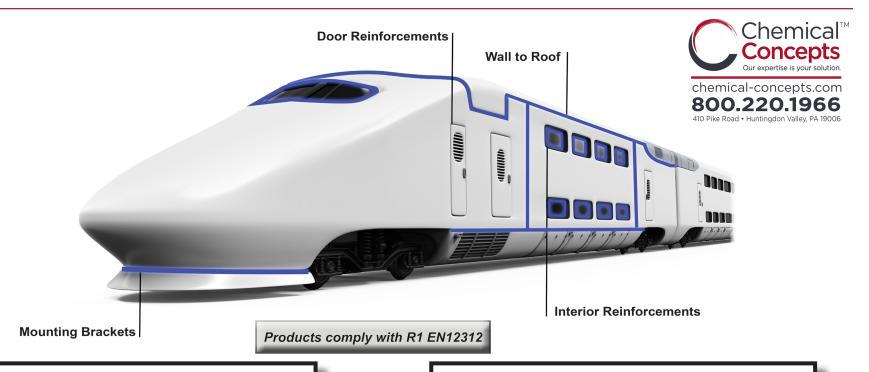


# **PLE 115** Structural Bonding Solutions for Rail Manufacturers



# The Problem: Mechanical Fasteners

- Create potential leak paths
- May result in stress cracking leading to shortened vehicle life
- · Require longer assembly time

# The Solution: Plexus® Adhesives

- Mitigate potential water intrusions
- Extend life of structure by offering superior fatigue resistance and uniform stress distribution
- Reduce total cost of assembly with fast dispensing and no/low surface preparation
- Simplify manufacturing join and seal in one step



# Structural Bonding Solutions for Rail Manufacturers

Product	Description	Mixed color	Mix ratio by volume	Working time, mins	Tensile strength, psi (MPa)	Tensile elongation, %	P.										
MA8110	Next generation primerless multimaterial adhesive	Gray	1:1	8 - 12	3,350 (23.1)	40 - 70	++	++	++	++	++	++	++	++	++	++	++
MA8120	Next generation primerless multimaterial adhesive	Gray	1:1	18 - 22	2,750 (19.0)	50 - 80	++	++	++	++	++	++	++	++	++	++	++
MA205HV	Fastest primerless to metal adhesive	Green	10:1	3 - 5	2,250 (15.5)	20 - 50	++	++	++	++	++	-	-	+	++	++	++
MA830	Primerless to metal adhesive	Gray	10:1	4 - 6	3,500 (24.1)	30 - 60	++	++	++	++	++	-	-	+	++	+*	++
MA832	Primerless to metal adhesive - medium open time	Gray	10:1	12 - 16	2,850 (19.7)	30 - 60	++	++	++	++	++	-	-	+	++	+*	++
MA420	All purpose toughened adhesive	Blue	10:1	4 - 6	2,850 (19.7)	30 - 50	+*	++	+*	++	++	-	-	-	++	++	++
MA320	Excellent low temp impact, white UV stable	White	10:1	8 - 12	1,950 (13.5)	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

