



OCV™ Technical Fabrics

PRODUCT INFORMATION

Double Bias Fabrics ($\pm 45^\circ$)

PRODUCT DESCRIPTION

OCV™ Technical Fabrics Double Bias Fabrics are a stitch-bonded composite reinforcement combining equal amounts of continuous fiber oriented in the $+45^\circ$ and -45° directions into a single fabric. This construction offers off-axis reinforcement without the need to rotate other materials on a bias. The versatile fabric, made from high-quality fibers, is available in a variety of widths and weights to meet your particular requirements. The input fibers are designed to give controlled wet-out and excellent laminate properties. Each fabric can be combined with a glass mat or veil for enhanced performance, surface finish or handling.

PRODUCT APPLICATION

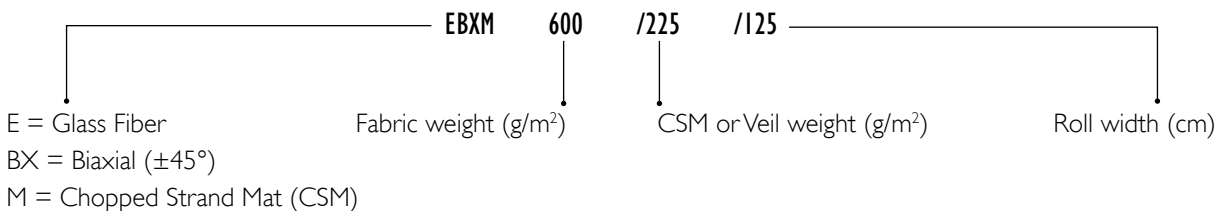
OCV™ Double Bias Fabrics offer superior structural performance in applications subject to extreme shear and torsion stress. These properties are ideal for applications such as wind blades, marine panels, and snowboards. These fabrics offer improved conformability over biaxial fabrics yet maintain comparable laminate properties, making them ideal for placement within complex parts. Reduced fabric print-through results in enhanced aesthetics on finished products while offering material and labor savings.

FEATURES

PRODUCT BENEFITS

Crimp-free construction	Improved fiber alignment and mechanical properties
Opposing $\pm 45^\circ$ fabric construction offers resistance to twisting	Finished parts perform under extreme shear and torsion stress
Excellent conformability	Improved placement in complex parts
Reduce print-through	Enhanced aesthetics with material and labor savings
Can be combined with various mats (continuous filament mat, wet formed mat, chopped strands and veil)	Improved print-through, cost-effective secondary bonding and handling
Available in a variety of widths and weights	Offers solutions for wide range of applications

PRODUCT NOMENCLATURE





PHYSICAL PROPERTIES / AVAILABLE PRODUCTS

FAMILY	PRODUCT DESCRIPTION	PRODUCT CERTIFICATE Lloyd's approval	TOTAL WEIGHT (g/m ²)	WEIGHT UNIFORMITY (g/m ²)				STANDARD WIDTH (mm)		
				Yarn Roving			Knit yarn			CSM
				0°	+45°	90°		-45°		
+/- 45°	EBX 400	X	410	-	200	-	200	10	-	1250/2500
	EBX 400/100	X	510	-	200	-	200	10	100	1250/2500
	EBX 600	X	610	-	300	-	300	10	-	1250/2500
	EBXM 600/100	X	710	-	300	-	300	10	100	1250/2500
	EBXM 600/225	X	835	-	300	-	300	10	225	1250/2500
	EBXM 600/300	X	910	-	300	-	300	10	300	1250/2500
	EBXM 600/450	X	1060	-	300	-	300	10	450	1250/2500
	EBX 800	X	810	-	400	-	400	10	-	1250/2500
	EBXM 800/225	X	1035	-	400	-	400	10	225	1250/2500
	EBXM 800/300	X	1110	-	400	-	400	10	300	1250/2500
	EBXM 936/100	X	1046	-	468	-	468	10	100	1250/2500

Others weights, types and combinations are available under request.

SAMPLE MECHANICAL PROPERTIES

Sample Mechanical Properties of Laminate based on EBX 600 (52% glass content by weight).

	TENSILE (ISO 527-4)		COMPRESSION (ISO 8515)		FLEXURAL (ISO 14.125)	
	Warp mean	Weft mean	Warp mean	Weft mean	Warp mean	Weft mean
Strength	78 MPa	144 MPa	140 MPa	130 MPa	221 MPa	263 MPa
Modulus	11 GPa	12 GPa	6 GPa	6 GPa	10 GPa	10 GPa



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