



Elastic **Körapop 225/2L** enables fast bonding in RV manufacturing

At H.B. Fuller we strive to help our customers improve their manufacturing processes and the end performance of their recreational vehicles. As slow curing of an adhesive can lead to issues during the production process we provide an elastic fast curing bonding solution that can also solve your problem.

Today motor homes and caravans need to meet the highest requirements in their design, comfort and safety, coupled with maximum individualization.

Our philosophy in this respect is to cater to the specific wishes and possibilities of the RV manufacturer. Together with our customers we analyse their processes in order to optimise these with jointly elaborated solutions. We replace mechanical fasteners, make products lighter, more durable and less noisy.

In the present case, it was the customer's goal to bond the sandwich panel for the RV floor onto the chassis in order to eliminate mechanical fasteners. At the same time the customer was looking for a faster curing solution ready to use as the operators must be able to walk on the ground panel as quickly as possible without damaging the elastic adhesive just applied.

To solve the customer's challenges, our team suggested two alternative bonding solutions: **Körapur 840/20** which is a 2K polyurethane for structural bonding but also an elastic adhesive solution with **Körapop 225/2K**, based on silane modified polymer. Even though the tensile strength of the 2K PUR is higher the customer was more confident about an elastic bonding solution so we finally decided to go with **Körapop 225/2K** and start corresponding tests.

After an ageing test under real conditions where a test vehicle drove more than 1000 km on a special circuit made of holes and bumps, no damage occurred to the adhesive. A similar test with a structural adhesive showed a much higher rigidity leading to cracks of more fragile parts inside the vehicle.

As the pot-life of the 2K standard version was a little bit short in summer time, the customer was asking for an alternative pot life version. Thanks to our comprehensive product range including different boosters we were able to offer **Körapop 225/2L** which can be used all time during the year. This was a good compromise in regards to the customer's needs. To guarantee a regularity in the minimum thickness of the adhesive recommended, 3 mm adhesive spacers are disposed beside the sealant.

Pre-treatment

Since the bonding is exposed to external conditions like frost and humidity, we additionally recommended the use of a pre-treatment with **Körabond HG 85 red** onto painted chassis for a better reliability. Due to its colour the user can clearly see where the priming has already been carried out. Additionally **Körabond HG 85 red** is free from a dangerous label, which is also a great competitive advantage.

Product Performance

Körapop 225/2L

Elastic, solvent-free two-component silane modified polymer with excellent moisture and weather resistance.

Product	Color	Mix ratio	Elongation at Break (%)	Tensile Strength (MPa)	Change in volume	Hardness Shore A	Service Temperature (°C)
Körapop 225/2L	Black, grey, white	10:1	450	2,6	-3 %	36	-60 °C to +90 °C



Summary of Customer's Results and Benefits:

- Improved production process by defined curing cycles
- Different potlives available
- Lightweight design by replacement of mechanical fasteners
- Improved functionality like vibration damping
- High quality end product

Ask H.B. Fuller today about how we can help to improve your production process with our innovative bonding solutions.

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. 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, medical, 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.



For more information about our company, visit www.hbfuller.com.

 Join the Conversation | www.hbfuller.com/connect

IMPORTANT: The information contained herein is believed to be correct to the best of our knowledge. However the recommendations and suggestions herein are made without guarantee or representation as to results. It is the purchaser's responsibility to test and determine the suitability of the product for the purchaser's intended use and purpose. Purchaser assumes all risk and liability whatsoever regarding such suitability. Any product samples provided for testing are provided in accordance with standard limited warranties as stated on our technical data sheets.

© H.B. Fuller Company

ea_btscasestudy001 Rev. 06/2021