

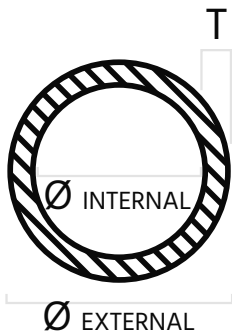


# TUBE PROFILES TRIGLASS®

**TUBULAR TRIGLASS®** composite profiles, reinforced with fibreglass and/or carbon, represent one of the pultruded profiles made by Top Glass.

They are **versatile in use** and suitable when a **lightweight, durable** and **long-lasting** product is needed and they are intended for a **wide range of sectors** such as lighting, signage, telecommunications and furniture.

The dimensions **IN GREEN** are produced only by **pullwinding technology**. This allows producing tubes with circular sections reinforced with fibreglass placed both longitudinally and circumferentially with respect to the profile axis. This creates **greater mechanical resistance and rigidity** than in a traditional pultruded profile.



Nominal dimension: mm

**IN RED** colour: dimensions available **in stock** (subject to prior sale)

**IN GREY** colour: dimensions available **upon request** and produced with a variety of reinforcements, resins and colours and based on **minimum production quantities** that can differ depending on the profile

**IN GREEN** dimensions produced only by **PULLWINDING** technology

DIA ex	DIA in	TH	DIA ex	DIA in	TH	DIA ex	DIA in	TH
11	7	2	<b>32,5</b>	<b>28,5</b>	<b>2</b>	60	44	8
11	6	2,5	<b>36,6</b>	<b>32,6</b>	<b>2</b>	60	48	6
<b>15</b>	<b>12</b>	<b>1,5</b>	39	34	2,5	60	50	5
18	14	2	40	20	10	60	52	4
20	15	2,5	40	32,6	3,7	60	54	3
<b>22</b>	<b>17</b>	<b>2,5</b>	<b>40</b>	<b>33,2</b>	<b>3,4</b>	60	55	2,5
24	10,5	6,75	<b>40</b>	<b>35</b>	<b>2,5</b>	60	56	2
24	11,5	6,25	40,2	35	2,6	76	60	8
<b>24,3</b>	<b>20,3</b>	<b>2</b>	40,7	36,7	2	76	70	3
26	16,5	4,75	41,7	35	3,35	80	74	3
<b>26</b>	<b>19</b>	<b>3,5</b>	44,1	36	4,05	88	79	4,5
28,4	23	2,7	44,8	40,8	2	101	96	2,5
<b>28,4</b>	<b>24,4</b>	<b>2</b>	45,5	40	2,75	102	91,6	5,2
30	24	3	48,9	44,9	2	108	102	3
30	25	2,5	50	34	8	120	110	5
30	26	2	50	40	5	127	121	3
31	27	2	50	42	4	135	120	7,5
32,5	18	7,25	50	45	2,5	160	120	20
32,5	20,3	6,1	<b>50,6</b>	<b>46</b>	<b>2,3</b>	169	149	10
32,5	25	3,75	51	44	3,5	169	153	8
<b>32,5</b>	<b>26</b>	<b>3,25</b>	53	49	2	180	170	5
			55,4	49,7	2,85	250	240	5
			60	40	10	250	245	2,5

## SPECIFICATIONS OF IN-STOCK PROFILES

LENGTH IN STOCK: 6.000 mm

COLOUR IN STOCK: WHITE

MATRIX IN STOCK: STANDARD POLYESTER

## MEAN PHYSICAL-MECHANICAL PROPERTIES

PROPERTY	TEST METHOD	UNIT OF MEASUREMENT	STANDARD TUBES MEAN VALUE	PULLWINDING TUBES MEAN VALUE
Specific weight	ASTM D792	g/cm <sup>3</sup>	1,75 ÷ 1,9	2
Dielectric strength	ASTM D149	kV/mm	3 ÷ 7	6
Water absorption	ISO 62	%	0,4	0,2
Surface electrical resistivity	EN 61340	Ω	10 <sup>12</sup>	10 <sup>12</sup>
Fattore di perdita 50 HZ (tg δ)	ASTM D150	-----	0,05	0,05
Thermal class	-----	CLASS	F	F
Longitudinal thermal expansion coefficient	ISO 11359-2	K <sup>-1</sup>	8 ÷ 11 x 10 <sup>-6</sup>	8 x 10 <sup>-6</sup>
Thermal conductivity	EN 12667 EN 12664	W/mK	0,3	0,3
Longitudinal flexural strength	ASTM D790	MPa	300 ÷ 500	500
Longitudinal flexural modulus	EN 13706	GPa	22 ÷ 30	40
Longitudinal tensile strength	ASTM D638	MPa	300 ÷ 500	500
Longitudinal tensile modulus	ASTM D638	GPa	22 ÷ 30	40
Longitudinal compression strength	ASTM D695	MPa	180 ÷ 300	350
Longitudinal compression modulus	ASTM D695	GPa	16 ÷ 21	32
Fire reaction	UL 94	CLASS	HB	HB
Shear strength	ASTM D2344	MPa	30	40

VALUES REFER TO REINFORCED PROFILES WITH FIBREGLASS IN  
**A POLYESTER MATRIX** (STANDARD TUBES) / **VINYLESTER MATRIX** (PULLWINDING TUBES)  
 MECHANICAL PROPERTIES COMING FROM EQUIVALENT **FLAT PULTRUDED PROFIL**

Tolerance for mechanical properties refers to longitudinal direction: ± 10%

The data provided is accurate. However, Top Glass does not assume any liability as to its use.

### NOTES:

- HIGHER MECHANICAL VALUES REFER TO PROFILE WITH THICKNESS OVER 4 mm
- UL 94 V0 FIRE REACTION WITH OR WITHOUT HALOGENS POSSIBLE
- ANTISTATIC FORMULATION POSSIBLE
- POSSIBLE TO USE SPECIAL FORMULATION ON THICKNESS OVER 2,5 mm FOR HIGH FIRE REACTION AND NO TOXIC SMOKE
- VINYLESTER FORMULATION FOR CHEMICAL RESISTANCE APPLICATION AVAILABLE

