

Targeted solutions for the U.S. market

In the wake of its long-standing experience gained in Europe, Vetroresina Spa is ready to renew the production systems of American manufacturers, with proposals aimed at introducing glass fibre-reinforced laminates for floors and internal walls.

Words Enrico Bona

Vetroresina Spa's commercial and productive commitment continues on two fronts, providing more than satisfactory results both in its original European market and across the Atlantic in the U.S. Which is why the Ferrara based manufacturer is focusing its efforts in America, to obtain the changes that have already taken place in Europe: broadening the use of glass fibre-reinforced laminates inside the vehicle's cab. North American recreational vehicle manufacturers have been making use of fibreglass laminates for a long time, even before they became common in Europe, but they've always used them for lining outer walls. In Europe, on the other hand, the use of fibreglass laminates is more recent, dating back to around 2000, and over the past few years the number of manufacturers who are adopting these materials has significantly increased, as they are no longer just used for exterior panelling, but for internal sandwich panels as well. What's

also worth noting is that for some time now American manufacturers and designers have been keeping an eye on what's happening in the old continent, so that a shift towards the use of fibreglass laminates for the interior of vehicle cabins could perhaps be seen as desirable, and even predictable.

Vetroresina Spa is thus ready to intensify and expand its product marketing, making a distinction based on the material's specific usage in the vehicle. Let's take floor panels, for instance: pre-finished PVC cemented glass fibre laminates are offered for the top side, providing a readymade flooring. 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 fibreglass excluding the PVC is roughly 2.2 kg/m², with a thickness of 1.4 mm. For the underside, instead, which faces the road pavement, a more traditional and economical laminate is proposed, with no gel

coat finish, available starting at 1 mm in thickness and weighing 1.4 kg/m².

This type of fibreglass sheet, in spite of its reduced cost, is perfect to guarantee waterproofing from splashing water and mechanical resistance to debris produced by the wheels.

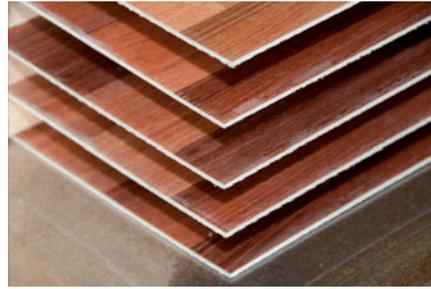
On the other hand, essentially two solutions are provided for interior wall panels, as Simone Colombarini, CEO of Vetroresina Spa explains.

"After the initial proposal of one of our more advanced products, such as Vetrostyle," states Colombarini, "we're now focusing on matt laminated fibreglass for interior wall panels and roof linings, no longer white as for exterior panelling, but beige. In fact, although Vetrostyle is an excellent pre-finished



Simone Colombarini
Vetroresina SpA CEO





decorative papered laminate, its disadvantage is that it can't be used for high walls, such as on vehicles with a top cabin roof, for instance. This is due to the fact that sheets of decorative paper do not exceed 220 cm,

and therefore even if there is a single fibreglass sheet, a joint can be seen on the paper, a small aesthetic defect that must be corrected with a special covering. This wasn't economically acceptable for a product which already had a high price tag." "Now, we're proposing these new laminates with a matt beige finish, at a lower cost than Vetrostyle, which don't have any problem issues relating to height since they range up to 3 meters."

Vetroresina Spa has had a direct presence in

the U.S.A. since 2008, with a production facility capable of manufacturing 1.5 million m² of laminate a year. Currently, production is focused on fibreglass laminates for external panels on motorhomes and trailers. The most popular product for motorhomes is Vetrolite, a very robust fibreglass sheet that is over 3 mm thick, which vehicle builders can apply to wall panels even without the usual supporting underlying plywood. For trailers, on the other hand, the focus is on thinner fibreglass sheets, coupled to a support panel that can be of normal plywood or a thermoplastic foam material.

"In the U.S., they're still mostly building using traditional methods," explains Colombarini, "but there are good chances for changes to be implemented. These changes could lead to significant developments for the fibreglass sector, as well as engendering interesting benefits for both vehicle manufacturers and end users. Let's start with floors: very few manufacturers produce insulated panels, as the majority of American motorhome manufacturers continue to make use of very thick wooden panels, even up to 1 inch (around 2.5 mm), without any insulation. The use of sandwich panels consisting of two sheets of fibreglass, with an insulated core material, would lead to

a weight reduction and greater thermal insulating properties for the vehicle cabin. We can provide our expertise to bring about this change, guaranteeing reliability not just for our own products, but also in terms of building techniques that have been in use for some time now."

Indeed, in Europe the use of fibreglass for interior wall panelling is a consolidated reality, providing reduction in overall weight while preventing issues of water seepage common to plywood. Even German manufacturers, who tend to favour aluminium panels, are increasingly converting to fibreglass: fibreglass laminates have become very popular as protective hail-proof roof covers, but fibreglass floor panels are also becoming more and more common. In fact, the German manufacturer Hymer were the first to experiment with fibreglass floors, thereafter immediately adopted by many other RV manufacturers, such as Pilote, Frankia and Rapido. Today, fibreglass panels for interiors have become very popular with the Italian brands of the Trigano group (from Mobilvetta to Roller Team, Elnagh and McLouis), not to mention that the German Eura Mobil was already making use of these fibreglass laminates before becoming part of the Trigano group.

Company Profile

Established in 1968, Vetroresina SpA manufactures polyester resin laminates reinforced with fibreglass. The company's large production capacity results from specific research in the field of composite materials, associated with continued improvements in manufacturing techniques. To maintain and increase production levels, Vetroresina SpA has implemented a major investment strategy and, with the help of advanced technologies and close partnerships with universities and industry experts, has been capable of adapting to market changes and new requirements.

Sophisticated technology levels, combined with a special attention to aesthetics and materials, have led to a range of diversified products, extending to many areas of application. Vetroresina SpA has a production capacity of 129 units per day, with a production area that covers 46,000 m². In June 2000, Vetroresina SpA inaugurated a production plant in the state of São Paulo, Brazil, in order to meet the needs of the South American market, and has operated a production facility in the United States since May 2008, dedicated to the North American market.