

Electrical surface heating  
for tiles and natural stone

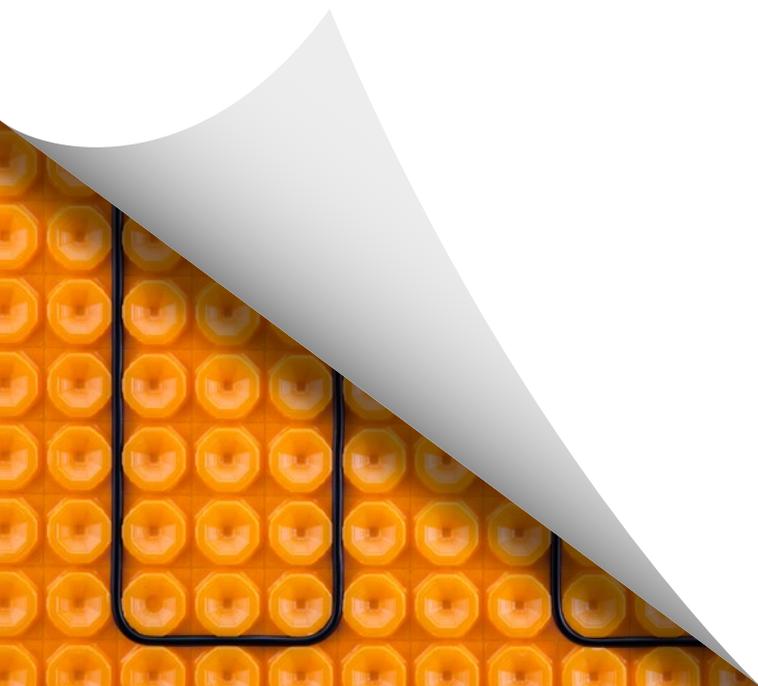
Schlüter®-DITRA-HEAT-E





# Welcome to the Schlüter<sup>®</sup>-DITRA-HEAT-E product family

Comfortable heat where you need it – quickly and efficiently. That's exactly what the electric floor and wall heating system Schlüter-DITRA-HEAT-E provides. In addition, it ensures reliable waterproofing and uncoupling in bonded assemblies with ceramic tiles and natural stone to create long-term comfort in your home.



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# FOCUS ON – product novelties in detail



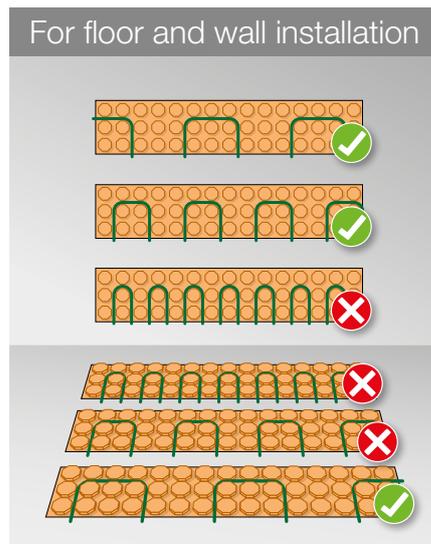
Intelligent solution for energy-efficient buildings

The concept of sustainable construction has led to a significant increase in energy-efficient buildings. Improved insulation standards are not only driving down the heating load of buildings, but also the required heating output. That, in turn, decreases the energy demand. The lower power rating of our new heating cable Schlüter-DITRA-HEAT-E-CHC is ideally suited for well-insulated spaces.



## Schlüter®-DITRA-HEAT-E-CHC

- ✓ Same design as Schlüter-DITRA-HEAT-E-HK
- ✓ Sleeveless connection from cold to heat conductors
- ✓ Proven installation practice
- ✓ Even heating cycles
- ✓ Fewer power consumption peaks due to lower output (important for electricity agreements with peak load rates)



## Heating cable power ratings

Spacing \ Power rating	2 studs	3 studs
12.5 W/m	200 W/m <sup>2</sup>	136 W/m <sup>2</sup>
7.5 W/m	120 W/m <sup>2</sup>	80 W/m <sup>2</sup>

Schlüter®-DITRA-HEAT-E-HK

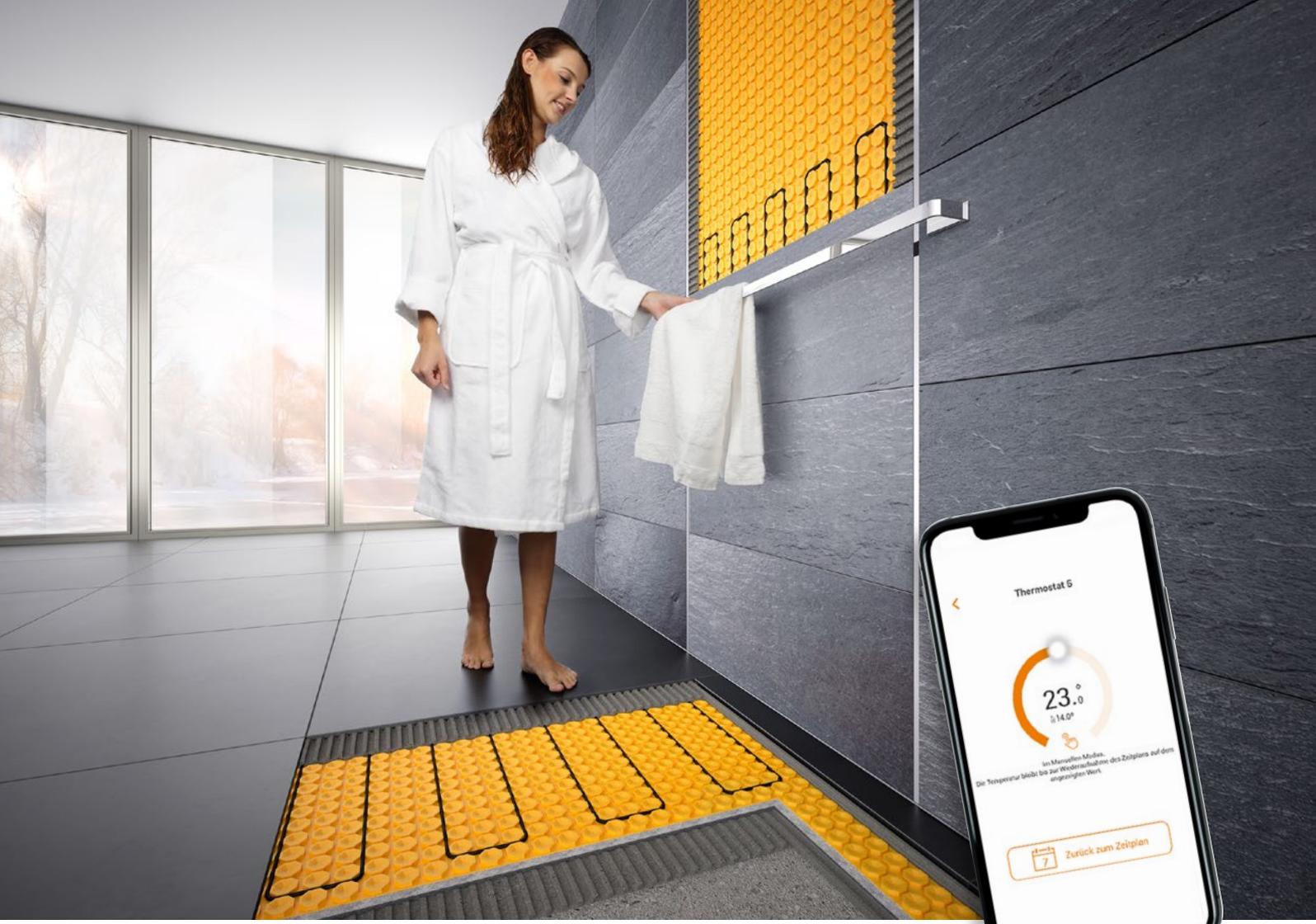


Schlüter®-DITRA-HEAT-E-CHC



Learn more online





# Electric floor and wall heating

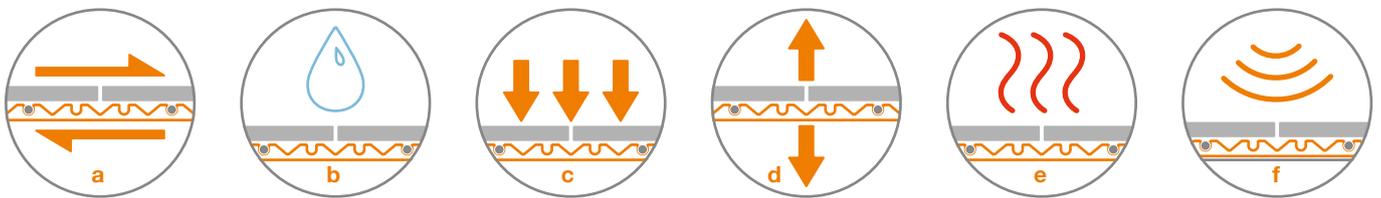
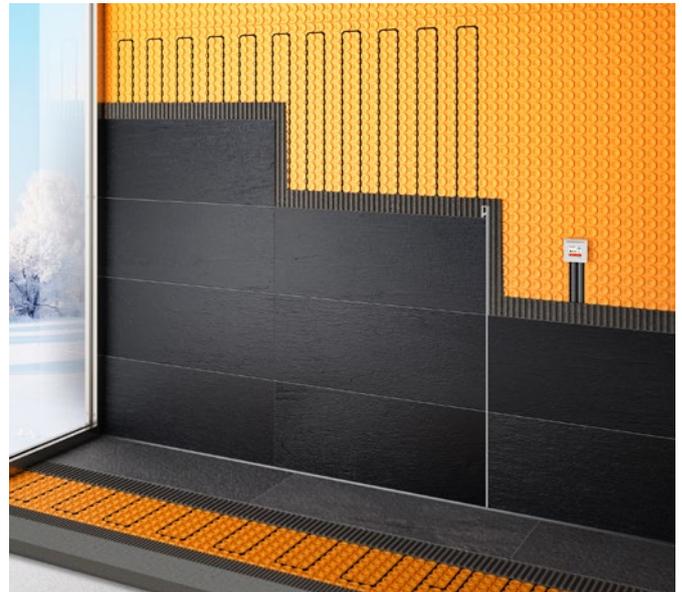
## Schlüter®-DITRA-HEAT-E

- ✓ **Creates comfortable warm floors**
- ✓ **Suitable for individual design**
- ✓ **Low assembly height is ideal for renovations**
- ✓ **Uncouples with proven DITRA technology**
- ✓ **Certified system components**

## What's possible with DITRA-HEAT-E

Schlüter-DITRA-HEAT-E is designed for installation in floors and walls, where it is used for targeted surface heating. What's more, DITRA-HEAT-E offers additional functions that are indispensable for high-quality tile and stone coverings. Thus, the system protects floors against permeating moisture, prevents the transfer of substrate cracks into the covering, and guarantees direct load transfer as well as neutralising uncoupling to keep your wall and floor coverings permanently beautiful.

Ceramic tiles and natural stone have the ability to retain and evenly distribute heat, which makes them ideal components of heating systems installed in floors as well as walls. Our innovative Schlüter-DITRA-HEAT-E system has therefore been developed for heating floors and walls.



### a) Uncoupling

Schlüter-DITRA-HEAT uncouples the covering from the substrate, neutralises stresses and bridges cracks.

### b) Waterproofing

Properly installed Schlüter-DITRA-HEAT creates a certified bonded waterproofing assembly with the tile covering.

### c) Load distribution (load induction)

Schlüter-DITRA-HEAT directly transfers traffic loads to the substrate. That makes the tile coverings installed on the assembly especially durable.

### d) Bonded assembly

Thanks to the bond of the fleece fabric with the thin-bed mortar over the substrate and its mechanical anchoring in the cut-back metal stud structure, Schlüter-DITRA-HEAT is suitable for use in both walls and floors.

### e) Thermal separation

Schlüter-DITRA-HEAT-DUO heats up faster because of the 2 mm anchoring fleece laminated on its underside.

### f) Impact sound insulation

The 2 mm anchoring fleece laminated on the underside of Schlüter-DITRA-HEAT-DUO also reduces impact sound.



**i**  
Get warm feet even faster with the convenient complete sets Schlüter-DITRA-HEAT-E!

# Electrical surface heating system in floors

## Schlüter®-DITRA-HEAT-E

Schlüter-DITRA-HEAT-E is a system for electric floor warming that creates cosy floor zones. The DITRA-HEAT-E heating cables are installed within the uncoupling mat wherever floor areas are to be specifically heated. Thanks to the versatile control of temperatures and heating schedules with the floor thermostat, DITRA-HEAT-E lets you enjoy cosily warmed tiles – when and where you want.

- ✓ **Heating of tiled floors in living rooms and bathrooms to supplement the primary heating system (barefoot zones)**
- ✓ **Back-up heating system for buildings with very low heating energy demand (e.g. passive houses)**

**i**  
The uncoupling mat DITRA-HEAT must be used whenever DITRA-HEAT-E is installed in conjunction with BEKOTEC-THERM.

## Electrical surface heating system in floors for tiles and natural stone

In contrast to conventional systems that work with pre-adhered heating mats, the heating cables of Schlüter-DITRA-HEAT-E are installed in an uncoupling mat. This offers maximum freedom in the design of the areas to be heated. Due to the crack-bridging properties of the Schlüter-DITRA-HEAT uncoupling mat, you can also install coverings over critical substrates such as wooden structures, fresh screeds etc. without any concerns about damaging the tile covering or the heating cables. Of course, the proven Schlüter-DITRA technology prevents damage in the covering caused by rapid temperature changes as well.

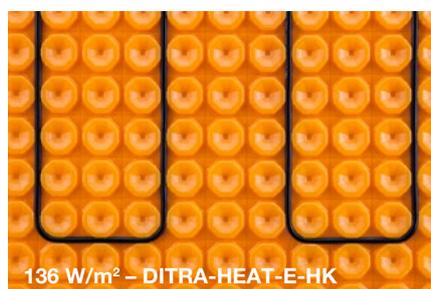
DITRA-HEAT-E with its extremely low assembly height (uncoupling mat and heating cable from 5.5 mm) is ideally suited for retrofitting. It is therefore a perfect choice for restoration and renovation projects. Yet another advantage: since the heating cables are embedded directly in the uncoupling mat with tile adhesive, they are located immediately below the tile covering for guarantee an efficient heat transfer.



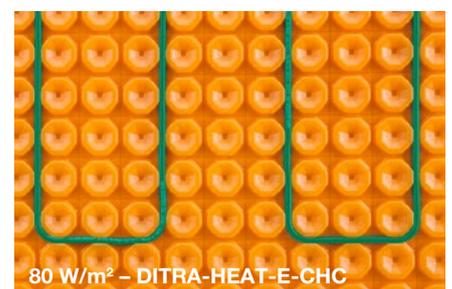
**i** Ideally suited for combination with our ceramic thermal comfort floor!

## Floor installation

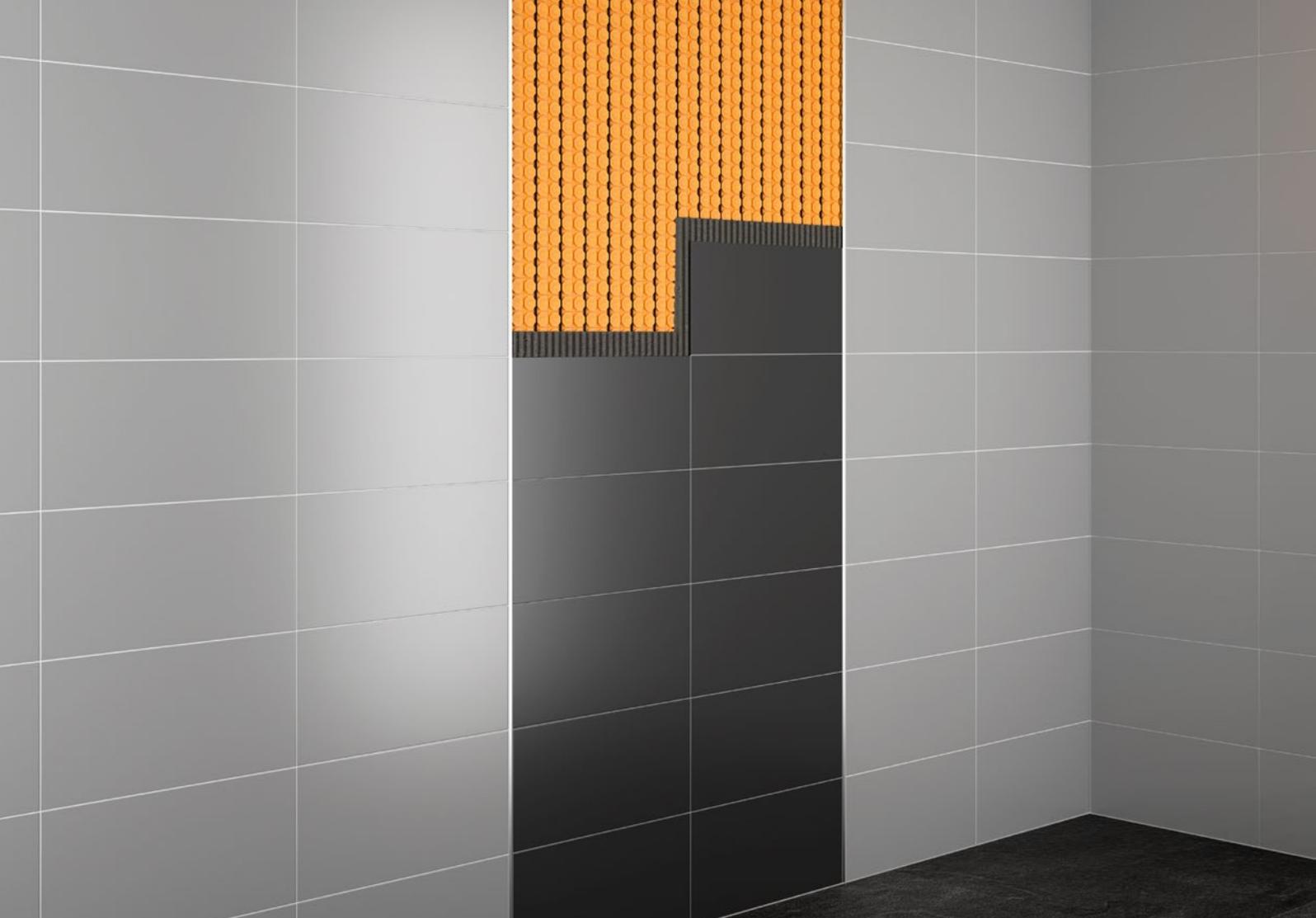
In floors, the Schlüter-DITRA-HEAT-E heating cable is installed with a fixed installation spacing of 3 studs.



136 W/m<sup>2</sup> – DITRA-HEAT-E-HK



80 W/m<sup>2</sup> – DITRA-HEAT-E-CHC



# Heat from within the wall

## Schlüter®-DITRA-HEAT-E

Schlüter-DITRA-HEAT-E is an innovative solution for electrical heating of wall coverings made of ceramic tile and natural stone. The heating cables installed in the uncoupling mat create special comfort zones in the wall that radiate a gentle warmth. The system thermostats offer versatile and energy-efficient control options for temperatures and heating times.

- ✓ Heating of specific wall zones, e.g. to dry towels
- ✓ Preventive heating to counter mould growth, e.g. in shower areas
- ✓ Comfort zones in relaxation areas or below eating nooks, desks or seating arrangements

## Targeted heating of wall areas

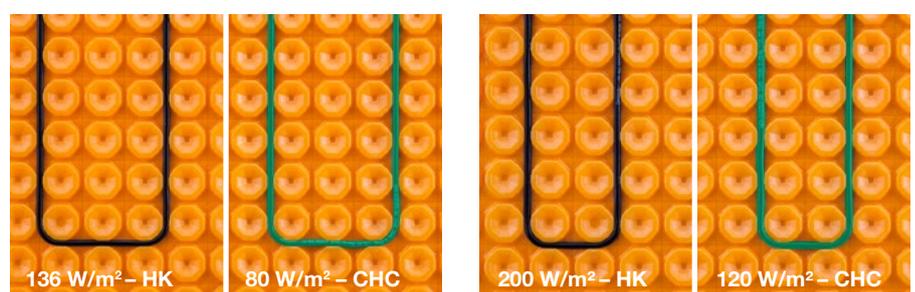
Bulky radiators are a thing of the past. Modern bathrooms offer comfortably heated walls. Elegant tile coverings warm up the towel rack - with precise time control. They can even heat the wall areas of showers that adjoin an exterior wall and are therefore prone to mould growth.

The uses of DITRA-HEAT-E are not limited to bathrooms. A wall heating system can also contribute to a healthy, pleasant room climate in living rooms, dining areas or workspaces.



## Wall installation

In wall areas, Schlüter-DITRA-HEAT-E heating cables can be installed with an installation spacing of either 2 or 3 studs.





**i**  
Get warm feet even faster with the convenient complete sets Schlüter-DITRA-HEAT-E-DUO!

# Fast heat-up response – reduced impact sound

## Schlüter®-DITRA-HEAT-E-DUO

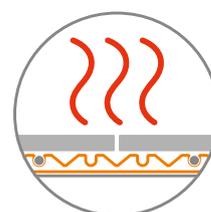
Schlüter-DITRA-HEAT-E-DUO is the right solution wherever heat is needed quickly and for a short time. For example, a residential bathroom that is only used for 1 to 2 hours in the morning and at night needs an efficient, highly responsive system. These situations call for defined comfort zones that must be available on short notice, for example in front of the vanity.

A special 2 mm fleece, the thermal barrier of the DITRA-HEAT-E-DUO system, ensures that the bulk (up to approx. 80%) of the heat is channeled directly toward the floor covering in the heat-up phase, which makes the noticeable heat effect much faster.

The DITRA-HEAT-DUO mat with its thermal barrier property is installed in a single work step as usual. In addition to the proven functions of the DITRA technology such as vapour pressure equalisation and waterproofing (as specified by German building standards), it reduces impact sound as well. Due to its excellent adhesive tensile strength, DITRA-HEAT-DUO is also suitable for wall installation.



One mat – two functions



Thermal separation

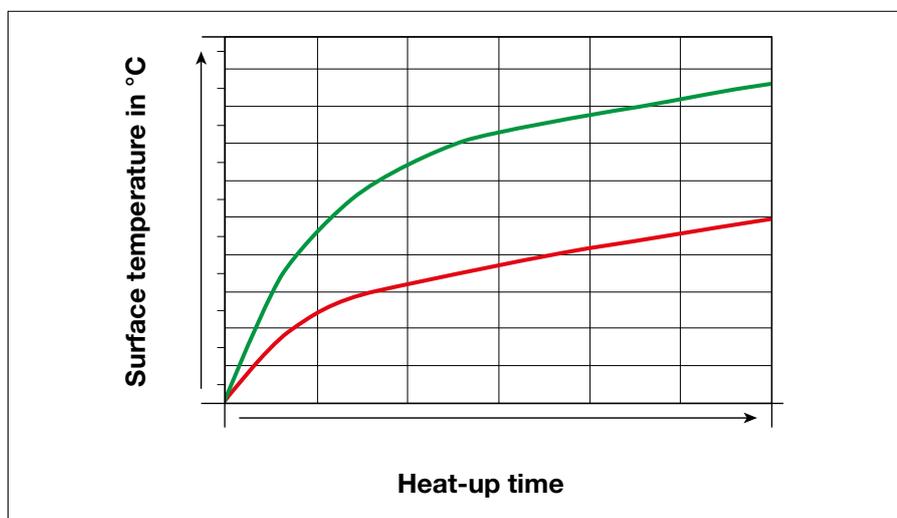


Impact sound insulation

## Fast heat response in the right place at the right time

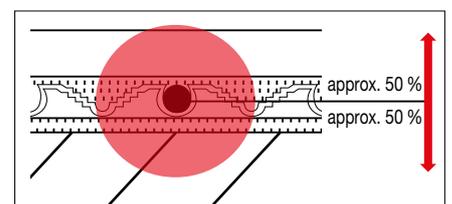
Schlüter-DITRA-HEAT-E-DUO with its integrated thermal barrier ensures that the bulk of the heat generated by the heating cables is not radiated into the screed below, but directly into the floor covering above during the heat-up phase. This makes the heating response of DITRA-HEAT-E-DUO even faster than in conventional systems with higher heating output. The higher efficiency is evident right away. Conventional systems function by heating up the screed first, which then releases the heat to the room. In contrast, DITRA-HEAT-E-DUO radiates up to 80% of heat directly into the covering above and channels only the remainder into the screed. Since the fleece also blocks the upward heat transfer from the substrate, the system is less suitable for use with water-based floor heating systems or the ceramic thermal comfort floor Schlüter-BEKOTEC-THERM.

### Heat-up\*

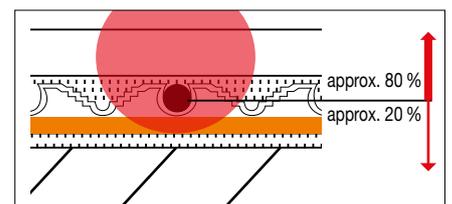


- Schlüter®-DITRA-HEAT-E
- Schlüter®-DITRA-HEAT-E-DUO

### Heating response in the start-up\*



- Schlüter®-DITRA-HEAT-E



- Schlüter®-DITRA-HEAT-E-DUO with thermal barrier

\* performed in unheated screed assembly, starting temperature 20°C

## Which system makes most sense?

Schlüter®-DITRA-HEAT-E

Schlüter®-DITRA-HEAT-E-DUO

over a conventional floor heating system	●	
over a ceramic thermal comfort floor	●	
over a wooden structure	●	
over unheated screed		●
over a weight-bearing previous covering (unheated)		●



# Peel & Stick technology

## Schlüter®-DITRA-HEAT-PS

- ✓ Fleece lined with a pressure sensitive adhesive laminated to the underside
- ✓ Quick and easy to install
- ✓ Easy to reposition during installation
- ✓ Saves time and material
- ✓ Immediately load bearing after installation
- ✓ Uncouples the covering from the substrate
- ✓ Easy installation of matching heating cables
- ✓ Also available as Schlüter-DITRA-HEAT-DUO-PS with additional sound insulation and faster heat-up response

## What's possible with DITRA-HEAT-PS

With suitable substrates, a self-adhesive variant is an especially easy alternative to conventional DITRA-HEAT that saves valuable time and materials. Since DITRA-HEAT-PS (Peel & Stick) features a pressure sensitive adhesive laminated to the underside, no tile adhesive is required underneath the mat. This facilitates the installation, which is especially recommended for moisture-sensitive substrates, and saves substantial amounts of material and time. All other functions of the proven DITRA-HEAT mat remain unchanged.



## Quick and easy installation of DITRA-HEAT



### Easy

Peel off the release film and set in place (mat can be repositioned during installation until pressure is applied)



### Quick

No mixing and spreading of tile adhesive, immediately load bearing after installation



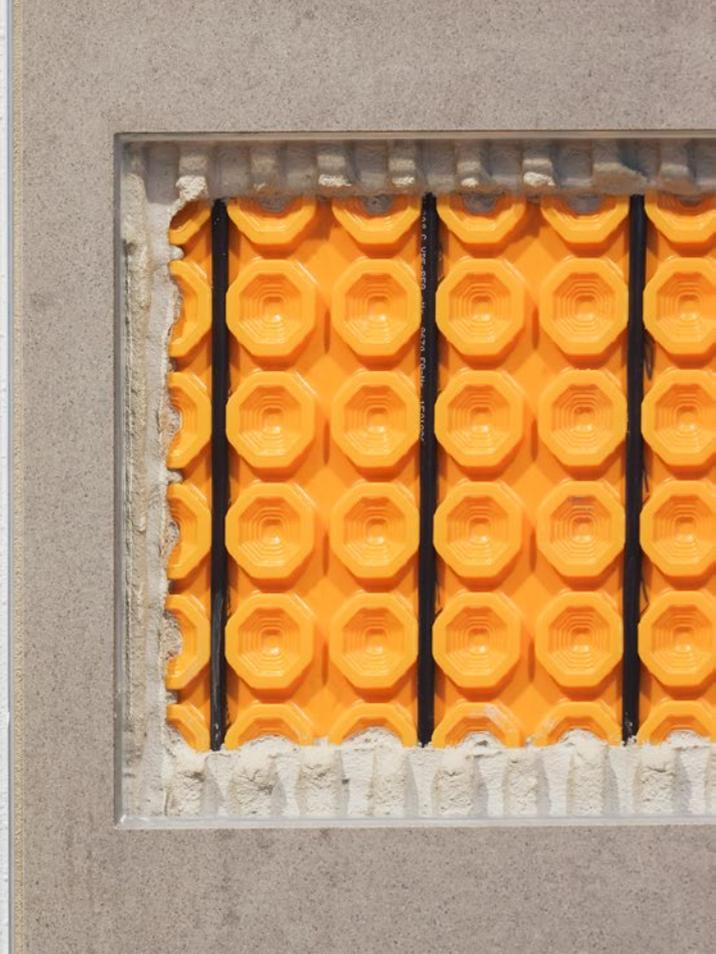
### Clean

No soiling from mixing and spreading tile adhesive, no trowels, buckets and tools to clean



Schlüter®-DITRA-HEAT-PS

Schlüter®-DITRA-HEAT-DUO-PS



## Additional system components

All from a single source!

### Heating cables and cable tester

Schlüter-DITRA-HEAT-E-HK and Schlüter-DITRA-HEAT-E-CHC are electrical heating cables with a unilateral connection that are designed for use with the uncoupling mat Schlüter-DITRA-HEAT. Our test device DITRA-HEAT-E-CT is the perfect tool to safely install our DITRA-HEAT cables.



#### Schlüter®-DITRA-HEAT-E-HK

Schlüter-DITRA-HEAT-E-HK is an electrical heating cable with a unilateral connection for installation in the uncoupling mat Schlüter-DITRA-HEAT.



#### Schlüter®-DITRA-HEAT-E-CHC

Schlüter-DITRA-HEAT-E-CHC is an electrical heating cable with a unilateral connection for installation in the uncoupling mat Schlüter-DITRA-HEAT. With a heat output of 7.5 W/m, the cable is an intelligent solution, e.g. for energy-efficient buildings, where provision for insulation has been made.



#### Schlüter®-DITRA-HEAT-E-CT

Schlüter-DITRA-HEAT-E-CT is a test device for measuring and checking the resistance of the electrical heating cables Schlüter-DITRA-HEAT-E-HK and DITRA-HEAT-E-CHC as well as the remote sensors supplied with Schlüter-DITRA-HEAT-E thermostats.

## Thermostat

The choice is yours! Whether you choose to control them via app, with a voice-controlled smart home device or with a conventional dial, the thermostats for our Schlüter-DITRA-HEAT-E system will set the temperature of your floor and wall heating system exactly as you need.

### Note

The remote sensor should be installed within the Schlüter-DITRA-HEAT uncoupling mat. Although two remote sensors are included, only one should be connected to the thermostat whilst the other is left unconnected as a spare.



### Schlüter®-DITRA-HEAT-E-R6

Schlüter-DITRA-HEAT-E-R6 is an all-in-one thermostat with WiFi connection and optional voice control. It controls floor and wall coverings that are electrically heated with Schlüter-DITRA-HEAT-E. As an alternative, the system can be operated via the 2" (5.1 cm) touchscreen display, with the Schlüter-

HEAT-CONTROL app for iOS and Android or by voice control with Amazon Alexa or Google Assistant. The thermostat, which is now also available in dark anthracite, controls either the surface or room temperature based on a time schedule.

### Schlüter®-DITRA-HEAT-E-R3

Schlüter-DITRA-HEAT-E-R3 is a thermostat for controlling floor and wall coverings that are electrically heated with Schlüter-DITRA-HEAT-E. The system is operated via a 3.5" (8.9 cm) touchscreen display. The thermostat controls either the surface or room temperature based on a time schedule.



### Schlüter®-DITRA-HEAT-E-R

Schlüter-DITRA-HEAT-E-R is a thermostat for controlling floor and wall coverings that are electrically heated with Schlüter-DITRA-HEAT-E. The system is operated via a 2" (5.1 cm) touchscreen display. The

thermostat controls either the surface or room temperature based on a time schedule.

### Schlüter®-DITRA-HEAT-E-R4

Schlüter-DITRA-HEAT-E-R4 is an analogue thermostat for the electrical temperature regulation of wall and floor coverings with Schlüter-DITRA-HEAT-E. The user-friendly thermostat has an on/off switch and a dial for adjusting the temperature set-point.



# Convenient complete sets

## Schlüter®-DITRA-HEAT-E / -DUO

We offer convenient complete sets for electrical heating of floor and wall coverings for common room configurations. They include the following components:

- Schlüter-DITRA-HEAT-MA / -DUO-MA uncoupling mats, see table
- Heating cable Schlüter-DITRA-HEAT-E-HK; see table (installation around every 3rd stud  $\Delta$  136 W/m<sup>2</sup> / installation around every 2nd stud  $\Delta$  200 W/m<sup>2</sup>)
- 1 x Schlüter-DITRA-HEAT-E-R touchscreen thermostat or DITRA-HEAT-E-R6 touchscreen thermostat with WIFI connection and optional voice control (note different article numbers)
- 2 x junction boxes
- 1 x conduit (3 m)

The sets comprise everything you need to install your floor and wall heating system in one convenient package. You only have to buy tiles and adhesive.



## Sets for floor and wall areas

Schlüter®-DITRA-HEAT-E-S							 	
Complete set for floor and wall							Complete set for floor and wall installation with WiFi connection and optional voice control	
Schlüter®-DITRA-HEAT-MA		Schlüter®-DITRA-HEAT-E-HK				Art.-No.	Art.-No.	
Number of mats	uncoupled area in m <sup>2</sup>	Heated floor 136 W/m <sup>2</sup> *		Heated wall 200 W/m <sup>2</sup> **				
		m <sup>2</sup>	W	m <sup>2</sup>	W			
4	3.1	2.2	300	1.5	300	DH S3	DH RT6 S3	
7	5.4	3.8	525	2.6	525	DH S1	DH RT6 S1	
10	7.8	5.5	750	3.7	750	DH S2	DH RT6 S2	

Schlüter®-DITRA-HEAT-E-DUO-S							 	
Complete set for floor and wall							Complete set for floor and wall installation with WiFi connection and optional voice control	
Schlüter®-DITRA-HEAT-DUO-MA		Schlüter®-DITRA-HEAT-E-HK				Art.-No.	Art.-No.	
Number of mats	uncoupled area in m <sup>2</sup>	Heated floor 136 W/m <sup>2</sup> *		Heated wall 200 W/m <sup>2</sup> **				
		m <sup>2</sup>	W	m <sup>2</sup>	W			
2	1.5	1.1	150	0.7	150	DH D S1	DH D RT6 S1	
3	2.3	1.6	225	1	225	DH D S2	DH D RT6 S2	
4	3.1	2.2	300	1.5	300	DH D S3	DH D RT6 S3	
5	3.9	2.7	375	1.8	375	DH D S4	DH D RT6 S4	
6	4.7	3.3	450	2.2	450	DH D S5	DH D RT6 S5	
7	5.4	3.8	525	2.6	525	DH D S6	DH D RT6 S6	
8	6.2	4.4	600	2.9	600	DH D S7	DH D RT6 S7	
9	7	5	675	3.3	675	DH D S8	DH D RT6 S8	
10	7.8	5.5	750	3.7	750	DH D S9	DH D RT6 S9	

\* for use in floor and wall areas \*\* for use in wall areas only

## Sets for wall areas

Schlüter®-DITRA-HEAT-E-WS					 	
Complete wall installation set					Complete set for wall installation with WiFi connection and optional voice control	
Schlüter®-DITRA-HEAT-MA		Schlüter®-DITRA-HEAT-E-HK		Art.-No.	Art.-No.	
Number of mats	uncoupled area in m <sup>2</sup>	Heated wall 200 W/m <sup>2</sup>				
		m <sup>2</sup>	W			
3	2.3	1.8	375	DH WS2	DH RT6 WS2	
4	3.1	2.6	525	DH WS1	DH RT6 WS1	

Schlüter®-DITRA-HEAT-E-DUO-WS					 	
Complete wall installation set					Complete set for wall installation with WiFi connection and optional voice control	
Schlüter®-DITRA-HEAT-DUO-MA		Schlüter®-DITRA-HEAT-E-HK		Art.-No.	Art.-No.	
Number of mats	uncoupled area in m <sup>2</sup>	Heated wall 200 W/m <sup>2</sup>				
		m <sup>2</sup>	W			
3	2.3	1.8	375	DH D S11	DH D RT6 S11	
4	3.1	2.6	525	DH D S10	DH D RT6 S10	



# All advantages at a glance

## Schlüter®-DITRA-HEAT-E

### Simple to install

After installing the heating cables in the uncoupling mat, tiles are installed immediately over the mat in the thin-bed method. No time-consuming trowelling over unheated areas is required as in the case of heated mats.

### Safe to install

The separately available cable testing device Schlüter-DITRA-HEAT-E-CT monitors the resistance of the heating cables during the entire installation phase. It alerts the installer with an acoustic signal in the event of damage.

### Fast heat-up response

The electric heating cables quickly warm up surfaces made of ceramic tiles or natural stone because they are located directly below the covering. Schlüter-DITRA-HEAT-E-DUO is especially quick to bring the floor covering to the desired temperature.

### Easy to retrofit

DITRA-HEAT-E is quick and easy to install. Its low assembly height makes it an ideal choice for restoration and renovation projects (uncoupling mat incl. heating cable from 5.5 mm).

### Durable and maintenance-free

There is no wear and tear; the virtually maintenance-free system has a long service life.

### Cost-effective

The system is economical to purchase, install, maintain and operate. Schlüter-DITRA-HEAT-E-DUO is particularly suitable for reducing heat losses and makes highly effective use of the energy input.

### Precise controls

Digital floor thermostats installed in every room enable convenient and precisely timed settings of preferred temperatures. The new generation of Schlüter-Systems thermostats can also control the room temperature, either using the voice control features of smart home devices such as Amazon Alexa or Google Assistant or a smartphone and tablet.

### Ideally suited for combination with our ceramic thermal comfort floor

Whether in bathrooms, living rooms or offices – the system components Schlüter-DITRA-HEAT-E are the perfect supplement for the Schlüter-BEKOTEC-THERM floor heating system. As an additional benefit, the product is not only easy to install, but also quick to generate cosy warmth.

### Prevents mould growth

Thanks to quick heating and drying, the electric wall heating system effectively prevent mould growth, for example in shower areas.

### Convenient complete sets

Schlüter-Systems offers convenient sets that comprise all pre-fabricated system components for common room configurations.

### Certified system components

The uncoupling mats Schlüter-DITRA-HEAT / -DITRA-HEAT-DUO are certified components of bonded waterproofing assemblies, whilst the heating cables Schlüter-DITRA-HEAT-E have VDE approval. The use of DITRA-HEAT in conjunction with heating cables as a floor/wall heating system is only permitted for interior areas.

### Pleasant room climate is suitable for allergy sufferers

Surfaces are warmed up with gentle radiated heat that maintains natural humidity without stirring up allergens. This creates a pleasant and healthy room climate.

### Invisible

DITRA-HEAT-E lets you enjoy the beauty of tiles or elegant natural stone without unsightly radiators.





# Expertise. In all areas.

The system solutions of Schlüter-Systems are market leaders in many areas. The products are carefully matched to create perfect system solutions from a single source. They are the result of expertise, know-how and innovation.

## Waterproofing / uncoupling / heating / drainage / sound insulation

The products Schlüter-KERDI, -DITRA and -TROBA are optimally matched system solutions for installing ceramic tiles and natural stone in wet rooms, outdoor areas and on critical substrates.

## Balconies and terraces

Tiles make ideal floor coverings for balconies and terraces. The well thought out assemblies of Schlüter-Systems create durable exterior tile floors. No matter whether you are planning to renovate a terrace or want to build a new place in the sun, we offer everything you need for balcony assemblies. From bonded waterproofing to edge profiles and drainage channels - the products of Schlüter-Systems are a perfect match.

## Technology and design with Schlüter profiles

Schlüter profiles offer an ideal combination of functionality and design. Our product portfolio includes profiles for finishing wall and floor coverings, stair nosings, and profiles for expansion, perimeter, edge and connection joints.

## Tile substrates

Schlüter-KERDI-BOARD is an innovative system to quickly create fully functional, dimensionally stable substrates for tiles.

Whether you are planning to install mosaics, standard tiles or large stone pavers, substrates created with KERDI-BOARD are immediately ready for tiling without further preparation.

## Covering assembly technology

Schlüter-BEKOTEC is a floor assembly system that can be constructed quickly. It is thin, will not buckle, and does not develop tensions. The heating and cooling components of Schlüter-BEKOTEC-THERM results in an efficient ceramic thermal comfort floor.

## Illuminated profile technology

The use of light is an essential factor in the design of room aesthetics and atmospheres. Modern lighting technology offers many options for creative and decorative interior design that go beyond the sole purpose of illumination.

# Learn more online

Would you like to know more about Schlüter-Systems?  
The quickest way is to visit our website.

[schluter.co.uk](https://www.schluter.co.uk)



You can also follow us on Instagram, Facebook and YouTube.



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 971-1261 · Fax: +49 2371 971-1112 · [info@schlueter.de](mailto:info@schlueter.de) · [schluter-systems.com](https://www.schluter-systems.com)

**Schlüter-Systems Ltd** · Units 3-6 Bardon 22 Industrial Estate · Bardon Hill · Coalville · Leicestershire · LE67 1TE

Tel.: +44 1530 813396 · Fax: +44 1530 813376 · [sales@schluter.co.uk](mailto:sales@schluter.co.uk) · [schluter.co.uk](https://www.schluter.co.uk)