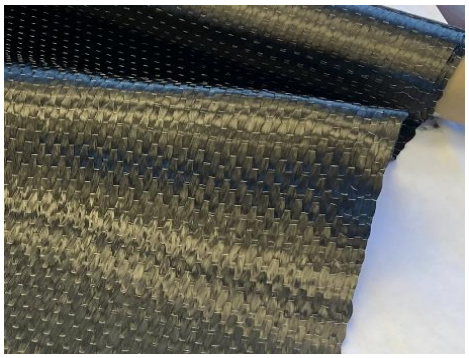
TECHNICAL DATASHEET

ZOLTEK™ PX35 UNI-DIRECTIONAL FABRICS

DESCRIPTION

ZOLTEK PX35 weave-heat Bonded Uni-Directional Carbon Fabrics are produced from our Zoltek PX35-1 (multi-compatible with epoxy, vinyl ester), PX35-7 (compatible with vinyl ester) 50K Continuous Tow Carbon Fiber. Unique stabilized techniques are utilized to obtain an easy-to-handle CF fabrics when process with wet layup. The fabrics can be custom cut on site to minimize scrap thanks to the weft bonding yarn.



MATERIAL	UD200	UD200	UD300	UD300	UD600	UD600
0° Carbon (nominal) Zoltek 50K	200 g/m^2	200 g/m^2	300 g/m^2	300 g/m^2	615 g/m^2	615 g/m2
PES 226 dtex	14 g/m^2	14 g/m^2	14 g/m^2	14 g/m^2	14 g/m^2	14 g/m^2
Total Fabrics Weight (nominal)	214 g/m^2	214 g/m^2	314 g/m^2	314 g/m^2	629 g/m^2	629 g/m^2
	6.36 oz/yd^2	6.36 oz/yd^2	9.34 oz/yd^2	9.34 oz/yd^2	17.92 oz/yd^2	17.92 oz/yd^2
Width	300 mm 12"	610 mm 24"	300 mm 12"	610 mm 24"	300 mm 12"	610 mm 24"
Stitch Length	19mm					
	3/4"					
Stitch Pattern	plain					
Cured Thickness/Ply	0.25mm		0.37mm		0.69mm	
Roll Length	50 m or custom length					

Average Values Shown

**Yarn is coated with Low melt temperature Co polymer (melting temp 90C)*

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.

ISO 9001 AS9100 BUREAU VERITAS Certification

ZOLTEK Toray Group

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TECHNICAL DATASHEET

ZOLTEK™ PX35 UNI-DIRECTIONAL FABRICS

PROPERTY	Test Norm	Typical test value with Epoxy resin (DGEBA / Amine) / wet layup vacuum	
TYPICAL FIBER PROPERTIES		**SI**	**US**
Tensile strength		4137 Mpa	600 Ksi
Tensile Elongation		1.7%	1.7%
Tensile Modulus		242 Gpa	35 Msi
COMPOSITE GROSS LAMINATE PROPERTIES		**SI**	**US**
Ultimate tensile Strength in primary Fiber Direction	D3039	1514 Mpa	220 Ksi
Elongation at Break	D3039	1.2%	1.2%
Tensile Modulus	D3039	124.0 Gpa	17.98 Ksi
Longitudinal compressive strength	D3410	1033 Mpa	149 Ksi
Longitudinal Compressive Modulus	D3410	114.0 Gpa	16.53 Ksi
Nominal Laminate thickness		0.57 mm	0.57 mm
Fiber volume content		58%	58%
Fabric type		Woven Quasi UD	Woven Quasi UD
Fabric total areal weight		624 gsm	18.40 oz/yd2
Fabric carbon fiber areal weight		615 gsm	17.69 oz/yd2

SIZING choice versus resin type:

Interlaminar shear strength (ILSS) is given for both types of sizing (Multicompatible -13 and Vinyl ester -73) for both types of resin: Epoxy and Vinyl ester.

UD CF fabrics with epoxy resin			
Properties		PX35-13	PX35-73
Interlaminar shear strength (ILSS)	ISO 14125	57 Mpa	60 Mpa
UD CF fabrics with epoxy resin			
		PX35-13	PX35-73
Interlaminar shear strength (ILSS)	ISO 14125	52Mpa	51 Mpa

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TYPICAL PACKAGING

Wound on a cardboard core, shrink wrap. packaged in a cardboard box. Rolls stacked horizontally on pallets when shipping.

Requirements other than standard widths and roll lengths should be specified by purchase order.

APPROVAL

DNV-GL: Zoltek fabrics are made from Zoltek PX35 tow. DNV-GL has granted approval to ZOLTEK PX35 Continuous Tow for use in wind energy and marine applications.

CERTIFICATION

ZOLTEK PX35 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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