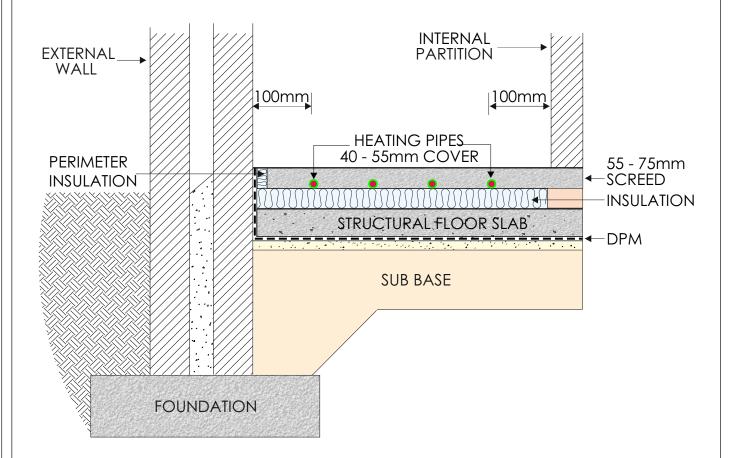
## PIPE INSTALLATION WITHIN A SCREEDED OR BEAM & BLOCK FLOOR



This technique is preferred by many builders. 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. **High density** extruded polystyrene should be used with a u-value to suit building regulations. This would normally require a minimum thickness of **125 mm**. The pipes are attached to the insulation and a minimum 60mm concrete 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. If using a pouring screed, a waterproof membrane must be installed above the insulation prior to installation of the floor pipes. If a membrane is not used, the screed will penetrate the gaps and float the insulation. The thickness of screed may be reduced to 55 mm, subject to application.

**IMPORTANT:** Do not use lightweight foil-faced insulation such as Kingspan or Celotex as the core structure is not strong enough to hold the insulation clips. We recommend using <u>high-density</u> flooring grade rigid insulation; a product such as Ravatherm XPS X 300 SB (www.panelsystems.co.uk), Polyfoam Floorboard, Cellecta Hexatherm Xfloor, or similar. Insulation must have a minimum compressive strength of 200 kPa.

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

