

Fact Sheet 4 Floating Floors

This increasingly popular type of floor can be laid onto any existing base and is an alternative to a screeded floor. The floating floor reduces the weight of the building structure, provides better insulation against sound and gives a soft floor effect when compared to a screeded floor.

The pre-grooved polystyrene panels are cut as necessary and laid butt-jointed onto the base to cover the entire floor area. Heat emission plates are pressed into pre-formed grooves in the polystyrene panels, spaced at 300mm centres. The pipe is then walked into the plates. After pressure testing the system, the floor deck is floated on top.

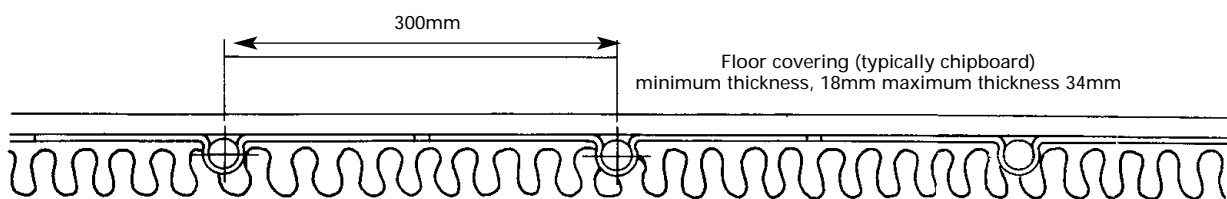
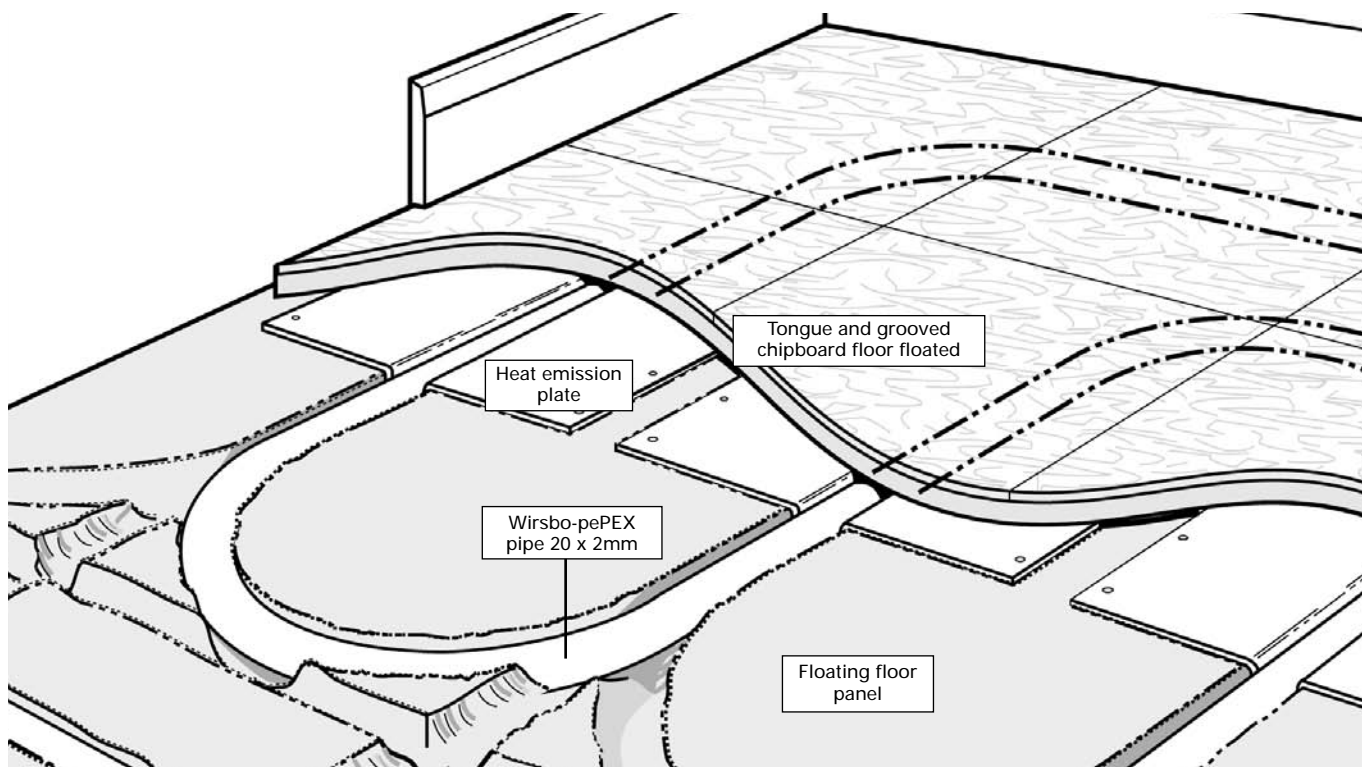
Floating Floor Panels

Dimensions	1200mm x 1200mm
Thickness	30mm, 50mm, 70mm
Compressive Strength	70 KN/m ² at 1% nominal strain
Thermal Conductivity	0.033 W/m°C

Note: 50mm panels are supplied standard. Other thicknesses are available on request. 30mm panels are used only where minimum increase in floor height is allowed. 70mm panels are available where extra insulation depth is required.

Heat Output

The maximum heat output available will be approximately 70W/m² with a floor temperature of 26°C and a design air temperature of 20°C. This output should be checked against the heat losses of the building given by the Architect and/or consulting engineer. This is particularly important in refurbishments and rooms with large glazed areas and/or high ceilings.



Materials	Supplied by		Installed by	
	Wirsbo	Others	UFH Installer	Others
WIRSBO-pePEX pipe	✓		o	o
Pipe bend supports	✓		o	o
Heat emission plates	✓		o	o
Manifold components	✓		o	o
Insulation pre-formed grooved EHD/N polystyrene: (thickness 30, 50 or 70mm)	✓		o	o
Controls	o	o		✓
Polythene membrane		✓		✓
Floor deck/finish		✓		✓
Flow and return to manifold		✓		✓
Boiler		✓		✓
Timer/programmer		✓		✓

Key: o denotes optional items which can be offered by Wirsbo or by UFH installer on request.

Installation Guide

The following important points are offered as a guide when using Wirsbo underfloor heating in floating floors:

1. The base should be flat and clear of sharp objects. A polythene membrane to act as a moisture barrier may be laid if required.
2. The pre-formed EHD/N polystyrene panels should be laid to give the required pipe layout. Where "cut-outs" have to be made to accommodate pipes this can be done using a "hot wire" tool or alternatively a sharp knife.
3. Lay out all the heat emission plates in the required configuration prior to pressing them into the grooves in the polystyrene panels. This ensures that the appropriate quantity of plates are evenly set out across the entire area. Plates are scored so that they may be easily separated into sections if required.
4. The system should be pressure tested prior to and during the laying of the floor deck.
5. The usual type of floor deck is tongue and grooved, either flooring grade chipboard or pre-finished stripwood (minimum thickness of 18mm, maximum thickness 34mm).
6. The floor deck is floated over the system, i.e. it is not fixed. Ensure that all floor joints are glued along the tongue and groove. It is necessary to leave a small expansion gap between the floor deck and the walls according to floor manufacturer instructions.
7. Carpet fitters should take care when fitting grips and bars, especially in doorways. Equal care should be taken when fixing any furniture to the floor.