

# Mind the gap: Preventing future problems of damp in cavity wall insulation

By Dr Greg French – August 6<sup>th</sup> 2020

The government has recently announced a new Green Homes grant worth over £2bn. This scheme will launch in September 2020, and gives homeowners and landlords the chance to apply for up to £10,000 (circumstances dependent) worth of vouchers. These vouchers are then to be used to make energy efficient and environmentally friendly improvements to properties. This includes improvements such as loft insulation, double glazing and solar panels. What is worrying however is cavity wall insulation's inclusion on this list.

Cavity wall insulation (CWI) first became prominent in the 1970's, in response to Government initiatives towards the thermal efficiency of buildings. This led to a program of CWI retrofit involving injecting wall cavities with insulating materials such as rockwool, encapsulated polystyrene beads (EPS) and vermiculite/perlite. CWI works by providing countless 'pockets' of air within the insulating material. As air is a poor heat conductor, the property is better insulated against heat loss.

The retrofit program gathered pace in the 1980's at the outset of various local and national Government grants for homeowners to insulate their homes. There was then a further significant campaign of retrofit after 2003, when energy providers were compensated by national Government for installing CWI to reduce their carbon footprint.

This brings us to 2020, with the Government under increasing pressure to reduce the UK's carbon footprint and improve their eco-friendly credentials, thus, the Green Homes grant. This is a positive step towards this, however, for those of us with experience of treating damp issues within properties many have reacted to this news with both caution and concern.

Inappropriate CWI installations using the wrong materials often by unqualified and inexperienced practitioners have led to increasing numbers of damp issues within properties over the past few years. Current estimates now stand at 900,000 properties suffering from damp as a result of poorly installed CWI. Water resistance of the materials used, and cavity depths were rarely considered, leading to homeowners and their properties suffering half-filled cavities, or insulation sagging

to the bottom of the wall when it has become wet. Not only does this negate the insulating properties of CWI, it then creates a cold bridge for penetrating damp from external walls. This manifests itself internally in the form of damp, condensation, mould and salts efflorescence.

The upshot of all this is that homeowners and their insurers are the ones left dealing with these issues' years down the line. Very often the original installer has ceased trading and guarantees/warranties prove worthless. If the property is also suffering other damp issues, CWI issues can become difficult to spot, with salts efflorescence often misattributed to rising damp. CWI failure investigations are usually invasive, and replacement of failed CWI costly. Removal costs can be in the region of £1,500 to £3,000, which doesn't even account for the secondary issues, such as damage to internal wall finishes, floor coverings and rotting timber floor joists etc. As well as poor installation an often-overlooked issue with CWI is how it is impacted during internal escapes of water episodes and during flooding incidents.

There is much that needs to be done before the start of another round of Government sponsored CWI installations can be considered both a viable and long-term investment. We know problems have historically arisen due to inappropriate materials and installation. To remedy this, there needs to be much more scrutiny placed on the experience and competency of installers.

The Government have tentatively advised that Green Home grant improvements will be undertaken by 'local accredited suppliers', but have yet to supply detail on what shape or form this accreditation will take, nor how this will be policed.

There is also the issue of education: for homeowners, installers, and those devising these sweeping policies. Damp issues cost insurers and homeowners millions of pounds every year, and uptake of schemes such as these without pause for thought on the potential risk to property is concerning. Homeowners need to be made aware of the pros and cons of the energy efficient improvements they intend to make, and how to better understand and spot risks, such as damp issues before they become a serious problem. Similarly, those installing the CWI, and Government policy makers should be similarly educated on the potential risks, as to better understand the impact of their actions.

Increasing energy efficiency in our homes is an important objective if we are to tackle the looming spectre of a climate crisis. This makes getting home improvements, such as retrofit CWI, 'right the first time', absolutely imperative. If done wrong, not only are the green benefits of installing CWI lost, but totally negated, and made worse with the carbon output of making the repairs. Installers and the Government need to be held to account to ensure that it is a successful endeavour.



Davis French & Associates are experts in property damage assessment. We specialise in establishing the cause of damp issues, and providing independent, practical and scientific advice on how to resolve them. Whether you suspect an issue with CWI, or have a problem regarding unexplained damp issues within a property, please call us on 0800 876 6626 or email [info@davis-french-associates.co.uk](mailto:info@davis-french-associates.co.uk) for independent technical advice