## Sicomin FIBRE ENGINEERED CORES™

Carbon Maxcore: 4mm Ø carbon insertions into ROHACELL® infused with high modulus Sicomin SR 1710

## **Redefining Sandwich Core Infusion Technology**

**MaxCore** is a new method of dry fibre insertion into sandwich core sheets for infusion manufacturing of large composite parts for civil engineering, transportation, wind energy and marine industries. Dry fibres are inserted into foam in multiple orientations and are responsible for 100% of the mechanical properties of the infused processed core. Fibre insertion is precise and consistent, resulting in a 70% fibre content by weight of infused glass.

Foam core is solely a carrier for the dry fibres and can be selected based on required parameters such as closed cells, water resistance, minimal resin absorption, recyclability, sustainable chemistry, thermoformability, fire and smoke behaviour as well as weight and cost savings. The **MaxCore** technology has been developed to maximise sandwich panel properties in large thickness formats. It is a cost-effective option compared with classic foam cores used in composite panels, especially the thicker the core, for example from 50mm to 200mm or more.

The options for panel dimensions are almost unlimited up to 2.5m wide with lengths up to 12m or more depending on customer requirements and transport. Standard lengths are approximately 2.5m to 3m subject to selected foams.

**MaxCore**'s patented fibre insertion method can be applied to kits in which fibre orientations are engineered within each panel to incorporate openings such as portholes, windows and doors, and to provide additional local reinforcement.



4mm diameter flax fibers infused with bio-based epoxy Infugreen 810.







## **Benefits**:

- Maximises sandwich panel properties in large thickness formats.
- Cost-effective technology.
- Unlimited options for panel dimensions.
- Compatible with epoxy, polyester and vinylester resin systems.
- Its unique dry fibre insertion technique can be applied with a variety of materials, including carbon, basalt, natural, thermoplastic and glass fibres.



For more information: www.maxcore-engineering.com

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