

Innovation starts from the bottom up



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Thanks to a diversified product range, Vetroresina SpA is capable of providing evolved hi-tech solutions not only for side panels, but floor coverings as well, with overall savings in time and production costs.

Words Andrea Cattaneo



Operating directly in the United States with its own North American base since 2008, Vetroresina SpA also has an important customer base of European RV manufacturers. Indeed in Europe the technology for sandwich panels is evolving, both through the use of composite materials for frames and the use of fiberglass as a liner material. And this doesn't only apply to walls and roofing, but floor blocks as well. This is an important challenge, one which Vetroresina SpA has taken on willingly, through a broadly diversified range of products, with laminates that are suited to different types of couplings.

In North America, weight is generally not an issue, but in Europe on the other hand, it is an essential factor. With the majority of production restricted to a limit of 3500 kg overall per vehicle, a lightweight sandwich panel also provides an excellent solution for the floor bed. However, the right materials need to be found to guarantee strength, water resistance and optimize production processes. This is where fiberglass can be used to substitute traditional multi-layered sheeting. For the past four years already, Vetroresina SpA has been supplying its fiberglass sheet solutions to manufacturers in the industry: a major trailblazer has been the Hymer group, as well as Pilote and its subsidiary Frankia, in addition to Rapido and the Italian division of the Trigano group.

The benefits of fiberglass are well known in the industry: lightweight properties, waterproof, low thermal conductivity and resistance to mechanical stress. For these reasons, the use of sheets produced by Vetroresina SpA has begun to expand to floor blocks as well. A liner sheet applied to the outer wall of floor panels, which is more directly in contact with the road, ensures waterproof protection from water sprayed by the tires, as well as providing mechanical resistance from debris propagated by the vehicle's wheels. This laminate is available in a variety of specifications, from a thickness of 1mm and a weight of 1.4 kg/m².

Fiberglass can also be used to build the upper part of the floor panel, in the same way as for the side panels. A double sheet of fiberglass with a valid core material is the current trend for many European manufacturers. Just as for internal wall coatings, a fini-

shed product can also be used on the upper part of the floor panel, saving vehicle manufacturers additional work processes. Vetrostyle PVC stands out among the wide range of Vetroresina SpA products, with a sheet of fiberglass with a PVC coating on one side. The two materials are coupled together during the processing phase of the laminate, allowing motorhome manufacturers to avoid the subsequent laying of a layer of PVC coating for the floor's finish. This way the manufacturer can lay down the finishing and skip the PVC cementing phase, saving significantly on time and costs. In fact, Vetroresina SpA has direct contacts with PVC manufacturers, allowing the company to optimize orders and production processes, thereby avoiding waste during manufacturing processes. The PVC is available in 60 meter length rolls, in widths of up to 2.5 meters, that can be cut into customized sheets. The weight of the fiberglass excluding the PVC is roughly 2.2 kg/m², with a thickness of 1.4mm.

Vetrostyle PVC has also been successfully applied in rear storage spaces for transporting bicycles and scooters: in this case, the material's waterproof qualities and resistance to wear are widely appreciated, with the possibility of using special laminates with non-slip surfaces or an almond finish. The latest results from the 2016 season which has just begun, and market studies already under way for 2017, present an open test outlook that can ultimately provide confirmation of these evolved building systems.