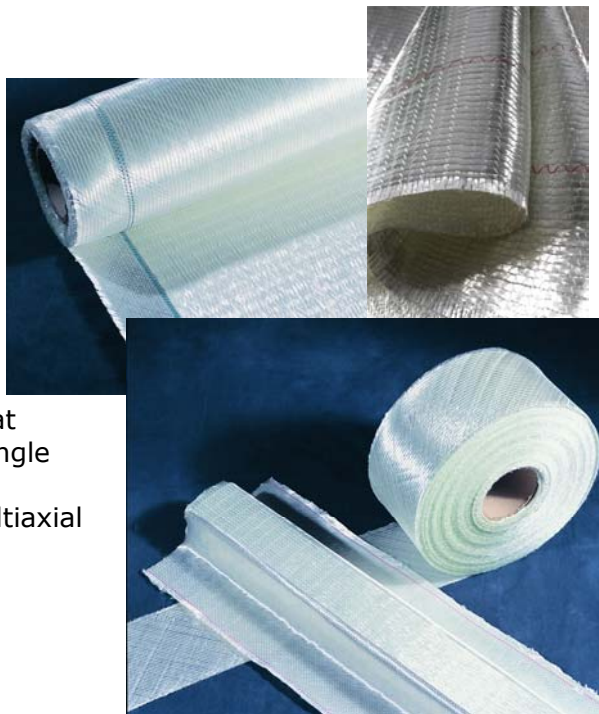


MULTIAXIALS

Introduction

MULTIAXIAL fabrics are made up of 2 or more layers of unidirectional fibres stitched together with a light polyester thread. Being stitched, they do not exhibit the crimping effect associated with woven fabrics - crimping that leads to resin rich areas, heavy print-through, and loss of performance.

The result is a range of reinforcements that offer the ability to process multiple layers of unidirectionals (the ultimate reinforcement form) at varying angles in a single fabric form - giving the term 'multiaxial fabric'.



The advantages of Saint-Gobain **MULTIAXIALS**:

- Quick & easy to wet-out
- No resin-rich areas
- Minimum print-through
- Increased performance (tensile & flexural)
- Improved fatigue & impact resistance
- Easier handling - the fabrics stay intact even when cut
- Labour savings - by using fewer multi-layer, heavyweight fabrics

We can also offer MULTIAXIALS that are powder-bonded instead of stitched.

Performance Gains

The combination of straight fibres and easily achievable high fibre fractions allow MULTIAXIAL reinforcements to offer a performance advantage that is so important in any structural composite.

The unidirectional fibres can be loaded to their maximum potential before failure occurs, rather than suffer the premature kink-stress that is inherent in a woven fabric.

In any laminate, uncrimped fibres with high fibre fractions offer the following advantages over wovens or random mats:

- increased tensile & flexural strength
- increased tensile & flexural moduli
- less weight for the same strength
- improve impact performance
- improved resistance to fatigue

Standard Product List and Specifications

Description	Reference	Weights in each axis (g/m ²)				
		0°	-45°	90°	+45°	CSM
E-glass Biaxial ±45° <i>All weights available with CSM</i>	EBX 254		127		127	
	EBX 318		159		159	
	EBX 424		212		212	
	EBX 446		223		223	
	EBX 602		301		301	
	EBXM 602/225		301		301	225
	EBX 802		401		401	
	EBX/EBXhd 936		468		468	
	EBX 1002		501		501	
	EBX 1202		601		601	
E-glass Triaxial 0°/±45°	ETLX 583	283	150		150	
	ETLX 751	283	234		234	
	ETLX 895	425	234		234	
	ETLX 1169	567	301		301	
E-glass Triaxial -45°/90°/+45°	ETTX 750		250	250	250	
	ETTX 1169		301	567	301	
E-glass Quadriaxial 0°/-45°/90°/+45°	EQX 263	94	56	57	56	
	EQX 610	142	150	165	150	
	EQX 868	283	150	283	150	
	EQX 1034	283	234	283	234	
	EQX 1168	283	301	283	301	
	EQX 1652	425	401	425	401	
	EQX 2336	567	601	567	601	
E-glass Biaxial 0°/90°	ELT 566	283		283		
	ELT 850	425		425		
	ELT 1134	567		567		
E-glass Biaxial Combination 0°/90°/CSM	ELTM 600/150	283		283		150
	ELTM 600/225	283		283		225
	ELTM 600/300	283		283		300
	ELTM 850/225	425		425		225
	ELTM 850/300	425		425		300
	ELTM 850/450	425		425		450
E-glass 0° UD	ELpb 425	425		40		
	ELpb 567	567		50		
E-glass 0°/CSM	U1140/r17/50/S50	1140		50		50
Carbon	CBX 200 3k		100		100	
	CBX 300 6k		150		150	
	CBX 340 6k		170		170	
	CBX 400 12k		200		200	
	CBX 440 12k		220		220	
	CBX 600 12k		300		300	
	CBX 636 24k		318		318	
	CBX 800 24k		400		400	
	CBX 1200 48k		600		600	
	CBX 1600 48k		800		800	
	CQX 800 12k	188	200	200	200	
	CQX 1309 12/24k	376	301	331	301	
	CLM 850/60 48k/veil	850				60
	Aramid	ARBX 350		175		175
ARBX 400			200		200	
AREBX 440			75/145		75/145	

All weights nominal. Other weights & variations available to order, including the range of **powder-bonded MULTIAXIALS** from Saint-Gobain Syncoglas. 05/05