

**TECHNICAL DATA SHEET Compositesplaza pultrusion profiles:**

version 01: 30-10-2017

Description	Code	Width	Thick ness	Diameter		Length mm	Straightness mm	Weight gr/mtr	Resin system	Fibers
				Outer mm	Inner mm					
pultrusion HT carbon tube 100 cm $\varnothing$ 1,5x0,7 mm - 2,0 g/m	CAPULROTUBE100-1,5x0,7 - 0020			1,50	0,70	1000 +5	2 mm/1000 mm	2,00	epoxy	UD Carbon HT
pultrusion HT carbon tube 100 cm $\varnothing$ 2,0x1,0 mm - 3,5 g/m	CAPULROTUBE100-2,0x1,0 - 0035			2,00	1,00	1000 +5	2 mm/1000 mm	3,50	epoxy	UD Carbon HT
pultrusion HT carbon tube 100 cm $\varnothing$ 3,0x2,0 mm - 5,6 g/m	CAPULROTUBE100-3,0x2,0 - 0056			3,00	2,00	1000 +5	2 mm/1000 mm	5,60	epoxy	UD Carbon HT
pultrusion HT carbon tube 100 cm $\varnothing$ 4,0x2,5 mm - 11,1 g/m	CAPULROTUBE100-4,0x2,5 - 0111			4,00	2,50	1000 +5	2 mm/1000 mm	11,10	epoxy	UD Carbon HT
pultrusion HT carbon tube 100 cm $\varnothing$ 5,0x3,0 mm - 19,0 g/m	CAPULROTUBE100-5,0x3,0 - 0190			5,00	3,00	1000 +5	2 mm/1000 mm	19,00	epoxy	UD Carbon HT
pultrusion HT carbon tube 100 cm $\varnothing$ 6,0x4,0 mm - 23,3 g/m	CAPULROTUBE100-6,0x4,0 - 0233			6,00	4,00	1000 +5	2 mm/1000 mm	23,30	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 0,5 mm - 0,27 g/m	CAPULROROD100-D0,5 - 0003			0,50		1000 +5	2 mm/1000 mm	0,27	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 1,0 mm - 1,1 g/m	CAPULROROD100-D1,0 - 0011			1,00		1000 +5	2 mm/1000 mm	1,10	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 1,5 mm - 2,6 g/m	CAPULROROD100-D1,5 - 0026			1,50		1000 +5	2 mm/1000 mm	2,60	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 2,0 mm - 4,6 g/m	CAPULROROD100-D2,0 - 0046			2,00		1000 +5	2 mm/1000 mm	4,60	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 3,0 mm - 10,5 g/m	CAPULROROD100-D3,0 - 0105			3,00		1000 +5	2 mm/1000 mm	10,50	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 4,0 mm - 19,0 g/m	CAPULROROD100-D4,0 - 0190			4,00		1000 +5	2 mm/1000 mm	19,00	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 5,0 mm - 31,5 g/m	CAPULROROD100-D5,0 - 0315			5,00		1000 +5	2 mm/1000 mm	31,50	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 6,0 mm - 45,0 g/m	CAPULROROD100-D6,0 - 0450			6,00		1000 +5	2 mm/1000 mm	45,00	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 8,0 mm - 79,4 g/m	CAPULROROD100-D8,0 - 0794			8,00		1000 +5	2 mm/1000 mm	79,40	epoxy	UD Carbon HT
pultrusion HT carbon rod 100 cm $\varnothing$ 10,0 mm - 122,0 g/m	CAPULROROD100-D10,0 - 1220			10,00		1000 +5	2 mm/1000 mm	122,00	epoxy	UD Carbon HT
pultrusion HT carbon rect. rod 100 cm 3,0x0,8 mm - 3,7 g/m	CAPULREROD100-3x0,8 - 0037	3,00	0,80			1000 +5	2 mm/1000 mm	3,70	epoxy	UD Carbon HT
pultrusion HT carbon rect. rod 100 cm 6,0x0,8 mm - 7,7 g/m	CAPULREROD100-6x0,8 - 0077	6,00	0,80			1000 +5	2 mm/1000 mm	7,70	epoxy	UD Carbon HT
pultrusion HT carbon rect. rod 100 cm 8,0x0,8 mm - 10,2 g/m	CAPULREROD100-8x0,8 - 0102	8,00	0,80			1000 +5	2 mm/1000 mm	10,20	epoxy	UD Carbon HT
pultrusion HT carbon rect. rod 100 cm 20x1,0 mm - 32,6 g/m	CAPULREROD100-20x1,0 - 0326	20,00	1,00			1000 +5	2 mm/1000 mm	32,60	epoxy	UD Carbon HT

## TECHNICAL DATA SHEET Compositesplaza pultrusion profiles: material properties

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### Base materials

#### Resin

- High performance bisphenol A epoxy resin
- Standard Tg: 120 °C

#### Standard Carbon Fiber

- Torayca T700 or equivalent
- Tensile strength (virgin fiber): 4900 MPa
- Tensile Modulus (virgin fiber): 230 GPa
- Elongation at break: 2%

#### High Modulus Carbon Fiber

- Toho Tenax UMS45 F22 or equivalent
- Tensile strength (virgin fiber): 4500 MPa
- Tensile Modulus (virgin fiber): 430 GPa
- Elongation at break: 1,10%

### Composite properties (typical values)

#### Standard Carbon Fiber

- Fiber volume fraction: +/- 63 %
- Tensile strength: 2500 MPa
- Tensile Modulus: 140 GPa
- Compression strength: 1600 MPa
- Elongation at break: 2%

#### High Modulus Carbon Fiber

- Fiber volume fraction: +/- 63 %
- Tensile strength: 2400 MPa
- Tensile Modulus: 240 GPa
- Compression strength: 1000 MPa
- Elongation at break: 1,10%

#### Remarks:

- Pultrusions with deferring properties can be delivered on request.
- Above mentioned properties are typical values only.