

Presentation

SUPERBAM (Sustainable PEdestrian Bridge using Advanced Materials) is a new pedestrian bridge concept offering a durable solution, with a very short erection time and innovative aesthetics.

SUPERBAM is based on a new structural design using high-strength Fibre Reinforced Polymer (FRP) and gives a cost-effective solution for small, medium and large-span pedestrian bridges.

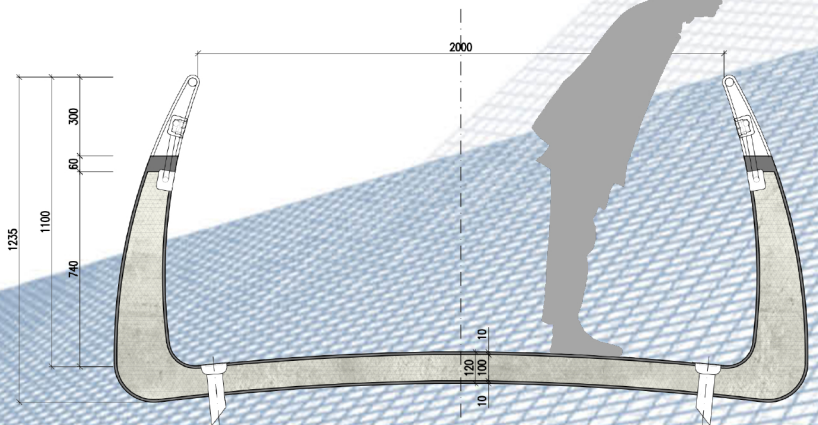
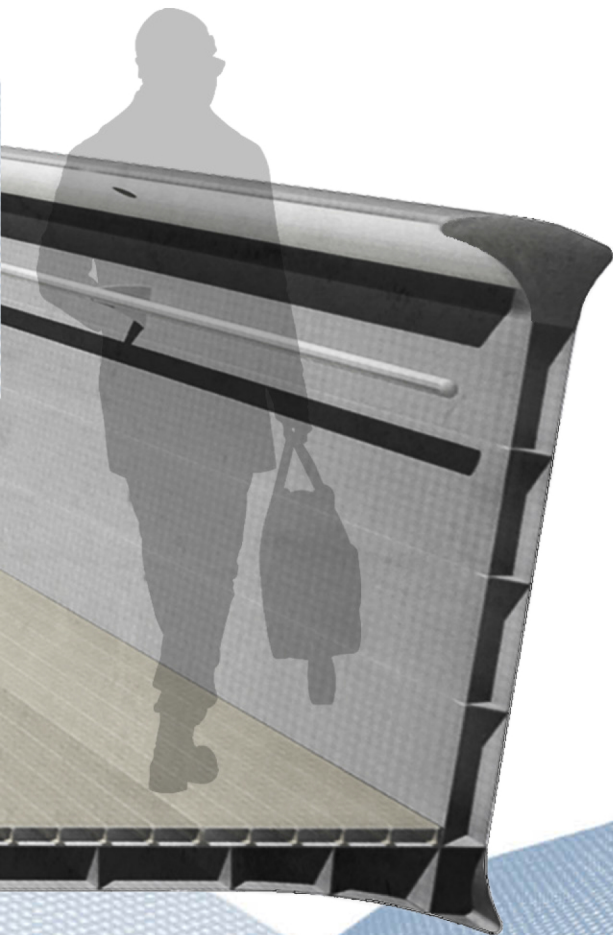
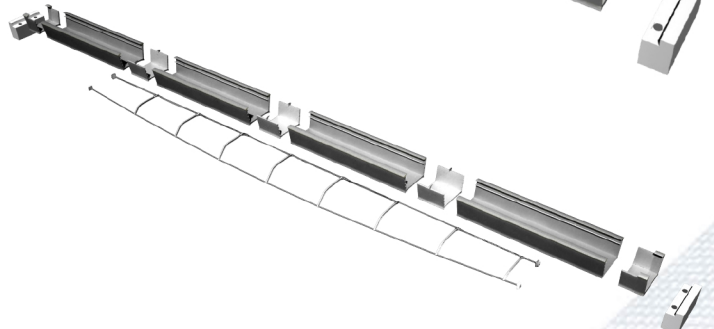
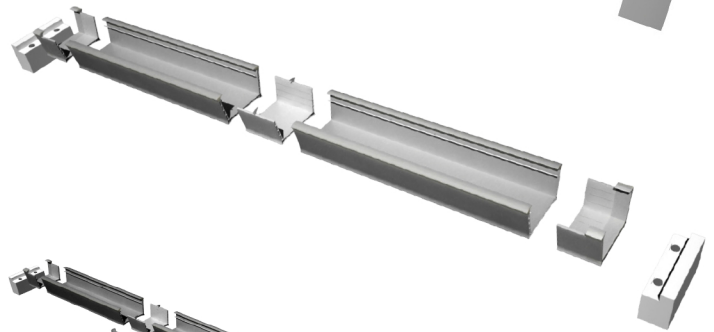
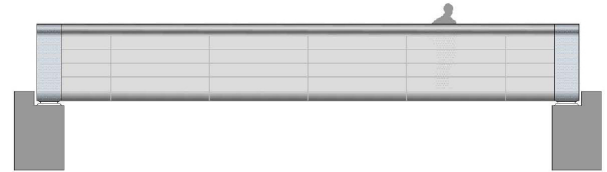
SUPERBAM technology is efficient, safe and easy to deploy in any situation.

Utility

SUPERBAM uses a new modular structural system based on FRP. The minimum amount of field joints facilitates the transportability of the modular components and the fast assembly on-site with minimum heavy erection equipment.

A new joint design also allows the bridge disassembling, creating the possibility to reuse it in different locations. This makes SUPERBAM an ideal solution for temporary bridges or emergency situations.

SUPERBAM's sustainable design uses high-strength recyclable materials, requires minimum maintenance and reduces environmental impact, without increasing the cost of the structure.



Strength

SUPERBAM offers a minimum maintenance cost and a long bridge lifetime. Corrosion of components is also prevented due to the use of FRP, which exhibits advantageous mechanical and physical properties. Indeed, FRP materials are immune to corrosion and exhibit resistance to chemical attacks, providing an optimal solution for bridges that have to be located in harsh environments (such as areas where deicing salts are applied or marine environments).

SUPERBAM technology complies with the most demanding resistance, efficiency and safety requirements.

Beauty

SUPERBAM's high strength/weight ratio improves the cost efficiency and minimizes the environmental impact, and allows a translucent structure with light effective aesthetics.

SUPERBAM permits customization of railings, illumination system and colours, which are some of the most significant aspects that affect the appearance of the bridge. Pleasant aesthetic and the possibility to customize those elements will allow the contextualization of the bridge in any environment.

Research

SUPERBAM is the outcome of two years of intense research activity carried out by two leading engineering firms: PEDELTA and COMPASSIS.

PEDELTA is a civil engineering firm, with an ample experience in bridge design and execution management, with more than 500 road, railway and pedestrian bridges built worldwide.

COMPASSIS is a naval architecture and civil engineering company with an internationally recognized professional expertise in the design and assessment of innovative FRP structures.

Contact

For further information about SUPERBAM please contact us at superbam@compassis.com.

