



Chorley Old Hall Insulated Floor

An Introduction to Limecrete Floors

Breathable, insulated and limecrete floors have now become quite common in the UK but one design does not fit all buildings and this is one in a series of case studies which may help you decide on the best floor build up for your old building.



It has long been recognised that in old buildings we should avoid pushing dampness in to walls from the ground by not using un draining compacted fill, cement subbases and impermeable layers and membranes.

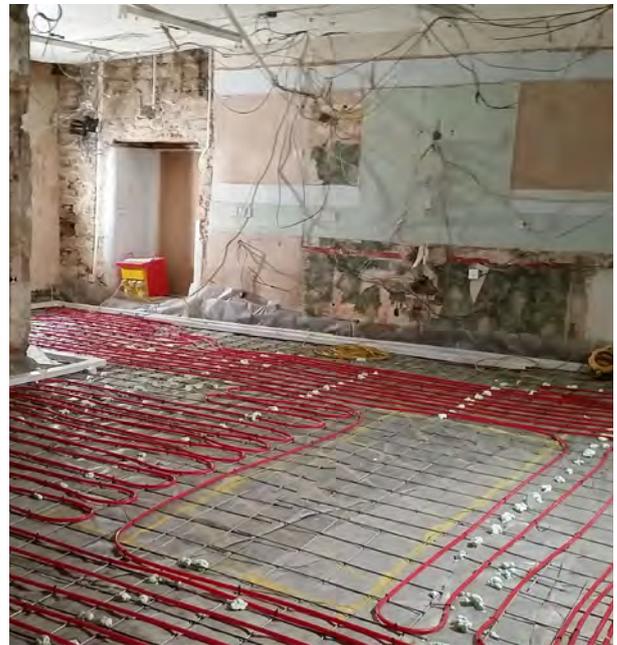
By allowing the lowest section of the floor build up, the sub base, to drain freely and by insulating within and above this sub base it is possible to create well insulated, free draining floors, that help prevent dampness rising up walls in old buildings. This case study illustrates one such build up.



Chorley Old Hall, Alderley Edge

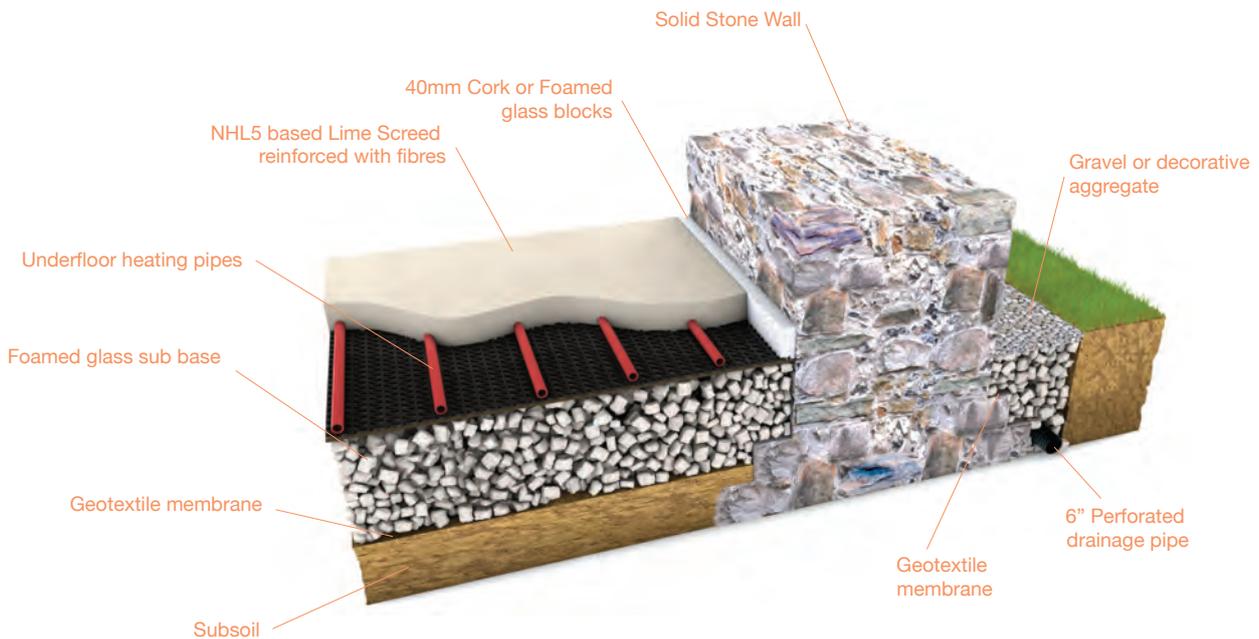
In the early 17th century the house was owned by the Stanley family who carried out alterations around 1640 and built a bridge across the moat. The two houses were joined by a brick link in the late 18th or the early 19th century. In 1915 the house was fully restored and further renovations are now being carried out.

The owners, their architect and project manager were keen to protect archeological evidence below the floors and avoid problems seen elsewhere where buildings with compacted ungraded hardcore and concrete sub bases prevent any water that gets under the building from draining away. They also wanted to avoid dampness being pushed from below an impermeable floor into surrounding walls. They instead have installed a floor build up that allows the whole floor structure to be able to breath.



At the old hall later concrete floor coverings and impermeable membranes were taken up and the ground excavated by archeologists.

The floor was then built up from the bottom with a geotextile membrane, 250mm of free draining foamed glass subbase, another geotextile membrane, underfloor heating pipes, clipped to lightweight steel reinforcing mesh and then an 85mm deep glass fibre reinforced eminently hydraulic lime screed, before finished with floor coverings including some areas of stone flags.



Further Advice

Further advice and support is available from...

Womersley's Ltd

Ravensthorpe Indust Est, Low Mill Lane, Ravensthorpe

