

**Your DESIGN, Your TRIGLASS® PROFILES**

Top Glass is the right manufacturer of **TRIGLASS® fiberglass profiles** for window systems. Our profiles are **custom made** to the customer's own design and specifications. They can meet specific requirements in terms of shape and chemical or physical properties.

TRIGLASS® profiles are ideal for windows because of their **high level of heat insulation**. This is guaranteed by their **low overall heat transfer coefficient** and **high dimensional stability** even in the face of large temperature changes.

In addition, thanks to their **superior mechanical properties** and **light weight** the window systems made with TRIGLASS® profiles do not need any additional internal reinforcement with metal.

TRIGLASS® pultruded profiles make a fundamental contribution to **energy saving**: this and their sectional design flexibility make them an ideal option for **windows of the future**.

TRIGLASS® fiberglass profiles can be suitable for:

- WINDOW FRAMES**
- THRESHOLDS**
- SHUTTERS**



↑  
**HIGH**

**THERMAL INSULATION**



Composite materials have a very low thermal conductivity coefficient, around 0.3 W/mK

↑  
**HIGH**

**MECHANICAL RESISTANCE**



Customized mechanical properties with an elastic- brittle behaviour until breaking.

↓  
**LOW**

**WEIGHT**



Four times lighter than steel and one and half times than aluminium.

↓  
**LOW**

**THERMAL EXPANSION**



Composite profiles remain stable at all temperatures, high or low.



## COMPOSITE PROFILES ARE THE ONLY OPTION IF COMPARED TO OTHER MATERIALS

Composite profiles continue to replace traditional materials because of their **unique characteristics**. Their lightweight combined high mechanical resistance make them **easy to handle and assemble**. In the meantime their intrinsic resistance to chemicals and corrosion make them **last longer** with **low maintenance costs**.

### COMPARISON WITH OTHER MATERIALS:

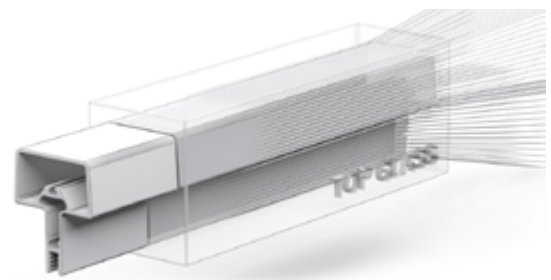
MATERIALS	SPECIFIC WEIGHT [g/cm <sup>3</sup> ]	TENSILE STRENGTH [MPa]	ELASTIC MODULUS [GPa]	THERMAL EXPANSION [K <sup>-1</sup> ]	THERMAL CONDUCTIVITY [ W/mK]
WOOD	0,7	80	12	14 X 10 <sup>-6</sup>	0,1
PVC	1,4	70	3	85 X 10 <sup>-6</sup>	0,1
<b>PULTRUDED GRP</b>	<b>1,8</b>	<b>400</b>	<b>26</b>	<b>11 X 10<sup>-6</sup></b>	<b>0,3</b>
ALUMINIUM	2,7	250	70	23 X 10 <sup>-6</sup>	170
STEEL	7,8	400	210	12 X 10 <sup>-6</sup>	40



### OUR TECHNOLOGY

Top Glass has over 55 years experience in composite TRIGLASS® profiles production obtained by **pultrusion process**.

Thanks to its production capacity Top Glass can supply a **wide range of composite profiles** with standard or complex (customized) design, with constant cross-section and unlimited length.



### OUR SERVICES



#### DESIGN

Top Glass offers customers a professional design service, offering optimal support on every key aspect related to the **profile design**: dimensions, thickness, form complexity, appropriate raw materials and mechanical specifications. All the profiles are finally subjected to advanced **laboratory tests**.



#### PROCESSING AND COATING

We undertake **machining** such as cutting, drilling, CNC and bonding according to the demands of our customers.

Top Glass can also provide a **coating service** for TRIGLASS® fibreglass profiles, suitable for both indoor and outdoor applications.



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