

# Hanno® Clima-Tect®

Innovation!

Energy-saving foam for the closing of cable openings in the false floors of data centres



**The amount of air loss can be reduced by 99.9% if the line or cable openings in false floors are closed off using Hanno® Clima-Tect®, instead of leaving them open.**

False floors in data centres are normally used for the cabling of network cabinets. The problem here is that a larger part of the cold air which is required for the cooling of the server escapes through the cable openings, reducing the static pressure in the false floor.

The IT market research company Gartner Inc. estimates that between 35% and 50% of the electrical energy is used for cooling. It is even possible to reduce the kWh consumption by between six and seven-figures, not forgetting the related energy costs in small data centres by adopting an optimised process. Gartner has devised "11 Best Practices" in this regard which can clearly reduce the energy consumption and makes the following recommendation: **an important and fast measure is to close the openings in false floors. The closing off of these opening can save up to 10% of the total energy which is required for cooling purposes.**

With the new Clima-Tect®, HANNO is able to provide the ideal solution to this problem. Fast, efficient, inexpensive and easy to subsequently install during ongoing operations, the panels normally pay for themselves after around one month. These do not increase the fire load in data centres as is the case with brush systems or cable bags!

## Clima-Tect® at a glance

Hanno® Clima-Tect® also provides other advantages in addition to the enormous energy saving:

- flame retardant in accordance with B1 DIN 4102/DIN EN 13501-1 C s1 d0
- reduces air flows
- reduces costs and has a very short payback period (RoI from only 33 days)
- retrofitting without interrupting operations
- ageing stability for 15 years (no dust-creating surfaces), contains no fibres
- easy and clean to process, reusable
- continuous temperature stability up to 180°C
- adaptable and noise reducing material
- kind to the skin\*, environmentally compatible and free of halogens

\*The used Basotect® melamine resin foam has been tested pursuant to Öko-Tex® Standard 100, product class III and meets the currently valid human ecological requirements of this standard.

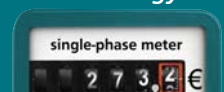
**An air loss reduction of up to 99.9%!**



**15 years**  
ageing resistance  
dust-free



saves up to  
10% energy!



flame retardant  
in accordance with  
DIN EN 13501-1 C s1 d0  
(B1 DIN 4102)



**HANNO**  
Sealing and insulating Systems

[www.clima-tect.com](http://www.clima-tect.com)

# Basotect® innovative Melamine Resin Foam

In data centre air conditioning systems, already used in the aerospace industry



Contains high quality foam Basotect® from

**BASF**  
The Chemical Company

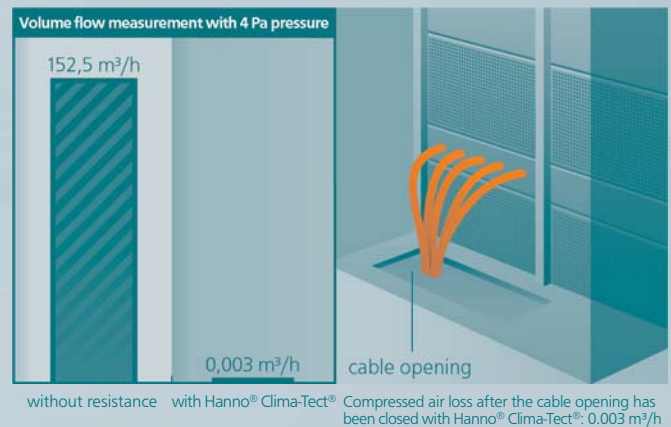
## Material properties

The base material Basotect® serves as the basis for Hanno® Clima-Tect® and has been categorised in building materials class B1 in accordance with DIN 4102 due to its extraordinary flame retardant property.

This melamine resin foam is rendered almost airtight by a special HANNO treatment. Hanno® Clima-Tect® is supplied by the factory in 620x620 mm panels, which can be used to close any hole forms up to the size of a standard floor tile of false floors. Customized sizes and other formats are also available, subject to the purchasing of corresponding quantities. The panels are approx. 5cm thick, so as to ensure an optimal closing of the openings.

Perforated cuboids make the breaking out of the required cable passages easier. The openings which are created in the Hanno® Clima-Tect® should always be a little smaller than required as the material can be easily pressed together and optimally adapts to the inserted cable. An escaping of the cold air is reduced by up to 99.9% as a result.

**Hanno® Clima-Tect® makes an ideal savings contribution: reduces costs, saves resources and is fast and efficient!**



**No matter whether a first time installation or retrofitting: 4 steps and you achieve optimal energy savings in minutes and that without interrupting operations!**



**Step 1:** Adaptation of Hanno® Clima-Tect® to the floor opening. (The panels are supplied in accordance with a 600 floor grid size)

**Step 2:** Breaking the cuboid at the required positions in the Hanno® Clima-Tect® panel in order to create a cable passage.

**Step 3:** Insertion or pushing of the cable through the resulting openings or slit.

**Step 4:** Wedging of the Hanno® Clima-Tect® panel into the opening in the false floor – finished!

**Note:** Any form of clean openings can be very easily created with a cutter knife.

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