

# Solid Wall Insulation



A lot of heat escapes through uninsulated solid walls - generally around half of the heat lost from the house! Adding solid wall insulation (SWI) is one of the most effective ways to reduce your energy bills and carbon footprint.

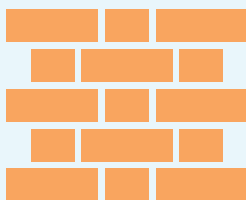
## How to tell if your house has solid walls:

### 1. When was your house built?

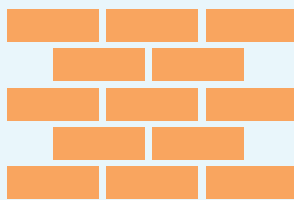
As a general rule, houses built before 1930 were constructed with solid walls.

### 2. What is the pattern of the brickwork?

Look at your brickwork - if the bricks have an alternating short and long pattern, it is likely to be a solid wall. If all the bricks are laid longways, it is likely to be a cavity wall.



Solid Wall



Cavity Wall

### 3. How thick are your walls?

Solid brick walls tend to be less than 25cm thick, whereas cavity walls will be closer to 30cm. If you have solid stone or cob walls, these could be even thicker - and would require more specialist insulation to prevent damage to the building.

## Reducing the cost of SWI:

SWI can be expensive. Externally insulating an average semi-detached house can cost around £15,000 - although you don't have to complete it all at once. Check whether grants are available, and consider internal SWI which tends to be cheaper and can be installed on a room by room basis.

## \*Typical Costs and Savings...



**880kgCO<sub>2</sub>e**  
Annual Carbon Savings



**£360**  
Annual Bill Savings



**£15,000 - £24,000**  
Cost of measure

*Costs may vary significantly depending on level of work required.*

## Keep it natural

Houses with solid walls are designed to be able to breathe - so it is important to consider the materials that you use to insulate your house and how they will affect the performance of the building.

There are now a lot of natural alternatives to plastic based insulations, which are better for your home, your health and the planet!



\* Figures are taken from Energy Saving Trust and are based on fuel prices as of October 2023. Estimates are based on an insulated, three bed, semi-detached, gas-heated home. The average professional installation cost is unsubsidised, prices will vary.



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## What are the benefits of SWI?

- Up to 45% of household heat is retained
- Your home will use less energy, lowering your carbon footprint
- Significant financial savings on heating bills
- Improved thermal efficiency and a more comfortable home
- SWI acts as a noise barrier to the outside
- Insulation may increase the value of your property

## External or Internal SWI?

Insulation can be added to solid walls either internally (from the inside) or externally (from the outside), depending on the circumstances. See below to work out which would be most appropriate for your property:

### External SWI

- May require Planning Permission
- The work will generate noise and dust
- External fittings will need to be removed and replaced (e.g. rainwater pipes, satellite dishes)
- The external building appearance will be changed - walls may require re-rendering or other finishing (eg.cladding)
- Access required to all external walls - may require scaffolding, skip etc.
- Should only be undertaken by an accredited professional

### Internal SWI

- Does not change the external appearance of the building
- Can cause significant disruption - rooms may not be usable during
- Fittings attached to external walls may need removing and re-fitting (e.g. radiators, kitchen units, bathroom fittings)
- Internal re-decoration will be required
- Room size will be marginally reduced
- Requires a good level of DIY skills

## Next steps...

If you are interested in Solid Wall Insulation, HEAT Hub are here to help! For advice or to arrange a free Home Energy Plan fill in a form at:

[bit.ly/BookHomeEnergyPlan](https://bit.ly/BookHomeEnergyPlan) or call

**0115 985 9057**