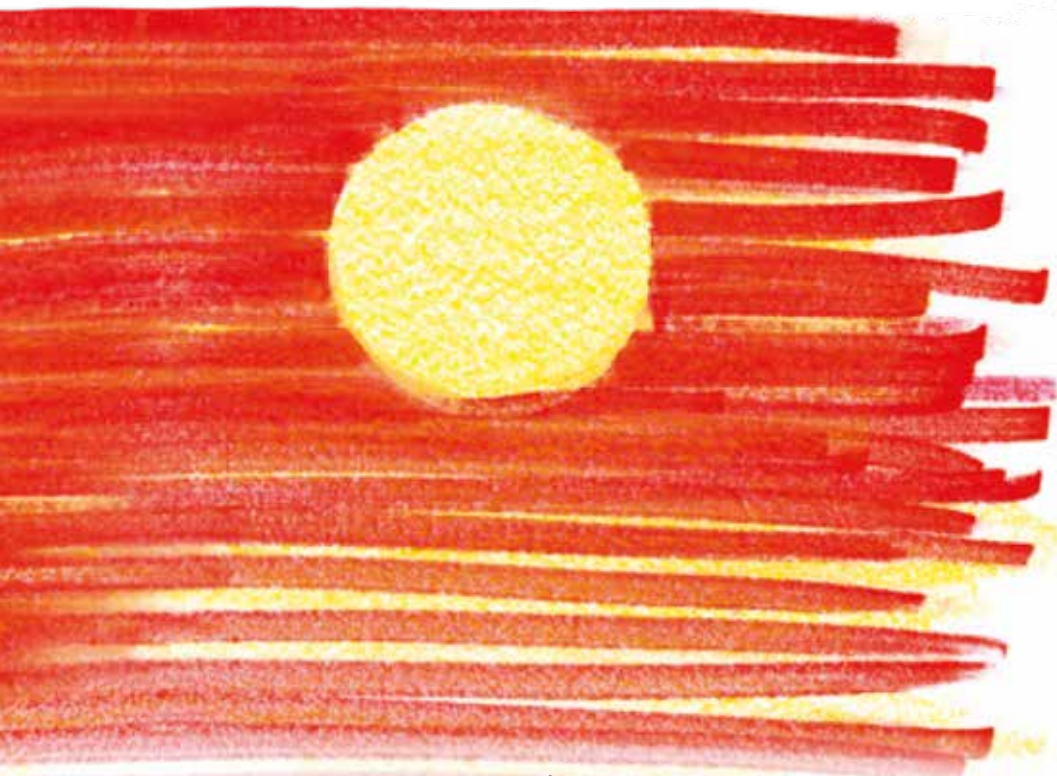


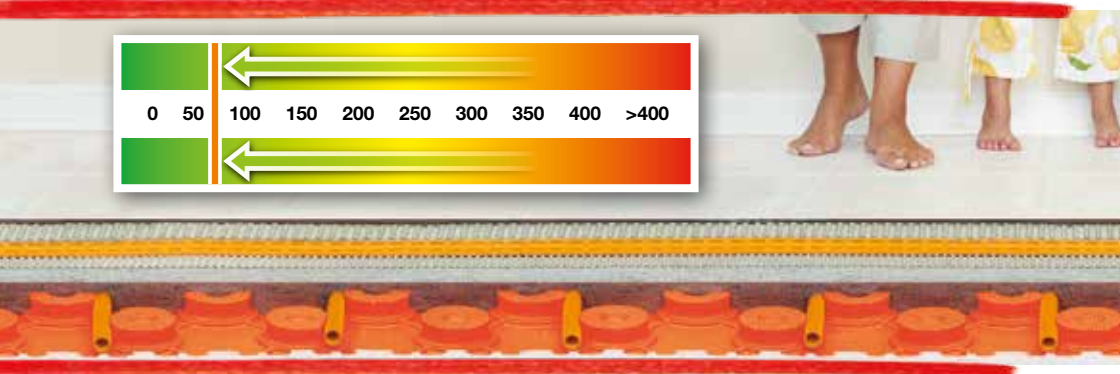
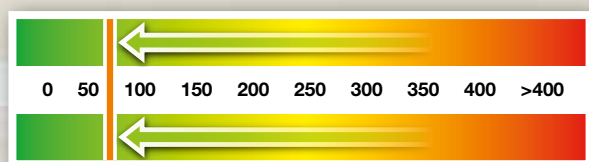
Schlüter®-BEKOTEC-THERM

The ceramic thermal comfort floor



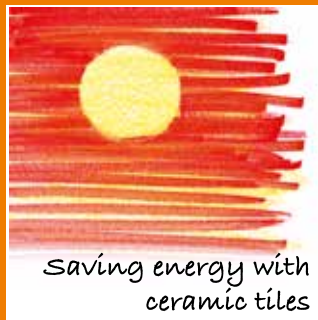
*Saving energy
with ceramic tiles*

... made by Schlüter-Systems



PROFILE OF INNOVATION

Saving energy with ceramic tiles



... made by Schlüter-Systems

Nowadays, the discussion about energy efficient construction primarily focuses on economic heat generation and the correct insulation of the outer building shell. However, this perspective frequently overlooks the important factor of heat release. In addition to the use of renewable energy sources and modern insulation systems, effective, large scale heat release and heat distribution have in fact become essential factors of energy efficient construction. This booklet explains how to turn your floor into an effective heating system with the thin-layer ceramic thermal comfort floor Schlüter-BEKOTEC-THERM.

Schlüter®-BEKOTEC-THERM

The ceramic thermal comfort floor



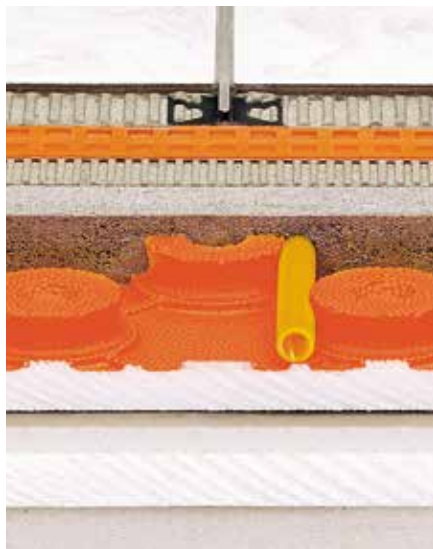
Energy efficient. Comfortable. Reliable.



PROFILE OF INNOVATION



Schlüter®-BEKOTEC-THERM. Install progress!



Schlüter-BEKOTEC-THERM combines environmentally friendly heating with hygiene and comfort. The patented floor assembly, which boasts a low construction height and an innovative heating and control technology, turns the entire system into a low energy, cost-saving, and quick-reacting “thermal comfort floor” with especially low supply temperatures.

But that is not all: the advantages of the ceramic thermal comfort floor start right at the time of construction because of its quick and uncomplicated installation. Whether your floor is covered with tiles, natural stone, or other coverings, BEKOTEC-THERM is always the right choice.



Guaranteed safety ...



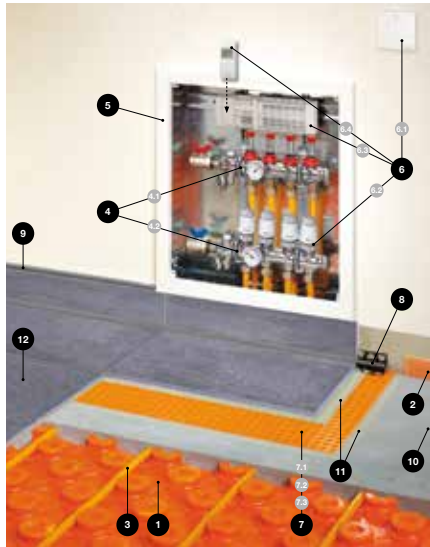
Independent expert studies have documented the practical properties of the system. Numerous references and our 5 year warranty, which not only covers the usual system components, but also damage free floor construction, underlines the reliability and safety of our innovative system.

The ceramic thermal comfort floor combines the use of regenerative energy sources with high levels of efficiency and comfort.



The combination matters...

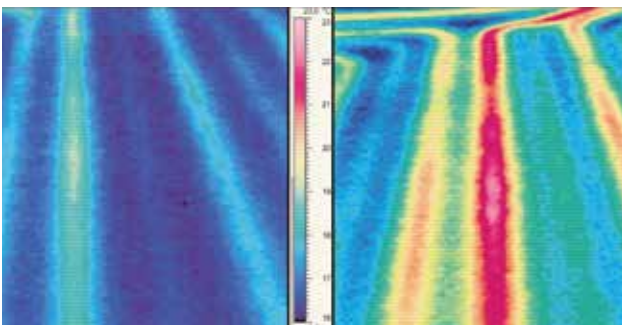
System components:



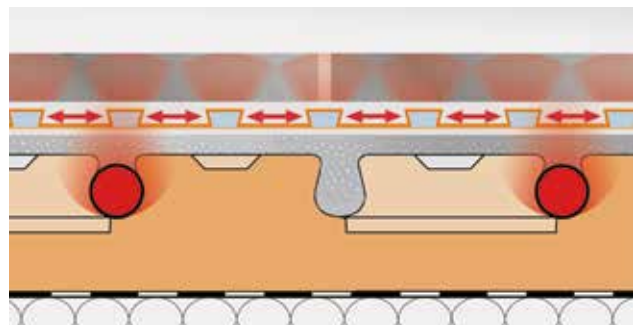
1. **Schlüter-BEKOTEC-EN**
studded screed panel
2. **Schlüter-BEKOTEC-BRS**
screed edging strip
3. **Schlüter-BEKOTEC-THERM-HR**
heating pipe
4. **Schlüter-BEKOTEC-THERM-HVT**
stainless steel heating circuit distributor
with connection accessories
4.1 flow leg 4.2 return leg
5. **Schlüter-BEKOTEC-THERM-VSV/-VSE**
distributing cabinet
6. **Schlüter-BEKOTEC-THERM-E**
electronic temperature control:
6.1 room sensor 6.2 actuator
6.3 base module "Control"
with connection module
6.4 timer unit (optional)
7. **7.1 Schlüter-DITRA 25**
Uncoupling, heat distribution, bonded
waterproofing, vapour pressure equali-
sation or
7.2 Schlüter-DITRA-DRAIN 4
Bonded uncoupling, heat distribution,
vapour pressure equalisation or
7.3 Schlüter-DITRA-HEAT
Bonded uncoupling, waterproofing with
electrical floor heating
8. **Schlüter-DILEX-EK or -RF**
Maintenance free edge and movement
joint profiles
9. **Schlüter-RONDEC/-JOLLY/-QUADEC**
Decorative finishing profiles for walls,
skirting and floors
10. Screed (Cement or calcium sulfate screed)
11. Thin-bed tile adhesive
12. Ceramic tiles or natural stone
(other floor coverings can be used)

Efficient heat distribution ...

i



The thin structure of the ceramic thermal comfort floor allows it to respond to temperature changes much more quickly than traditional underfloor heating systems. Schlüter-BEKOTEC-THERM even allows for energy efficient night control settings, which significantly reduce your heating costs.



The secret of the ceramic thermal comfort floor lies in its patented structure. The connected air channels within the Schlüter-DITRA 25 membrane, located immediately below the covering, distribute the heat with particular speed and evenness and heat the entire floor to the desired temperature within a short period of time.



Environmentally friendly and comfortable. Save energy and reduce heating costs



Due to the patented thin layer construction of the Schlüter-BEKOTEC-THERM system, the total screed mass to be heated is comparatively small. As a consequence, floor heating systems can be operated with low supply temperatures. The Schlüter-DITRA 25 or Schlüter-DITRA-DRAIN 4 installed under the ceramic covering allows the heat to distribute evenly, the heat is rapidly spread over a large area,

making an entire room comfortable in a short period of time. Ceramic thermal comfort floors are ideally suited for operation with environmentally friendly, regenerative heat pumps. However, the low operating temperatures also protect the environment if they rely on conventional heat generation and are good to your wallet as well!

- ✓ **Low operating temperatures**
- ✓ **Low heating cost**
- ✓ **Effective utilisation of regenerative or conventional energy sources**



Cost and energy efficient ...



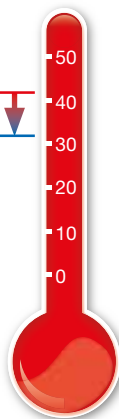
Schlüter-BEKOTEC-THERM is an ideal component for use in modern low energy homes.

i

Conventional

Schlüter®-BEKOTEC-THERM

Cost savings of up to 9.5 %



The temperature of the medium that transfers heat to the ceramic thermal comfort floor (e.g. water) is called “supply temperature”. It depends on the size of the heat emitting areas and the heating requirement of the corresponding space. In conventional radiator systems, this temperature used to be 70-90 °C. Due to its low supply temperature of approx. 30 °C, Schlüter-BEKOTEC-THERM works very well in conjunction with heat pumps and solar systems, which can heat utility water for bathroom and kitchen use at the same time.



One size fits all: One system for all coverings



Note: Other coverings such as carpet, laminates and parquet are also possible by following the relevant installation instructions.

Your personal comfort zone ...



The perfect combination of heated floors and ceramic tiles: Dust mites or contaminants have no chance on hygienic surfaces covered with ceramic tiles or natural stone.



The quick responsiveness of the system and its air channels create your personal comfort zone in any season. You can enjoy comfortable warmth wherever you step in the winter, while the floor provides passive cooling with pleasant barefoot freshness in the summer.



Fast.

Move in earlier, thanks to shorter construction time!



Due to the special construction of the ceramic thermal comfort floor, tiles can be installed on top of the system component, Schlüter-DITRA 25, Schlüter-DITRA-DRAIN 4 or Schlüter-DITRA-HEAT, as soon as the screed is ready to bear weight.

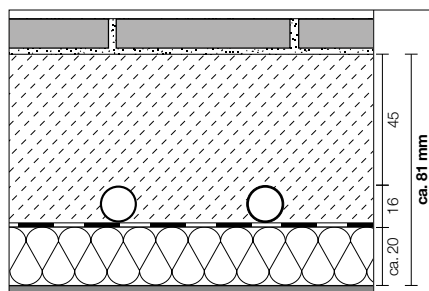
This eliminates long waiting periods for drying the screed and lengthy functional heating periods to bring the covering to temperature. Since the thinner screed requires much less material, the final construction is lighter and lower than conventional installations, saving considerable construction time.

- ✓ **Low construction height**
- ✓ **Material and weight savings**
- ✓ **Short construction time**

In new construction and refurbishment projects...

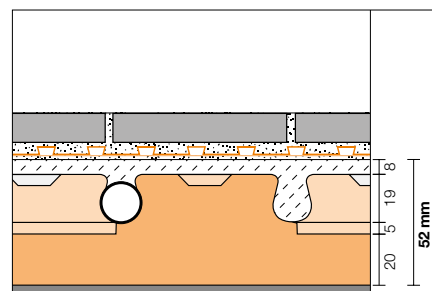
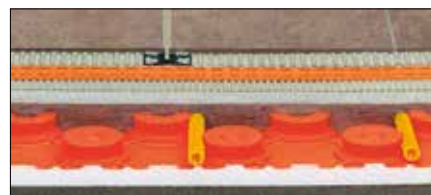


Assembly as per
DIN 18 560-2



The standard specifies a minimum screed coverage of 45 mm over the heating pipes.

Assembly with
Schlüter®-BEKOTEC-EN/P or -EN/PF



The Schlüter-BEKOTEC system only requires a coverage of at least 8 mm over the heating pipes, which translates into a thinner assembly and a lower screed mass.



Systematic safety. Quality in the long run!

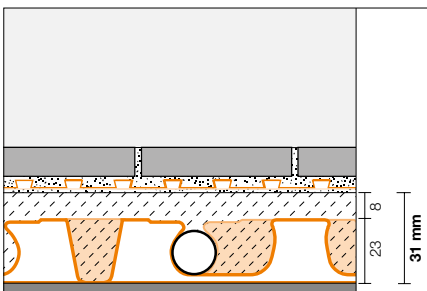
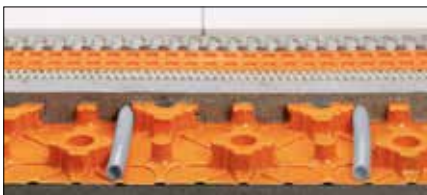


The patented structure of the Schlüter-BEKOTEC-THERM system neutralises stresses within the floor assembly. This creates

a permanently damage free, heated floor structure that you will continue to enjoy for a long time.

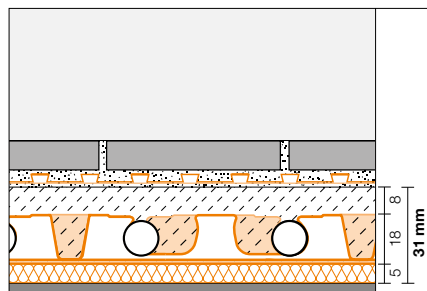
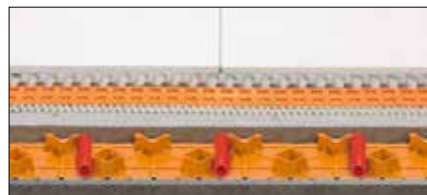
- ✓ Low stress screed construction
- ✓ Joint free screed
- ✓ Crack free ceramic or stone tile coverings
- ✓ First rate references

Assembly with
Schlüter®-BEKOTEC-EN 23 F



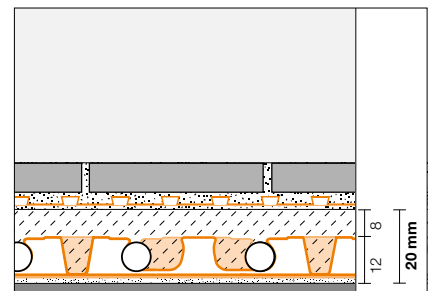
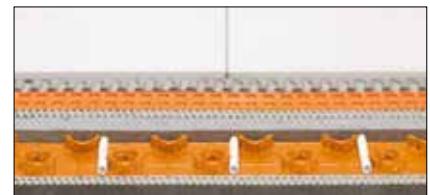
Schlüter-BEKOTEC-EN 23 F, made of high-impact deep-drawing foil, is directly installed on the substrate or on insulation layers.

Assembly with
Schlüter®-BEKOTEC-EN 18 FTS



Schlüter-BEKOTEC-EN 18 FTS with integrated impact sound insulation results in a particularly thin heated screed with additional sound insulation up to 25 dB.

Assembly with
Schlüter®-BEKOTEC-EN 12 FK



The system panel EN 12 FK can be used to create a heated screed with a thickness starting from 20 mm.



10 strong arguments in favour of living spaces with tiles.

Tile coverings are ...

... warm!



In the summer as much as in the winter insulation and radiant floor heating provide a pleasant room environment.

... exclusive!



Tile coverings come in many variations, thanks to individual installation patterns and innovative designs.

... quiet!



Tranquility due to sound insulation layer blocking out noise.

... durable!



Once installed, tiles are of lasting beauty: ceramic tiles show virtually no wear and tear.

... hygienic!



Dust mites or contaminants have no chance on the hygienic surface of ceramic tiles.

... longevity!



As documented by many historic buildings, properly installed tile coverings can last for centuries.

... fireproof!



Ceramic tiles are fire resistant and are not harmed by cigarette ashes or open flame.

... comfortable!



Living rooms, kitchens, bedrooms: tiles are suitable for the entire house, from the attic to the basement.

... easy to care for!



Dirt on your shoes or food crumbs: water is usually all you need to clean tiled floors.

... cost effective!



Tile coverings are durable, hygienic, and easy to care for, making them a great investment over the life of the installation.



Convincing. All advantages at a glance

Construction advantages

- Low construction height
- Material and weight savings
- Low stress screed construction
- Crack free ceramic or stone tile coverings
- Joint free screed
- More design options
- Shorter construction time
- High durability
- Suitable for all floor coverings

Heating advantages

- Even heat distribution
- Comfortable environment
- Hygienic and healthy
- Easy control technology

Ecological advantages

- Low hot supply temperatures, low heating cost
- Effective for the use of regenerative energy sources
- Fast reacting floor heating system
- Low energy consumption



Our areas of expertise

Technology and design with Schlüter-PROFILES

 Edge profiles for floor coverings



 Stair nosing profiles



 Wall corners and edge profiles



Technology and design with Schlüter-PROFILES

 Movement and control joint profiles



Covering assemblies

 Covering assemblies



Waterproofing / uncoupling / drainage / sound insulation

 Waterproofing / uncoupling / drainage / sound insulation



Substrate for tiles

 Substrate, structural panel, bonded waterproofing



Balcony finishing profiles and gutter systems

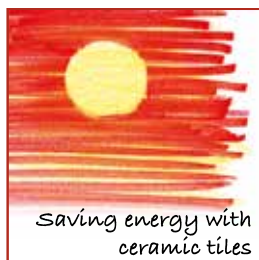
 Balcony finishing profiles and gutter systems



Illuminated Profile Technology

 Illuminated Profile Technology





*Saving energy with
ceramic tiles*

... made by Schlüter-Systems
www.bekotec-therm.co.uk

i

Informative. For those who want to know more!

Did we get you interested in Schlüter-BEKOTEC-THERM?

Would you like to find out more? The fastest way to find out more is online. Visit our website **www.bekotec-therm.co.uk**, which offers additional details at the click of a mouse. If you need additional information, please contact the staff at an authorised dealer of Schlüter-Systems. Alternatively contact us directly and we will be pleased to assist with your enquiry.



Your authorised dealer:



P R O F I L E O F I N N O V A T I O N

Schlüter-Systems KG · Schmölestraße 7 · D-58640 Iserlohn

Tel.: +49 2371 971-261 · Fax: +49 2371 971-112 · info@schlueter.de · www.schlueter-systems.com

Schlüter-Systems Ltd · Units 3-5 Bardon 22 Industrial Estate · Beveridge Lane · Coalville · Leicestershire · LE67 1TE

Tel.: +44 1530 813396 · Fax: +44 1530 813376 · sales@schluter.co.uk · www.schluter.co.uk