Technical Data

Divinycell® H Grid Scored (GS30)

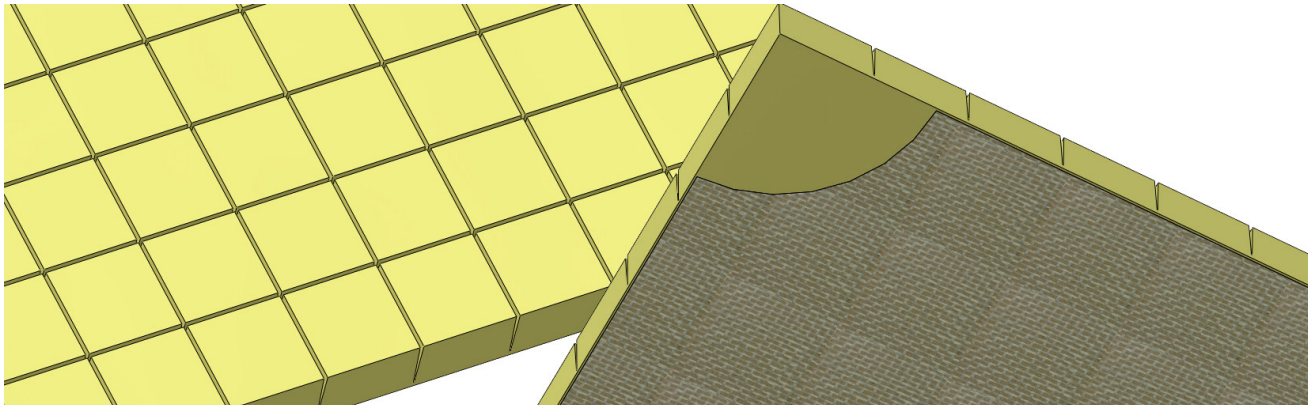

Image 1: GS30 top view (left image) and bottom view (right image)

Divinycell® H Grid Scored (GS30) is a material grooved in two directions, making it malleable and flexible for use in curved shapes or similar applications.
The sheet has grooved incisions in the longitudinal and transverse directions that extend almost through the entire thickness.
A lightweight glass fibre fabric is used on the opposite side of the grooves to reinforce the sheet.

Key advantages:

- Simple and robust to handle
- Versatile
- Load-bearing outer skins easy to press under vacuum
- Mouldable

Divinycell® H Grid Scored (GS30) is probably one of the most commonly used materials due to its flexibility and ease of handling. The most common method of joining grid-cut materials in a curved shape is to close the grooves in a concave shape, with the grooves facing the user.

This has the following advantages:

- Reduces resin absorption
- Reduces resin shrinkage – resulting in higher-quality surfaces
- Reduces exothermic temperature

Typical applications:

Rotor blades, nacelles, fuselages, superstructures, tanks, and much more.

Typical measurements	
Grid dimension/ centre to centre	30 mm
Depth of groove (D)	~ 2 mm from the bottom edge of the sheet
Width of groove (W)	~0.9 U-shaped cut

Possible processing methods:

Hand lamination – only to a limited extent, as the fibre usually bonds poorly to the core material; vacuum pressing; mechanical pressing; vacuum infusion – only to a limited extent; better to switch to variant Divinycell® H80 Grid Scored + Grooved (Q200). The panels are very often used in hand lamination or spray lamination processes. In wet lamination, the surface of the core is preferably pre-treated with a wet process before being inserted into a laminate layer, ideally as an inserted bedding layer made of cut mats.

Restrictions:

If the core is correctly positioned in the mould as described, the grooves are closed or almost closed.
If the core is not placed correctly, the grooves are opened/widened, creating gaps that are filled with resin and form flow channels in resin transfer processes. Resin consumption in the infusion process increases with thickness.