

## FLOOR INSULATION

**Floor insulation is especially worthwhile for accessible suspended timber floors.**

### **Suspended timber floors:**

- ◆ Insulation materials can be mineral wool quilts, polystyrene boards or blown insulation.
- ◆ The mineral wool quilt is supported by plastic mesh/netting or boarding fixed to the underside of the joists.
- ◆ Polystyrene boards are supported and held down against timber battens nailed to the sides of the joists.
- ◆ Blown insulation needs to be contained by mesh or boarding beneath the joists
- ◆ All of the above can be installed by an experienced DIY person, except for blown insulation.

### **Solid concrete floors:**

- ◆ When a new concrete floor is laid, it is best insulated below the slab
- ◆ Insulation below the slab is usually polystyrene, high density mineral wool or cellular glass
- ◆ Insulation above an existing concrete floor is usually mineral wool or polystyrene, in conjunction with timber-based flooring (e.g. chipboard).
- ◆ Normally, a job for the builder as part of a major renovation

### **Safety**

#### **Suspended timber floors:**

- ◆ Insulation should be taken right up to the edge of the floor and any space close to the outside wall filled with mineral wool insulation to avoid any gaps.
- ◆ The insulation should not block the airbricks in the outside wall which are there to ventilate the space under the floor and prevent rot.

#### **Solid concrete floors:**

- ◆ Insulation below the slab should be strong enough to support the concrete and, if it is below the damp proof membrane (dpm), resistant to chemicals and moisture in the ground.
- ◆ Timber-based flooring used with insulation above the slab must be protected by a dpm, tongued and grooved and glued at the joints.

### **Procedure**

#### **Suspended timber floors:**

- ◆ To cut out draughts and increase comfort, gaps between floorboards can be filled with a patent filler, or this sheets of hardboard can be laid across the floor. The skirting should be draught stripped to the flooring and all holes for services filled.
- ◆ A fire-resistant board should be used beneath the joists if the floor is above a garage or basement

#### **Solid concrete floors:**

- ◆ It is not advisable to insulate above the floor in conjunction with timber-based flooring in 'wet' rooms, such as kitchens or bathrooms.

**All information provided by the Energy Saving Trust: For free, impartial energy advice call 0800 512 012**