

# FLOOR INSULATION



Insulating the ground floor of your home is an excellent way of keeping your property warm. If you're on an upper floor you don't usually need to insulate the floor space as most heat is lost through the ground floor.

It is important to know what the construction of your ground floor is before you can decide how to insulate it – ground floors are typically solid concrete slabs or suspended timber floors (floorboards laid over timber joists with a void underneath for ventilation).

Insulating the ground floor is disruptive, particularly for solid concrete floors and therefore it is best done when the floor needs replacing or as part of wider works e.g., a ground floor extension.

Solid concrete floors are usually insulated by fitting rigid foam insulation on top of the concrete slab and finishing with chipboard to allow for flooring to be installed. This will raise the level of the floor so consideration for other changes such as doors, skirting and electrical sockets is required. Insulation can be placed underneath concrete slabs; however, this is only advised if the floor needs replacing in its entirety as part of a wider scheme of work.

Timber floors are typically insulated by fitting rigid insulation board between the timber joists (usually supported by small battens) or by installing a windtight breathable membrane over the joists to support a fibrous or wool insulation. The insulation should not extend below the depth of the joist to ensure ventilation under the floor is continued. Natural insulation materials such as wood-fibre or sheep's wool are encouraged in older buildings as they allow both air and moisture vapour to pass through slowly and minimise the risk of condensation.

## Risks:

For suspended floors, special care needs to be taken to ensure continued ventilation through the floor void. Careful consideration should be taken for the type of insulation used and a Retrofit Designer / Coordinator should be able to advise on this.

## Associated works:

For suspended timber floors, it is important to inspect the floor structure and complete any repairs or maintenance prior to insulating. This also applies to any works required to ensure maintained cross-ventilation within the sub-floor void.

## REGULATORY CONSIDERATIONS

- Installation of floor insulation is not considered to be development requiring planning consent – no planning permission is likely to be required for internal works in properties which are not listed.
- Listed Building Consent required for Listed Buildings.
- Making significant changes to thermal elements (walls, roofs or floors) would normally require Building Regulations approval through a building control body. Applicable Buildings Regulations: Part L (Conservation of fuel and power), Part P (Electrical safety).

Cost: £££-££££

Disruption: Suspended Floor: ■ ■ ■ □ □

Solid Floor: ■ ■ ■ ■ ■



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