

# **PLE 115** 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**

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Product	Description	Mixed color	Mix ratio (by volume)	Working time (mins)	Tensile strength (psi)	Tensile elongation (%)	Alli					( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )			To all a			
MA8110	Next-generation primerless multimaterial adhesive	Gray	1:1	8 - 12	3,350	40 - 70	++	++	++	++	++	++	++	++	++	++	++	
MA8120	Next-generation primerless multimaterial adhesive	Gray	1:1	18 - 22	2,750	50 - 80	++	++	++	++	++	++	++	++	++	++	++	
MA205HV	Fastest primerless to metal adhesive	Green	10:1	3 - 5	2,250	20 - 50	++	++	++	++	++	-	-	+	++	++	++	
MA830	Primerless to metal adhesive	Gray	10:1	4 - 6	3,500	30 - 60	++	++	++	++	++	-	-	+	++	+*	++	
MA832	Primerless to metal adhesive - medium open time	Gray	10:1	12 - 16	2,,850	30 - 60	++	++	++	++	++	-	-	+	++	+*	++	
MA420	All purpose toughened adhesive	Blue	10:1	4 - 6	2,850	30 - 50	+*	++	+*	++	++	-	-	-	++	++	++	
MA320	Excellent low temp impact, white UV stable	White	10:1	8 - 12	1,950	60 - 100	+*	++	+*	++	+*	-	-	-	++	+*	++	

<sup>++</sup> 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

# Mechanical Fastener Stress Uniform Adhesive Stress

### Improved structure strengths with tougher materials

