

## ZOLTEK™ PX30 Fabric (PW03, PW06, SW08)

Graphitized Spun Yarn Carbon Fabric

### DESCRIPTION

ZOLTEK PX30 Woven Carbon Fabrics tailorability results from controlling the yield on rovings and yarns, and allows for a variety of finished composite thicknesses. The spun yarns have many surface fibrils that protrude in various directions at various lengths from the surface. This fiber loft contributes to high cross-ply tensile and interlaminar shear strengths for 2-D composite materials. Contour conformation without wrinkling is another advantage of spun yarn fabrics. ZOLTEK PX30 materials undergo high temperature carbonization process, involving a long temperature soak time, resulting in a very thermally stable and chemically pure fabric with low oxidation rate.



MATERIAL OVERVIEW	PLAIN WEAVE (PW03)		PLAIN WEAVE (PW06)		SATIN WEAVE (SW08)	
	SI	US	SI	US	SI	US
Areal Weight	115 g/m <sup>2</sup>	3.4 oz/yd <sup>2</sup>	237 g/m <sup>2</sup>	7.0 oz/yd <sup>2</sup>	288 g/m <sup>2</sup>	8.5 oz/yd <sup>2</sup>
Count (W x F)	175 x 175 yarns/10 cm	45 x 45 yarns/in	113 x 113 yarns/10 cm	29 x 29 yarns/in	160 x 160 yarns/10 cm	38 x 38 yarns/in
Thickness	406 microns	16 mils	673 microns	20 mils	890 microns	35 mils
Standard Widths	838 mm	33 inch	1,067 mm	42 inch	1,067mm	42 inch
Roll Length*	73 m	80 yds	36 m	40 yds	36 m	40 yds
Yarn Input	2/27		2/10			
Electrical Resistivity	0.0014 ohm-cm (0.00055 ohm-in)					
Carbon Content	99%					
Density	1.75 g/cc (0.063 lb/in <sup>3</sup> )					
Oxidation Rate	1% per hour at 932° F (500° C)					

\* Due to the manufacturing process, individual roll lengths will vary.

The properties listed in this datasheet do not constitute any warranty or guarantee of values. This information should only be used for the purposes of material selection. Please contact us for more details.

### TYPICAL PACKAGING

All fabrics are wound on a 3" diameter core, sealed in plastic, and placed in a cardboard box. Listed below are the standard box dimensions. All dimensions are internal measurements.

33 inch Fabric Width: 12" x 12" x 37"

42 inch Fabric Width: 12" x 12" x 50"

### CERTIFICATION

ZOLTEK PX30 Fabrics are manufactured in accordance with ZOLTEK's written and published data. A Certificate of Conformance is provided with each shipment.

### SAFETY

Obtain, read, and understand the Material Safety Data Sheet (SDS) before use of this or any other ZOLTEK product.

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