



FÜR HANDWERK, DAS ÜBERZEUGT.

# BLANKE HEATING AND COOLING SYSTEMS

Highly efficient heating with smart home solutions



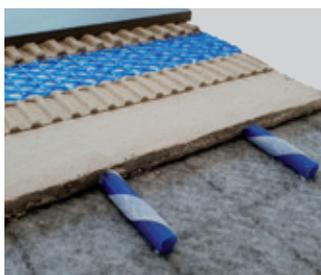


# UNDERFLOOR HEATING AND COOLING SYSTEMS WITH SMART HOME SOLUTIONS

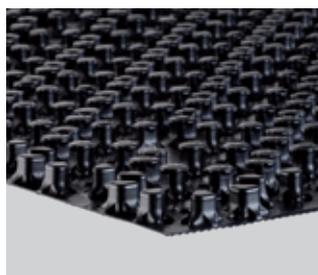
## Efficient heating for a better world

There is no doubt about it: efficient heating has a positive effect on the world's climate. To achieve climate policy objectives, the Federal and State governments of Germany offer financial incentives and subsidies to end-users to support them when making decisions about upgrading their outdated heating systems. Alone in Germany, there are 20 million systems in need of upgrades in order to meet future demands with regard to combating

climate change. Blanke is also doing what it can and is responding to the Federal government's appeal to develop simple, efficient and climate-friendly product solutions. As a consequence, you can look forward to our product portfolio of surface heating systems with control technology. We are also looking towards the future with regard to smart home applications - more information on this topic can be found in this brochure.



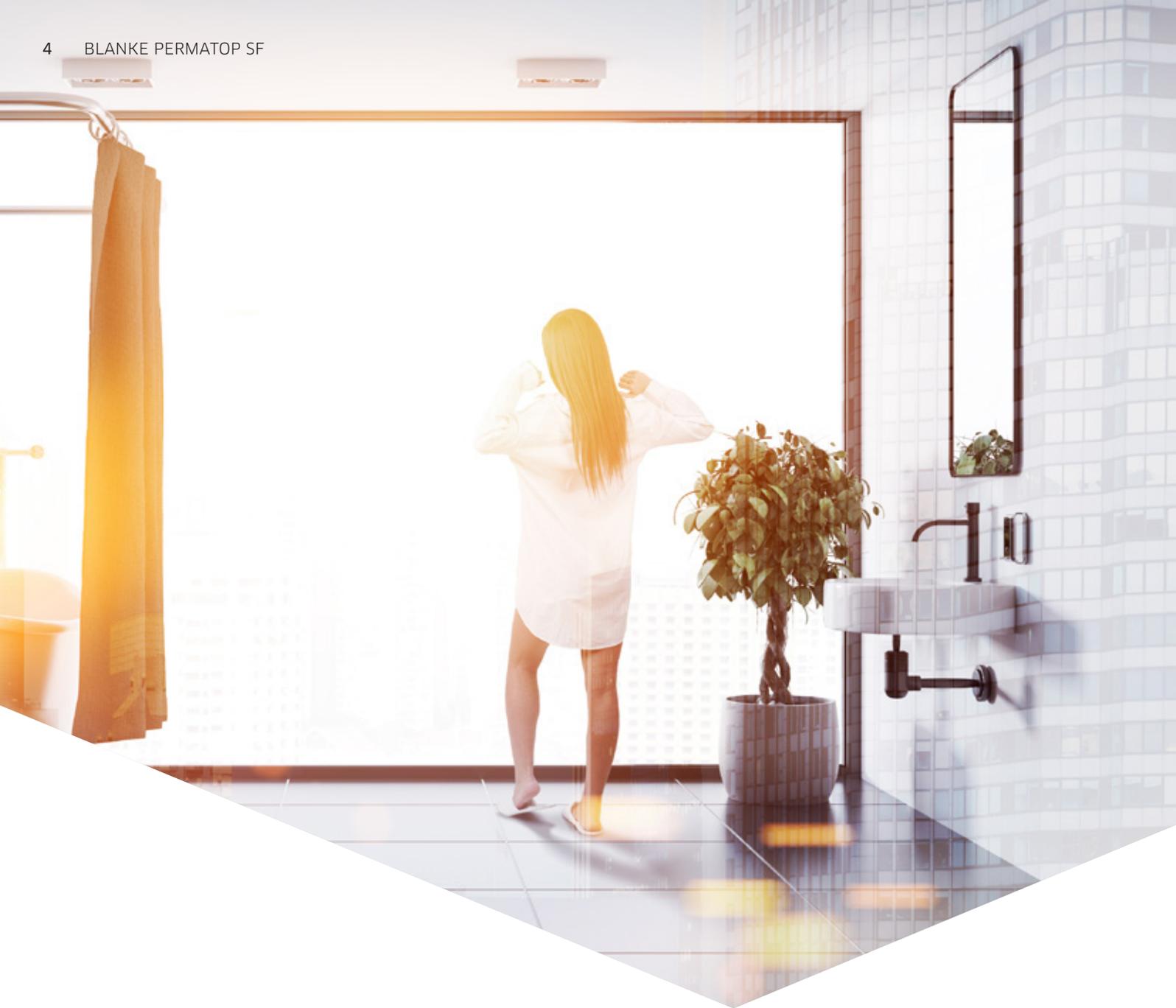
04 BLANKE PERMATOP SF



06 BLANKE PERMATOP BF

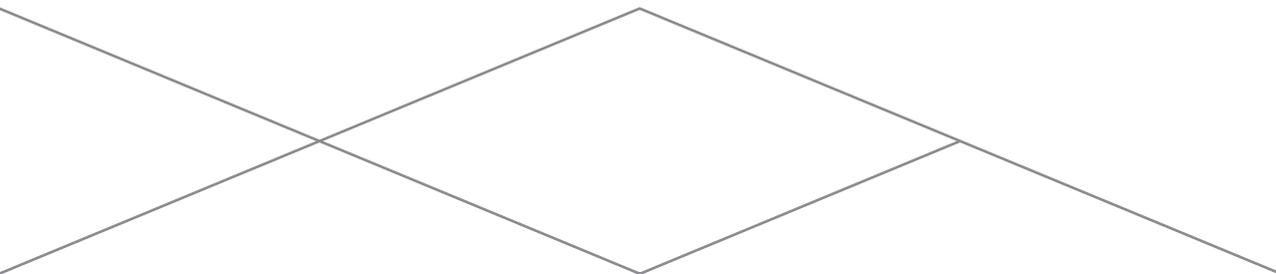


16 BLANKE SMART HOME



## BLANKE PERMATOP SF

Highly efficient heating for a better world



## BLANKE PERMATOP SF

BLANKE PERMATOP SF for tiles and natural stone floor coverings is a modular combination of perfectly matching individual components for use in heating and cooling rooms. It consists of a self-levelling energy distribution layer BLANKE SF FILLER with integrated water-carrying heating and

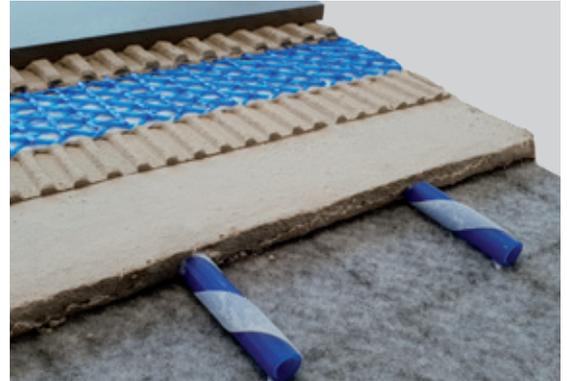
cooling pipework made of a high-quality PE heating pipe, which makes it with Velcro extremely easy to lay onto the self-adhesive fibre fabric mat. The tried-and-trusted Blanke PERMAT decoupling mat rounds off this system to make it suitable for all floor surface coverings.

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### ADVANTAGES AT A GLANCE

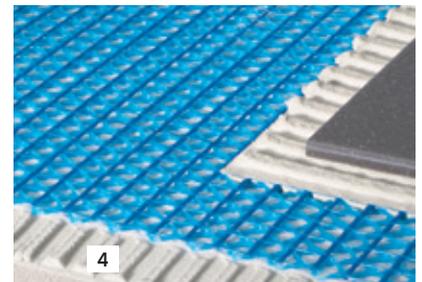
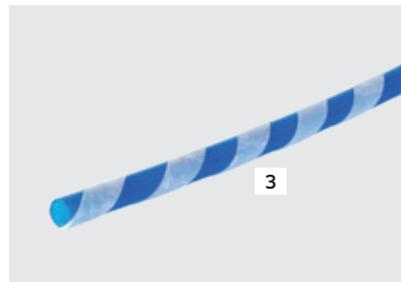
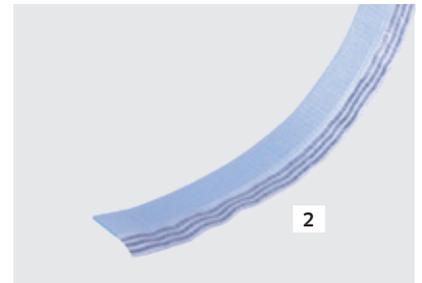
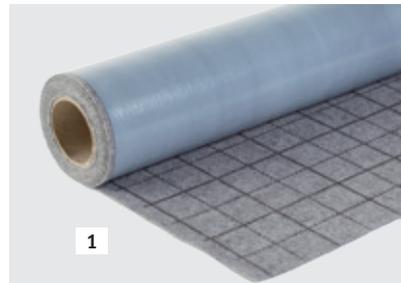
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- > Minimal installation height of just 14 mm
- > Fast-reacting
- > Very short drying time - quick installation with zero waiting time
- > Easy levelling thanks to the integrated energy distribution layer BLANKE SF FILLER



### BLANKE PERMATOP SF COMPONENTS

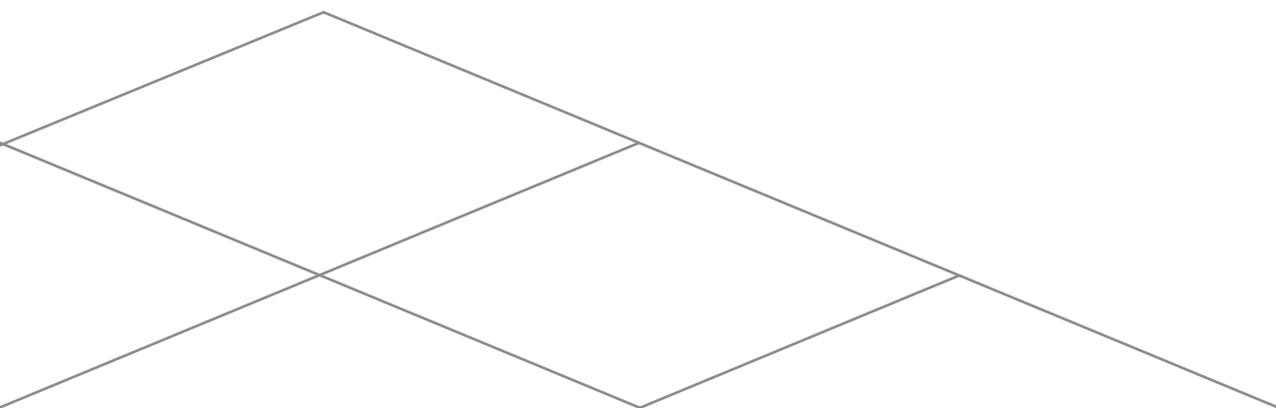
- 1 BLANKE SF BASE
- 2 BLANKE RDS 5/50
- 3 BLANKE SF KLETT-TEC
- 4 BLANKE PERMAT





## **BLANKE PERMATOP BF AND BFC**

Underfloor heating and cooling system -  
quick and easy installation



## BLANKE PERMATOP BF

BLANKE PERMATOP BF is a unique, modular, complete underfloor heating system that consists of BLANKE BF BASE, a special polystyrene studded panel for a controlled shrinkage of the screed,

and BLANKE BF/C PIPE, a highly flexible, oxygen diffusion tight polyethylene pipe with an internal oxygen barrier layer. The tried-and-trusted BLANKE PERMAT decoupling mat rounds off this system.



BLANKE BF/C PIPE



BLANKE RDS 10/120

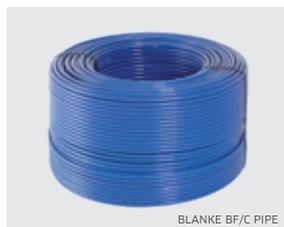


BLANKE BF BASE

## BLANKE PERMATOP BFC

BLANKE PERMATOP BFC is a unique, modular, complete underfloor heating system that consists of BLANKE BF BASE, a special polystyrene studded panel for a controlled shrinkage of the screed, and BLANKE BF/C PIPE, a highly flexible, oxygen

diffusion tight polyethylene pipe with an internal oxygen barrier layer. In addition, the studded panel also comes with an integrated impact noise insulation backing. The tried-and-trusted BLANKE PERMAT decoupling mat rounds off this system.



BLANKE BF/C PIPE



BLANKE RDS 10/120



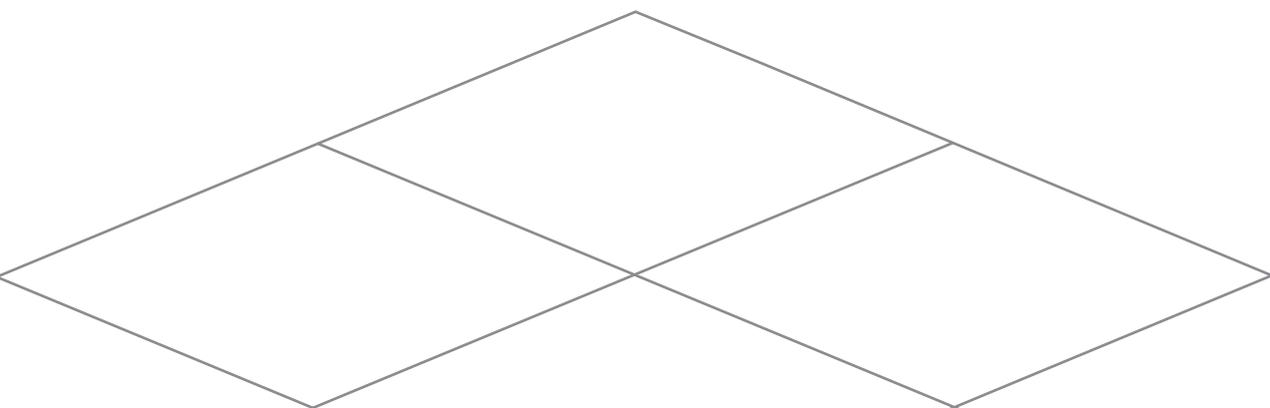
BLANKE BFC BASE



Image source: AGROB BUCHTAL

## BLANKE PERMATOP

The innovative underfloor heating and cooling system



## BLANKE PERMATOP

BLANKE PERMATOP is an innovative underfloor system for both heating and cooling. It combines the advantages of an EPS-based installation panel and ex-works heat diffusion plate with the enormous compressive stability of BLANKE PERMAT underlayment and decoupling mat. The heat diffusion plate is bonded across the whole surface area – including the bends – and guarantees a uniform and particularly fast heat distribution.

Combined with BLANKE GLUEMAX, a special, fast-curing dispersion adhesive, BLANKE PERMAT replaces the conventional layer of screed; distinguishing features include high adhesive bonding values as well as resistance to bending, tensile and compressive loads.

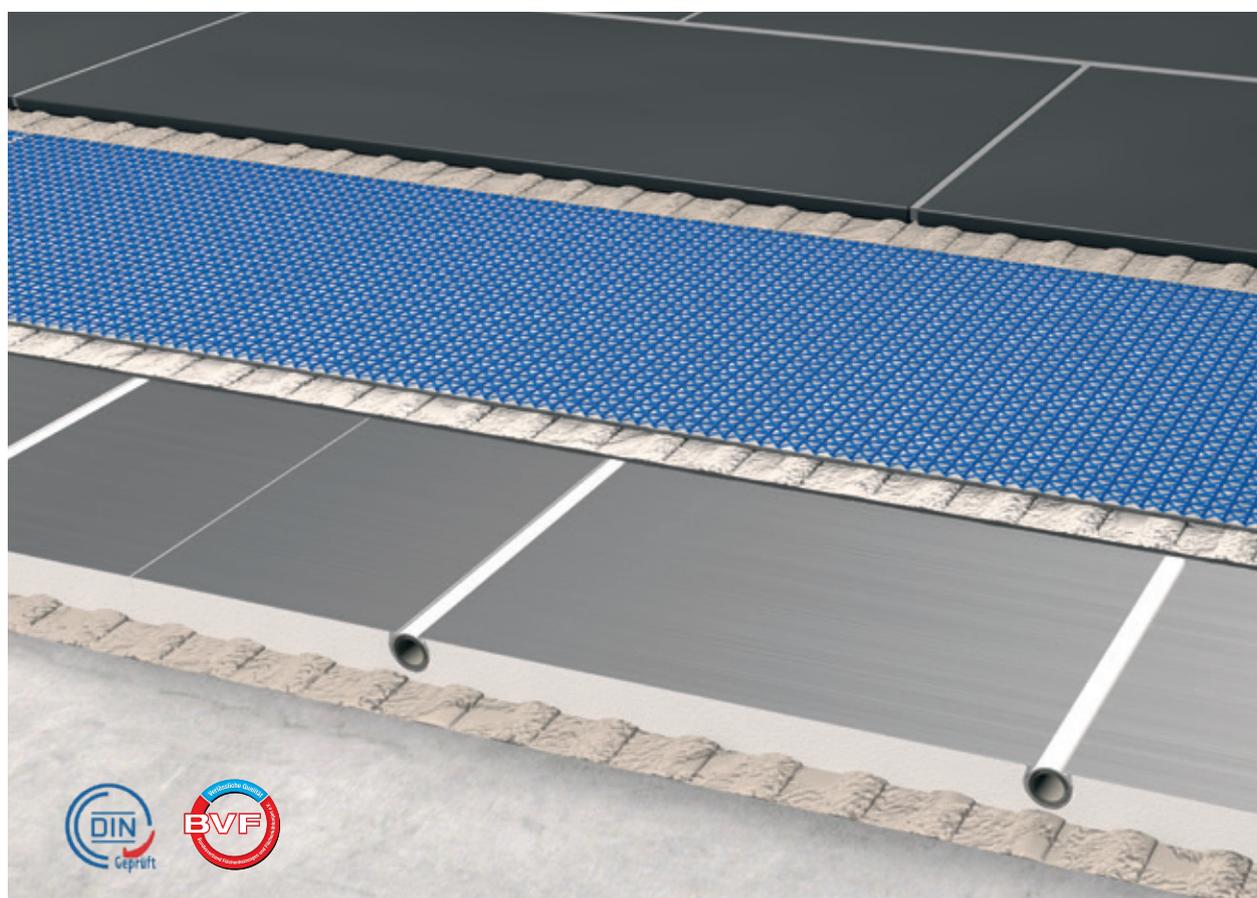
The unique combination of BLANKE PERMAT with the BLANKE PERMATOP installation panels comprising insulation and heat diffusion plate facilitates an extremely thin construction without having to forgo fast and even heat distribution. Three different systems are available with different heights or sustainable wood fibre insulation with two different pipe spacings.

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### ADVANTAGES AT A GLANCE

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- > Very fast-reacting underfloor heating and cooling system. Noticeable warmth after 5 minutes
- > Extremely low installation height – from 31 mm
- > Can save upwards of four weeks of construction time, because there is no need for screed
- > Particularly suitable for refurbishments



**Fast-reacting underfloor heating and cooling system**

Perceptible warmth in as little as 5 minutes thanks to excellent heat distribution properties of the heat diffusion plate bonded across the whole surface area.

**Extremely low floor installation height, including insulation**

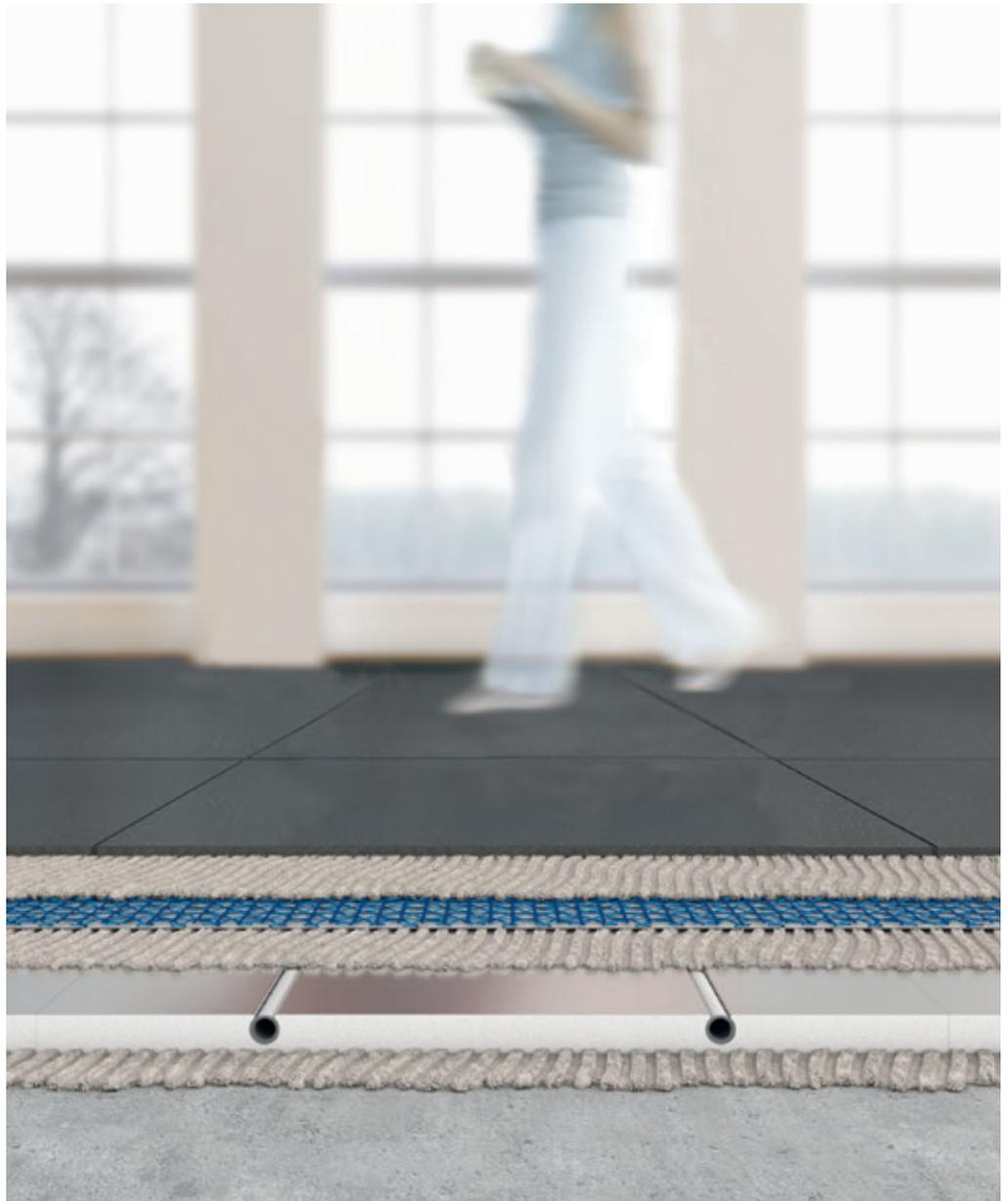
With BLANKE PERMATOP 3000 the installation is just 31 mm high and as a consequence particularly suitable for refurbishments.

**Saves more than 4 weeks building time**

Because installation requires no screed, because there are no drying times and costs to lay screed.

**Multifunctional**

BLANKE PERMAT makes it possible to lay all tile formats and all types of flooring.



**BLANKE PERMATOP WOOD**

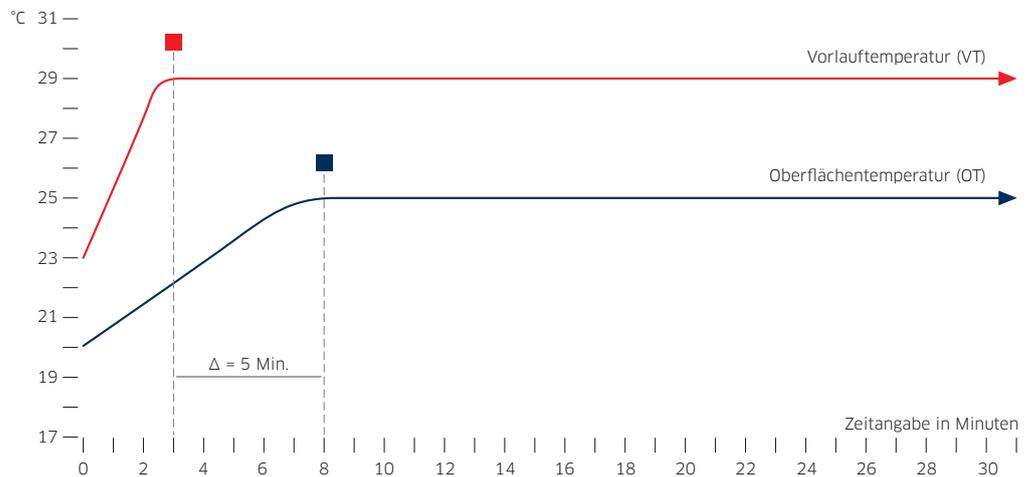
The sustainable and environmentally friendly version with wood fibre insulation board!

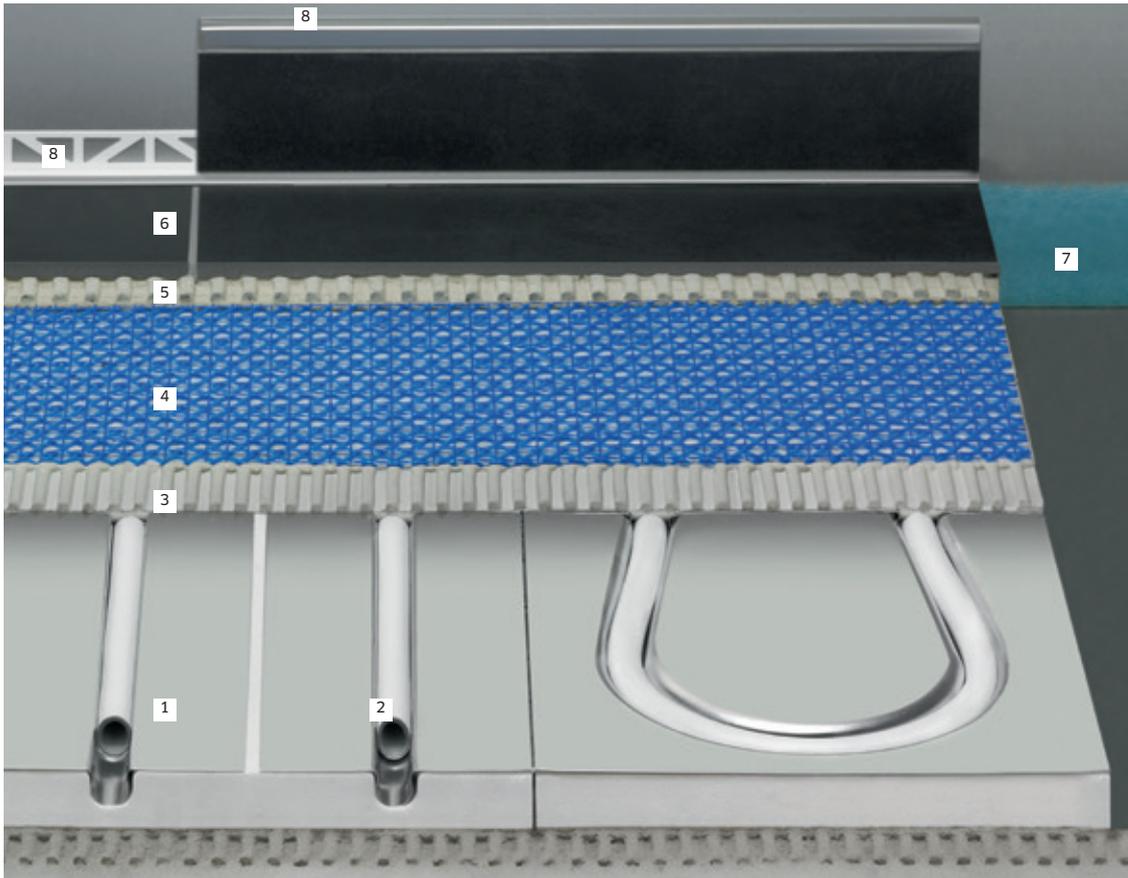
**TEMPERATURE PROFILE BLANKE PERMATOP**

■ The supply temperature of 29 °C is reached within 3 minutes.

■ The surface temperature of 25 °C is reached in 8 minutes.

Full surface temperature after just 5 minutes!





We offer a complete package

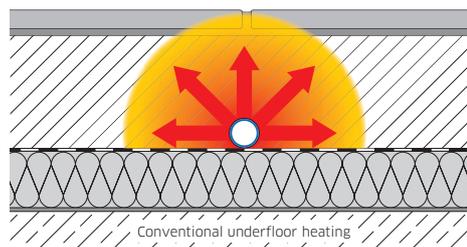
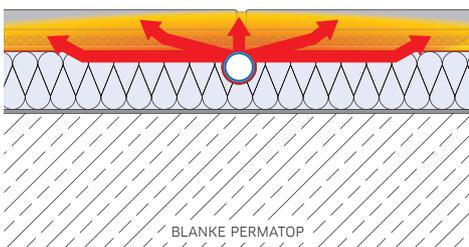
Planning, subfloor panel, pipes, underlayment, special adhesive and free delivery to site

Important notes:

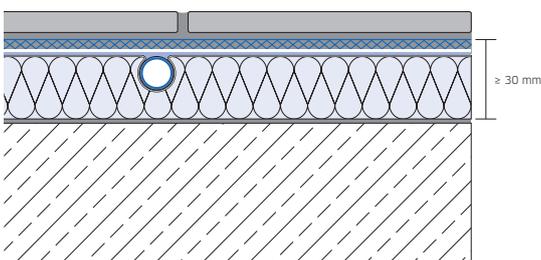


- 1 BLANKE PERMATOP Grooved/return panel
- 2 BLANKE PERMATOP composite metal piping
- 3 BLANKE GLUEMAX
- 4 BLANKE PERMAT
- 5 Flexible adhesive mortar
- 6 Floor surface covering
- 7 BLANKE PERMATOP edge insulation strips
- 8 Optional: Blanke edge profile, expansion joints & edge protector

Uniform heat distribution thanks to heat diffusion plate



Cross-section BLANKE PERMATOP installation height 31/35 mm



Cross-section: conventional underfloor heating installation height from approx. 85 mm

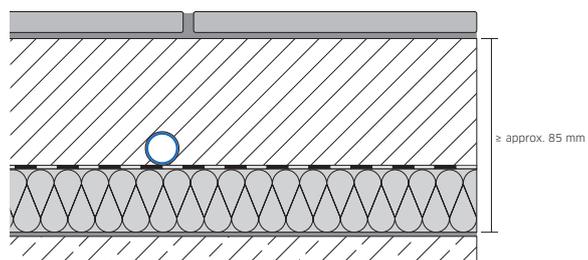
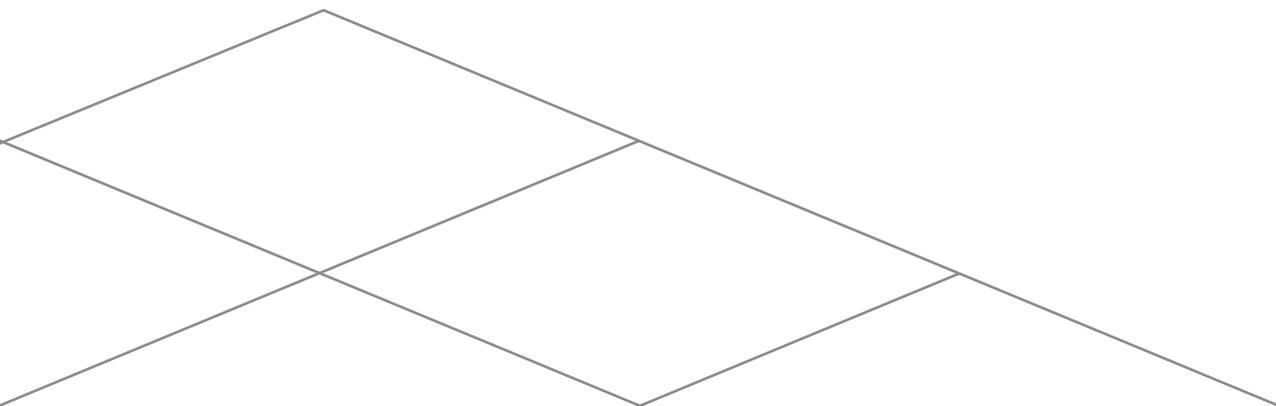




IMAGE SOURCE: STELLER DESIGN

## BLANKE PERMATOP WALL

For all-round warmth



## BLANKE PERMATOP WALL

PERMATOP WALL is a heating and cooling system for the wall that facilitates short construction times and impresses with top performance figures. The temperature of the heating or cooling agent is only slightly above or below that of the ambient air. The

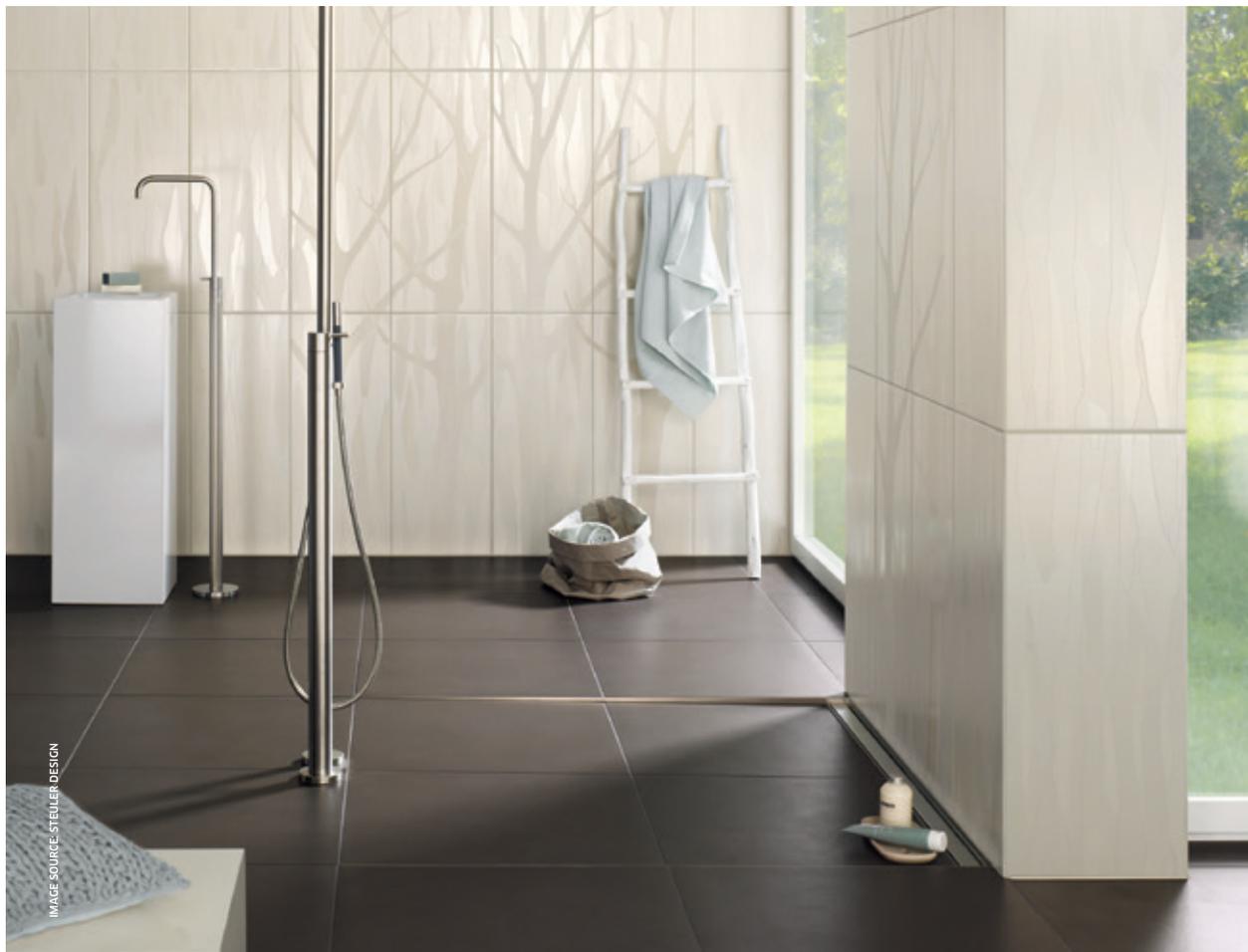
greater portion of energy is emitted as radiation, which significantly increases the perceived sense of comfort. This system combines perfectly with all other solutions available in the range of Blanke surface heating and cooling systems.

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### ADVANTAGES AT A GLANCE

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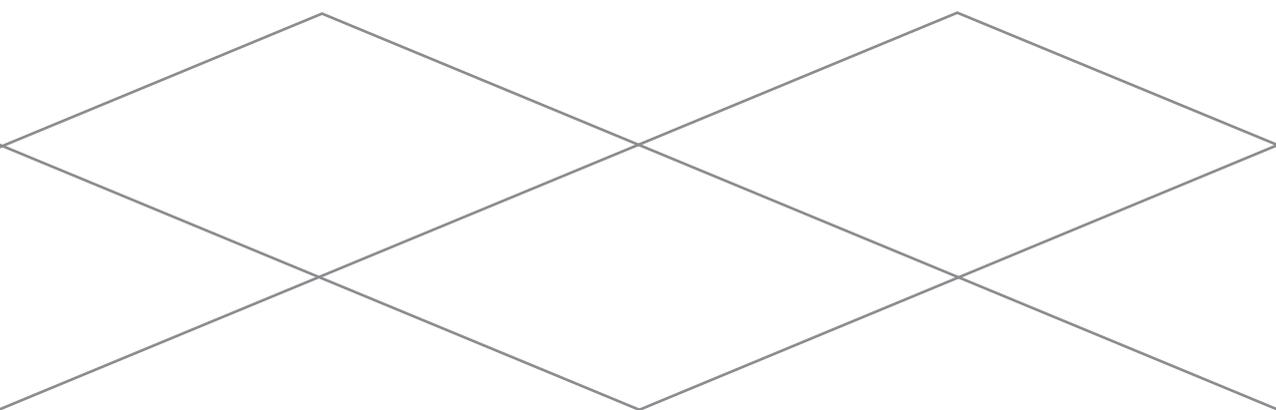
- > Very fast-reacting heating and cooling system for walls
- > Minimum layer height thanks to low thickness of 35 mm
- > Combines perfectly with all underfloor heating and cooling system in the PERMATOP series





# BLANKE HEATING CIRCUIT MANIFOLD

and accessories



# BLANKE HEATING CIRCUIT MANIFOLD AND ACCESSORIES

Stainless-steel heating circuit manifolds with innovative valve technology “Hydro-Control” facilitate simple and fast hydraulic calibration of the connected heating and cooling circuits. This innovative

valve technology offers automatic adjustment of the heating circuits to different operating statuses as well as changing pressure and volume rates in the surface heating.

**Accessories for BLANKE UNDERFLOOR HEATING AND COOLING SYSTEM:**

- 1 BLANKE SF COMPRESSION FITTING for BLANKE PERMATOP SF
- 2 BLANKE COMPRESSION FITTING for BLANKE PERMATOP BF, BFC and WALL
- 3 BLANKE COMPRESSION FITTING for BLANKE PERMATOP SF, BF, BFC and WALL
- 4 BLANKE COMPRESSION CONNECTOR for BLANKE PERMATOP
- 5 BLANKE HEATING CIRCUIT MANIFOLD Hydro-Control (number of heating circuits: 2-12, Fig. example with 5)
- 6 BLANKE MANIFOLD STOP VALVE flow (red)
- 7 BLANKE MANIFOLD STOP VALVE return (blue)
- 8 BLANKE CONNECTION SET ELBOW (PWZ)
- 9 BLANKE CONNECTION SET STRAIGHT (PWZ)
- 10 BLANKE FIXED-VALUE CONTROL STATION with high-efficiency pump
- 11 BLANKE FIXED-VALUE CONTROL STATION with high-efficiency pump and heat exchanger
- 12 BLANKE ZONE VALVE
- 13 BLANKE MAGNETIC SEPARATOR
- 14 BLANKE MICRO LBA
- 15 BLANKE THERMAL INSULATION SHELLS
- 16 BLANKE RETURN FLOW TEMPERATURE-LIMITER VALVE
- 17 BLANKE MIXING UNIT
- 18 BLANKE Y-JUNCTION CONNECTOR
- 19 BLANKE ADAPTER FITTING
- 20 BLANKE flush-mounted MANIFOLD CABINET
- 21 BLANKE surface-mounted MANIFOLD CABINET

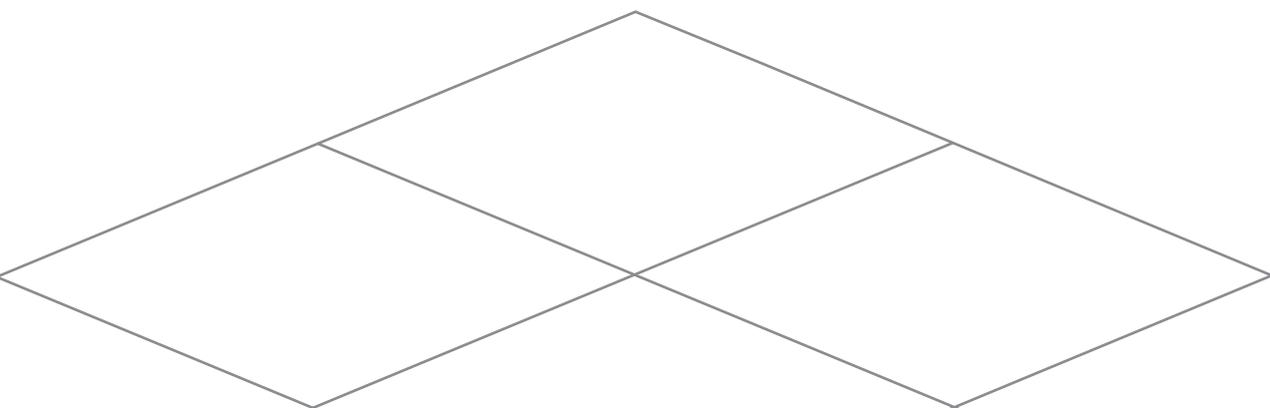


There are more accessories that are not illustrated here; talk to us or browse through our catalogue!



## BLANKE SMART HOME SOLUTIONS

Better sense of well-being and convenience for your home



## BLANKE SMART HOME SOLUTIONS

Future market – smart home: 88.2% of all households in Germany are connected to the Internet, and some 59% already use smart home applications to control and monitor their domestic energy systems. This approach to controlling their domestic systems not only results in a better sense of well-being and convenience, but also has a high potential for saving energy in your home. Controlling heating,

security\*, lighting\* or shading\* quickly and simply – smart home technology offers you a convenient and simple way to control different applications that accompany you throughout your everyday life. The Blanke system is easy to install and – thanks to its modular expandability – introduces you to the world of smart homes via a flexible and uncomplicated way.

### BLANKE SMART HOME SOLUTIONS:

- 1 BLANKE CENTRAL UNIT
- 2 BLANKE WALL-MOUNTED THERMOSTAT
- 3 BLANKE SOCKET OUTLET
- 4 BLANKE WINDOW/DOOR SENSOR
- 5 BLANKE WALL SWITCH
- 6 BLANKE WALL-MOUNTED THERMOSTAT
- 7 BLANKE UP RELAY 16 A
- 8 BLANKE SWITCHBOX
- 9 BLANKE BASE UNIT 230V
- 10 BLANKE DIGITAL ROOM-CONTROL DEVICE
- 11 BLANKE ANALOG ROOM-CONTROL DEVICE
- 12 BLANKE ACTUATOR 230V

### Expert tip:

BLANKE SMART HOME SOLUTIONS can be used with all PERMATOP heating and cooling systems.

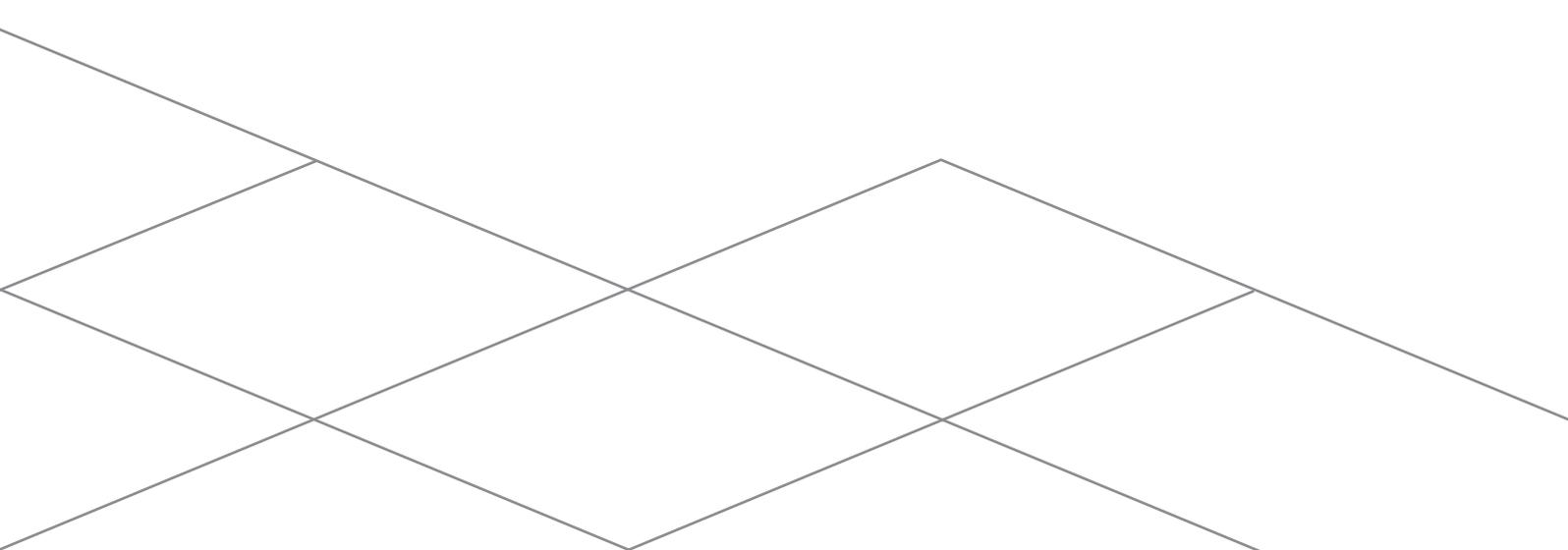


\*Security, light and shading accessories are optional and can be purchased from HomeMatic.



## ANY FURTHER QUESTIONS?

Call us free-of-charge on 0800/025 26 53 (if you are calling from abroad, dial +49 2374/507 131) or visit our website: [www.blanke-systems.de](http://www.blanke-systems.de).





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IMAGE SOURCE: STEULER DESIGN



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