

## UNDERFLOOR HEATING SYSTEM WITH PLY FINISH:

Material: [LAVA MOULDED TILE].

Supplier: [BACK TO EARTH (SW) LTD, 7 Tuns Lane, Silverton, Devon. EX5 4HY, Tel:- 01392 861763]

- Product reference: [Lithotherm Underfloor heating tiles, Lithotherm timber profiles].

Thickness: 45mm.

Preparation: Ensure that the surface of the concrete slab is clean, dry and flat. Any protrusions should be removed by grinding down or applying a levelling screed to the surface. Lay insulation and ensure insulation boards form a flat, level surface with no rocking movement when load applied. All voids should be filled as per insulation suppliers recommendations and perimeter insulation fitted to the surface of the wall to allow movement in the perimeter of the system.

Installation requirements:

- Lay a continuous run of Lithotherm timber profile along the two walls that will be parallel with the tile grooves. Timber profiles should stop short of the wall/perimeter insulation by around 20mm to allow for pipes to run around the ends.
- Starting with a full tile placed 100-120mm away from the wall perpendicular to the grooves and abutting the timber profile, lay the Lithotherm tiles in rows with the tiles firmly butted up to each adjacent tile.
- Working towards the centre of the room from both walls, lay alternate rows of Lithotherm tiles and timber profiles until the centre row is reached which will require a cut tile and should have the timber profile on both sides of the row.
- Cut the tiles to fit neatly between the two timber profiles.
- The tiles should not be walked on during installation, except by the installer and only when necessary. Lay boards over the tiles to prevent damage if access is required.
- Once complete, the pipes can be installed in loops of around 100m (roughly equivalent to 10m<sup>2</sup> of tiles). The pipe should run from the flow side of the manifold to the tiles and be laid in every 4th groove, starting with the first. Pipes can be bent by hand at the end of each run.
- Once the 50m point is reached on the pipe (identified by the length markings on the sidewall of the pipe) then the pipe should return in between the first set of pipes laid, at the same spacing, so that once complete every second groove is filled.
- Once all the pipework is installed and pressure tested fill the voids around the perimeter of the tiles, including the pipework, with a dry-mix cement screed, flush with the surface of the tiles.
- Screw fix T&G ply to the battens, ensuring screws are finished flush or slightly below the surface of the ply. The surface is then ready to receive carpet or vinyl/linoleum finish.

For more information on installation please contact Back to Earth (SW) Ltd or see the online installation guide at <https://www.youtube.com/watch?v=yxZhFy46BC4>.