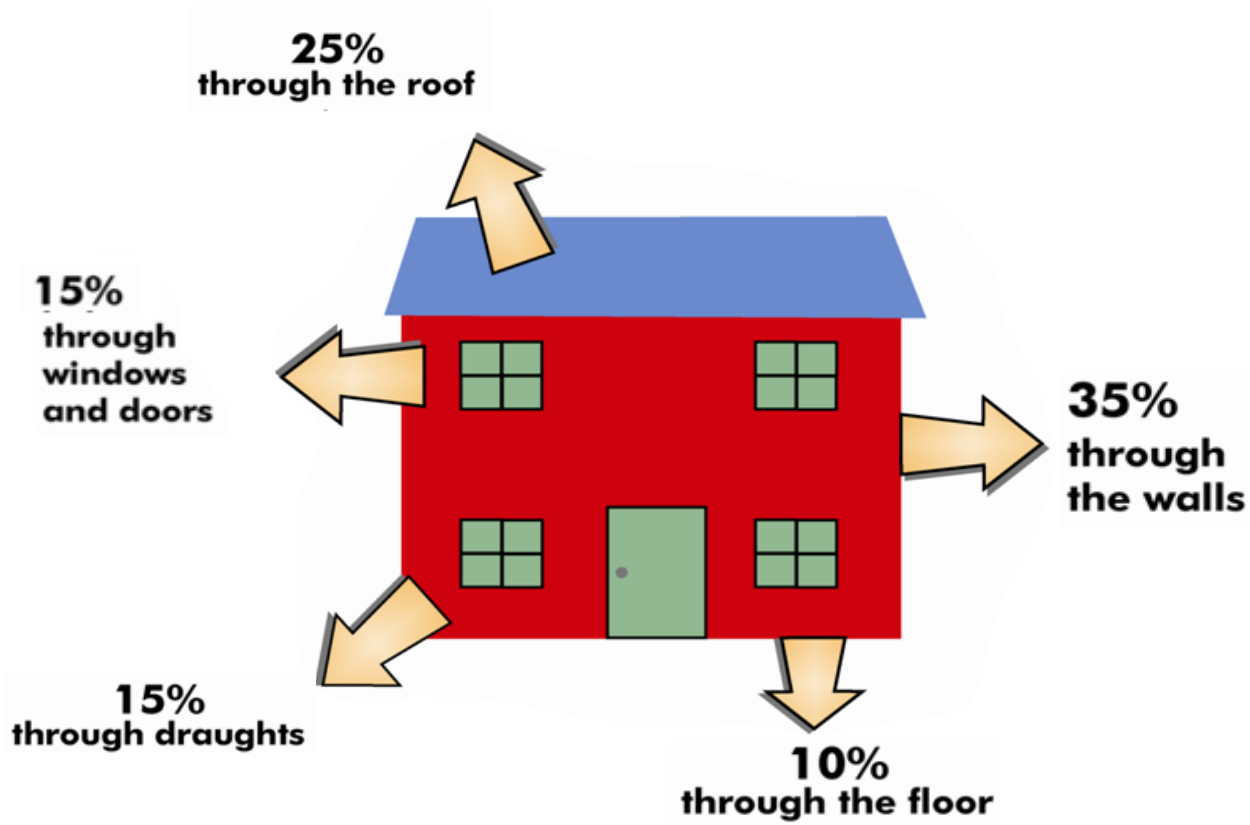


Insulation Improvements



Heat Loss from a Home



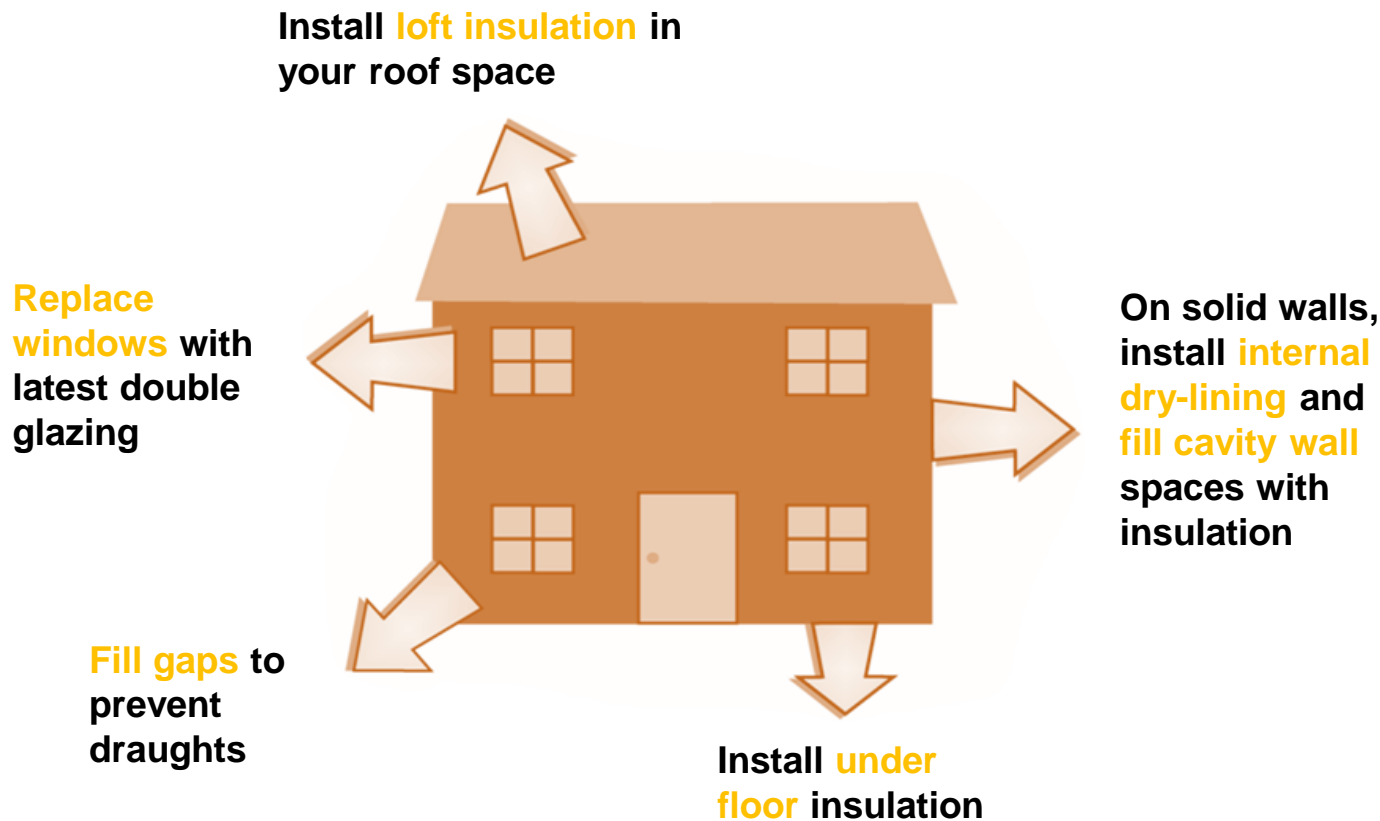
- Keeping warm involves stopping heat escaping and then using as little fuel as possible to produce the heat

Heat Loss from a Home

SUGGESTIONS & TIPS



How to reduce Heat Loss from a Home



- Obtain an energy performance certificate to start developing a plan!

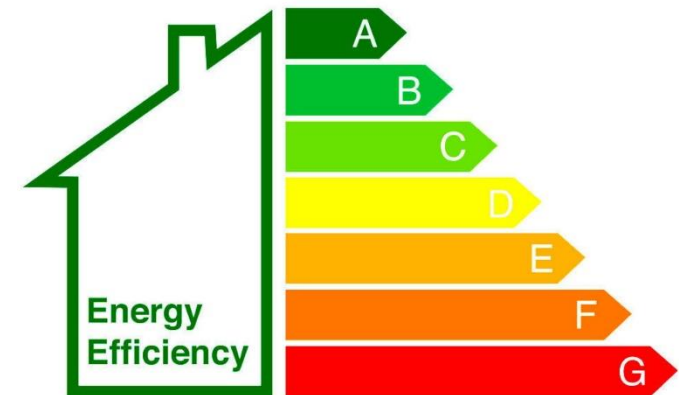


Insulation Improvements



Energy Performance Certificates (EPC)

- An Energy Performance Certificate (EPC) provides a rating of a property's energy efficiency and environmental impact (rating from A, very efficient, to G, very inefficient).
- EPCs also estimate the amount of energy used, carbon emissions, and potential annual costs.



Energy Performance Certificates

SUGGESTIONS & TIPS



1. Look for your EPC online <https://www.gov.uk/find-energy-certificate> and check that it's up-to-date.
2. Obtain an EPC if your house does not have one.
3. Read its recommendations for measures to improve your home and its EPC rating.
4. Discuss them with the landlord, if you do not own the property. A good EPC rating will help to rent or sell the property in future.
5. www.gov.uk/improve-energy-efficiency suggests energy saving improvements.



Insulation Improvements



Roof and Loft Insulation

- Check whether you have the recommended 270mm thickness of insulation.
- Produces significant savings on your energy bill.
- Is easy and quick to install.
- Retains heat in your home.



Roof and Loft Insulation

SUGGESTIONS & TIPS



- If loft suitable, roll out insulation between joists .
- Add floorboards 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



Insulation Improvements



Floor Insulation

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



Floor insulation

SUGGESTIONS & TIPS



- Seal up gaps between floorboards 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.

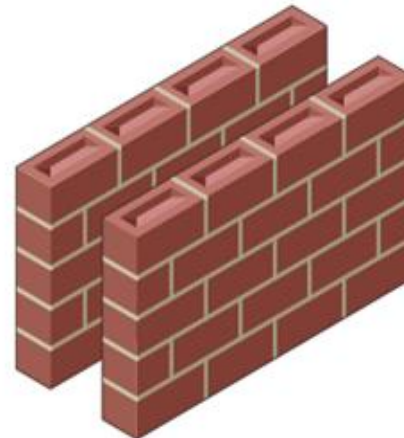
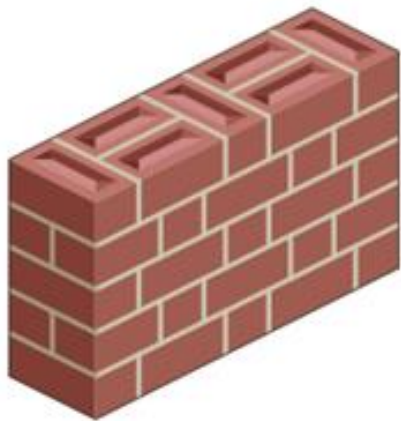


Insulation Improvements



Wall insulation

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



Solid wall

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

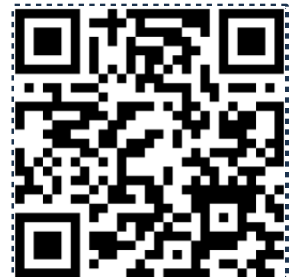
Cavity wall

- Typical in post-1930 properties
- Even brick pattern

Wall insulation SUGGESTIONS & TIPS



- You need to identify the type of wall on your property.
- Uninsulated solid walls are only about 22 cm thick.
- Cavity walls are 27cm thick. If the cavity has been filled, there will be circles of mortar marking the drill holes (seen in the picture).



Insulation Improvements



Cavity wall insulation

- It involves blowing mineral wool, insulation beads or foam into cavity between walls.
- Average 3-bed gas-heated semi can save **£315/year**.
- Your annual savings should cover the installation cost in three years or less.



Cavity Wall Insulation

SUGGESTIONS & TIPS



- Find an installer who has CIGA Warranty ciga.co.uk/registered-installers.
- Cost about **£1000** for a semi. Grants may be available for the work and your installer should know about them.
- Installers should inspect walls with a camera before filling.



Insulation Improvements



External insulation of solid walls

- This involves fixing a layer of insulation material to the external 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 a brick slip finish.
- There are savings **~£540/year** for a 3-bed semi.
- It is important that the wall remains breathable to allow moisture from inside to escape, preventing dampness and potential structural damage.

External insulation of solid walls

SUGGESTIONS & TIPS



- External insulation will be the more affordable option if you're already having other work done externally.
- Having scaffolding up already will save costs.
- If your walls need repointing or other repair work, it's worth obtaining a quote for a complete refurbishment including insulation.



Insulation Improvements



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 re-siting radiators and electrics.
- No need to insulate walls that adjoin another room or house.



Interior insulation of solid walls

SUGGESTIONS & TIPS



- It is important to get advice from an architect to avoid condensation problems.
- It should not be done before fixing any problems with penetrating or rising damp.
- Internal insulation or 'dry lining' can be done DIY, one room at a time. Start with the main living room.



Insulation Improvements



Double glazing windows and doors

- This 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.

Double glazing windows and doors

SUGGESTIONS & TIPS



- Select a colour that complements the aesthetic of the house, as well as other houses on your street to maintain community cohesion.
- Consider ventilation, especially kitchen and bathroom.
- Consider having opaque glass for privacy.

