



H.B. Fuller

Connecting what matters.™

CASE STUDY



High-Performance Undercarriage Coating Offers Improved Protection

At H.B. Fuller, we strive to help our customers improve their processes and end-product performance. A bus manufacturer partnered with our Transportation team because they were having difficulty with the underbody application material they were using.

The bus manufacturer was experiencing problems with their current undercoat product as it was not able to run, drip, or sag at the target application thickness. The manufacturer also needed better corrosion protection and desired a multi-use product that would also coat both wood and composite board floors, as well as, a bare-metal chassis.

Our team evaluated the customer's needs and began testing our existing solutions to try to find a match. H.B. Fuller's HydroArmor® underbody coating is a one-coat, low-VOC, water-based material that is easy to use while providing high-performance protection.

It offers an improved shelf life and sag resistance, which helped meet key performance indicators for the manufacturer. HydroArmor is designed with an improved impact and moisture resistance, and it can withstand humidity, heat, and salt spray exposure. Since HydroArmor protective coating exceeded all of the requirements, the manufacturer is currently applying HydroArmor to the bottom of their vehicles.

"HydroArmor protective coating exceeded all of the requirements."



THE FOLLOWING TESTS WERE PERFORMED ON PANELS COATED WITH A WET FILM THICKNESS OF 0.030" OF MATERIAL AND ALLOWED 48HRS TO DRY @ 23°C (73°F)	
Gravelometer: ASTM D 3170-03	8A Rating (2-4 Chips, <1mm)
Humidity Resistance:1000 hours @ 38°C (100°F) & >95%RH	No loss of adhesion No corrosion or blistering
Salt Spray Resistance: ASTM B117; 1000 hours	No loss of adhesion No corrosion
Water Resistance: 24 hours submerged in water	No blistering or significant softening of the coating
Temperature Resistance: 1,000 hours at 185°F	Passes- No cracks, chalking, or loss of adhesion

HydroArmor offered the customer the following benefits:

- Improved durability of coating to long-term wear.
- Improved Sag Resistance.
- Improved Shelf Life.
- Water-based solution.
- Easier cleanup.

In addition to buses, HydroArmor underbody coating works great on:

- Truck flooring.
- Train and Rail undercarriages.
- Trailer undercarriages and flooring.
- Emergency Vehicles.
- All-terrain vehicles.

Email transportation@hbfuller.com for more information about our entire family of HydroArmor® coating products or to request a sample.

About H.B. Fuller

Since 1887, H.B. Fuller has been a leading global adhesives provider focusing on perfecting adhesives, sealants and other specialty chemical products to improve products and lives. With fiscal 2019 net revenue of nearly \$3 billion, H.B. Fuller’s commitment to innovation brings together people, products and processes that answer and solve some of the world’s biggest challenges. Our reliable, responsive service creates lasting, rewarding connections with customers in electronics, disposable hygiene, health and beauty, transportation, aerospace, clean energy, packaging, construction, woodworking, general industries and other consumer businesses. And, our promise to our people connects them with opportunities to innovate and thrive. For more information, visit us at hbfuller.com.



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