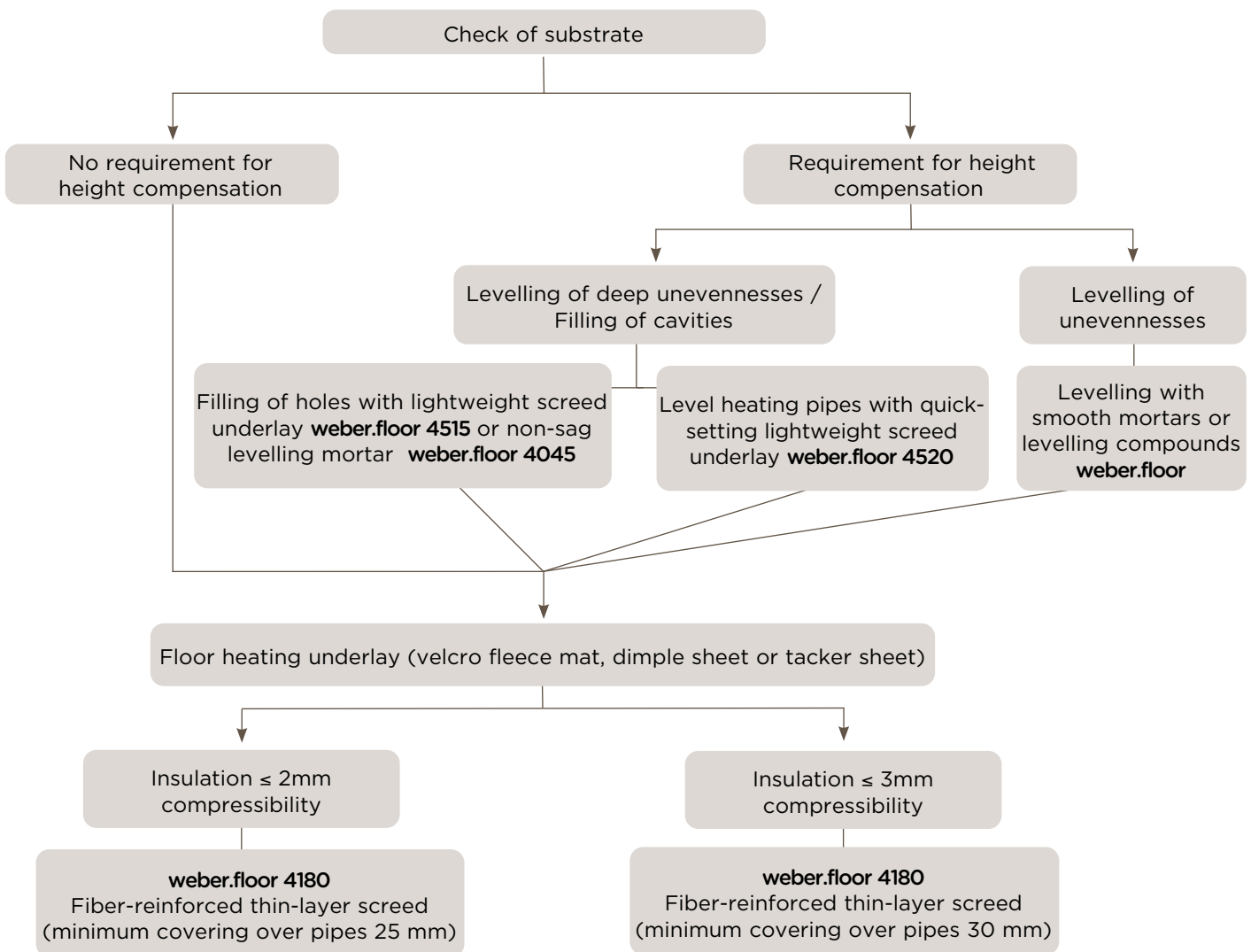
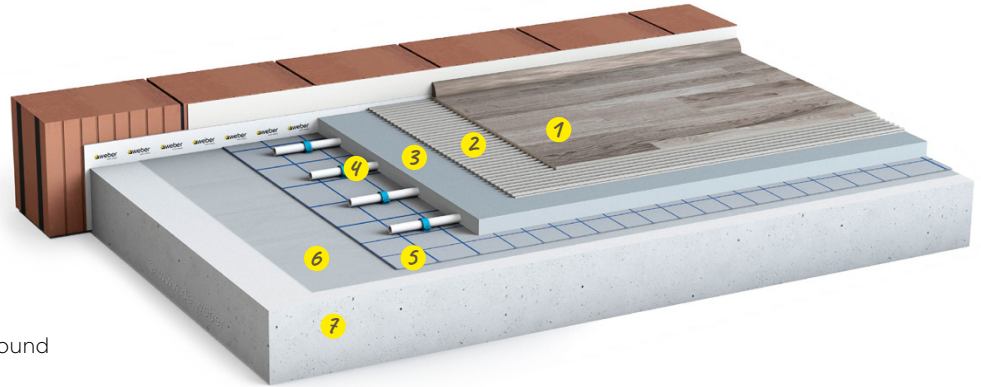


Application fields:

Thin-layer heating floor on tacker sheets (with anchor clips) / dimple sheets or on velcro fleece systems with the fiber-reinforced thin-layer heating screed **weber.floor 4180**.

System set-up:

- 1 New flooring
- 2 **weber.floor** flooring glue
- 3 Thin-layer heating screed **weber.floor 4180**
- 4 Water-fed underfloor heating floor
- 5 Underlay for heating floor
- 6 Eventually levelling with **weber.floor** smoothing mortar or levelling compound
- 7 Load-bearing construction



Working instructions

Substrate preparation

The substrate must be convenient for the laying of floating screeds. In case of uprising damp appropriate waterproofing measures must be taken.

Prior to laying step-resistant insulation boards, separating membrane or dimple sheets, the substrate must be egalized, if necessary. Remove all loose materials.

Fill deeper cavities and holes with the normal-setting lightweight screed underlay **weber.floor 4515** or the non-sag levelling mortar (trowel-grade) **weber.floor 4045** or similar.

In case of pipes on the floor the height differences between all the pipes at first must be compensated with the quick-setting lightweight screed underlay **weber.floor 4520**.

Unevennesses must be egalized with a **weber.floor** smoothing mortar or levelling compound. The goal of the substrate preparation is to provide a full-surface underlay for the insulation boards.

When planning an underfloor heating system, pay attention that the whole floor surface is heated in a uniform way. Otherwise, heated and non-heated areas and different heating circuits must be separated by movement joints, except in kitchen areas or under cupboards in a width up to 80 cm. A foam strip (≥ 8 mm thickness) must be installed along walls and all upstanding construction parts (pillars, columns etc.).

Movement joints must be installed:

- between separately controlled heating circuits, and between cold and warm areas
- in case of contiguous surfaces $> 60 \text{ m}^2$ and side length of $> 10 \text{ m}$
- in case of special building features and special room geometry (room dividers, wall recesses, doorways, different screed thicknesses etc.)
- over existing movement joints

Application of the fiber-reinforced thin-layer heating screed **weber.floor 4180**

The underfloor heating (if necessary, also the insulation boards) must be installed by a professional company. After their installation **weber.floor 4180** is applied. In case of floating constructions, the compressibility of the insulation boards must not exceed 3 mm. If their compressibility is ≤ 3 mm, it must be ensured that the covering of the pipes with **weber.floor 4180** is at least 30 mm. If their compressibility is ≤ 2 mm, the minimum covering of the pipes can be reduced by 5 mm, so that the covering

of the pipes with **weber.floor 4180** is at least 25 mm.

Covering maturity of **weber.floor 4180**

After 48 hours start the functional heating. Generally, the covering maturity is reached at the end of the functional heating (with all heating and cooling periods).

weber.floor 4180 is ready for covering when its residual moisture content has reached a value of 0.5% (by weight). Use a carbide hygrometer for the measurement.

Further notes / documents:

Note that hairline cracks can occur due to the building geometry and the substrate condition. These cracks represent an optical failure and have no detrimental influence on the bonding strength and load-bearing capacity of the floor. For floor covering with ceramics a system-compliant flexible cement-based tile adhesive like the multi-use flexible tile adhesive **weber.xerm 861** should be used. For any other floor coverings use the appropriate **weber.floor** flooring glue.

The thin-layer underfloor heating constructions described in this recommendation sheet are special designs for floors. Therefore, the screed thicknesses may deviate from the minimum layer thicknesses specified in the standards.

The allowed traffic load (variable or moving load on the floor) is maximum $\leq 1 \text{ kN/m}^2$ and the allowed area load is maximum $\leq 2 \text{ kN/m}^2$. The allowed pipe diameter is 12 - 16 mm.