CUSTOMISED COMPOSITES

CARBON FIBRE HIGH GLOSS VENEER



PRODUCT DESCRIPTION & MANUFACTURING PROCESS

Our high gloss carbon fibre veneer sheet is manufactured from a single la_1 of 2x2 twill weave 200 gramme per square M epoxy pre-preg. The single layer is cured with a light weigh peel ply on one side, to give a high gloss finish on one side and a textured finish on the other.

To achieve a completely pin hole free surface all sheets are manufactured in our bespoke autoclave facility. They allow us to cure laminates at 120 degrees under 60 Psi of pressure to guarantee all the air is removed from our laminates. Our largest autoclave can take laminates up to 1100 x 2400mm.

All of our veneer sheets are cured on highly polished perfectly flat platens, which in turn produces a high gloss smooth, flat surface. The gloss level is as high as a lacquered or varnished item, without the need for additional products.

The thickness of the plate is 100% controlled by the amount of fibre and resin used in the laminate. By only using the highest quality epoxy pre-preg materials we have exact control over the resin to fibre ratios of all laminate stacks, guaranteeing there are never any areas that are too dry, or too wet with resin so offering the best possible thickness control and tolerances.

MECHANICAL PROPERTIES:

KEY FEATURES

- High Gloss Finish
- 100 % Pinhole Free Surface
- Ideal for Any Cosmetic Use
- Highly Flexible, Can Wrap Most Surfaces
- Service Temperature up to 120 Degrees C
- Textured Reverse Side, Ideal to Bond to Anything
- Easy to cut and Shape with Scissors
- Can be Supplied with 3M Adhesive Backing

LAMINATE SPECIFICATION AND TOLERANCES

Sheet Description	Lay-up Schedule	Thickness and Tolerance (mm)	
0.25mm	1 Layer, 200T	0.22mm,(+/-0.05)	

Material Specifications:

200T: 200 gsm, 2x2 Twill Weave Carbon, 3K, T300-42% resin volume

Tests performed on 200T-3K-T300-42%RW				
Test	Test type	Results	Standard	
Compression	Compressive strength	615 MPa	BS EN ISO 14126 : 1999	
Tension	Tensile Strength	645 MPa	BS EN ISO 2563 : 1997	
	Tensile Modulus	55.2 GPa		
Flexure	Flexural Strength	882 MPa	BS EN ISO 14125 : 1998	
	Flexural Modulus	60.1 GPa		
	Strain to Failure	1.5 %		
Interlaminar Shear Strength	Interlaminar shear strength	69.8 MPa	BS EN 2563 : 1997	
DMA	Tg – Storage Modulus Onset	120 Degrees C	AITM 1 – 0003 Issue 3	

Mechanical testing carried out at 23±2°C, 50±5% RH. All mechanical tests were completed independently by UKAS approved organisations. Complete

Double Sided Carbon High Strength Carbon Fibre Plate – Technical Data Sheet Customised Composites Ltd, <u>Tel:02380559665</u> <u>www.customisedcomposites.co.uk</u> E-mail: sales@customisedcomposites.co.uk

