Factsheet

Filling the gaps

A guide to cavity wall insulation: warmer homes, lower bills and what to check before you start.

Cavity wall insulation can be a quick and effective way to reduce heat loss in suitable homes. Many UK homes built after the 1920s have external walls made from two layers, or "skins", of brick or block with a gap between them. Filling this cavity with insulation helps slow heat escaping through the walls, keeping rooms warmer and making heating systems work less hard.

Why cavity wall insulation matters

Around a third of heat lost from an uninsulated home can escape through the walls, so improving wall insulation is often one of the most useful first steps in a "fabric first" approach. This means improving the building itself - walls, roof, floors, draught-proofing, damp control and ventilation - before spending money on new heating systems or other upgrades.

Is your home likely to have cavity walls?

Your home may have cavity walls if it was built after the 1920s and before wall insulation became common in newer homes. Homes built before the late 1920s are often solid-wall buildings, especially older stone terraces, and usually need different insulation options.

- **Look at the brick pattern:** if you can see mostly long faces of bricks laid lengthways, the wall may be a cavity wall. If you see a mix of long and short brick ends, it may be solid.
- **Measure wall thickness:** cavity walls are usually thicker than solid brick walls, but this is only a guide.
- **Check previous work:** some homes already have insulation, partial fill or older material that may need checking.
- **Ask for a professional survey:** a registered installer should inspect the wall construction and cavity before recommending installation.

When cavity wall insulation may be suitable

Cavity wall insulation is generally more likely to be suitable where the external walls are unfilled cavity walls, the brickwork or masonry is in good condition, and the cavity is wide enough for the chosen insulation material. Some materials can be used in cavities from around 35mm, while others may need at least 50mm.

Do not insulate until problems are fixed

Before adding insulation, check and repair leaks, damaged pointing, cracked render, blocked gutters, missing roof tiles, defective flashing, damp patches or mould. Insulation should not be used to cover up damp or structural problems. If rain can get into the wall from outside, or moisture cannot escape safely, insulation may make problems worse.

Homes that need extra care

Some homes are not straightforward. Get specialist advice if your property is in a very exposed location, has a history of damp, has narrow or dirty cavities, has rubble in the cavity, has wall-tie problems, has cracked walls, or is built from stone or mixed materials. Listed buildings, conservation areas and older terraces may need a whole-house retrofit assessment before any wall insulation is chosen.

What installation involves

A professional installer normally drills small holes into the mortar joints, injects insulation into the cavity, and then fills the holes afterwards. The work is usually done from outside, often within a few hours for a straightforward property, and should leave little visible change once the holes are made good.

Insulation materials

Common cavity wall insulation materials include polystyrene beads, mineral fibre and foam systems. The right material depends on the cavity width, wall condition, exposure to weather and the installer's approved system. Ask the installer what material they propose, why it is suitable for your home, and what guarantee comes with it.

Ventilation, damp and indoor air quality

Insulation helps keep heat in, but a warmer, better-sealed home still needs controlled ventilation. Everyday activities such as cooking, washing, drying clothes and breathing release moisture into the air. Without enough ventilation, condensation and mould can still occur, especially on cold surfaces, behind furniture or in rooms with poor airflow.

Questions to ask before you say yes

- Have you checked whether the walls are definitely cavity walls?
- Is the cavity clear, dry and wide enough?
- Have you checked for damp, cracks, damaged pointing, render, gutters and roof problems?
- Is the property exposed to driving rain or severe weather?
- What insulation material will be used, and why is it right for this home?
- Are you registered with a recognised installer scheme, and what guarantee is provided?
- Will ventilation be checked as part of the work?
- What happens if problems are found during the survey?

Costs, savings and funding

Costs vary depending on the size and type of property, access, wall condition and the material used. The Energy Saving Trust gives a typical installation cost in Great Britain of around £2,200, but a survey and quote are essential because every home is different. Grants or funding may be available for some households, particularly where people are on lower incomes or meet eligibility rules for energy-efficiency schemes.

Good sources of information

- **Centre for Sustainable Energy:** practical home energy advice, including a cavity wall insulation guide and downloadable advice leaflets. Visit: Cavity wall insulation - Centre for Sustainable Energy
- **Energy Saving Trust:** independent advice on cavity wall insulation, costs, suitability and energy savings. Visit: Cavity wall insulation - Energy Saving Trust
- **Local advice sessions:** ask about home energy checks, damp and ventilation, funding routes and trusted installers.

Need help deciding?

If you would like more information or help understanding whether cavity wall insulation is right for your home, visit us at one of our drop-in advice and information sessions or look out for details of Warmth Works events across the town in the next few months.

Together, we can create warmer homes, stronger communities and a clean energy Calder Valley.