3M Science. Applied to Life.™

Selection Guide

Your everyday challenges solved. Every day.

Industrial solutions.
Maintenance, Repair and Operations (MRO) essentials.
3M Industrial Adhesives and Tapes

Choose the Right 3M Product for the Application

3M Industrial Adhesives and Tapes

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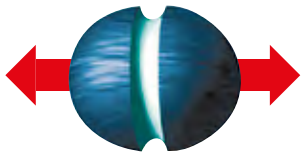
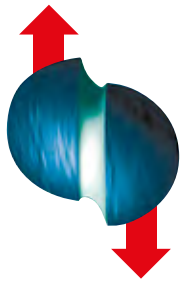
Types of Stress

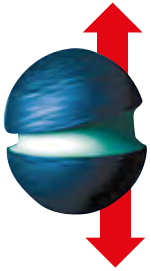


Tensile
Stress acts perpendicular to bond plane



Shear
Stress acts parallel to bond plane

Preferred Design
With tensile and shear forces, entire bond area contributes to strength



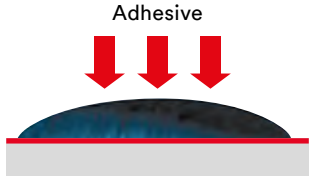
Cleavage
Stress between two rigid substrates

Peel
Stress with at least one flexible substrate

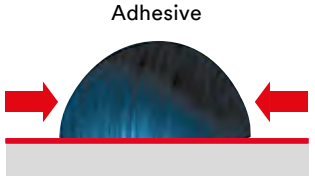
Not Preferred Design
With both cleavage and peel forces, the stresses are concentrated at the leading edge

Surface Energy

Choose the right tape for the substrate: Adhesives must flow onto the substrate surfaces in order to achieve intimate contact area



High Surface Energy



Low Surface Energy

High Surface Energy	Medium Surface Energy	Low Surface Energy
Metal, glass	PET, ABS, PVC (rigid), polycarbonate, polyimide, polyurethane (rigid), acrylic (PMMA). Most paints and coatings	Polypropylene, polyethylene, TPO, PTFE, acetyl, PBT, polystyrene, EPDM rubber. Some paints and coatings (PVDF)

Tape Surface Preparation and Application

1. Surface Cleaning

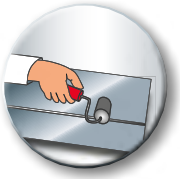
- To obtain optimum adhesion, the bonding surfaces must be well unified, clean and dry
- Wipe surface using an appropriate cleaning agent and a clean cloth
- For glass surfaces use the 3M Silane Glass Primer

2. Application

- Apply the tape to the surface. Do not overstretch the tape
- Avoid air pockets
- Do not touch the adhesive or adhesive surface
- Optimum application temperature is between 15°C and 25°C

3. Pressure

- Bond strength is dependent upon the amount of adhesive-to-surface contact developed
- Firm application pressure develops better adhesive contact and helps improve bond strength



4. Liner Release

- Release the liner in one step (avoid stops)
- Do not touch the adhesive or adhesive surface

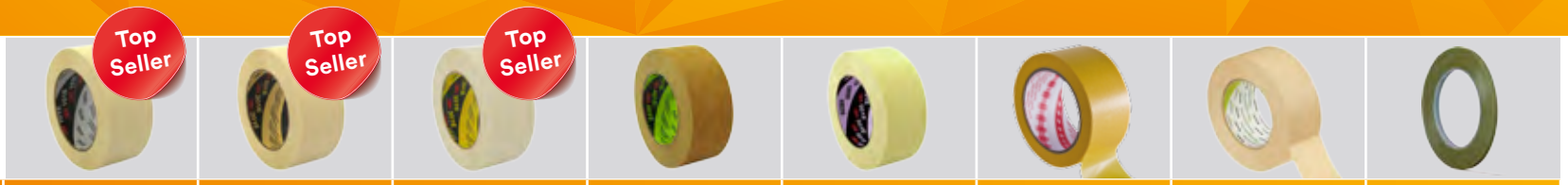
5. Joining and Contact Pressure

- Apply substrate to the tape
- Avoid air pockets
- Bonding pressure of about 2 kg/cm²

6. Wait for Final Adhesion

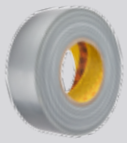
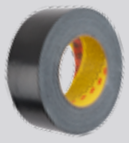
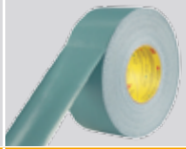
- After application, the bond strength will increase as the adhesive flows onto the surface
- At room temperature, approximately 50% of the ultimate strength will be achieved after 20 minutes, 90% after 24 hours and 100% after 72 hours
- In some cases, bond strength can be increased and ultimate bond strength can be achieved more quickly by exposure of the bond to elevated temperatures (e.g. 66°C for 1 hour)

3M™ Masking Tapes



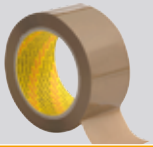
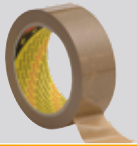
Product Number	101E	201E	301E	401E	501E	244	202	218
Product Description	Value Masking Tape	General Use Masking Tape	Performance Masking Tape	High Performance Masking Tape	Specialty High Temperature Masking Tape	Washi Masking Tape Gold	High Strength Paper Masking Tape	Fine Line Masking Tape
Colour	Tan	Chamois	Chamois	Brown	Chamois	Gold	Natural	Green
Physical and Performance Characteristics								
Total Thickness [mm]	0.115	0.135	0.150	0.160	0.150	0.085	0.170	0.120
Backing Material	Crepe Paper	Crepe Paper	Crepe Paper	Crepe Paper	Crepe Paper	Flat Paper Backing	Smooth Crepe Paper	Polypropylene
Adhesive Type	Rubber	Rubber	Rubber	Rubber	Rubber	Acrylic	Rubber	Rubber
Peel Strength [Newton/25 mm]	5.0	6.0	9.0	10.0	11.0	2.0	10.5	11.0
Tensile Strength [Newton/25 mm]	89	89	95	100	106	76	115	57
Elongation at Break	8%	10%	10%	10%	10%	6%	10.5%	490%
Temperature Resistance	60°C/1 h	80°C/1 h	100°C/1 h	140°C/1 h	160°C/1 h	100°C/1 h	95°C/1 h	120°C/1 h
Applications and Key Features								
Indoor use	•	•	•	•	•		•	•
Indoor and outdoor use						•		
Short-term paint masking	•	•					•	
Longer-term paint masking						•		
Heavy, thick, crepe paper backing provides good paint lines							•	
Light-duty applications	•							
General-purpose industrial paint masking			•					
High-performance industrial paint masking				•				
Oven-drying systems, IR or heat lamps				•				
Good solvent and moisture resistance				•	•			
High-performance automotive paint masking				•	•			
Suitable for infrared/UV-curing and bake cycles					•			
Fine colour separation line in multi-colour striping applications								•
Prevents paint bleed through				•	•	•		•
Removes cleanly in one piece with no residue				•	•	•		

3M™ Cloth and Duct Tapes

								
Product Number	**1900**	**1909**	**2903**	**2904**	**389**	**8979**		
Product Description	**Utility Duct Tape Noncritical Applications**	**General Purpose Cloth Tape**	**General Purpose Conformable Cloth Tape**	**Heavy Duty Conformable Cloth Tape**	**Performance Plus Conformable Cloth Tape**	**Performance Plus UV Resistant Cloth Tape**		
Colour	Silver	Silver, Black	Silver, Black, White	Silver, Black, White	Silver, Black, White, Yellow, Red, Blue, Green, Olive	Black, Olive, Slate Blue		
Physical and Performance Characteristics								
Total Thickness [mm]	0.17	0.28	0.15	0.19	0.26	0.31		
Backing Material	PE Over Coated Cloth Scrim	PE Coated Cloth	PE Coated Cloth Scrim	PE Coated Cloth Scrim	PE Coated Cloth	PE Over Cloth Scrim		
Adhesive Type	Synthetic Rubber Resin	Synthetic Rubber Resin	Synthetic Rubber Resin	Synthetic Rubber Resin	Crosslinked Rubber Resin	Rubber		
Peel Strength [Newton/25 mm]	15.0	15.0	8.0	11.0	22.5	5.3		
Tensile Strength [Newton/25 mm]	70	133	100	110	200	63		
Elongation at Break	20%	12%	30%	30%	6%	19%		
Temperature Resistance	60°C/1 h	60°C/1 h	60°C	60°C	70°C/1 h	90°C		
Applications and Key Features								
Indoor use	•	•	•	•	•			
Indoor and outdoor use						•		
UV Resistant						• (1 year)		
Wide colour range					•			
For noncritical applications	•							
Light-duty sealing and holding	•							
General maintenance, bundling, wrapping, attaching				•				
Bundling and fixing in the transportation area		•	•	•				
Bonding and splicing of wall carpets				•	•			
Marking and labelling	•			•	•			
Sealing and fixing of pipes				•		•		
Joining and sealing of plastic films				•		•		
Gypsum and plaster work and exterior insulation						•		
High water resistance		•			•	•		
Provides moisture resistance for tape applications	•	•			•			
Easy unwinding and hand tearable	•	•	•	•	•	•		

3M™ Scotch® Box Sealing Tapes

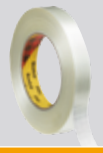



Product Number	369	371	309	313	3739	6890	375E	
Product Description	PP 25 µm Standard	PP 28 µm Standard	PP 28 µm Standard Low Noise	PP 40 µm Standard Low Noise	PP 35 µm Performance	PVC 33 µm Performance Low Noise	PP 50 µm High Performance	
Colour	Tan, Clear	Tan, Clear	Tan, Clear	Tan, Clear	Tan, Clear	Tan, Clear	Tan, Clear	
Physical and Performance Characteristics								
Total Thickness [mm]	0.041	0.045	0.050	0.065	0.057	0.051	0.073	
Backing Material	BOPP	BOPP	BOPP	BOPP	BOPP	PVC	BOPP	
Adhesive Type	Hot Melt Rubber Resin	Hot Melt Rubber Resin	Acrylic	Acrylic	Hot Melt Rubber Resin	Solvent Natural Rubber Resin	Synthetic Rubber	
Peel Strength [Newton/25 mm]	8.0	10.0	6.5	8.8	12.5	5.5	15.0	
Tensile Strength [Newton/25 mm]	84	125	128	153	135	143	200	
Elongation at Break	160%	140%	154%	125%	154%	70%	140%	
Applications and Key Features								
Available in long rolls	•	•			•		•	
Low-noise unwinding			•	•		•		
Light-weight packaging, cardboard	•	•	•					
Medium-weight packaging, cardboard				•	•	•		
Colder and damper applications			•	•				
Absorbs impact shock					•		•	
Scuffing to hold strong throughout the shipping process	•	•			•		•	
Heat-shrink sealing						•		
Good UV resistance			•	•				
Box Sealing Tape Dispenser H-180								
								
Portable, lightweight, easy to operate, hand held dispenser with a retractable blade	•	•	•	•	•	•	•	

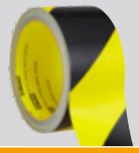
3M™ Scotch® Filament Tapes





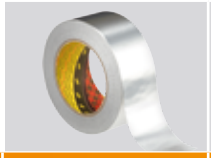
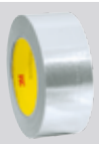
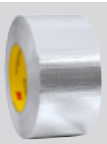

Product Number	8953	8954	8956	8959	8981	8915		
Product Description	**100 µm Filament Tape Standard**	**125 µm Filament Tape Standard, Bidirectional**	**120 µm Filament Tape Universal**	**130 µm Filament Tape Universal, Bidirectional**	**168 µm Filament Tape High Performance**	**152 µm Filament Tape Removable**		
Colour	Transparent	Transparent	Transparent	Transparent	Transparent	Transparent, Light Blue		
Physical and Performance Characteristics								
Total Thickness [mm]	0.100	0.125	0.120	0.130	0.168	0.152		
Backing Material and Reinforcement	Polypropylene Film, Fibreglass Reinforced	Polypropylene Film, Bidirectional Fibre-glass Reinforced	Polypropylene Film, Fibreglass Reinforced	Polypropylene Film, Bidirectional Fibre-glass Reinforced	Polypropylene Film, Fibreglass Reinforced	Polypropylene Film, Fibreglass Reinforced		
Adhesive Type	Synthetic Rubber Resin	Synthetic Rubber Resin	Synthetic Rubber Resin	Synthetic Rubber Resin	Synthetic Rubber Resin	Synthetic Rubber Resin		
Peel Strength [Newton/cm]	5.5	7.0	8.0	9.0	7.7	7.1		
Tensile Strength [Newton/cm]	250	135	260	280	666	298		
Elongation at Break	10%	10%	6%	6%	3%	3%		
Applications and Key Features								
Fibreglass longitudinally reinforced	•		•		•	•		
Fibreglass Bidirectional reinforced		•		•				
Pallet unitising, bundling for shipping and handling	•	•	•	•	•	•		
Bundling of light-weight products	•	•						
Bundling of medium-weight products			•	•		•		
Bundling of heavy-weight products					•			
Remove cleanly from most surfaces with no adhesive residue						•		
Moisture resistance	•	•	•	•	•	•		
Abrasion resistance	•	•	•	•	•	•		
Scuffing to hold strong throughout the shipping process	•	•	•	•		•		
Filament Tape Dispenser								
3M Filament Dispenser H-10 								
3M Filament Dispenser H-12 								
H-10 Dispenser: durable filament tape dispenser, up to 25 mm	•	•	•	•	•	•		
H-12 Dispenser: features a hand break to add tension to the tape roll, up to 25 mm	•	•	•	•	•	•		

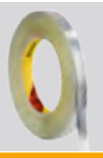
3M™ Vinyl Tapes



Product Number	764i	766i	767i	471	5702			
Product Description	**Vinyl Tape Standard**	**Hazard Marking Vinyl Tape Standard**	**Hazard Marking Vinyl Tape Standard**	**Vinyl Tape**	**Safety Stripe Vinyl Tape**			
Colour	Black, Grey, White, Red, Yellow, Blue, Clear, Green, Orange, Brown	Yellow/ Black stripes	Red/White stripes	Black, White, Red, Yellow, Blue, Clear, Green, Orange, Brown	Yellow/ Black stripes			
Physical and Performance Characteristics								
Total Thickness [mm]	0.125	0.125	0.129	0.140	0.140			
Backing Material	Polyvinyl Chloride (PVC)	Polyvinyl Chloride (PVC)	Polyvinyl Chloride (PVC)	Vinyl	Vinyl			
Adhesive Type	Rubber	Rubber	Rubber	Rubber	Rubber			
Peel Strength [Newton/100 mm]	21	21	21	25	21			
Tensile Strength [Newton/100 mm]	228	228	228	270	260			
Elongation at Break	180%	180%	180%	130%	170%			
Temperature Use Range	16°C to 29°C	16°C to 29°C	16°C to 29°C	4°C to 77°C	4°C to 77°C			
Applications and Key Features								
Noncritical applications	•	•	•					
Hand tearable								
Temporary marking of parts	•							
Protect parts, equipment or products from abrasion	•			•				
Temporary floor marking around equipment or spills		•	•	•				
Marking of equipment pitch points or gears for warning purposes		•	•	•				
For taping, wrapping or sealing many curved or convex surfaces				•				
Lane and safety marking applications				•	•			
Colour code piping, tools, instruments, etc.				•				
Helps identify hazard areas					•			
Sealing and protecting surfaces from dust, dirt and moisture								
Plaster and concrete formwork tape application								
Good solvence resistance					•			

3M™ Metal Foil Tapes

Product Number	1436	1517CW	1524CW	431	425	420		
Product Description	**Aluminium Foil Tape With Liner**	**Aluminium Foil Tape With Liner**	**Reinforced Aluminium Foil Tape With Liner**	**Aluminium Foil Tape No Liner**	**Aluminium Foil Tape No Liner**	**Lead Foil Tape With Liner**		
Colour	Silver	Silver	Silver	Silver	Silver	Silver		
Physical and Performance Characteristics								
Total Thickness [mm]	0.075	0.060	0.180	0.080	0.120	0.170		
Backing Material	Dead Soft Aluminium	Dead Soft Aluminium	Scrim Reinforced Aluminium Foil/PE	Aluminium Foil	Aluminium Foil	Lead Foil		
Adhesive Type	Rubber	Acrylic	Acrylic	Acrylic	Acrylic	Rubber		
Peel Strength Adhesion [Newton/25 mm]	12.0	9.7	11.0	11.3	12.8	12.2		
Tensile Strength [Newton/25 mm]	45	57	113	85	123	88		
Elongation at Break	3%	5%	30%	5%	6%	12%		
Water Vapour Transmission Rate	< 1.0 g/m² in 24 h			1.55 g/m² in 24 h	0.77 g/m²/24 h	1.55 g/m² in 24 h		
Temperature Use Range	–25°C to 70°C	–40°C to 121°C	–40°C to 85°C	–54°C to 149°C	–55°C to 150°C	–51°C to 107°C		
Applications and Key Features								
Indoor use	•							
Indoor and outdoor use		•	•	•	•			
Easy-release liner	•	•	•			•		
Designed for cold-weather conditions		•	•					
Use as a vapour seal for reinforced aluminium-faced fiberglass or mineral-wool thermal insulation		•	•					
Fixing of tubes, coils				•	•			
General-purpose heat reflector and heat dissipater					•			
Masking in electroplating					•	•		
Moisture barrier in “white goods” appliances					•			
Mechanically hold wires and cooling coils in “white goods” appliances					•	•		
Radiopaque for X-ray markers						•		

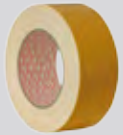
3M™ Specialty Single Coated Tapes and Extreme Sealing Tapes





Product Number	361	5423	5490	4411N	4412N			
Product Description	**Glass Cloth Tape High Temperature Resistant**	**UHMW-PE Tape Low Friction**	**PTFE Tape Anti-stick**	**Extreme Sealing Tape 1.0 mm**	**Extreme Sealing Tape 2.0 mm**			
Colour	White	Translucent	Brown	Translucent	Translucent			
Physical and Performance Characteristics								
Total Thickness [mm]	0.16	0.30	0.09	1.00	2.00			
Backing Material	Glass Cloth	UHMW-PE Film	PTFE – Polytetra-fluorethylene	Acrylic Foam	Acrylic Foam			
Adhesive Type	Silicone	Rubber	Silicone	Acrylic	Acrylic			
Peel Strength [Newton/100 mm]	42	39	30	134	168			
Tensile Strength [Newton/100 mm]	2555	796	304	218	193			
Elongation at Break	9%	530%	170%	547%	380%			
Temperature Use Range	–54°C to 232°C	–34°C to 107°C	–54°C to 260°C	90°C to 150°C	90°C to 150°C			
Applications and Key Features								
Can withstand intermittent temperatures	•							
Sealing of high-temperature ducts or chambers	•							
Applications requiring heat treatment followed by clean removal of the tape with little or no stain	•							
Reduce squeaks, rattles and other noises that occur with movement		•						
Noise reduction between dissimilar parts		•						
Protection of grinding areas		•						
Protection for aluminium sheets on stretch forming presses		•						
Lining of conveyer guide rails, tank and bin liners		•						
Nonstick PTFE film provides a good slick surface for easy clean-up			•					
Easy-release surface by wrapping rollers, plates, belts, etc.			•					
Low coefficient of friction surface on rollers, formers to facilitate web movement			•					
Good sealing properties and outdoor durability				•	•			
Seal over an existing joint, seam or penetration				•	•			

3M™ Double Coated Thin Tapes



Product Number	9088-200	9088F200	9191	9195				
Product Description	**Double Sided Adhesive Tape Paper Liner**	**Double Sided Adhesive Tape Film Liner**	**Carpet Tape Standard**	**Carpet Tape Exhibition**				
Colour	Clear	Clear	White	Yellow				
Physical and Performance Characteristics								
Total Thickness [mm]	0.20	0.20	0.26	0.13				
Backing Material	Polyester	Polyester	Cloth	Polypropylene				
Adhesive Type	Modified Acrylic	Modified Acrylic	Hot Melt	Hot Melt, Acrylic				
Peel Strength [Newton/cm]	11.5	11.5	6.0	8.0 + 1.6				
Temperature Resistance	90°C	90°C	60°C	60°C				
Applications and Key Features								
High initial tack and shear strength	•	•						
Good adhesion to low-surface-energy substrates like PC, PP	•	•						
High shear and temperature resistance	•	•						
Good UV resistance	•	•		•				
Bonding and mounting of sales displays and billboards	•	•						
Fixing of decorative trims and emblems	•	•						
Self-adhesive mounting of furniture trim, sealing profiles and cable ducts	•	•						
Fixing area rugs, carpet plates			•					
Bonds carpet to concrete or gymnastic floors and can be removed without any residue				•				
Different adhesive strengths (permanent bonding/removable)				•				

3M™ ATG Adhesive Transfer Tape System and Transfer Tapes




Product Number for ATG System	ATG 904	ATG 924	ATG 976	ATG 969	ATG 926	ATG 928		
Product Number for Adhesive Transfer Tapes		465	927	950	9485	9415		
Product Description	**General Purpose**	**General Purpose**	**High Tack LSE Substrates, e.g. PE, PP**	**High Tack LSE Substrates, e.g. PE, PP**	**High Performance and Temperature Resistance**	**Repositionable**		
Colour	Clear	Clear	Clear	Clear	Clear	White		
Physical and Performance Characteristics								
Total Thickness [mm]	0.05	0.05	0.05	0.13	0.13	0.05		
Backing Material	Transfer Tape	Transfer Tape	Transfer Tape	Transfer Tape	Tissue	Transfer Tape		
Adhesive Type	Acrylic	Medium-firm Acrylic Pressure Sensitive	Soft Acrylic Pressure Sensitive	Soft Acrylic Pressure Sensitive	Firm Acrylic Pressure Sensitive	Medium-firm Acrylic Pressure Sensitive		
Peel Strength [Newton/cm]	5.0	2.7	6.6	8.0	16.3	0.3/1.3		
Relative High-Temperature Operating Ranges	70°C	80°C to 120°C (min, h)	80°C to 120°C (min, h)	80°C to 120°C (min, h)	150°C to 230°C (min, h)	50°C to 80°C (min, h)		
Applications and Key Features								
General-purpose adhesive transfer film tape. Offers high adhesion, good solvent resistance, and excellent UV resistance	•	•						
High initial adhesion and good holding power to a variety of materials including most plastics			•	•				
Excellent solvent resistance and can be used in high-temperature applications					•			
High-tack/Low-tack repositionable pressure sensitive adhesive which allows removal from many papers, foils, and films						•		
ATG 700 Adhesive Applicator								
								
Touch of the finger triggers quick, controlled application of tape. No mess or clean-up. Saves time and effort. Applies adhesive transfer tape while simultaneously removing and rewinding the liner	•	•	•	•	•			

3M™ Mounting Tapes

Product Number	4026	4032	9546					
Product Description	**Double Coated Urethane Foam Tape**	**Double Coated Urethane Foam Tape**	**Double Coated PE Foam Tape**					
Colour	White	White	White					
Physical and Performance Characteristics								
Total Thickness [mm]	1.60	0.80	1.10					
Backing Material	Polyurethane Foam	Polyurethane Foam	Polyethylene Foam					
Adhesive Type	Acrylic	Acrylic	Modified Acrylic Adhesive					
Tensile Strength (T-Block) [kPa]	275	415	-					
Temperature Resistance	105°C	105°C	80°C					
Applications and Key Features								
Durable foam is ideal for interior mounting applications	•	•						
High-shear adhesive with high temperature resistance	•	•						
Ideal for bonding, attaching, and mounting	•	•						
Mounting interior signs and nameplates	•	•						
Mounting dispensers and air fresheners	•	•						
Attach wire clips to wall surfaces	•	•						
Mount corner protectors	•	•						
Provide a combination of high initial adhesion and good shear-holding power to a wide variety of materials, including many plastics and foams			•					
Bonding fabric to rigid cardboard			•					
Attaching foam to plastics			•					
General-purpose lamination for fabricated parts			•					

3M™ VHB™ High-Strength Bonding Tapes

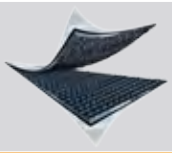
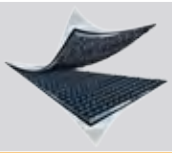




Product Number Long Rolls	4905	4910	4915	5925	5952	5962	GPH-110GF	GPH-160GF
Product Number Short Rolls (11 m)		4910F			5952F			
Product Description	VHB™ Bonding Tape Transparent Surfaces	VHB™ Bonding Tape Transparent Surfaces	VHB™ Bonding Tape Transparent Surfaces	VHB™ Bonding Tape Very Conformable	VHB™ Bonding Tape Very Conformable	VHB™ Bonding Tape Very Conformable	VHB™ Bonding Tape High Temperature Resistance	VHB™ Bonding Tape High Temperature Resistance
Colour	Clear	Clear	Clear	Black	Black	Black	Grey	Grey
Physical and Performance Characteristics								
Total Thickness [mm]	0.5	1.0	1.5	0.6	1.1	1.6	1.1	1.6
Adhesive Type	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic
Foam Density [kg/m³]	960	960	960	590	590	590	710	710
Peel Strength [Newton/cm]	21	26	26	30	39	39	37	34
Tensile Strength (T-Block) [kPa]	690	690	690	620	620	620	670	690
Dynamic Overlap Shear [kPa]	480	480	480	620	550	550	730	570
Relative High-Temperature Operating Ranges	90°C to 150°C (min, h)	90°C to 150°C (min, h)	90°C to 150°C (min, h)	120°C to 150°C (min, h)	120°C to 150°C (min, h)	120°C to 150°C (min, h)	150°C to 230°C (min, h)	150°C to 230°C (min, h)
Applications and Key Features								
Indoor and outdoor use	•	•	•	•	•	•	•	•
For applications where clear or colourless is desired	•	•	•					
High-surface-energy substrates like metal, aluminium, etc.	•	•	•	•	•	•	•	•
High to medium surface energy substrates like paints, metals and glass etc.	•	•	•	•	•	•		
High temperature resistance (short-term)							•	•
Bonding before powder-coating process							•	•
UV resistance	•	•	•	•	•	•	•	•
Solvent resistance	•	•	•	•	•	•	•	•
Aging resistance	•	•	•	•	•	•	•	•
Very conformable adhesive foam core				•	•	•		
Products for surface preparation								


VHB Surface Cleaner	Primer 94							

3M™ Reclosable Fasteners




Product Number Long Rolls	**SJ-3526**	**SJ-3527**	**SJ-3540**	**SJ-3550**	**SJ-3560**	**SJ-4570**		
Product Number Dispenser Box (2 × 5 m)	**SJ-352D**	**SJ-352D**	**SJ-354D**	**SJ-355D**	**SJ-356D**	**SJ-457D**		
Product Number Short Rolls (2.5 m)	**SJ-352B**	**SJ-352B**	**SJ-354B**	**SJ-355B**	**SJ-356B**		**SJ-387B**	
Product Description	**Nylon Hook Fastener**	**Nylon Loop Fastener**	**Dual Lock™ Reclosable Fasteners Indoor Use**	**Dual Lock™ Reclosable Fasteners Indoor and Outdoor Use**	**Dual Lock™ Reclosable Fasteners Transparent**	**Dual Lock™ Reclosable Fasteners Thin**	**Dual Lock™ Reclosable Fasteners Indoor and Outdoor Use**	
Colour	Black, White	Black, White	Black	Black	Clear	Clear	Black	
Physical and Performance Characteristics								
Engaged Thickness [mm]	3.8 ± 15%	3.8 ± 15%	6.8 ± 15%	5.7 ± 15%	5.9 ± 15%	2.31 ± 15%	6.1 ± 15%	
Adhesive Type	Rubber	Rubber	Rubber	White Acrylic	Clear Acrylic	Modified Acrylic	Modified Acrylic	
Closure Cycle Life	Up to 5000	Up to 5000	Up to 1000	Up to 1000	Up to 1000	100-150	Up to 1000	
Temperature Resistance	49°C	49°C	49°C	93°C	104°C	70°C	82°C	
Applications and Key Features								
Indoor use	•	•	•					
Indoor and outdoor use				•	•	•	•	
Fastening of transparent materials					•	•		
Bonds well to high and medium surface energy substrates such as many metals (e.g. aluminum, stainless steel), glass, plastics (e.g. acrylic, poly-carbonate, ABS) and sealed wood, paper as well as cardboard	•	•	•	•	•	•	•	
Bonds well to a variety of high and medium surface energy substrates as well as to selective low surface energy substrates such as powder-coated metals	•	•	•			•	•	
Bonds well to many low surface energy materials (polypropylene, polyethylene) and critical paints	•	•	•					
Half-standard thickness / Low profile						•		
Temperature performance	Low	Low	Low	High	High	Medium	Medium	

3M™ Spray Adhesives and Cleaners





Product Number	Foam Fast 74	Repositionable 75	Hi-Tack 76	Super 77	Rubber and Vinyl 80	Hi-Strength 90	Industrial Cleaner IC	VHB Surface Cleaner
Product Description	Foam Bonding	Repositionable and Removable	Hi-Tack Spray	Multi-Purpose Spray	Rubber and Vinyl Spray	Hi-Strength Spray	Industrial Cleaner	Surface Cleaner
Colour	Orange	White	Cream	Cream	Bright Yellow	White	Clear	Clear
Physical and Performance Characteristics								
Base	Synthetic Elastomer	Synthetic Elastomer	Synthetic Elastomer	Synthetic Elastomer	Polychloroprene	Synthetic Elastomer		
Density [g/ml]	0.713	0.71	0.70	0.70	0.71	0.71		
Volatile Organic Compounds [VOC] %	< 55	636	Yes	523	506	636		
Flash Point	–42°C	–46°C	–42°C	–42°C	–45°C	–55°C		
Spray Adhesive Application	Both Sides	One Side	Both Sides	One Side or Both Sides	Both Sides	Both Sides	Spraying, Brushing	With Lint-Free Cloth
Spray Pattern	Variable Lace	Particle	Variable Lace	Mist	Variable Lace	Variable Lace		
Bonding Range	Up to 10 min	Permanently Tacky	Up to 60 min	Up to 15 min	Up to 15 min	Up to 15 min		
Dry Time	15 to 30 sec	Up to 5 min	Up to 10 min	Up to 10 sec	1 to 3 min	Up to 30 sec		
Applications and Key Features								
General upholstery and flexible foams bonding (e.g. PU or latex)	•							
Bond fabrics to interiors, speakers, etc.	•							
Repositionable and removable		•						
Lightweight materials such as paper, cardboard		•						
Bond carpet, door skins and fabric in conversions			•					
Attach nameplates and pipe insulation			•					
Bond insulation in interiors and specialty cabinets			•					
Bond insulating material such as polystyrene, rock wool, glass wool				•				
For variety of display and furniture jobs				•				
Bond some gaskets				•				
Bond thin decorative film, foils, and fabrics				•				
Bond all types of rubber except EPDM					•			
Bond most supported vinyl and leather					•			
Adhere stainless-steel panels, stiffeners and metal kick plates					•			
Adhere many plastics, laminates and wood products					•			
Adhere polyethylene, polypropylene to wood, metal and more						•		
Bond decorative laminate to tables, cabinets and shelving						•		
Bond kick plates to office desks						•		
Attach plastic sign lettering to wood						•		
Industrial cleaner (universal use, non-corrosive)							•	
For degreasing, cleaning before bonding								•

3M™ Adhesive Sealants



Product Number	540	550FC	760					
Product Description	**Polyurethane Adhesive Sealant**	**Polyurethane Adhesive Sealant**	**SMP, Isocyanate free adhesive sealant**					
Colour	Black, Grey, White	Black, Grey, White	Black, Grey, White					
Physical and Performance Characteristics								
Base	Polyurethane	Polyurethane	Toughened Epoxy – Modified Amine					
Adhesive Consistency	Thyrotrophic	Medium Paste	Thick Paste					
Hardness [Shore A seconds]	40	45	45					
Modulus at 100% [MPa]	0.98	1.00	> 1.00					
Skin Time	approx. 45-60 min	approx. 60 min	20 min ± 10 min					
Cure Rate mm/24 h	3.5	4.0	3					
Temperature Use Range	–40°C to 90°C	–40°C to 90°C	–40°C to 100°C					
Applications and Key Features								
UV resistance for outdoor applications where bond, sealant line is exposed			•					
Interior seal	•	•	•					
Outdoor seal	•	•	•					
One-component/moisture curing	•	•	•					
Industrial and refrigerated trailers, truck bodies, shipbuilding, sandwich panels and many other industrial applications	•	•	•					
Wood	•	•	•					
Steel, anodized aluminium, galvanised metal	•	•	•					
Glass	•	•	•					

3M™ Scotch-Weld™ Two-Component Structural Epoxy Adhesives

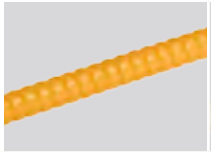



Product Number	DP100	DP105	DP110	DP190	DP410	DP460	DP490	7240 B/A FR
Product Description	General Purpose Rigid Bonds	Very Flexible Colourless	General Purpose Flexible Bonds	High Performance Slightly Flexible Bonds	Tough Durable Bonds Shorter Work Life	Tough Durable Bonds Longer Work Life	Tough Durable Bonds High Temperature Resistance	For Thicker Adhesive Layers
Colour	Clear	Clear	Translucent, Grey	Grey	Beige	Beige	Black	Grey
Physical and Performance Characteristics								
Base	Epoxy Adhesive	Epoxy Adhesive	Modified Epoxy	Epoxy Adhesive	Toughened Epoxy	Epoxy Adhesive	Epoxy Adhesive	Epoxy Adhesive
Approx. Work life [min]	4	3	8	90	12	60	170	76
Approx. Time to Handling Strength [min]	20	20	20	480 to 720	30	240 to 360	240 to 360	360
Viscosity	Fluid	Fluid	Controlled Flow	Controlled Flow	Low Flow	Controlled Flow	Thixotropic	Thixotropic
Overlap Shear Strength [MPa]	24	13.8	17	17.6	38	31	31	28
Manual Dispenser								
EPX Plus II Applicator: for 50 ml Cartridges	•	•	•	•	•	•	•	
EPX Pneumatic Applicator: for 400 ml Cartr.			•	•	•	•	•	•
Plunger								
EPX Plunger for 50 ml Cartridges	•	•	•	•	•	•	•	
Static Mixing Nozzles								
EPX Mixing Nozzles for 50 ml Cartridges	•	•	•	•	•	•	•	
EPX Mixing Nozzles for 400 ml Cartridges			•	•	•	•	•	•
Applications and Key Features								
High shear strength, good peel strength	•		•	•				•
High peel strength		•	•					
Toughened adhesive to withstand demanding conditions					•	•	•	
Good adhesion to many plastics and metals			•	•				
Flexible adhesive formula provides strong, permanent bond even under vibration and impact		•						
Flexible when cured, making it a good choice for bonding dissimilar surfaces			•	•				
Self-extinguishing (no halogen)								•
Long open time for large-surface application						•	•	•

3M™ Scotch-Weld™ Two-Component Structural Acrylic and PU Adhesives

Product Number	DP8005	DP8010	DP810	DP8405NS	DP8810NS	DP609	
Product Description	Bonds polyolefins and low-surface-energy Materials	Bonds polyolefins and low-surface-energy Materials	Tough Durable Bonds High-impact Resistance	High-impact Adhesion to most Plastics	Low-Odour Fast Rate of Strength Build	Especially for Plastics and Wood	
Colour	Black, Translucent	Blue-Green	Green	Green	Blue-Green	Beige	
Physical and Performance Characteristics							
Base	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Polyurethane	
Approx. Work life [min]	2 to 3	approx 8	10	4 to 6	8 to 12	9	
Approx. Time to Handling Strength [min]	30	60	20	14 to 16	16 to 20	60	
Viscosity	Thixotropic Low	Thixotropic	Controlled Flow	Thixotropic	Thixotropic	Low	
Shear Strength [MPa]	7	13.5	29	30	25.6	14	
Manual Dispenser							
EPX Plus II Applicator: for 38/45 and 50 ml Cartridges	•	•	•	•	•	•	
EPX Pneumatic Applicator: for 400 ml Cartridges	•	•	•	•	•	•	
Plunger							
EPX 10:1 Plunger for 38 ml Cartridges	•	•					
EPX 10:1 Plunger for 45 ml Cartridges				•	•		
EPX Plunger for 50 ml Cartridges			•			•	
Static Mixing Nozzles							
EPX Mixing Nozzles for 45 ml Cartridges				•	•		
EPX Mixing Nozzles for 50 ml Cartridges						•	
EPX DP810 Mixing Nozzles for 50 ml Cartridges			•				
EPX Mixing Nozzles for 38 ml Cartridges	•	•					
Applications and Key Features							
Creates strong bond on low-surface-energy plastics (LSE) such as polyolefin with minimal or no surface prep required	•	•					
Resists many chemicals, water, humidity and corrosion	•	•					
Low-odour adhesive			•		•		
Provides high shear and peel strength and is toughened for impact resistance			•				
Durable bond with excellent shear, peel and high-impact strength				•	•		
Bonds to a variety of surfaces, including most metals and plastics				•			
Bonds difficult surfaces such as powder coats and most plastics					•		
Bonds plastics and painted or primed metal surfaces						•	

3M™ Hot Melt Bonding Systems, Rubber and Plastic Adhesives




Product Number	3738	3748	3762	3764	3792	847	1099
Product Description	**Hot Melt Adhesive Wood**	**Hot Melt Adhesive Electronics**	**Hot Melt Adhesive Cardboard**	**Hot Melt Adhesive Plastics**	**Hot Melt Adhesive Universal**	**Nitrile High Performance Rubber and Gasket Adhesive**	**Nitrile High Performance Plastic Adhesive**
Colour	Tan	White	Tan	Clear	Clear	Brown	Light Tan
Physical and Performance Characteristics							
Base	Thermoplastic adhesive	Thermoplastic adhesive	Thermoplastic adhesive	Thermoplastic adhesive	Thermoplastic adhesive	Nitrile Rubber	Nitrile Rubber
Viscosity						Fluid	Fluid
Method						Brush, Roller, Flow or Spray	Brush, Roller, Flow or Spray
Open Time [Seconds]	50	45	35	40	50		
Ball and Ring Melt Point	86°C	144°C	94°C	88°C	83°C		
Shear Strength [MPa]	2.6	2.2	3.8	2.7	1.7	1.4	9.0
Peel Strength [Newton/cm]	23	32	12	25	23	23	23
Applications and Key Features							
For woodworking and general industrial applications	•						
Outstanding electrical properties offers an ideal solution for electrical applications		•					
Aggressive hot tack rapidly achieves handling strength for packaging and other applications			•				
Bonding of many plastics, including polyolefin				•			
Clear, multipurpose for wood, fabric, upholstery, and other lightweight materials					•		
Bond leather, nitrile rubber, most plastics, gasketing materials to a variety of substrates						•	
High-performance adhesive forms strong bonds on most vinyls and plastics							•
Resists weathering, water, oil, plasticizer migration and fuels							•
Hot Melt Applicators							
3M™ Scotch-Weld™ EC Applicator  3M™ Scotch-Weld™ TC Applicator 							
3M™ Scotch-Weld™ EC: variable temperature control	•	•	•	•	•		
3M™ Scotch-Weld™ TC: thumb controlled feeder	•	•	•	•	•		

Product Use
All statements, technical information, and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law.

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

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