



# Fast and Effective Bonding Solutions

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The **3M Double-Sided Foam Tapes** range will help you find the right bonding solution for your requirements.

Double-Sided Foam Tapes help seal, cushion and damp vibration, fill gaps and bond irregular surfaces.

For **lightweight bonding solutions** in an outdoor environment, **3M Soft Sealing Joining Tapes** provide the perfect solution for bonding to uneven surfaces such as brick, concrete and wood. For indoor use, **3M Multi-purpose Mounting Tapes** can be used on most surfaces and are ideal for attaching lightweight objects.

For **heavy duty bonding requirements**, **VHB™ Tapes** are a family of double-sided tapes made from high performance acrylic adhesives, providing excellent long term durability and holding power. VHB™ Tapes have been performing successfully in a wide range of long term and demanding applications for over 25 years, including sign assembly, bonding metal panels to frames and as a replacement for screws and rivets.

As well as a range of cost-effective general purpose VHB™ Tapes, 3M also offers a specialised range designed for tough applications such as cold temperature application; bonding to plastics, metals, glass and powdercoated paints; and where high temperature resistance is needed.

	Tape	Adhesive/Carrier	Product Number	Thickness	Colour	Temperature Resistance		Relative adhesion		Solvent resistance	Features/Applications		
						Min/Hours	Days/Weeks	HSE	LSE				
LIGHTWEIGHT BONDING	Soft Sealing Joining Tapes	Acrylic adhesive with reinforcing scrim	4481MH	1.0mm	Black	70 deg C	49 deg C	High	High	Medium	Ideal for joining and sealing uneven surfaces. Can be used on brick, concrete, wood, metal and most plastics. Exterior and interior use. Not recommended for use in high shear applications.		
			4405	2.0mm	Black	70 deg C	49 deg C	High	High	Medium			
	Multi-purpose Mounting Tapes	Acrylic adhesive on both sides of a urethane foam	4016	1.6mm	Off White	193 deg C	104 deg C	High	Low	Medium	Ideal for attaching many lightweight objects eg hooks, nameplates, signs. Can be used on most surfaces. For interior use only.		
			4466	1.6mm	White	70 deg C	49 deg C	High	High	Medium			
HEAVY DUTY BONDING	General Purpose VHB Tapes	Modified acrylic adhesive on both sides of a soft acrylic foam	5925	0.64mm	Black adhesive, Grey core	149 deg C	121 deg C	High	Medium	High	Excellent adhesion to the widest variety of surfaces, including most powder coated paints and plastics. Can also be used on metal and glass. Exterior and interior use. For textured surfaces or when sealing is required.		
			5952	1.1mm	Black adhesive, Grey core	149 deg C	121 deg C	High	Medium	High			
			5962	1.55mm	Black adhesive, Grey core	149 deg C	121 deg C	High	Medium	High			
		Firm acrylic adhesive on one side and a soft acrylic adhesive on the other side of a medium acrylic foam	4618	0.64mm	White	121deg C	93 deg C	High	Low	High	Good adhesion to a wide range of surfaces including metal, glass and high surface energy plastics.		
			4622	1.1mm	White	121deg C	93 deg C	High	Low	High			
			4624	1.55mm	White	121deg C	93 deg C	High	Low	High			
		Specialised VHB Tapes	Firm acrylic adhesive on both sides of a firm acrylic foam	4930	0.64mm	White	149 deg C	93 deg C	High	Low	High	The strongest tape for metals and glass. Use where high dynamic stresses are involved.	
	4950			1.1mm	White	149 deg C	93 deg C	High	Low	High			
	4959			3.0mm	White	204 deg C	149 deg C	High	Low	High			
	Soft acrylic adhesive on both sides of a firm acrylic foam		4945	1.1mm	White	149 deg C	93 deg C	High	Low	High	Excellent adhesion to HSE plastics with added feature of plasticiser resistance. Use where high dynamic stresses are involved.		
			Soft acrylic adhesive on both sides of a medium acrylic foam	4936	0.64mm	Grey	149 deg C	93 deg C	High	Medium		High	Excellent adhesion to a wide range of high surface energy materials and most plastics including plasticised vinyl. For textured surfaces or when sealing is required.
				4941	1.1mm	Grey	149 deg C	93 deg C	High	Medium		High	
	4991		2.3mm	Grey	121 deg C	93 deg C	High	Medium	High				
	Clear firm acrylic foam adhesive		4905	0.5mm	Clear	149 deg C	93 deg C	High	Low	High	For high surface energy materials where a clear or transparent adhesive is required.		
			4910	1.0mm	Clear	149 deg C	93 deg C	High	Low	High			
			4915	1.5mm	Clear	149 deg C	93 deg C	High	Low	High			
			4918	2.0mm	Clear	149 deg C	93 deg C	High	Low	High			
	Low temperature acrylic adhesive on both sides of a firm acrylic foam		4951	1.1mm	White	149 deg C	93 deg C	High	Low	High	For high surface energy substrates where tape is applied in temperatures as low as 0 deg C.		
		4957	1.55mm	Grey	149 deg C	93 deg C	High	Low	High				
High temperature firm acrylic foam adhesive	4611	1.1mm	Dark Grey	232 deg C	149 deg C	High	Low	High	High temperature resistance. Can be used to bond metals prior to powder coating.				

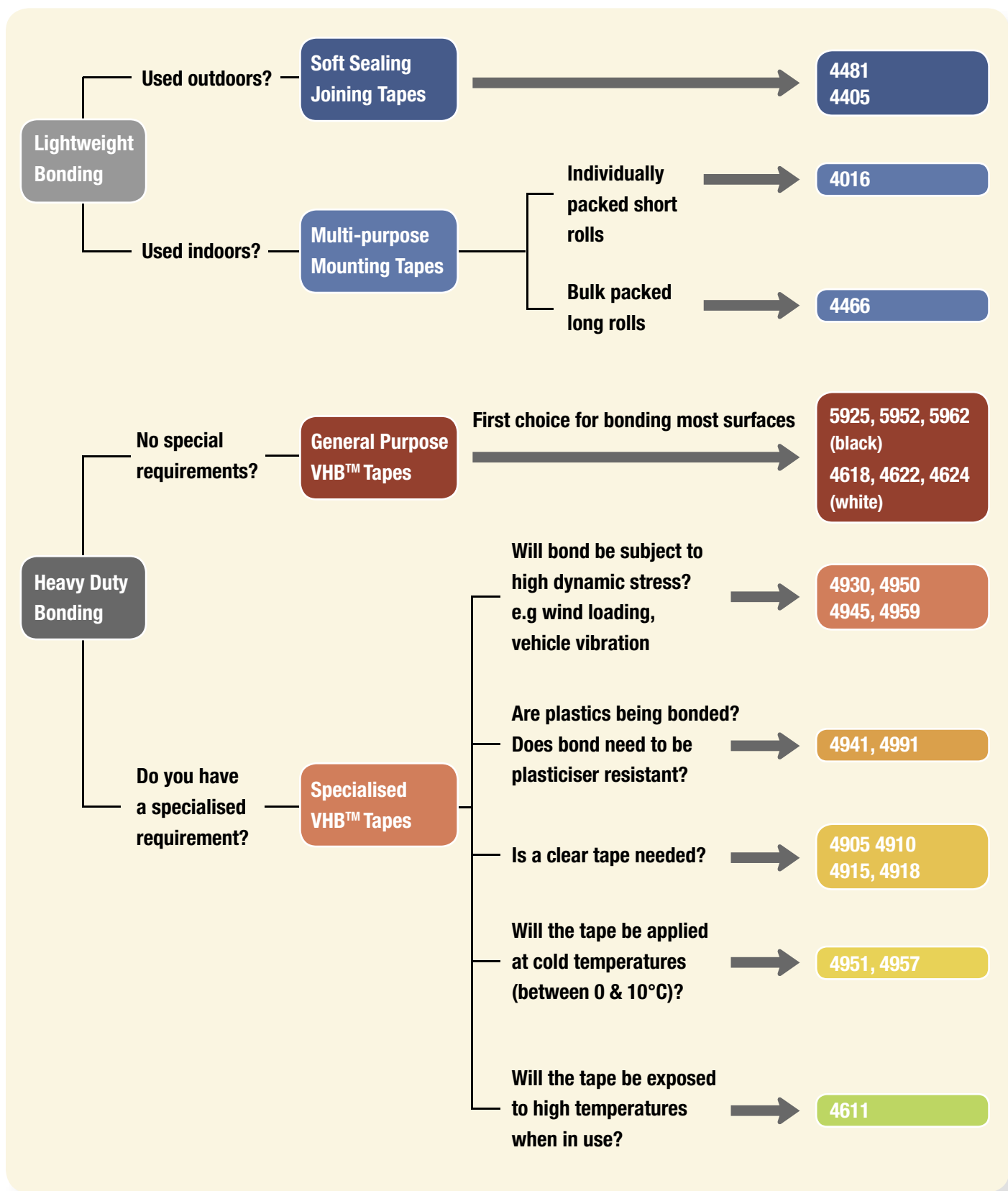
HSE - High Surface Energy eg metal, glass, some plastics (polyester, ABS, rigid PVC, polycarbonate, acrylic).  
LSE - Low Surface Energy eg some powder coated paints, polyethylene, polypropylene.



# Selecting your Double-Sided Foam Tape

The 3M Double-Sided Foam Tape range provides a bonding solution to meet every requirement. Depending on the surface and gap to be filled, the temperature and application, the product you need will differ in each case. Follow the chart below to assist in choosing the correct tape for your needs.

N.B: If you have a requirement for thinner double-sided tapes, please refer to separate literature from 3M.



# Surface Preparation for applying VHB™ Tapes and Double-Sided Foam Tapes

- Most substrates are best prepared by wiping (in one direction) with a 50:50 mixture of isopropyl alcohol (IPA) and water.
- Where heavy oils or greases are present, there may be a need to first cut the oil with a “degreasing” solvent. This should always be followed by cleaning with IPA/water mixture.
- Abrasion or scuffing of the surface will in many instances enhance adhesion by increasing the surface area available for bonding. Scuffing must be followed by cleaning with IPA/water mixture.
- The surface must be dry.



## Making the bond



Apply the tape to one surface leaving the liner in place.



Apply pressure using a Scotch™ PA-1 applicator or roller. This ensures contact and removes air bubbles.



Remove the liner, fit the two surfaces together carefully and apply more pressure to form a bond.

Please note that the technical information and data provided within should be considered representative or typical only and should not be used for specification purposes. User should evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of application.



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