

# Installation Instructions - Timber Suspended Floor (Heat Emission Plates)

Pipe Dimensions	9.9mm PEX	12mm PEX	16mm PEX	✓	16mm MLC	✓	20mm PEX	✓
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## Siccus Heat Emission Plates

Uponor have developed various heat emission plates (HEP's) to suit many timber floor applications. There are 4 plate sizes suitable for Uponor pipes, as follows:

### HEP300

For use with timber suspended or battened floors with joists/supports at 300mm centres. 20mm PEX pipe only.

### HEP400

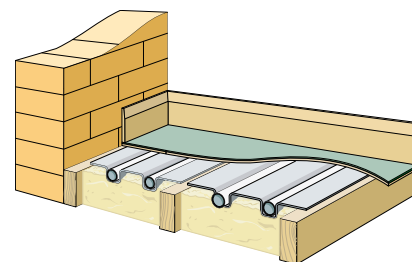
For use with timber suspended or battened floors with joists/supports at 400mm centres.

### HEP411

For use with sprung timber floors with battens spaced at 411mm centres, such as Junckers Unobat and Blubat Sports Floor Systems, suspended or battened floors with joists/supports at 411mm centres. 20mm PEX pipe only.

### Insulation

It is essential that insulation is installed between the joists, as close to the underside of the plates as possible.



Typically, a minimum 100mm of mineral wool insulation is used, however, where relevant, the insulation used must comply with current Part L and Part E (England & Wales) of the Building Regulations.

The relevant Building Standard codes for other countries are as follows:

**Northern Ireland - Technical Booklets F (Conservation of Fuel and Energy) and G (Sound).**

**Republic of Ireland - Parts L (Conservation of Fuel and Energy) and E (Sound)**

**Scotland - Sections 6 (Energy) & 5 (Sound).**

Item	Product code	Dimensions (m)	No. of pipe tracks	Plates/pack	*Pack Coverage (m <sup>2</sup> )
HEP400 (16mm)	1034365	0.38 x 1.15	Two	28	15.3
HEP300 (20mm)	1009132	0.28 x 1.15	Single	40	16.0
HEP400 (20mm)	1034492	0.38 x 1.15	Two	20	11.0
HEP411 (20mm)	1034491	0.405 x 1.15	Two	20	11.8

\*Equates to approximately 80% floor coverage

## Installation of Siccus Heat Emission Plates



- The plates are for heat distribution only and are not structural. They are easily damaged and it is very important that no other trades are allowed where the UFH is being installed. The heat emission plates normally cover approximately 80% of the floor area. Plates should never touch each other, as they expand when heated and can create noise. Plates are only laid under straight runs of pipe.
- Ensure all insulation and the necessary battening work is installed and complete, prior to laying of the plates. If cross battening, this is best achieved using 25mm x 100mm battens. Leave the ends of the battens loose so that the pipe loop can be laid beyond the end of or under the cross batten. Fix batten ends before laying floor.
- Lay the heat emission plates across the joists without fixing, leaving a gap between the ends and sides of each plate. Check to ensure appropriate number of plates are evenly spread out across the entire area before fixing.

Lay the first plates at each end of the room, leaving a minimum 300mm space (16mm) and 450mm space (20mm) space from the wall edge, to enable the pipe to bend 180 degrees around.

Thereafter space the plates out evenly ensuring gaps between plates are at least 10mm but less than 100mm. Use any sections of plates in the middle of the room.

- When the plates have been laid on the first row of joists, fix these into position and repeat the process for the remaining joists.
- Careful consideration should be given to the location of plates around the manifold area and along feed pipe routes, where the UFH pipes congregate together, cross joists at right angles and are non standard pipe centres.

### Cutting Plates

The plates are scored  $\frac{1}{3}$  from one end of the plate and at  $\frac{1}{3}$  from the other and are easily split along these score lines. Keep the pipe groove uppermost and sharply break the plate over a straight edge. If different lengths are required, score the plate deeply with a Stanley knife and cut along the pipe groove with a hacksaw.

Clean off the burrs in the pipe groove to prevent damage to the pipe.