311	21	927	7	5423	15	9934XL	17	E1860H	4, 6
313	21	928	16	5425	15	9940	8	E1915	5, 6
353	21	950	7	5480	15	9960	20	E1915S	5, 6
355	21	969	16	5481	15	9969	20	E1915H	5, 6
369	21	976	16	5490	15	5-Way Penetrant	24	E1915HS	5, 6
371	21	987	16	5491	15	Accu-Glide		E1920	5, 6
372	21	1015	5, 6	5700	28	Taping Head	23	E1920H	5, 6
373	21	1015-15	6	5702	28	Adhesive Remover	24	E1920S	5, 6
375	21	1015M	5, 6	5830	30	C22	22	E1920HS	5, 6
396	10, 12	1020	5, 6	5836	30	Citrus Base Cleaner	24	H122	22
405	20	1020-20	6	5840	30	C-FL550DD	29	H123	22
411	4, 6	1020M	5, 6	5842	30	DP600	27	H128	22
411DL	4, 6	1020R	5, 6	6997-1	27	E1015	5, 6	H129	22
412	4, 6	1040	5, 6	8056	10, 11	E1015H	5, 6	H180	22
412DL	4, 6	1060	5, 6	8401	10, 12	E1015-15	6	H183	22
413DL	4, 6	1115	5, 7	8402	10, 12	E1015-15H	6	H190	22
414DL	4, 6	1115-15	7	8403	10, 12	E1020	5, 6	H192	22
415	7, 10, 11	1120	5, 7	8411	18	E1020H	5, 6	H320	22
425	9	1120-20	7	8412	18	E1020-20	6	H1755	22
442KW	7	1120K	5, 7	8621	18	E1020-20H	6	LT Applicator	8
447	4, 6	1640	9	8624	18	E1040	5, 6	LTQ Applicator	8
447DL	4, 6	1720M	5, 6	8626	18	E1040H	5, 6	Multipurpose 27	24
450EK	17	1815M	4, 6	8979	25	E1060	5, 6	R3127	10, 13, 20
450XL	17	1820M	4, 6	8992	12	E1060H	5, 6	R3187	10, 13, 19, 20
465	10, 11	1900	25	8992L	12	E1115	5, 7	R3227	10, 13, 20
465XL	17	1915M	5, 6	9030	14	E1115H	5, 7	R3287	20
466XL	17	1920M	5, 6	9038	10, 13	E1115-15	7	R9990	10, 13
469	10, 11	1920S	5, 6	9038W	13	E1115-15H	7	R9993	10, 13, 19, 20
471	9, 28	2205	7	9069	10, 13, 20	E1120	5, 7	R9996	10, 13, 20
472	28	2205FL	7	9103	20	E1120H	5, 7	R9999	20
476XL	17	2209	26	9114	19, 20	E1120-20	7	RTA-500	19
477	28	2214	26	9415PC	14	E1120-20H	7	Silicone Lubricant	24
600	27	2307	26	9420	10, 11	E1215	5, 7	Sticker &	
700	16	2510	14	9425	14	E1215H	5, 7	Marker Remover	24
700r	23	2515	10, 12	9464	10, 11	E1220	5, 7	Super 77	24
714	16	2517	10, 12	9497	10, 11	E1220H	5, 7	TL22	27
752	16	2525	10, 12	9498	10, 11	E1315	5, 6	TL42	27
764	28	2526	10, 12	9499	10, 11	E1315H	5, 6	TL62	27
766	28	2693	26	9500PC	7	E1320	5, 6	TL71	27
767	28	2929	25	9576	10, 11	E1320H	5, 6	TL72	27
810	9	3199	21	9725	8	E1515	5, 6	TL90	27
850	9, 10, 12	3270	29	9737	10, 11	E1515H	5, 6		
856	18	3270E	29	9737R	10, 11	E1520	5, 6		
900	20	3732	21	9738	10, 11	E1520H	5, 6		
900B	20	3734	21	9738R	10, 11	E1715	5, 6		

3M™ Flexographic Plate Mounting Systems

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

For halftone work where dot gain is a concern, a softer tape optimizes reproduction. When solids and dots share the plate, a combination tape can properly balance the result. When your customer requires solid ink and crisp lines, you'll want a firm, high density mounting tape.

From the wide 3M selection, you can find the adhesives, foams, and thicknesses for the print quality that customers demand and expect. You'll also find choices for mounting ease, positioning accuracy, and clean removal.



E-Series Tapes with Easy Mount Adhesive

On easy with reduced air entrapment

Unlike flat or pebbled liners, E-Series liners are crosshatched. This imprints unique microchannels into the adhesive that allow air to flow throughout the adhesive. Air bubbles disappear from between the tape and plate, and between the tape and cylinder or sleeve for virtually bubble-free mounting. Setup is faster with smoother surfaces for cleaner print quality and higher productivity.

Stays on with reduced edge-lifting

Exclusive 3M plate-side adhesive maintains tight contact. Saves the prep time, downtime, and labor of sealing plate edges.

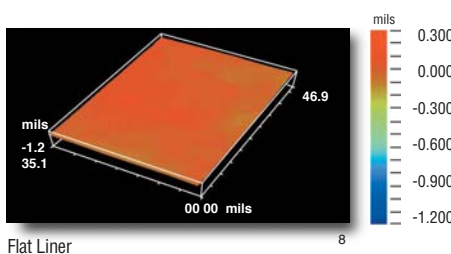
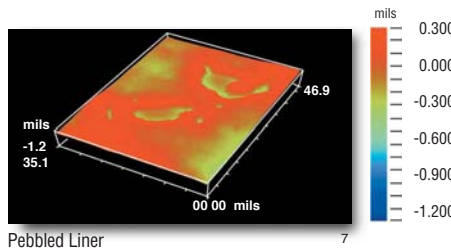
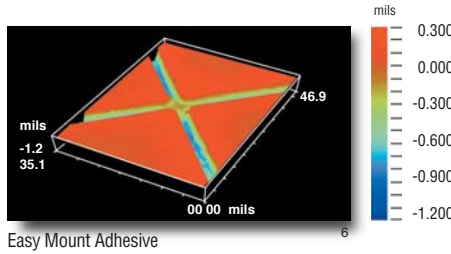
Peels off easily to reduce plate damage

Peels off so easily you can virtually eliminate plate back treatment. You're less likely to damage plates, so you save time, labor, and money.

Bubble-free print quality

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

Microscopic view of adhesive surface measured with interferometer



EH-Series Adhesive to hold the edge on small diameter cylinders

3M EH-Series Tapes combine the air-release of 3M E-Series Tapes with higher plate side adhesion to resist edge lifting on cylinder diameters as small as 2".

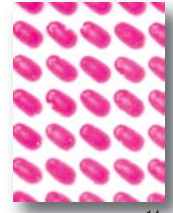


Solid Printing

400 Series Tapes: Solid

18 Series: Firm

10% HIGHLIGHT



40% MIDTONE



REVERSE



100% SOLID



Uniform coverage of solids when halftone dot reproduction is not critical.

When plate contains mostly solids in a combination of solid and halftone images.

- 447, 447DL
- 411, 411DL, 413DL
- 412DL, 414DL

- E1815, E1815H, 1815M
- E1820, E1820H, 1820M
- E1840, E1840H
- E1860, E1860H

Combination Printing

Process Printing

17 Series:
Medium Firm

15 Series:
Medium

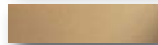
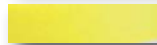
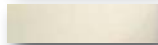
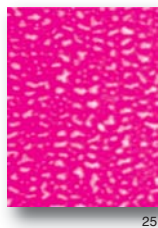
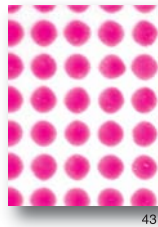
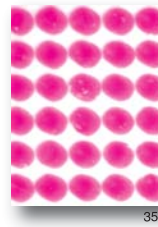
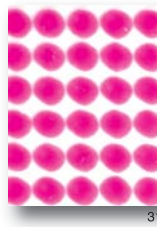
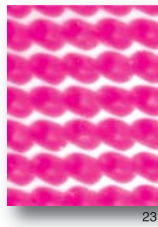
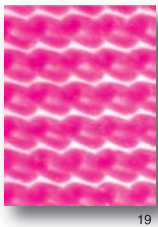
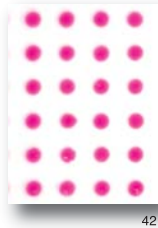
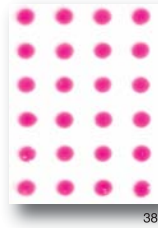
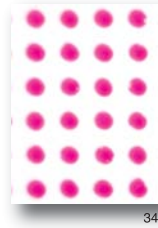
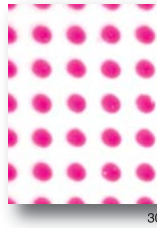
10 Series:
Standard

13 Series:
Medium Soft

19 Series:
Light Medium

12 Series:
Light

11 Series:
Process



When plate contains slightly more solids in a combination of solid and halftone images.

For high speed printing with fine type reverses and expanded color gamut.

When solid and halftone areas are equally important.

For high speed printing of combination work when halftone areas exceed solid.

Improved tone reproduction at high speed when process and halftone images predominate.

Low density maximizes dot reproduction for high speed process and screen printing.

Low density maximizes dot reproduction for high quality process work and screen printing.

E1715, E1715H
E1720, E1720H,
1720M

E1515, E1515H
E1520, E1520H

E1015, E1015H, 1015,
1015M
E1020, E1020H, 1020,
1020M, 1020R
E1040, E1040H, 1040
E1060, E1060H, 1060

E1315, E1315H
E1320, E1320H

E1915, E1915H,
E1915S, E1915HS
1915M
E1920, E1920H,
E1920S, E1920HS,
1920M, 1920S

E1215, E1215H
E1220, E1220H

E1115, E1115H,
1115
E1120, E1120H,
1120, 1120K

3M™ Flexographic Plate Mounting Systems Selection Guide

	Product Number	Application Thickness Inches (mm)	Manufactured Target Thickness Inches (mm)	Description	Plates	Cylinders	Color	Features
3M™ Solid Printing Tapes	400 Series 3M™ Flexomount™ Plate Mounting Tapes (Solid Printing)							
	411DL, 411	0.015 (0.38)	0.015 (0.38)	Gray double coated tape with a soft rubber adhesive on each side of a vinyl carrier. Available in single and double liner.	P/R	SS/SL	Gray	Gray vinyl tapes with high adhesion. Helps reduce edge lifting. Helps minimize pin holing on solid work.
	412DL, 412	0.020 (0.51)	0.020 (0.51)		P/R	SS/SL	Gray	
	447DL, 447	0.010 (0.25)	0.010 (0.25)		P/R	SS/SL	Gray	
	413DL	0.015 (0.38)	0.015 (0.38)	Black double coated tape with a firm rubber adhesive on each side of a vinyl carrier. Available only in double liner.	P/R	SS/SL	Black	Black vinyl - lower adhesion. Higher temperature and solvent resistance. Helps minimize pin holing on solids.
414DL	0.020 (0.51)	0.020 (0.51)	P/R		SS/SL	Black		
3M™ Combination Printing Tapes	18 Series 3M™ Cushion-Mount™ Plus Plate Mounting Tapes (Firm Combination Printing)							
	E1815H, E1815, 1815M	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	Blue	Better solid ink density than the standard combination printing tapes. Clean removal from plate and print cylinder.
	E1820H, E1820, 1820M	0.020 (0.51)	0.022 (0.56)		P	SS/SL	Blue	
	E1840, E1840H	0.040 (1.02)	0.042 (1.07)		P	SS/SL	Blue	
	E1860, E1860H	0.060 (1.52)	0.062 (1.57)		P	SS/SL	Blue	
	17 Series 3M™ Cushion-Mount™ Plus Plate Mounting Tapes (Medium Firm Combination Printing)							
	E1715H, E1715	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	Teal	Quality results when plate contains slightly more solids in a combination of solid and halftone images.
	E1720H, E1720, 1720M	0.020 (0.51)	0.022 (0.56)		P	SS/SL	Teal	
	15 Series 3M™ Cushion-Mount™ Plus Plate Mounting Tapes (Medium Combination Printing)							
	E1515, E1515H	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	Purple	High quality, medium combination print. Adhesive removes cleanly from the print plate and the print cylinder.
E1520, E1520H	0.020 (0.51)	0.022 (0.56)	P		SS/SL	Purple		
10 Series 3M™ Cushion-Mount™ Plus Plate Mounting Tapes (Standard Combination Printing)								
E1015H, E1015, 1015, 1015M	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	White	Most versatile 3M™ Cushion-Mount™ Plus Tapes. Effectively prints most types of flexographic printing.	
E1015-15H, E1015-15, 1015-15	0.015 (0.38)	0.015 (0.38)		P	SS/SL	White		
E1020H, E1020, 1020, 1020M	0.020 (0.51)	0.022 (0.56)		P	SS/SL	White		
1020R	0.020 (0.51)	0.022 (0.56)		P/R	SS/SL	White		
E1020-20H, E1020-20, 1020-20	0.020 (0.51)	0.020 (0.51)		P	SS/SL	White		
E1040H, E1040, 1040	0.040 (1.02)	0.042 (1.07)		P	SS/SL	White		
E1060H, E1060, 1060	0.060 (1.52)	0.062 (1.57)		P	SS/SL	White		
13 Series 3M™ Cushion-Mount™ Plus Plate Mounting Tapes (Medium Combination Printing)								
E1315H, E1315	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	Yellow	High quality, medium-soft combination print. Adhesive removes cleanly from the print plate and the print cylinder.	
E1320H, E1320	0.020 (0.51)	0.022 (0.56)		P	SS/SL	Yellow		
19 Series 3M™ Cushion-Mount™ Plus Plate Mounting Tapes (Soft Combination Printing)								
E1915, E1915H, 1915M	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	Pink	Soft support improves tone reduction when process and halftone images predominate.	
E1915HS, E1915S	0.015 (0.38)	0.017 (0.43)		P	SL	Pink		
E1920H, E1920, 1920M	0.020 (0.51)	0.022 (0.56)		P	SS/SL	Pink		
E1920S, 1920S, E1920HS	0.020 (0.51)	0.022 (0.56)		P	SL	Pink		

DL - Double Liner E - Air Release Standard Plate Side Adhesion EH - Air Release High Plate Side Adhesion M - Modified Plate Side Adhesion P - Photopolymer Plates R - For Rubber Plates S - High Adhesion on Cylinder/Sleeve Side SL - Sleeve SS - Stainless Steel Cylinder

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Flexographic Plate Mounting Systems Selection Guide (continued)

	Product Number	Application Thickness Inches (mm)	Manufactured Target Thickness Inches (mm)	Description	Plates	Cylinders	Color	Features
3M™ Comb. Tapes (cont.)	12 Series 3M™ Cushion-Mount™ Plus Plate Mounting Tapes (Light Combination Printing)							
	E1215H, E1215	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	Orange	High quality, light combination print. Adhesive removes cleanly from the print plate and the print cylinder. Air release on both adhesive surfaces.
	E1220H, E1220	0.020 (0.51)	0.022 (0.56)		P	SS/SL	Orange	
3M™ Process Printing Tapes	11 Series 3M™ Cushion-Mount™ Plus Tapes (Process Printing)							
	E1115H, E1115, 1115	0.015 (0.38)	0.017 (0.43)	Differential acrylate adhesive system on each side of a foam carrier, protected by a release liner on one side.	P	SS/SL	Tan	Better tone reproduction than the standard combination printing tapes. Clean removal from plate and print cylinder.
	E1115-15H, E1115-15, 1115-15	0.015 (0.38)	0.015 (0.38)		P	SS/SL	Tan	
	E1120H, E1120, 1120	0.020 (0.51)	0.022 (0.56)		P	SS/SL	Tan	
	E1120-20H, E1120-20, 1120-20	0.020 (0.51)	0.020 (0.51)		P	SS/SL	Tan	
	1120K	0.020 (0.51)	0.022 (0.56)		P	SL	Tan	

DL - Double Liner E - Air Release Standard Plate Side Adhesion EH - Air Release High Plate Side Adhesion K - High Sleeve Side Adhesion for Composite Sleeves
M - Modified Plate Side Adhesion P - Photopolymer Plates R - For Rubber Plates S - High Adhesion on Cylinder/Sleeve Side SL - Sleeve SS - Stainless Steel Cylinder

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.



46



47

3M™ Thin Tapes

When cushioning is unnecessary, these tapes can mount both rubber and photopolymer plates. Some are also repositionable.

Product Number	Tape Thickness inches (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.		X	X		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.		X	X		Plate mounting applications requiring a thin tape to bond rubber or photopolymer plates to metal cylinders.
927	0.002 (0.05)	Acrylic adhesive transfer tape.		X		X	Corrugated plate mounting applications where repositionability and removability are not required.
950	0.005 (0.13)	Acrylic adhesive transfer tape.		X			Corrugated plate mounting applications where repositionability and removability are not required.
2205	0.005 (0.13)	Double coated film tape with differential acrylic adhesive using a polyester film carrier on a polycoated kraft paper liner.		X			Adhesives designed specifically for corrugated flexo mounting. Removes cleanly and easy to reposition.
2205FL		Same as 2205 but with carrier on a polycoated polyester film liner.					
9500PC	0.005 (0.13)	High performance acrylic adhesive on each side of a polyester carrier.	X		X		Thin tape plate mounting applications requiring higher performance than 442KW Tape.

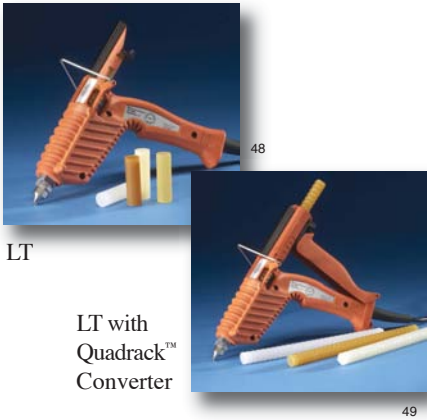
All tapes listed on this chart have been used successfully on non-compressible sleeves.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Plate Edge Sealing

3M™ Scotch-Weld™ Hot Melt Bonding Systems

Easily apply 3M™ Scotch-Weld™ Hot Melt Adhesives 3762LM, 3776LM, 3792LM, or 3798LM with a 3M™ Scotch-Weld™ Hot Melt Applicator LT to seal plate edges against ink and solvent penetration that can cause edge lifting.



3M™ Scotch-Weld™ Hot Melt Applicator	Weight	Output lb/hr	Temperature	Adhesive Size	Accessories (keyed below)
				dia. x length	
LT	10.0 oz.	2.6	265°F (129°C)	5/8 x 2"	1 2 3 4
LT with Quadrack™ Converter	13.8 oz.	2.6	265°F (129°C)	5/8 x 8"	1 4



Tip No.	Description	1
9913	2 Hole Spreader (1/4" hole span)	54
9916	3 Hole Spreader	
9921	.090" Fluted Tip	
9922	.063" Fluted Tip	
9940	.125" Fluted Tip	55
9725	Mini Extension Tip .072" Opening	
9785	.070" Tapered Aluminum Extension	



A general purpose tip (9921) is supplied with each 3M™ Scotch-Weld™ Applicator. Optional tips are available to increase productivity.

Increase capacity and ease of operation with Quadrack Converter and Palm Trigger.

Heavy-Duty Benchstand for added convenience.

Product Information

3M™ Scotch-Weld™ Hot Melt Adhesives (Color)	Features Application Ideas	Sizes	Heat Resistance (°F/°C)	Peel Strength PIW ⁽¹⁾ 72°F (22°C)	Shear Strength PSI ⁽²⁾ 72°F (22°C)	Open Time 1/8" Bead (sec) ⁽³⁾	
Low Melt Technology: Applied 250° - 270°F (127° - 132°C)	3762LM* Lt. Amber	Economical, fast setting general purpose	5/8" x 8" 5/8" x 2"	130/54	6	480	25
	3776LM Tan	Bonds variety of materials	5/8" x 8"	140/60	9	600	40
	3792LM* Clear	Clear, multi-purpose	5/8" x 8" 5/8" x 2"	140/60	13	350	40
	3798LM Clear	Gummy glue removable adhesive	5/8" x 2"	120/49	N/A	N/A	30

* Also available in bulk. (1) On canvas (2) On Douglas Fir (3) 1/8" semicircular bead, Douglas Fir to Douglas Fir.
Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Plate Edge Sealing (continued)

Multiple options with 3M™ Single Coated Tapes

3M™ Aluminum Foil Tape 425, 3M™ Vinyl Tape 471, or 3M™ Polyester Film Tape 850 are pressure sensitive adhesive tapes that bond on contact to seal plate edges against ink and solvent penetration that can cause edge lifting.



To seal plate edges against ink and solvent penetration that can weaken mounting tape strength, 3M™ Aluminum Foil Tape 425 (left) and 3M™ Vinyl Tape 471 (right) apply easily, bonding on contact and conforming over the plate edge.

Product Information

Product/Color	Tape Structure (Backing/Adhesive)	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. (N/100 mm)	Elongation at Break %	Temperature Range °F (°C)	Comments
ASTM Test Method:		D-3652	D-3652	D-3330	D-3759	D-3759		
Premium Performance Aluminum Foil Tape								
425	Aluminum/Acrylic	2.8 (0.07)	4.6 (0.12)	47 (51)	30 (525)	8	-65 to 300°F (-54 to 149°C)	Most versatile aluminum tape. ^{1,2,3,4}
Premium Performance Vinyl Tape								
471/Various Colors	Vinyl/Rubber	4.1 (0.10)	5.2 (0.13)	23 (25)	16 (280)	130	40 to 170°F (4 to 77°C)	Conformable and clean removal. Black, Blue, Brown, Green, Orange, Purple, Red, Transparent, White, Yellow.
General Industrial Tapes								
850/Transparent	Polyester/Acrylic	0.9 (0.02)	1.9 (0.05)	30 (33)	28 (491)	120	-60 to 300°F (-50 to 150°C)	Splicing, holding, sealing, highly transparent.
850/White/Red/Blk	Polyester/Acrylic	0.9 (0.02)	1.9 (0.05)	30 (33)	28 (491)	120	-60 to 300°F (-50 to 150°C)	Splicing, holding, decorating, color-coding, sealing.
850/Silver/Gold	Metallic Polyester/Acrylic	0.9 (0.02)	1.9 (0.05)	42 (46)	28 (491)	120	-60 to 300°F (-50 to 150°C)	Splicing, holding, decorating, color-coding, sealing.

¹ Can be qualified to L-T-80B, MIL-T-23397B II ² Meets U.L., Class L File R 7311 ³ F.A.R.25.853 (a) ⁴ Meets U.L.746C File E122798

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Other Mounting Essentials



3M™ Cylinder Mount Build-Up Tape 1640

For use with any 3M flexographic tape to add 0.040" thickness. Facilitates use of thinner printing plates.

58



3M™ Primer 94

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



3M™ Hand Roller 903

For virtually air-free mounting, helps air bleed through and out of the adhesive microchannels in 3M™ Flexographic Plate Mounting Tapes

Scotch® Magic Tape 810

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



61

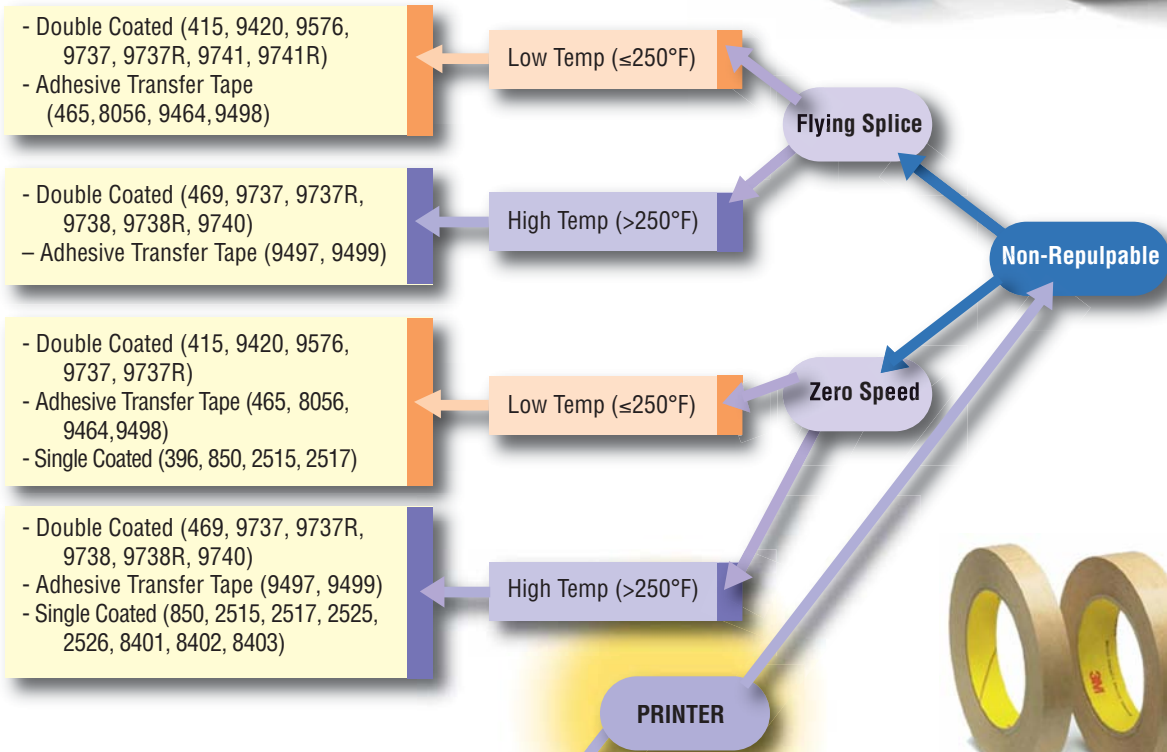
3M™ Splicing Systems for Printing

Bringing it all together for flying and zero speed splices, high temp, low temp, non-repulable, and repulable

On the following pages you'll find the many 3M choices to meet splicing requirements for coated and uncoated paper, newsprint, kraft, films, and foils. Select from single coated, double coated, and adhesive transfer tapes.

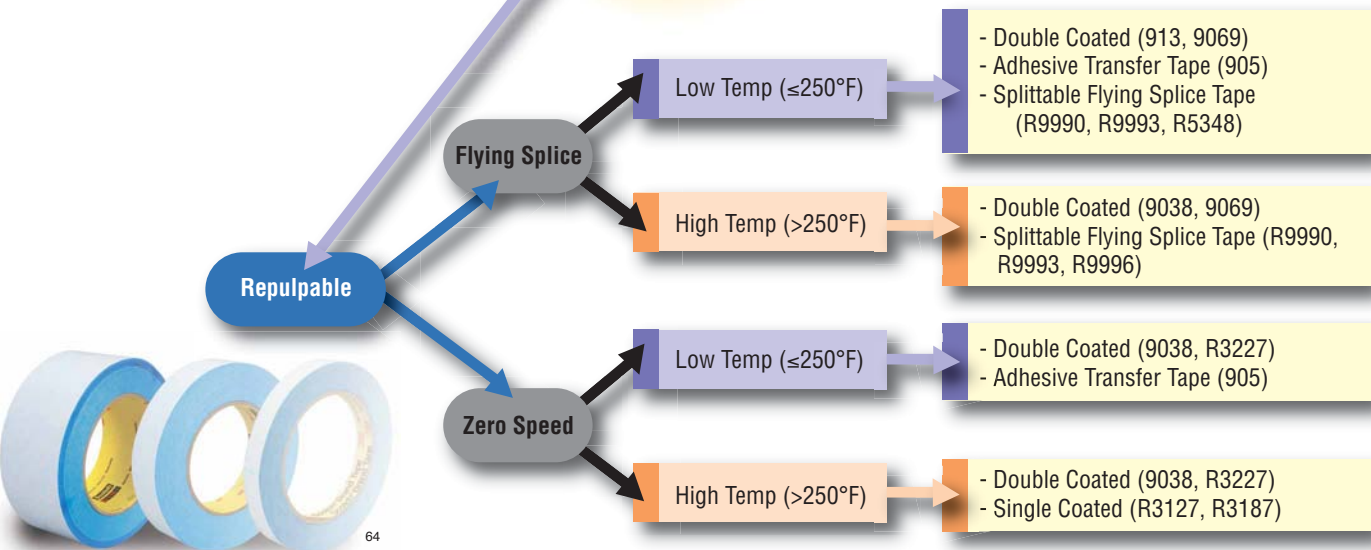


62



63

3M™ Splicing Tapes Selection Guide



64

3M™ Non-Repulpable Splicing Tapes

Adhesive transfer and double coated tapes for reliable overlap splices

3M™ Adhesive Transfer Tapes

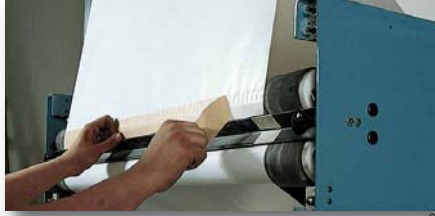
For an overlap splice, simply press the adhesive side of the tape to one of the surfaces to be spliced. Peel off the liner and you have a neat strip of adhesive for immediate bonding. Select from a range of adhesive properties.

3M™ Double Coated Tapes

Adhesive is on both sides of a carrier that increases dimensional stability of the adhesive for easy handling and application in making overlap splices.



Versatile 3M™ Performance Flatback Tape 2525 provides high visibility for holding many materials, edge banding, and splicing.



High tack 3M™ Adhesive Transfer Tape 465 grabs fast for flying and zero speed splices, resists up to 250°F for 20 seconds.



With high tack and good shear strength, 3M™ Double Coated Tape 9420 splices plastic film quickly and securely. Red carrier identifies the splice for later removal.

Product Information

Adhesive Family	Product Number	Tape Thickness w/o liner mils (mm)	Description	Temperature Resistance		Solvent Resistance	Relative Adhesion		Application Ideas
				Minutes Hours	Days Weeks		HSE	LSE	
Adhesive Transfer Tapes									
400 Acrylic	465	2.0 (0.05)	<ul style="list-style-type: none"> High tack Excellent adhesion to most paper stocks Flexible to -60°F 	250°F (121°C)	180°F (82°C)	Medium	Med.	Low	Paper splicing and general office and commercial joining. Validation labels and parking permits on car windows. Splicing tape.
	9464	2.0 (0.05)	<ul style="list-style-type: none"> Pink tinted adhesive 	180°F (82°C)	180°F (82°C)				
	9498	2.0 (0.05)	<ul style="list-style-type: none"> Industrial-grade adhesive transfer tape 						
430	9497	2.0 (0.05)	<ul style="list-style-type: none"> Pink • High temperature splicing 	350°F (177°C)	250°F (121°C)	Medium	Med.	Low	High temperature, zero speed splicing.
	9499	2.0 (0.05)	<ul style="list-style-type: none"> Clear version of 9497 						
Specialty	8056	5.0 (0.13)	<ul style="list-style-type: none"> High tack, for hard to bond surfaces 	150°F (65°C)	120°F (49°C)	Low	High	Med.	Bonding plasticized vinyl gaskets, decals and moldings. Splicing photographic papers.
Double Coated Tapes									
400 Acrylic	415	4.0 (0.1)	<ul style="list-style-type: none"> High tack adhesion to paper and many other surfaces • PET carrier 	180°F (82°C)	150°F (65°C)	Medium	Med.	Low	Splice papers, films and foils.
	9420	4.0 (0.1)	<ul style="list-style-type: none"> 415 with a 0.5 mil red PET carrier 						
	9576	4.0 (0.1)	<ul style="list-style-type: none"> Transparent PP carrier 	165°F (75°C)	125°F (52°C)				
330	469	5.5 (0.14)	<ul style="list-style-type: none"> High temp, high tack, light red Tissue carrier 	350°F (177°C)	200°F (93°C)	Medium	High	Med.	High speed flying splices.
900 Misc.	9737	4 (0.1)	<ul style="list-style-type: none"> Aggressive and versatile for many surfaces 	300°F (149°C)	260°F (127°C)	High	Med.	Low	Double coated splicing tape.
	9737R	4 (0.1)	<ul style="list-style-type: none"> Same as 9737 in Red 						
	9738	5.6 (0.14)	<ul style="list-style-type: none"> Aggressive and versatile or many surfaces 						
	9738R	5.6 (0.14)	<ul style="list-style-type: none"> Same as 9738 in Red 						
	9740	4 (0.1)	<ul style="list-style-type: none"> High temperature performance with high peel, tack, and shear for splicing applications 	425°F (218°C)	N/A	Medium	Med.	Low	Double coated splicing tape.
	9741	7 (0.18)	<ul style="list-style-type: none"> Thick, adheres to a wide variety of substrates 	200°F (93°C)					
9741R		<ul style="list-style-type: none"> Same as 9741 in Red 							

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Non-Repulpable Splicing Tapes (continued)

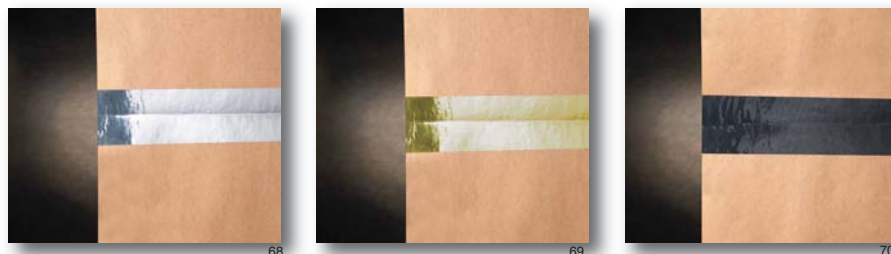
Polyester and flatback crepe tapes for high strength butt and overlap splices

3M™ Polyester Tapes

These high strength single-coated tapes provide thin caliper with some of the highest tensile strengths available for overlap and butt splices.

3M™ Flatback Crepe Tapes

With high strength paper backings, these single-coated tapes provide high machine direction tensile strength yet can be conveniently torn off the roll by hand for application ease.



For marking splice location, 3M™ Polyester Tape 850 is available in red, black, white, silver, and gold. Transparent is also available to blend with the web stock. Pressure sensitive acrylic adhesive grabs on contact and holds butt splices securely. High tensile strength backing resists web handling stresses.



For splicing paper or fabric, 3M™ Flatback Tapes provide high machine direction tensile strength and easy cross tear. Rubber adhesive holds securely on materials ranging from kraft paper to nonwoven fabric.

Product Information

Product	Tape Structure		Total Thickness mils (mm)	Adhesion oz./in. (N/100 mm)	Tensile Strength lbs./in. width (N/100 mm)	Elongation at Break %	Temperature Range °F (°C)	Comments
	Backing	Adhesive						
ASTM Test Method:			D-3652	D-3652	D-3330	D-3759	D-3759	
Single Coated Tapes (Polyester)								
General Industrial Tapes								
850/Transparent	Polyester	Acrylic	1.9 (0.05)	30 (33)	28 (491)	120	-60 to 300°F (-51 to 148°C)	Splicing, holding, sealing, highly transparent.
850 White/Red/Black	Polyester	Acrylic	1.9 (0.05)	30 (33)	28 (491)	120		Splicing, holding, decorating, color-coding, sealing.
850/Silver/Gold	Metallic Polyester	Acrylic	1.9 (0.05)	42 (46)	28 (491)	120		Splicing, holding, decorating, color-coding, sealing.
8401/Cream	Polyester	S/R Blend	1.9 (0.05)	22 (24)	34 (597)	100		Splicing release coated papers.
Release Surface and Liner Splicing Tapes								
396/Transparent	Metallic Polyester	Rubber	4.1 (0.10)	170 (190)	43 (753)	140	40 to 200°F (4 to 93°C)	Adhesion to low energy surfaces.
8402/Green	Polyester	Silicone	1.8 (0.05)	24 (26)	33 (578)	120	-60 to 425°F (-50 to 218°C)	Adheres well to silicone.
8403/Green	Polyester	Silicone	2.3 (0.06)	27 (30)	44 (772)	150		Adheres well to silicone.
8992/8992L/Green	Polyester	Silicone	2.0 (0.05)	33 (36)	48 (840)	83	-60 to 400°F (-50 to 200°C)	Powder coat masking, economical high temperature applications.
Single Coated Tapes (Crepe Flatback)								
2515	Tan Flat Stock Paper	Rubber	6.7 (0.17)	55 (60)	36 (630)	3	Up to 200°F Up to 30 min.	General purpose taping, holding and bundling applications.
2517	Tan Flat Stock Paper	Rubber	6.4 (0.16)	74 (80)	36 (630)	4	Up to 300°F Up to 1 hour	Excellent splicing, holding and bundling applications.
2525	Orange Flat Stock Paper	Rubber	9.5 (0.24)	69 (75)	49 (858)	2	Up to 300°F Up to 1 hour	Premium splicing, holding and bundling applications.
2526	White Flat Stock Paper	Rubber	9.8 (0.242)	69 (75)	50 (858)	4	Up to 300°F Up to 1 hour	Excellent adhesion and strength for textile applications.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Repulpable Splicing Tapes for Printing

Choices to keep production at full speed

From core starting to roll closing/tabbing and all the splices in-between, these totally repulpable single and double coated tapes offer you the shear strength, high tack, and heat resistance necessary for dependable productivity.

Backings and adhesives are engineered for optimum strength for every type of splice: flying, overlap, butt, and general purpose.



74

A new generation of 3M™ Repulpable Tapes designed with greater holding power, featuring a new high tack adhesive technology that's long lasting and fast grabbing. Ideal for core starting, roll closing, splicing and general purpose tabbing.



75

With 3M™ Repulpable Splicing System R9993, an all-in-one system replaces a combination of nose tabs, hold down tape, adhesive and splicing tape with a simple high strength splice.

Product Information

Type	Product	Color	Comments	Tape Thickness mils(mm)	Tape Structure Backing/Adhesive	Liner		Heat Resistance (F/C)	FDA Compliant*
						Type	Thickness mils (mm)		
Double Coated	905	Clear	Thinnest, fiber reinforced adhesive transfer tape.	2.0 (0.05)	None/Repulpable	Paper	3.3 (0.08)	250 (120)	X
	913	Blue	Paster tape for splices at newspaper printers.	3.0 (0.075)	Tissue/Repulpable	Paper	3.2 (0.08)	400 (200)	
	R3227	Blue/White	Double coated core starting, temporary splicing.	3.0 (0.075)	Tissue/Repulpable	Paper	3.2 (0.08)	350 (180)	X
	9038	Blue	General purpose plus flying splice for the commercial printers and corrugators.	3.0 (0.075)	Tissue/Repulpable	Paper	3.2 (0.08)	350 (180)	X
	9038W	White							
	9069	Blue	Excellent for newsprint or directory stock.	3.0 (0.075)	Tissue/Repulpable	Paper	3.2 (0.08)	400 (200)	
Single Coated	R3127	White/ Kraft/Blue	Single coated core starting, closing, butt splicing.	4.5 (0.11)	Paper/Repulpable	Paper	4.5 (0.11)	350 (180)	X
	R3187	Blue/White/ Kraft/ Black	Bleached extensible kraft coated with high tack adhesive.	7.5 (0.19)	Paper/Repulpable	None	None	350 (180)	X
Splittable Flying Splice	R9990	Blue	Wide range of paper grades and converted webs for automatic inductively sensing.	3.1 (0.08)**	Metalized Paper/ Repulpable Paper	Paper	3.1 (0.08)	400 (200)	
	R9993	Blue	All in one tabbing and splicing tape for a wide range of heat set printing application	2.5 (0.06)**	Paper/Repulpable	Paper	3.1 (0.08)	400 (200)	
	R5348***	Blue	Premium all in one tape for newsprint, rotogravure, and most low heat applications.	2.5 (0.06)	Paper/Repulpable	Paper	3.1 (0.08)	300 (150)	

* FDA Indirect Food Additive: This product complies with regulations for repulpable tape (see sections for possible limitations) which may subsequently become components of paper and paper board food packaging as described in 21 CFR 176.170 and 176.180.

** Reported tape thickness is the caliper of the splice as it passes through coating and printing operations.

*** Broadest temperature performance. Works well in low temperature environments.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

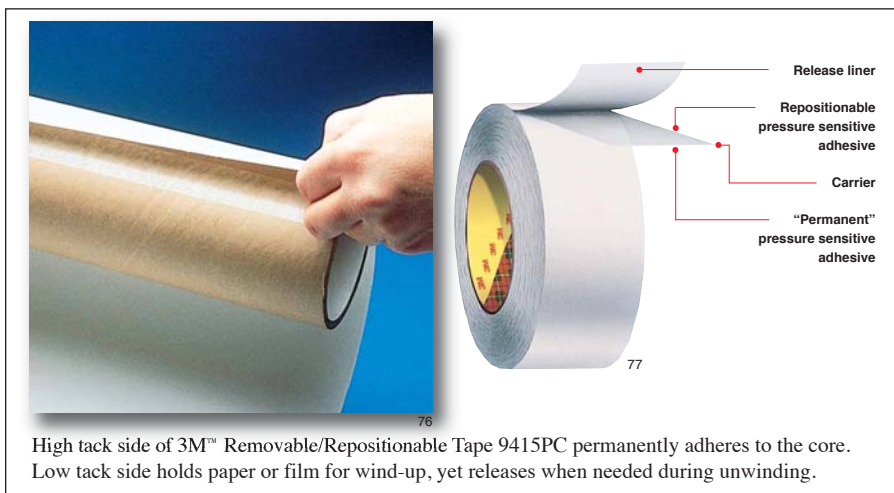
3M™ Splicing Aids

Technology for knife cut signaling, core starting, and more

Building on the wide variety of adhesives and backings, 3M has developed specialized tapes for splicing and other web process aids.

For example, black crepe paper tape conforms to the roll and signals the knife cut during the splicing process.

For reusing cores, double coated removable/repositionable tape features a permanent adhesive on one side of a carrier that bonds permanently to the core. Adhesive strength on the other side of the carrier holds paper and film with enough strength for reliable wind-up but easy release when unwinding.



High tack side of 3M™ Removable/Repositionable Tape 9415PC permanently adheres to the core. Low tack side holds paper or film for wind-up, yet releases when needed during unwinding.



To mark a roll with opaque black crepe tape to signal a knife cut during a splicing operation, you can select either the 5.6 mil thick 3M™ Crepe Masking Tape 2510 or the 7.0 mil thick 3M™ Photographic Light Blocking Tape 235. With conformable backing and rubber adhesive, both tapes hold securely at full operating speeds.

Product Information

Product/Color	Description	Tape Structure		Tape Thickness mils (mm)	Liner	Temperature Performance
		Backing or Carrier	Adhesive			
Single Coated Tapes						
235/Black	3M™ Photographic Light Blocking Tape	Crepe paper backing	Rubber adhesive	7.0 (0.18)	None	Up to 200°F (93°C)
2510/Black	3M™ Crepe Masking Tape for marking and light blocking	Crepe paper backing	Rubber adhesive	5.6 (0.14)	None	Up to 200° F (93°C) for up to one hour
Double Coated Tape						
9030/Blue	3M™ Repulpable Nose Tabs for quick grab to newsprint	Tissue carrier	High tack repulpable	3.0 (0.075)	Semi-bleached kraft	Up to 400°F (204°C)
9415PC	3M™ Removable/Repositionable Tape for core starting and roll tabbing	PET carrier	1000 (repositionable) adhesive on one side; 400 (permanent) on the other	2.0 (0.05)	78# PCK	Up to 180°F (82°C)
9425		UPVC film carrier	1050 (repositionable) adhesive on one side; 420 (permanent) on the other	5.5 (0.14)	58# PCK	Up to 125°F (52°C)

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

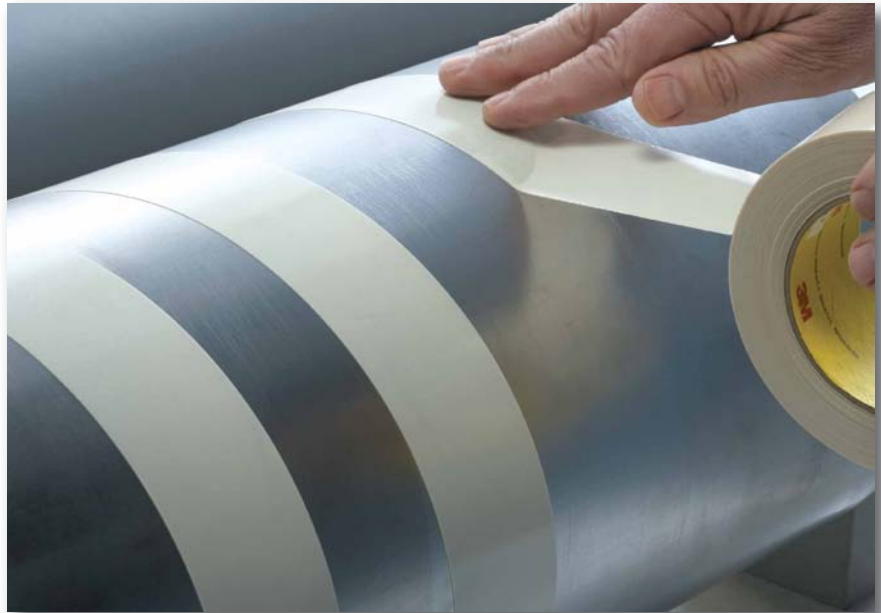
3M™ Web Handling Systems

Traction wrap to enhance friction for web handling

3M™ Traction Tape 5401 bonds on contact to rollers providing non-stick traction for enhanced friction that improves web handling.

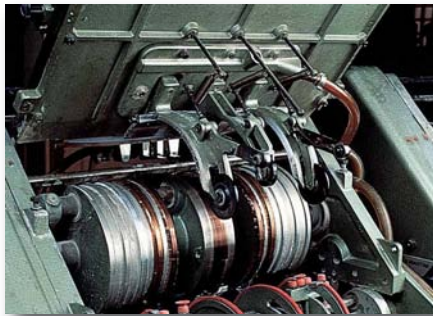
Slick surface roller wrap tapes for smoother web movement

PTFE Tapes perform at up to 400°F (204°C) and resist chemicals. For temperatures up to 225°F (107°C) and abrasion resistance, consider UHMW-PE (Ultra High Molecular Weight Polyethylene).

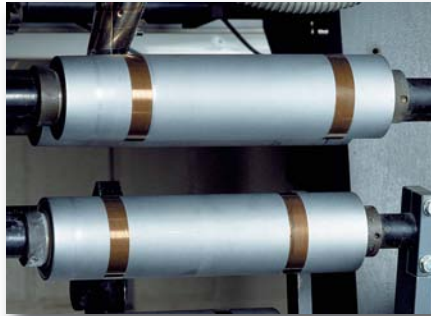


Apply quickly and easily to rollers by hand for printing, converting, and other web processing.

80



81



82

3M™ PTFE and UHMW-PE Tapes conform to rollers to provide low coefficients of friction for smoother, more reliable web movement. As a cover on web former edges, the tapes minimize friction during folding.

Product Information

Product/Color	Tape Structure (Backing/Adhesive)	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. width (N/100 mm)	Elongation at Break %	Temperature °F (°C)	Comments
ASTM Test Method:		D-3652	D-3652	D-3330	D-3759	D-3759		
PTFE Tapes (Polytetrafluoroethylene)								
Skived Film								
5480/Gray	PTFE/Silicone	2.0 (0.05)	3.7 (0.09)	20 (22)	27 (473)	140	-65 to 400°F (-54 to 204°C)	Roller wrapping tape.
5481/Gray	PTFE/Silicone	5.0 (0.13)	6.8 (0.17)	32 (35)	49 (858)	335	-65 to 400°F (-54 to 204°C)	Heavy-duty roller wrapping tape.
Extruded Film								
5490/Gray	PTFE/Silicone	2.0 (0.05)	3.7 (0.09)	27 (29)	22 (385)	150	-65 to 400°F (-54 to 204°C)	Lay-flat backing.
5491/Gray	PTFE/Silicone	5.0 (0.13)	6.7 (0.17)	35 (38)	40 (700)	200	-65 to 400°F (-54 to 204°C)	Lay-flat backing.
UHMW-PE Tapes (Ultra High Molecular Weight — Polyethylene)								
Film								
5421/Transparent	UHMW-PE/Rubber	5.0 (0.13)	6.7 (0.17)	26 (28)	30 (526)	275	-30 to 225°F (-34 to 107°C)	General purpose tape.
5423/Translucent	UHMW-PE/Rubber	10.0 (0.25)	11.7 (0.30)	26 (28)	55 (963)	300	-30 to 225°F (-34 to 107°C)	Excellent abrasion resistance.
5425/Transparent	UHMW-PE/Acrylic	3.0 (0.08)	4.5 (0.11)	30 (33)	45 (788)	100	-30 to 225°F (-34 to 107°C)	Solvent resistant adhesive.
Traction Wrap Tape								
5401/Tan	Fiberglass reinforced silicone/silicone	8 (0.2)	9.3 (0.24)	12 (13)	220 (3853)	7	Up to 300°F (150°C)	Non-stick traction surface.

Note: All UHMW-PE tapes come on a paper liner. This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Scotch® ATG Adhesive Systems

Finger touch application of pressure sensitive adhesive

Speed and convenience. That's what you get with the Scotch® ATG Applicator System for your assembly process. For example, when you want to assemble folders, a touch of the finger applies a neat strip of Scotch adhesive transfer tape to the surface for immediate grab. The tape liner automatically rewinds into the applicator as you apply the tape. You get the same productivity for many other jobs, such as those shown here.



85 For musical greeting cards, securely attach the metal audio module to the heavy paper stock and bond the edges of the fold-over flap to seal in the module.



- 1 Scotch® ATG Applicator 700 for 3/4", 1/2", and 1/4" wide tape (1/4" adapter purchased separately).
- 2 Scotch® ATG Applicator 714 for 1/4" wide tape.
- 3 Scotch® ATG Applicator 752 for 3/4", 1/2", and 1/4" wide tape (1/4" adapter purchased separately).
- 4 Scotch® ATG Applicator 3662 for 2" wide tape.



Leader permits fast, easy loading
 Pressure sensitive adhesive
 Release liner



84 Bond inserts into packaging.



86 Scotch® ATG 700 Applicator with Scotch® ATG Tape 924 makes fast work of folder assembly. Pressure sensitive adhesive bonds immediately and the folder pocket is ready to hold contents.

Product Information

Product Number	Tape Thickness w/o liner mils (mm)	Description	Temperature Resistance		Solvent Resistance	Relative Adhesion	
			Minutes Hours	Days Weeks		HSE	LSE
908	2.0 (0.05)	Acid free.	180°F (82°C)	150°F (66°C)	Medium	Medium	Medium
976	2.0 (0.05)	High tack. Adhesion to most plastics.	250°F (121°C)	150°F (66°C)	Medium	High	High
969	5.0 (0.13)						
926	5.0 (0.13)	High performance. Bonds lightweight metals.	450°F (232°C)	300°F (149°C)	High	High	High
924	2.0 (0.05)	Multipurpose. Excellent adhesion to most papers.	250°F (121°C)	180°F (82°C)	Medium	Medium	Low
928	2.0 (0.05)	Differential tack. Repositionable.	180°F (82°C)	120°F (49°C)	Medium	High/Low	Low/Low
987*	1.7 (0.040)	General purpose.	250°F (121°C)	180°F (82°C)	Medium	Medium	Low

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Relative Adhesion: HSE – High Surface Energy, LSE – Low Surface Energy

* 3M brand

3M™ Extended Liner Tapes

Versatile pressure sensitive adhesive on easy-to-remove liners

3M™ Extended Liner Tapes offer the adhesive versatility of 3M tapes but with liners wider than the adhesive. This leaves an easy-to-grab edge for convenient and easy liner removal.

With the variety of adhesives, you have a selection of performance characteristics such as high tack for coated papers and plastics, low tack for temporary attachment, high temperature resistance, and more.

Apply manually or with equipment matched to your production volume requirements.



3M™ Extended Liner Tapes are available with a release liner wider than the adhesive. This provides an easy-to-grab edge for convenient liner removal.



Depending on adhesive type, 3M™ Extended Liner Tapes are applied to envelopes, polybags, boxes, or tubes. User simply peels off liner to expose the adhesive for an immediate, secure closure.



A variety of automatic and semi-automatic equipment is available for higher volume applications. For example, apply tape to business forms, literature, bounce back and business reply cards.



Select from a variety of adhesives and liners to meet production and end use requirements.

Product Information

Adhesive Type	Product Number	Tape Thickness w/o liner mils (mm)	Liner Type	Description	Temperature Resistance		Solvent Resistance	Relative Adhesion		Application Ideas
					Minutes Hours	Days Weeks		HSE	LSE	
340	466XL	2.0 (0.05)	62# DK white with black print	<ul style="list-style-type: none"> High tack Permanent 	180°F (82°C)	150°F (65°C)	Medium	High	High	Coated papers and low surface energy (LSE) plastics. Overnight envelopes. Features an end-of-roll indicator tab for automated dispensing.
400	450EK	1.0 (0.025)	70# Extensible Kraft white without print	<ul style="list-style-type: none"> General purpose 	250°F (121°C)	180°F (82°C)	Medium	Med.	Low	Pharmaceutical outsert attachment. For applications requiring a more tear resistant liner.
	450XL	1.0 (0.025)	60# DK tan with green print							Pharmaceutical outsert attachment. General paper attachment.
	465XL	2.0 (0.05)	60# DK tan with green print							Seal flaps on overnight envelopes. Pressure sensitive edging on business forms. General commercial joining applications. For attaching materials that require more adhesive thickness. Larger outsert attachments.
	920XL	1.0 (0.025)	43# DK white with red print							Seal flaps on poly-bags and envelopes. Pressure sensitive edging on business forms, literature, photos, posters, and labels.
	9926XL	1.0 (0.025)	43# DK white with red print							Economical alternative for general paper-to-paper applications.
600	9934XL	4.0 (0.10)	60# DK tan without print	<ul style="list-style-type: none"> High tack to LSE materials 	150°F (65°C)	120°F (49°C)	Medium	High	High	P.O.P. displays. Difficult splicing applications, shelf talkers, price tags, polyethylene foam bonding, indirect food contact applications. ¹ High tack to LSE materials.
760	476XL	6.0 (0.16)	62# DK white with red print	<ul style="list-style-type: none"> High tack, double coated film 	150°F (65°C)	120°F (49°C)	Medium	High	High	Heavy-duty sealing. Mounting of promotional items. Core starting. Closure of overnight boxes, tubes and envelopes. Indirect food-contact applications. ¹
770	9925XL	2.5 (0.065)	43# DK white with black print	<ul style="list-style-type: none"> Tissue reinforced High initial adhesion to a wide variety of materials 	150°F (65°C)	100°F (41°C)	Low	Med.	Med.	General mounting. P.O.P. items. Attaching tags and labels. Core starting. Permanent bonding paper-to-paper, business forms, traffic tickets, novelty items and literature. Indirect food-contact applications. ¹

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

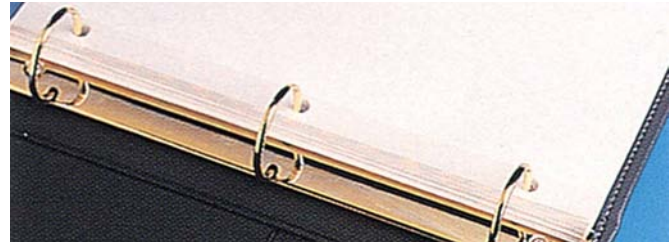
Relative Adhesion: HSE – High Surface Energy, LSE – Low Surface Energy

¹ FDA acceptable dry ingredients listed as indirect food-contact additives when used in food packing with minimal opportunity for exposure.

3M™ Polyester Tapes for Edging and Reinforcing

Tear resistant reinforcement

With thin caliper and tear resistance, 3M™ Polyester Tapes provide tough low-profile reinforcement for card stock edges and punch holes. Choice of tape thickness and adhesives helps meet various end use conditions.



Product Information

Product/Color	Tape Structure (Backing/Adhesive)	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. (N/100 mm)	Elongation at Break %	Temperature Range °F (°C)	Comments
ASTM Test Method:		D-3652	D-3652	D-3330	D-3759	D-3759		
General Industrial Tapes								
856/Transparent	Polyester/Acrylic	1.0 (0.03)	2.0 (0.05)	20 (22)	25 (438)	90	-60 to 300°F (-50 to 150°C)	Economy edge and hole reinforcing.
Release Surface and Liner Splicing Tapes								
8411/Transparent	Polyester/Acrylic	0.9 (0.02)	1.5 (0.04)	30 (33)	26 (456)	120	-60 to 300°F (-50 to 150°C)	Performance edge and hole reinforcing.
8412/Transparent	Polyester/Acrylic	4.6 (0.12)	6.3 (0.16)	42 (46)	120 (2100)	130	-60 to 300°F (-50 to 150°C)	Heavy-duty edge and hole reinforcing.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Scotch® Tear Strip Tapes

Easy access solutions

For easy opening of packaging ranging from overnight envelopes to corrugated fiberboard, high strength tear strip tapes eliminate scissors or knives.

The consumer simply grabs and pulls the exposed end of the tape. With tensilized polypropylene construction, the tape tears through paper board and fiber board with high pull-rate success.



Scotch® Tear Strip Tape 8626 – Easy opening of medium to heavy weight corrugated fiberboard used in such applications as detergent boxes.



Scotch® Tear Strip Tape 8621 – Reinforced with monofilaments for opening overnight envelopes and mail order boxes.



Scotch® Tear Strip Tape 8624 – Easy opening of light to medium weight packaging such as CD and book mailers.

Product Information

Product	Backing Color	Backing	Reinforcement	Adhesive	Total Thickness (mils)	Adhesion (oz./in.)	Tensile Strength (lbs./in.)	Elongation at Break %
8621	White	Tensilized Polypropylene Monofilaments	Polypropylene	Synthetic Rubber Resin	5.2	64	160	30
8624	Blue	Tensilized Polypropylene	None	Synthetic Rubber Resin	4.5	65	160	30
8626	Ivory	Tensilized Polypropylene	None	Synthetic Rubber Resin	6.2	75	220	30

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Repulpable Tapes for Paper Mills and Paper Converters

Fast and dependable splicing, core starting, and roll closure

From core starting to roll closing/tabbing and all the splices in-between, this totally repulpable line offers choices for the dependability you need to keep production at full speed. Backings and adhesives are engineered for optimum strength on every type of splice: flying, overlap, butt, and general purpose.

Temporary Tapes

- Good shear strength, high tack, and reliable heat resistance

Permanent Tapes

- High shear strength to stay with paper through sheeting, printing, slitting, and perforating



3M™ Super Strength Repulpable Tape R3187 with high tack adhesive closes rolls without slipping or popping off.

96



High tack 3M™ Temporary Single Coated Repulpable Tapes are available in white, blue, and kraft for dependable core starting, roll closing, and butt splicing.

97



For easy, precise application, 3M™ Repulpable Butt Splicing Tape 9114 is initially repositionable then bonds with paper-delaminating strength.

98



For finished mill overlap splicing, 3M™ Repulpable Permanent Tape 900B provides high shear strength without adhesive oozing or bleed through.

99



One simple splice with 3M™ Repulpable Tape R9993 replaces complex patterns.

100



For core starting and roll closing, the hand-held 3M™ Repulpable Tape Applicator RTA-500 dispenses tape and disposes of the liner with one pull of the trigger.

101

3M™ Repulpable Tapes for Paper Mills

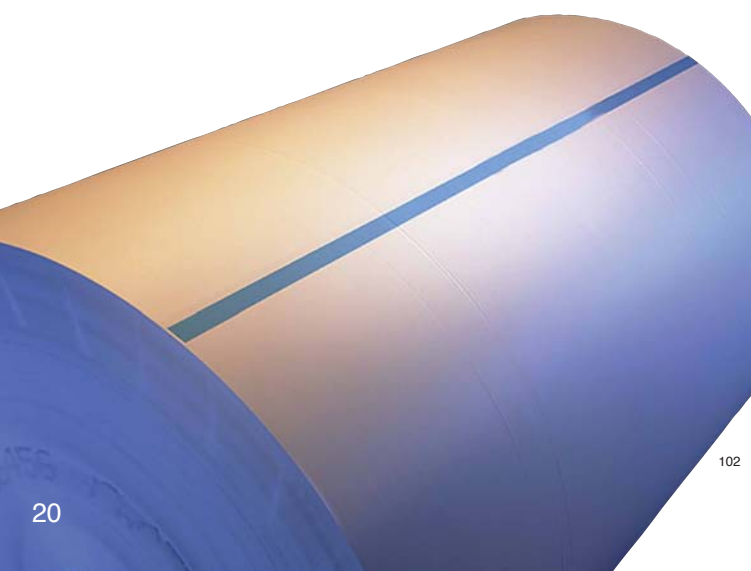
Product Information:

Type	Product	Color	Comments	Tape Thickness mils(mm)	Tape Structure Backing/Adhesive	Liner		Heat Resistance (F/C)	FDA Compliant*
						Type	Thickness mils (mm)		
Permanent Double Coated	405	Lt. Green	Excellent for raw and starch-treated papers.	3.0 (0.08)	Tissue/Repulpable	UPVC	1.7 (0.04)	400 (200)	
	900	Blue	Recommended for LWC papers.	2.5 (0.06)	Tissue/Repulpable	Paper	3.2 (0.08)	400 (200)	X
	900B	Blue	Recommended for supercalendered papers.	2.5 (0.06)	Tissue/Repulpable	Paper	3.2 (0.08)	400 (200)	X
Permanent Single Coated	901	Lt. Green	Excellent for raw and starch-treated papers.	4.0 (0.10)	Paper/Repulpable	UPVC	1.7 (0.04)	400 (200)	
	910	Blue	Recommended for coated and uncoated papers and paperboard.	4.0 (0.10)	Paper/Repulpable	—	—	400 (200)	X
	9103	Blue	Printable, coatable backing.	4.5 (0.11)	Paper/Repulpable	Paper	2.9 (0.07)	400 (200)	X
	9114	Blue	The easiest way to make a butt splice. Printable.	4.5 (0.11)	Paper/Repulpable	Paper	2.9 (0.07)	400 (200)	X
	9960	Blue	Thinnest butt splicing tape for light weight uncoated and coated and supercalendered papers.	2.2 (0.06)	Paper/Repulpable	Paper	2.9 (0.07)	350 (180)	X
	9969	Blue/White	Very thin butt splicing/cover tape for uncoated, newsprint and most coated papers.	2.2 (0.06)	Paper/Repulpable	Paper	2.9 (0.07)	350 (180)	X
Temporary Double Coated	905	Clear	Thinnest, fiber reinforced adhesive transfer tape.	2.0 (0.05)	None/Repulpable	Paper	3.3 (0.08)	250 (120)	X
	906	Blue/White	Flying splice at the off-machine coater (OMC).	3.0 (0.08)	Tissue/Repulpable	Paper	3.2 (0.08)	400 (200)	X
	9069	Blue	Excellent for newsprint or directory stock.	3.5 (0.09)	Tissue/Repulpable	Paper	3.2 (0.08)	400 (200)	
	R3227	Blue/White	Core starting, roll closing and general purpose temporary splicing.	3.0 (0.085)	Tissue/Repulpable	Paper	3.2 (0.08)	350 (180)	X
	R3287	White	Heavy tissue, very high tack for core starting.	5.5 (0.14)	Tissue/Repulpable	Paper	3.2 (0.08)	400 (200)	X
Temporary Single Coated	R3127	Blue/White Kraft/Red	General purpose, excellent holding power.	4.5 (0.11)	Paper/Repulpable	—	—	350 (180)	X
	R3187	Blue/White/ Kraft/Black	General purpose, strong repulpable backing.	7.3 (0.19)	Paper/Repulpable	—	—	350 (180)	X
Splittable Flying Splice (SFS)	R9993	Blue	All in one tabbing and splicing tape for newspaper, rotogravure and heatset printing applications.	2.5 (0.06)**	Paper/Repulpable	Paper	2.9 (0.07)	400 (200)	
	R9996	Blue	Thinnest SFS tape for splicing applications in papermill or paper converting coating operations.	2.5 (0.06)**	Paper/Repulpable	Paper	2.9 (0.07)	400 (200)	
	R9999	Blue	Heavy duty SFS tape for flying splices on heavy papers and high tension web processing applications.	4.5 (0.12)**	Paper/Repulpable	Paper	2.9 (0.07)	400 (200)	

* FDA Indirect Food Additive: This product complies with regulations for repulpable tape (see sections for possible limitations) which may subsequently become components of paper and paper board food packaging as described in 21 CFR 176.170 and 176.180.

**Reported tape thickness is the caliper of the splice as it passes through coating or printing operations.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.



103

Flying splices at the machine coater use 3M™ Repulpable Flying Splice Tape 906B. A light-weight tissue coated on both sides with a high tack, high shear strength, repulpable adhesive.

102

Scotch® and Tartan™ Box Sealing Tapes

Built tough for dependability

Each tape in this wide variety is built tough to resist score line breaking and seam splitting even when boxes are handled roughly. Use with Scotch® Manual Dispensers for easy time-saving application, or with any one of several 3M-Matic™ Case Sealing Systems for even greater productivity.

Designed primarily for closing and sealing RSCs, tapes are also available for specialty uses such as color coding, gap closure, custom printed tapes, and more.



Tapes dispense and seal cases easily by hand, hand-held dispenser, or with a semi-automatic or fully automatic case sealer.

Product Information

Product	Tape Structure (Backing/Adhesive)	Backing Thickness mils(mm)	Total Thickness mils(mm) (N/100 mm)	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in.	Elongation at Break %	Comments
ASTM Test Method:		D-3652	D-3652	D-3330	D-3759	D-3759	
Box sealing tapes							
302	Polypropylene/Acrylic	1.1 (0.28)	1.6 (0.41)	18 (19.7)	23 (402)	116	Available in Clear and Tan.
305	Polypropylene/Acrylic	1.0 (.025)	1.8 (.046)	—	21 (368)	—	Available in Clear and Tan.
311	Polypropylene/Acrylic	1.1 (.028)	2.05 (.052)	22 (24)	25 (438)	—	Available in Clear and Tan.
313	Polypropylene/Acrylic	1.6 (.041)	2.55 (.065)	24 (26)	35 (613)	—	Available in Clear and Tan.
369	Polypropylene/Synthetic Rubber	1.0 (.025)	1.6 (.041)	30 (32)	19 (333)	160	Available in Clear and Tan.
371	Polypropylene/Synthetic Rubber	1.2 (.030)	1.9 (.048)	40 (44)	22 (385)	160	Available in Clear, Tan, Blue, Green, Orange, Red, White, and Yellow.
372	Polypropylene/Synthetic Rubber	1.4 (.035)	2.2 (.056)	45 (49)	26 (455)	160	Available in Clear and Tan.
373	Polypropylene/Synthetic Rubber	1.6 (.041)	2.5 (.064)	50 (55)	30 (525)	160	Available in Clear, Tan, Blue, Green, Orange, Red, White, and Yellow.
375	Polypropylene/Synthetic Rubber	2.0 (.051)	3.1 (.079)	55 (60)	35 (613)	160	Available in Clear and Tan.
Specialty box sealing tapes							
255	Paper/Synthetic Rubber	4.6 (.117)	5.3 (.135)	80 (88)	40 (700)	NA	Available in 1.5" x 60 yards.
353	Polyester/Synthetic Rubber	1.0 (.025)	1.9 (.048)	45 (49)	25 (437)	110	Available in Clear and Tan.
355	Polyester/Synthetic Rubber	2.0 (.051)	3.43 (.089)	78 (85)	67 (1174)	130	Clear with red stripes and message:
3199	Polypropylene/Acrylic	1.1 (0.28)	2.05 (.052)	22 (24)	25 (438)	125	"Check seal before accepting."
3732	Polypropylene/Synthetic Rubber	1.6 (.041)	2.5 (.064)	50 (55)	30 (525)	160	Tan with red printed message: "If Seal Is Broken Check Contents Before Accepting."
3734	Polypropylene/Synthetic Rubber	1.6 (.041)	2.5 (.064)	50 (55)	30 (525)	160	Tan with red printed message: "Fragile Handle With Care."
3743	Polypropylene/Modified Synthetic Rubber	1.6 (.041)	2.6 (.066)	43 (47)	30 (525)	160	Available in Clear and Tan. Modified for high initial tack.
3779	Polypropylene/Synthetic Rubber	1.2 (.030)	1.9 (.048)	40 (44)	22 (385)	160	Clear with red stripes and message: "Check seal before accepting."

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Scotch® Manual Dispensers

Engineered for reliable productivity

Select from a variety of hand-held dispensers and heavy duty pull and tear table top dispensers to meet various production requirements.



106



107



108



109



110

Product Information

Product	Product Description	Product Recommendation	Applications	Max. Tape Width
C22	Heavy-duty tabletop manual pull and tear dispenser. film, paper and filament tapes.	Cellophane, UPCV, acetate.	Sealing, holding, attaching and tabbing.	2 in.
H122	Lightweight, compact, hand-held dispenser.	All box sealing tapes.	Box closing.	48 mm
H123	Lightweight, compact metal, hand-held dispenser.	All box sealing tapes.	Box closing.	72 mm
H128	Heavy-duty durable metal hand dispenser.	8959, 890, and others.	Heavy duty box closing.	48 mm
H129	Quick and easy one hand method for dispensing.	All box sealing tapes.	"C" clip application on RSCs.	48 mm
H180	Hand-held, portable and easy to operate.	All box sealing tapes.	Box closing.	48 mm
H183	Hand-held dispenser features adjustable tape brake.	All box sealing tapes.	Center seam sealing on RSCs.	72 mm
H190	Pistol grip dispenser features pull apart design.	All box sealing tapes.	Box closing.	48 mm
H192	Tape tension can be controlled with tape roll brake. High impact plastic construction.	All box sealing tapes.	Box closing.	48 mm
H320	Ultra-light, economical plastic dispenser.	All box sealing tapes.	Center seam sealing on RSCs and recoupage.	48 mm
H1755	Hand-held, portable dispenser is easy to load and operate.	All box sealing tapes.	Center seam sealing on RSCs.	48 mm

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M-Matic™ Case Sealers

From manually adjustable to random automatic operation

From the full line of 3M-Matic™ Case Sealers, two are presented here with the most applicability for printers.

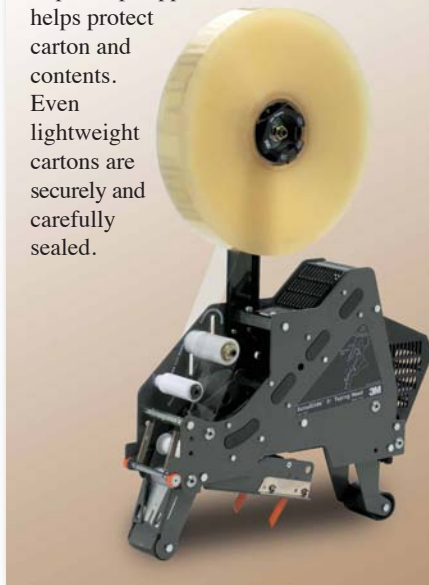
3M-Matic™ Adjustable Case Sealer 200a seals up to 40 cases per minute with weights of up to 85 pounds.

3M-Matic™ Random Case Sealer 700r seals up to 19 different case sizes per minute with weights of up to 85 pounds.

Ask your 3M representative for more information on these and other units.

3M™ AccuGlide™ Taping Head 2+ for consistent case sealing

Patented curvilinear design for low impact tape application helps protect carton and contents. Even lightweight cartons are securely and carefully sealed.



111

3M-Matic™ Adjustable Case Sealer 200a3

- Laced traction grip belts for reliable feeding and easy replacement
- Adjustable side guides to center cases of various widths for the full length of the unit



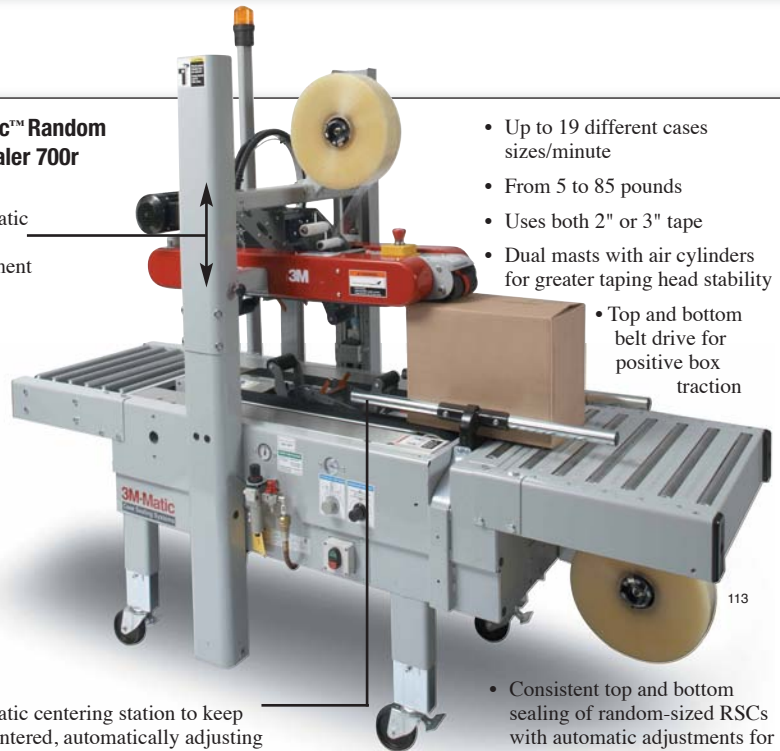
- Up to 40 cases/minute
- From 5 to 85 pounds
- Uses both 2" or 3" tape
- Dual masts with twin lead screws for greater taping head stability

- Consistent top and bottom sealing with easy, quick adjustments

112

3M-Matic™ Random Case Sealer 700r

- Automatic height adjustment
- Pneumatic centering station to keep case centered, automatically adjusting for width



- Up to 19 different cases sizes/minute
- From 5 to 85 pounds
- Uses both 2" or 3" tape
- Dual masts with air cylinders for greater taping head stability

- Top and bottom belt drive for positive box traction

- Consistent top and bottom sealing of random-sized RSCs with automatic adjustments for height and width

113

Product Information

Model	Drive Belt System	Min. Case Length (in.)	Min. Case Width (in.)	Min. Case Height (in.)	Max. Case Length (in.)	Max. Case Width (in.)	Max. Case Height (in.)	Max. Case Weight (lbs.)	Max. Cases/Minute	Comments
200a3	Bottom	6	7	4.75 ♦	None	21.5	24.5 ▲	85	40	Adjustable
700r	Top and Bottom	6	7	4.75 ♦	None	21.5	24.5	85	19	Random

♦ Can be adjusted for 3.5" min. case height using 2" tape legs.

▲ Can be adjusted for 28.5" max. case height. Minimum case height increases by 4".

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Aerosol Products

Convenience and a fistful of work power for maintenance and production

In thousands of plants, 3M aerosol products are proven daily to save time and effort. Bonding, lubricating, cleaning, inhibiting rust, and other tough jobs are finger-touch easy.

Compact container fits in a tool box to go readily to any job site and can help you reduce storage space and cost.

3M aerosol products contain no methylene chloride, chlorofluorocarbons (CFCs), or 1,1,1-trichloroethane (methyl chloroform).



3M™ 5-Way Penetrant penetrates, lubricates, cleans, and helps prevent rust on rollers and other metal parts. 114



115

For fast, easy cleanup of gears, 3M™ Citrus Base Cleaner helps soften and loosen grease, oil and grime. After using this heavy-duty degreaser/cleaner, just wipe away with a shop towel.



116

With 3M™ Super 77™ Multipurpose Spray Adhesive, you have fast tack, long bonding range, and little or no soak-in for bonding many lightweight materials including papers, labels, plastics, foils, foam, insulation, fabric, cardboard, and light gauge metal.



117

Product Information

Aerosol Adhesive	Product	Description	Spray Width	Bonding Range Surfaces One/Both	Peel Strength (PIW) ⁽¹⁾	Temperature Resistance ⁽²⁾	Coverage Sq. Ft./ Container ⁽³⁾ (Typical)
		Super 77 Multipurpose Spray Adhesive	• Fast, aggressive tack for bonding many lightweight materials	1½"- 4" fan	15 min./30 min.	15	110°F (43°C)
	Multipurpose 27 Spray Adhesive	• Fast tack and versatile for bonding paper, cardboard, fabrics, and other lightweight materials.	Mist spray	15 sec/10 min	4	140°F (60°C)	78
Aerosol Chemicals	Product	Description					Temperature Resistance
	Silicone Lubricant	• Lubricates cutting tools and tables • Helps prevent buildup of glues, wax, inks, paints • Won't stain or become gummy • FDA listed ingredients*					350°F (177°C)
	5-Way Penetrant	• Penetrates, lubricates, demoiseurizes, cleans and helps prevent rust • Frees rusted, frozen nuts • "Dries out" electrical apparatus					N/A
	Citrus Base Cleaner	• Multi-purpose, citrus-scented cleaner removes grease, dirt, oil and adhesive overspray from equipment • Softens liquid adhesive and tape residue					N/A
	Adhesive Remover	• Specifically formulated to remove adhesive from many substrates with no residue • Citrus-scented					N/A
	Sticker & Marker Remover (Pen)	• Same as aerosol Adhesive Remover but more precise application with pen tip					N/A

*FDA Listed Ingredients: The ingredients of this product, when dried after application, are listed as indirect food contact additives when used with minimal opportunity for exposure. See 21 CFR 178.3570, 178.3910, and 181.28

(1) IATD T.M. C-449.

(2) IATD T.M. C-483; 500 g load for 1 hr. at noted temp.

(3) Coverage based on container sizes 24 fluid ounce or *16 fluid ounce size cans.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

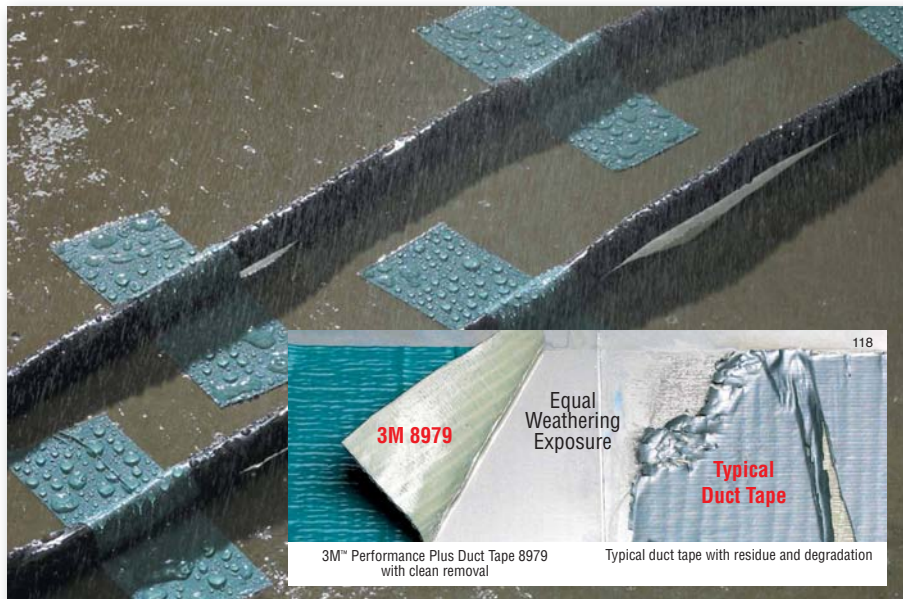
3M™ Duct Tapes and Cloth Tapes

Dependability and versatility for bundling, sealing, reinforcing, and more

This family of rugged cloth and duct tape adheres to most surfaces for applications ranging from bundling to moisture proofing, sealing to splicing, reinforcing to hanging poly drapes. Features include:

- Hand tearable
- High tensile strength
- Conformability

Unique 3M™ Performance Plus Duct Tape 8979 removes cleanly for up to six months from most opaque surfaces, even after exposure to sun and outdoor weathering. Stays on for up to one year without deterioration.



Waterproof backing of 3M™ Performance Plus Duct Tape 8979 resists moisture and rain for up to a year.



3M™ Utility Duct Tape 2929 is the versatile, practical choice for temporary repairs and general use applications.



3M™ Value Duct Tape 1900 is the cost-effective choice for light duty sealing, holding, and marking applications.



Available in seven different colors, 3M™ Duct Tape 3900 temporarily holds and calls attention to electrical wires on floors at trade shows, conventions, and other foot traffic areas.

Product Information

Product	Color(s)	Backing	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/100mm)	Tensile lb/in (N/100mm)	Comments
1900	Silver	Polyethylene film	5.8 (0.147)	58 (63.5)	16 (280.2)	Economical choice for sealing, holding, and marking.
2929	Silver	Polyethylene film	6.0 (0.152)	45 (49.2)	19 (333.4)	Utility grade duct tape for temporary repairs and general use sealing, holding and marking.
3900	Black, Blue, Olive, Red, Silver, White, Yellow	Polyethylene film	7.7 (0.19)	56 (62)	22 (385)	General purpose duct tape for temporary repairs and color-coding. Tested according to UL 723, HUD and BOCA codes.
3939	Silver	Polyethylene film	9.0 (0.23)	55 (60)	25 (438)	Variety of widths, versatile for many applications, Tested according to UL 723, HUD and BOCA codes.
8979	Black, Olive, Slate blue	Polyethylene film	12.6 (0.33)	52 (57)	36 (643)	Up to 6 months clean removal from most opaque surfaces indoors or outdoors. Will not delaminate or deteriorate for up to a year. Excellent water resistance. Unique slate blue color lets customer know they have used the right tape. Tested according to UL 723, HUD and BOCA codes.

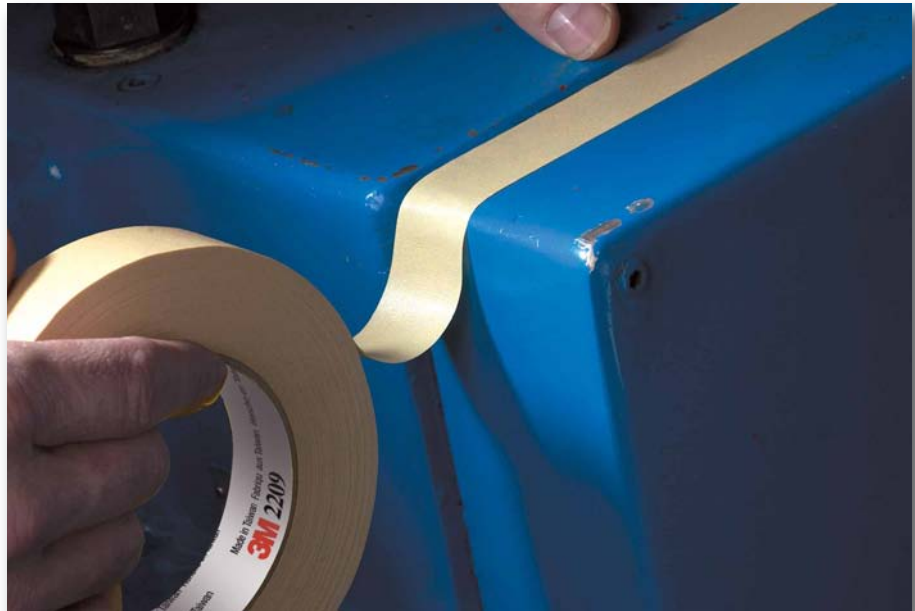
Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Masking Tapes

Holding power, line sharpness, and removal the way you want

In this simplified line, you will find a range of such characteristics as adhesive holding power, line sharpness, and clean removal to meet different application requirements for virtually every industry and consumer application. 3M products feature:

- Instant adhesion at a touch
- Easy tear without stretching or pulling
- Controlled unwind...not too easy or too hard
- Conformability to stretch and adhere around curves



3M™ Masking Tape 2209 is an economical choice for light duty holding, bundling, sealing, marking, and non-critical masking.



3M™ Masking Tape 203 is a cost-effective choice for bundling, holding, attaching, sealing, wrapping, and masking. Removes cleanly from most substrates for up to 24 hours.



With sliver-resistant crepe backing, 3M™ Masking Tapes peel off neatly without breaking into pieces. Saves time and work for removal.

Product Information

Product	Tape Structure (Backing/Adhesive)	Total Thickness mils (mm)	Adhesion oz./in. (N/100 mm)	Tensile Strength lbs./in. width (N/100 mm)	Elongation at Break %	Temperature Range °F (°C)	Comments
200	Tan Colored Crepe Paper/Rubber	4.4 (0.11)	25 (27)	19 (333)	8	Up to 200°F (93°C)*	Good instant adhesion.
203	Tan Colored Crepe Paper/Rubber	4.7 (0.12)	28 (31)	22 (385)	8	Up to 200°F (93°C)*	Good price/value relationship.
231/231A	Tan Colored Crepe Paper/Rubber	7.6 (0.19)	38 (41)	28 (490)	10	Up to 300°F (149°C)*	Best all-purpose paint masking tape.
2209	Tan Colored Crepe Paper/Rubber	4.5 (0.114)	26 (29)	20 (350)	10.5	Up to 150°F (66°C)*	Most economical, light duty, holding, and sealing.
2214	Tan Colored Crepe Paper/Rubber	5.2 (0.13)	22 (24)	22 (385)	9	Up to 150°F (66°C)*	Good for holding and bundling.
2307	Tan Colored Crepe Paper/Rubber	5.2 (0.13)	28 (31)	23 (403)	8	Up to 200°F (93°C)*	Solvent-free construction; non-critical paint masking.
2693	Tan Colored Mini-Crepe Paper/Synthetic	8.5 (0.21)	46 (50)	26 (455)	10	Up to 325°F (163°C)*	Very aggressive holding. Excellent for multi-bake paint cycle.

*Up to 30 minutes

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Scotch-Weld™ Threadlockers

Keep threaded fasteners in place and on the job

These anaerobic adhesives on threaded metal fasteners keep production equipment up an running. You can save the cost and time of disruptive, unscheduled downtime due to nuts, bolts, and screws that vibrate loose in such areas as gear housings and motor mounts.



Product Information

127

128

Product number	Removal (torque-break/prevail)	Bolt size	Description	Color
TL22	Low 50/30 lb. in.	Less than 5/16"	<ul style="list-style-type: none"> Screw grade • Thixotropic to reduce flow after application to surface Hand tools for disassembly 	Purple
TL42	Medium 120/50 lb. in.	Up to 3/4"	<ul style="list-style-type: none"> Nut grade • Thixotropic to reduce flow after application to surface Oil tolerant • Hand tools for disassembly 	Blue
TL62	Medium/high 200/100 lb. in.	Up to 1"	<ul style="list-style-type: none"> Permanent, controlled torque • High breakaway, reduced prevailing torque Heat and hand tools for disassembly 	Red
TL71	High 230/330 lb. in.	Up to 1"	<ul style="list-style-type: none"> Permanent • Low viscosity • High breakaway, high prevailing torque Heat and hand tools for disassembly 	Red
TL72	High 130/225 lb. in.	Up to 1-1/2"	<ul style="list-style-type: none"> Permanent • High viscosity • Wide temperature range -65°F to 450°F (-55 to 232°C) High breakaway, high prevailing torque Heat and hand tools for disassembly 	Red
TL90	Medium 85/250 lb. in.	Greater than 1/4"	<ul style="list-style-type: none"> Wicks into pre-assembled bolts • Seals welds and porous metals Locks and seals small compression and ferrule fittings Service temperature to 400°F (204°C) • Heat and hand tools for disassembly 	Green

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Scotch-Weld™ Concrete Repair Products

Fast, convenient application and rapid cure for productivity

Repair cracks and spalls with strong, long-lasting bonds that resist weathering, expansion and contraction. Fast setting allows you to walk or even drive on repaired surfaces in as few as five minutes. Nozzle automatically and precisely meters, mixes, and dispenses the 2-part urethane formulation.



Product Information:

129

Product/Color	Size	Description	Work life	Handling time	Cure time
DP600 Gray Self-leveling	12 fl. oz.*	<ul style="list-style-type: none"> Repair of cracks or spalls and setting anchors in floors or horizontal surfaces 	70 sec.	5 min.	1 hr.
DP600 Gray Non-sag	12 fl. oz.*	<ul style="list-style-type: none"> Repair of cracks in walls and setting anchors in vertical surfaces • Repair chipped or broken steps and ledges 	50 sec.	4 min.	1 hr.
Concrete Repair 600 Gray Self-leveling	8.4 fl. oz.	<ul style="list-style-type: none"> Flows smoothly into cleaned cracks and gaps Hardens in as little as 5 minutes Use in common caulking guns 	70 sec.	5 min.	60 min.
3M™ Manual Dispenser 6997-1	12 fl. oz.	<ul style="list-style-type: none"> Heavy-duty applicator 	-	-	-

*Also available in 50 ml cartridges, 5 gallon pails and 55 gallon drums

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Vinyl Tapes

Mark, identify, color-code, seal seams, and more

These rugged tapes adhere aggressively and remove cleanly from most surfaces for marking hazards and aisles, color-code piping, decorative trim, and more.

- “Color throughout” construction resists scrapes, wear, weathering, and chemicals
- Wide variety of colors plus transparent
- Flexible backing with aggressive adhesive bonds, conforms, and seals even with irregular surfaces
- Removes cleanly without leaving adhesive behind to clean up
- Stretches to mold to contours



3M™ Vinyl Tapes clearly mark lanes, corridors and hazardous or no-go areas. 130



Orange 3M™ Vinyl Tape identifies dangerous machine parts when enclosure doors are open. 131



Striped 3M™ Vinyl Tape 5702 calls attention to protruding equipment and steps. 132



Red 3M™ Vinyl Tape immediately identifies fire protection equipment. 133

Product Information

Product/Color	Tape Structure (Backing/Adhesive)	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz./in. (N/100 mm)	Tensile Strength lbs./in. (N/100 mm)	Elongation at Break %	Temperature Range °F (°C)	Comments
ASTM Test Method:		D-3652	D-3652	D-3330	D-3759	D-3759		
Premium Performance Vinyl Tapes								
471/Various	Vinyl/Rubber	4.1 (0.10)	5.2 (0.13)	23 (25)	16 (280)	130	40 to 170°F (4 to 77°C)	Conformable and clean removal. Black, Blue, Brown, Green, Orange, Purple, Red, Transparent, White, Yellow.
472/Black	Vinyl/Rubber	9.0 (0.23)	10.4 (0.26)	23 (25)	32 (560)	370	Up to 225°F (107°C)	Abrasion resistant. High temperature resistant.
477/Transparent	Vinyl/Rubber	6.0 (0.15)	7.2 (0.18)	24 (26)	24 (420)	230	40 to 170°F (4 to 77°C)	Abrasion resistant.
General Purpose Vinyl Tapes								
764/Various	Vinyl/Rubber	4.0 (0.10)	5.0 (0.125)	18 (21)	13 (228)	180	60 to 85°F (15 to 27°C)	Non-critical applications. Black, Blue, Brown, Gray, Green, Orange, Purple, Red, Transparent, White, Yellow.
Hazard Identification Tapes — Premium Performance Permanent								
5700/Black and White Stripes	Vinyl/Rubber	4.2 (0.11)	5.5 (0.14)	19 (21)	15 (260)	170	40 to 170°F (4 to 77°C)	Adhesive side printing. Critical applications.
5702/Black and Yellow Stripes	Vinyl/Rubber	4.2 (0.11)	5.4 (0.14)	19 (21)	15 (260)	170	40 to 170°F (4 to 77°C)	Adhesive side printing. Critical applications.
Hazard Identification Tapes — General Performance Temporary								
766/Black and Yellow Stripes	Vinyl/Rubber	4.0 (0.10)	5.0 (0.125)	30 (33)	13 (228)	180	60 to 85°F (15 to 27°C)	Non-critical applications.
767/Red and White Stripes	Vinyl/Rubber	4.0 (0.10)	5.0 (0.125)	18 (21)	13 (228)	180	60 to 85°F (15 to 27°C)	Non-critical applications.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Safety-Walk™ Cushion Matting

Textured, cushioned support for fatigue resistance and safety

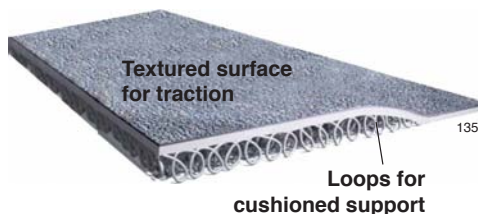
3M™ Safety-Walk™ Cushion Matting 3270 absorbs foot pressure and impact to help reduce leg and back fatigue. The black textured surface also increases traction for safer footing.

Consider all of the following when thinking about floor mats anywhere in your business from reception area to assembly lines and packaging stations:

- Solid surface keeps debris and liquid on top for easy removal
- Resists water with no delamination like foam mats when wet
- Quick and easy to clean: generally just shake the mat to remove debris; damp mop top surface.



134



Product Information

Product Number	Sizes
3270	3'x5', 4'x6', 3'x10', 4'x10', 3'x20', 4'x20'
3270E*	3'x5', 4'x6', 3'x10', 4'x10', 3'x20', 4'x20'

*Integral black 4-side edging

3M™ Folded Sorbent

Four-in-one solution for easy clean up of many spills, drips, and leaks

From a single go-to-the-job dispenser, you have 4-ways to clean up with 3M folded sorbents. With perforations every 16", you simply tear off the desired length of sorbent to configure as a **pillow** or **boom**. Unfold and use it as a **pad**. Or unwind and unfold for use as a **roll**.

Each 5" x 50' roll can sorb 10.5 gallons of cutting oil, coolants, aqueous or petroleum-based liquids, and other non-aggressive fluids.

WARNING: Failure to properly handle and dispose of sorbents contaminated by hazardous materials can result in serious physical injury or death and/or environmental harm. For proper handling, consult the Material Safety Data Sheet for the material absorbed, applicable safety and health standards, contact your supervisor, or call 3M.



137

Product Information

Product Number	Size	Description Capacity	Sorption
C-FL550DD/ P-F2001	5" x 50' per box, 3 per case	3M™ Chemical Sorbent Folded, High Capacity. All purpose maintenance clean-up of non-aggressive fluids	31.5 gallons per case

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Clean-Walk Mats

Capture dirt on contact before tracking it from one area to another

Between areas within a plant or between the plant and the office these adhesive mats capture dirt on contact from shoe soles, wheels, and other passing objects. Framed and unframed mats keep clean areas clean.

- Individually tabbed sheets remove easily to expose a fresh, ready-to-use sheet
- Individually numbered sheets ensure one sheet removal at time and identify remaining number of applications
- Large adhesive area allows two full steps

Unframed mats

Adhere to most smooth, clean and dry floors such as tile or concrete. Remove cleanly from floor surface when all sheets are used.

Framed mats

Mats are adhered to a plastic frame. The frame's nonskid textured back maintains position on carpet and other surfaces. Replacement pads/mats install easily to the reusable plastic frame.



138

To preserve the cleanliness and appearance of floors and carpets, 3M™ Clean-Walk Mats reduce the amount of dirt passing between areas. Unframed mats (above) adhere to most smooth, clean and dry floors such as concrete. Framed mats (at right) feature a nonskid texture to maintain the position of the frame even in high traffic areas.



139

Product Information

Product	Sizes	Mat Construction	Frame Construction	Color	Adhesive	Sheets per Mat	Items per Case	MOQ	Comments
Clean-Walk Mats — Unframed									
5830	18" x 36" 18" x 46" 25" x 45"	Polyethylene Film 1.2 mil (0.03 mm)	N/A	White	Acrylic	30	4 Mats	1 Case	Adhesive-backed mat ideal for concrete and other smooth floor surfaces.
5836	18" x 36" 18" x 46" 25" x 45"	Polyethylene Film 1.2 mil (0.03 mm)	N/A	White	Acrylic	60	4 Mats	1 Case	
Clean-Walk Mats — Framed									
5840	31.5" x 25.5"	Polyethylene Film 1.2 mil (0.03 mm)	1/8" polystyrene base with a nonskid backing	White pad on white or black frame only.	Acrylic	60 Only	1 Pad and Frame	1 Case	Nonskid framed mats are ideal for carpeted surfaces and are completely portable and reusable.
Clean-Walk Replacement Pads for Framed Mat									
5842	30" x 24"	Polyethylene Film	N/A	White pad only.	Acrylic	60 Only	2 Pads	1 Case	Replacement pads, for use on reusable plastic frame, install quickly and easily.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Product 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. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. **Warranty, Limited Remedy, and Disclaimer:** Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 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 OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 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 where prohibited by law, 3M 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.



Industrial Adhesives and Tapes Division

3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550 . 877-369-2923 (Fax)
www.3M.com/industrialtape

3M, Flexomount, Cushion-Mount, Scotch-Weld, Quadrack, Tartan, 3M-Matic, AccuGlide, Safety Walk, and Super 77 are trademarks of 3M Company. Scotch is a registered trademark of 3M Company.

Cover photo of printing press courtesy of Paper Converting Machine Company (PCMC).

Printed in U.S.A
© 3M 2010
78-6901-2144-3