

# **PLEXUS®** Structural Bonding Solutions for Specialty Vehicles



## ***The Problem: Mechanical Fasteners***

- Create potential leak paths
- May result in stress cracking leading to shortened vehicle life
- Require longer assembly time
- Require thicker gauge metals to ensure enough energy absorption in crash events

## ***The Solution: Plexus® Adhesives***

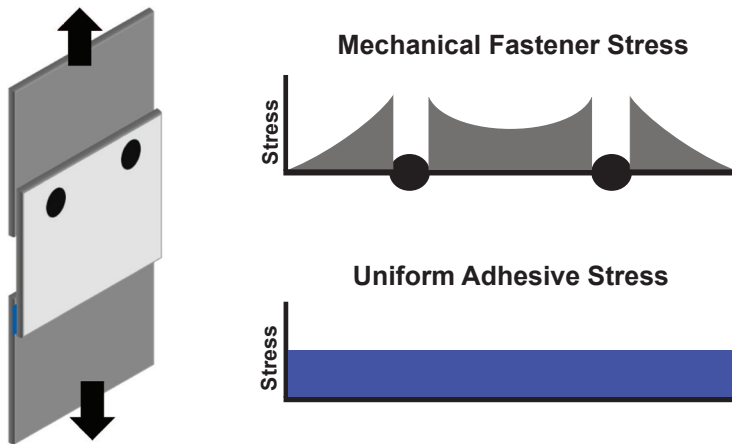
- Eliminate exterior holes by bonding and sealing
- Extend the life of the body structure with high toughness and superior fatigue resistance
- Reduce total cost of assembly with easy to use, fast curing Plexus® adhesives that can cross bond multiple substrates with no/low surface perpetration
- Distribute stress with high strength and high elongation adhesives

## Structural Bonding Solutions for Specialty Vehicles

Product	Description	Mixed color	Mix ratio by volume	Working time, mins	Tensile strength, psi (MPa)	Tensile elongation, %										
							Aluminum	Coil Coated	Anodized Aluminum	E-Coat	Cold Rolled Steel	HDB	EZG	Galvanneal	Powder Coated	Stainless Steel
MA8110 GB	Next generation primerless multimaterial adhesive	Gray	1:1	8 - 12	3,285 (22.7)	25 - 45	++	++	++	++	++	++	++	++	++	++
MA8120 GB	Next generation primerless multimaterial adhesive	Gray	1:1	18 - 22	2,907 (20.5)	30 - 60	++	++	++	++	++	++	++	++	++	++
MA205HV	Fastest primerless to metal adhesive	Green	10:1	3 - 5	1,980 (13.7)	15 - 30	++	++	++	++	++	-	-	+	++	++
MA830	Primerless to metal adhesive	Gray	10:1	4 - 6	2,620 (18.0)	10 - 20	++	++	++	++	++	-	-	+	++	+
MA832	Primerless to metal adhesive - medium open time primerless	Gray	10:1	12 - 14	2,790 (19.2)	20 - 40	++	++	++	++	++	-	-	+	++	+
MA420	All purpose toughened adhesive	Blue	10:1	4 - 6	2,430 (16.8)	20 - 40	+	++	+	++	++	-	-	-	++	++
MA320	Excellent low temp impact, white UV stable	White	10:1	8 - 12	1,800 (12.4)	30 - 60	+	++	+	++	+	-	-	-	++	+

++ 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

### Improved durability with uniform stress distribution



### Improved structure strengths with tougher materials

