

THOMSIT

make it!



EASY RETROFITTING OF UNDERFLOOR HEATING SYSTEMS

Efficient solutions for use in renovation

www.thomsit.com





WARM FEET WITH THOMSIT

Underfloor heating systems are well known for creating a feeling of cozy warmth and also offer convincing energy efficiency. However, in old buildings, the height available for systems is limited and the installation of underfloor heating may pose a challenge. This is where THOMSIT system solutions come into play – they represent a simple, efficient approach for retrofitting underfloor heating systems. Thanks to perfectly harmonized products, the installation of these special structures can be accomplished easily and does not call for any complex conversion work with long drying times.

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GRASP THE OPPORTUNITY

with retrofitted underfloor heating

More and more owners of old buildings are opting for energy-saving rehabilitation work. The options available range from the comprehensive thermal insulation of facades to advanced, energy-efficient heating systems. The potential for flooring specialists is enormous. A smart combination of low-energy heating technology with optimum flooring design offers the perfect solution for energy and cost savings.

To date, the potential available in most old buildings has remained untapped and retrofitting work is called for. The floor is the key to a solution. Heat can be distributed evenly over the entire surface using retrofitted heating systems.

What benefits does underfloor heating offer?



Evenly distributed, pleasant warmth with a low flow temperature



Significant energy and cost savings as a result of low flow temperature



Efficient distribution of heat via floor surfaces

When does retrofitting makes sense?

- Complete renovation
- Installation in individual rooms (e.g. bathroom, living room)
- Partial retrofitting to support existing heating system (e.g. under desks in offices).

Note: When retrofitting a heating system, it is important to consider the thermal insulation of the entire building in order to avoid heat losses.

What possibilities are available for retrofitting an underfloor heating system?

- There are three main types of underfloor heating systems that can be retrofitted: warm water heating systems in milled screeds, electric underfloor heating systems and low-profile warm water heating systems.
- The main differences between the three systems concern the installation procedure and the resulting characteristics of the system.
- The appropriate system should be selected after consulting a specialist as the heating system output required needs to be calculated.

What must be taken into consideration in connection with the retrofitting of an underfloor heating system?

- The height of the heating system relative to neighboring areas needs to be considered.
- A wide variety of different floor coverings may be combined with an underfloor heating system. However, the recommendations of the floor covering manufacturers must be followed.

RETROFITTED MILLED SCREED UNDERFLOOR HEATING

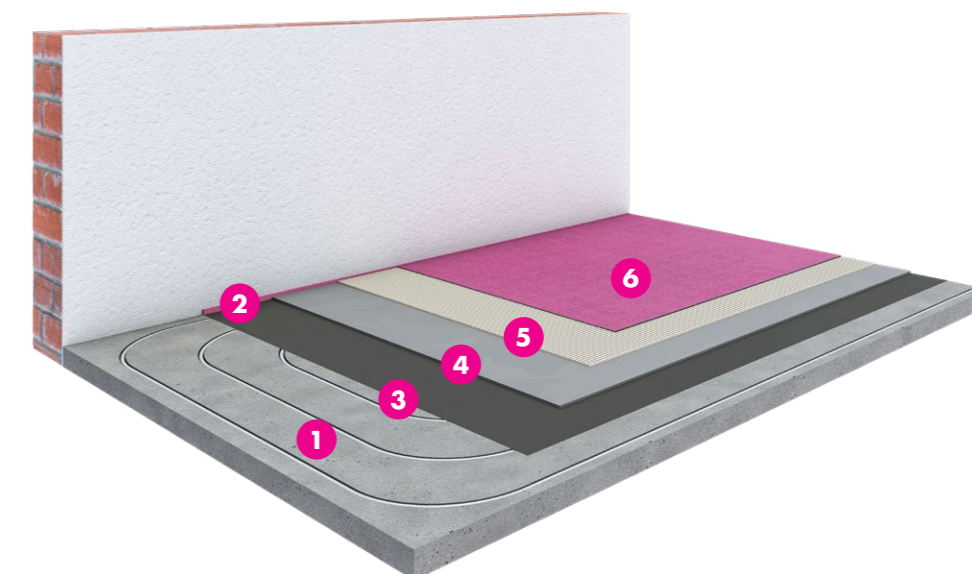
in cement and calcium sulfate screeds

A fast, effective solution for old screeds with suitable preparation:

- On cement and calcium sulfate screeds that are sufficiently thick and strong
- Energy renovation of floors in private and commercial buildings
- The low height of the system allows adaptation to neighboring surfaces (e.g. at staircases)



System recommendation:



- 1 Load-bearing existing screed**
With underfloor heating installed in retroactively milled grooves
- 2 THOMSIT TRD 5 – self-adhesive edge insulating strips**
For preventing sound transmission at wall/floor interface
- 3 THOMSIT R 790 – filling primer**
For filling joints and preparing surfaces for THOMSIT leveling compounds

- 4 THOMSIT XXL POWER – premium leveling compound**
For leveling up to 20 mm in a single application
- 5 THOMSIT T 410 – AQUATAACK carpet adhesive**
For all textile floor coverings
- 6 e.g. textile floor covering**
Approved by manufacturer for use on warm water underfloor heating systems

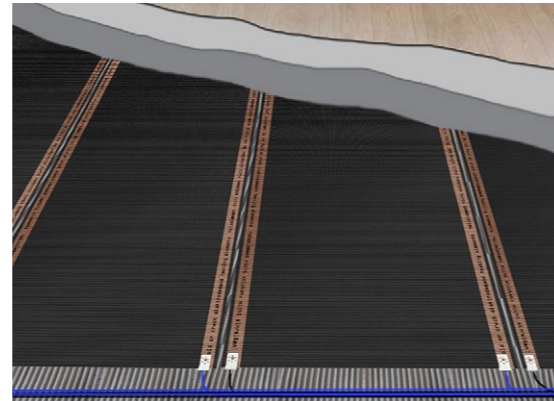
*You will find further information on processing and consumption in the latest technical data sheets at www.thomsit.com

ELECTRIC UNDERFLOOR HEATING

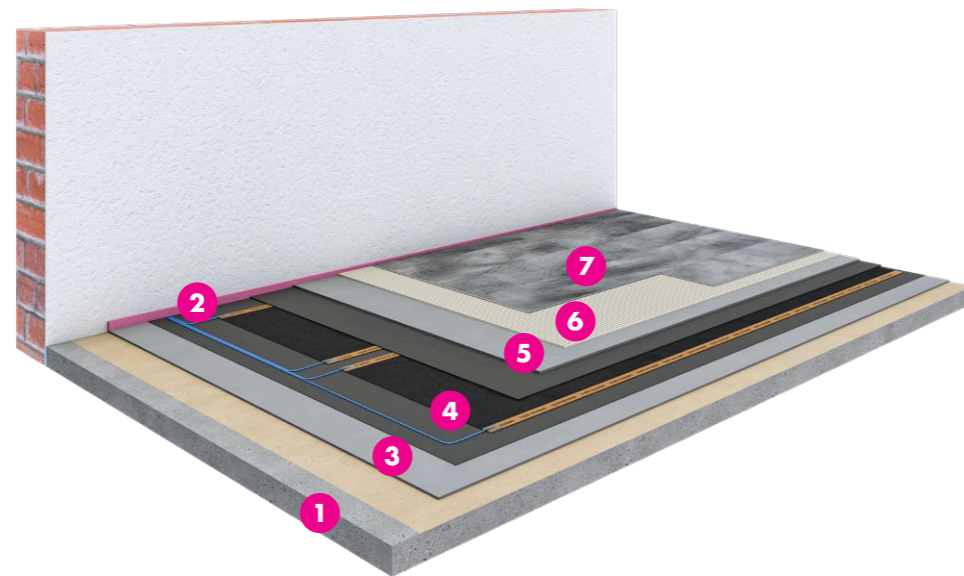
on existing substrates

A fast solution and an alternative to warm water underfloor heating:

- Can be installed on almost any existing substrate, e.g. on screeds or old tiling
- Energy renovation of floors in private and commercial buildings
- Can either be installed as a full-scale space heating system (e.g. in low-energy or passive houses or as an additional heating system for warming the floor)
- Rapid coverage of heat demand for users



System recommendation:



1 Existing surfaces (e.g. cement or calcium sulfate screed, old tiling)

Prepared with THOMSIT R 766 multi-purpose primer

2 THOMSIT TRD 5 – self-adhesive edge insulating strips

For preventing sound transmission at wall/floor interface

3 THOMSIT XXL POWER – premium leveling compound

For leveling up to 20 mm in a single application

4 Electric underfloor heating system

Installed with THOMSIT R 790 filling primer

5 THOMSIT XXL XPRESS – rapid leveling compound

5 mm layer for the protection of heating elements and for the distribution of loads and heat

6 THOMSIT K 190 F – fiber-reinforced PVC and rubber flooring adhesive

For elastic floor coverings

7 e.g. vinyl design coverings (LVT)

Approved by manufacturer for use on electric underfloor heating systems

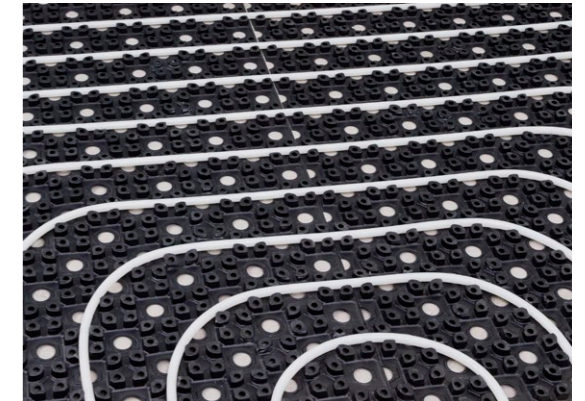
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LOW-PROFILE WARM WATER UNDERFLOOR HEATING

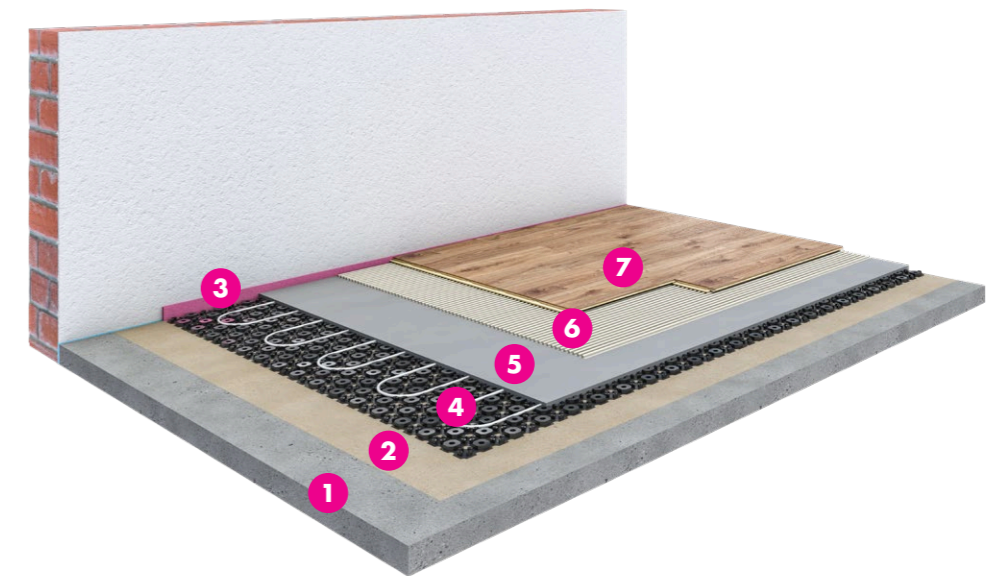
on existing substrates

The direct solution for existing buildings:

- Can be installed on existing substrates, e.g. on screeds or old tiling
- Energy renovation of floors in private and commercial buildings
- Low energy consumption as heating pipes are installed near the surface



System recommendation:



1 Existing surfaces

e.g. cement or calcium sulfate screed, old tiling

2 THOMSIT R 766 – multi-purpose primer

As a bonding agent for THOMSIT leveling compounds

3 THOMSIT TRD 5 – self-adhesive edge insulating strips

For preventing sound transmission at wall/floor interface

4 Low-profile warm water underfloor heating system

5 THOMSIT DS 40 – thick-layer leveling compound

For 3 – 40 mm layers in one application

6 THOMSIT P 680 ELAST STRONG – hard elastic adhesive

For laying all types of parquet flooring

7 e.g. solid or multi-layer parquetry

Approved by manufacturer for use on warm water underfloor heating systems

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Your competent partner for flooring technology