

FERMACELL Flooring Elements (25 mm)

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FERMACELL with UnderFloor Heating (UFH) Systems

Special FERMACELL 25 mm flooring elements are designed for use in conjunction with underfloor heating (UFH) systems as a load distribution layer as well as a substrate for the final floor finishes. The ability of the FERMACELL system to provide a continuous floating membrane with minimal thermal resistance as a dry system combines the benefits of speed of installation, reduction of water loading on the building and fast response times that are unavailable by other means.

The floor heating, normally based on warm water systems, must be designed by the manufacturer for use under dry flooring.

Areas of Application:

- Living areas, corridors and attics in residential applications.

Permitted 1 kN pointloading:

- Loadbearing surface of > 1000 mm², separation of loads > 500 mm.

Designated heating systems:

- Systems with heat sources in formed insulation, for example tracked Polystyrene (PS 30 SE) or PU boards. The horizontal distribution of heat is provided by special diffuser plates. The Flooring elements lay directly on top of and are fully supported by the heating layer.
- Systems with climate control boards (Chilled floors).

Electrically operated heating systems (e.g. heating elements embedded in an adhesive bed) are not suitable for use with FERMACELL Flooring Elements.

The design of the system must be such that the temperature underneath the FERMACELL Flooring should not exceed 45° Celsius.

Installation note:

The preparation of the structural floor is described in the FERMACELL Flooring Instruction Manual. If, for site reasons, additional layers must be added to the structural floor, it is important to ensure that these have a suitable loadbearing capability. When UFH systems are to be laid on FERMACELL Levelling Compound, an additional layer of FERMACELL 10 mm wallboard must be laid between the FERMACELL Levelling Compound and the UFH System.

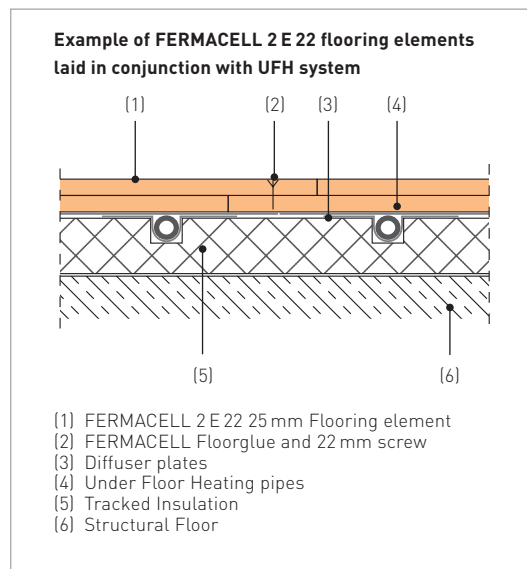
Permitted insulation types:

- Expanded Polystyrene PS 30 SE (density > 30 kg/m³) overall thickness of insulation layer < 90 mm.
- Extruded rigid plastic foam insulation (density > 33 kg/m³) overall thickness of insulation layer < 90 mm.

The insulation must be of the same thickness throughout.

If the flooring has to span larger cavities – where a number of heating pipes are bunched together close to the heating system manifold, for example, additional support for the FERMACELL flooring elements must be provided.

The recommended method – taking into account the requirements of heat conservation – is to fill such cavities with FERMACELL levelling compound. The heating pipes and diffuser plates must be laid so that the floor above them lies completely flat. Diffuser plates and panel-type heating elements must not be bent or distorted in any way. Further advice is available from the FERMACELL Technical Department.



For detailed instructions on installing FERMACELL flooring please refer to the FERMACELL Flooring Instruction Manual

Further information can be found in the FERMACELL Flooring Instruction Manual under the section marked "Packing up and levelling floors with additional thermal insulation".

Other construction details and technical information sheets are available from XELLA.

This publication contains detailed instructions for the correct installation of FERMACELL dry flooring elements.

We reserve the right to make changes in the interest of technical improvement.

All information correct as at 08.03

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