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Agrément Certificate

14/5176

Product Sheet 1 Issue 5

SUPAFIL CAVITY WALL INSULATION

SUPAFIL PARTY WALL

This Agrément Certificate Product Sheet⁽¹⁾ relates to Supafil⁽²⁾ Party Wall, a blue granulated glass mineral wool fibre material injected in loose form, for use in internal separating masonry party walls of existing domestic buildings with nominal cavity widths not less than 65 mm, using internal or external filling methods. In the latter case, installation is restricted to a maximum of 10 m total length of cavity wall, when filled from both ends.

(1) Hereinafter referred to as 'Certificate'.

(2) Supafil is a registered trademark.

The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review



KEY FACTORS ASSESSED

- Section 1. Mechanical resistance and stability
- Section 2. Safety in case of fire
- Section 3. Hygiene, health and the environment
- Section 4. Safety and accessibility in use
- Section 5. Protection against noise
- Section 6. Energy economy and heat retention
- Section 7. Sustainable use of natural resources
- Section 8. Durability

The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Fifth issue: 2 May 2024
Originally certified on 28 November 2014

Hardy Giesler
Chief Executive Officer

This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.

The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).

Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

The Certificate should be read in full as it may be misleading to read clauses in isolation.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément

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SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

In the Opinion of the BBA, Supafil Party Wall, if installed, used and maintained in accordance with this Certificate, is not subject to the national Building Regulations.

Fulfilment of Requirements

The BBA has judged Supafil Party Wall to be satisfactory for use in internal separating masonry party walls of existing domestic buildings with nominal cavity widths not less than 65 mm, using internal or external filling methods. In the latter case, installation is restricted to a maximum of 10 m total length of cavity wall, when filled from both ends.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the product under assessment. Supafil Party Wall consists of a blue granulated glass mineral wool fibre material, treated with a water-repellent additive.

The product is intended for use as an injected party cavity wall insulation and is effective in reducing the party wall thermal bypass.

The product is for use in internal separating masonry cavity party walls of existing domestic buildings, comprising minimum 100 mm brick leaves or minimum 100 mm solid blockwork leaves (600 to $1600 \text{ kg}\cdot\text{m}^{-3}$) finished with wet plaster or a minimum 6 mm (8 mm nominal) parge coat with plasterboard on dabs.

Product assessment – key factors

The product was assessed for the following key factors, and the outcome of the assessments is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Not applicable.

2 Safety in case of fire

2.1 Reaction to fire

2.1.1 The product was tested for organic content by weight and the results are given in Table 1.

Table 1 Reaction to fire classification

Product assessed	Assessment method	Requirement	Result
Supafil Party Wall ⁽¹⁾	BS EN 13820 : 2003 BS EN 14064-1 : 2018	Value achieved	≤1%

(1) Element report No. N100026B, dated 30 August 2019. Copies can be obtained from the Certificate holder on request.

2.1.2 Based on the information given in Table 1, the reaction to fire classification of the product is Class A1.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Effectiveness against rising damp

3.1.1 The product was tested for short-term water absorption by partial immersion and the results are given in Table 2.

Table 2 Short term water absorption by partial immersion

Product assessed	Assessment method	Requirement	Result
Supafil Party Wall	EN 1609 : 2013	$\leq 1.0 \text{ kg}\cdot\text{m}^{-2}$	Pass

3.1.2 The product can be used in situations where it bridges the damp-proof course (DPC) in party walls; dampness from the ground will not pass through to the inner leaf of the walls in either property, provided the wall is detailed in accordance with the requirements and provisions of the national Building Regulations.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

On the basis of the data assessed, the product will not significantly affect the wall's resistance to the passage of airborne sound.

6 Energy economy and heat retention

Data were assessed for the following characteristics.

6.1 Conservation of fuel and power

6.1.1 In-situ testing has demonstrated that party cavity walls fully filled with the product can achieve the effective thermal transmittance (U values) in Table 3.

Table 3 Example party wall U values

U values ($\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$)	Edge sealing	Examples for wall junctions, where floor junction is closed	
		Junction closure	External wall cavity
0.0	Effective	Compressible fire stops enclosed in plastic sleeves (Figure 1)	Any full- or partial-fill insulation or no fill at all
0.1	Reasonable	Full-fill mineral wool thermal insulation (Figure 2)	Full-fill mineral wool thermal insulation
		Compressible fire stops not enclosed in plastic sleeves	Any full- or partial-fill insulation
0.2	Poor	Cavity brush (Figure 3)	In-situ formed mineral wool thermal insulation

6.1.2 Significant heat can be lost via the cavity in a party wall. Rising warm air can lose heat through the wall leaves in cold loft spaces and can also be replaced by cooler air drawn in from the outside. The extent of the heat loss depends significantly on the external temperature and wind speed, unless the opportunity for convective air movement in the cavity and the air permeability of the cavity perimeter are significantly restricted.

6.1.3 On the basis of the data assessed, the product can contribute to reducing heat loss.

Figure 1 'Effective' edge seal — sleeved cavity barrier

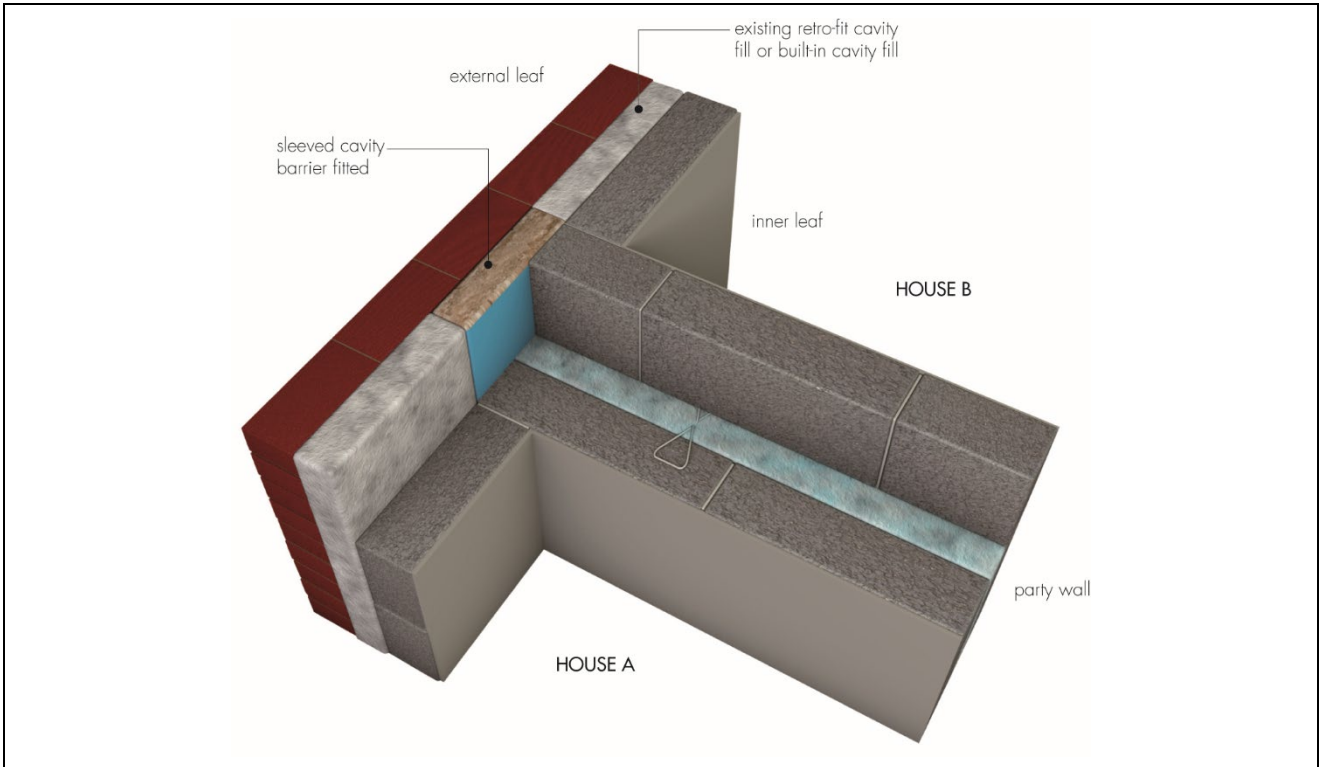


Figure 2 'Reasonable' edge seal — fully-filled external cavity

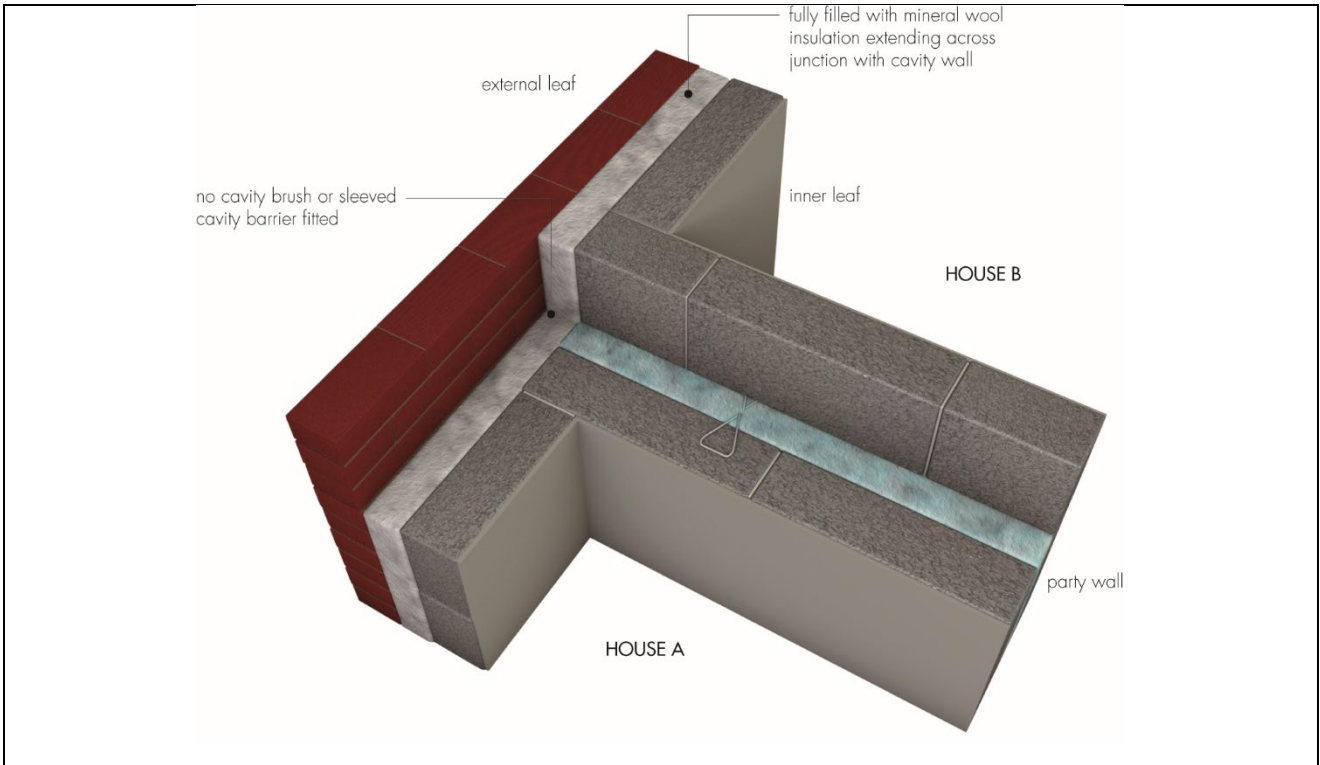
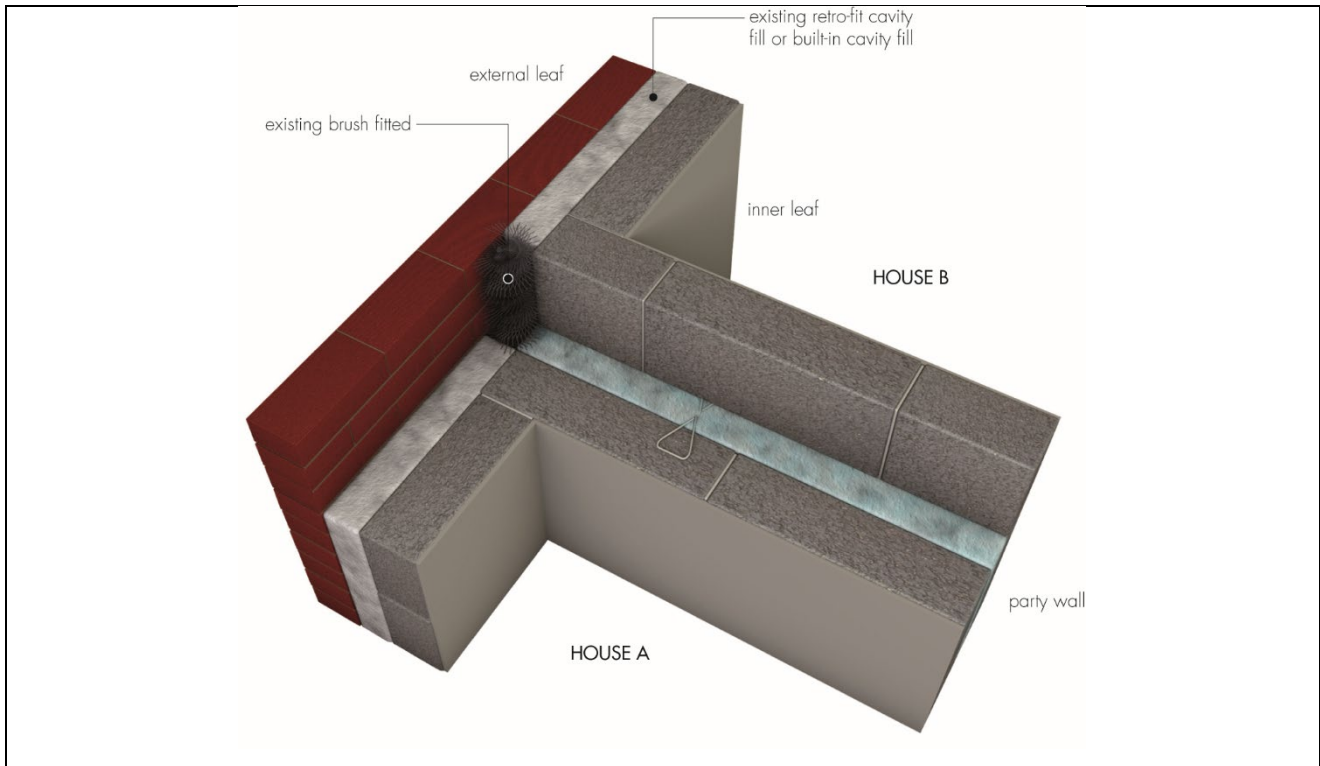


Figure 3 'Poor' edge seal —cavity brush



7 Sustainable use of natural resources

Not applicable.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in the product were assessed.

8.2 Service life

Under normal service conditions, the product will have a life equivalent to the structure in which it is incorporated, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 The design process was assessed by the BBA, and the following requirements apply in order to satisfy the performance assessed in this Certificate.

9.1.2 This Certificate covers the use of the product subject to the following conditions being met:

- a site survey should be carried out prior to installation (see sections A.1 and A.2)
- the entire cavity is fully filled from ground level up to the roofline
- the minimum cavity width must be no less than 65 mm
- walls are in a good state of repair and show no evidence of damage
- for external filling (see sections A.7 to A.9), the total length of cavity wall does not exceed 10 m
- installation is carried out by a BBA Approved Installer, trained to work on this type of installation.

9.1.3 The target mean density of the product when installed is $18 \text{ kg}\cdot\text{m}^{-3}$ over the entire installation.

9.1.4 Essential ventilation openings, such as those providing combustion air on underfloor ventilation, and all flues in the cavity wall must be checked. If adequate sleeving or other cavity closures are not present, installation must not proceed until these openings have been sleeved or otherwise modified to prevent blockage by the insulant.

9.1.5 Care must be taken in the overall design and construction of junctions with other elements and openings to minimise thermal bridges and air infiltration and the detailed guidance found in the documents supporting the national Building Regulations must be followed.

9.1.6 The product may be installed only where:

- there are no signs of dampness on the inner face of the cavity wall, other than those caused solely by condensation
- the cavity is not being used as a source of combustion air or as a flue for ventilation purposes.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate, the *BBA Assessment and Surveillance Scheme for BBA Approved Installers of Cavity Wall Insulation* and the Certificate holder's instructions. A summary of instructions and guidance are provided in Annex A of this Certificate.

9.2.3 The installation of the product must only be undertaken using installation equipment, tested and accepted for use with the product by the BBA.

9.2.4 The installer must provide all necessary hoses, drilling tools, equipment and materials for making good the walls after the installation.

9.2.5 During installation, the following simple checks can be made, as an aid to determining that the installation conforms to the certified method:

- that the pattern of holes complies with the description given in sections A.5 and A.6.
- that injection of the material takes place at each hole, to complete the filling of the cavity space.

9.2.6 An initial exploratory hole should be drilled to determine the masonry's resistance to spalling. This should be located adjacent to the external wall to facilitate removal of any spall.

9.2.7 The drilling tool used must have a selectable 'rotational only' mode in addition to a hammer action. Drilling of injection holes commences with the hammer action on, but the 'rotational only' mode must be used for the final 25 mm of the wall leaf. Depending on the circumstances of a particular installation, the depth of the 'rotational only' mode may need to be extended.

9.2.8 In the event of spall occurring, the Certificate holder's methodology must be followed to determine whether to clear the cavity, investigate a revised drilling process or abandon the installation altogether. An example of a revised drilling process is that the final 50 mm of hole depth is completed in 'rotational only' mode.

9.2.9 Where the party cavity wall of a property is to be insulated and the external cavity wall is not already insulated, a cavity brush is inserted at the line dividing the junctions in order to contain the insulation. This consists of a continuous nylon brush which is left in place when the installation is completed.

9.3 Workmanship

Practicability of installation was assessed by the BBA on the basis of the Certificate holder's information and a site visit to witness an installation in progress. To achieve the performance described in this Certificate, installation of the product must be carried out by operatives trained and approved by the Certificate holder and subsequently approved by the BBA.

9.4 Approved installers

9.4.1 Installation of the product must be carried out by the Certificate holder or their approved installers. An Approved Installer is defined as a company:

- required to satisfy an initial site installation check by the BBA following approval by the Certificate holder and subject to the BBA Assessment and Surveillance Scheme for Installation of Cavity Wall Insulation
- approved by the Certificate holder and the BBA to install the product
- having undertaken to comply with the Certificate holder's installation procedure
- employing technicians who have been issued with appropriate identity cards by the Certificate holder; at least one member of each installation team must carry a card
- subject to inspections by the Certificate holder who oversees the activities of Approved Installers operating under the BBA Surveillance Scheme for Cavity Wall Insulation. It is a requirement that the Certificate holder undertakes inspections of each card-carrying technician using their product, and maintains records, as detailed in the *BBA Assessment and Surveillance Scheme for BBA Approved Installers of Cavity Wall Insulation*.

9.4.2 Details of Approved Installers are available from the Certificate holder. Approved Installers are responsible for each installation of the product that they undertake.

9.5 Maintenance and repair

As the product is confined within the wall cavity and has suitable durability, maintenance is not required. Should it become necessary for any reason, the product can be evacuated from the cavity void.

10 **Manufacture**

10.1 The production processes for the product have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate .

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

11 Delivery and site handling

11.1 The Certificate holder stated that the product is delivered to site in polythene-wrapped bales weighing approximately 18 kg, which should not be opened until required for use. The bales are marked with the BBA logo incorporating the number of this Certificate.

11.2 Delivery and site handling must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 It is essential that the product is stored off the ground, inside or under cover on a dry, level surface and protected from rain, snow and other sources of dampness. Nothing should be stored on top of the product.

11.2.2 Damaged, contaminated or wet materials must not be used.

Supporting information in this Annex is relevant to the product but has not formed part of the material assessed for the Certificate.

Construction (Design and Management) Regulations 2015

Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised European Standard EN 14064-1 : 2010.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018 and ISO 50001 : 2018 by TÜV Nord (Certificates 44100190742, 44104190742, 44126190742 and 44764190742 respectively).

Additional information on installation

Installation must be in accordance with the Certificate holder's instructions and this Certificate.

Site Assessment

A.1 Prior to installation, an assessment must be carried out by a trained assessor, who may also be the installing technician, to ascertain the suitability of the property or properties to receive Supafil Party Wall. An assessment report is prepared and held at the installer's offices. Particular problems must be specifically identified and any reasons for rejection of the work noted. Care should be taken at this stage for the assessor and the party commissioning the work to identify and agree in writing, as appropriate, any special requirements for making good (see section A.10).

A.2 The assessment should establish the presence of electrical cables and other services found within the party wall cavity. De-rating of cables should be considered, as required.

Site preparation

A.3 The installing operative must ensure that the property has been correctly assessed and is suitable for insulation with the product. Any problems encountered during installation which prevent compliance with this Certificate must be referred to the installation company before proceeding.

A.4 The party wall should be thoroughly examined for any gaps, especially at penetrations through the wall. Any gaps found must be sealed prior to installation, for example with plugs of mineral fibre.

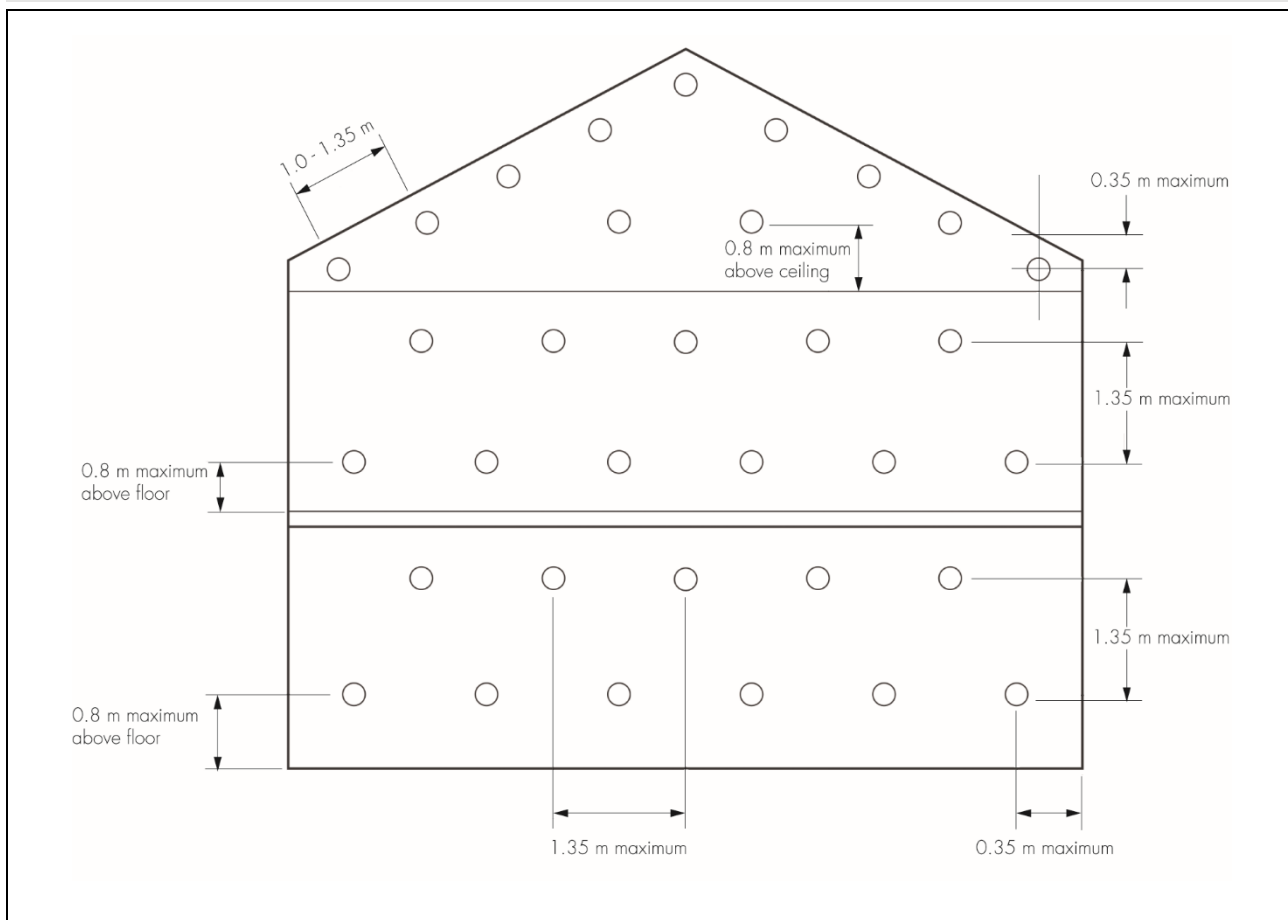
Procedure

Internal filling

A.5 Starting closest to an external wall, holes of 22 mm in diameter are drilled to suit the diameter of the injection nozzle used. The bottom row of holes should start approximately 800 mm above floor level and at a maximum of 350 mm from the junction of the external wall. The next row of holes is drilled in a diamond pattern at a maximum of 1.35 m above the bottom row. Assuming standard storey heights, this pattern is repeated for subsequent floors. For buildings with high ceilings, extra holes will need to be drilled following the installation pattern.

A.6 The final injection holes are drilled from within the loft space. The bottom row of holes should start approximately 800 mm above ceiling level. The topmost holes should not be more than 1.0 m apart under the horizontal boundaries and 1.35 m apart under the sloping boundary at the top of the gable end (see Figure 4).

Figure 4 Typical drilling pattern — internal

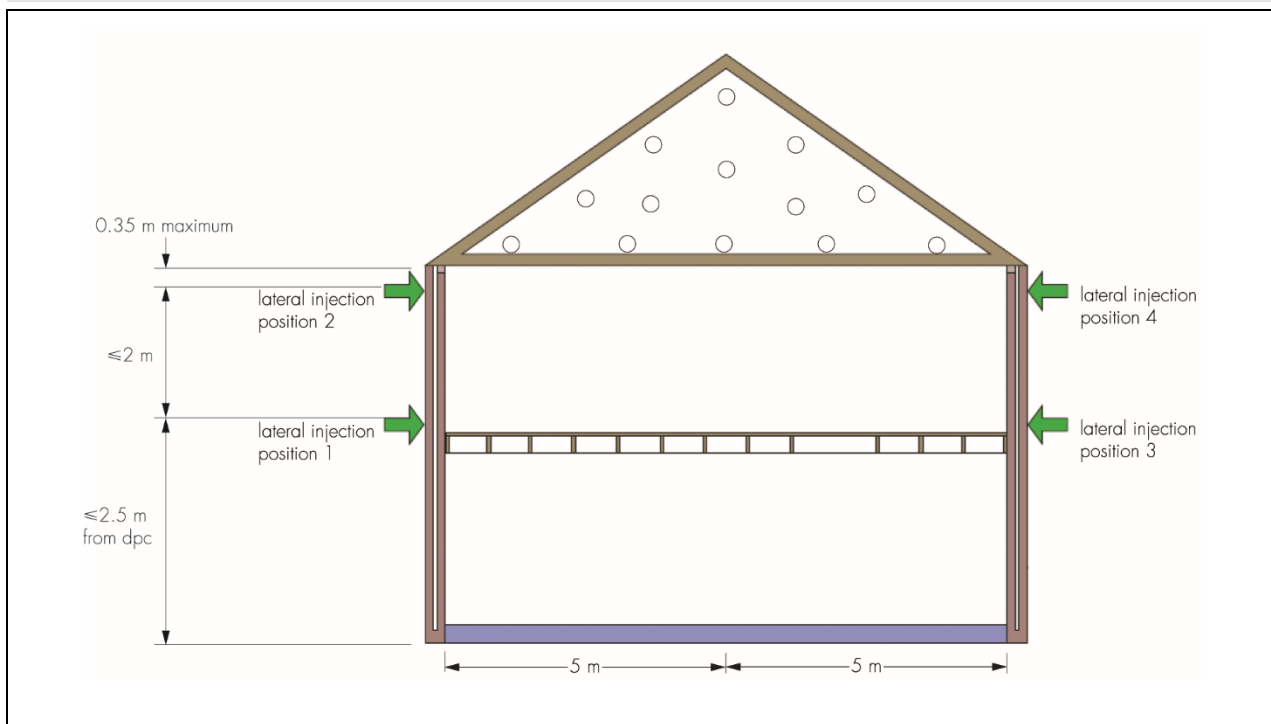


External filling

A.7 The product can also be installed via external filling, from both ends, when the total length of the cavity wall does not exceed 10 m (see Figure 5). Holes of 22 mm in diameter are drilled to suit the diameter of the injection nozzle specified by the system designer. The bottom hole should be no more than 2.5 m above the DPC level and centred on the party wall line. The next hole is drilled at a maximum of 2 m above the previous one. This pattern is repeated for subsequent floors as appropriate. The final injection hole is drilled 350 mm below the eaves level.

A.8 Installation is then completed internally, from within the loft space. The bottom row of holes should start approximately 800 mm above ceiling level. The topmost holes should not be more than 1.0 m apart under the horizontal boundaries and 1.35 m apart under the sloping boundary at the top of the gable end (see Figure 4).

Figure 5 Typical drilling pattern — external



A.9 For both internal and external filling, the product is blown into the cavity under pressure through 22 mm holes via a flexible pipe, fitted with the system designer's specified injection nozzle. Filling proceeds from the bottom to the top of the walls, and from one elevation to the other.

Finishing

A.10 After injection, the drill holes are fully filled with mortar of a similar type, colour, texture and weathertightness to that of the existing wall. Where a wall requires a high degree of colour-matching, the level of finish-matching should be agreed in writing during the site assessment. All trunked air vents, eg those providing underfloor ventilation and combustion air for heating appliances, must be checked and any obstructions cleared. In addition, all flues must be carefully checked by an appropriate test (eg smoke test) to verify that they are clear and unobstructed.

A.11 Insulant blown through the top of the cavity into the loft space is removed and any points of leakage sealed.

Bibliography

BS EN 13820 : 2003 *Thermal insulating materials for building applications – Determination of organic content*

EN 1609 : 2013 *Thermal insulating products for building applications — Determination of short term water absorption by partial immersion*

EN 14064-1 : 2010 *Thermal insulation products for buildings — In-situ formed loose-fill mineral wool (MW) products — Specification for the loose-fill products before insulation*

ISO 9001 : 2015 *Quality management systems — Requirements*

ISO 14001 : 2015 *Environmental management systems — Requirements with guidance for use*

ISO 45001 : 2018 *Occupational health and safety management systems - Requirements*

ISO 50001 : 2018 *Energy management systems — Requirements with guidance for use*

Conditions of Certificate

Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.

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