

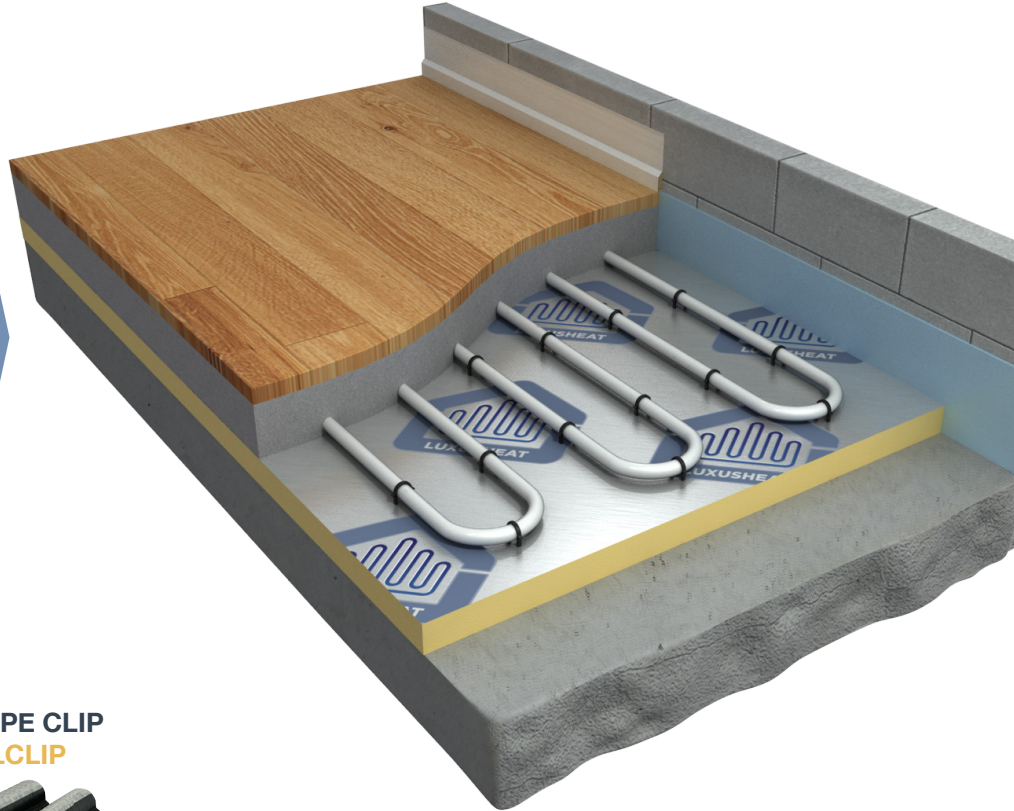


## Floor Construction - FC1 A&B

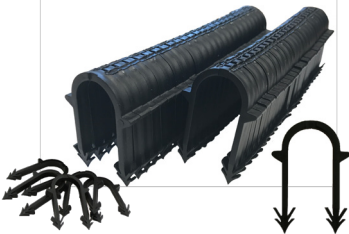
### Pipe Clips - Screed

#### KEY BENEFITS >>>

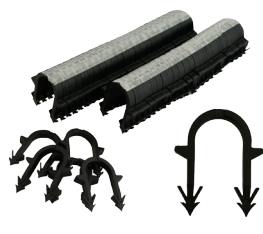
- > Can be used with a staple gun for quick installation
- > Can be fixed directly to insulation
- > Less expensive installation due to less fixing materials
- > Good for irregular shaped rooms
- > Best efficiency with Heat Pumps
- > Low water temperatures
- > Suitable for all floor finishes



✓ LONG PIPE CLIP  
50mm 50LCLIP



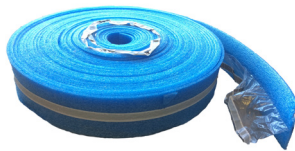
✓ SHORT PIPE CLIP  
40mm 40LCLIP



✓ CONDUIT PIPE 50m  
50CONDUIT



✓ EDGE INSULATION  
50m 50MEDGE



✓ STAPLE GUN  
STAPLEGUN



✓ PIPE DECOILER  
DECOIL



#### < OVERVIEW

Solid floor constructions are one of the simplest, most cost effective ways of installing UFH. The pipes are laid on insulation then covered with screed which acts as a large heat conductor. There are two types of screed that can be used over the pipes; traditional sand/cement or specialist Anhydrite flow screed.

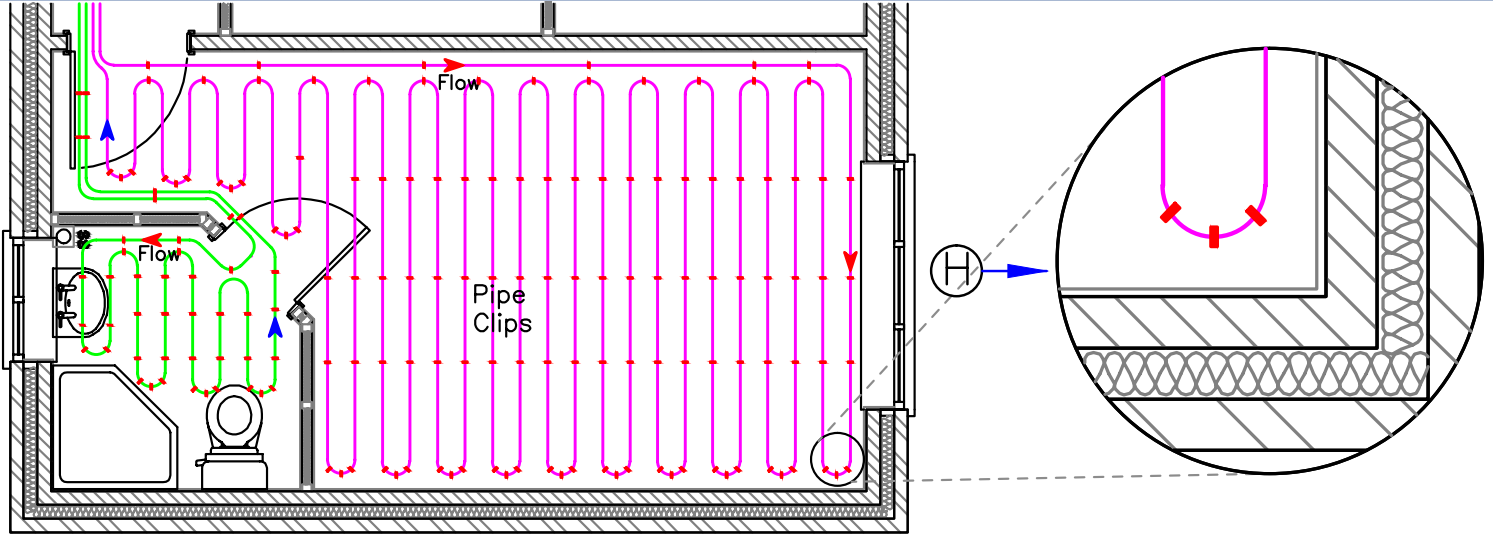
Where the pipe is laid on insulation with sand/cement the optimum screed depth is 65mm for domestic and 75mm for commercial applications. The same situation with an Anhydrite screed will only call for a nominal screed thickness of 50-55mm.

- Best suited for Firmopress multilayer pipe 16x2mm
- Maximum outputs: -100w/m<sup>2</sup> - Stone/tile/carpet  
70w/m<sup>2</sup> - Timber floor finishes
- Flow temperatures 40 - 50°C
- BS EN1264 UFH design on request.



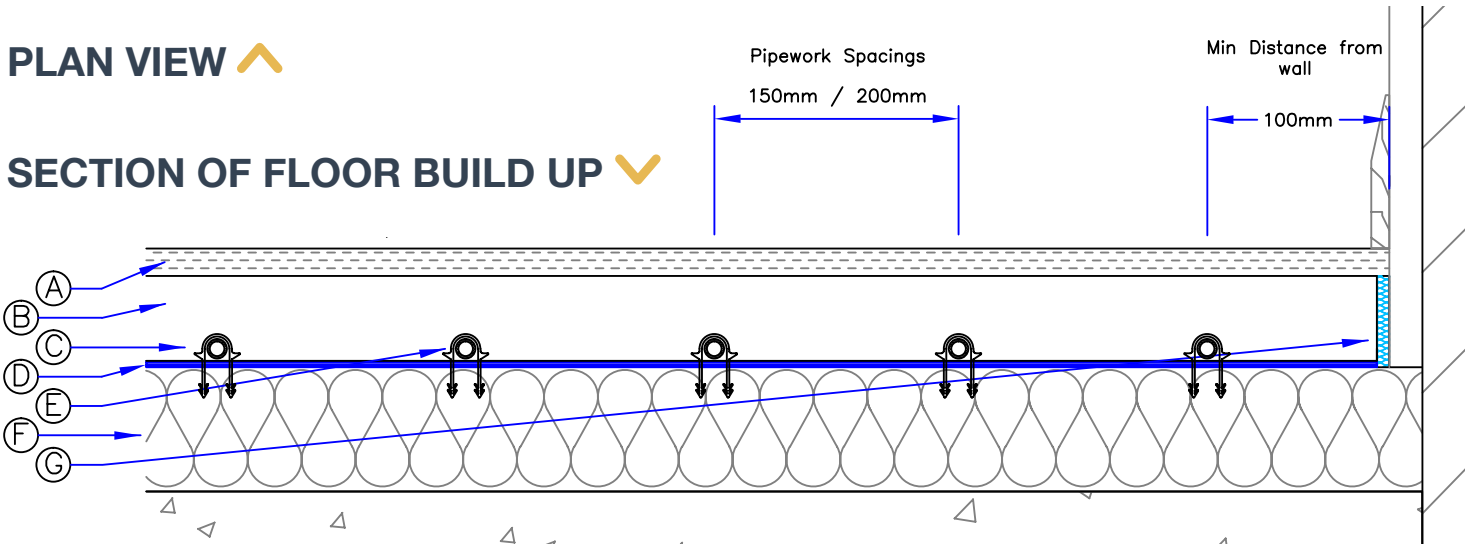
# Floor Construction - FC1 A&B

## Pipe Clips - Screed



### PLAN VIEW

### SECTION OF FLOOR BUILD UP



- A** > **Floor Finish.**
- B** > **Screed** - Traditional Sand/Cement 4:1 65-75mm depth. Liquid Screed 55-65mm depth.
- C** > **Pipe Clips** - Secured using a pipe clip staple gun at every 500mm.
- D** > **Protective Vapour Layer** - It is essential to prevent the screed from slipping between the insulation board joints. This can be achieved by taping the joints of the insulation or alternatively using a polythene membrane (in addition to builders DPM).
- E** > **UFH Pipe** - Lux Pert-Al-Pert or FlexiPex 16mm Heating Pipework laid at 200mm / 150mm c/c's as specified in quotation and laid approximately 100mm away from walls.
- F** > **Insulation** to comply with Part L of the Building Regulations.
- G** > **8mm Edge Insulation** with self adhesive backing must be positioned around all wall edges to reduce heat loss and take up screed expansion.
- H** > **Pipe Clip** for securing pipe on the bends and in localised areas so pipework is securely fixed to the insulation.



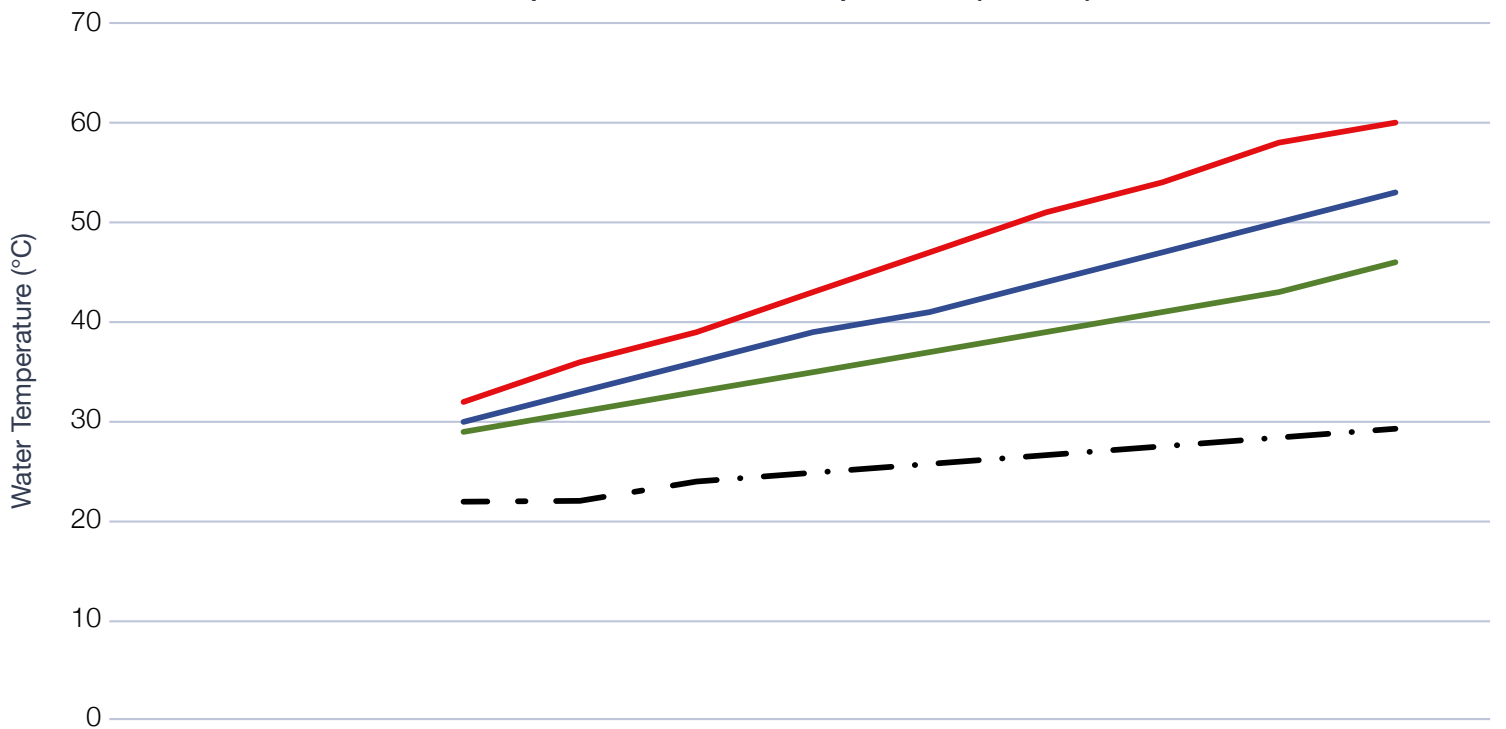
# Floor Construction - FC1 A&B

## Pipe Clips - Screed

### OUTPUTS/WATER TEMPERATURES & FLOOR COVERINGS >

The available output of the system will vary depending on the overall resistance of the floor finish. Based on a Design room temperature of 20°C & 7.5K ΔT. The table below is for guidance only and actual outputs and temperatures may vary.

Heat output / Flow water Temperature (Screed)



Output w/m²

	20	30	40	50	60	70	80	90	100	Water Temp (°C)
Tile / Stone	29	31	33	35	37	39	41	43	46	
Laminate / Vinyl	30	33	36	39	41	44	47	50	53	
Carpet	32	36	39	43	47	51	54	58	60	
Floor Temp	22	22	24	25	26	27	27	28	29	