

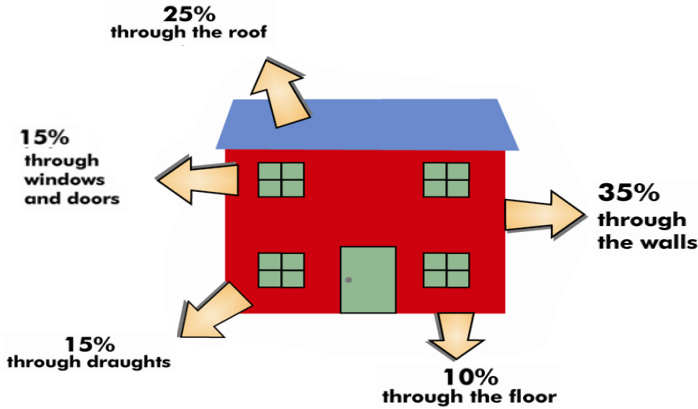


# Insulation as a Home Improvement



IH 1

## Heat Loss from a Home



Keeping warm involves stopping heat escaping and then using as little fuel as possible to produce the heat

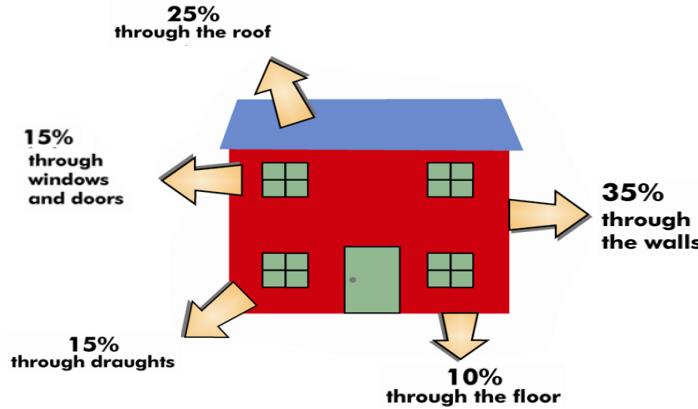


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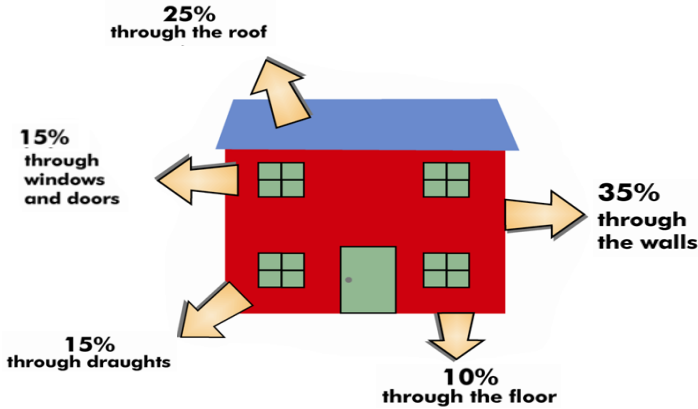


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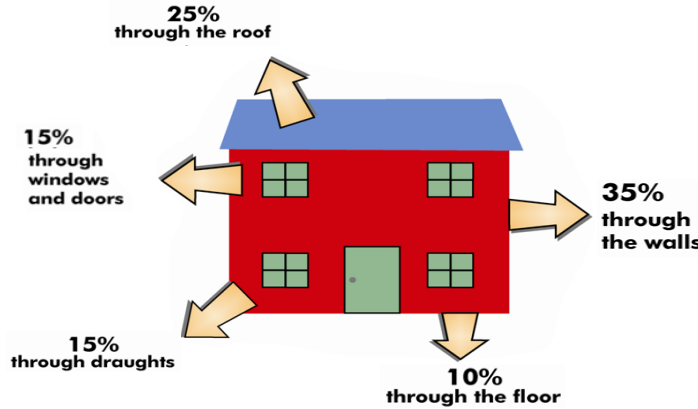


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## SUGGESTIONS and TIPS

To reduce heat loss from a house you can

- Fill gaps to **prevent draughts**
- Install **loft insulation** in your roof space
- **Fill cavity wall** spaces with insulation
- **Replace windows** with latest double glazing
- Install **under floor** insulation
- On solid walls, install **internal dry-lining**

Obtain an energy performance certificate  
to start developing a plan!



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## Insulation as a Home Improvement



IH 2

### Energy Performance Certificates

- Energy Performance Certificates or EPCs tell you how energy efficient a building is and give it a rating from A, very efficient, to G, very inefficient
- EPC tells you how costly it will be to heat and light your home (based on energy costs at the time EPC was done), what its carbon dioxide emissions are, and what can be done to reduce energy use



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3. Read its recommendations for measures to improve your home and its EPC rating
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# Insulation as a Home Improvement



IH 3

## Roof and loft insulation

- Check whether you have enough loft insulation-- 270mm (about 11") recommended
- Produce significant savings on your energy bills
- Easy and quick to install
- Keep the heat in your home



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## SUGGESTIONS and TIPS



### Roof and Loft insulation

- If loft suitable, roll out insulation between joists
- Add floor boards for storage above the insulation making sure insulation is not squashed
- Leave enough space for ventilation and don't cover any vents or air bricks
- Get professional advice if there is any damp in loft
- Check out Energy Saving Trust's [Roof and Loft Insulation](#) for more information



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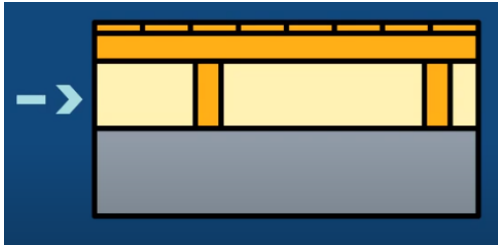
# Insulation as a Home Improvement



IH 4

## Floor insulation

- Floor insulation is an extra barrier between the cold ground and your home
- Insulate under suspended timber floors
- Insulate on top of solid concrete floors
- Using a thick carpet a lower cost alternative



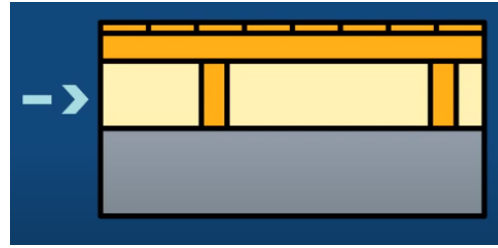
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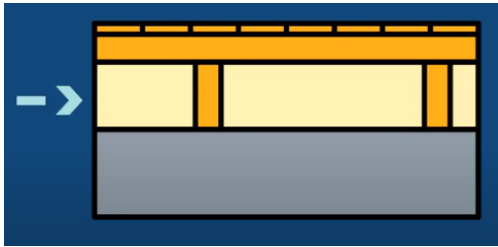
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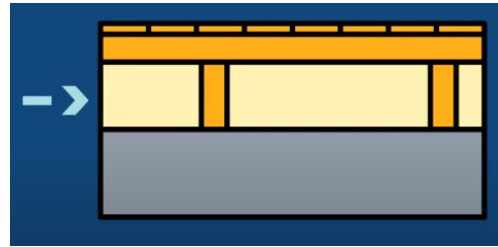
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## SUGGESTIONS and TIPS



### Floor insulation

- Seal up gaps between floor boards and skirting boards
  - Check whether you have timber or solid ground floor
  - Investigate mineral wool insulation under timber floors
  - Add rugs and carpets to floors
  - Do not block any vents or air bricks
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- Check out Energy Saving Trust's [Floor Insulation](#) for more information



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# Insulation as a Home Improvement



IH 5



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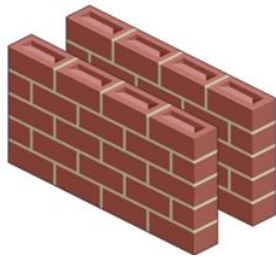
## Wall insulation

Uninsulated walls account for 35% of a house's heat loss



### Solid wall

Typical in pre 1930 properties.  
'Thick-thin' brick pattern

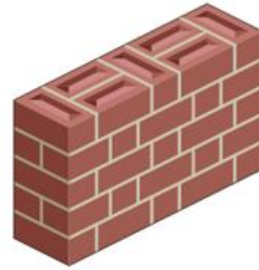


### Cavity wall

Typical in since 1930s  
Even brick pattern

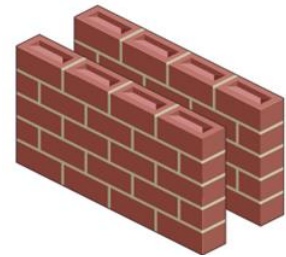
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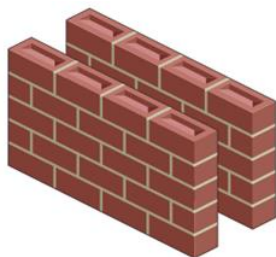
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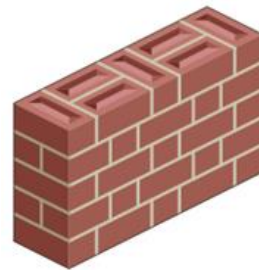


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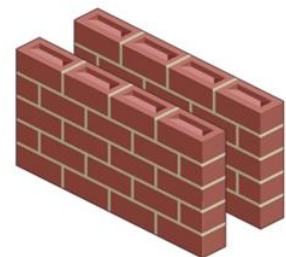
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## SUGGESTIONS and TIPS

### Wall Insulation

- You need to know what sort of walls you have.
- Uninsulated solid walls are only about 22 cm thick
- Cavity walls are about 27cm thick. If the cavity has been filled, there will be circles of mortar marking the drill holes
- Check out Energy Saving Trust's [Solid Wall Insulation](#) for more information



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IH 6

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- Average 3-bed gas-heated semi can save **£315/year**
- Your annual savings should cover the installation cost in three years or less



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## Insulation as a Home Improvement



IH 7

### External insulation of solid walls

- External wall insulation involves fixing a layer of insulation material to the wall, then covering it with a special type of render (plasterwork) or cladding
- The finish can be smooth, textured, painted, tiled, panelled, pebble-dashed, or finished with brick slips.
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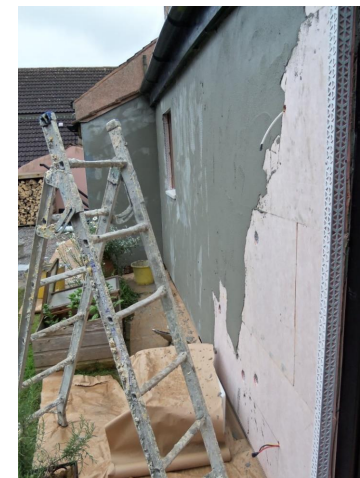
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## Insulation as a Home Improvement



IH 8

### Interior insulation of solid walls

- Is generally cheaper to install than external wall insulation
- Will slightly reduce the floor area of any rooms in which it is applied
- Will require plastering, redecorating and resitting radiators and electrics
- No need to insulate walls that adjoin another room or another house



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### Interior insulation of solid walls

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## Insulation as a Home Improvement



IH 9

### Double glazing windows and doors.

- Reduces heat loss, condensation and noise
- New units can be plastic or wood
- A set of A-rated windows for a semi-detached house will typically cost around £7,500
- Replacing single with double glazing in a semi could save £195 a year



See more detailed advice at <https://energysavingtrust.org.uk/advice/windows-and-doors/>



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## SUGGESTIONS and TIPS



### Double glazing windows and doors

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- Design to match other houses in the street
- Consider ventilation, especially kitchen and bathroom
- Can have opaque glass for privacy
  
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