

Tiling onto electrical under-tile warming mats (wooden substrates)

Highly polymer-modified adhesives and grouts, such as **weber.set rapid SPF** and **weber.joint wide flex** have enough flexibility when set to accommodate

the thermally-induced movements associated with under-tile warming on timber substrates. **weber.niv dur** can be used to protect the warming elements

prior to tiling and also helps stabilise movement in the floor.

Products required

weber.niv dur
weber PR360 or **weber PR301**
weber.set rapid SPF or **weber.set SPF**
weber.joint wide flex, **weber SL450**

Stage 1: Preparation

Ensure that the floor is rigid, sound, clean, dry and free from any contaminating barrier.

The wooden floor must be capable of supporting the expected dead load and probable dynamic load, without excessive deflection. Additional strength can be provided, where necessary, by taking up the existing boards and stiffening with noggings.

Alternatively, the required rigidity can be achieved through overlaying the existing timber boards with either WPB plywood or tile backer board.

Plywood should be at least 18 mm thick, primed on the reverse face and edges with **weber AD250** and screwed every 300 mm. MDF, chipboard or floorboards must be overlaid with 18 mm plywood before under-tiling warming products can be used.

All joints between boards should be filled with **weber SL450** silicone sealant to prevent leakage during application.

Stage 2: Under-tile warming

Install the under-tile warming system in accordance with the manufacturer's instructions and test that it works. Allow to cool.

weber.niv dur levelling compound can be used to help stabilise the floor, raise the floor level and/or protect the cables if necessary. The face of the plywood should be primed with **weber PR301** and allowed to dry. Warming elements must be covered by a minimum of 3 mm. Allow 3 hours before foot traffic.

Alternatively, the cables can be protected by covering them with a solid layer of flexible adhesive using a rubber trowel. This should be allowed to cure.

Stage 3: Fix the tiles

Fix the tiles with **weber.set rapid SPF** or **weber.set SPF** and allow to cure before grouting. If natural stone is being used, **stoneset** adhesives should be used.

Grout the joints with **weber.joint wide flex** and allow 24 hours before traffic.

Stage 4: Allow to cure

Keep the warming system turned off for at least 5 days to allow the cement to cure. Bring the system up to its operating temperature gradually in stages over a few days.



For detailed instructions, please refer to the relevant product data sheet. For further information, please contact our Technical Helpline on 01525 722137.

Tiling onto under-floor heating pipes (solid substrates)

Normally, piped heating systems are installed on top of insulation and buried in a reinforced cement/sand floating screed of not less than 65 mm thick. If a polymer-

modified levelling screed is used it must cover the pipes by a minimum of 10 mm. Highly polymer-modified adhesives and grouts such as **weber.set rapid SPF** and

weber.joint wide flex have enough flexibility when set to accommodate the thermally-induced movements associated with under-floor heating pipes.

Products required

weber.niv floor, **weber.niv plus** or **weber.niv dur**
weber PR360 or **weber PR301**
weber.set rapid SPF or **weber.set SPF**
weber.joint wide flex

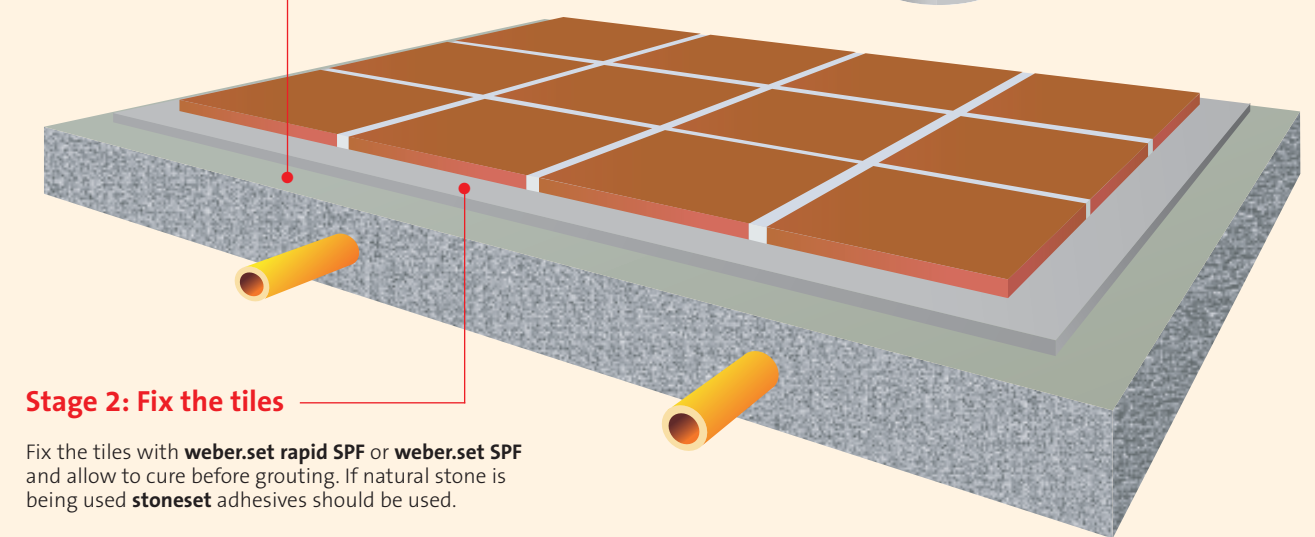
Stage 1: Preparation

The heating pipes should be installed according to manufacturer's instructions, fixed down and tested prior to being encapsulated in a screed or levelling compound.

If the pipes have been laid in a reinforced cement/sand screed this must be allowed to dry fully prior to tiling. A sand/cement screed should be left for 3 weeks with the under-floor heating off, to dry. After this period the heating system should be turned on and the temperature raised by a maximum of 5°C/day until the maximum recommended operating temperature is achieved. This temperature should be maintained for 3 days and then the system turned off and the screed allowed to cool to 15°C before tiling commences.

If a suitable polymer-modified levelling compound is used to cover the pipes instead of a cement/sand screed, the drying time will be considerably shorter (see **weber.niv** data sheets).

Ensure that the cured surface of the floor is rigid, sound, clean, dry and free from any contaminating barrier. Porous or dense substrates must be primed with **weber PR360** and impervious surfaces with **weber PR301**. Allow to dry for a few hours.



Stage 2: Fix the tiles

Fix the tiles with **weber.set rapid SPF** or **weber.set SPF** and allow to cure before grouting. If natural stone is being used **stoneset** adhesives should be used.

Grout the joints with **weber.joint wide flex** and allow 24 hours before traffic.

Stage 3: Allow to cure

Keep the warming system turned off for at least 5 days to allow the cement to cure. Bring the system up to its operating temperature gradually in stages of 5°C/day.



For detailed instructions, please refer to the relevant product data sheet. For further information, please contact our Technical Helpline on 01525 722137.