

Triflex HeatTec Heating Laminate



Product information

Applications

The heating laminate is used in the Triflex HeatTec outdoor heating system for ramps, entrances and exits, terraces and walkways. It can withstand the high mechanical and chemical loads required in these areas. The Triflex HeatTec heating system can also be used for other pedestrian and vehicular outdoor areas. These include, e.g. rail platforms, helicopter landing pads, staircases and many more.

Properties

Triflex HeatTec Heating Laminate comprises:

- Carbon/glass fabric for the heating level
- Glass/steel fabric for equipotential bonding
- Epoxy resin/glass fabric as base material
- Copper strips for internal contacting
- Special PVC/PUR hose line 3 G 0.75 mm² as connection line

The listed fabric types are embedded in a fully cured glass fibre reinforced epoxy laminate with a glass transition (T_g) of 130°.

This construction facilitates a high level of efficiency when converting electrical energy into heat radiation, and can be coated with various Triflex surface protection systems.

They comply with the standards:

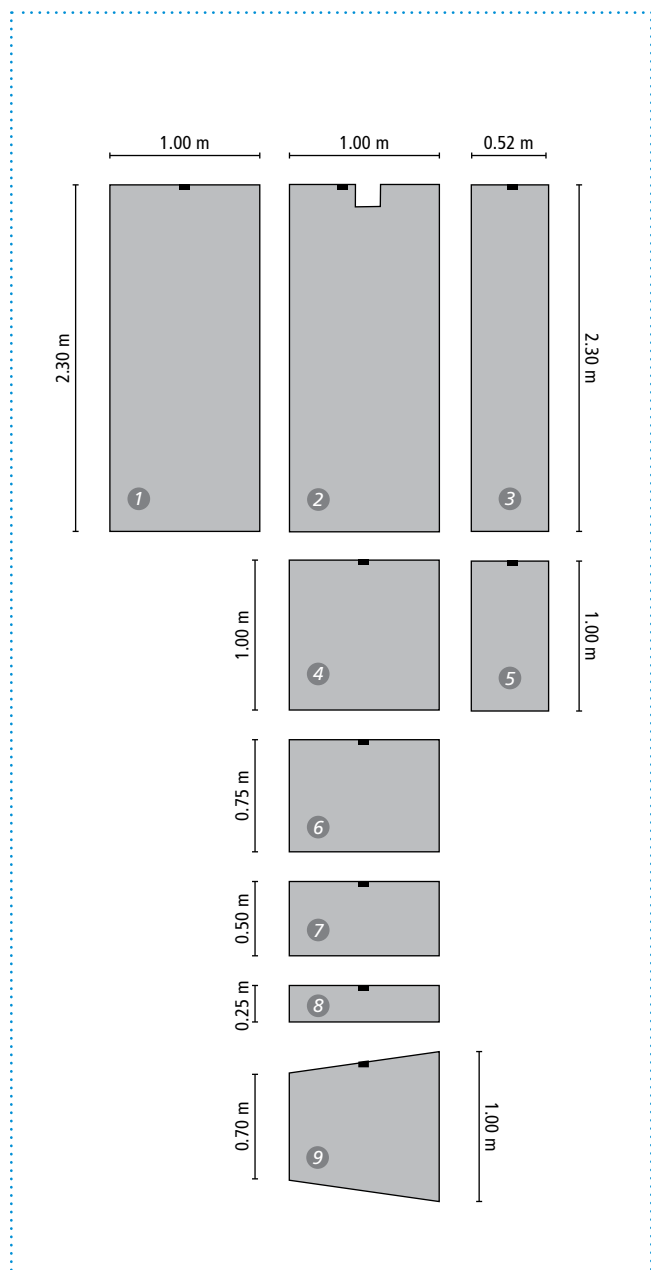
- IEC 60893 EP GC 202
- DIN 7735 HGW 2372.1
- Nema FR4
- UL 94 VO File E310805
- TÜV: EN 60335-1:2012; EN 60335-2-96:2002 + A1:2004 + A2:2009
- RoHS

Pack sizes

The heating laminates are available in the following sizes:

- 1 Triflex HeatTec Heating Laminate: 2.30 m x 1.00 m
- 2 Triflex HeatTec Heating Laminate for sensor: 2.30 m x 1.00 m
- 3 Triflex HeatTec Heating Laminate: 2.30 m x 0.52 m
- 4 Triflex HeatTec Heating Laminate: 1.00 m x 1.00 m
- 5 Triflex HeatTec Heating Laminate: 1.00 m x 0.52 m
- 6 Triflex HeatTec Heating Laminate: 0.75 m x 1.00 m
- 7 Triflex HeatTec Heating Laminate: 0.50 m x 1.00 m
- 8 Triflex HeatTec Heating Laminate: 0.25 m x 1.00 m
- 9 Triflex HeatTec Heating Laminate Curve: 1.00 m x 1.00 m (external)

All laminates are supplied with a cable of 7.5 m in length.



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Storage

The laminates must be stored in a cool, dry place and above freezing.

Application instructions

Triflex HeatTec Heating Laminates can be applied at substrate and ambient temperatures between +5 °C and +35 °C.

Technical data

Property	Standard	Unit	Value
Thickness of the laminate	–	mm	1.2
Operating voltage/AC.	–	V	230
Electrical power	–	W/m ²	190
Insulation resistance	–	MΩ/m ²	> 5
Density	ISO 1183	g/cm ³	approx. 1.92
Flexural strength at 23 °C, longitudinal	ISO 178	MPa	380
Flexural strength at 23 °C, transverse	ISO 178	MPa	365
Tensile strength	SO 527	MPa	235
Flammability	UL-94 IPC	Level	V 0
Water absorption	TM 650	%	< 0.5
Glass transition temperature	Tg IPC TM 650	°C	130
Thermal conductivity	DIN 52612	W/mk	0.3
Linear expansion coefficient	VDE 0304/2	K-1	15.10-6

General information

We guarantee the consistently high quality of our products. Non-Triflex products must not be used with Triflex systems.

The advice we give in relation to the application of our products is based on extensive development and many years of experience, and is correct to the best of our knowledge. Given the wide variety of on-site requirements and conditions, the user is required to test the product's suitability for the particular purpose. Technical information is subject to change without notice in the interests of technical advancement or enhancement of our products.