

ampliTex[®] Art. No. 5018 biaxial fabric 350 gsm



Product description

Non-crimp biaxial flax fabric with fibres oriented at +45° and -45°, suitable for manufacturing fibre reinforced composite products with a high performance and a low environmental impact.

Fabric construction

Fibre type: Flax (EU) Construction: -45/+45°

Fabric weight: 350 gsm +/- 5%

Ply construction

-45/+45 ply Fibre type: Flax Fibre tex: 105 TEX Ply weight: 171 gsm

Stitching fibre

Thread: textured polyester

Weight: 6 gsm

Measurements

Standard width: 310 mm Standard roll length: 50 m

Performance advantage

Considering that glass fibres have a density of 2.6 and a tensile modulus of 70 GPa, the flax ampliTex biax 350 gsm can replace a 580 gsm glass fibre biax fabric to have the same stiffness in tension.

In compression, the performance of flax is a bit lower. Since a biaxial fabric often works in traction in one direction and compression in the other direction, the flax ampliTex biax 350 gsm can replace a 550gsm glass fibre biax fabric to have the same stiffness.

	Technical specifications	Dry fibres*	Composite **
Tensile	Strength // to fibres	580 MPa	
	Strength ⊥ to fibres		
	Yield strength // to fibres		
	Modulus // to fibres	61 GPa	
	Modulus ⊥ to fibres	6.5 GPa	
Flexural	Modulus // to fibres		
	Modulus ⊥ to fibres		
	Strength // to fibres		
	Strength ⊥ to fibres		
	Strain to failure // to fibres		
	Strain to failure ⊥ to fibres		
	Density	1350 kg/m ³	

^{*} Fiber properties measured on a UD flax composite

^{**} No composite data due to fabric architecture