



# OCV™ Technical Fabrics

## PRODUCT INFORMATION

## Unidirectional Fabrics (0° or 90°)

### PRODUCT DESCRIPTION

OCV™ Technical Fabrics Unidirectional Fabrics are a composite reinforcement designed for applications requiring a high concentration of reinforcement in only one direction. This is achieved by placing continuous fibers in either a 0° or 90° direction. These fibers are held in place by either interweaving a lightweight hot melt yarn to lock the unidirectional fibers in place, or by stitching the fibers in place using a stitch yarn. 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 or surface finish.

### PRODUCT APPLICATION

OCV™ Unidirectional Fabrics provide excellent strength and stiffness along the fiber direction. They also provide the highest ratio of axial strength to weight. This combination of properties makes Unidirectional Fabrics ideal for demanding applications with a high aspect ratio (length to width ratio) such as wind blades, poles, and stringers. These fabrics are also useful in applications where a discrete area requires additional strength or stiffness. Wrapping of existing structural components, such as columns and beams, with Unidirectional Fabrics could also greatly increase the lifespan and performance of these critical load-bearing members. These fabrics are also commonly used in FRP pipe and fittings for increased strength.

### FEATURES

### PRODUCT BENEFITS

Maximized axial fiber content	Reduced resin usage and part weight
Improved longitudinal strength, stiffness and flex	Finished parts perform under extreme tensile and flexural stress
Economical method to deliver unidirectional reinforcement	Lower finished part cost
Improved strength without adding thickness at comparable stiffness	Enhanced performance from lighter laminates
Available in a variety of widths and weights	Offers design flexibility for wide range of applications





**PHYSICAL PROPERTIES / AVAILABLE PRODUCTS**

FAMILY	PRODUCT DESCRIPTION	TOTAL WEIGHT (g/m <sup>2</sup> )	WEIGHT UNIFORMITY (g/m <sup>2</sup> )	SUBSTRATE (g/m <sup>2</sup> )	STANDARD WIDTH (mm)
			Yarn Roving 0°		
<b>Stitched &amp; Powder Bonded</b>	ELpb 425	465	425	40	1250/2500
	ELpb 567	617	567	50	1250/2500
<b>Powder Bonded</b>	U375/M150	525	375	150	1250/2500
	U672/S300	972	672	300	1250/2500
<b>Stitched</b>	CM750.300	1053	720	333	1250/2500
	U1140/R17/50/S50	1257	1140	117	1250/2500

*Others weights, types and combinations are available under request.*



OCV™ Technical Fabrics

OWENS CORNING  
COMPOSITE MATERIALS, LLC  
ONE OWENS CORNING PARKWAY  
TOLEDO, OHIO 43659  
1.800.GET.PINK™  
[www.ocvtechnicalfabrics.com](http://www.ocvtechnicalfabrics.com)  
[www.owenscorning.com/composites](http://www.owenscorning.com/composites)

OCV TECHNICAL FABRICS  
43 BIBBER PARKWAY  
BRUNSWICK, ME 04011  
U.S.A.  
+1 207 729 7792

Contact :  
[sales.na.ocvtf@owenscorning.com](mailto:sales.na.ocvtf@owenscorning.com)

OWENS CORNING  
FIBERGLAS, SPRL.  
166, CHAUSSÉE DE LA HULPE  
B-1170 BRUSSELS - BELGIUM  
+32.2.674.82.11

OCV TECHNICAL FABRICS  
DRUKKERIJSTRAAT 9  
B-9240 ZELE  
BELGIUM  
+32 52 45 76 11

Contact :  
[sales.eu.ocvtf@owenscorning.com](mailto:sales.eu.ocvtf@owenscorning.com)

OWENS CORNING - OCV ASIA PACIFIC  
SHANGHAI REGIONAL HEADQUARTERS  
2F OLIVE LVO MANSION  
620 HUA SHAN ROAD  
SHANGHAI CHINA 200040  
+86.21.62489922

OCV TECHNICAL FABRICS  
2/F, NO. 68 TSO WO HANG  
SAI KUNG, KOWLOON  
HONG KONG  
+852 9091 3534

Contact :  
[sales.ap.ocvtf@owenscorning.com](mailto:sales.ap.ocvtf@owenscorning.com)

This information and data contained herein is offered solely as a guide in the selection of a reinforcement. The information contained in this publication is based on actual laboratory data and field test experience. We believe this information to be reliable, but do not guarantee its applicability to the user's process or assume any responsibility or liability arising out of its use or performance. The user agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production. It is important for the user to determine the properties of its own commercial compounds when using this or any other reinforcement. Because of numerous factors affecting results, we make no warranty of any kind, express or implied, including those of merchantability and fitness for a particular purpose. Statements in this publication shall not be construed as representations or warranties or as inducements to infringe any patent or violate any law safety code or insurance regulation.

