

PRODUCT DATA SHEET



TENCATE PERFORMANCE COMPOSITES

TenCate TW-1000

PRODUCT TYPE

Carbon (12K) fiber content: 26%

Glass (330) fiber content: 26%

Modified PMMA thermoplastic resin (48%)

(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.

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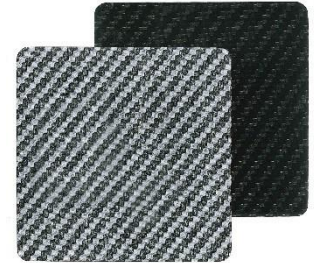
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PRODUCTS DESCRIPTION

TenCate Cetex® TW-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 twill weave for enhanced shapes and performance. The TW-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

- Twill weave of 12K carbon fibers and glass (330) fibers
- Bi-directional reinforcement
- Lightest weight, thin single layer
- Available in stock and custom colors



TENCATE TW-1000 MATERIAL PROPERTIES

Specific Gravity..... 1.50 g/cc

Thickness: 0.89 mm (0.035 inches) nominal. Available in single ply laminates.

Color: Various

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

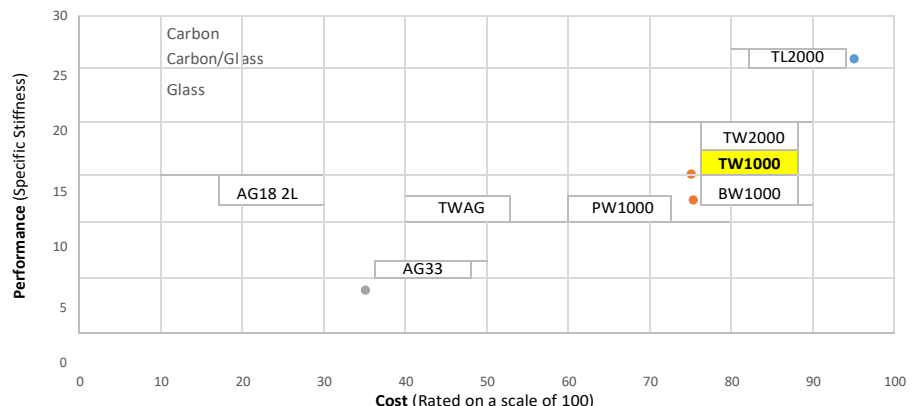
Property	Condition	Method	Results	
Flexural Strength	RTD	ASTM D790-10	47 ksi	327.0 MPa
Flexural Modulus	RTD	ASTM D790-10	2.3 Msi	15.7 GPa
Flexural Rigidity	RTD	ASTM D790-10	8.3 lbs-in ²	24.3 N/cm ²

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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