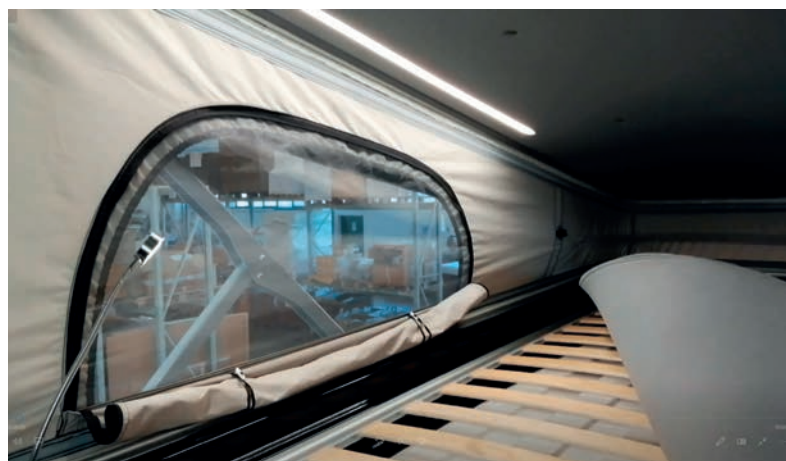


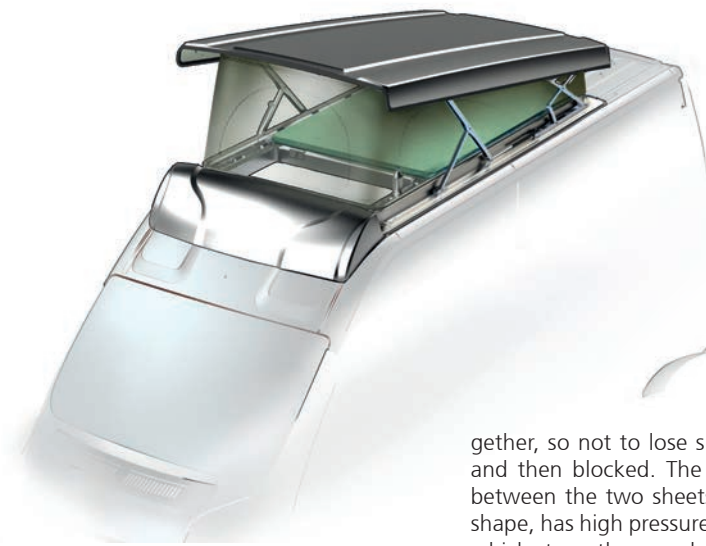


Here comes the innovative “Vela” PopUp Roof

Available from this September, the new “Vela” PopUp Roof from Lippert Components, developed and produced in Europe, is sturdy and light, weighing 20 to 30 percent less than comparable fibreglass products. It provides a real extra bedroom for campervans with a double bed measuring 200 x 130 cm, and is built with a thermoformed twin sheet technique plus an exclusive, patented solution for channeling hot or cold air.

Words Paolo Galvani





The growth of the campervan market in Europe and the Class-B market in North America is a trend that Lippert Components (LCI) has been following closely. LCI has already developed several products for this type of recreational vehicle, including some interesting slide-out applications to provide more living space when required. Now the concept of "space on demand" also extends upwards with the introduction of its innovative PopUp Roof mechanism, the Vela.

"It was 2017 when we started to focus on a new idea: that of entering the market of elevating roofs," says Michele Checucci, CEO of LCI RV Europe. "At the time there were only two producers and the segment suggested there was room for strong growth, which subsequently has happened. To enter this market you need to have an innovative product, so we took our time designing and engineering the best product possible and now we are ready to introduce the "Vela" PopUp Roof," continued Checucci.

The new Vela PopUp Roof has been designed from the outset to adapt perfectly to the aesthetics of the vehicle on which it will be mounted and use technology that is currently unique in this sector: "twin sheet" thermoformed technology. While traditional products are made of fibreglass, the use of a thermoformed product offers important advantages, including being easier to produce and saving weight.

"The elevating roof made with the thermoformed twin sheet technique allows us to have a much higher than average production capacity," explains Lorenzo Manni, commercial director of LCI RV Europe. "With fibreglass, one mold means we can only make one unit per day, so more units per day will always equal the need for more molds. With our twin sheet technology, we can utilize a single mold and still increase production capacity while still producing a shape that can be successfully. This benefits the quality of the product over time," added Lorenzo Manni.

Sturdiness and lightness

The twin sheet thermoforming technology, which can use both vacuum and pressure techniques, requires each sheet to be produced separately. Once formed, the top and bottom sheets are quickly joined to-

gether, so not to lose surface temperature, and then blocked. The space that remains between the two sheets, thanks to a wave shape, has high pressure air introduced to it, which strengthens and welds the two parts. The end result is a more robust and lighter product, which weighs 20 to 30 percent less than similar fibreglass products.

Using this technique has allowed LCI to create a larger than average elevating roof able to contain a double bed measuring 200 x 130 cm, without increasing its weight.

LCI has also designed a lifting system with a double integrated mechanism which allows



more space and height, even at the lower end.

The PopUp Roof uses the thermoformed twin sheet technique in both the upper and lower shell. Having the cavity in the base as well has made it possible for LCI to propose an exclusive and patented solution to push hot or cold air into that space, depending on the climate outside. This improves the air in the upper room, and gives it a temperature more similar to that of the interior of the campervan below it.

A real extra room

LCI's innovation is not just limited to the technology of this new elevating roof, but also to aesthetics and functionality to ensure it can be used as a real additional bedroom.

The objective was to design a product that was not a simple extension of the campervan, but a real additional room with

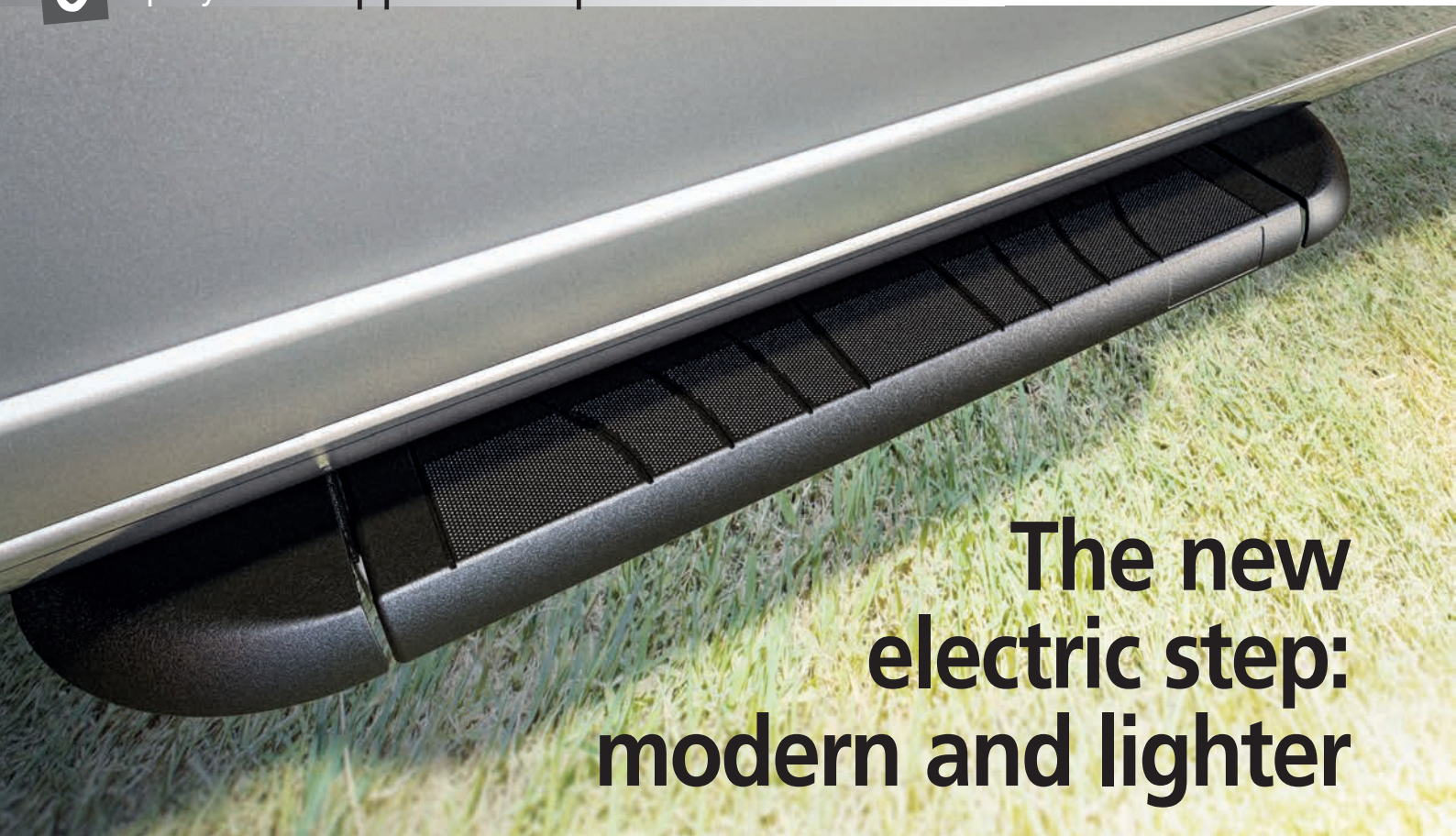
perimeter lights, reading lights, sockets for charging smartphones and air vents. The roof's fabric, produced in Italy, is washable and removable, and certified according to the American standard FMVSS302 against flammability. As an option, it will be possible to have an additional insulated sheet with an external waterproof layer and an insulating internal layer, joined in a way to reduce the heat exchange between inside and outside.

"We paid particular attention to the strength and durability of the PopUp Roof," - says Luigi Gozzi, technical director of LCI RV Europe - "We conducted tests of dropping steel balls with a diameter of two inches and a weight of 0.5kg from four metres in height. This impact test ensures that breakages will not occur even in the event of an abnormal hailstorm. The PopUp Roof was then tested in the climatic chamber. Here a series of opening and closing cycles were created to simulate 10 years of use at + 50 ° and 10 years of life at -20 °. In total, the roof has shown that it can easily overcome 20 years of operation at the two thermal extremes," added Luigi Gozzi.

The Vela PopUp Roof will initially be available for the Fiat Ducato, Citroën Jumper and Peugeot Boxer with H2 roof, but in the future LCI will also manufacture specific frames and spoilers for other versions of the same vehicles, as well as for other manufacturers. Mounted on vehicles of length L2, L3 and L4 (i.e. from 541, 599 and 636 cms), the PopUp Roof also leaves space for the installation of a roof air conditioner.

"We arrived last in this sector, but with the best product," concludes Michele Checucci. "The Lippert Components group will not participate in any European fairs in 2020, but we have set up a digital platform to present our products to B2B and B2C customers. The virtual presentation is scheduled for September and Vela will be available by the end of that month. Initially, it will be available for installation by OEMs, but it will also arrive in the aftermarket".





The new electric step: modern and lighter

To consolidate its success in the campervan market, LCI has decided to focus strongly on innovation, particularly in the field of electric steps. For this reason, a new product, Alanera, was designed from scratch which, for the first time, is made with polymeric materials instead of metal. This solution is lighter than traditional steps, and with a more pleasant shape.

To create the new step, LCI collaborated with the TekneHub Laboratory at the Department of Architecture of the University of Ferrara in Italy, and Giuseppe Mincoelli, head of the research unit in Design and coordinator of the MSc in Innovation Design. Once the design was defined, static and dynamic simulations were carried out to guarantee the same solidity as traditional steps. From a technical point of view, LCI worked with Femto Engineering, a company in the LCI group that specializes in engineering and manufacturing of moulds and injection

moulding of plastics. The use of polymers is not the only innovation of this revolutionary new product. LCI has also patented the motor system which, for the first time, is derived from electric car windows. The automotive origin guarantees extremely high reliability even at extreme temperatures, low noise and low energy consumption. The new Alanera step offers a weight reduction of between 15 and 20 percent (about 1.5 kg less than the standard step) and is simpler to fit to an RV. In fact, Alanera is optimized for quick assembly: it is delivered with the brackets already mounted so at the time of installation no other components are required, thus reducing the processing time. Production of the new Alanera step is expected to start in early October, with availability in significant quantities starting from November.



LCI launches the 'Slide Out Your Van' initiative in Europe

Lippert Components is starting a communication project in Europe to improve the public's knowledge of slide-out devices. In North America, extendable walls are a "must have", so much so that almost all motorhomes, caravans and fifth wheel trailers are equipped with two, three or even four slide-outs. Lippert Components is the world leader in the technology and production of extendable slide-outs for RVs. In Europe, however, this system is yet to take off. But now Lippert Components has reached a definitive development of its slide-out system called Smart Room 2.0 and aims to promote this solution, which has already been adopted by some important European motorhome and caravan manufacturers. "Slide Out Your Van" is the headline for the campaign aimed to develop the concept of "space on demand" in Europe. This includes an awareness-raising project to introduce the advantages of slide-out systems. A dedicated website, www.slideoutyourvan.com, available in four languages (English, German, French and Italian), includes the "who we are" section, a presentation of the technical characteristics of the "Smart Room", case histories and a blog with insights, interviews, videos, and other stories. It intends to open a dialogue with camper users and dispel any

The LCI world at the window

After the acquisition, Lippert Components (LCI) chose to put a manager in charge of Polyplastic who knows family businesses very well. Jan-Cees Santema has the task of integrating the sector's leading company into the LCI group.

Polyplastic joined the LCI group on 1st January 2020, and has had a new managing director, Jan-Cees Santema, since the beginning of June. Polyplastic is the Dutch company that is a leader in the sector of windows for motorhomes, campervans, caravans and mobile homes. Historically family-run, it is now facing the challenge of integration with a large international group. This is why a highly experienced manager has been chosen. Over the past 20 years, Santema has worked for the VDL Group, another family business with many facets within 100 companies, known above all for producing buses. With 16.000 employees and a turnover of around €6 billion, this group has allowed Santema to follow several different projects, particularly in the field of R&D and assembly of special and e-mobility vehicles in different end markets. At the beginning of his career, this manager worked in the plastic sector for a long time. The combination of this experience aligns perfectly with the profile of Polyplastic, where Santema brings two fundamental components: his passion for innovation and the desire to continuously deal with customers to be able to better meet their needs.

"My job is to better integrate a family-run business into a large group, because I have over 20 years of experience that allows me to perfectly understand that type of mentality," explains Jan-Cees Santema. *"LCI pays great attention to people, not only internally, but also to customers, and I think this is very important. The other task that has been assigned to me is to grow the company through innovation. This will be one of our growth models, the way we aim to conquer the market,"* he added.

Aboutcamp BtoB: In addition to windows, what other sectors does Polyplastic operate in?

Jan-Cees Santema: In addition to windows, sun roofs, windshields and rear windows, we have knowledge that has allowed us to develop doors for supermarket cooling cabinets. It is not a simple sector, because the ambient temperature exceeds 20 degrees and in the fridge there are only four, but with our skills we have succeeded: it is an emerging market that is growing very quickly, and we are always looking for new ones. For example, we are looking at the bus sector, where, thanks to our tech-

nologies, we can work to reduce its weight.

Aboutcamp BtoB: What kind of impact has the pandemic had on Polyplastic?

Jan-Cees Santema: In the first quarter and the first part of the second, we saw a reduction in revenues because our customers had suspended production. The strange thing is that in the end user market the demand for motorhomes and caravans increased, while production capacity decreased because working was not allowed. Then we saw a great recovery, first in Germany and then in Italy and France, while Great Britain is still a little behind, but factories are still not able to keep up with demand. However, with Covid-19 a new market has opened up, which is that of protective barriers to be used in shops or on desks. This will allow us to limit the drop in turnover, which will not be as high as for the rest of the market.

Aboutcamp BtoB: Have you had problems with your supply chain?

Jan-Cees Santema: No, because our supply chain is very short and well controlled. Furthermore, we directly produce the windows and also the sheets that are used to make them. We have a company, called Delta Glass, where we work the raw materials to produce the acrylic sheets. We use casting, not extrusion, and by making everything ourselves we are able to control the quality, in particular transparency, in an optimal way. And stability and durability are also the best.

Aboutcamp BtoB: What can we expect in terms of new products in the coming months?

Jan-Cees Santema: We will launch two new product families. The first, called Piuma, is a range of side windows complete with frame, comprising blinds and mosquito nets, designed to substantially reduce installation time. And then we will propose a new sunroof for campervans, called Vista, which allows you to increase the brightness in the front of the vehicle.

Aboutcamp BtoB: What are the advantages of integrating Polyplastic with LCI?

Jan-Cees Santema: It will allow Polyplastic to strengthen itself, because it will be able to help its customers not only with windows, but also with products of all kinds. This is the strength of the LCI family. We are proud to be part of it and to have the opportunity to accelerate and innovate even faster than in the past. I look forward to meet our customers to share our knowledge and vision.



doubts about slide-outs. *"From having conversations with the public at European fairs,"* - says Lorenzo Manni, sales manager LCI RV Europe, *"we realized that a lot of people have concerns about slide-out technology: they are afraid of water leaks, of increasing weight, and the possibility of not being able to retract the slide-out if the mechanism breaks or due to lack of power, electricity consumption or heat loss. With this communication campaign, we intend to dispel any doubts about the Smart Room slide-out and also inform the B2B market about the extraordinary opportunities offered by this product which has been specifically engineered for the European market and for compact vehicles, including, of course, vans."*