

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, insulating) 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

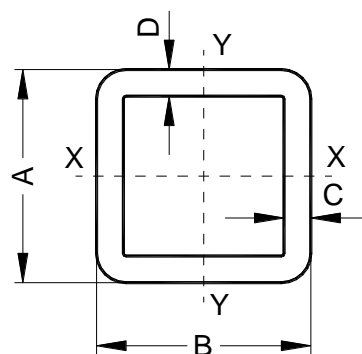
Easy Mechanical Assembly. Does not require special or heavy equipment for assembly

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 6,35 x 6,35



- A = 50.8 mm
- B = 50.8 mm
- C = 6,35 mm
- D = 6,35 mm

Weigth	Surface	Moment of Inertia		Resistance moment		Turning radius		Length	Colour
		Ix	Iy	Wx	Wy	ix	iy		
Kg/m linear	cm ²	cm ⁴	cm ⁴	cm ³	cm ³	cm	cm	30 cm - 6 m	Green, Yellow, Orange, Gray
1,96	10,873	37,9	37,9	14,9	14,9	1,87	1,87		

Physical characteristics

Physical properties	Rule	Value
Density	ASTM D792 (Método A)	1,63 – 1,96 g/cm ³
Barcol hardness	ASTM D2583	≥ 50
Water absorption	ASTM D570	≤ 0,75 %
AC Dielectric resistance	ASTM D149 (longitud 2,54 cm)	≥ 25 kV
DC current leak	ANSI A14.5	≤ 90 microA

Mechanical characteristics

Type	Tension ASTM D638 (MPa)		Flexural ASTM D790(MPa)	
	Resistance	Modulus	Resistance	Modulus
PRT (50,8-3,17)	385	31.493	378	17.093

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

Admissible Load

Camber L/200	Distance L (cm)										
	80	100	120	140	160	180	200	220	240	260	280
Admissible load (Kg)											
Uniformly Distributed Admissible Load X-X / Y-Y	767	391	225	141	93	64	45	33	24	17	12
Admissible load in center X-X / Y-Y	479	245	141	88	58	40	29	21	15	11	8

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