

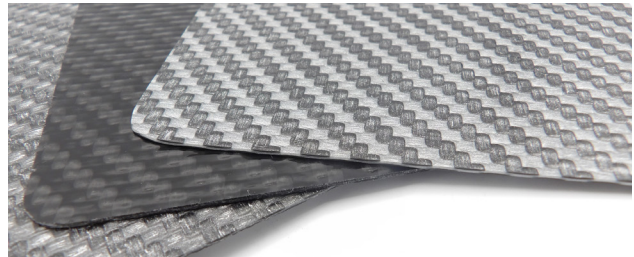
## PRODUCT DATA SHEET

### DESCRIPTION

Toray PMC CFRT® (TW-1000) is a reinforced thermoplastic composite laminate. It blends the benefits of a thermoplastic polymer matrix 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. This product is ultra-thin, lightweight, and resilient for improved energy return.

### FEATURES

- › Twill weave of carbon and glass fibers
- › Bi-directional reinforcement
- › Lightest weight, thin, single layer
- › Available in stock and custom colors



### PRODUCT TYPE AND COMPOSITION

Carbon fiber content: 26%  
Glass fiber content: 26%  
Modified PMMA thermoplastic resin: 48%  
(Noted: Percentages are by volume and are nominal values)

### TYPICAL APPLICATIONS

- › Footwear
- › Recreational equipment
- › Skates

### SHELF LIFE

Stable indefinitely at 25°C (77°F)

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

### MATERIAL PARAMETERS

Specific Gravity	1.3 ± 0.15 (calculated based upon material volume)
Thickness	1.0 mm (± 0.2 mm) nominal
Size	Cut to customer specifications from sheet of 91 x 122 cm (36 x 48 inches)
Standard Colors	Silver, Charcoal, and Black
Forming Temperature	195° to 200°C (383°F–392°F)
Bonding Temperature	55°C to 60°C (131°F–140°F)



Contact us for more information:

**e** [contact@toraypmc.com](mailto:contact@toraypmc.com)

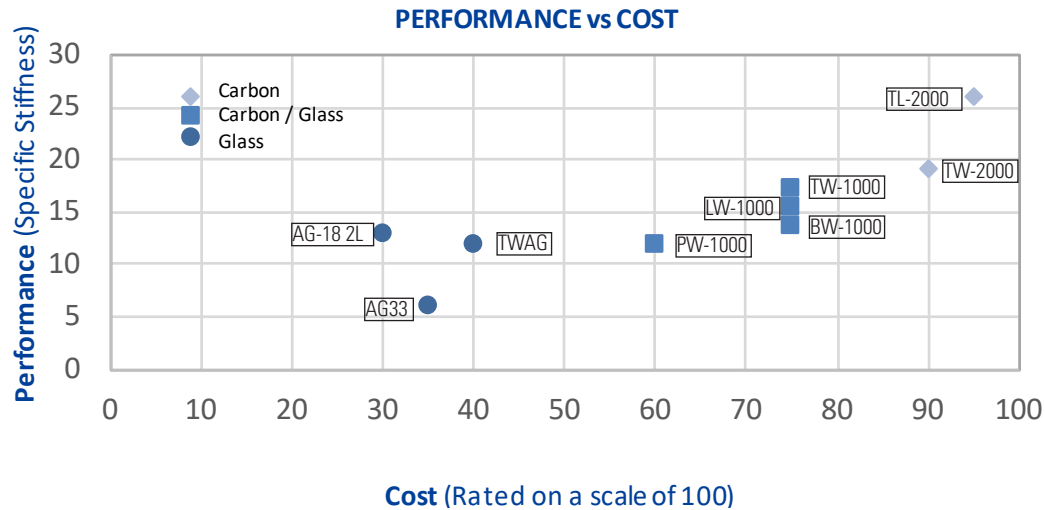
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# CFRT®

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## PRODUCT DATA SHEET



## MECHANICAL PROPERTIES

Properties	Method	Results
Flexural Rigidity	ASTM D790-10	> 45 N-cm
Flexural Strength	ASTM D790-10	> 148 MPa*
Flexural Modulus	ASTM D790-10	> 7445 MPa*

\*Results per testing performed in carbon direction.