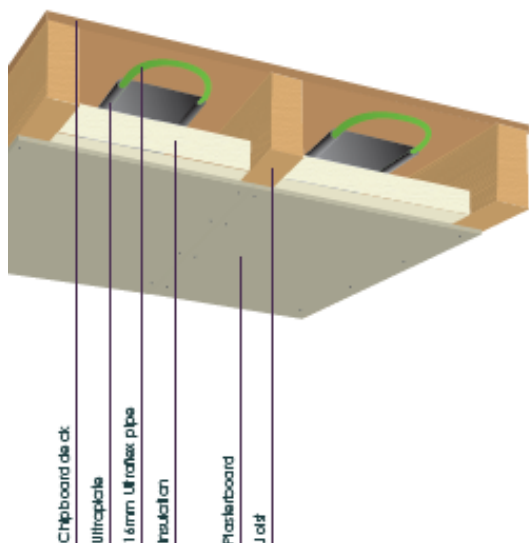


UltraPlate

Underfloor heating for intermediate floors in new build properties only



UltraPlate

Lightweight aluminium UFH solution for timber suspended first floor applications, installed from below or above.

UltraPlate is a lightweight aluminium spreader plate that evenly distributes the heat over the floor. The plate can be installed from below before the ceilings are up or can be installed over the joists before floorboards are laid.

Using this system ensures that there is no height build up above the existing joists.

Mi-Heat recommends that this system is only used for intermediate floor applications or over an existing or new heated space below. In most situations, this system will only be suitable for new build properties or extensions where very good levels of insulation exist.

Installed From Below

UltraPlate has been carefully produced so that the UFH can be installed from below after the floorboards have been fitted.

Self-tapping screws (supplied) are used to secure the diffuser plates in place, and the tube is held in place by pushing the pipe into the rolled in edges.

This is in keeping with modern construction methods as most homes that are built today are of timber construction. This means that site safety is greatly improved and provides the lateral strength for the timber before the outer brickwork is completed.

Installed From Above

UltraPlate can also be installed from above before the floorboards have been fitted. They are secured in place by the self-tapping screws supplied.

Before installing the floorboards, the diffuser plates each side of the joists should be slightly angled upwards to ensure that the plates remain in contact with the timber boards.

Insulation

Current building regulation specifies 100mm of mineral wool insulation is required on intermediate floors. This is for reducing sound not for thermal properties.

Manifold

The Mi-Heat manifold is made from stainless steel with connections to 14mm UltraFlex pipe. Every loop has one connection for the flow and one for the return. Each manifold comes with a 3 bar pressure gauge, as well as two

temperature gauges to ensure the 10°C temperature difference between the flow and return rails on the manifold. Each manifold also comes with two filling and venting valves.

Floor Coverings

Virtually any floor covering can be used, however the best is those that have little resistance to heat transference, such as stone, ceramic tiles and laminate flooring solutions.

Engineered wood flooring is also an excellent choice, and because of its laminate construction, it is very stable.

Greater care should be taken when using solid wood flooring, which should have a low moisture content. Before installation, natural wood needs to be acclimatised to the climactic conditions in the property. For any wood flooring, a floor sensor maybe required to protect the floor from overheating and keeping the surface temperature to a maximum of 27°C. This floor sensor is supplied by Mi-Heat once the floor coverings are known.

Vinyl is also another popular choice, as well as resin floors, and again a floor sensor will be required to keep the floor temperature to a maximum of 27°C.

Carpets can be used but the Tog value, when combined with an underlay should be no greater than 2.5 togs.

If the system is powered by a heat pump rather than a traditional gas or oil-fired boiler, greater restrictions apply as the flow temperature is much lower, usually 45°C rather than 55°C.

Mi-Heat Warranties and Insurance

Manufacturer's warranty: All UltraFlex pipe supplied by Mi-Heat is covered by a 50-year warranty, the first 10 years are insurance-backed.

Product liability: Mi-Heat maintains product liability insurance to £5 million.

Professional indemnity: Mi-Heat designs are an integral part of the operational effectiveness of the UFH system therefore Mi-Heat holds professional indemnity insurance of £5 million to cover all aspects of our design services.