



Aerolite Carbon™

FORMABLE - AFFORDABLE - CARBON FIBER

The Latest Technology in Carbon Fiber Composites has Arrived

Aerolite Carbon is an advanced carbon fiber textile impregnated with a proprietary thermoplastic alloy resin. The unique material chemistry and construction allow Aerolite Carbon sheets to stretch uniformly when heated to form deep draws and sharp angles on simple, one-sided tooling in a single-step process.

- Compatible with existing thermoforming equipment
- Short cycle time – high throughput
- Forms complex geometry in single step
- Lightweight strength
- Cost-effective, affordable performance

Aerolite Carbon easily incorporates as molded textures and embossments, as well as decorative finishes and color matching, without any secondary operations.

STANDARD SHEET DIMENSIONS AND COMPOSITION

	Metric	English
Length	2440 mm	96 inches (8 feet)
Width	1220 mm	48 inches (4 feet)
Thickness	1,5 mm / 2,5 mm	0.060" / 0.100"
Carbon Content	C30: 30%, by wt. C15: 15%, by wt.	

*custom thickness available for large orders

Physical Properties

PROPERTY	C15	C30
Sheet Density	1.02	1.19
Forming Temperature	330 - 380°F / 165 - 195°C	330 - 380°F / 165 - 195°C
Shrinkage Rate	<1%	<1%

Mechanical Properties

PROPERTY	C15	C30
Tensile Strength	115 MPa (16.6 ksi)	200 MPa (29.0 ksi)
Tensile Modulus	6450 MPa (935 ksi)	12900 MPa (1870 ksi)
Flexural Strength	180 MPa (26.1 ksi)	253 MPa (36.6 ksi)
Flexural Modulus	6800 MPa (986 ksi)	13100 MPa (1900 ksi)

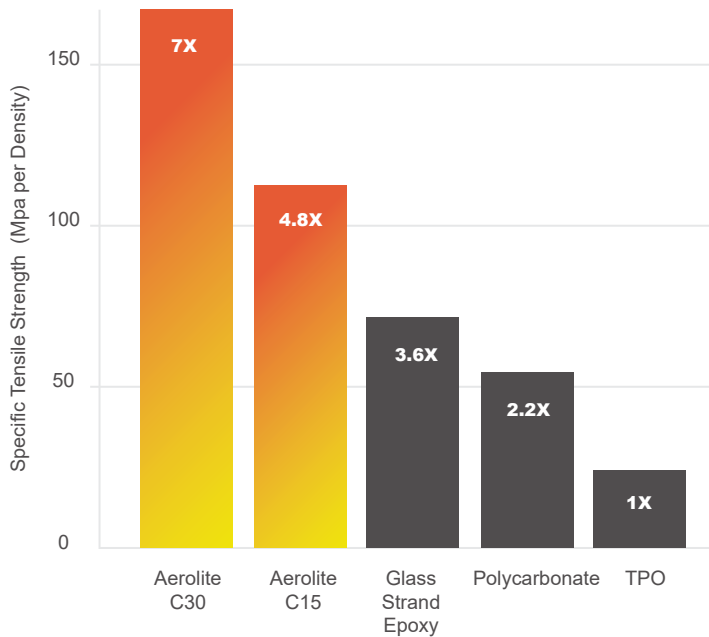


Aerolite Carbon is the industry's first blend of cost-effectiveness and high performance. It's easy and affordable to manufacture into final parts without sacrificing performance or premium aesthetics.

Aerolite Carbon improves the customer experience with as-molded cosmetic finishes, textures and embossment capabilities and offers OEMs the chance to differentiate their products in the market without prohibitive initial costs.

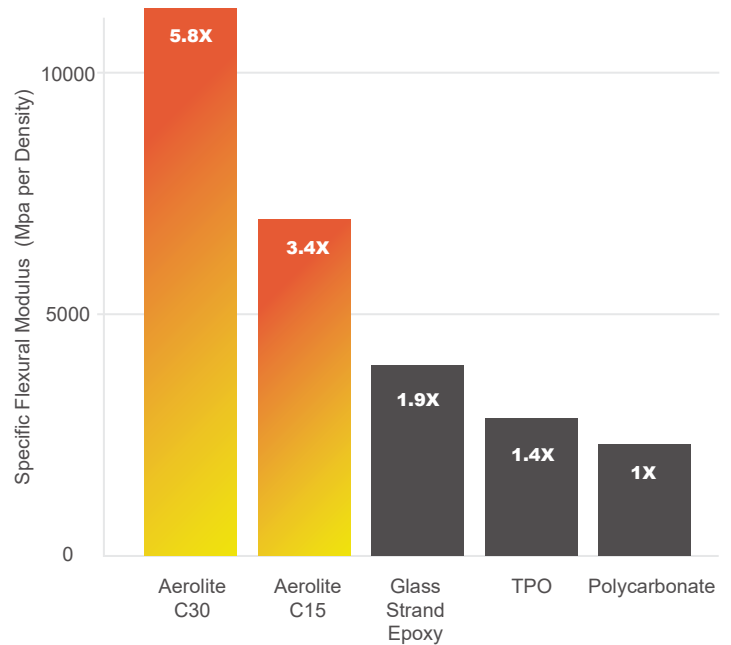
LIGHTWEIGHT STRENGTH

Strength per Weight Comparison with Common Materials



LIGHTWEIGHT STIFFNESS

Flexural Modulus per Weight Comparison with Common Materials



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