



### Key Features

- 100% high strength carbon fibre
- Flat, textured bonding surface on reverse

### Description

Premium quality carbon fibre sheet manufactured using 100% high-strength carbon fibre reinforcement and epoxy resin with a smooth, glossy, cosmetic quality carbon fibre finish on one side and a textured 'peel-ply' finish on the reverse.

### Typical Uses

- Motorsport / marine / light aircraft
- Engineering / automation
- Displays / exhibitions / shop-fitting
- Cabinets / enclosures / high-end audio
- Further processing into sandwich panels

### Specification

#### Quasi-Isotropic Layup

To create a more uniform distribution of strength, these sheets are manufactured using layers of 0°/90° and 45°/-45° oriented reinforcement in a quasi-isotropic fibre orientation. This offers improved stiffness across their diagonal axis and significantly improved torsional stiffness.

#### Laminate Composition and Tolerances

Using a high temperature cure cycle to maximise mechanical strength, the sheets also have a resultant Tg (glass transition temperature) of 80°C.

To achieve maximum stability and flatness the sheets are made with a symmetrical stack up in both fibre weight and weave.

| Sheet Thickness | Layup Schedule   | Thickness & Tolerance |
|-----------------|--|-----------------------|
| 1.0mm           | 210g 22 twill<br>300g +/-45 biax<br>210g 22 twill  | 0.9mm +/- 0.2mm       |
| 2.0mm           | 210g 22 twill<br>300g +/-45 biax<br>650g 22 twill<br>300g +/-45 biax<br>210g 22 twill  | 1.7mm +/- 0.2mm       |
| 3.0mm           | 210g 22 twill<br>300g +/-45 biax<br>650g 22 twill<br>210g 22 twill<br>650g 22 twill<br>300g +/-45 biax<br>210g 22 twill                  | 2.8mm +/- 0.2mm       |
| 4.0mm           | 210g 22 twill<br>300g +/-45 biax<br>650g 22 twill<br>650g 22 twill<br>650g 22 twill<br>650g 22 twill<br>300g +/-45 biax<br>210g 22 twill | 4.0mm +/- 0.2mm       |

| Property                                | Units             | Value* |      |      |      |
|---|-------------------|--------|------|------|------|
| Sheet Thickness                         | mm                | 1.0    | 2.0  | 3.0  | 4.0  |
| Weight                                  | kg/m <sup>2</sup> | 1.32   | 2.80 | 4.11 | 5.84 |
| Density                                 | g/cm <sup>3</sup> | 1.15   | 1.02 | 1.27 | 4.46 |
| Tensile Strength 0/90°                  | MPa               | 503    | 558  | 644  | -    |
| Tensile Strength 45°                    | MPa               | 557    | 622  | 443  | -    |
| Tensile Modulus 0/90°                   | GPa               | 37.2   | 43.9 | 47.4 | -    |
| Tensile Modulus 45°                     | GPa               | 32.3   | 34.5 | 27.1 | -    |
| Youngs Modulus 0/90° Gloss Side Compr.  | GPa               | 32.4   | 35.1 | 10.3 | -    |
| Youngs Modulus 0/90° Gloss Side Tension | GPa               | 31.6   | 35.3 | 10.5 | -    |
| Elongation at Break at 0/90°            | %                 | 2.27   | 2.91 | 3.88 | -    |
| Elongation at Break at 45°              | %                 | 3.13   | 4.11 | 4.10 | -    |

\*Data measured from a typical production sheet

### 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.

Leaders in materials, equipment and training for advanced composites

**Easy Composites Ltd**  
Unit 39, Park Hall Business Village  
Stoke-on-Trent, ST3 5XA  
United Kingdom

**Easy Composites Ltd**  
Beneluxbaan 16  
Rijen, 5121 DC  
Netherlands

**W:** [www.easycomposites.com](http://www.easycomposites.com)  
**E:** [sales@easycomposites.com](mailto:sales@easycomposites.com)  
**T:** +44 (0) 1782 454499

Version 2.0  
Revised 12/11/2024

Page 1 of 1