

CF-NWM Carbon Fibre Non-Woven Mat



Key Features

- 100% Recycled Carbon Fibre
- Ideal for use as a bulking material
- Excellent surface finish
- 100gsm and 300gsm

Description

Non-Woven mats are made from 100% recycled carbon fibre. These mats provide an excellent balance of mechanical properties, formability and high-quality surface finish.

Made from 100% recycled carbon fibres, the non woven mat offers excellent environmental and cost saving advantages and can be used in both component and mould making applications.

Non-Woven mats can be used with all commonly used resin systems for composite manufacture. Whilst best suited for compression moulding processes they can also be used in vacuum infusion to help consolidate and bulk out laminates.

When used in cosmetic parts the finish is similar to that of a typical 'forged' carbon look only with finer fibres and a much more subtle appearance.

Typical Uses

- Mould Making
- Compression Moulding
- Consolidation and Bulking in Infusion
- Subtle Cosmetic Finish

Processing

Non-woven mats can be used with most composite processes and resin systems, most commonly hand layup and resin infusion using epoxy, vinylester or polyester resin systems. The mat binding readily breaks down with resin and can be easily conformed to complex, compound forms.

Resin to fibre fractions will typically be 70:30 and 50:50 for hand layup and resin infusion respectively.

Mechanical Properties

Indicative data provided for a typical epoxy-matrix cured laminate with 30% fibre-fraction.

Due to the recycled nature of the material and the unknown origin of the feed stock these values must be considered approximate.

Property	Unit	Transverse	Longitudinal
Tensile Strength	MPa	330	290
Tensile Modulus	GPa	35	25
Compressive Strength	MPa	330	270
Compressive Modulus	GPa	30	20
Flexural Strength	MPa	500	370
Density	g/cm³	1.51	

Disclaimer

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum. Our technical advice, whether verbal or in writing, is given in good faith but Easy Composites Ltd gives no warranty; express or implied, and all products are sold upon condition that purchasers will make their own tests to determine the quality and suitability of the product for their particular application and circumstances.

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