



# External masonry walls.

Built in solutions.

# Glass mineral wool.

## The perfect solution for external masonry walls.

About a third of all the heat lost in an uninsulated home escapes through the walls, as heat will always flow from a warm area to a cold one. In winter, the colder it is outside, the faster heat from your home will escape into the surrounding air.

In domestic dwellings built after 1920, it is highly likely that the external walls are made of two masonry layers with a cavity in between. Cavity wall insulation fills that gap, keeping the warmth in to save energy.

To assist in Buildings Regulation compliance, our recommended masonry cavity wall solution is fully filling the cavity with Superglass insulation.

This not only provides the best U-Value to wall width ratio, but also make good economic sense. Even with dense concrete blocks it is possible to achieve very high thermal performance in a manageable wall width.

The systems shown on the following pages do not require cavity fire barriers\*, and full fill systems can be installed in all types of buildings, as detailed in their British Board of Agrément (BBA) Certificates. With formal guarantees against liquid water penetration and a long history of use, they offer peace of mind for the specifier, builder and client alike.

Our technical team will help you find **the best solution** for your application, call **0808 1645 134**.



### Why use Superglass Superwall cavity wall batts in full fill masonry cavity wall applications over rigid insulation boards?

#### Reliable on-site performance

- The flexible properties of Superglass Superwall cavity batts allow the insulation to follow the uneven surface of the cavity, making it more effective at restricting air movement within the cavity and removing the risk of heat loss through convection.
- The thermal performance of Superwall cavity batts is not reliant on the reflective properties of foil facings in low emissivity cavities, which can be compromised by dulling of the reflective surface caused by mortar dust and excessive air movement.

#### Quick and easy on-site installation

- **No requirement for retaining discs**  
Superwall cavity batts negate the need for retaining discs, saving on material costs and installation time.
- **No requirement for cavity fire barriers\***  
Superwall cavity batts helps minimise flanking sound transmission and prevent the spread of fire within the external wall cavity.
- **Robust product**  
Superwall cavity batts are able to withstand the demands of on-site installation, improving in-situ performance and reducing on-site waste.

#### Cost efficient solution

- The installed cost of Superglass full fill solutions is significantly lower compared to a partial fill system using rigid foam boards.

\*Reference to current Building Regulations may be required.



# Superwall Cavity Wall Batts.

Full Fill Built-In solutions.

**Superglass Superwall** products are British Board of Agrément (BBA) approved, non-combustible and water repellent glass mineral wool insulation cavity wall batts. These flexible batts are supplied at 455mm wide to allow easy installation between standard vertical wall tie spacings and minimum on-site cutting and waste.

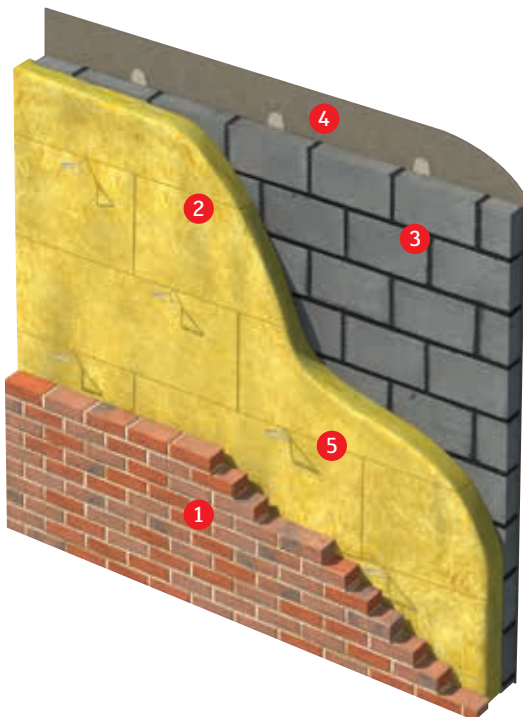
## Application

Superwall is designed to provide thermal insulation in full fill external masonry cavity walls up to 25m in height. Superwall is BBA approved for use in all UK exposure zones (subject to conditions detailed in the BBA Certificate and NHBC Standards).

Note: can also be used in partial-fill applications. For more information contact the Superglass Technical Team.

## Moisture Resistance

Tests by the BBA confirm that Superwall will not transmit water to the inner leaf. Nor will it transmit moisture by capillary action across the cavity or from below damp proof course level. Please refer to the BBA Certificate for more information.



Thermal Insulation



## Superglass Superwall for external cavity walls

The tables on the adjacent page show typical U-Values when combining different Superwall products with a variety of commonly used inner and outer leaves.



Superglass Products	Thermal conductivity
Superwall 32	0.032 W/mK
Superwall 34	0.034 W/mK
Superwall 36	0.036 W/mK

## Typical Application

External masonry cavity walls

- 1 Outer leaf - brickwork or blockwork
- 2 **Superglass Superwall**
- 3 Inner leaf - brickwork or blockwork
- 4 12.5mm plasterboard on dabs
- 5 Wall ties

Typical U-Values (W/m<sup>2</sup>K) achieved when fully filling the wall cavity with Superglass Superwall cavity wall batts.

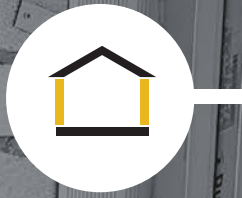
## Brick and block construction

Cavity width & insulation thickness	Outer Leaf Bricks	102.5mm	102.5mm	102.5mm Brick	102.5mm
	85mm Superwall 36	0.34	0.33	0.29	0.28
	85mm Superwall 32	0.31	0.30	0.27	0.26
	100mm Superwall 36	0.30	0.29	0.26	0.25
	100mm Superwall 34	0.28	0.27	0.25	0.24
	100mm Superwall 32	0.27	0.26	0.24	0.23
	125mm Superwall 36	0.25	0.24	0.22	0.21
	125mm Superwall 34	0.23	0.23	0.21	0.20
	125mm Superwall 32	0.22	0.22	0.20	0.19
	150mm Superwall 36	0.21	0.20	0.19	0.19
	150mm Superwall 34	0.20	0.20	0.18	0.18
	150mm Superwall 32	0.19	0.19	0.17	0.17
	200mm Superwall 36 (2x100mm)	0.16	0.16	0.15	0.15
	200mm Superwall 34 (2x100mm)	0.15	0.15	0.14	0.14
	200mm Superwall 32 (2x100mm)	0.15	0.14	0.14	0.13
Inner Leaf Blocks	100mm Dense Aggregate (1.13W/mK)	100mm Medium Dense (0.45W/mK)	100mm Standard Aircrete (0.15W/mK)	100mm Lightweight Aircrete (0.11W/mK)	
Plaster Dabs	15mm	15mm	15mm	15mm	
Plasterboard	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	
Plaster Skim	3mm	3mm	3mm	3mm	

## Block and block construction

Cavity width & insulation thickness	Render	20mm Sand & Cement	20mm Sand & Cement	20mm Sand & Cement	20mm Sand & Cement
	Outer Leaf Blocks	100mm Dense Aggregate (1.13W/mK)	100mm Medium Dense (0.45W/mK)	100mm Standard Aircrete (0.15W/mK)	100mm Lightweight Aircrete (0.11W/mK)
	85mm Superwall 36	0.34	0.32	0.26	0.24
	85mm Superwall 32	0.31	0.29	0.24	0.22
	100mm Superwall 36	0.30	0.28	0.23	0.22
	100mm Superwall 34	0.29	0.27	0.22	0.21
	100mm Superwall 32	0.27	0.25	0.22	0.20
	125mm Superwall 36	0.25	0.23	0.20	0.19
	125mm Superwall 34	0.24	0.22	0.19	0.18
	125mm Superwall 32	0.22	0.21	0.18	0.17
	150mm Superwall 36	0.21	0.20	0.18	0.17
	150mm Superwall 34	0.20	0.19	0.17	0.16
	150mm Superwall 32	0.19	0.18	0.16	0.15
	200mm Superwall 36 (2x100mm)	0.16	0.16	0.14	0.13
	200mm Superwall 34 (2x100mm)	0.16	0.15	0.14	0.13
200mm Superwall 32 (2x100mm)	0.15	0.14	0.13	0.12	
Inner Leaf Blocks	100mm Dense Aggregate (1.13W/mK)	100mm Medium Dense (0.45W/mK)	100mm Standard Aircrete (0.15W/mK)	100mm Lightweight Aircrete (0.11W/mK)	
Plaster Dabs	15mm	15mm	15mm	15mm	
Plasterboard	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	
Plaster Skim	3mm	3mm	3mm	3mm	





# External masonry walls.

Blown solution for new build installations.

Superglass  
Your insulation team



Superglass  
Superwhite [34]  
Blown Fibre Cavity Wall Insulation



# Superwhite 34.

## Blown Cavity Wall Insulation. For a smarter way to build.

**Superglass Superwhite 34** is more than just superior glass mineral wool blown cavity wall insulation. It's a whole new way of working.

This product has been designed specifically for new build masonry cavity walls, using our 20 years' experience in the retro-fit blown insulation industry.

The solution has been meticulously tested and is fully BBA certified making it much easier to comply with current Building Regulations for new build dwellings. It is also backed by a 25 year guarantee.

**Superwhite 34 has a thermal conductivity of 0.034W/mK which is the lowest thermal performance for blown glass mineral wool insulation for masonry cavity walls in the UK. It's also declared to Lambda 90/90, so you can be sure it delivers all the thermal performance you need.**



Installed internally after the walls are built, Superwhite 34 will help make the most of the on-site team's skills. The Superwhite 34 full fill solution is proven to give a superior thermal performance whilst facilitating a highly efficient build process. It also minimises potential weather delays and reduces on-site waste.

We also recommend Superwhite 34 for party walls\*, giving the added advantage of just one product and one installation process on-site, which means less room for error, less management needed and a superior level of insulation throughout.

\*A Superwhite 34 Party Wall Robust Details solution is currently being developed.

1 Product

2 Applications

1 Price

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Simple



# Superwhite 34 Blown Cavity Insulation.

Full Fill Blown solution.

## Application

**Superglass Superwhite 34** is designed to provide thermal insulation for new-build masonry cavity walls with a minimum cavity width of 90mm and up to 12m in height. It can be installed in buildings of 12m – 25m in height subject to a satisfactory inspection of the wall construction and installation approval by Superglass Insulation. The product is BBA approved for all UK exposure zones (subject to conditions detailed in the BBA Certificate and NHBC Standards).

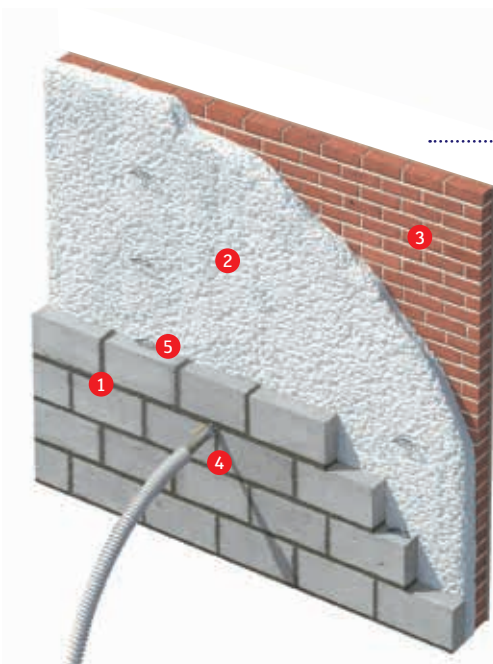
## Moisture Resistance

Tests by the BBA confirm that Superwhite 34 will not transmit water to the inner leaf, nor will it transmit moisture by capillary action across the cavity or from below damp proof course level. Please refer to the BBA Certificate for more information.

## Installation

Highly trained technicians working for UKAS approved companies install the product quickly and efficiently through the inner walls prior to the final internal finish being applied. Trained to assess buildings for suitability of installation, the technicians are inspected every 6 months as part of an on-going Approved Contractor Scheme. Superwhite 34 can be installed in any weather conditions minimising potentially costly on site delays. Only Superglass approved installers are allowed to install Superglass Superwhite 34.

**Contact the Superglass sales team on 01786 451170 for your nearest approved installer.**



Thermal Insulation



## Superglass Superwhite 34 for external masonry cavity walls

Tested to provide high levels of thermal performance when installed during the construction of new build masonry cavity walls. The tables on the adjacent page show typical U-Values when combining Superwhite 34 with a variety of commonly used inner and outer leaves.



Superglass Products	Thermal conductivity	Installed density
Superwhite 34	0.034 W/mK	25kg/m <sup>3</sup>

## Typical Application

External masonry cavity walls

- 1 Inner Leaf - brickwork or blockwork
- 2 **Superglass Superwhite 34**
- 3 Outer Leaf - brickwork or blockwork
- 4 Blowing machine nozzle
- 5 Wall ties

Typical U-Values (W/m<sup>2</sup>K) achieved when fully filling the cavity wall with Superwhite 34.

## Brick and block construction

Cavity width & insulation thickness	Outer Leaf Bricks	102.5mm	102.5mm	102.5mm	102.5mm
	95mm of Superwhite 34	0.30	0.29	0.26	0.25
	100mm of Superwhite 34	0.28	0.27	0.25	0.24
	105mm of Superwhite 34	0.27	0.26	0.24	0.23
	110mm of Superwhite 34	0.26	0.25	0.23	0.22
	115mm of Superwhite 34	0.25	0.24	0.22	0.22
	120mm of Superwhite 34	0.24	0.24	0.22	0.21
	125mm of Superwhite 34	0.23	0.23	0.21	0.20
	150mm of Superwhite 34	0.20	0.20	0.18	0.18
	165mm of Superwhite 34	0.18	0.18	0.17	0.16
	175mm of Superwhite 34	0.17	0.17	0.16	0.16
	190mm of Superwhite 34	0.16	0.16	0.15	0.15
	200mm of Superwhite 34	0.15	0.15	0.14	0.14
Inner Leaf Blocks	100mm Dense Aggregate (1.13W/mK)	100mm Medium Dense (0.45W/mK)	100mm Standard Aircrete (0.15W/mK)	100mm Lightweight Aircrete (0.11W/mK)	
Plaster Dabs	15mm	15mm	15mm	15mm	
Plasterboard	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	
Plaster Skim	3mm	3mm	3mm	3mm	

## Block and block construction

Cavity width & insulation thickness	Render	20mm Sand & Cement	20mm Sand & Cement	20mm Sand & Cement	20mm Sand & Cement
	Outer Leaf Blocks	100mm Dense Aggregate (1.13W/mK)	100mm Medium Dense (0.45W/mK)	100mm Standard Aircrete (0.15W/mK)	100mm Lightweight Aircrete (0.11W/mK)
	95mm of Superwhite 34	0.30	0.28	0.23	0.21
	100mm of Superwhite 34	0.29	0.27	0.22	0.21
	105mm of Superwhite 34	0.27	0.26	0.22	0.20
	110mm of Superwhite 34	0.26	0.25	0.21	0.20
	115mm of Superwhite 34	0.25	0.24	0.20	0.19
	120mm of Superwhite 34	0.24	0.23	0.20	0.19
	125mm of Superwhite 34	0.24	0.22	0.19	0.18
	150mm of Superwhite 34	0.20	0.19	0.17	0.16
	165mm of Superwhite 34	0.18	0.18	0.16	0.15
	175mm of Superwhite 34	0.18	0.17	0.15	0.14
	190mm of Superwhite 34	0.16	0.16	0.14	0.13
200mm of Superwhite 34	0.16	0.15	0.14	0.13	
Inner Leaf Blocks	100mm Dense Aggregate (1.13W/mK)	100mm Medium Dense (0.45W/mK)	100mm Standard Aircrete (0.15W/mK)	100mm Lightweight Aircrete (0.11W/mK)	
Plaster Dabs	15mm	15mm	15mm	15mm	
Plasterboard	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	12.5mm Standard (0.18W/mK)	
Plaster Skim	3mm	3mm	3mm	3mm	





# External masonry walls.

Blown solutions for retrofit installations.



# Superwhite 40.

## Blown Cavity Wall Insulation for upgrading the thermal performance in older properties.

### Application

Superglass Superwhite 40 is designed specifically to provide thermal insulation for retrofit/existing masonry cavity walls with a minimum cavity width of 50mm and up to 12m in height. It may be installed in buildings of 12m – 25m in height subject to a satisfactory inspection of the wall construction and installation approval by Superglass Insulation.

Superwhite 40 is BBA approved for all UK exposure zones (subject to conditions detailed in the BBA Certificate and NHBC Standards).

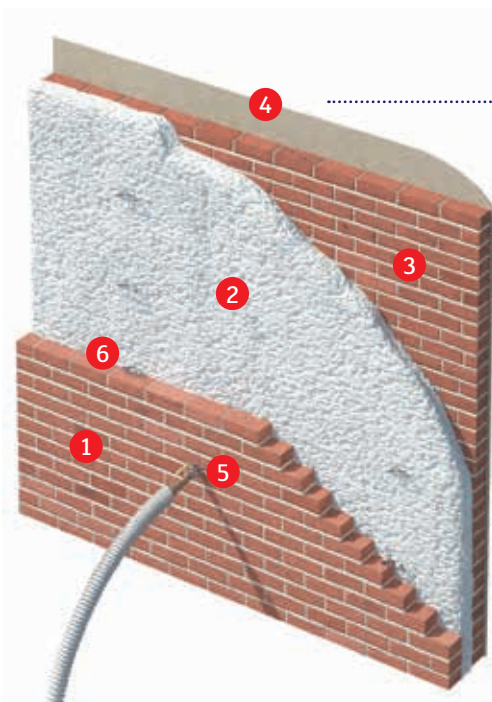
### Moisture Resistance

Tests by the BBA confirm that Superwhite 40 will not transmit water to the inner leaf, nor will it transmit moisture by capillary action across the cavity or from below damp proof course level. Please refer to the BBA Certificate for more information.

### Installation

Highly trained technicians working for UKAS approved companies install the product quickly and efficiently through the outer walls. Trained to assess buildings for suitability of installation, the technicians are inspected every 6 months as part of an on-going Approved Contractor Scheme. Only Superglass approved installers are allowed to install Superglass Superwhite 40.

Contact the Superglass sales team on 01786 451170 for your nearest approved installer.



### Thermal Insulation

#### Superglass Superwhite 40 in external cavity walls

High performance, non-combustible glass mineral wool blown cavity wall insulation. The product is British Board of Agrément (BBA) certified and Cavity Insulation Guarantee Agency (CIGA) approved. Superwhite 40 has a 25 year guarantee and is inspected under the BBA Surveillance Scheme for cavity wall insulation.



Superglass Products	Thermal conductivity	Installed density
Superwhite 40	0.040 W/mk	18kg/m <sup>3</sup>

### Typical Application

External masonry cavity walls

- 1 Outer leaf - existing brickwork
- 2 Superglass Superwhite 40
- 3 Inner leaf - existing brickwork or blockwork
- 4 Internal finish
- 5 Blowing machine nozzle
- 6 Wall ties

