

Floors

Traditional buildings have two different types of floors (typically), suspended timber floors and solid floors. A solid floor could be a concrete floor or a flagstone floor. Where you have suspended timber floors at ground level, this can lead to significant heat loss if they are draughty. This can be effectively dealt with at relatively low cost by draught-proofing between the floorboards. You should also look to address any damp problems that you might have at ground floor. For more information on this, please visit the <u>Damp</u> page.

If you are considering whether to insulate a suspended timber floor or solid floor, then careful consideration needs to be given to the materials and design of the insulation installed, making sure that thermal bridges are minimised as much as possible and that the materials are compatible with the building (i.e. using breathable materials). It is likely that this work will need to be undertaken by a suitably qualified professions (please go to the <u>Getting Help</u> page for more information).

If you are looking to replace a concrete floor, or install an insulated floor slab, then it is strongly advised that a limecrete floor and vapour permeable insulation, such as foam glass, is installed. There are some circumstances where it is not appropriate to use limecrete, such as in buildings where there is a high-water table, or where the works would undermine the building. However, in most cases this is not a problem, and a suitably qualified specifier will be able to design a system which will not harm your building.

When carrying considering whether to insulate a floor in a listed building, you need to consider whether the works may impact on any historic features. If you are lifting a historic floor (whether that is timber floorboards or flagstones), it is important that this is done carefully, and a record is made so that the floor can be re-laid in the same way.

Consents

Please visit the <u>Permissions</u> page for further advice about whether consent is need for works to insulate your floor.

If you are lifting an entire floor, you may need to comply with the Building Regulations. It is the homeowner's responsibility to make sure that the works comply with the relevant Building Regulations. For further advice on Building Regulations, please visit the Council's Building Control pages.

Further guidance

Historic England has produced two useful guidance documents on insulating floors which can be accessed through the following links:

Insulation of Suspended Timber Floors

Insulating Solid Ground Floors

The SPAB has produced lots of useful guidance on historic floors, their repair and maintenance and insulation. These can be found through the following links:

Suspended timber floor insulation

Stone floors

Timber floor structures

Timber floorboards

Other helpful guides on insulating traditional floors have been produced by:

The Essex Design Guide

STBA'S Knowledge Centre (aimed at professionals and technically minded home owners)

Bath & North East Somerset Council

Cotswold District Council