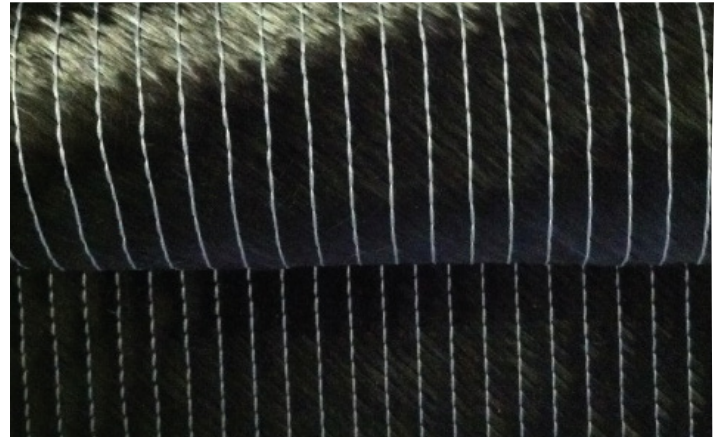


## ZOLTEK™ PX35 Multi-Directional Fabrics

Stitch-Bonded Multi-Axial Carbon Fabrics

### DESCRIPTION

ZOLTEK's Multi-Axial Fabric is produced from our ZOLTEK PX35 continuous carbon fiber tow. Unique fiber spreading techniques are utilized to obtain a wide range of MD fabric weights for a varied set of composite part applications. Quick composite part build-up is cost effectively achieved with our diverse weight range of low-cost carbon fabric products. Drapable fabric construction, ideal for complex shape preforms. Pillar and Tricot stitching patterns available.



### APPLICATIONS

- Automotive
- Marine
- Aircraft
- Infrastructure

### RECOMMENDED USE

- Body Panels (Interior / Exterior)
- Components / Undercarriage
- Reinforcement

### +/- 45° FABRIC ARCHITECTURE

| Material         | Fiber Orientation | Nominal Weights g/m <sup>2</sup> (oz) |                    |                    |                    |
|------------------|-------------------|---------------------------------------|--------------------|--------------------|--------------------|
|                  |                   | MD 300                                | MD 400             | MD 500             | MD 600             |
| ZOLTEK PX35 50K  | +45°              | 150 (4.42)                            | 200 (5.90)         | 250 (7.37)         | 300 (8.85)         |
| ZOLTEK PX35 50K  | -45°              | 150 (4.42)                            | 200 (5.90)         | 250 (7.37)         | 300 (8.85)         |
| Polyester Stitch | —                 | 4 (.12)                               | 5 (.15)            | 7 (.21)            | 8 (.24)            |
| <b>Total</b>     | —                 | <b>304 (9.00)</b>                     | <b>405 (11.94)</b> | <b>507 (14.95)</b> | <b>608 (17.93)</b> |

### 0/90° FABRIC ARCHITECTURE

| Material         | Fiber Orientation | Nominal Weights g/m <sup>2</sup> (oz) |                    |                    |                    |
|------------------|-------------------|---------------------------------------|--------------------|--------------------|--------------------|
|                  |                   | MD 300                                | MD 400             | MD 500             | MD 600             |
| ZOLTEK PX35 50K  | 0°                | 150 (4.42)                            | 200 (5.90)         | 250 (7.37)         | 300 (8.85)         |
| ZOLTEK PX35 50K  | 90°               | 150 (4.42)                            | 200 (5.90)         | 250 (7.37)         | 300 (8.85)         |
| Polyester Stitch | —                 | 4 (.12)                               | 5 (.15)            | 7 (.21)            | 8 (.24)            |
| <b>Total</b>     | —                 | <b>304 (9.00)</b>                     | <b>405 (11.94)</b> | <b>507 (14.95)</b> | <b>608 (17.93)</b> |

## ZOLTEK PX35

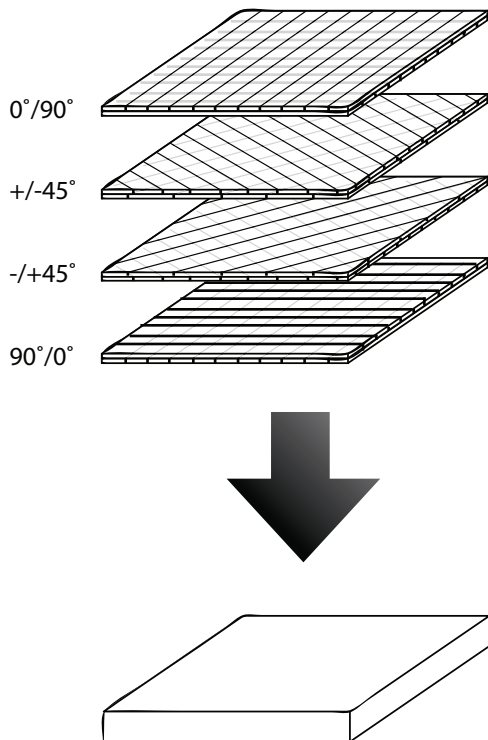


Stitch-Bonded Multi-Axial Carbon Fabrics

| MATERIAL FIBER PROPERTIES | SI             | US                       |
|---------------------------|----------------|--------------------------|
| Tensile Strength          | 4,137 MPa      | 600 ksi                  |
| Tensile Modulus           | 242 GPa        | 35 msi                   |
| Electrical Conductivity   | 0.00155 ohm-cm | 0.00061 ohm-in           |
| Density                   | 1.81 g/cc      | 0.065 lb/in <sup>3</sup> |
| Fiber Diameter            | 7.2 microns    | 0.283                    |
| Carbon Content            | 95%            |                          |

*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 MULTI-AXIAL LAYUP



## TYPICAL PACKAGING

Wound on cardboard core, sealed in polyethylene bag, and placed in cardboard box. Rolls stacked horizontally on pallets when shipping.

Standard Width: 1,270 mm +/- 20

Standard Roll Length: 50 m

+ Custom widths and roll lengths may be available upon request.

## 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.

## ZOLTEK PX35

