

Superglass Superwall 32, 34 & 36 Cavity Wall Batts Installation Guide - Full-Fill



Typical Constructions

Brick outer with block inner leaf

- Brick outer leaf
- Superwall Cavity Batt
- Block inner leaf
- Plasterboard on dabs

Block outer with block inner leaf

- Render
- Block outer leaf
- Superwall Cavity Batt
- Block inner leaf
- Plasterboard on dabs

Handling

Superwall Cavity Batts are lightweight and easy to handle; care should be taken to avoid crushing the edges or corners. If damaged, the product should be discarded.

Damaged, contaminated or wet product must not be used.

Partially completed walls should be protected from inclement weather (eg wind, rain or snow) and covered at the end of the day's work.

It is recommended that dust masks, gloves and long-sleeved clothing should be worn during cutting and handling of the product.



Cover exposed skin. When working in unventilated areas wear disposable face mask.



Clean area using vacuum equipment.



Waste should be disposed of according to local regulations.



Rinse in cold water before washing.



Ventilate working area if possible.

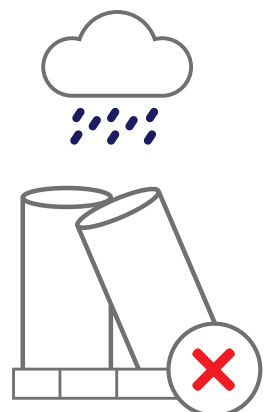
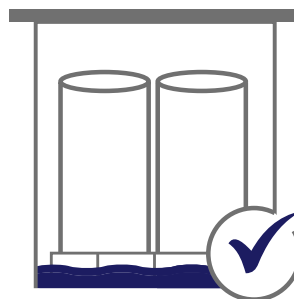


Wear goggles when working overhead.

Storage

Superwall is supplied compression packed in polythene to provide short-term protection only. The product should be stored properly and handled in such a way as to ensure they are clean, dry and undamaged.

For long-term protection, the product must be stored indoors or under a waterproof covering and off the ground to protect it from weather damage. The product should not be left permanently exposed to the elements.



Product Description

Superglass Superwall is a British Board of Agrément (BBA) approved, non-combustible and water repellent glass mineral wool insulation cavity wall batt.

Application

Superglass Superwall is satisfactory for use as either a full fill or partial fill cavity wall insulation and is used to reduce the thermal transmittance (U value) of external cavity walls with masonry inner and outer leaves (where masonry includes clay and calcium silicate bricks, concrete blocks, reinforced concrete, and natural and reconstituted stone blocks). The product is for use in new domestic and non-domestic buildings up to and including 25 metres in height for full fill and without restriction for partial fill (although additional requirements apply above 12 metres in height for full fill and above 25 metres for partial fill). It is essential that walls are designed and constructed to incorporate the precautions given in this Certificate to prevent moisture penetration.

Superwall is BBA approved for use in all UK exposure zones (subject to conditions detailed in the BBA Certificate and NHBC Standards).

Building Regulations

Buildings subject to national Buildings Regulations should be constructed in accordance with the relevant recommendations of:

- BS EN 1996-1-1:2005, BS EN 1996-1-2:2005, BS EN 1996-2:2006 and BS EN 1996-3:2006 and their respective UK National Annexes.
- BS EN 845-1:2013 and BS 8000-3:2020.

New buildings not subject to regulatory requirements should also be built in accordance with Standards identified in section 4.4 of BBA Certificate No:

Superglass Superwall 32 = 89/2231: Product Sheet 3

Superglass Superwall 34 = 89/2231: Product Sheet 5

Superglass Superwall 36 = 89/2231: Product Sheet 2

NHBC Standards

In the opinion of the BBA, Superglass Superwall, if installed, used and maintained in accordance with BBA Certification No: 89/2231, can satisfy or contribute to satisfying the relevant requirements to NHBC Standards Chapter 6.1 External masonry walls.

Cavity Wall Ties

Cavity wall ties and, if required, any additional ties to BS EN 845-1:2013 should be used for structural stability in accordance with BS EN 1996-1-1:2005, BS EN 1996-2:2006 and BS EN 1996-3:2006.

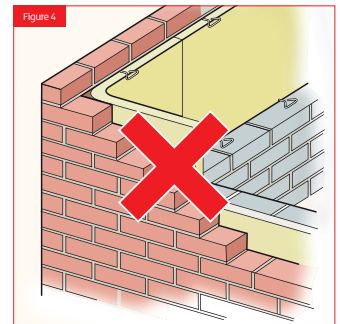
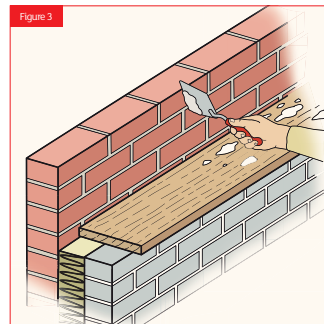
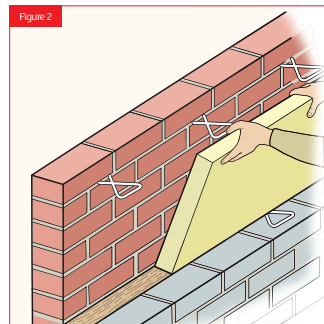
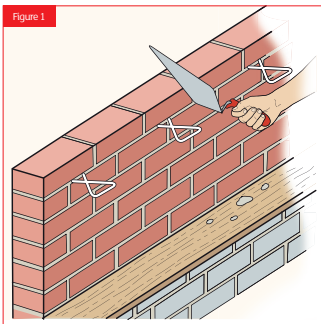
Installation Procedure - Full-Fill

Note: Cavities should be designed to suit the thickness of the proposed Superwall Cavity Batt.
Thicker batts should not be compressed into narrow cavities.

Step-by-step

- 1 A section of the inner leaf is built, with the first row of wall ties, at maximum 600mm horizontal spacing, where the insulation is to be begin. It is recommended that the wall ties are not placed directly on the dpc. The first run of batts may commence below dpc level (minimum 150mm) to provide edge insulation for the floor.
- 2 The leading leaf is then built up to the required height, with wall ties placed at a vertical spacing of 450mm ensuring the drip of the tie is located halfway across the residual cavity width. Excess mortar should be cleaned from the cavity face of the leading leaf, and the batts placed on the wall ties behind the retaining clips, to form a closely butt-jointed run. (See Figure 1).
- 3 The batt is compressed slightly and placed between the upper and lower wall ties to form a closely butt-jointed run. (See Figure 2).
- 4 The drip on each of the upper wall ties is inserted into the top of the batt and must be positioned to shed water away from the inner leaf. This is important to ensure that it functions correctly.
- 5 The other leaf is built up to the same level as the batt, with its inner face in contact with the batts.
- 6 Successive sections of the wall, incorporating wall ties, are constructed and the batt installed as work proceeds up to the required height. Vertical joints must be staggered and all joints tightly butt. Where protrusions occur in the cavity or extra wall ties are used, the batts should be carefully cut to fit.
- 7 For wide cavities, it is possible to use two layers of batts with vertical joints staggered both between layers and within layers. Appropriate wall ties should be used to accommodate the extra width of cavity; if unequal thicknesses of batts are used, the thinner layer should be placed nearest the outer leaf.
- 8 Batt's should be installed to the highest level of each wall.
- 9 Additional wall ties may be required to satisfy the structural requirements of BS EN 845-1:2013, BS EN 1996-1-1:2005, BS EN 1996-2:2006 and BS EN 1996-3:2006 to ensure adequate retention of the product or cut pieces.
- 10 Where additional wall ties are required at less than 450mm vertical spacing, the batts must be cut and neatly fitted around them. Under no circumstances should the batts be impaled by the ties.

Note - Partially completed walls should be protected from inclement weather (eg wind, rain or snow) and covered at the end of the day's work.



The illustrations outline technique only, and do not imply that the outer leaf must be built first.

Additional requirements

Buildings over 12 metres high and up to and including 25 metres high

Where the walls of a building are between 12 and 25 metres high, the following requirements also apply:

From ground level, the maximum height of continuous cavity must not exceed 12 metres. Above 12 metres, the maximum height of continuous cavity must not exceed 7 metres. In both cases, breaks should be in the form of continuous horizontal cavity trays and weepholes discharging to the outside.

- The area to be insulated must not be an infill panel in a framed structure.
- The Certificate holder, in association with the architect, must carry out a detailed programme of assessment of the project including an examination of the quality of installation as work progresses. Above average site supervision is recommended during installation.

Mortar droppings

After each section of the wall leaf is built, excess mortar should be removed from the cavity and mortar droppings cleaned from exposed edges of the installed batt before installation of the next section of batts. Use of a cavity board is recommended to protect batt edges and make cleaning easier. (See Figure 3).

Cut pieces

Batts can be cut, using a sharp knife or fine-toothed saw, to fit around windows, doors, apertures, air bricks etc. It is essential that cut pieces completely fill the spaces for which they are intended and that no gaps are left in the insulation.

Behaviour in relation to fire

Superglass Superwall Cavity Batts have a reaction to fire classification of Class A1 to BS EN 13501-1; therefore, they are considered to be non-combustible under the national Building Regulations.

Water resistance

Superglass may be used in situations where it bridges the dpc in walls. Dampness from the ground will not pass through to the inner leaf provided the wall is detailed in accordance with the requirements and provisions of the national Building Regulations.

Constructions incorporating Superglass and built in accordance with the Standards listed in section 4.4, will resist the transfer of precipitation to the inner leaf and satisfy the national Building Regulations.

Please refer to the product BBA Certificates for more information.

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