# **Creating Living Spaces with Tiles**

System solutions from Schlüter®-Systems



Your competent partner for interior and exterior solutions









Schlüter Systems



### The "Schiene" idea

From "Schiene" to complete systems – Schlüter-Systems KG is a market leader in the sector of tile installation accessories and offers a wide range of innovative ideas and high value products. With over 1100 employees in Europe, the U.S. and seven subsidiary offices, Schlüter-Systems has set national and global standards for solutions used in the installation and processing of tiles and pavers for over four decades.



#### Inventors don't fall from the sky!

When the master tile installer Werner Schlüterwas installing tiles in a bathroom with five doors as a young man, he suddenly thought of a profile he would later call "Schiene." That moment became the start of his highly successful entrepreneurial career.

Inventors don't fall from the sky, but inventions are born from practical experience. Truly successful ideas often are the result of many years of experience, coupled with a healthy dose of creativity. Of course, they always are a reflection of their time as well. Today, the

name of the young tile installer stands for an internationally recognised brand and company. The portfolio of Schlüter-Systems today covers six competency areas with over 10,000 proven solutions for the installation of tiles and natural stone. They range from Schlüter-SCHIENE, the original finishing profile for floor coverings, to complete system solutions for floor level showers and a complete set to build ceramic thermal comfort floors.





#### Technology and design with 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 transition joints.



#### Waterproofing, uncoupling, drainage, and sound insulation

Schlüter-Systems offers practical and proven system solutions for waterproofing, uncoupling, drainage, and sound insulation of tiled coverings. Whether indoors or outdoors, new construction or renovation, you are sure to find the right solution here.



#### Covering assemblies

The Schlüter-BEKOTEC system is a quickly constructed, thin, non-buckling and tension free covering assembly. The heating and cooling components of Schlüter-BEKOTEC-THERM are ideally suited to build effective ceramic thermal comfort floors.



#### **Balconies and terraces**

The Schlüter-balcony system is a comprehensive product assortment of precisely matching finishing profiles and gutters as well as drainage, uncoupling, and waterproofing systems.



#### Tile underlayment, structural panel, bonded waterproofing

The tile underlayment Schlüter-KERDI-BOARD, which is manufactured with a completely unique technology and offers a special focus on the practical requirements of construction sites, provides many new options for installation and design.



#### Electrical surface heating for tiles and natural stone

Schlüter-DITRA-HEAT-E heats individually specified areas with ceramic tile and natural stone coverings quickly and with precise timing. The system also provides uncoupling and waterproofing.



#### Design with light and ceramic tiles

The innovative Schlüter-LIPROTEC illuminated profile technology puts your preferred spaces in the right light. The high-quality LED modules of the elegant profiles create unique accentuated illumination.



# 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 transition joints.





### **Wall Corners and Finishing Profiles**

The profiles of the product series Schlüter-JOLLY, -RONDEC, and -QUADEC create impact resistant and decorative finishing edges of wall coverings and moldings made of tiles and natural stone. Due to the numerous material and colour variations, the creative options are endless. The decorative Schlüter-DESIGNLINE and Schlüter-QUADEC-FS border profiles allow for decorative accents.





#### Schlüter®-JOLLY, -RONDEC and -QUADEC

Schlüter-JOLLY, -RONDEC, and -QUADEC are finishing profiles for external wall corners of tile coverings and offer excellent edge protection. The profiles, which are available in a variety of materials, colours and finishes, allow for a precise colour match of the external edges with the tiles and grout of the covering. As an alternative, they can also be used to create interesting decorative accents.



Schlüter®-JOLLY/-SCHIENE



Schlüter®-RONDEC



Schlüter®-QUADEC



#### Covering edges and stair-nosing profiles

Finishing profiles such as the original Schlüter-SCHIENE are installed at the perimeter of tiled coverings and protect the outside edges of ceramic tile and natural stone coverings from mechanical impact. All Schlüter- finishing profiles for floor areas contribute to the aesthetic and lasting impression of the floor covering.

Stair nosings are exposed to heavy mechanical stresses and represent a high accident risk. Schlüter-TREP profiles offer improved safety due to their slip resistant design and high visibility. They protect stair nosings from damage and ensure that tile coverings on stairs remain fully intact.





#### Schlüter®-SCHIENE

Schlüter-SCHIENE is a special profile that finishes and protects the edges of tiled surfaces. It can also be used in conjunction with other covering materials. The joint spacer defines a joint chamber with the tile.

#### Schlüter®-RENO-U

Schlüter-RENO-U is a profile that provides a stepless transition between floor coverings of different heights. The joint spacer defines a joint chamber with the tile. Schlüter-RENO-EU, -EBU, and -MU do not have a joint spacer.

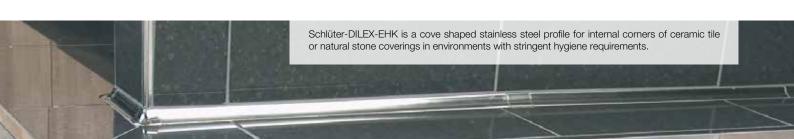
#### Schlüter®-TREP-E

Schlüter-TREP-E is a stainless steel stair nosing profile with a non-slip tread to create safe and attractive stair edges. It is suitable for tile or natural stone coverings, but can also be used with screeds or other coating materials.









### **Movement joints**

The profiles of the Schlüter-DILEX series offer maintenance free and functional solutions for all relevant movement in tile coverings.

The product range includes profile types for structural joints, perimeter joints, intermediate joints and connection joints. The profiles are installed at the same time as the tiles. DILEX profiles are available in various materials, depending on the expected mechanical or chemical stresses of the covering.





#### Schlüter®-DILEX-KS

Schlüter-DILEX-KS is a movement profile with edge protection. The profile's anchoring legs, made of aluminium or stainless steel, are connected to a replaceable movement zone made of soft synthetic rubber.



#### Schlüter®-DILEX-HKS

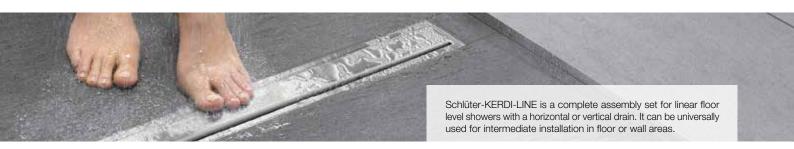
Schlüter-DILEX-HKS is a combination of a stainless steel coveshape and a flexible joint movement profile for the floor to wall transition area of tile coverings. It is particularly well suited for hygienically sensitive areas, which require perfect cleanliness in addition to an appealing visual appearance.





The products Schlüter-KERDI, -DITRA, and -DITRA-DRAIN offer complete system solutions for the installation of tiles and natural stone over substrates in wet or high moisture areas. Furthermore, Schlüter-DITRA-SOUND offers effective sound insulation in renovation projects.





#### Waterproofing and uncoupling

Tile coverings are not waterproof. Moisture can seep through the joints and damage the building structure, which you can effectively prevent with a bonded waterproofing assembly. Schlüter-DITRA and Schlüter-KERDI offers a complete system of matching components for waterproofing. DITRA prevents stresses in ceramic coverings from damaging the assembly and helps avoid cracks in the tile covering. As a passive capillary bonded drainage membrane, Schlüter-DITRA-DRAIN provides ventilation and uncouples the covering from the substrate. Schlüter-DITRA-SOUND serves as a sound insulation for tiled floor assemblies.



#### Schlüter®-KERDI

Schlüter-KERDI is a polyethylene waterproofing membrane with fleece fabric laminated on both sides for anchoring in the tile adhesive. It is especially suitable for tiled waterproofing assemblies on floors and walls.

#### Schlüter®-DITRA 25

Schlüter-DITRA 25 is a polyethylene un-coupling membrane with unique cut-back square indentations and an anchoring fleece laminated on the underside. It is a universal substrate for tile coverings, which serves as an uncoupling layer, bonded waterproofing assembly and vapour pressure equalization layer.





#### Schlüter®-KERDI-LINE

Schlüter-KERDI-LINE is a complete assembly set for linear floor level showers with a horizontal or vertical drain. It can be universally used for intermediate installation in floor or wall areas.

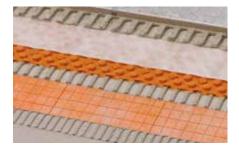


#### Please refer

to our current Schlüter-KERDI-LINE brochure for further details.

#### Schlüter®-DITRA-DRAIN

Schlüter-DITRA-DRAIN is a safe and permanently effective passive capillary drainage system for floor assemblies. The material is installed into thin set adhesive over a sloped waterproofing assembly, such as those produced with Schlüter-KERDI.





## **Ceramic Thermal Comfort Floors – Install the future!**

The Schlüter-BEKOTEC system is a quickly constructed, thin, non-buckling and tension free covering assembly. The heating and cooling components of Schlüter-BEKOTEC-THERM are ideally suited to build effective ceramic thermal comfort floors.







#### Schlüter®-BEKOTEC-EN

Schlüter-BEKOTEC is a reliable assembly system for crack-free and functionally safe floating screeds and heated screeds with ceramic or natural stone coverings. The BEKOTEC screed is also suitable for other cover materials.

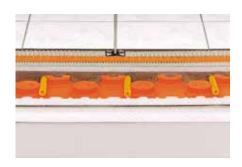
#### Schlüter®-BEKOTEC-EN 23 F

Schlüter-BEKOTEC-F is a safe and especially thin cover assembly system for damage free and functionally safe floating screeds and heated screeds with ceramic or natural stone coverings.

The Schlüter-BEKOTEC screed is also suitable for other cover materials.

#### Schlüter®-BEKOTEC-DRAIN

Schlüter-BEKOTEC-DRAIN is a safe and especially thin cover assembly system for damage free and functionally safe floating screeds in exterior areas with ceramic or natural stone coverings.









No matter whether your floor is covered with tiles, natural stone, or other coverings, Schlüter-BEKOTEC-THERM is always the right choice.





#### **Ceramic thermal comfort floor**

Due to the patented, thin-layer assembly of the Schlüter-BEKOTEC-THERM system, only a small screed volume has to be heated. This ensures the energy efficient operation of the heated floor with low supply temperatures. The even heat distribution below ceramic coverings provided by Schlüter-DITRA 25 results in quick heat release over a large area and creates a comfortable room atmosphere. Dust mites or contaminants have no chance on hygienic surfaces covered with ceramic tiles or natural stone.

#### Save energy and money!

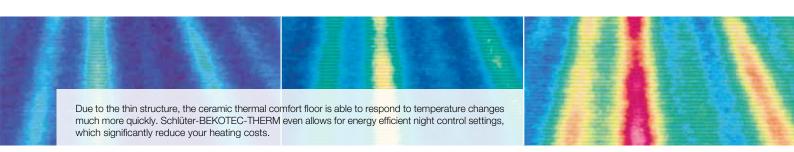


Schlüter-BEKOTEC-THERM is an ideal construction component of modern low-energy houses. The quick responsiveness of the system creates the right temperature in any season. You can enjoy cozy warmth wherever you step in the winter, while the floor provides passive cooling with pleasant barefoot freshness in the summer.

The temperature of the medium that transfers heat to the ceramic comfort floor (e.g. water) is called "supply temperature." It depends on size of the heat-emitting areas and the heating requirement of the corresponding space. In conventional systems, this temperature used to be 70-90 °C. Due to its low supply temperature of approx. 30 °C, BEKOTEC-THERM works very well in conjunction with heat pumps and solar technology, which can heat utility water for bathrooms and kitchens at the same time. However, due to the low supply temperatures of the system, its use with conventional heat sources also protects the environment – and is easy on your wallet!



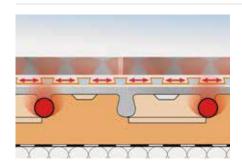




#### Move in faster due to faster construction time

Due to the special construction of the ceramic thermal comfort floor, tiles can be installed on the matching Schlüter-DITRA membrane as soon as the screed is ready to bear weight. This eliminates long waiting periods for screed curing, and the time consuming need to heat the screed for functional testing or curing. In addition, the thin screed requires much less material, which reduces the weight and construction height and saves considerable installation time.

#### **Efficient heat distribution**



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

### **Guaranteed safety...**

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





# Heating advantages

- · No expansion joints in the screed
- Even heat distribution
- Cosy comfort
- Hygienic and healthy
- Easy control options
- · Passive cooling is an option

# **Ecological** advantages

- Night control settings
- Low supply temperature, low heating cost.
- Effective use of renewable energy sources
- Fast reacting heated floor assembly
- Low energy consumption

# Construction advantages

- Low construction height
- Material and weight savings
- Low tension screed assembly
- Crack free ceramic tile or natural stone coverings
- Joint free screeds
- More creative design options
- Short construction time
- Highly durable
- Documented suitability for the defined purpose
- Suitable for all floor coverings



### **Balconies and terraces**

Ceramic tiles are the ideal covering for balconies and terraces. The intelligently designed covering assemblies of Schlüter-Systems allow for permanently beautiful tiles in outdoor areas. We offer everything for balcony construction from A to Z. Whether you would like to renovate your terrace or are preparing for a new spot in the sun... From bonded waterproofing to edge profiles and gutters, the components of with Schlüter-Systems are a perfect match for new construction and renovation projects.



#### Schlüter®-DITRA-DRAIN 4 and 8

is an impact resistant polyethylene mat with a special stud structure on one side and a polypropylene filter webbing laminated on the upper side. It is available with drainage areas of either 4 or 8 mm height.

#### Schlüter®-BARA-RTKE

is a finishing profile with drip lip for installation over finished sloped screeds. It features a T-shaped profile chamber for the attachment of the gutter system Schlüter-BARIN. Schlüter-BARA-RTKE is especially suited for assemblies with the bonded drainage mat Schlüter-DITRA-DRAIN. The perforated outer edges give the exterior perimeter of tiled areas a neat appearance

#### Schlüter®-BARIN

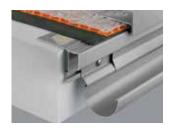
is a gutter system of colour coated aluminium for the drainage of balconies and terraces. It is designed for attachment to the corresponding Schlüter-BARA profiles.

#### Schlüter®-TROBA

is a separation and drainage layer installed over horizontal water-proofing assemblies underneath screeds or crushed stone beds. It consists of a high impact, studded polyethylene foil with openings to the drainage channels. Schlüter-DITRA 25 must be installed for uncoupling and waterproofing if tiles are to be installed on screed layers.





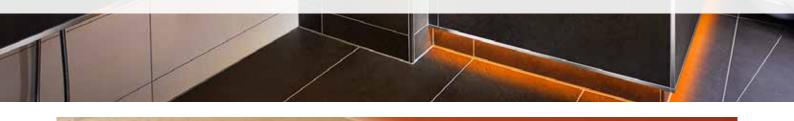






## Reliability in all forms

Schlüter-KERDI-BOARD is an innovative system for the quick and stable creation of perfect tile underlayments. No matter whether you plan to install mosaics, standard tiles or stone pavers, substrates created with KERDI-BOARD are immediately ready for the installation of tiles without the need for further preparatory steps.



- Waterproof and temperature resistant
- Easy to handle
- Vapour retardant
- . Thermally insulating
- Suitable for use on any kind of substrate
- Even, impact resistant, and rigid
- Fleece webbing for anchoring in thin set adhesive
- Free of cement/glassfibre components

- Dust-free and easy to cut (utility knife)
- Imprinted gridlines for precise cutting
- Easy to transport, light weight
- Officially approved for waterproofing assemblies (abP)



Depending on the levelness and characteristics of the existing wall areas, Schlüter-KERDI-BOARD can either be fully embedded in mortar or attached to the substrate with spots of thinset mortar or other suitable bonding mortars, followed by alignment and levelling.



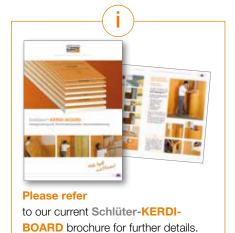
KERDI-BOARD is quick and easy to install as an underlayment for tile coverings over studframe structures of wood or metal, using the screws included in our hardware assortment.



To be suitable for the installation of tiles in thin-set adhesive, the underlayment must be completely level and made of an appropriate, moisture resistant material.

#### Schlüter®-KERDI-BOARD

are structural panels that come in 7 different thicknesses from 5 - 50 mm. Due to the easy handling and the imprinted cutting gridlines, tile installers can assemble any imaginable shape within a short time to create a reliable basis for perfect tile assemblies. Tile installers can warrant this combination of perfect substrate and professional installation without concern. This makes the liability risk more calculable, which is an interesting aspect for tradesmen, but also for developers, architects and designers during contract assignment.





# Schlüter®-DITRA-HEAT-E Electrical surface heating for tiles and natural stone.

Schlüter-DITRA-HEAT-E quickly heats individually specified areas with ceramic tile and natural stone coverings with precise timing. The system also provides uncoupling and waterproofing.



# Pleasantly warm spaces in exactly the right place. When and where you want. With Schlüter®-DITRA-HEAT-E

Schlüter-DITRA-HEAT-E is a system for electrical surface heating that quickly creates comfortably warm spaces in walls and floors. The special characteristic of the system is that heating cables are installed individually in the uncoupling mat. This offers optimal freedom for defining the areas to be heated. A digital thermostat connected to an integrated temperature sensor offers precise control for easy and accurate adjustment of the desired temperature.

Thanks to the low assembly height of just 5.5 mm (uncoupling membrane incl. heating cables), DITRA-HEAT-E is ideally suited for retrofitting, making it an intelligent solution for renovation or restoration projects in floor areas. Since it relies on the proven DITRA technology for uncoupling, the system can also be installed on critical substrates such

as wood flooring, green screeds, or cracked substrates, as the mat will cover cracks that are up to 2 mm wide.

The low assembly height, combined with the excellent thermal conductivity of ceramic tile and natural stone, ensures that the gentle radiated heat quickly reaches the surface and is distributed evenly.

Moreover, DITRA-HEAT-E is officially approved as a bonded waterproofing assembly with tile or natural stone coverings. Tradesmen appreciate the simple installation of the system that is durable and maintenance-free as well as cost-effective to purchase and install. Convenient complete sets are available in different sizes for the quick installation of the system. They contain all required system components in pre-cut lengths and sizes.





#### Advantages at a glance

- Quick surface heating with precise control
- Individual specification of heated zones
- Uncoupling with proven DITRA technology
- Officially approved as a bonded waterproofing assembly
- Pleasant room climate thanks to gentle radiated heat
- Quick and easy installation
- Low assembly height is ideally suited for upgrade projects
- No wear and tear, making the system maintenance-free and durable
- Cost-effective to purchase and install
- Practical solutions with complete sets
- Low-cost operation with time control

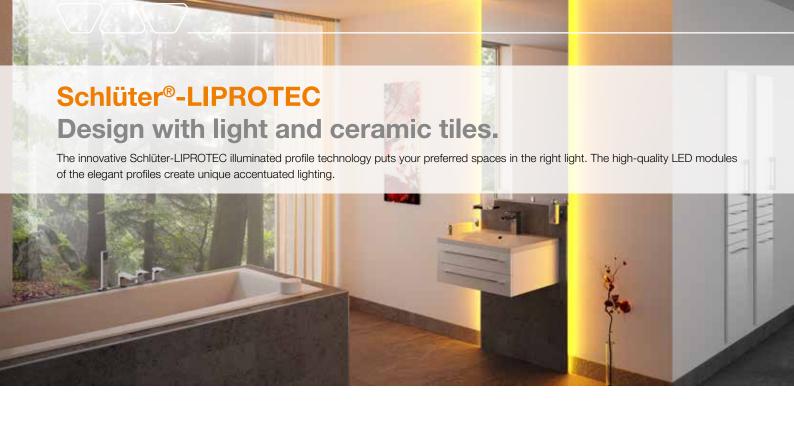


#### What are suitable uses of the electrical heating system?

Schlüter-DITRA-HEAT-E is designed as a supplementary heating system, for example for:

- √ Heating tiled floors in living rooms and bathrooms to supplement full-scale heating systems (barefoot zones)
- ✓ Buildings with very low heating energy needs (e.g. passive energy homes) as a backup
- √ Temporary heating of buildings that are only occupied occasionally, e.g. weekend homes
- ✓ For additional comfort, for example to heat the wall of a floor-level shower

Because of the higher operating costs, the electrical floor heating system is not suitable to serve as a full-scale heating system. In those cases, effective surface heating with the ceramic thermal comfort floor Schlüter-BEKOTEC-THERM is recommended.



# Create your individual room ambience with Schlüter®-LIPROTEC illuminated profile technology.

Schlüter-LIPROTEC is a system for elegant accent lighting with LED modules integrated in high-quality aluminium profiles. The energy-saving lighting technology is durable and efficient, making it an ideal fit for sustainable construction.

The high-quality LED strips generate particularly homogeneous light. In addition to a choice between direct and indirect lighting, you can select four different light types: warm white, neutral white, white with adjustable colour temperature, and coloured RGB light with over 16.7 million colours. The latter can be conveniently controlled with a Bluetooth receiver and a free app via a smartphone or tablet.

Support profiles are simply installed in the tile adhesive with the corresponding diffuser lenses subsequently clipped on. The program comes with a complete range of system accessories, including cables, power supply units, receivers and switches. The illuminated profile technology is therefore available from a single source.

LED strips are IP 65 certified for exposure to moisture, which makes them an ideal fit for use in bathrooms. Convenient complete sets with pre-cut components are available for many installation solutions such as illuminated bathroom mirrors or back-lit wall panels, with endless creative choices.











### Advantages at a glance



- Energy-efficient lighting technology for sustainable construction durable
- and efficient.
- Uniform homogeneous light reflection with high-quality LED strips.
- Four types of light the choice is yours.
- High-quality aluminium profiles now also available with a stainless steel look.
- Easy installation of profiles.
- IP65 certified LED strips making them suitable for high-moisture areas.
- Online selection aid at www.liprotec.co.uk.

### Ready, set, go!

To make the set-up and installation of the individual LIPROTEC illuminated profile technology even easier, you can choose from a number of convenient sets for different applications. They contain all components in pre-cut lengths for quick installation. The innovative LED illumination can be set up in staircases, along wall panels or for mirrors and decorative areas with ease.







# Information. For those who want to know more!

Did we attract your interest in the products of Schlüter-Systems? For those who want to know more, online information is easily accessible. For further details please visit <a href="https://www.schluter.co.uk">www.schluter.co.uk</a>.





PROFILE OF INNOVATION

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