



Schlüter Systems

INNOVATIVE PROFILES

# » 10 strong arguments in favour of tiled living spaces...«

# Tile coverings are warm!

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





# Tile coverings are 6 exclusive!

High value ceramic tiles increase the aesthetic appeal of any room: tile coverings come in many variations thanks to individual installation patterns and new designs.

# Tile coverings are quiet!

Music from a stereo system or a party: tiles and a sound insulation layer block the noise.





# Tile coverings are 7 durable!

Once installed, they are of durable beauty: ceramic tiles are subject to virtually no wear and tear.

# Tile coverings are hygienic!

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





# Tile coverings are 8 long-lived!

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

# Tile coverings are fireproof!

Ceramic tiles are fire resistant: neither cigarette ash nor open flame can harm them.





# Tile coverings are 9 comfortable!

Living room, kitchen, bedroom: tiles are suitable for the entire house, from the attic to the cellar.

# Tile coverings are easy to care for!

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





# Tile coverings are 10 economical!

Tile coverings are long-lived, hygienic, and easy to care for, which makes them a great economic value over the long term.



# »...permanently beautiful and free of damage with system solutions by Schlüter-Systems! «



# Finishing profiles on the floor

Finishing profiles such as the original Schlüter®-SCHIENE form a clean border for tile coverings and protect the edges of ceramic and natural stone coverings from mechanical impact. Schlüter®-RENO profiles create a stepless transition to adjoining floor coverings. All of our finishing profiles for the floor area contribute to an aesthetic and lasting appearance of the floor covering.







# **Corner profiles and connectors**

The profiles of the series Schlüter®-JOLLY and -RONDEC create an impact resistant and decorative finishing for wall coverings and skirtings made of tile and natural stone. Thanks to the numerous material and colour variations, there is no limit to creativity with these profiles. Together with the decorative DESIGNLINE border profiles, Schlüter-Systems has everything to let you set the right design accent.







# Stair nosing profiles

The edges of stairs are frequently subject to heavy mechanical impact and pose a high risk of accidents. Thanks to their slip resistant design and high visibility, Schlüter®-TREP profiles allow for better safety. They protect the stair nosings from damage and ensure that tile coverings on stairs remain free of damage.







# Movement and control joint profiles

The profiles of the Schlüter®-DILEX series offer maintenance free and functional solutions for all relevant types of movement joints in tile coverings. The product portfolio includes profile types for control joints, movement joints, expansion, and edge joints. All profiles are installed at the same time as the tiles. Our DILEX profiles are available in various materials, depending on the expected mechanical or chemical stresses on the covering.

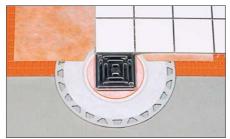






# Waterproofing and uncoupling mats

The Schlüter®-DITRA uncoupling mat neutralises tensions between the substrate and the tiles. In addition, Schlüter®-DITRA is waterproof and protects the substrate from moisture as a waterproofing layer in tiled floor assemblies, e.g., when tile coverings are used in wet rooms or on balconies and terraces.







# **Balcony and terrace constructions systems**

The Schlüter® balcony system is a completely coordinated, modular product assortment to create complete solutions in balcony and terrace assemblies with ceramic tiles and natural stone. The system includes the Schlüter®-TROBA drainage products, Schlüter®-DITRA uncoupling and waterproofing mat, and Schlüter®-BARA profiles for balcony edges. The Schlüter®-BARIN gutter system and Schlüter®-KERDI-DRAIN floor drains are compatible and can be installed for water drainage.





# »...permanently damage free with Schlüter®-BEKOTEC-THERM: the ceramic thermal comfort floor!«

Schlüter®-BEKOTEC-THERM is a safe, modular floor assembly technique with low construction height. In conjunction with the corresponding heating and control technology, the construction results in an energy-efficient, quick-responding radiant floor heating system with especially low water temperature requirements.

The heating pipes are clamped between the studs of the studded BEKOTEC panels in the required grid spacing. Then, screed is applied to cover the studs and pipes with a layer of at least 8 mm and up to 25 mm in thickness. Movement joints or reinforcement bars are not required in the screed. As soon as the floor is ready to bear weight, the Schlüter®-DITRA uncoupling mat can be applied, immediately followed by the installation of the tile covering in the thin-bed method.

This construction, which has been registered as an international process patent, has been proven to be free of curling and cracks in practical applications. In terms of heating technology, the relatively small volume of screed and the closeness of the heating pipes to the surface make the assembly especially responsive to temperature changes. Thanks to the interconnected air channels of the Schlüter®-DITRA mat below the tiles, the floor system achieves quick and even temperature distribution. This makes Schlüter®-**BEKOTEC-THERM** a quick reacting ceramic thermal comfort floor, which can be operated efficiently with very low water temperature requirements. Other cover materials (e.g., carpet, parquet, or laminates) may be installed over the BEKOTEC screed as well.

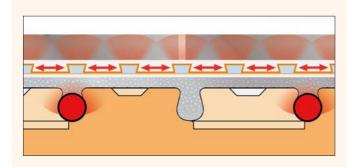


The combination of innovative heating and control technology with the BEKOTEC-THERM construction results in the modern ceramic thermal comfort floor.

# » Even heat distribution thanks to interconnected air channels!«

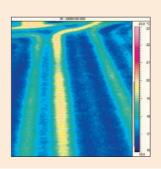
### The principle of BEKOTEC heat distribution:

The open air channels on the underside of the Schlüter®-DITRA mat allow for an even distribution of heat across the entire area of the ceramic thermal comfort floor.



#### After 20 minutes:

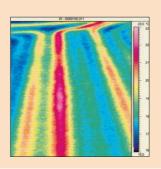
The heat has spread over the entire area, radiating from the zones above the heating pipes.





# After 40 minutes:

The cold zones have disappeared in most areas. The entire ceramic thermal comfort floor radiates a pleasant heat.





# » The sum of all benefits speaks for the ceramic thermal comfort floor!«

## The Schlüter®-BEKOTEC-THERM

ceramic thermal comfort floor is an effective, easy to construct, modular floor assembly, with low construction height and short construction times, suited for both new construction projects and the refurbishment of older buildings.

# Schlüter®-BEKOTEC-THERM: construction benefits

#### Low construction height

- Schlüter®-BEKOTEC-THERM can be installed with construction. heights starting at 52 mm plus covering.
- This results in a wide range of application options for new construction and refurbishment.

#### Material and weight savings

- Due to the low screed mass, the weight of 1 m³ of screed is only 57kg.
- Compared to conventional heated screeds, a reduction of 37 mm in screed thickness saves 3.7 m³ of screed mortar with the weight of approximately 7.4 t over an area of 100 m<sup>2</sup>.
- . This has a positive impact on the static calculations of new construction or refurbishment projects
- The building is also spared the corresponding amount of moisture.

#### Screed construction with low tension

- Tensions in the screed are reduced through the regularly structured network of microfine cracks in the studded pattern of the BEKOTEC panels.
- The screed does not buckle due to internal tensions.
- · No constructive reinforcement is necessary

#### No screed joints

· The tensions in the screed are evenly reduced across the entire area. Therefore, it is not necessary to divide the screed into fields with movement joints.

#### More design options

• Free choice of movement joints in the joint pattern of the ceramic covering over Schlüter®-DITRA, since the joints from the screed don't have to be carried over.

• Schlüter®-DITRA can be installed as soon as the screed is ready

#### **Short construction** periods

- to bear weight, followed by the tile covering. For gypsum-based screeds, the residual moisture should be approximately 2%, . No warm up or cure heating is required.
- No CM measurements to determine residual moisture.
- Less material, therefore quicker installation.

# Crack free ceramic or natural stone

• The low tension screed construction and uncoupling properties of Schlüter®-DITRA make sure stresses are not transferred to the

#### Highly durable

. Loads in private and commercial buildings of up to 5kN/m² are no problem (additional insulation must be able to sustain the corresponding pressure).

# Proven suitability

- · Damage free practical application for several years.
- Numerous reference projects.
- · Test certificates from independent institutes

# Schlüter®-BEKOTEC-THERM: heating benefits

#### Quick reacting radiant heated floors

Even distribution

 The low screed mass allows for quick control response. e.g. when lowering the temperature at night.

ceramic covering allow for an even distribution of heat.

• The interconnected air channels of Schlüter®-DITRA below the

of heat

Low supply temperature,

• The even, quick, and large scale heat performance is highly efficient. low heating cost

Effective for the utilisation of renewable energy sources

- Easy to control
- The effective heating performance with low supply temperatures translates into a high degree of efficiency, e.g. for heating pumps or solar equipment.
- The optimised control technology allows for accurate temperature settings
- Electronic (230 V, 24 V) or wireless controls offer the right solution for all building situations.
- Comfort level
- The mild radiation heat of the floor as a "large-scale heating element" makes for maximum comfort.

Sanitary and healthy

- . The heated, dry floor areas don't give insects such as mites a chance.
- . The evenly distributed radiation heat prevents the formation of fungi or the distribution of spores.
- Ceramic tile and natural stone coverings are especially easy to

Cooling

· With the corresponding technology, basic cooling is also an option.

