

HY Networks (Shanghai) Co., Ltd.

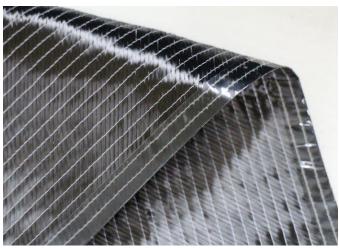
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Technical Data Sheet

Code No: CMF-DB400

Description:

Carbon fiber biaxial fabric CMF-DB400 is woven by 2 layers of different direction (+45°/-45°) yarn. It is compatible with various resin systems including epoxy, polyester and vinyl ester resins. Because of so many outstanding features carbon fiber fabric is widely used in various fields



like sports equipment, building reinforcements, etc.

Advantages:

- --- Low density with high tensile strength and high modulus
- --- Extra high temperature resistance under non-oxidizing environment
- --- Excellent electrical and thermal conductivity
- --- Good fatigue resistance, abrasion resistance and corrosion resistance
- --- Good electromagnetic shielding and X-ray permeability
- --- Insoluble and non-swelling in the organic solvent, acid, alkali

Applications:

Structural strengthening of reinforced concrete, masonry, brickwork and timber elements or structures, to increase flexural and shear loading capacity for:

- --- Improved seismic performance of masonry walls
- --- Replacing missing steel reinforcement
- --- Increasing the strength and ductility of columns
- --- Increasing the loading capacity of structural elements
- --- Enabling changes in use / alterations and refurbishment
- --- Correcting structural design and / or construction defects



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- --- Increasing resistance to seismic movement
- --- Improving service life and durability
- --- Structural upgrading to comply with current standards

Storage:

Storage Conditions / Shelf Life: 24 months from date of production if stored properly in undamaged original sealed packaging in dry conditions at temperatures between +5°C and +35°C. Protect from direct sunlight.

Technical data:

Fabric Construction	Fiber orientation: +45°/-45° (Biaxial)		
+45°	200±5 g/m ²		
Skeleton yarn	0.4 g/m ²		
+45°	200±5 g/m ²		
Warp knitting yarn	2 g/m ²		
Total weight	$402.4 \pm 10 \text{ g/m}^2$		
Thickness	0.4mm		
Roll length	100m		
Fabric width	1260~1270mm		

Dry Fiber Properties

Physical Properties	Unit	Characteristic value	Result	Test standard
Linear density	g/km	780~820	802	GB/T 3362-2005
Density	g/cm3	1.78~1.82	1.79	GB/T 3362-2005
Tensile strength	MPa	≥4900	4997	GB/T 3362-2005
Coefficient of Variation	%	≤5.0	3.0	GB/T 3362-2005
Tensile modulus	GPa	220~260	247	GB/T 3362-2005
Elongation at break	%	≥2	2.0	GB/T 3362-2005
Sizing	%	1.0~1.2	1.1	GB/T 26752-2011