

PLEXUS® Structural Bonding Solutions for Construction Vehicles

Chemical Concepts[™]
Our expertise is your solution.
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The Problem: Fasteners & Welding

- Are unable to join certain dissimilar materials
- May result in stress cracking leading to shortened vehicle life
- May cause galvanic corrosion with joined aluminum and steel components
- May cause weld distortion, preventing Class A finishes

The Solution: Plexus® Adhesives

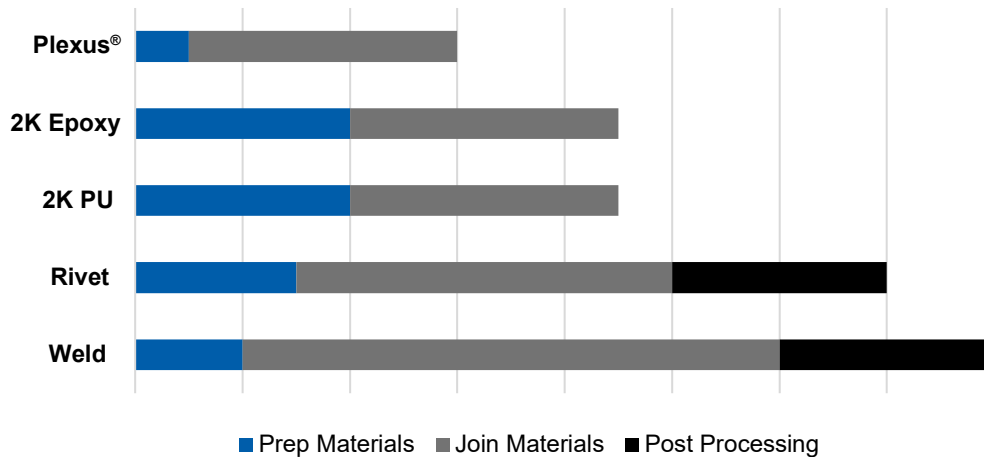
- Enable primerless adhesion to multiple materials
- Distribute stress with unparalleled durability
- Enable use of non-corrosive materials like composites, thermoplastics and aluminum
- Create clean “class A” surfaces

Structural Bonding Solutions for Construction Vehicles

Product	Chemistry	Description	Mix ratio by volume	Working time, mins	Tensile strength, psi	Tensile elongation %															
							Aluminum	Raw Steel	E-Coated	Galvaneal	Stainless Steel	Cast Iron	ABS	Nylon	FRP	DCPD	SMC				
MA8110	MMA	Bracket bonding, multimaterial bonding	1:1	8 - 12	3,350(23.1)	40 - 70	++	++	++	++	++	++	++	++	++	++	++	++	++	++	+
MA8120	MMA	Bracket bonding, multimaterial bonding	1:1	18 - 22	2,750(19.0)	50 - 80	++	++	++	++	++	++	++	++	++	++	++	++	++	++	+
MA420	MMA	Composite and thermoplastic bonding	10:1	4 - 6	2,850(19.7)	20 - 50	++	++	++	-	++	-	++	-	++	++	++	++	++	+	
MA320	MMA	Composite and thermoplastic bonding	10:1	8 - 12	1,950(13.5)	60 - 100	++	++	++	-	++	-	++	-	++	++	++	++	++	+	
MA422	MMA	Composite bonding, aluminum to painted steel	10:1	17 - 24	2,850(19.7)	75 - 100	++	++	++	-	++	-	++	-	++	++	++	++	++	+	
PU2105	PU	Rigid paintable seam sealer	1:1	4 - 6	4,000(28.0)	5	++	+	++	++	++	-	-	-	++	++	++	++	++	+	
AC1700	Polyester	Sprayable body filler, fills pinholes on castings	2%	3 - 6	n/a	n/a	++	++	-	++	+	++	-	-	++	-	-	++	-	-	

++ Excellent adhesion with no to little surface preparation. + Good adhesion with some surface preparation. - Not recommended. * Use PC120 Cleaner Conditioner for optimum long term environmental durability

Relative Labor Spent to Assemble



Plexus Adhesives

- Ensure great stress distribution and fatigue resistance for optimal durability
- Have excellent weather resistance
- Offer high elongation enabling dissimilar material joining

