



Development and production: Hans Loss, A 6900 Bregenz www.lithotherm-loss.at

LITHOTHERM<sup>®</sup>

# Installation instructions for floor heating with LITHOTHERM FORM PLATES



# Before laying the LITHOTHERM form plates, carry out the following work:

Fit commercially available edge strips and smooth out unevenness on the floor, if necessary, using chippings or similar ballast material... Position insulating boards, observing level and height (min. compressive strength of the insulating boards should be 600 kg/m2, lay load distributing panels on insulating board, if necessary). If insulating ballast is used, also lay overlapping 2 x 1 cm thick soft fibreboards. A 1 to 2 cm thick soft fibreboard is laid on wooden beam ceilings with a flat surface, for impact noise insulation. (if necessary, install a vapour barrier – consult the architect)

The surface must be flat and firm.

#### VARIANT 1 for floor coverings: floating parquet, tiles, natural stone slabs, adhesive parquet.



# Laying the LITHOTHERM form plates

Start laying the LITHOTHERM form plates in one corner. Slide the first plate against the edge strip with one side touching and maintain a 7 cm gap between the face of the plate and the wall. Engage the second plate at a 9 cm distance from the wall. Lay row by row at alternating distance. Continue laying from the corner, in the shape of a triangle. The spacing at the face of the plates serves to accommodate the return bends and manifolds for the heating circuit distributor. A gap of approx. 3 - 4 cm may also be created parallel to the grooves for this purpose, between the boards and the wall.

The LITHOTHERM aluminium composite tubes are then laid. Depending on the requirements for heating, the distance between the tubes is 9 cm / 13.5 cm, increasing in steps of 4.5 cm. Fill recesses at the edges and in the doorways with quick-drying screed or bound dry filling.

#### Floor covering: lay floating parquet

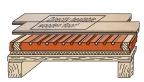
Lay carpeting or cork matting, then lay parquet (laminate) by a well-known method.

#### Floor covering: tiles, natural stone slabs, adhesive parquet

Lay down fibre glass netting with 1 – 2 mm mesh size onto the LITHOTHERM form plates and distribute flexible adhesive without pressing, using a serrated trowel, and then spread smoothly. After the surface has dried to the touch, lay down the floor covering in conventional patterns. Include expansion joints in the floor covering, perpendicular to the heating tubes.

Floor covering: industrial floors, see further documentation.

#### VARIANT 2 for floor coverings: floorboards, ship's floors, slat floor, nailed parquet floor, carpet, cork flooring, plastic flooring and sports floors on firmly anchored profile strips.



#### Laying the LITHOTHERM form plates

Start laying the LITHOTHERM form plates in one corner. Place the profile strip against the edge strip and push the first plate firmly against the profile strip, leaving a gap of approx. 7 cm on the face side. Lay 5 to 6 plates in the first row, then firmly press the second profile strip in position. Lay the remaining rows leaving a gap of approx. 7 cm between the wall and the face of the plates. Continue laying in the shape of a triangle, until the entire area is covered. The gap at the face of the plates serves to accommodate the

of a triangle, until the entire area is covered. The gap at the face of the plates serves to accommodate the return bends and manifolds to the heating circuit distributor. A gap of approx. 3 – 4 cm may also be created between plates and wall for this purpose, parallel to the grooves. If the profile strip between plates and wall cannot be firmly wedged, glue in position with building adhesive.

Lay the LITHOTHERM aluminium composite tubes immediately after completion of the LITHOTHERM floor. Depending on the required heating, the distance between the tubes is 9 cm / 13.5 cm etc., in steps of 4.5 cm. Fill recesses at the edges and in the doorways with solid dry filling.

## Floor covering: deal flooring, ship flooring, slat flooring and nail parquet

Lay LITHOTHERM form plates with LITHOTHERM profile strips as described above (see drawing also). The wooden floors are now nailed or screwed to the firmly anchored LITHOTHERM profile strips.

## Floor covering: carpeting, cork flooring, plastic floorings and sports flooring

Lay LITHOTHERM form plates with LITHOTHERM profile strips as described above (see drawing also). Then screw an OSB board with tongue and groove, 12 mm thick, to the LITHOTHERM profile strips. Glue down the floor coverings or lay floating. Fill recesses at the edges and in the doorways with solid dry filling. (allow for expansion of the wooden parts) For sports floors, place an elastic foam layer underneath the LITHOTHERM form plates (Getzner company).

# Floor covering: industrial floors, see further documentation.

## ATTENTION!

The newly laid LITHOTHERM floor may be walked on only by persons working on the flooring. Thoroughfares must be covered with firm boards during installation.

The LITHOTHERM formed boards must be checked for dryness before the flooring is laid. The material moisture content as a percentage of the dry weight (specific weight of LITHOTHERM form plates 1.3) should not exceed 10-12% when laying wooden floors. Measuring methods, CM or electronic. Wooden flooring must be acclimatised to ambient conditions well before laying. Installation instructions must be closely observed. System insurance cover was taken out on behalf of the customer to assure guarantees as required by law. Warranty claims and insurance cover are only valid if the installation instructions are strictly followed. (Ensure that only original LITHOTHERM accessories are used!)