



Professor Stefan Hallstroem

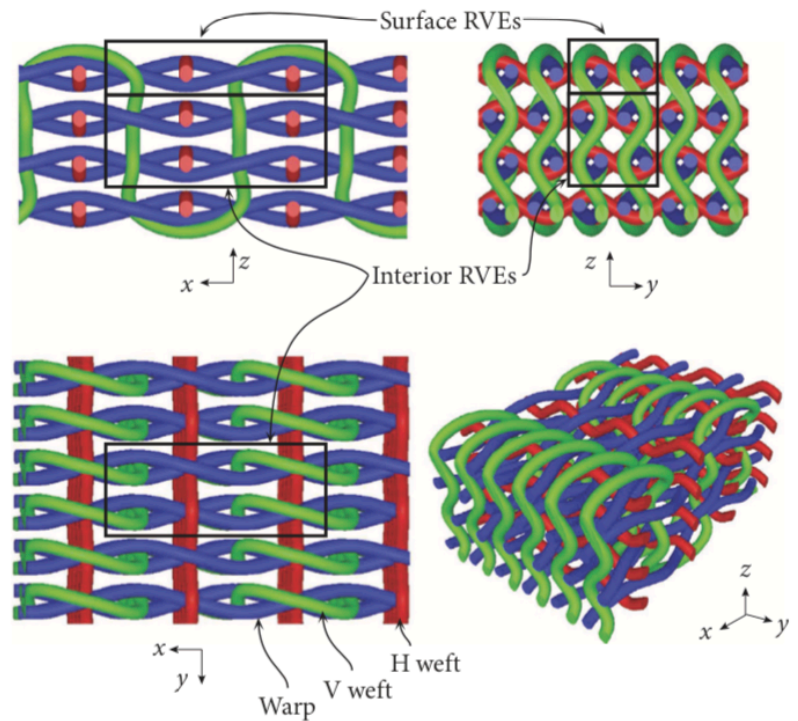


FIGURE 1: A plain 3D weave, comprising warp, horizontal H, weft and vertical V weft, depicted along its three principal axes and in an isometric view. Surface and interior RVEs of the weave architecture are also outlined.

From: Fredrik Stig and Stefan Hallstroem, “Effects of crimp and textile architecture on the stiffness and strength of composites with 3D reinforcement”, *Advances in Materials Science and Engineering*, Vol. 2019, Article ID 8439530, 2019

See:

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Selected Publications:

Shipsha A, Hallstrom S and Zenkert D. Failure mechanics and modelling of impact damage in sandwich beams – a 2D approach: Part I – experimental investigation. *Journal of Sandwich Structures and Materials*, 2003; 5: 7–31.

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A. Lindström; and S. Hallström, “Energy absorption of SMC/balsa sandwich panels with geometrical triggering

features,” *Compos. Struct.*, vol. 92, no. 11, pp. 2676–2684, 2010

Fredrik Stig and Stefan Hallstroem, “Modelling of composites containing 3D-woven reinforcement”, *Proceedings of the 3rd World Conference on 3D Fabrics and Their Applications*, Wuhan, China, 20-21 April 2011

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B. Wucher, S. Hallstroem, D. Dumas, T. Pardoen, C. Bailly, Ph. Martiny and F. Lani, “Non-conformal mesh based finite element strategy for 3D textile composites”, *Journal of Composite Materials*, September 2016, DOI: 10.1177/00219983166669875

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Moeen S. Rajput, Magnus Burman, Joonas Koell and Stefan Hallstroem, “Compression of structural foam materials – Experimental and numerical assessment of test procedure and specimen size effects”, *Journal of Sandwich Structures & Materials*, Vol. 21, No. 1, pp 260-288, January 1, 2019

Moeen S. Rajput, Magnus Burman, Fredrik Forsberg and Stefan Hallstroem, “Experimental and numerical study of the response to various impact energy levels for composite sandwich plates with different face thicknesses”, *Journal of Sandwich Structures and Materials*, Vol. 21, No. 5, pp 1654-1682, June 2019

Anton Shipsha, Stefan Hallström, Magnus Burman, “Effect of stacking sequence and bundle waviness in quasi-isotropic NCF composites subjected to compression”, *Composites Part B: Engineering*, Vol. 178, Article 107423, 1 December 2019