

Electrical resistor cable system TOSKANA

Electrical resistor cable for the TOSKANA system

following IEC 60800 (ed.3):2009-07

Properties

Electrical resistor cable for fabrication as heating tool in the ArgillaTherm® System panel TOSKANA.

Insulation

Fluoroplastic

Key figures (values in brackets are required according to DIN)

Nominal voltage	230 Volt
Demand	12 W/m
Cold applied conduit connection	4 m
Minimum installation temperature	5 °C
Smallest bend	29,4 mm
Resistance tolerance	- 5 % / +10 %
Approval	following IEC 60800 (ed.3):2009-07
Cold warm transition	Seamless, without shrink-fit technology
Cable diameter	5,0 mm

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Forms of delivery

Heating load in W	Length of heating conductor in m*	Area in m ² (at complete occupancy)	Article number
150	12,07	1,02	EHK001207
450	35,97	3,05	EHK003597
750	59,87	5,07	EHK005987
1432	119,37	10,12	EHK011937
2152	179,37	15,20	EHK017937

* all cables are pre-assembled with a 4 m long connection cable pre-assembled (seamless transition)



Bild vom nahtlosen Übergang; Anschluss- zum Heizkabel

The seamless transition of connection and heating cable is waterproof and ideal for installation into the TOSKANA ceiling heating system. The heating cable is made up of a solid heating conductor with an insulation cover, a solid return copper conductor with an insulation cover and a copper current-operated circuit breaker. An aluminum coat with outer insulation forms the completion of the heating cable.

Storage

The material is indefinitely storable at dry storage.

Occupancy

The specified area is related to the closest-possible occupancy at system TOSKANA. In practice the occupancy is based on the calculated length of the heating cable and the actual conditions.

Lower heating loads are represented either by a reduced ceiling surface temperature or a reduced number of clay system panels at constant surface temperatures (areas are paneled by clay compensation plates).

Application

Electrical resistor cable for laying into the ArgillaTherm system panel TOSKANA. Connect testing device (e.g. Warmup Watchdog). Conduct a wavelike installation of the cable, starting at the transition of the connector to the heating cable (labeled with red and blue arrows). Belay the circumferential groove last, because it serves as a safety lead-out track. In conclusion cover with the ArgillaTherm finish plaster.

The VDE / EN-requirements (60335-2-96-2002) demand a 5,00 mm cover of the heating pipes. Comply with an approximate 30cm spare space, for lamps, required areas for smoke detectors or other attachments.

Electromagnetic fields

Supply and return conductors lie closely together and are passed through by a current, running in opposite directions in the heating cable by ArgillaTherm®. The magnetic fields of both conductors (twin sheet technology) are oppositely aligned in this order neutralizing each other. This design guarantees electromagnetic fields of practically zero (0-0,2 Mikrot Tesla).

Additionally, all conductors are insulated and repeatedly entirely protected by an aluminium coating with outer insulation. The aluminium coat acts like a faraday cage, meaning electric fields are completely.

Important: **The protective conductor must be grounded!**

System products

ArgillaTherm clay-dry construction panel system TOSKANA acc. to DVL TM 07 (Typ A)

Dry construction panel as mounting aid for electrical resistor cable.

ArgillaTherm clay-upper plaster No. 1-2

Machinable clay plaster ready-mix acc. to. DIN 18947.

ArgillaTherm clay-finish plaster No. 2-2

Ready-mix for creation of white thin layer coating acc. To DVL TM 06.

ArgillaTherm clay-paint No. 3-1

Spray and brushable clay paint as ready-mix.

Thermostat AT-3D

Thermostat acc. DIN EN 60730, protection class II, for finery or flush mounting.

Working conditions for construction and application areas of our products are very various. In our technical data sheets, we can only provide basic processing guidelines. These comply with our current state of knowledge. Planners and processors are obligated to examine suitability and potential applications for the intended use. For application scenarios that are not expressly mentioned in our data sheets, planners and processors are obligated to refer to the ArgillaTherm[®] application technology. If the processor uses the product beyond the area of application in the instruction manual, without previous consultation of the ArgillaTherm[®] application technology, they are completely liable for the potential resulting damages. All herein contained descriptions, sketches, photographs, data, conditions, weights etc. can be changed without prior notice and do not represent contractual agreements of the products characteristics.

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