

3M Science.
Applied to Life.™

productivity
solution company limited



Solutions for your assembly challenges.

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5,000+
adhesive and tape SKUs

Do it your way.

- 3M systems are built around *your* manufacturing processes, not the other way around.
- Whether it's structural or non-structural adhesives, bonding tapes or reclosable fasteners, 3M solutions ensure speed, convenience and ease of use.



88,667
employees

Do it together.

- No matter what you need to bond, you can count on 3M's expertise, technologies and 88,667 dedicated employees to help you find solutions.
- From wood, metal, foil, insulation, foam, fabric and panel lamination to specialty high performance and multipurpose materials of every kind, solutions are one call away.



100,000
patents

Do it boldly.

- 3M has been a world leader in bonding technology for decades and we have the patents to prove it.
- Quality, consistency and reliability—the attributes you look for in a bonding solution—help drive our quest for new innovations.



1
chance to do it right



Do it responsibly.

- Sustainability is a natural extension of 3M's corporate values.
- We developed the first water-based contact adhesive ever — more than 40 years ago.
- We have a wide selection of Low VOC products that help contribute to LEED® credits and are GREENGUARD™ Certified.

Specialty Technologies

Supporting your designs behind the seams.

Powerful Fastening Solutions

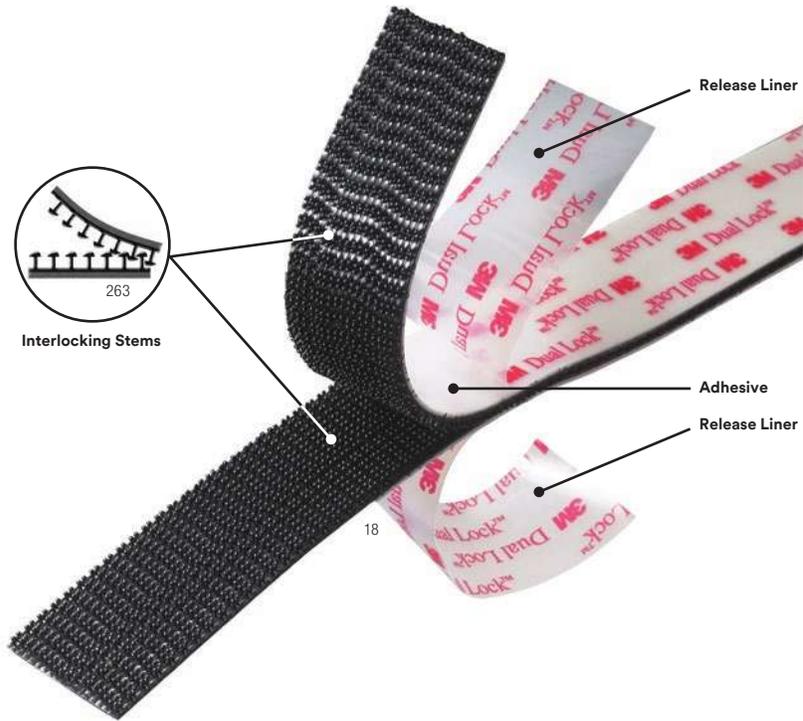
3M™ Reclosable Fasteners provide secure fastening with easy access and enhanced gripping for a wide range of applications. Weather-resistant single coated foam tapes are practical solutions that protect against moisture, dust, vibration and impact, and remain flexible.

3M™ Dual Lock™ Reclosable Fasteners

Holding Power to Replace Screws, Bolts and Rivets

Durable enough to last through repeated opening and closing. Unique mushroom-shaped heads snap shut and stay locked.

- Durable — up to 1,000 openings and closings before losing 50% of original tensile strength
- Helps reduce vibration
- Temperature, moisture and UV resistant
- Strong, pressure-sensitive adhesive bonds on contact
- Interlocking mushroom-shaped heads have **5X the tensile strength** of hook-and-loop products



Secure plastic signs to window glass.

39



Anchor vehicle accessories to dashboard.

266



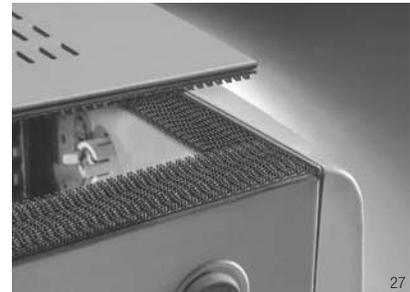
Attach elevator control panel to interior wall.

267



Fasten ceiling panels to interior for future access.

268



Attach access panels to industrial, electronic and electrical equipment.

27

3M™ Dual Lock™ Reclosable Fasteners and Applications



- Best Suggested Product
- Primer Recommended
- ▲ Performance Dependent on Selected Attachment Method

Product	Stem Density (per sq/in)	Adhesive	Color	3M Liner	Engaged Thickness	Temperature Resistance °F (°C)	Substrates					Use	Markets												
							Metals (Al & SS)	Glass	Plastics (Acrylic, PC, ABS)	Powder Coated Paints	Low Surface Energy (PP, PE)		Indoor/Outdoor	Aerospace & Rail	Appliance & Electronics	Design & Construction	Furniture & Upholstery	General Industrial	Marine & Specialty Vehicle	POP, Display & Signage					
SJ3540	250	Rubber	Black	White, 5 mil (0.13mm) Polyolefin	0.23 in (5.7mm)	120 (49)	■		■	■	■	Indoor													
SJ3541	400																								
SJ3542	170																								
SJ3550	250	White Acrylic	Black	Clear, 4 mil (0.10mm) Polyolefin	0.23 in (5.7mm)	200 (93)	■	■	■	●	●	Indoor/Outdoor	■	■	■	■	■	■	■	■	■	■			
SJ3551	400																								
SJ3552	170																								
SJ3558	250	White Acrylic	Clear*	Clear, 4 mil (0.10mm) Polyolefin	0.23 in (5.7mm)	200 (93)	■	■	■	●	●	Indoor/Outdoor	■	■	■	■	■	■	■	■	■	■			
SJ3560	250	Clear Acrylic	Clear	Clear, 4 mil (0.10mm) Polyolefin	0.23 in (5.7mm)	220 (104)	■	■	■	●	●	Indoor/Outdoor	■	■	■	■	■	■	■	■	■	■			
SJ3561	400																								
SJ3562	170																								
SJ3550CF	250	Clear Acrylic	Black	Clear, 4 mil (0.10mm) Polyolefin	0.23 in (5.7mm)	220 (104)	■	■	■	●	●	Indoor/Outdoor	■	■	■	■	■	■	■	■	■	■			
SJ3551CF	400																								
SJ3552CF	170																								
SJ3870	250	Modified Acrylic	Black	Red, 4.5 mil (0.11mm) Polyolefin	0.24 in (6.1mm)	140 (60)	■		■	■	●	Indoor/Outdoor										■			
SJ3871	400																								
SJ3872	170																								
SJ3782	250	Low Surface Energy Acrylic	Black	Brown, 83# Polykraft	0.16 in (4.1mm)	120 (49)	■		■	■	■	Indoor/Outdoor	■									■			
SJ3440	250	None	Black	No Liner	0.15 in (3.86mm)	220 (104)	▲	▲	▲	▲	▲	Indoor/Outdoor		▲	▲	▲	▲	▲	▲	▲	▲	▲			
SJ3441	400																								
SJ3442	170																								
SJ3443	400	Non-woven Backing with No Adhesive	Black	No Liner	0.28 in (7.1mm)	220 (104)	▲	▲	▲	▲	▲	Indoor/Outdoor		▲	▲	▲	▲	▲	▲	▲	▲	▲			
SJ3444	170																								
SJ3445	250																								
SJ3460	250	None	Clear	No Liner	0.15 in (3.86mm)	220 (104)	▲	▲	▲	▲	▲	Indoor/Outdoor		▲	▲	▲	▲	▲	▲	▲	▲	▲			
SJ3463	400	Piece Part Circle'	Black	No Liner	0.20 in** (5.1mm)	220 (104)	■		■	■	■	Indoor/Outdoor	■	■	■	■	■	■	■	■	■	■			
SJ3481	400	Rigid Strip'	Black	No Liner	0.20 in** (5.1mm)	220 (104)	▲	▲	▲	▲	▲	Indoor/Outdoor		▲	▲	▲	▲	▲	▲	▲	▲	▲			
SJ4570	Low Profile/Thin	Low Surface Energy Acrylic	Clear	Brown, 83# Polykraft	0.098 in (2.489mm)	158 (70)	■		■	■	■	Indoor/Outdoor	■	■	■	■	■	■	■	■	■	■			
SJ4575			Black																						
SJ4580		Clear Acrylic	Clear	Red, 4.5 mil (0.11mm) Polyolefin	0.12 in (3.0mm)	200 (93)	■	■	■	●	●	Indoor/Outdoor		■	■	■	■	■	■	■	■	■			

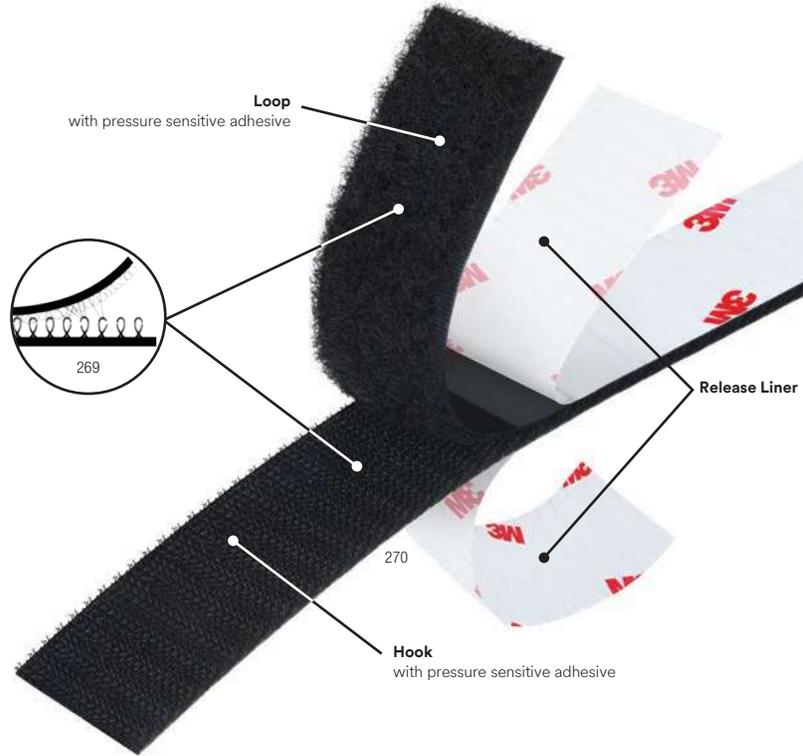
*Clear fastener utilizes a white adhesive giving the product a white appearance **Single thickness; not engaged †No adhesive

Note: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes.

3M™ Hook and Loop Reclosable Fasteners

Hooks on One Side, Loops on the Other for Secure, Repeated Closures

- Reliable PSA holds on contact with a variety of materials
- Low profile options, as much as 75% thinner than standard product
- Up to 5,000 closures for standard Hook and Loop
- Flame resistant product available
- Also available without adhesive



Attach cushioning panels in an ambulance or bus.



Sew to the fabric and leather of jackets and gloves.



Use as a replacement for string, tapes, rubber bands, wire and strapping.



Attach removable seat cushions.



Hang graphics and banners that change frequently.

3M™ Hook and Loop Reclosable Fasteners and Applications



- Best Suggested Product
- Performance Dependent on Selected Attachment Method
- ▲ Primer Recommended
- Back-to-back fastener which can wrap around any type of surface or substrate

Product	Type	Adhesive	Closure Life	Product Material	Liner Description	Engaged Thickness	Temperature Resistance °F (°C)	Substrates					Use	Markets				
								Metals (Al & SS)	Glass	Plastics (Acrylic, PC, ABS)	Powder Coated Paints	Low Surface Energy (PP, PE)		Aerospace & Rail	Furniture & Upholstery	General Industrial	Marine & Specialty Vehicle	POP, Display & Signage
Best																		
SJ3526N	Hook	High Performance Rubber	5,000	Nylon	White, 3 mil (0.08mm) Polyethylene Film 3M Red Print	0.14 in. (3.6mm)	120 (49)	■	■	■	■	Indoor	■	■	■	■		
SJ3527N	Loop							■	■	■	■		■	■				
SJ3572	Hook	High Performance Acrylic	5,000	Nylon	Clear, 4 mil (0.10mm) Polypropylene Film Embossed 3M Logo	0.14 in. (3.6mm)	200 (93)	■	■	■	▲	Indoor/Outdoor	■	■	■	■		
SJ3571	Loop							■	■	■	■		■					
Better																		
SJ3522	Hook	Plasticizer Resistant Acrylic	5,000	Nylon	Clear, 3.5 mil (0.08mm) Polyolefin Film, No print	0.14 in. (3.6mm)	158 (70)	■	■	■	■	Indoor/Outdoor	■	■	■	■		
SJ3523	Loop							■	■	■	■		■					
SJ3530	Hook	High Tack Rubber	5,000	Nylon	Yellow, 3 mil (mm) Polyethylene Film No Print	0.14 in. (3.6mm)	90 (32)	■	■	■	■	Indoor	■	■	■	■		
SJ3531	Loop							■	■	■	■		■					
General Purpose																		
SJ30H	Hook	Rubber	5,000	Nylon	White, 3 mil (0.08mm) Polyethylene Film No Print	0.14 in. (3.6mm)	100 (38)	■	■	■	■	Indoor	■	■	■	■		
SJ30L	Loop							■	■	■	■		■					
SJ60H	Hook	Acrylic	5,000	Nylon	Clear, 4 mil (0.10mm) Polypropylene Film Embossed 3M Logo	0.125 in. (3.2mm)	180 (82)	■	■	■	■	Indoor/Outdoor	■	■	■	■		
SJ60L	Loop							■	■	■	■		■					
SJ3401	Loop	None	5,000	Nylon	None	0.12 in. (3.0mm)	200 (93)	●	●	●	●	Indoor/Outdoor	●	●	●	●		
SJ3402	Hook							●	●	●	●		●					
Low Profile/Thin																		
SJ3506	Hook	Acrylic	25	Polypropylene	Brown #83 Polykraft Green Print	0.034 in. (0.84mm)	158 (70)	■	■	■	▲	Indoor/Outdoor	■	■	■	■		
SJ3507	Loop			Polyester				■	■	■	■		■					
SJ3000	Back-to-Back Hook and Loop	None	10	Polypropylene/Nylon	None	0.053 in. (1.3mm)	200 (93)	□	□	□	□	Indoor	□	□	□	□		
Flame Resistant																		
SJ3519FR	Hook	Flame Resistant	5,000	FR Nylon	White, 3 mil (0.08mm) Polyethylene Film 3M Red Print	0.14 in. (3.6mm)	158 (70)	■	■	■	■	Indoor	■	■	■	■		
SJ3518FR	Loop							■	■	■	■		■					
SJ3419FR	Hook	None	5,000	FR Nylon	None	0.12 in. (3.0mm)	200 (93)	●	●	●	●	Indoor/Outdoor	●	●	●	●		
SJ3418FR	Loop							●	●	●	●		●					

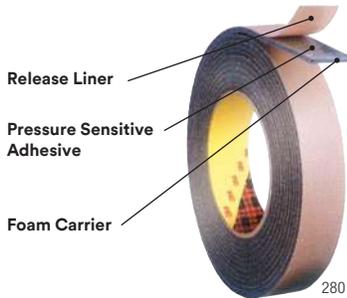
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3M™ Single Coated Foam Tapes

Roll-on Protection Against Moisture, Dust, Noise, Vibration and Impact

3M™ Single Coated Foam Tapes are strips of foam in a roll with high strength acrylic adhesive on one side of the foam. Cut to length, they seal, damp, insulate or cushion. For die-cut shapes, 3M™ Single Coated Foam Tape Series 4100, 4300, and 4700 is protected by a liner. With 3M™ Single Coated Foam Tape Series 4500, the liner is on the non-adhesive side to minimize foam stretching while placing the gasket.

Urethane foams seal, cushion, damp sound, and absorb vibration. Weather-resistant vinyl foams seal out light and dust when under compression and remain flexible even when exposed to variable temperatures and UV.



In a computer printer, 3M™ Urethane Foam Tape 4318 is a very soft, low density cushion that helps absorb impact and vibration.



When compressed 50%, the open cell construction of 3M™ Urethane Foam Tape 4314 provides an air barrier and cushion in electronic equipment.



To help prevent light leakage around a sign perimeter, 3M™ Vinyl Foam Tape 4726 attaches securely on contact.



In outdoor mailboxes, strips of 3M™ Vinyl Foam Tape 4504 helps seal the inside from rain and dirt. Vinyl provides excellent aging characteristics and remains flexible.

Product Number	Color	Description	Adhesive	Approximate Thickness in. (mm)	Density lb/cu ft (kg/cu m)	Tensile Strength (psi (kPa))	Compression Deflection 25% psi (kPa)	Compression Set % Loss	Temperature Tolerance	
									Short-term	Long-term
Urethane										
4104*	Natural White	Firm, rigid, open cell urethane foam for cushioning. Allows air or gas vapors to pass through. Not recommended for outdoor use.	350 Acrylic	0.250 (6)	12 (192)	115 (795)	4 (27.6)	8	350°F (176°C)	200°F (93°C)
4108	Natural White			0.125 (3)	16 (256)	130 (895)	6 (82.8)	8		
4116	Natural White			0.062 (1.5)	18 (288)	115 (795)	12 (82.8)	12		
4314	Charcoal Gray	Soft conformable, low density foam for sealing out air, dust and light when compressed 30%. Used to help damp sound and absorb vibration in electronics.	430 Acrylic	0.250 (6)	2 (32)	25 (170)	0.3 (2.1)	5	250°F (121°C)	150°F (66°C)
4317*	Charcoal Gray			0.375 (9.5)						
4318	Charcoal Gray			0.125 (3)						
Vinyl										
4504*	Black	Durable, flexible, closed cell vinyl foams with excellent aging characteristics. Weather resistant. Application ideas include dust and moisture seal.	430 Acrylic	0.250 (6)	20 (320)	90 (620)	4 (27.6)	15	250°F (121°C)	150°F (66°C)
4508*	Black			0.125 (3)	20 (320)	100 (690)				
4516*	Black			0.062 (1.5)	25 (400)	130 (895)				
4714*	Black	Same as above except lower density and liner over PSA.	430 Acrylic	0.250 (6)	14 (225)	75 (515)	2 (13.8)	5		
4718*	Black			0.125 (3)	20 (320)	100 (690)	4 (27.6)	15		
4726*	Black			0.062 (1.5)	20 (320)	130 (895)	3 (20.7)	15		

*Meets requirements of UL 94HBF.

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3M Converter Markets Center

Converting 3M Technology into Successful Applications

3M Converters match 3M technologies to customer requirements with the exact form, fit, and functionality for application success in identifying, bonding, protecting, and electrical shielding or conducting.

Converter expertise includes part design, quick prototyping, laminating adhesives to various surfaces, printing labels and durable graphics, slitting, and die-cutting.

3M technologies include the following:

- 3M™ Performance Label Materials
- 3M™ Thin Attachment Tapes
- 3M™ Adhesive Transfer and Double Coated Bonding Tapes such as 3M™ VHB™ Tapes
- 3M™ Single Coated Tapes such as crepe masking tape
- 3M™ Reclosable Fasteners
- 3M™ Bumpon™ Protective Products
- And more



3M™ Performance Label Materials with Structured Adhesive — With unique microchannels throughout the structured adhesive, air flows freely from between the label adhesive and substrate. Hand-applied large labels go on smoothly and stay that way permanently without unsightly wrinkles and bubbles.



For permanent attachment of die-cut durable graphics, 3M™ Low Surface Energy (LSE) Acrylic Adhesive 300 bonds on contact and stays tight on low surface energy plastics, powder coated paints, and lightly oiled metals.



Dimensionally-stable 3M™ Double Coated Tapes are pre-applied to foam gasketing material and die-cut to precise shape and size for fast, easy application.



3M converters can slit 3M™ Masking Tapes to specified widths and roll lengths, as well as die-cut to unique shapes for specialized applications.



For hundreds to thousands of openings and closings, 3M converters customize 3M™ Reclosable Fasteners to meet exact customer requirements for form, fit, mating strength, and liner.



For a little touch of quiet and skid resistance on a PDA or other small product, custom 3M™ Bumpon™ Protective Products are scaled for the design. Adhesive is formulated to hold even a small bonding surface.



From the 150,000 possible combinations of adhesives, facestocks, overlaminates and liners, 3M has many choices for durable labels requiring UL and/or RoHS compliance.