

## CIT CC631 12K T700S T2/2 ET445S 37% 127CM

### PROPERTIES

<i>Dry Fabric:</i>	<i>Unit</i>	<i>Typical Values</i>
Weaving Style	-	Twill 2/2
Fiber Type	-	T700SC 12K
Fiber Density	g/cm <sup>3</sup>	1.80
Warp	threads/cm	3.90
Weft	threads/cm	3.90
Areal Weight	g/m <sup>2</sup>	630 (±4%)

<i>Uncured Prepreg:</i>	<i>Unit</i>	<i>Typical Values</i>
Tack	-	High
Flow	%	3.70 (± 5%)
Out Life @ 23°C	days	30
Storage Life @ -18°C	months	12
Nominal Areal Weight	g/m <sup>2</sup>	1000
Nominal Resin Content	Wt %	37% (± 3%)
Volatile Content	Wt %	< 1
Nominal Width	mm	1270
Laminate Density*	g/cm <sup>3</sup>	1.52
Cured Ply Thickness*	mm	0.658

(\*) The tests were carried out @ 23°C and 60% R.H. on specimens cured in std conditions (dwell @125°C for 30 minutes in autoclave. External pressure applied: 6 bar).

*Details provided in this document have been obtained from carefully controlled samples; data are an overview of this product and should not be intended as technical specification.*

*Because the properties of this product can be significantly affected by the fabrication and testing techniques employed and since CIT does not control the conditions under which its products are tested and used, CIT cannot guarantee that the properties provided will be obtained with other processes and equipment.*

*CIT has the right to change any data or information when deemed appropriate.*

<b><i>Cured Material Property</i></b>	<b><i>Test method</i></b>	<b><i>Units</i></b>	<b><i>Actual Value</i></b>
0° Tensile modulus		GPa	61.4
0° Tensile strength	ASTM D3039	MPa	874
0° Poisson's ratio		-	0.08
0° Elongation at failure		%	1.55
90° Tensile modulus		GPa	59.9
90° Tensile strength	ASTM D3039	MPa	788
90° Poisson's ratio		-	0.06
90° Elongation at failure		%	1.44
0° Compressive modulus	ASTM D6641	GPa	57.2
90° Compressive modulus		GPa	56.0
0° Compressive strength	SACMA SRM 1R-94	MPa	517
90° Compressive strength		MPa	524
In-plane shear modulus		GPa	3.63
In-plane shear strength @ failure	ASTM D3518	MPa	73.7
In-plane shear strength @ 5%		MPa	54.5
Inter-laminar shear strength	ASTM D2344	MPa	63.4

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