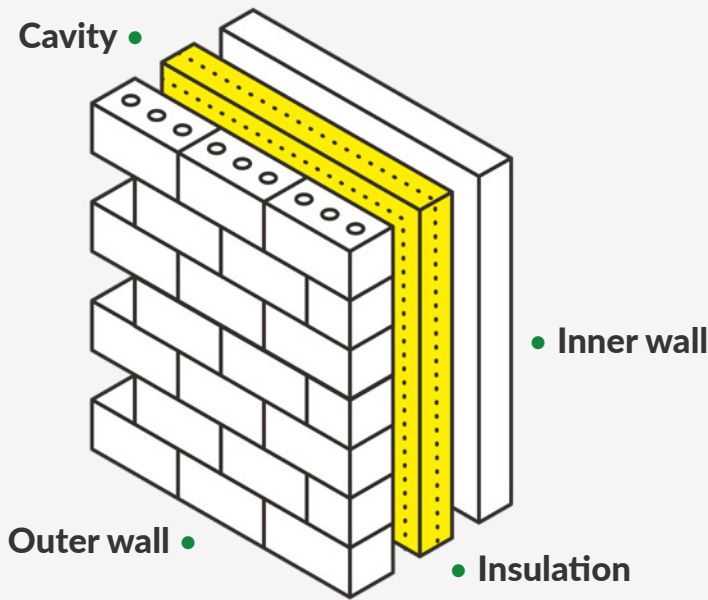


Cavity Wall Insulation

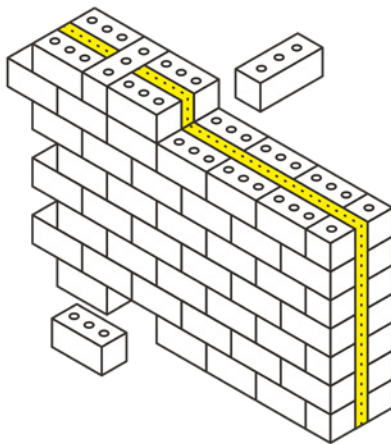
Cavity Wall Insulation is one of the best ways to insulate and improve the energy retention of your home because it is a simple and cost-effective measure that does not create much disruption.



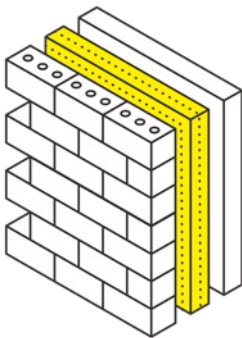
What is it?	Cavity Wall Insulation (CWI) works by replacing the air gap between the two parts of the wall with insulation to reduce the amount of heat lost through the wall. The three main types of insulation are mineral fibre, polystyrene balls, and urea formaldehyde foam.
How is it installed?	Small holes are drilled through either the outer or inner leaf of the wall, at joints in the mortar between bricks. CWI is either blown or injected into the cavity.
How disruptive?	● ○ ○ ○ ○
Right for your home?	Cavity Wall Insulation may be right for your home if the measure has not been done before. If the correct wall type has been identified, there should be no real barriers to the work being completed. Please note in 'high exposure' areas where weather conditions can be adverse, the measure may not be appropriate.
Ventilation?	A ventilation assessment will be conducted in advance of the installation of wall insulation. Improved insulation means less leakage of air from the home than before. If there is an increased risk that warm, moist air trapped in the property will condense on surfaces and cause damp, an improved ventilation solution should be recommended.

HOW TO RETROFIT YOUR WALLS

Insulation can be added to the walls of a property in two main ways, internal wall insulation or external wall insulation.



- What is a solid wall and do I have them?**
- Common in properties built before 1930.
 - Usually, two layers of bricks joined together, identifiable with common brick layers and end placed bricks through the course.
 - This type of wall can be externally or internally insulated.



- What is a cavity wall and do I have them?**
- Common in properties built after the 1930s.
 - Usually identified by staggered brick courses.
 - The cavity (empty space between the inside and outside wall) is between 50mm and 100mm.
 - This type of wall is best suited to cavity wall insulation.

TOP 3

Benefits of improved wall insulation

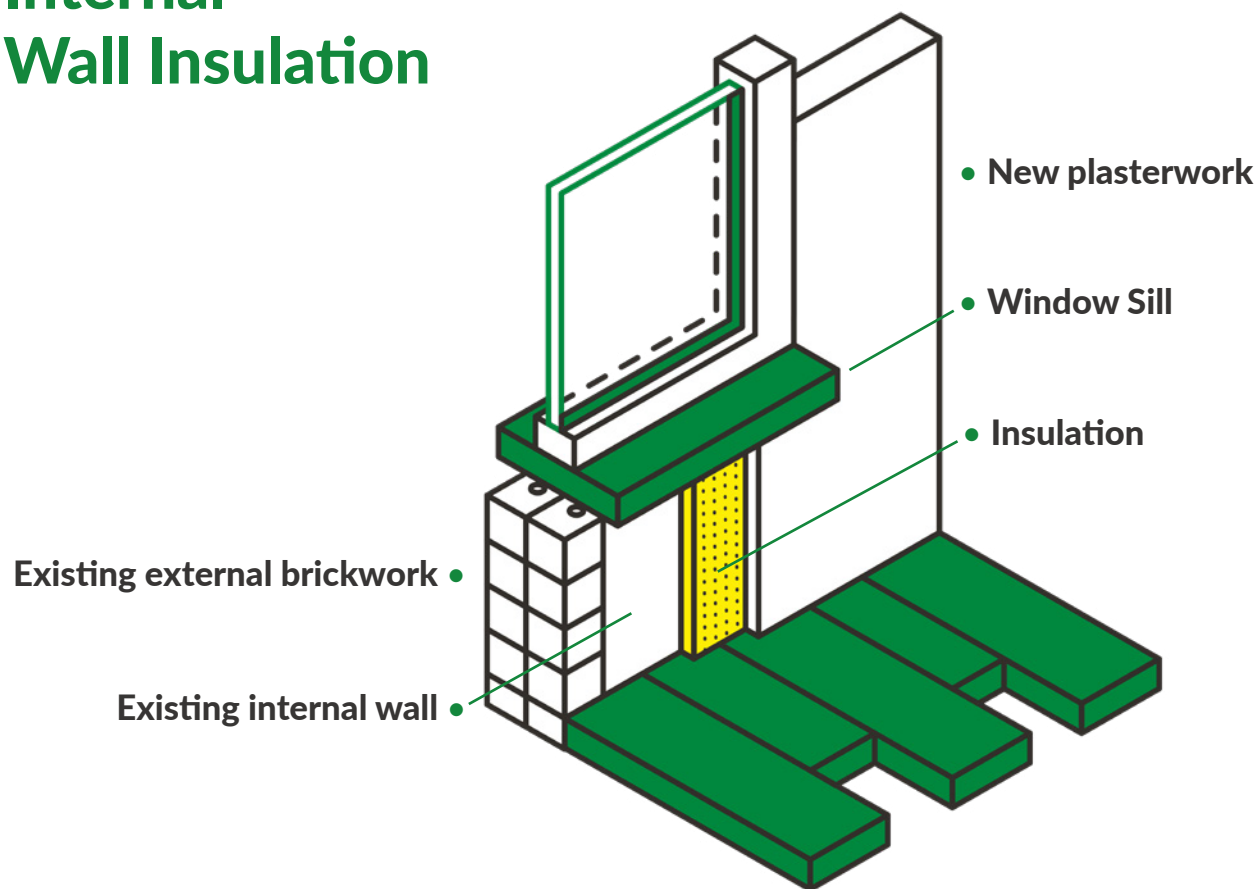
- 1 It allows your walls to retain more heat, so when your heating is off, the walls continue to heat your home, resulting in a more even temperature and reducing the possibility of dampness coming through the walls.
- 2 It makes your home more airtight, removing chilly draughts, reducing the risk of condensation and mould inside.
- 3 It also offers the added benefit of increased sound-proofing to the outside.

Up to 35% of the heat in your home is lost through uninsulated walls, making it a high priority when it comes to retrofitting your home. There are typically two different ways a wall has been constructed that will determine what type of fabric that can be retrofitted in your home: solid walls and cavity walls.

Most homes do not have adequate insulation to keep residents warm and comfortable, adding insulation to solid walls and cavity walls will improve the energy efficiency of the home and can be done with local authority funding.



Internal Wall Insulation



What is it?	Insulation applied to the inner side of walls.
How is it installed?	Insulation is either adhered directly to the inner wall or within timber framing, and a new finish is applied on top. Items such as sockets, shelving, etc would need to be altered.
How disruptive?	● ● ● ● ○
Right for your home?	Internal Wall Insulation (IWI) avoids changing the outside appearance of your home and can be applied to dwellings such as flats with fewer issues.
Ventilation?	Ventilation shall be assessed when any insulation measure is to be installed to maintain a healthy internal environment.

External Wall Insulation



What is it?	External Wall Insulation (EWI) is when insulation is placed on the outside of your home on exposed walls and finished with a render. Its main advantages are that it wraps the outside of the building to thermally insulate the whole home as well as protecting the structure of the building.
How is it installed?	1. Insulated boards are attached to the outer surface of your home, using both an adhesive layer and mechanical fixings. 2. This insulation is then covered with a protective layer of mesh. 3. Insulation is aligned with existing features. It might be that window reveals are extended, guttering is adapted, and damp-proofing is required at ground level. 4. Finally, a durable and water-resistant render is applied.
How disruptive?	● ● ● ○ ○
Right for your home?	Good access to the external walls of your property is necessary to install EWI. It is less disruptive than IWI because the work takes place outside the property but does require scaffolding and dry weather.
Ventilation?	A ventilation assessment will be conducted in advance of the installation of wall insulation. Improved insulation means less leakage of air from the home than before. If there is an increased risk that warm, moist air trapped in the property will condense on surfaces and cause damp, an improved ventilation solution should be recommended.