



Installing Injected Cavity Wall Insulation to Party Walls

Best Practice Guide

Best Practice Guide: April 2020

Version: 1.0

Installing retrofit blown cavity wall insulation to party walls of standard cavity wall construction

Preface

Installing retrofit blown cavity wall insulation to party walls of standard cavity wall construction provides technicians with a guide to best practice and offers practical examples of procedures to be carried out by trained and competent technicians. The guide should be followed by all party wall cavity wall insulation installers and used in conjunction with training programmes.

Contents:

Page 1: The IAA

Page 2: Preface & Contents

Page 3: Introduction

Page 4: Building Regulation

Page 5: Building Suitability Assessment

Page 5 to 7: Identifying Cavity Constructed Walls

Page 7 & 8: Appliances

Page 8: Drilling Operation

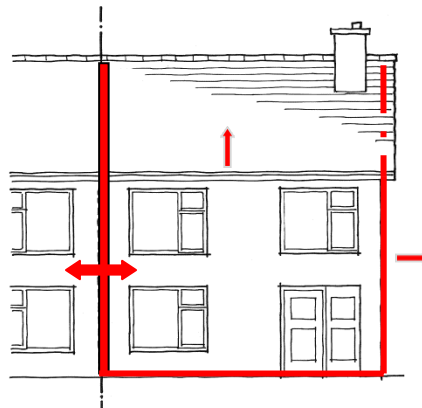
Page 9: Filling Operation & Making Good

Page 10 to 11: Post Installation Internal Checks, Health and Safety & customer care

Introduction

Cavity wall insulation installed into cavity constructed party walls is beneficial in reducing heat loss and in some cases reduction in sound transmittance within buildings.

- A “Party Wall” is the dividing wall between attached buildings (e.g. semi-detached/mid terraced properties)
- Many existing Party Walls have been built with a cavity to reduce sound transmission between the buildings. However, the party wall cavity can allow cold air from outside to circulate and draw heat from the building.
- This heat ‘bypasses’ the thermal envelope and deposited externally, resulting in wasted energy.



Typical Party Wall Layout

Since the 1930's, the vast majority of houses have been constructed with cavity walls.

The two wall leaves are structurally tied together with wall ties usually of galvanised steel, stainless steel or plastic.

If the cavity is left empty, air movement constantly cools down the cavity due to convection within the party wall. As the temperature drops, more heat is lost. Filling the party wall with insulation material prevents convection and reduces heat loss from or to adjoining buildings.

Installing companies must be approved by the British Board of Agrément or KIWA BDA. The system certification bodies are responsible for the technical approval of each system.

Technicians are trained and approved by the systems suppliers and are also required to be registered with the BBA / KIWA BDA.

When retrofit blown party wall cavity wall insulation is carried out, a 25-year guarantee is issued by the Cavity Insulation Guarantee Agency [CIGA] for installing companies who are registered with CIGA.

THE PARTY WALL ACT 1996

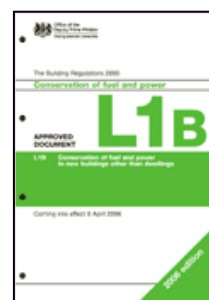
The party wall act is concerned with works carried out to party walls that affect the support function of the wall (structure). Installing party wall cavity wall insulation can be considered as minor works in this respect. Notices (building notices) are not required; however, such works must be discussed and agreed with neighbours and or landlords of all adjoining buildings.

Building Regulations

The United Kingdom has three sets of building regulations.

- The Building Regulations - Covering England
- The Building Regulations (Scotland) - Covering Scotland
- The Building Regulations (Northern Ireland)

Whilst each of these regulations are different in expression and interpretation, they all require building materials and works to be fit for the intended purpose.



Building Suitability Assessment

Each building must be assessed before installation, to ascertain that the building construction type and party walls are suitable for the installation of party wall cavity wall insulation.

The assessor accepts liability on behalf of his/her company. However, the installation team must also ensure that each affected property has been correctly assessed and suitable to receive cavity wall insulation.

The assessment is of particular importance in the case of flues, chimneys and combustion air ventilators, where it is the responsibility of the installation technicians to carry out thorough checks. **See the Technicians Guide – Flues, Chimneys & Combustion Air ventilators.**

Cavity Wall Insulation must not proceed unless you can gain entry to the individual properties proposed to receive cavity wall insulation and are able to carry out all necessary checks.

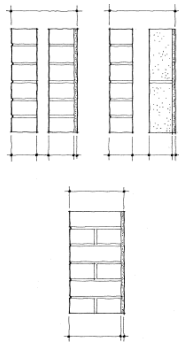
On arrival:

- Introduce yourself to the occupants of both property's of the adjoining party wall.
- Explain and confirm what you are there to do.
- Explain the process and need for the internal checks both before and after the planned installation.

Identifying Cavity Constructed Party Walls

Similar to external walls, there is no standard rule for identifying if a wall is of solid or cavity construction.

The first indication can be from a visual inspection of the party wall from the roof space. If “header bricks” are identified within the wall construction this may indicate that the wall is of a solid construction.



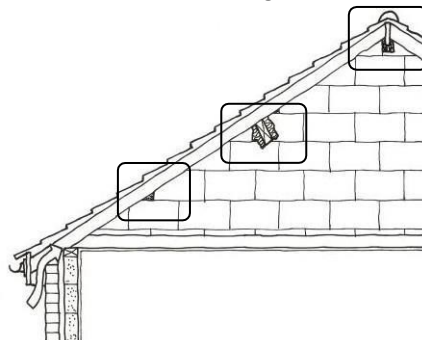
Non Traditional Construction

Properties constructed of non-traditional build (system built – timber frame/concrete frame/steel framed construction] should not be insulated without special approval by the BBA, System Supplier, Building control.

Missing mortar joints, gaps and making good of the party wall

Seal all holes or gaps that you find including pipe work below baths, sinks. Check cupboards, wardrobes, or domestic appliance located on the party wall.

Gain access to the roof space – inspect gable ends particularly around ceiling joists, purlins, structural bindings and seal off before commencing the installation works.



Electricity

Be aware of electrical cabling / wiring within the party wall cavity.

Where meter boxes are located adjacent to the party wall (i.e. below stair wells etc) be aware that party walls to older properties can contain electrical cables where re-wiring has been carried out. or where additional cables are added and distributed from the mains supply unit.

Where cables are identified these must be protected / safeguarded.

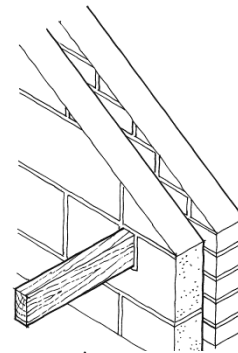
In all cases the assessor / technician should contact a qualified electrician for advice - guidance.

There may be a requirement for intumescent sleeving around electrical cables, pipe work located within the party wall. Specialist advice must be obtained.

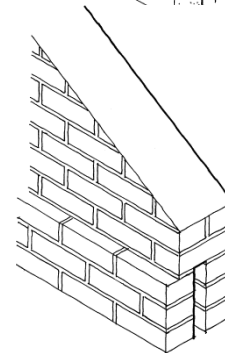


Gable Apex Construction

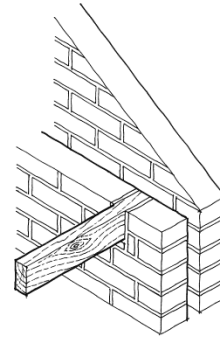
Standard Cavity Wall Masonry /Masonry construction.



Cavity Construction reducing to solid wall construction (visible within the roof space / loft)



Cavity to single leaf brickwork
(not generally seen on party wall construction)



Whilst inspecting the loft space, take the opportunity to look for signs of condensation.

Where condensation exists, the route cause should be identified, and remedial action taken.

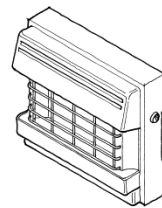
Dampness and Condensation

Ask the customer's if there have been any problems with dampness to the party wall to be treated.

Look for any signs of mould growth or staining during your inspection – i: e inside cupboards, kitchen units, and wardrobes etc that are attached to the party wall

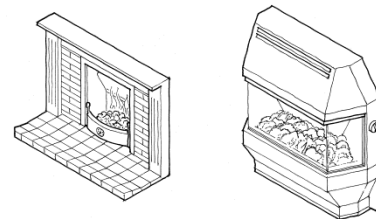
See IAA guide to best practice Installing Cavity Wall Insulation.

Flues, Chimneys & Combustion Air Ventilators



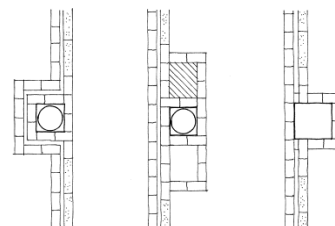
Fuel Burning Appliances

Cavity wall insulation installed should not be installed unless you gain entry to each individual adjoining property where party wall cavity insulation works are to be carried out.



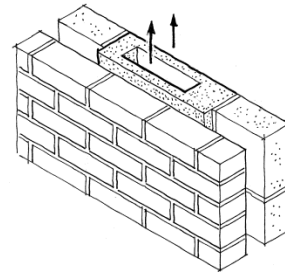
Locate, Type, Fuel used,

Safety Checks must be carried out to all fuel burning appliances fitted to party walls before and following completion of the installation works to ensure that the appliance is / has not been compromised



Flues and Chimneys

Inspections must be carried out to confirm positions of Chimneys, Flue Routes within party walls to each property.



Combustion Air Ventilation

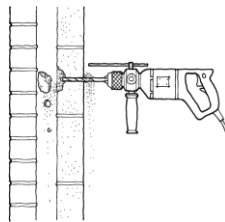
You must be satisfied that the combustion air ventilator supplying combustion air for the fuel burning appliance meets current requirements -: See **flues, chimneys & combustion air ventilators**.

Drilling Procedure

Refer to your system suppliers drilling patterns. When drilling do not drill directly in line with chimney flues.

Check adjoining properties to make an informed decision as to which wall should be drilled for ease of installation i.e. kitchen/bathroom units, ceramic tiling to kitchen, bathrooms, wall unit cupboards, wardrobes, loft or roof void working access and party wall facings etc should be considered to minimise the amount of debris that falls into the cavity during the drilling process.

Methods during the drilling operation of minimising falling debris may include: Reduced leverage / pressure on the drilling machine, use of a depth gauge, take the drilling machine off “hammer function” for the latter part of drilling each hole.

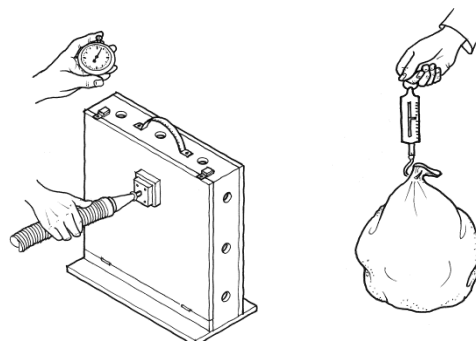


Prevent as much major disruption to the client during the drilling operation as possible – noise, dust, etc

FILLING OPERATION.

The filling operation must not commence until such time that the complete elevation has been drilled.

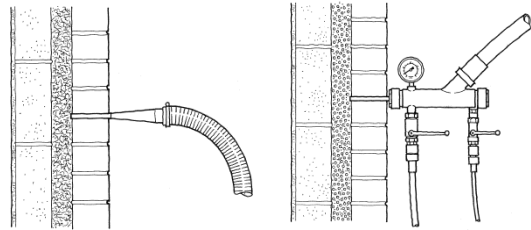
Install the insulation system in accordance with BBA / KIWA certification & system designer



specification.

Quality control checks must be carried out to confirm that the installation/ blowing machine is complying to system designer specification.

Record cavity widths on front and rear elevations, material usage to provide valuable information for installed density checks.



For further guidance See: IAA guide to best practice: (installing cavity wall insulation)

Making Good

The importance of making good all installation holes following completion of the works cannot be over emphasised.



The customer must be fully informed at the initial assessment and contract stage, of the final making good process and of any actions to be taken following the works. i.e. re-tiling, re-plastering, redecoration, replace all wall units removed during the planned works,

Post Internal Installation Checks

It is vital to carry out post installation checks on:

- All flued appliances to party walls.
- Combustion air ventilators.

For further guidance See: IAA guide to best practice: (installing cavity wall insulation)

Health and Safety

It is important that the installation and all associated works are carried out in a safe manner and in strict accordance with HSE & Installer company health and safety policy and procedures.

The customer and all persons within the property must be informed of the work procedures and ensure that their safety and well-being is protected during the works.



Customer Care

- The following points may seem obvious but remember- you will be judged on what is important to the customer's – not what matters to you.
- Always communicate with the customer / client in an appropriate & proper manner.
- Explain to the client's what you intend to do before you start and during the installation process.
- Remind the customer's that you will need access to adjoining properties during the works.
- Make the customer's aware of any problems or defects before starting the works, and record details on the work records.
- Always use shoe protection entering within the property.
- Safely remove all articles on affected walls to adjoin properties.
- Put down sheeting / coverings to working and access areas
- Close all doors etc to prevent air borne dust/materials etc during the works.
- If the works being carried out varies from what the customer was originally told, be sure to fully explain why and contact your office for instructions.
- If any damage is caused however small, inform the customer and report the matter to your company. Assure the customer that the matter will be dealt with appropriately.
- Do not park vehicles on a customer's driveway without permission.