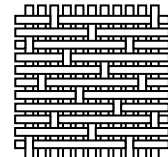


FLAX LINEN DRY FABRIC D-RS 5.9 AMPLITEX 5031 TECHNICAL DATA SHEET

Bidirectional fabric with fibers oriented at 0° and 90°, suitable for manufacturing of fiber reinforcement composite products with high performance and low environmental impact. Very good drapability, ideal for complex shapes. High laminate stiffness due to low crimp with satin weave.

Fabric Specification

Fabric Type	Flax (EU)
Construction	0°/90° Satin Weave
Fiber Tex	200 TEX
Fabric Weight	200 gsm +/- 5%, 100 gsm in each direction
Standard Width	1150 mm
Standard Roll Length	100 mm <i>*other lengths upon request</i>



Satin Weave

Composite Properties

Properties measured on samples with 5 layers aligned at 0°, manufactured in a press with 5 bars pressure (52% fiber weight), with Epoxy resin R&G type L, cured at 80°C. Fibers dried 30 minutes at 110°C prior processing.

Tensile Modulus parallel to one fiber direction	18 GPa
Tensile Strength parallel to one fiber direction	205 MPa
Tensile Strain to failure parallel to one fiber direction	

Flexural Modulus parallel to one fiber direction	10 GPa
Flexural Strength parallel to one fiber direction	160 MPa
Flexural Yield Strength parallel to one fiber direction	115 MPa

Fiber Properties

Considering that glass fibers have a density of 2.6 kg/dm³ and a tensile modulus of 70GPa, the flax ampliTex 0° /90° 200 g/m² can replace a 320 g/m² glass fiber 0° /90° fabric to have the same stiffness in tension. In compression, the performance of flax is a bit lower, so that the flax ampliTex 0° /90° 200 g/m² can replace a 230 g/m² glass fiber 0° /90° fabric to have the same stiffness.

Tensile Modulus of fibers	58.5 GPa
Tensile Strength of fibers	700 MPa
Density of fibers	1.35 kg/dm ³