For faster construction

BT innovation

Technical Data Sheet - ThermoPin®

Product description

ThermoPin® is a tie anchor for producing core-insulated pre-cast concrete walls. It is made of glass fiber reinforced plastic (GFRP), which makes it ideal for using in slim components with low concrete cover. Conically shaped rod ends reliably transfer loads to concrete.

Product properties

::: GFRP rod with conically widened ends
::: Any length is available in 5mm increments
::: Fixed sleeve for well decoupling and safe installation
::: Two versions:
  ::: Horizontal anchor for horizontal load transfer
  ::: Diagonal anchor for load transfer of the weight force of the facing layer into the bearing layer
::: Low thermal conductivity which is about 0.5 W/m·K, more suitable for walls with thermal decoupling
::: Slim-structures with a low layer thickness are possible
::: Alkali Resistant

Areas of application

Core-insulated walls

Article Data and Delivery Form

ThermoPin® is made individually after consultation with the customer.

Processing

Lay the previously drilled insulation onto the first layer of fresh concrete, apply the ThermoPin® and compacting the concrete. The anchor is pressed into the holes until the plates of the sleeves would come into contact with the insulation. After that, the concrete is compacted again.
As about sandwich wall production, lay the reinforcement layer on the insulation and fill and compacting the second layer of fresh concrete.
And for double wall production, the cured first layer with the installed ThermoPins should be placed into the fresh concrete of the second layer. The concrete of the second layer is compacted and then cured.
After the concrete has cured, the element can be erected and delivered to the construction site.

Notes

The number of ThermoPins required must be calculated by static calculations in accordance with Z-21.8-2055 or ETA-19/0498. The suitability of the ThermoPin® must be proven.

The configuration of the ThermoPin® must conform to the wall structure in order to ensure the sufficient embedment depth.

Storage

Store in a dry and cool place without exposure of UV radiation

Disposal

In small quantities the product can be disposed of as a household waste. Dispose of large quantities in accordance with local regulations.

Packaging

Box, fabric bag or pallet

Fire resistance classification

In sandwich walls according to the report R-4372/19-1 on the classification of fire resistance according to EN 13501-2:2016 of the testing body LTM, the following fire resistance classes were verified: E120 / EI 120 /EW 120.

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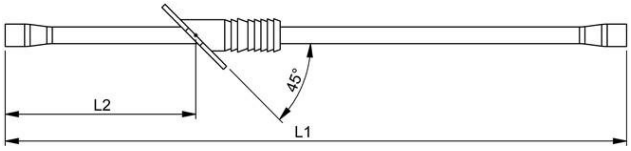
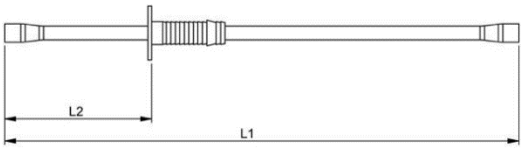
Specifications

Color	yellow to beige
surface	slightly profiled
safety instructions	the product is harmless
Technical characteristics (short-term behavior) *	
tensile strength	1.500 N/mm²
E-modulus (tensile & pressure)	60.000 N/mm²

* The values and processing instructions given in the building inspection permit are decisive.





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Version 01/23 - This datasheet has been technically revised. Older editions are invalid. When technically revised old editions of this data sheet become invalid. Inform yourself whether you possess the latest issue please.