3DXTECH® Additive Manufacturing

Technical Data Sheet: HTN+CF

Material Description:

CARBONX HTN+CF boasts impressive performance without compromising on printability. Though a heated chamber is recommended for optimized results, this material has consistent layer adhesion and minimal warp even when printed in an unheated chamber. With low moisture absorption, excellent chemical resistance, and a high continuous service temperature, CARBONX HTN+CF is a material which can handle rigorous applications which other grades of Nylon cannot.

Mechanical Property	Testing Standard	Orientation	Unit	Value
Tensile Strength	ASTM D638	Vertical	psi	4,500
Tensile Modulus	ASTM D638		ksi	553
Tensile Strength	ASTM D638	Flat	psi	15,500
Tensile Modulus	ASTM D638		ksi	977
Tensile Strength	ASTM D638	Edge	psi	13,700
Tensile Modulus	ASTM D638		ksi	1,300
Flexural Strength	ASTM D790	Edge	psi	26,900
Flexural Modulus	ASTM D790		ksi	1,380
Izod Impact, Unnotched	ASTM D256	Flat	ft-lb/in	4.68

Thermal Properties	Testing Standard	Unit	Value
Continuous Service Temperature, 20,000 hrs	IEC 60216	°C	150
Deflection Temperature, 1.80 MPa (261 psi)	ISO 75	°C	200

Note: Testing data provided in this document was generated by an independent third-party lab to ensure unbiased results.

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TDS Rev 1.0

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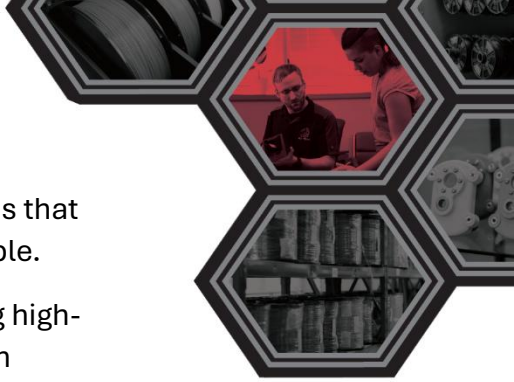
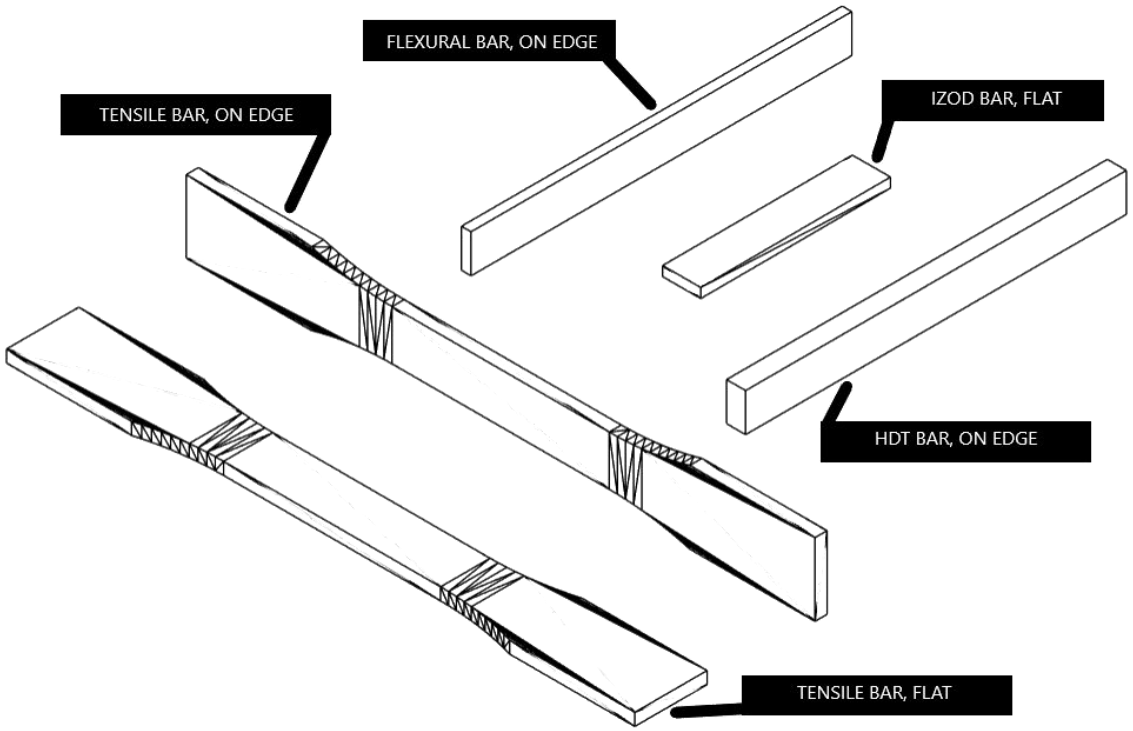


Mission: To inspire creators by delivering innovative manufacturing solutions that empower professionals to solve complex challenges once thought impossible.

Vision: Become a trusted partner for demanding applications by developing high-performance materials that fuel sustainable design and engineering, with an unwavering commitment to continuous improvement.

Physical Properties	Testing Standard	Unit	Value
Density	ISO 1183	g/cc	1.25

Printer Used	Nozzle Temp	Bed Temp	Chamber Temp	Layer Height
Bambu X1C	295 °C	100 °C	N/A	0.24 mm



Disclaimer: The technical data contained on this data sheet is furnished without charge or obligation and accepted at the recipient's sole risk. This data should not be used to establish specifications limits or used alone as the basis of design. The data provided is not intended to substitute for any testing that may be required to determine fitness for any specific use.

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