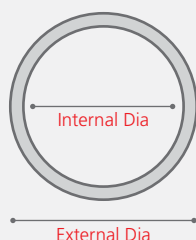


Tube PROFILES

DIA ex	DIA in	DIA ex	DIA in
10	6	31	27
11	7	32,5	18
11	6	32,5	20,3
12	10	32,5	25
15	12	32,5	26
18	14	32,5	28,5
20	15	36,6	32,6
22	17	39	34
24	10,5	40	20
24	11,5	40	32,6
24,3	20,3	40	33,2
26	16,5	40	35
26	19	40,2	35
28,4	23	40,7	36,7
28,4	24,4	41,7	35
30	24	44,1	36
30	25	44,8	40,8
30	26	45,5	40



Profiles in Stock **
 Profiles made to order
 Pullwound profiles
 Nominal dimension: mm

TRIGLASS® TUBES

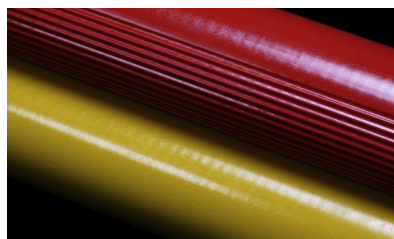
These composite profiles represent part of Top Glass standard shapes range and some of them are in stock ready for immediate delivery.

In case of specific needs in terms of mechanical, chemical and fire performances, a wide combination of resins, colors and reinforcements are available for a customized production.

Other tools can be designed and made by Top Glass to produce any other dimension.

Top Glass is certified ISO 9001.

DIA ex	DIA in	DIA ex	DIA in
48,9	44,9	76	70
50	34	80	74
50	40	88	79
50	42	101	96
50	45	102	91,6
50,6	46	108	102
51	44	120	110
53	49	127	121
55,4	49,7	135	120
60	40	160	120
60	44	169	149
60	48	169	153
60	50	180	170
60	52	250	240
60	54	250	245
60	55		
60	56		
76	60		



NOTES:

** STOCK LENGTH: 6.000 mm
 STOCK COLOR: WHITE

MEAN PHYSICAL-MECHANICAL PROPERTIES

STANDARD TUBES

PROPERTY	TEST METHOD	UNIT	STANDARD MEAN VALUE
SPECIFIC WEIGHT	ASTM D792	g/cm ³	1,75 ÷ 1,9
DIELECTRIC STRENGTH	ASTM D149	kV/mm	3 ÷ 7
WATER ABSORPTION	ISO 62	%	0,4
SURFACE RESISTIVITY	EN 61340	Ω	10 ¹²
LOSS FACTOR AT 50 Hz (Tg δ)	ASTM D7028	-----	0,2
THERMAL CLASS	-----	CLASS	F
LONGITUDINAL THERMAL EXPANSION COEFFICIENT	ISO 11359-2	K ⁻¹	8 ÷ 11 x 10 ⁻⁶
THERMAL CONDUCTIVITY	EN 12667 EN 12664	W/mK	0,3
LONGITUDINAL FLEXURAL STRENGTH	ASTM D790	MPa	300 ÷ 500
LONGITUDINAL FLEXURAL MODULUS	EN 13706	GPa	22 ÷ 30
LONGITUDINAL TENSILE STRENGTH	ASTM D638	MPa	300 ÷ 500
LONGITUDINAL TENSILE MODULUS	ASTM D638	GPa	22 ÷ 30
LONGITUDINAL COMPRESSION STRENGTH	ASTM D695	MPa	180 ÷ 300
LONGITUDINAL COMPRESSION MODULUS	ASTM D695	GPa	16 ÷ 21
FIRE REACTION	UL 94	CLASS	HB
SHEAR STRENGTH	ASTM D2344	MPa	30

VALUES RELATED TO GLASS REINFORCED STANDARD POLYESTER PROFILES

NOTES:

- HIGHER MECHANICAL VALUES REFER TO PROF. WITH THICKNESS OVER 4 mm
- POSSIBLE UL 94 V0 FIRE REACTION WITH OR WITHOUT HALOGENS
- POSSIBLE TO HAVE IN ANTISTATIC FORMULATION
- POSSIBLE USE OF SPECIAL FORMULATION ON THICKNESS OVER 2,5 mm FOR HIGH FIRE REACTION AND NO TOXIC SMOKE
- VINYLESTER FORMULATION FOR CHEMICAL RESISTANCE APPLICATION AVAILABLE
- MECHANICAL PROPERTIES COMING FROM EQUIVALENT FLAT PULTRUDED PROFILE

PULLWOUND TUBES

PROPERTY	TEST METHOD	UNIT	STANDARD MEAN VALUE
SPECIFIC WEIGHT	ASTM D792	g/cm ³	2
DIELECTRIC STRENGTH	ASTM D149	kV/mm	6
WATER ABSORPTION	ISO 62	%	0,2
SURFACE RESISTIVITY	EN 61340	Ω	10 ¹²
LOSS FACTOR AT 50 Hz (Tg δ)	ASTM D7028	-----	0,2
THERMAL CLASS	-----	CLASS	F
LONGITUDINAL THERMAL EXPANSION COEFFICIENT	ISO 11359-2	K ⁻¹	8 x 10 ⁻⁶
THERMAL CONDUCTIVITY	EN 12667 EN 12664	W/mK	0,3
LONGITUDINAL FLEXURAL STRENGTH	ASTM D790	MPa	500
LONGITUDINAL FLEXURAL MODULUS	EN 13706	GPa	40
FIRE REACTION	UL 94	CLASS	HB
SHEAR STRENGTH	ASTM D2344	MPa	40

Average tolerance on mechanical properties referred to longitudinal direction: ± 10%.

To the best of our knowledge, the data contained in this publication is accurate. However, Top Glass does not assume liability for how the data is used.