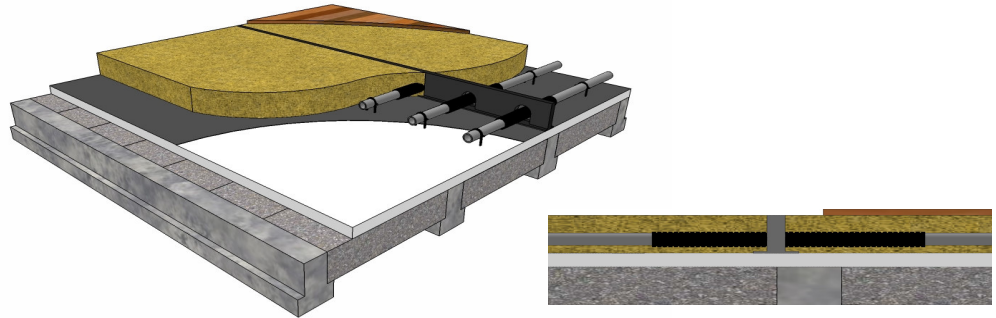


## Solid Floor Constructions

Data Sheet 3A  
Solid Base – Expansion



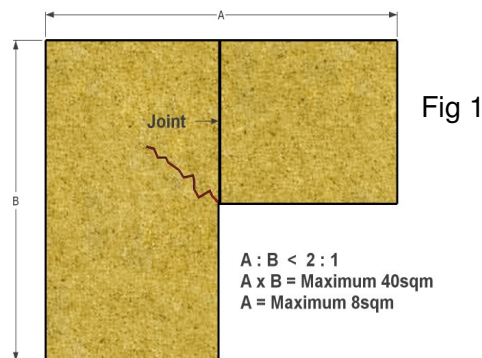
### Expansion & Movement Joints

All cement based materials shrink as they dry, these materials will also expand and contract with temperature. These characteristics are exaggerated by Underfloor heating systems.

This drying, shrinkage and thermal movement will cause the screed to crack and therefore due to this shrinkage and movement, screeds are generally specified with movement joints at set positions.

Different types of floor finishes will affect the position of the joints within the screed. These expansion joints may also affect the positioning of the underfloor heating pipes. Guidance for installation & spacing of joints in screed is specified in BS 8204-2.

Expansion joints should be included in the floor if the final floor finish is to be a ceramic tile or similar. Expansion joints will be required if the floor area is greater than 40 m<sup>2</sup> and then the floor area should be divided into bays with 8 m being the maximum length as shown in Fig 1 below:



Other types of joints may be present within the floor structure as part of the structural design of the floor such as day joints. In these cases the Underfloor heating pipe work should be sleeved where it passes through a joint system or over a joint line.

With Screeded floors, crack inducers may be included in the top surface of the screed these are generally a 5mm mechanical saw cut in the top surface of the screed. In this case the Underfloor heating pipe work should be sleeved where it passes below the crack inducement line.