

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. Tested under international standards ASTM D149 ASTM D229 y ANSI A14.5. (international standards for testing materials such as electrical insulators)


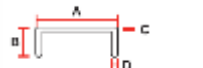







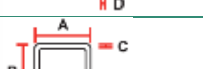




Dimensional consistency

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.

Range

Type	Profile	Sketch	Height (mm)		Thickness (mm)	
			Web (A)	Flange (B)	Web (C)	Flange (D)
Pillar Duct			110	30	4	6
Edge Duct			110	50	6	6
Beam Duct			200	50	6	6
RTP			50,8	50,8	3,17	3,17
RTP			50,8	50,8	6,35	6,35
Angle			50,8	50,8	6,35	6,35
IPR Beam			152,4	76,2	6,35	6,35

Length	Cut	Color
30 cm a 6 m	0° a 90°	Green, Yellow, Orange, Gray

Possible combinations

Type	Description	Sketch	Height (mm)		Thickness (mm)	
			Web (A)	Flange (B)	Web (C)	Flange (D)
Beam I	Assembly of 2 Pillar-Duct Profiles (110 x 30 mm) forming a 110 x 60 mm I-beam		110	60	4	6
Beam I	Assembly of 2 Edge-Duct profiles (110 x 50 mm) forming a 110 x 100 mm I-Beam		110	100	6	6
Beam I	Assembly of 2 Channel-Beam-Duct Profiles (200 x 50 mm) forming an I-Beam of 200 x 100 mm		200	100	6	6

Technical characteristics (full section)

Physical properties	Rule	Value
Density	ASTM D792 (Mehod A)	1,63 – 1,96 g/cm ³
Barcol hardness	ASTM D2583	≥ 50
Water absorption	ASTM D570	≤ 0,75 %
AC Dielectric resistance	ASTM D149 (length 2,54 cm)	≥ 25 kV
DC current leak	ANSI A14.5 (electrodes a 25,4 cm, con 90 kV, 22,2°C)	≤ 90 microA

Technical characteristics (in court sample)

Type	Web (Pultrusion direction)						Flange (Pultrusion direction)					
	Tension ASTM D638 (MPa)		Compression ASTM D695 (MPa)		Flexural ASTM D790 (MPa)		Tension ASTM D638 (MPa)		Compression ASTM D695 (MPa)		Flexural ASTM D790 (MPa)	
	Resistencia	Módulo	Resistencia	Módulo	Resistencia	Módulo	Resistencia	Módulo	Resistencia	Módulo	Resistencia	Módulo
Pillar Duct (110-30-4-6)	355	28.153	385	30.294	367	21.151						
Edge Duct (110-50-6-6)	375	27.650	353	23.795	297	19.950	393	26.788	357	25.316	329	21.171
Beam Duct (200-50-6-6)	381	29.327	399	24.041	250	19.044	395	28.140	397	25.437	383	19.858
RTP (50,8-3,17)	576	29.647	414	18.616	524	18.616						
RTP (50,8-6,35)	385	31.493			378	17.093						
Angle (50,8-6,35)	346	32.861	344	21.068	290	15.809						

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.