

Single Contour

Main feature: Formable

SW30 is sheets which are scored in longitudinal direction on one side and in transverse direction on the opposite side, creating a perforation which enables air and resin to flow.

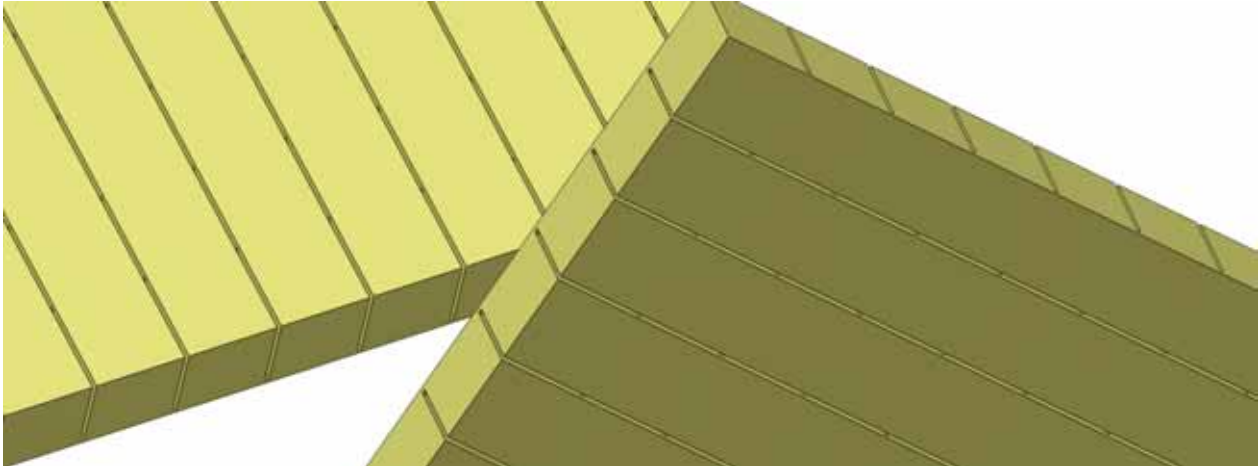


Figure 1: SW30 top view (left picture) and bottom view (right)

Description

As shown above the sheet has U-shaped cuts which intersect each other, thus creating perforations.

Typical measurements:	
Center-to-center	30mm
Depth (D)	~2mm from bottom of sheet
Width (W)	~1.3mm

Benefits

- Reduced resin consumption

Typical applications

- Blades, shells

Process characteristics

Preferred to be used on slightly curved surfaces.

Necessary to combine with other finishing codes to get an acceptable flow in resin transfer molding processes. External flow medias such as flow mats or flow meshes can also be used.

Limitations and considerations

Cuts will be opened up facing the mold side, thus increasing risk of print through due to resin shrinkage.

Formability is limited to single curved applications.

Resin uptake increases with thickness and is dependent of curvature and orientation of material is essential to get an even flow.

SC30 materials is more demanding for the user, who must fully understand the manufacturing process, in order to use it effectively in the correct way.

Finishing Solutions

DIAB utilizes a combination of its complete range of finishing options to provide an optimized solution based on customers' requirements and objectives. Should the standard range not fulfill the needs, tailor made cuts and solutions can be defined and developed. Normally this is not needed as the range of options and DIAB competence covers majority of needs in various industries.

Kits

To fully optimize the application for cost, performance and quality DIAB can engineer and design a core kit delivered in lay-up sequence. The kit of precut pieces is optimized for mechanical requirements, lay-up, manufacturing process, cost and quality objectives. The kit is produced by our skilled personnel using a combination of traditional and CNC equipment to achieve the desired result.

By working with kits our customers gain access to the full competence of DIAB in terms of engineered design, core materials and range of manufacturing techniques, all having a profound impact on the ability to reach the objectives of the application from cost, quality and performance point of view.

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