# **PLEXUS** Structural Bonding Solutions for Trailer Manufacturers



### The Problem: Mechanical Fasteners

- Create potential leak paths
- May result in stress cracking leading to shortened vehicle life
- May cause water intrusion resulting in shortened life of refrigerated units
- Are unable to join lightweight composites to metal frame
- May cause galvanic corrosion with joined aluminum and steel components

Contact us to conduct an assembly line audit to find out if Plexus<sup>®</sup> is right for you! cs@itwpp.com

## The Solution: Plexus<sup>®</sup> Adhesives

- Eliminate exterior holes and potential water intrusion by bonding and sealing
- Reduce total cost of assembly. Easy to use, fast curing adhesives that cross bond multiple substrates with no/low surface preparation
- Create non-conductive high strength bonds
- Extend life of body structure by offering superior toughness, fatigue resistance and uniform stress distribution.

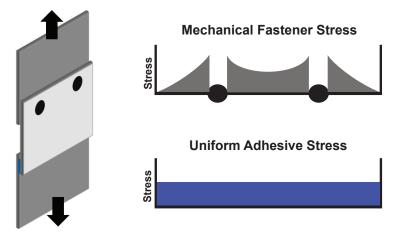


### Structural Bonding Solutions for Trailer Manufacturers

| Product | Description  | Mixed<br>color | Mix ratio<br>(by<br>volume) | Working<br>time<br>(mins) | Tensile<br>strength<br>(psi) | Tensile<br>elongation<br>(%) | PH | stining co |    |    |    | and a second | \$<br> 15 |    | AND OC | de 55 | Solution of the second |
|---------|--|----------------|-----------------------------|---------------------------|------------------------------|------------------------------|----|------------|----|----|----|--------------|-----------|----|--------|-------|------------------------|
| MA8110  | Bond E-Tracks, walls to rails and<br>reinforcements  | Gray           | 1:1                         | 8 - 12                    | 3,350                        | 40 - 70                      | ++ | ++         | ++ | ++ | ++ | ++           | ++        | ++ | ++     | ++    | ++                     |
| MA8120  | Bond E-Tracks, walls to rails and reinforcements     | Gray           | 1:1                         | 18 - 22                   | 2,750                        | 50 - 80                      | ++ | ++         | ++ | ++ | ++ | ++           | ++        | ++ | ++     | ++    | ++                     |
| MA205HV | Composite shiplap bonding, aluminum weld replacement | Green          | 10:1                        | 3 - 5                     | 2,250                        | 20 - 50                      | ++ | ++         | ++ | ++ | ++ | -            | -         | +  | ++     | ++    | ++                     |
| MA830   | Composite shiplap bonding, aluminum weld replacement | Gray           | 10:1                        | 4 - 6                     | 3,500                        | 30 - 60                      | ++ | ++         | ++ | ++ | ++ | -            | -         | +  | ++     | +*    | ++                     |
| MA832   | Aluminum rail to wall bonding                        | 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                     | +* | ++         | +* | ++ | +* | -            | -         | -  | ++     | +*    | ++                     |

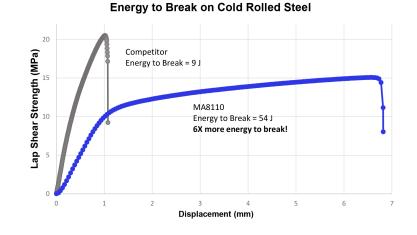
++ Excellent adhesion with no to little surface preparation. + Good adhesion with some surface preparation. - Not recommended. \* Use PC120 Cleaner Conditioner for optimum long term environmental durability

#### Improved durability with uniform stress distribution



#### Improved structure strengths with tougher materials

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