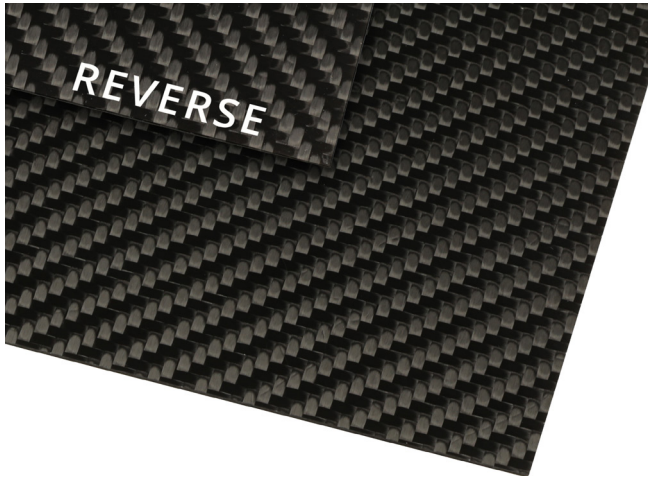


Carbon Fibre Sheet



Product Description

Manufactured by Easy Composites in the UK. Double-sided carbon fibre sheets manufactured from 100% high-strength prepreg carbon fibre, pressed at high temperature and pressure between polished plattens to produce the highest quality carbon fibre sheet available. Smooth, flat, gloss finish on both sides suitable for cosmetic or structural applications including motorsport, aerospace, engineering, drones/UAVs, modelling and more.

Designed to meet the most exacting standards of any carbon fibre sheet, our Double A-Side High Strength smooth Carbon Fibre Sheet is manufactured from 100% carbon fibre reinforcement and pressed at high temperature and pressure to create a high performance double sided carbon fibre sheet with a smooth, high-gloss finish on both sides.

Our Double A-Side High Strength Carbon Fibre Sheet is available to buy in thicknesses of 0.25mm, 0.5mm, 1mm, 2mm and 3mm. The sheet is also available in sheet sizes 285mm x 140mm, 285mm x 285mm, 580mm x 285mm and 580mm x 580mm

Typical Uses

- General Engineering
- Robotics
- Aerospace
- Motorsport
- X-Ray/Metrology Equipment
- R/C Models

Specification

Manufacturing Process

These sheets are made in-house in our specially designed platen press.

By manufacturing in-house we can supply the highest quality prepreg carbon fibre sheet available at the best possible price; a combination that has won us ongoing contracts supplying some of the biggest names in technology, engineering and motor-sport.

Laminate Composition and Tolerances

The matrix used is a high performance epoxy resin which offers excellent mechanicals, clarity and improved UV stability. The high temperature cure maximises the mechanical strength properties and results in a Tg (glass transition) of 80°C.

Key Features

- Double Sided Gloss Finish
- Smooth, Flat Finish
- Structural and cosmetic use
- Lightweight
- Pin Hole Free Surface Finish
- Service Temperature 80°C

Our Double A-Side High Strength Carbon Fibre Sheet is manufactured from multiple layers of our XPREG XC130 Prepreg Carbon 3K, 210g, 2/2 Twill and our XPREG XC130 Prepreg Carbon Fibre 12K, 450g, 2/2 Twill.

The Layup Schedule of the sheets and the thickness and its tolerance can be seen in the following table:

Sheet Thickness	Layup Schedule	Thickness and Tolerance
0.25mm	1 Layer of XPREG XC130 210g	0.22 +/-0.1mm
0.5mm	2 Layers of XPREG XC130 210g	0.44 +/-0.1mm
1.0mm	2 Layers of XPREG XC130 210g 1 Layer of XPREG XC130 450g	0.86 +/-0.15mm
1.5mm	3 Layers of XPREG XC130 210g 2 Layers of XPREG XC130 450g	1.61 +/-0.20mm
2.0mm	3 Layers of XPREG XC130 210g 3 Layers of XPREG XC130 450g	1.78 +/-0.20mm
3.0mm	3 Layers of XPREG XC130 210g 5 Layers of XPREG XC130 450g	2.82 +/-0.25mm

Mechanical Properties

The Following Data was measured from typical production sheet manufactured in our sheet manufacturing facility to the same standards as the sheet we sell.

Property	Units	Value					
Sheet Thickness	mm	0.25	0.5	1.0	1.5	2.0	3.0
Weight	kg/m ²	0.35	0.74	1.42	2.41	2.98	4.22
Flexural Modulus	GPa	TBC	TBC	45.5	51.6	54.4	16.9
Flexural Strength	MPa	TBC	TBC	204	876	880	571
Tensile Modulus 45°	GPa	TBC	12.4	11.2	12.3	13.2	13.7
Tensile Strength 45°	MPa	TBC	219	181	196	190	188
Tensile Modulus 0/90°	GPa	50.1	55.9	66.6	58.7	63.9	64.9
Tensile Strength 0/90°	MPa	641	608	768	757	796	848

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.

Easy Composites Ltd shall be in no way responsible for the proper use and service of the product, nor for the safeguarding of personnel or property, all of which is the duty of the user. Any information or suggestions are without warranty of any kind and purchasers are solely responsible for any loss arising from the use of such information or suggestions. No information or suggestions given by us shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

Before using any of our products, users should familiarise themselves with the relevant technical and safety datasheets provided by Easy Composites Ltd.