Government Grants for Thermal Insulation and Heating Infrastructure

Some facts: Cavity Wall Insulation etc.

The Warm Front Scheme

As a useful starting point refer to http://www.government-grants.co.uk which provides an at-a glance summary of eligibility for all insulation and heat-related grant aid.

Energy Company Grants

Grants are funded by the energy companies via EnergyLink (part of the Government Carbon Emissions Reduction Target – CERT), and as with those of other previous initiatives, are offered subject to the work being carried out by an 'approved installer' – meaning a contractor approved as competent both by the British Board of Agrément and by the manufacturer of the product being used.

Accreditation of Contractors

As part of the accreditation process – for example, to qualify for installing cavity-wall insulation, an **approved installer** has to satisfy an initial site installation check, and thereafter will be subject to the **BBA Assessment and Surveillance Scheme**. The product manufacturer will also make spot checks to ensure that the installation complies with the conditions set out in the BBA certificate.

Proof of Competence

At least one member of the team of operatives must carry an **identification card** issued by the manufacturer.

Building Regulations or Exemptions

Like the fitting of replacement windows, insulation of a cavity wall requires consent under the building regulations, and involves prior application unless the contractor holds an **exemption certificate**.

BBA Certificate numbering

BBA Product Certificates for cavity insulation require not only that the BBA identification mark is shown on **quotations, tenders and invoices**, but also the **certificate number** which identifies the product irrefutably.

Initial Survey

The whole process begins with a pre-works survey by the installation company, and on completion the work will be guaranteed for a period of 25 years by CIGA, the Cavity Wall Guarantee Agency.

The following definitions might be of assistance:

25-year Guarantee

CIGA: (Cavity Wall Guarantee Agency): Established in consultation with the UK Energy Environment and Waste Directorate (part of DETR). An independent agency with is own secretariat that provides a 25-year guarantee for cavity-wall insulation. Governed by a council of system-designers who also supply the insulation material) and registered installers with support from trade associations and government bodies. The guarantee covers defects in materials and workmanship. Guarantees are transferable when a dwelling changes hands. To find out more, click on http://www.ciga.co.uk/services.html

Energy Savings Trust: An independent, non-profit making organisation acting as a bridge between government, consumers, trade, businesses, local authorities and the energy market. Mission: to provide impartial information and advice specifically designed to help consumers take action to save energy. To find out more click on http://www.energysavingtrust.org.uk

British Board of Agrément – (BBA) is the UK's major authority offering approval of construction products, systems and installers.

Since 1966 Agrément Certificates have been providing invaluable information on the performance of new construction products and materials. For only a little less time, the BBA has been running its injected cavity wall insulation approved installer scheme, and since 2002 has provided the inspections that have underpinned the FENSA Competent Persons Scheme for replacement windows and doors in England and Wales.

The BBA has a reputation for integrity and its absolute independence and impartiality recognised throughout the construction industry in the UK and beyond. The reputation of the BBA is also underlined by its UKAS accreditations. The BBA is also the UK representative of EOTA, the body that co-ordinates the issue of European Technical Approvals across the EU. In this respect, the organisation is responsible for issuing European Technical Approvals (ETAs), and will also offer testing and certification services in support of CE markings against harmonised European standards.

Maintenance of core values is addressed by a Governing Board of senior figures drawn from the UK construction industry and implemented by the BBA Management Team.

Input to technical work is also overseen by a Technical Advisory Committee, including representatives of all key industry sectors. See also www.bbacerts.co.uk

Retrospective Fill. Types of Cavity Insulation

Survey Key points: Older cavity construction: Retrospective insulation:

Essentially, three types of retrospective cavity fill are likely to be encountered: Loose-blown mineral wool (glass or rock); Expanded polystyrene bead (EPS); and Urea-formaldehyde foam (UF). Each has its place, but all are approximately equivalent in insulation properties. UF tends to be less favoured than the other two products and is unsuitable for use where the wall is moderately or severely exposed to incident weather, but was much used in the 1960s/70s, until perceptions that formaldehyde gas was one cause of a 'sick-building' syndrome caused it to be regarded with suspicion. An adverse effect has not been convincingly proved.

A building survey should be able to establish whether retrospective cavity fill has been installed, and the type of material. This information should also be indicated in the *Energy Performance Certificate* (EPC), but take note: The *Independent Surveyors Association* knows of several instances where the Energy Assessor has failed to make the correct interpretation.

Surveyors need to be aware of the following:

Air-bricks Sub-floor ventilation

1. Work of installing CWI is a rapid process (2 hours for the average semi-detached house), and we are aware of various examples where under-floor ventilation in some older housing has been compromised: firstly by neglecting to confirm sleeving of the cavity, or secondly by failure to remove the outer 'air-brick, and provide protection by fitting a 'cavity-brush' or other type of approved protection to prevent the air channel becoming blocked by the insulation. Use of a torch will often assist in determining whether an air channel is sleeved or not. One of our members recommends checking the opening into an under-floor void by using a length of stiff wire (he uses an opened-up clothes hanger for this purpose).

   If unimpeded and protected openings cannot be determined, this fact should be stated in the report, with a recommendation for an extended survey to investigate further, by opening-up. The risks associated with insufficient airing of ground-level voids below suspended-timber floors should be emphasised.

Pre-works Survey Report

2. The pre-works inspection carried out by the installation company should be a detailed assessment of all aspects of the wall in accordance with BS 8208:Part1: 1985, and should result in a survey report and comprehensive data record which will be retained by the BBA certificate-holder. However examples of defects (generally penetrating dampness) continue to occur where walls unsuitable for cavity-insulation have, nevertheless, been treated:

Example:

One case (unreported) concerns a tenant, where the Local Authority landlord upgraded its social-housing stock on an exposed coastal site, by inappropriate installation of loose-blown rock-wool into the cavity walls. Within two years, water-bridging had occurred, causing dampness internally, and development of 'black-mould' (*Stachybotrys chartarum* or similar). The tenant had a history of chronic asthma, which became dramatically worsened by the environmental conditions within the dwelling, resulting in a successful claim for compensation against the landlord. As well as compensation in recognition of the ill-health suffered, the Local-Authority landlord had to carry out remedial rectification which included opening up the walls and removing the saturated cavity-fill, and then providing insulation externally, behind a rendered, weatherproof finish.

The importance of the pre-works survey cannot be underestimated, and the purchaser of a house with retrospectively-fitted CWI should always be advised to obtain a copy of the report as well as the guarantee certificate for safe-keeping with the title documents.

Importance of comprehensive inspection for penetrating dampness

3. When carrying out a building survey of a dwelling which has been treated with CWI, it is advisable to ensure careful inspection of the internal wall surfaces for dampness at all levels, and not only on the ground floor. Investigate for circular patches which might indicate bridging of wall ties; dampness on the undersides of, or around, structural openings where cavity-trays may have been compromised, as well as at floor level. Externally, check with particular care, render and other finishes for evidence of structural fractures (defective wall-ties, and other structural faults), and the level of damp-proof courses. If in doubt, warn the client of the consequences of defects arising from inappropriate CWI.

Identify the Material

4. Wherever possible, try and establish the nature of the material used for cavity insulation. Inspection at roof-void level, or from an electricity-meter wall-box, will often leave clues where the material has escaped through openings in the structure.

Notice to Conveyancer

5. Recommend the client to instruct the conveyancer that cavity-wall insulation has been installed, that it is a notifiable event under the Building Regulations, unless the work has been carried out by a contractor holding an 'exemption certificate'. If the work is of recent origin, recommend that a copy of the pre-works survey, and CIGA guarantee are obtained (from CIGA), if necessary; and that any benefit under guarantee is transferred on change of ownership. A small charge is made for changing the name on the certificate (£5.00).

Advise of Risks

6. Advise the client of the risks from penetrating dampness arising from cavity fill, the extent of your investigation for current evidence of dampness within the dwelling, and the importance of the CIGA guarantee, if available.

7. Advise clients about the possibility of grant aid for dwellings which need improvement: http://www.freeinsulation.co.uk is a good starting point.

Useful Guidance

- *Technician's guide to best practice: Installing cavity wall insulation*; Version 2.0 – issued July 2002. Published by Cavity Insulation Guarantee Agency, CIGA House, 3 Vimy Court, Vimy Road, Leighton Buzzard, LU7 1FG (Tel.01525 853300)
- *BS 8208 Guide to assessment of suitability of external cavity walls for filling with thermal insulants, Part 1: 1985 Existing traditional cavity construction.*
- *BBA Information No 10: Methods of assessing the Exposure of Buildings for Cavity Wall Insulation.*
- *Cavity wall insulation in existing dwellings: A guide for specifiers and advisors:* CE252*;* Published by The Energy Saving Trust. Available for free down-load from http://www.energysavingtrust.org.uk/Publications-Download/?p=18pid=1161
- *Refurbishing cavity-walled dwellings: a summary of best practice*: CE57 Published by the Energy Saving Trust. Available for free down-load via http://www.sap-rating.com/html/downloads_links.html . **Note: this web site also contains other useful links and pdf downloads**
- *British Standards:* **BS 5618:1985 Code of Practice for thermal insulation of cavity walls** (with masonry or concrete inner and outer leaves) by filling with Urea Formaldehyde (UF) foam systems.
- *BRE Information Paper – IP 2/88. Rain penetration of cavity walls: report of a survey of properties in England & Wales.*

BBA Certificate:

See also British Board of Agrément Certificates for blown-fill insulation:

89/2316 Rockwool Cavity Wall Insulation
89/2294 Instafibre White Wool Cavity Wall Insulation
95/3149 Instafibre Rockwool Cavity Wall Insulation
88/2033 Knauf Supafil Cavity Wall Insulation
99/3637 1st Insulaion Partners: Cosytherm Rockwool
01/3789 1st Insulation Partners: Whitewool

and for EPS beads:

05/4263 Sundolitt EPS bead
04/4167 Platinum EcoBead
09/4652 Korefill Blownin cavity-wall insulation