SANDWICH TECH

TDS

Technical Data Sheet

Unidirectional Carbon Fiber - 6oz UM

This non-woven carbon fiber is supported with melted cross yarns for a flatter and more stable fabric than traditional stitched unidirectionals. This is often paired with another ski or snowboard reinforcement to customize the flex in specific areas or directions. This premium grade is 67% stronger and 28% stiffer than traditional T300 carbon fiber.

Dry Fabric Densities	0°	-45°	45°	Total
Density (oz/yd²)	5.7	0	0	5.7
Density (gsm)	193	0	0	193

Fiber Properties	Imperial Units	SI Units
Tensile Strength	855 ksi	5900 MPa
Tensile Modulus	42.8 Msi	295 GPa
Elongation at Break	2.0%	2.0%
Density	1.79 g/cm3	0.065 lbs/in3

Laminate Properties	Imperial Units	SI Units
Pressed thickness (t)	0.008 in	0.20 mm
Longitudinal modulus (E_x)	23.7 Msi	164 GPa
Tensile stiffness ($A_{xx} = E_x * t$)	**182 kip/in**	**32.0 kN/mm**
Shear Modulus (G_{xy})	0.53 Msi	3.63 GPa
Torsional stiffness ($A_{ss} = G_{xy} * t$)	**4.05 kip/in**	**0.71 kN/mm**

Note: Properties are for a lamination with epoxy and a 55% fiber volume fraction. Values are theoretical given known fiber and epoxy properties.

This technical information provided represents the best of our knowledge. We cannot guarantee this data because conditions of product use are beyond our control.

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