# THE P-u-R SOLUTION FROM PROLAM: ABSOLUTE PROTECTION FOR WOOD TRAILER FLOORS



## INTRODUCING P•u•R TRAILER FLOOR COATING, EXCLUSIVELY FROM PROLAM—CREATORS OF THE REVOLUTIONARY ZIG-ZAG PRECISION-CUT TECHNOLOGY.

P•u•R coating provides protection for wood trailer floors that standard water-based paint coatings cannot offer. Especially in climates with extreme weather conditions, water-based paint systems currently used to protect the underside of trailer floors can break down when subjected to intense water spray and road debris. Specific areas, like trailer wheel locations, are more prone to degradation. Once water-based paint breaks down, the wood absorbs moisture, causing warping, swelling and deterioration of glue bonds.



Weather and elements weaken water-based paint coatings under trailer floors, leading to warping, uneven swelling stresses, and degradation of glue lines. Once the coating has been breached, water can migrate into the trailer itself, resulting in cargo damage.

PROLAM

## THE P•u•R SOLUTION

Prolam has developed a new, hot-melt polyurethane reactive (**PuR**) coating for the underside of laminated trailer floors that will eliminate the limitations of traditional water-based paint coatings. **P·u·R** has superior moisture resistance and outperforms water-based coatings.

#### Advantages

- .010" P·u·R thickness compared to a .0035" water-based coating
- P·u·R viscosity forms a perfect adhesion to laminated hardwood, creating a solid bond
- **P·u·R** "bridges" wood defects, knots and critical areas like butt-end joints, providing a single uniform barrier against moisture penetration from the underside of the trailer floor
- In sandblast tests, **P·u·R** was 11-times more abrasion-resistant than water-based coatings



#### P•u•R FROM PROLAM PROVIDES A SUPERIOR MOISTURE BARRIER, WHICH INCREASES DURABILITY AND REDUCES FLOOR MAINTENANCE COSTS.

Polyurethane reactive coating resists moisture intrusion from underneath the trailer, protecting the integrity of wood floor glue lines.

#### **POSSIBLE PROTECTION CONFIGURATIONS**







## PROLAM'S P•u•R SOLUTION SURPASSES WATER-BASED COATINGS IN INDUSTRY STANDARDIZED TESTS

#### **ELONGATION**—ASTM D-638

Tensile tests measure the force required to break a sample material and the extent, measured in percentage, to which the specimen stretches or elongates to that breaking point.

ABRASION\* – NEMA LD3-2005

Determines resistance to abrasion, or the ability of a material to withstand rubbing scrapping, or erosion; Measured by the number of cycles needed to create weight loss.

#### ADHESION\*\* – ASTM D-3359

Measures adhesion of a coating material to metallic samples by applying and removing pressure-sensitive tape over cuts made in the coating. Measured on a scale of 0 – 5, with 5 representing the least amount of lifting.

#### WATER ABSORPTION\*\*\* - ASTM D-5795-95

Measures amount of water absorbed after sample material is exposed to moisture; Measured in grams per 100-square inches. Water-based coating elongation: 5% **P•u•R elongation: 600%** 

Water-based coating abrasion test: 20 cycles P•u•R abrasion test: 225 cycles

Water-based adhesion: Class 4 P•u•R adhesion: Class 5

Water-based absorption: 29.9 grams/100 sq. inch. P•u•R absorption: 3.4 grams/100 sq. inch.

\*Thickness of coating tested was 4 mils. \*\*Empirical test \*\*\*24-hour exposure to water



CANADA \_ 439, chemin Vincelotte, Cap-Saint-Ignace (Québec) Canada GOR 1H0 Telephone: **418-246-5101** Fax :418-246-5217

UNITED STATES \_ Jim Jannell, U.S. Sales Manager Telephone: 1-508-316-1970 Fax: 1-508-316-1970