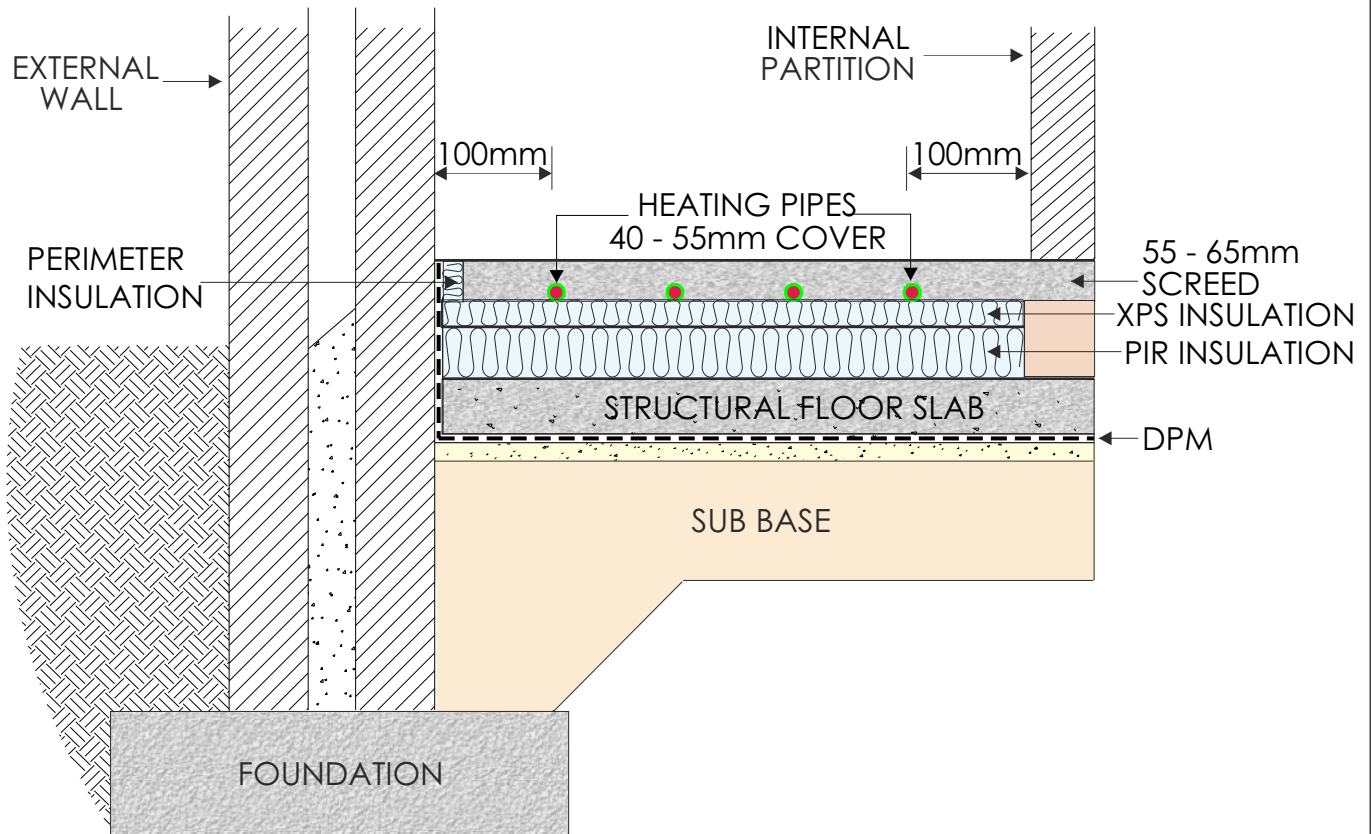


PIPE INSTALLATION WITHIN A SCREEDED OR BEAM & BLOCK FLOOR



A concrete sub-base is poured and the construction of the house may then continue right up to second fix before the pipes need to be installed. insulation should be used with a u-value to suit building regulations. The pipes are attached to the XPS insulation and a minimum 55 mm liquid screed is poured around the pipes to give at least 40 mm cover over the pipes. This gives good thermal conductivity with a good response time for the end user.

Liquid screeds provide an excellent self-levelled finish, and are recommended over a conventional concrete screed. A waterproof membrane must be installed above the insulation prior to installation of the floor pipes. If a membrane is not used, the liquid screed will penetrate the gaps and float the insulation. The total thickness of screed should not exceed 65 mm.

IMPORTANT: Do not use full thickness lightweight foil-faced insulation such as Kingspan or Celotex as the core structure/compressive strength is not strong enough to hold the insulation clips. We recommend a **combination of 120 mm PIR and 50 mm high density rigid XPS** insulation using the XPS as a top layer. Products such as Danosa Danopren TR XPS, Sundolitt XPS, Ravatherm XPS X 300 SB, Polyfoam Floorboard, Collecta Hexatherm Xfloor, or similar, are suitable. Top layer insulation must have a compressive strength of at least 200 kPa. A total of 170 mm insulation and 55 mm liquid screed helps to avoid the cutting of blocks to allow the passage of the UFH pipes from one space to another.

Beam and block construction may be used in place of a structural concrete floor slab.

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