

## Adhesives used in Vehicle Body Panel Repair

Vehicle Manufacturers recommend the use of “VM branded” materials in their repair methods, for good reasons: they have assembled and tested their vehicle to established criteria, using materials of known composition and quality. A repairer of that vehicle must meet these criteria using materials that perform in the same way.

Vehicle Manufacturers are usually supplied with “VM branded” materials by specialist makers of these products e.g. Dow, 3M, Loctite. These makers may also sell their products to the general vehicle repair industry under their own label, after testing them to the same VM criteria; they may even be exactly the same products. In this way, and with VM approval, the specialist makers of adhesives can list their materials for use in the vehicle repair industry, confident that they will be fit for purpose.

In Thatcham’s view, which is shared and understood by PAS 125 assessors, the best practice is to use the Vehicle Manufacturer’s product. However it is acceptable, for business reasons or due to lack of availability, to use an alternative supplier’s product that meets the required standards.

This document offers guidance on the suitability, application, function and type of adhesive products available from various adhesive manufacturers. Information is currently only available from those adhesive manufacturers who have responded to a request from Thatcham to provide this information.

The document will be regularly updated as more information becomes available.

It is the repairer’s responsibility to provide evidence that the material meets the required standards and to identify any associated risks.



Product Name	Accreditations (See Key Below)	Web Site Address	Shelf life in Months	Drive Away Time In Hours	Applications					Functions					Types of Product (Family)				Prep				
					Structural Steel	Non Structural Steel	Structural Composite	Non Structural Composite	Cosmetic Repairs Bumpers	Bonding	Adhesive	Spacing	Sealing	Gap Filling Properties	Spot Weld Bonding	One Component (1K)	Two Component (2K)	Polyurethane	Direct Glazing	Epoxy	High -Modulus	Pre-Heat Cartridge (Pre-Heat Time - Minutes)	Degreased Bare Metal
3M 8115 Panel Bonding Adhesive	ALL	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	24			X		X	X	X	X		X	X	X	2K			X			X	
3M 8122 Adhesive	a	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	12			X		X	X	X		X	X	X	2K			X				X	
3M DP490 (OEM Supplied)	a h	<a href="http://3m-automotive.com">3m-automotive.com</a>	15																				
3M 55045 Automix Superfast Adhesive	a	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	12						X	X	X	X		X		2K							X
3M 05901 FPRM	a	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	12						X	X	X	X		X		2K			X				X
3M 08603 / 08616 Windscreen PU	a	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	12	4-8hrs						X	X	X	X	X		1K	X	X					X
3M 7222 Scotch Weld Epoxy Adhesive	a n	<a href="http://3m-automotive.com">3m-automotive.com</a>	12				X			X	X	X		X		2K			X				X
3M 7036 Steel Bonding	a i	<a href="http://3m-automotive.com">3m-automotive.com</a>	6			X				X	X		X	X	X	2K			X	X			X
3M SAF 6068 Steel Bonding	a	<a href="http://3m-automotive.com">3m-automotive.com</a>	2		X					X	X		X	X	X	2K			X	X			X
3M Polyurethane Sealer Adhesive 08694, 08684, 08689, 08789, 08782,08793, 08788, 08783.	a l	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	12			X					X	X	X	X		1K	X						X
<b>Accreditations</b>																							
ISO	a	<b>3M (Steel)</b>  Where the adhesive manufacturer has suggested they have accreditation from a Vehicle Manufacturer or other professional organisation, this has not been verified by Thatcham.  It is the repairer's responsibility to provide evidence that the material meets the required standards and to identify any associated risks.																					
Ford: WSS-M2G410-A2	b																						
DCX Weld Bonding	c																						
Toyota: Yaris, Aygo, Prius	d																						
Lexus: IS250	e																						
Jaguar XJ: Bonding Sec 4 Body Repair Manual	f																						
Mitsubishi: TSB-04-42B-002	g																						
VW / AUDI: DA001 730 A1	h																						
Ford: WSB-M2G-373-A/A2/B/C	i																						
Hyundai / KIA Automotive: BRRT-034	j																						
Volvo: VIDA Repair Manual	k																						
Ford: WSK-M11P47	l																						
Ford Aluminium: WSS-M2G 410A	m																						
Aston Martin: WSS-M2G410-A2	n																						

Product Name	Accreditations (See Key Below)	Web Site Address	Shelf life in Months	Applications				Functions				Types of Product (Family)					Prep					
				Structural Aluminium	Non Structural Aluminium	Structural Composite	Non Structural Composite	Cosmetic Repairs Bumpers	Bonding	Adhesive	Spacing	Sealing	Gap Filling Properties	Spot Weld Bonding	One Component (1K)	Two Component (2K)	Polyurethane	Acrylic	Foam	Epoxy	High -Modulus	Pre-Heat Cartridge (Pre-Heat Time - Minutes)
3M 8115 Panel Bonding Adhesive	a b c d e g h	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	24	X		X	X	X	X	X	X	X	X	2K			X				X	
3M DP490 (OEM Supplied)	a e	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	15	X		X	X	X	X	X	X	X	2K			X						
3M Polyurethane Sealer Adhesive 08694, 08684, 08689, 08789, 08782, 08793, 08788, 08783	a	<a href="http://3mbodyshop.co.uk">3mbodyshop.co.uk</a>	12	X					X	X	X	X	1K									X
3M 7222 Scotch Weld Epoxy Adhesive	a f	<a href="http://www.3mbodyshop.co.uk">www.3mbodyshop.co.uk</a>	12	X	X								2K			X						X
3M 5027 Aluminium Bonding	a g	<a href="http://3m-automotive.com">3m-automotive.com</a>	6	X									1K	X	X				X			
3M SAF 6045 Aluminium Bonding	b	<a href="http://3m-automotive.com">3m-automotive.com</a>	6	X																		
<b>Accreditations</b>																						
ISO	a	<p align="center"><b>3M (Aluminium)</b></p> <p>Where the adhesive manufacturer has suggested they have accreditation from a Vehicle Manufacturer or other professional organisation, this has not been verified by Thatcham.</p> <p>It is the repairer's responsibility to provide evidence that the material meets the required standards and to identify any associated risks.</p>																				
FORD WSS-M2G 410-A2	b																					
DCX Weld Bonding	c																					
Jaguar XJ: Bonding Section 4 of Body Repair Manual	d																					
VW/Audi - VW DA001 730 A1	e																					
Aston Martin - conform to WSS-M2G410-A2	f																					
Ford Aluminium WSS-M2G 410A Jaguar 5754 Alloy	g																					
Ford WSB-M2G-373-A/A2/B/C	h																					









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					Structural Steel	Non Structural Steel	Structural Composite	Non Structural Composite	Cosmetic Repairs Bumpers	Bonding	Adhesive	Spacing	Sealing	Gap Filling Properties	Spot Weld Bonding	One Component (1K)	Two Component (2K)	Polyurethane	Acrylic	Solvent	Solvent Free	Polymer based	Epoxy	High -Modulus	Pre-Heat Cartridge (Pre-Heat Time - Minutes)	Degreased Bare Metal
SikaFlex 529 Sprayable Sealer		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	9			X		X							1K									X	X	
SikaFlex 552 Assembly Adhesive		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	9			X			X	X					1K				X					X	X	
SikaFast 5211 Structural Adhesive		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	12		X	X	X	X		X	X				2K		X							X		
SikaFast 5215 Structural Adhesive		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	12		X	X	X	X		X	X				2K		X							X		
SikaFast 5221 Structural Adhesive		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	12		X	X	X	X		X	X				2K		X							X		
SM15 Structural Adhesive		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	12		X		X			X	X				2K		X							X		
SikaTack Drive (New Formulation)		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	12	1.00						X	X				1K	X									X	
SikaFlex 221 Adhesive Sealant		<a href="http://www.sika.co.uk">www.sika.co.uk</a>	12			X		X	X		X		X		1K	X									X	
<b>Accreditations</b>		<p><b>SIKA Ltd UK</b></p> <p>Where the adhesive manufacturer has suggested they have accreditation from a Vehicle Manufacturer or other professional organisation, this has not been verified by Thatcham.</p> <p>It is the repairer's responsibility to provide evidence that the material meets the required standards and to identify any associated risks.</p>																								

