

TECHNICAL DATA

Pultrux

Light structure profile

Code: TDS-HP-PTR-01

Inspection: 00

Valid from: 22/11/18

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Product description

Pultrux® can replace steel in secondary construction structures. It consists of a reinforcement of continuous threads, layers and veils of fiberglass, impregnated by a polyester resin with excellent dielectric properties and low moisture absorption, obtaining a profile of high resistance to current flow and excellent mechanical properties dry and as wet even after being exposed to the elements.

Pultrux® can be applied outdoors, in humid environments or acid environments emitted by industrial processes. It can be drilled or punched to be assembled by mechanical means or high strength adhesives to achieve its fixation.

Sector

Industrial / Agricultural / Residential

Application

Light Structure Secondary support usually carried out with classic carpentry (platforms, walkways, landings, chemical equipment supports, screens, insulatings) in:

- Chemical facilities, Water treatment, Tanneries, Naval, Waste treatment...
- Electric stations, Electric cabinets,
 Telecommunications, Railway



Advantage

Resistance to Corrosion and Chemical products. Resistant to corrosive environments, acids, saline, alkaline and electromagnetic corrosion

Under weight. Corresponds to 25% of Steel and 70% of Aluminium

- (1) Comparative with respect to profiles of equal dimension
- (2) Comparative tension resistance in the direction of the fiberglass

Mechanical strength. 70% of the standard commercial Steel

Electrical and Thermal Insulation.

Dimensional consistency

Easy Mechanical Assembly. Does not require special or heavy equipment for assembly

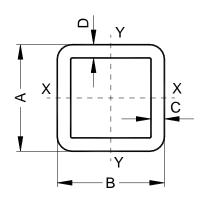
Zero maintenance. The color is an integral part of the material so it does not require painting or subsequent maintenance

Low Integral cost. Competitive cost compared to painted steel, low installation cost, long service life and zero maintenance costs

Profile

PRT – 50.8 x 50.8 x 3,17 x 3,17





A = 50.8 mm B = 50.8 mm C = 3,17 mm D = 3,17 mm

Weigth	Surface	Moment if Inertia		Resistance moment		Turning radius		Length	Colour
Kg/m linear	ana?	lx	ly	Wx	Wy	ix	iy		Green, Yellow, Orange, Gray
	cm²	cm ⁴	cm ⁴	cm³	cm³	cm	cm	30 cm - 6 m	
1,06	5,908	22,9	22,9	9.0	9,0	1,97	1,97		



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Physical characteristics

Physical properties	Rule	Value		
Density	ASTM D792 (Método A)	1,63 – 1,96 g/cm³		
Barcol hardness	ASTM D ₂₅ 8 ₃	≥ 50		
Water absorption	ASTM D ₅ 70	≤ 0,75 %		
AC Dielectric resistance	ASTM D149 (longitud 2,54 cm)	≥ 25 kV		
DC current leak	ANSI A14.5	≤ 90 microA		

Mechanical characteristics

Туре	Tension ASTM D638 (MPa)		Compr ASTM D6		Flexural ASTM D790(MPa)		
	Resistance	Modulus	Resistance	Modulus	Resistance	Modulus	
PRT (50,8-3,17)	576	29.647	414	18.616	524	18.616	

Tests carried out in Alma (web) in the direction of pultrusion

Admissible load

Camber L/200	Distance L (cm)										
Admissible load(Kg)	80	100	120	140	160	180	200	220	240	260	280
Uniformly Distributed Admissible Load X-X / Y-Y	464	237	136	85	56	39	28	20	15	11	8
Admissible load in center X-X / Y-Y	290	148	85	53	35	25	18	13	9	7	5

Recommended installation

For its installation, mechanical screw-washer-washer-screw-nut unions and epoxy, urethane or methacrylate based structural adhesives are recommended. Do not use self-tapping elements.

The information referred to in this Technical Data Sheet is based on the experience and the tests carried out by the company, without this implying any kind of responsibility for its different applications, given that Stabilit Europa does not have any kind of control over its final use



