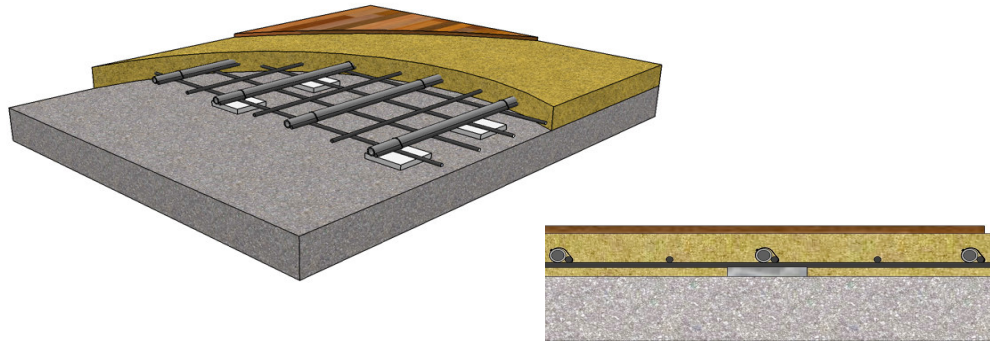


## **Solid Floor Constructions**

**Data Sheet 2A**  
**Solid Base – Pipe on Mesh**



### **Structural Floors – Pipe on Mesh**

The actual floor construction will be dependant on the structural requirements of the floor.

A typical floor construction is shown with the principal elements of the floor structure and the underfloor heating pipe work positioned within it.

The sub-base usually consists of two layers, compacted or consolidated hardcore which will have a sand blinding layer on top. A damp proof membrane (DPM) is laid over the sand blinding to stop moisture transferring into the concrete base.

Insulation is then laid to reduce downward heat loss, the thickness and or the necessity to include insulation is determined by building regulation requirements.

To prevent the concrete penetrating or damaging the insulation a vapour barrier / protection layer such as Visqueen is laid on top of the insulation.

Reinforcing bars are then positioned within the structure normally 1/3 from the bottom and 1/3 from the top surface dependant on the overall slab thickness.

USL Underfloor Heating Pipes are then cable tied to the reinforcing structure to the pre-designed centres.

Underfloor heating generally operates to its optimum outputs within a 150mm structural slab.

This method of fixing underfloor heating pipework to a mesh grid can also be used within a traditional sand and cement screed floor structure.