

PRODUCT DATA SHEET



TENCATE PERFORMANCE COMPOSITES

TenCate PW-1000

CFRT® Woven Series Carbon/Glass Fiber

PRODUCT TYPE

Carbon (12K) fiber content: 25%

Glass (330) fiber content: 25%

Modified PMMA thermoplastic resin (50%)

Noted: Percentages are by volume and are nominal values)

TYPICAL APPLICATIONS

- Footwear
- Skates
- Recreational equipment

SHELF LIFE

Stable indefinitely at 77°F (25°C)

Materials must be dried prior to heating and thermoforming. Please refer to the TCPC Processing Instructions.

Revised 5/2017

Cetex® and CFRT® are registered trademarks of Royal TenCate. All data given is based on representative samples of the materials in question. Since the method and circumstances under which these materials are processed and tested are key to their performance, and TenCate Advanced Composites has no assurance of how its customers will use the material, the corporation cannot guarantee these properties.

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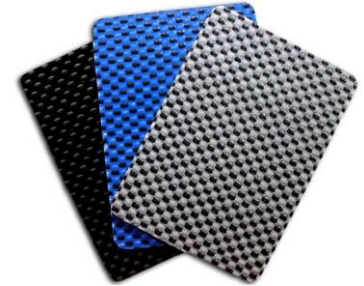
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PRODUCTS DESCRIPTION

TenCate Cetex® PW-1000 is a continuous fiber reinforced thermoplastic (CFRT®) composite laminate. It blends the benefits of a thermoplastic polymer alloy with woven carbon and glass fibers in a plain weave for enhanced performance. The PW-1000 style laminate is available in a single layer product; carbon in one direction and glass fibers at a 90° orientation to the carbon that is ultra-thin, lightweight, and resilient for improved energy return.

PRODUCT BENEFITS/FEATURES

- Plain weave of 12K carbon fibers and glass (330) fibers
- Bi-directional carbon and glass reinforcement
- Lightest weight, thin single or multiple layers
- Available in various colors



Composition:

Fibers..... Carbon (12K) fiber content: 25%, Glass (330) fiber content: 25%

Resin..... PMMA impact modified proprietary thermoplastic resin (50%).

(Noted: Percentages are by volume and are nominal values)

TENCATE PW-1000 MATERIAL PROPERTIES

Specific Gravity..... 1.48 g/cc

Thickness: 0.8 mm (0.031 inches) nominal. Available in single ply laminate.

Color: Various

Size: Cut to customer specifications from sheet of 91 x 122 cm (36 x 48 inches)

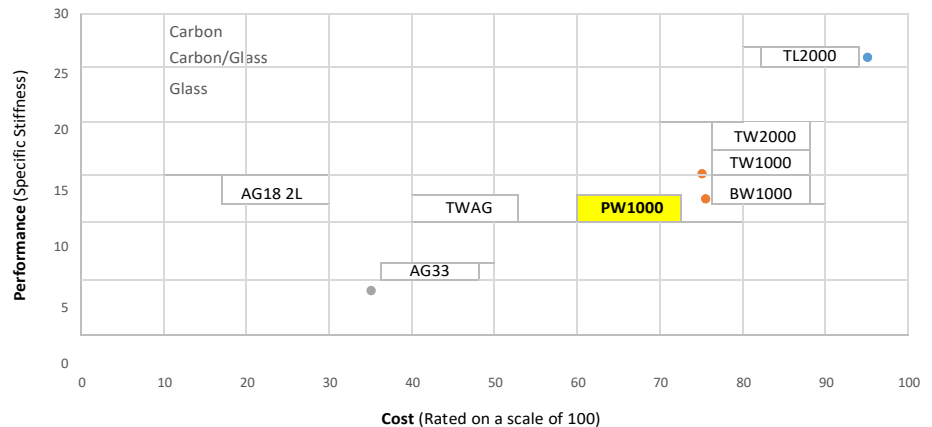
Property	Condition	Method	Results:	
Flexural Rigidity	RTD	ASTM D790-10	4.5 lbs-in ²	13.2 N/cm ²
Flexural Modulus	RTD	ASTM D790-10	1.2 Msi	8.5 GPa
Flexural Strength	RTD	ASTM D790-10	21.1 ksi	145.6 MPa

TYPICAL CONSOLIDATION PARAMETERS OR PROCESSING INFO

Recommended Processing Temperatures.....Forming 195°C to 200°C (383°F - 392°F)

Bonding 55°C to 60°C (131°F - 140°F)

PERFORMANCE versus COST



TENCATE PERFORMANCE COMPOSITES

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