



Carlisle Carbon Composites Grade C31-HD

General Product Information

Chopped fiber Carbon / Carbon material heat treated to 2300 C.
Custom machining to print also available.

Typical Physical Properties

	Direction	Typical Values
Bulk Density	N/A	1.70 g/cm ³
Total Porosity	N/A	8%
Flexural Strength	In-Plane	15,000 psi
	Perpendicular	13,000 psi
Compressive Strength	In-Plane	18,000 psi
	Perpendicular	8,000 psi
Flexural Modulus	In-Plane	4.1 x 10 ⁶ psi
	Perpendicular	
Thermal Conductivity	In-Plane	50 W / m-K
	Perpendicular	16 W / m-K
Secant Value CTE (ambient to 1000 °C)	In-Plane	1.0 x 10 ⁻⁶ / °C
	Perpendicular	7.0 x 10 ⁻⁶ / °C
Electrical Resistivity	In-Plane	
	Perpendicular	
Rockwell Hardness	(R15X scale)	70 - 80
Ash Content	N/A	0.3%

Available Stock Sizes

Limited availability, please call for available stock sizes. To be replaced by Grade T26-HDP.