

# 'Hard to treat' cavity walls

## Not all cavity walls can be insulated ...

As many as 5.8 million properties in the UK have cavity walls that are classed as 'hard to treat'. This means that they cannot be insulated using the same methods and products as a standard cavity wall.

### How is a 'hard to treat' cavity wall different to a standard cavity wall?

Hard to treat cavity walls usually have one of the following construction characteristics:

- A cavity that is less than 50mm wide
- A prefabricated concrete construction with a cavity
- A metal frame construction with a cavity
- A stone cavity (e.g. many older properties have uneven cavities in walls constructed of a natural stone outer leaf and a block or brick inner leaf)
- A timber framed un-insulated studwork cavity. These properties have a masonry cavity, which must not be filled
- Cavities that have already been partially filled.

Other properties that may have cavity walls which aren't suitable include: those of more than four storeys tall; those where features such as conservatories create difficulties in terms of access; and those exposed to severe wind driven rain, such as homes near the sea or on top of hillsides.

A further category of hard to treat cavity walls is where there is a fault like significant cracking in the outer leaf of the wall. This will need to be remedied before the cavity



can be filled. In some cases, exposed walls can be clad to prevent water ingress, but this can be a costly option and it may be cheaper to opt for solid wall insulation instead.

### How can a hard to treat cavity be filled?

Standard cavity walls are insulated using materials such as mineral fibre and bonded beads. Hard to treat cavity walls, however, are insulated by drilling holes in the outer leaf of brickwork and injecting expanding foam into the wall cavity. The process can be described in five stages:

- 1)** The internal wall is checked for holes into the cavity. Any found are filled to ensure there is no leakage into the property when the insulation is installed;
- 2)** Holes are drilled in a specific pattern (photo, left) and spray foam is injected in a staged process to ensure the whole cavity is filled from the bottom to the top;
- 3)** The contractor may use a camera to ensure that the whole cavity is filled equally and that no gaps are left;
- 4)** Upon completion, the installer will check all flues, vents, and pipes to ensure that all appliances are operating correctly and that nothing has been blocked by the new insulation;
- 5)** Finally, a mortar is used to fill the holes in the external brickwork.



'Hard to treat' cavity walls are sometimes referred to as 'hard to fill'

# Tips for lower energy bills

Happy paying your gas and electricity supplier more money than you need to?

Thought not. Here are 15 ways to cut your bills ...

1) **Keep the oven door shut as much as possible;** every time you open it, nearly a quarter of the heat escapes.



2) **Give your clothes a day in the sun;** and give your tumble drier a break. Clothes dried in the fresh air feel great, and there are drying days in winter, too.

3) **Food in the oven cooks faster when the air inside flows freely,** so don't put foil on the racks.

4) **Don't leave your phone on charge all night.** It only needs three hours – and try not to leave the TV and other kit on stand-by.

5) **Be a friend to your freezer.** Defrost it regularly to help it run more efficiently.

6) **Catch 'em young.** Encourage your children to switch off electric toys and lights that they're not using. They'll soon get the hang of saving energy.



7) **Dodge the draught!**

Fit draught-excluders to your front door, letter box and key hole, and draw your curtains at dusk to keep the heat in.

8) **When boiling water, only fill the kettle with as much as you'll actually use** (but make sure you cover the metal element at the base).

9) **Buying a new TV, washing machine or dishwasher?** Look out for the Energy Saving Trust 'recommended' logo, and remember: the bigger the TV, the more energy it'll use.



10) **Dimmer is smarter.** Use your dimmer switches to reduce the amount of energy used to light your room.

11) **Wait until you have a full load before putting on a wash.** Two half-loads use more energy (and water) than one full load.



12) **Sleep tight.** Make sure all the lights are turned off when you go to bed, or use a low-wattage night light if you do need to leave one on.

13) **Turn your heating down by 1 degree.** You'll hardly notice the change in temperature, but it'll make a big difference to your heating bill.

14) **Put your fridge in a good spot.** Somewhere the air can circulate behind it, but not next to a cooker or radiator.

15) **New computer?** Remember a laptop typically uses around 85% less energy than a new desktop PC.



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