

Carbopree®



Carbopree® rods, laminates and profiles made of carbon fiber are used as structural reinforcements within the restoration of deteriorated buildings or structures, or to increase their ultimate or service loads.

HIGH STRENGTH CARBOPREE® RODS

	Ø 5.5 mm	Ø 7.5 mm	Ø 10 mm	Ø 12.5 mm
Tensile strength – ASTM D3039	2450 MPa	2450 MPa	2450 MPa	2450 MPa
Tensile modulus of elasticity – ASTM D3039	130 GPa	130 GPa	130 GPa	130 GPa
Deformation – ASTM D3039	1.8%	1.8%	1.8%	1.8%
Section	23 mm ²	44 mm ²	78 mm ²	122 mm ²
Ultimate load – ASTM D3039	56 kN	108 kN	192 kN	300 kN

HIGH MODULUS OF ELASTICITY CARBOPREE® RODS

	Ø 5 mm	Ø 7.5 mm	Ø 10 mm
Tensile strength – ASTM D3039	2000 MPa	2000 MPa	2000 MPa
Tensile modulus of elasticity – ASTM D3039	150 GPa	150 GPa	150 GPa
Deformation – ASTM D3039	1.8%	1.8%	1.8%
Section	19 mm ²	44 mm ²	78 mm ²
Ultimate load – ASTM D3039	45 kN	88 kN	157 kN

HIGH STRENGTH CARBOPREE® LAMINATES

	50 x 1.2	80 x 1.2	100 x 1.2	120 x 1.2
Tensile strength – ASTM D3039	2800 MPa	2800 MPa	2800 MPa	2800 MPa
Tensile modulus of elasticity – ASTM D3039	165 GPa	165 GPa	165 GPa	165 GPa
Deformation – ASTM D3039	1.8%	1.8%	1.8%	1.8%
Thickness	1.2 mm ²	1.2 mm ²	1.2 mm ²	1.2 mm ²
Width	50 mm	80 mm	100 mm	120 mm

HIGH STRENGTH CARBOPREE® LAMINATES

	50 x 1.4	60 x 1.4	90 x 1.4	100 x 1.4	120 x 1.2
Tensile strength – ASTM D3039	2800 MPa	2800 MPa	2800 MPa	2800 MPa	2800 MPa
Tensile modulus of elasticity – ASTM D3039	165 GPa	165 GPa	165 GPa	165 GPa	165 GPa
Deformation – ASTM D3039	1.8%	1.8%	1.8%	1.8%	1.8%
Thickness	1.4 mm ²	1.4 mm ²	1.4 mm ²	1.4 mm ²	1.4 mm ²
Width	50 mm	60 mm	90 mm	100 mm	120 mm



HIGH MODULUS OF ELASTICITY CARBOPREE® LAMINATES

	50 x 1.4	60 x 1.4
Tensile strength – ASTM D3039	2300 MPa	2300 MPa
Tensile modulus of elasticity – ASTM D3039	200 GPa	200 GPa
Deformation – ASTM D3039	1.4%	1.4%
Thickness	1.4 mm ²	1.4 mm ²
Width	50 mm	60 mm

HIGH STRENGTH CARBOPREE® SHEETS

	HS 300	HS 600
Average tensile strength – ASTM D3039	3900 MPa	3900 MPa
Tensile modulus of elasticity – ASTM D3039	230 GPa	230 GPa
Deformation – ASTM D3039	1.5%	1.5%
Thickness of dry tissue	0.165 mm ²	0.330 mm ²
Weight	300 g/m ²	600 g/m ²