

More than the usual panel

Palomar inaugurates its new manufacturing plant, where sandwich panels of all types will be manufactured. In order to face the challenges posed by a dynamic and continuously evolving market, Palomar introduces two new solutions: the heated flooring and the flooring for campervans made from lightweight recycled materials.

Words Renato Antonini

It's quite uncommon for a company operating in the production of sandwich panels to introduce upgrades to its product range, so it's surprising that this year, Palomar will be showcasing not one, but two new products at the Caravan Salon in Düsseldorf. In fact, Palomar will be presenting the new heated flooring, as well as the floor panel made from recycled materials. Of course, the CSD stand will also be displaying the company's traditional range of panels, proposed in several different versions. An Italian business operating since 2003, Palomar is based in Tuscany (the Italian manufacturing district of the RV sector) and

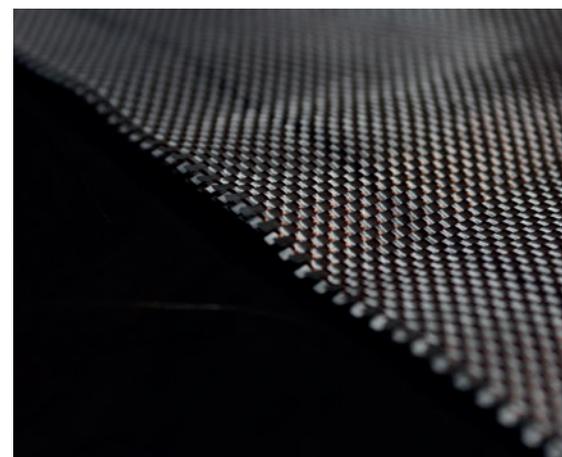
manufactures sandwich panels custom-made to order, based on characteristics agreed with the customer prior to production. Palomar's sandwich panels are used to build the box interior (walls, roof and floor) of both campers and mobile homes.

Heated flooring

"We developed a new system to heat the floors of RVs", explains Roberto Bagni, one of Palomar's partners and head of the company's sales division, "because more and more, customers who use their campers or caravans in the winter are demanding comfort in the

living space on-board the vehicle. In partnership with Ama Composites, we have developed a heated flooring designed to provide a sensation of added comfort on board. The entire floor can be heated, or the customer can choose to install the system only in the bathroom or the living area. Compared to other systems already available in the market, our heated flooring stays heated for a longer period of time. The system can also be applied to the roof panel and is available not just for campers and caravans, but also for mobile homes".

The partnership between two highly qualified

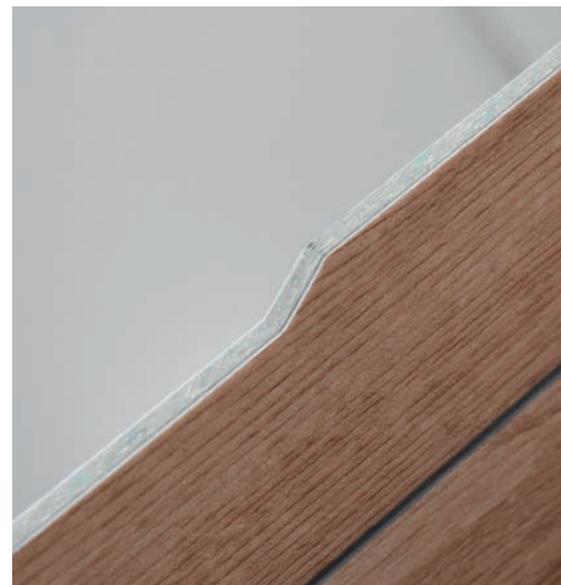




In partnership with



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Panels in recycled fiberglass

Palomar's Research & Development began studying the possibility of manufacturing panels from recycled materials already two years ago, with the aim of expanding its offer to include new alternative products in addition to its standard range of panels. The Company is now ready to introduce a flooring panel made using recycled fiberglass scraps. The panel is specifically designed for the floors of campervans, instead of the classic floor in poplar and birch plywood. The new floor panel by Palomar is durable, suitable for fastening with screws, and lightweight. The weight varies depending on the quantity of resin inserted in the mold and the choice of the density is made based on how the panel will be used. Plywood measuring about 400 kg/m³ can be used for the flooring of vans, which means that the panel weighs less than poplar and birch plywood. The new Palomar panel is eco-friendly, both because it is manufactured from recycled materials and because it is 100% recyclable.

companies like Palomar and Ama Composites has spawned this new heatable flooring solution. The idea is to ensure the highest possible level of comfort that a heated flooring system can provide, with a fully integrated solution manufactured on industrial scale during the camper's production. This means any floor can be equipped with a heating system at any point during construction, deciding whether to activate it later on, depending on the configuration chosen for the vehicle.

JESS is an innovative floor heating system that ensures comfort inside the camper in a totally autonomous way, and is powered by hooking it up to a standard mains network. JESS is a membrane consisting of a heat-conductive element manufactured by Ama Composites, coupled with one or more armatures and protected by safeguarding polyester film. Through the circulation of electricity in the heat-conductive material, thanks the "Joule" effect, the electricity is transformed into thermal energy. In essence, the membrane tends to heat up and thus heats the floor it comes into contact with via thermal conduction. In order to ensure a simple and safe installation process, it was decided to configure the membrane for a voltage supply of no more than 12 V. This means that any inadvertent contact with the membrane's live part is harmless and has no effect on humans. Two live wires powered with equal and opposite electrical current form two equal and opposite electromagnetic fields that cancel each other out, with the result of having an electromagnetic field tending towards zero voltage. The application of this principle alone allows JESS to deactivate its electromagnetic field. In fact, the heat-con-

ductive element manufactured by Ama Composites is made using two precisely overlapping conductive layers, which are crossed by equal and opposite electrical current, thus causing deactivation of the resulting electro-magnetic field.

The new manufacturing plant

In order to meet the market's growing demands, in early 2019 Palomar purchased an already existent manufacturing plant, where production began in January 2020 after completing some renovation works. The plant offers extensive space for production, roughly 3,000 square meters, which, summed to the 8,000 square meters of the former industrial shed amount to a total surface area of 11,000 square meters. The pantograph and the fiberglass cutting machine within the manufacturing plant have been moved to a different site. The largest production line has been added, for the 3m sides. Thanks to this new building, Palomar is also able to streamline its materials and finished products handling process. Formed 17 years ago from the merger of two companies (Mabel and Sima) which had already been present for a long time in the market of sandwich panels for the RV sector, Palomar currently manufactures assembly panels of various kinds for the walls, roofs and floors of campers, caravans and mobile homes. Several types of materials are used to form the sandwich, based on the customer's request. Palomar is currently a key supplier of the Trigano and Rapido Groups, but also of the LCI Group and Crippa Campeggio.



Heated flooring system advantages

The advantages offered by the heated flooring, manufactured in partnership with Ama Composites using the JESS system:

- High ambient air heating comfort
- Total reliability and durability
- Built-in solution
- Low production costs
- No production of electrical smog
- Zero pollution – no gas or diesel fuel combustion
- Option of drilling holes into the membrane without any complications for up to 70% of the surface
- Can heat any type of space
- Low consumption
- 10 year warranty