intelligent environments
Superglass by etex

# Superglass Insulation. The Intelligent Choice.

## A Technical Guide.

# Thinking light years ahead.

Superglass is one of the UK's leading manufacturers of insulation. Founded in 1987 and based in Stirling, Scotland, we specialise in glass mineral wool insulation products for housebuilding and the wider construction industry. In 2023 we became part of Etex – a global group comprising of 160 facilities across 45 countries and the name behind many other market leading brands in the building materials sector including URSA, a leading European glass mineral wool insulation manufacturer.

In 2025, the Superglass and URSA brands came together to form Etex UK Insulation Ltd.

**Superglass. Smart thinking in insulation.**

We've always been innovators. But today it's more important than ever that our products play their part in building a more sustainable future for the next generation. Working on the principle of 'the smartest way to use energy is to not use it at all', we apply a unique approach to everything we do.

We call it THINKTECH, and it means you can rely on our improved fibre technology, advanced glass chemistry and state-of-the-art manufacturing for our best insulation ever – with products that help you optimise living and working spaces, save energy and precious resources, and create Intelligent Environments.

THINKTECH

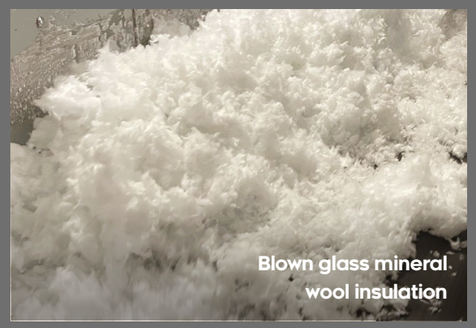
# What's so special about glass mineral wool?

Glass mineral wool is central to every Superglass product due its combination of thermal and acoustic performance, as well as being non-combustible.

Our glass mineral wool insulation is also made from up to 84% recycled glass, including windows, bottles and jars. We combine this with various other raw materials, then melt the mixture in a furnace. The molten glass is spun into millions of fine fibres, which are then formed into a cured or blown product.

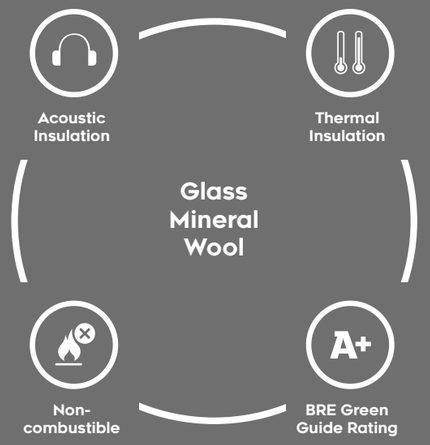
**Cured glass mineral wool insulation** – The fibres are bonded with resin binder to create a mat. This mat is 'cured' in an oven, cut to size, and packaged as rolls, slabs or batts.

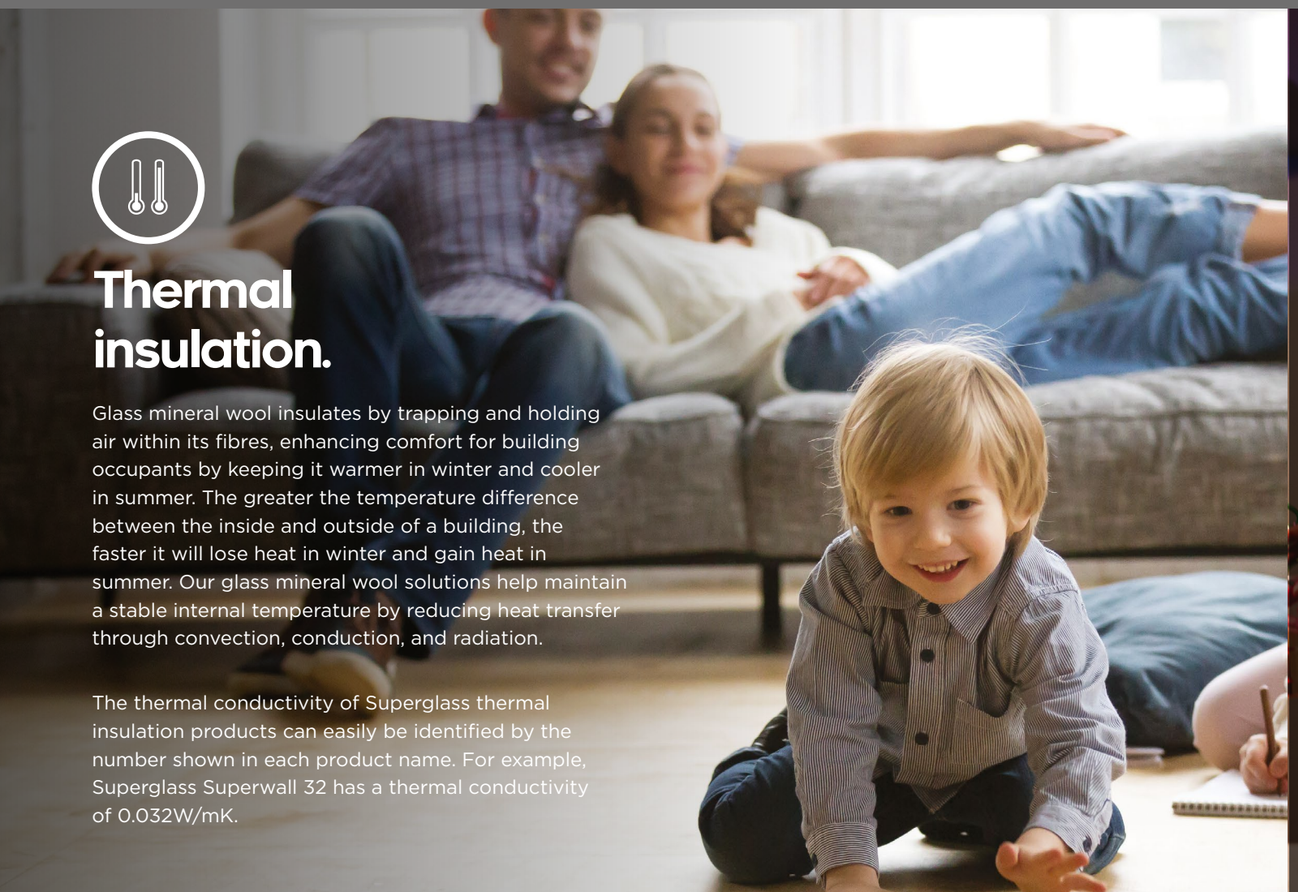
**Blown glass mineral wool insulation** – Produced similarly to cured glass mineral wool, but remains uncured, making it a loose-fill product that can be 'blown' into various applications.


**The key benefits of glass mineral wool insulation.**

Glass mineral wool insulation offers '4-benefits-in-1' that meet the increasing demand of thermal, fire, acoustic and environmental performance in the built environment.

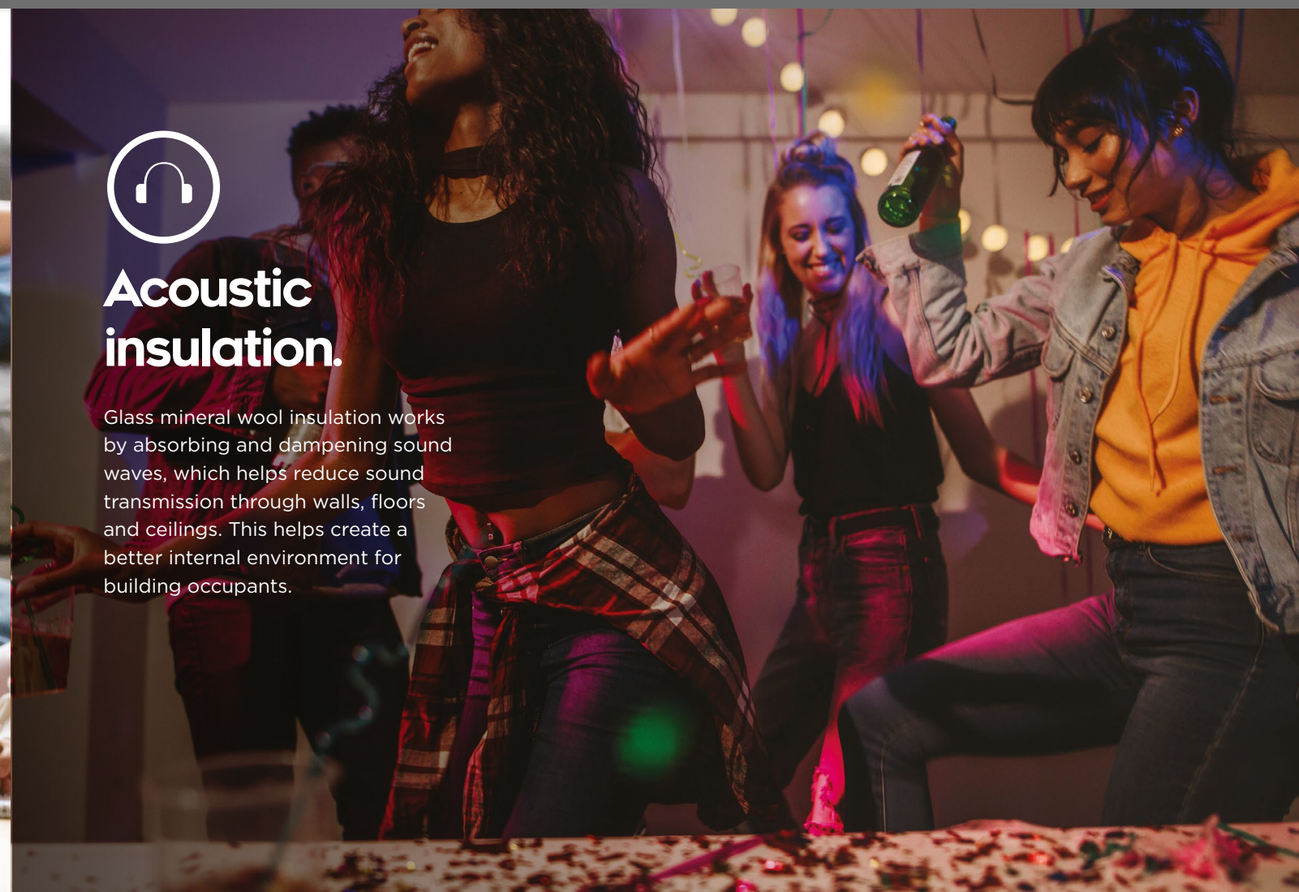


## Thermal insulation.

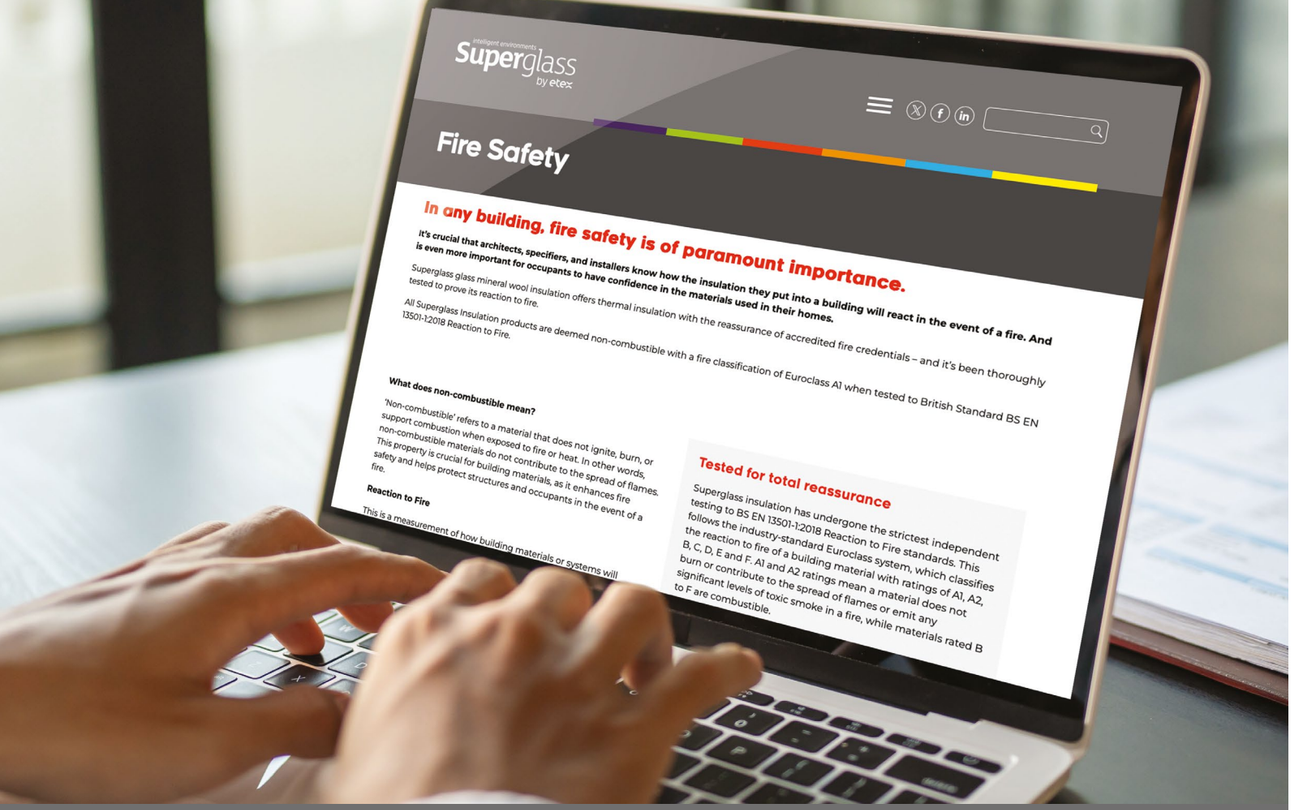
Glass mineral wool insulates by trapping and holding air within its fibres, enhancing comfort for building occupants by keeping it warmer in winter and cooler in summer. The greater the temperature difference between the inside and outside of a building, the faster it will lose heat in winter and gain heat in summer. Our glass mineral wool solutions help maintain a stable internal temperature by reducing heat transfer through convection, conduction, and radiation.

The thermal conductivity of Superglass thermal insulation products can easily be identified by the number shown in each product name. For example, Superglass Superwall 32 has a thermal conductivity of 0.032W/mK.



## Acoustic insulation.

Glass mineral wool insulation works by absorbing and dampening sound waves, which helps reduce sound transmission through walls, floors and ceilings. This helps create a better internal environment for building occupants.




# Fire classification.

All Superglass Insulation products are deemed non-combustible with a fire classification of Euroclass A1 when tested to British Standard BS EN 13501-1:2018 Reaction to Fire.

### What does non-combustible mean?

'Non-combustible' refers to a material that does not ignite, burn, or support combustion when exposed to fire or heat. In other words, non-combustible materials do not contribute to the spread of flames. This property is crucial for building materials, as it enhances fire safety and helps protect structures and occupants in the event of a fire.

### Reaction to Fire

This is a measurement of how building materials or systems will contribute to the development and spread of a fire, especially in the early stages, when evacuation is crucial.

All insulation materials are given a Euroclass reaction to fire classification in accordance with BS EN 13501-1 Reaction to Fire.

Testing assesses the performance of materials in terms of fire behaviour, smoke production, and flaming droplets, resulting in a range of classification possibilities.

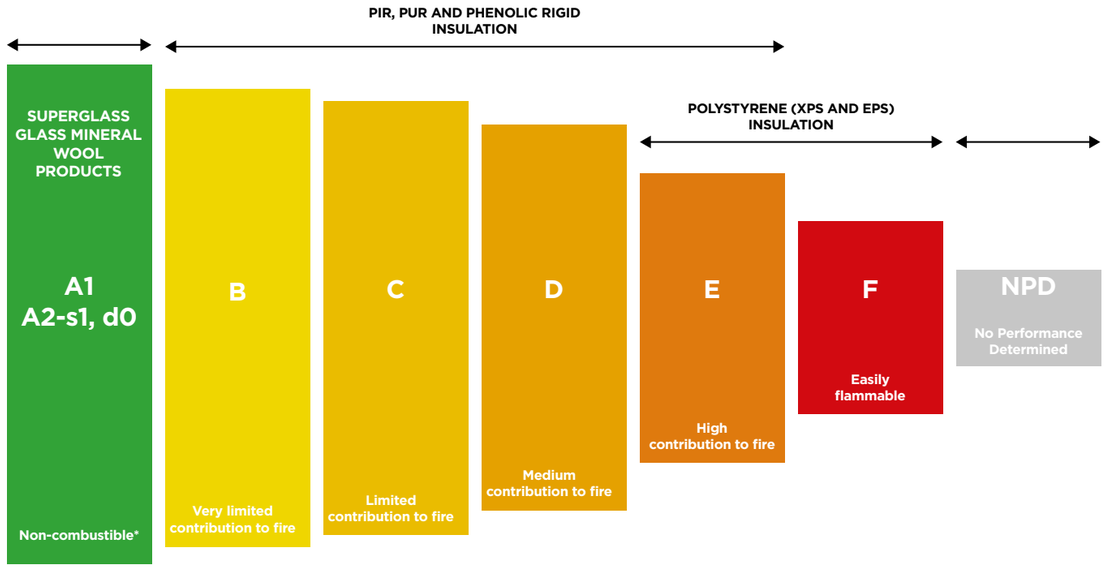
All Superglass products are non-combustible, achieve the highest possible Euroclass A1 Reaction to Fire classification and do not produce smoke or droplets.

By choosing non-combustible insulation materials, building designers and specifiers can help mitigate the risk of fire within the building fabric from the outset.

According to British Standard BS EN 13501-1 Reaction to Fire of construction products and building elements, "Euroclass A1 products will not contribute to any stage of the fire including the fully developed fire."

The graph below shows a range of insulation products relevant to their ability to withstand fire. It's clear to see that glass mineral wool, as a non-combustible product, provides a level of protection for a building and its occupants in the event of a fire breaking out.

# Typical insulation product Euroclass Reaction to Fire classifications.




*As set out in changes to the building regulations 2010 which bans the use of combustible materials, limiting the use of materials to those that achieve A1 or A2-s1,d0 on buildings in scope of the ban [as defined in regulation 7(4)]

Notes: Other classifications of smoke and flaming droplets within A2 are classed as limited combustibility. (Not shown here as no insulant falls in that category)

NPD - No Performance Determined. In this instance no performance is declared and information regarding reaction to fire performance is unknown. Illustration for guidance only.
It is crucial to check the actual Euroclass Reaction to Fire classification of a product before use. Always refer to the product manufacturers literature.

# Made to make a difference.

Rising energy costs and the effects of global warming have made the need to create energy-efficient buildings greater than ever. And at Superglass, we're leading the way in our commitment to optimise the spaces in which we live and work, producing Intelligent Environments in the most sustainable way possible. Our glass mineral wool insulation is made from up to 84% recycled waste glass and contains no ozone-depleting substances or greenhouse gases, helping to achieve a generic BRE Green Guide rating of A+.

Our products also benefit from the latest compression packaging to reduce the flexible insulation up to one-ninth of its original volume. This helps to maximise storage during distribution and reduce transport miles with more pallets per load. Our products and their pallets are wrapped in low-density polyethylene (LDPE4) plastic, which contains a minimum 30% recycled material and is fully recyclable. Before recycling, please consult your local authority for guidance.

Superglass glass mineral wool insulation is produced in one of Europe's most advanced manufacturing facilities and over its lifetime can typically save up to 200 times the energy used in its manufacture and transport – making a valuable contribution to reducing our collective environmental impact.

## Our environmental accreditations.

Superglass products have BRE verified Environmental Product Declarations (EPD). Verifications from BRE Global provide end users and specifiers with the confidence that environmental claims made relevant to Superglass Insulation products are credible, through a process of independent assessment and validation of evidence put forward in respect of products, service, or practice.

Superglass products are ISO 14001:2015 - Environmental Management Systems (EMS) certified.

All Superglass products have a generic BRE Green Guide Rating of A+ and also contain no ozone depleting substances or greenhouse gases.

Superglass is a Gold Level member of the Supply Chain Sustainability School, an industry led organisation at the forefront of sustainability, strategy, and best practice.

# Dedicated support for specifiers.

We want you to get the very best out of our products, so we've put everything in place to make sure you have all the support you need in specifying Superglass insulation. Our Technical Services team can call upon the significant resources of the Etex Group, to not only answer your queries and help you find the best solution, but provide various calculations to make the specification process easier. Alternatively we have a range of online tools available, including our U-Value and Psi-value calculators, NBS Source and NBS BIM Library.

## Free U-Value calculation service

To help specifiers quantify the amount of heat lost through a building's thermal elements, such as walls, floors and roofs, we offer an online U-Value service to make the most of our wide range of thermal insulation products. Since U-Values determine the overall energy efficiency of a building, this tool is essential for meeting or exceeding Building Regulations. Simply start your calculation by accessing this service using the QR code below. You will then be guided through the process until you receive your U-Value. To contact our Technical Services Team at any point during the calculation call **0808 1645 134** or email **technical.stirling@etexgroup.com**

U-Value calculator

Quidos
U-Value Competent Person


## Psi-value calculations

To help specifiers achieve Part L of the Building Regulations, the Superglass Psi-value Guide features a range of common junctions for external masonry cavity walls and masonry party walls using Superglass insulation. Simply access the Guide via the QR code, email us the reference number of the junction you need and we will send you the calculations.

**Email: technical.stirling@etexgroup.com**

For instant calculations, we have also introduced a intuitive online calculation tool, allowing you to download common calculations using 125mm & 150mm Superwall 32.

These Psi-values were calculated by our in-house Technical Services Team, who are all members of the Elmhurst Energy Psi-value Competency Scheme. If you require bespoke calculations please contact the team on **technical.stirling@etexgroup.com**

Psi-value calculator

elmhurst energy APPROVED Psi VALUE COMPETENCY SCHEME MEMBER


## Technical documentation

To assist our customers and specifiers, we offer a comprehensive range of technical documentation, both in print format and online via our web site. **www.superglass.co.uk**

## Code for Construction Product Information

Where indicated, Superglass has Code for Construction Product Information (CCPI) accreditation and is working to raise standards in construction product information and marketing. This helps to ensure product information is clear, accurate, accessible, up-to-date and unambiguous.

**The Superglass Technical Services Team can help with:**

- U-Value calculations
- Condensation risk analysis
- Building Regulations compliance
- Application and installation guidance
- Environmental and sustainability credentials
- Psi-value calculations

Call them today on 0808 1645 134 or email technical.stirling@etexgroup.com

**NBS Source**

Superglass products are available on NBS Source. NBS Source aims to help you find everything you need to make a decision in one place – product properties, certifications, associated literature, specification clauses and digital objects. With NBS Source, you will be able to add the Superglass products data straight into your NBS specification or design model with the click of a button.

NBS Source PARTNER

# Blown wool.
# For maximum on-site efficiency.

Our blown insulation products provide all the thermal benefits you expect from Superglass. They have been meticulously tested and fully British Board of Agrément (BBA)* certified, ensuring compliance with current Building Regulations.
They are also backed by a 10-year guarantee for complete peace of mind.

* BBA certification refers to external masonry cavity walls.

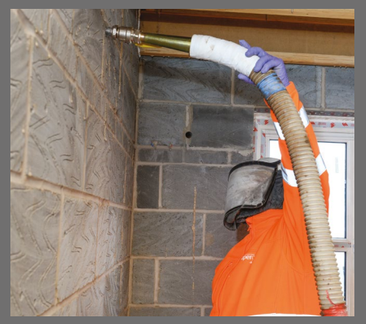
Every installation is carried out by a national network of Superglass approved installers. Using the latest technology, the insulation is blown into the walls internally after they've been built, allowing for installation in any weather and reducing potential on-site delays.

This makes better use of site skills by allowing bricklayers to focus solely on laying bricks rather than insulation. The same product can be used for both external and party walls, offering the benefit of a single product and installation process on-site. This reduces the potential for errors and minimises management requirements.

**Our new THINKTECH App intelligently closes the performance gap.**

To assist installers and housebuilders in complying with Building Regulations, we have created an app called THINKTECH. Accessible from the installer's phone, the user-friendly interface intelligently records specific house plot information, various metrics and installation images. This, combined with other data collected from the manufacturing process, provides all the necessary information to ensure the correct installation procedure is always adhered to.

After installation, a fully automated Cavity Wall Installation Report can be downloaded. This report includes the plot's 10-year material warranty, as well as product datasheets and health & safety sheets relevant to the materials used. The site manager should keep this report ready to present to Building Control at handover and to provide to the new homeowners as part of their welcome pack.

# Insulation for a wide range of applications.

In commercial, leisure or residential projects and from floors to roofs, Superglass insulation delivers the thermal and acoustic benefits needed to create today's intelligent living and working environments, with an expansive range of rolls, batts, slabs and blown insulation solutions.

In residential projects, our insulation products are specified in a wide range of applications and developments of all sizes, ranging from high volume housing schemes through to bespoke self build projects.

Superglass insulation is also perfect for the broader construction industry, including modular or portable buildings, off-site construction, internal partitions and cavity walls in high-rise structures, and various commercial building projects. No matter where you use our products, you can rely on them to perform as expected.

Superglass products can be used in light gauge steel framing systems. As part of Etex, we collaborate with Remagin, off-site construction manufacturing experts, operating across the UK and Ireland.

**For more information, please visit www.remagin.world/en/**

remagin


# Our certifications, accreditations & industry standards.

We're proud to have gained a number of certifications and accreditations that provide our customers with the assurance that our products are manufactured to the relevant industry standards, having passed a series of comprehensive and rigorous assessments which ensures they're fit for their intended purpose.

The UKCA (UK Conformity Assessed) marking is a certification mark that indicates conformity with the applicable requirements for products sold within Great Britain (England, Scotland, and Wales). It was introduced to replace the CE (Conformité Européene) marking after Brexit. Superglass products are certified by the British Standards Institution (BSI) with a UKCA Certificate of Constancy of Performance for:

- Cured Products: BS EN 13162:2012+A1:2015 Thermal insulation products for buildings. Factory made mineral wool (MW) products. Certificate number: 0086 CPR 469699.
- Blown Products: BS 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 installation. Certificate number: 0086 CPR 742703.

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The CE (Conformité Européene) is a certification mark that indicates a product complies with relevant European Union (EU) legislation regarding health & safety and performance. Superglass products certified by Forschungsinstitut für Wärmeschutz e.V. München (FIW) for:

- Cured Products: EN 13162:2012+A1:2015 Thermal insulation products for buildings. Factory made mineral wool (MW) products. Certificate number: 0751-CPR-399.0-01.

And by Research Institutes of Sweden AB (RISE) for:

- Blown Products: EN 14064-1:2010 Thermal insulation products for buildings – In-situ-formed loose-fill mineral wool (MW) products. Certificate number: 0402-CPR-SC0003-13.

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ISO 9001:2015 is a global standard for Quality Management Systems (QMS). It helps organisations meet customer and regulatory needs while improving their processes. The standard focuses on customer satisfaction, management involvement, a process approach, and continuous improvement.

Superglass is certified by the British Standards Institution (BSI), certificate number: FM 02264.

ISO 14001:2015 is an internationally recognised standard for Environmental Management Systems (EMS). It provides a framework for organisations to improve their environmental performance through more efficient use of resources and reduction of waste.

Superglass is certified by the British Standards Institution (BSI), certificate number: EMS 646508.

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All Superglass glass mineral wool products are made of non-classified fibres and are certified by EUCEB (European Certification Board of Mineral Wool Products).

EUCEB is a voluntary initiative by the mineral wool industry. It is an independent certification authority that guarantees that products are made of fibres which comply with the exoneration criteria for carcinogenicity (Note Q) of the Regulation (EC) 1272/2008. Certificate number: BEUC-511-27949-491-14462

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BBA certification refers to the approval and certification provided by the British Board of Agrément (BBA). This certification is highly regarded in the construction industry and signifies that a product or system meets specific quality and safety standards.

Superglass Superwall Cavity Batts and Superwhite 34 & 40 blown products are BBA certified, confirming their suitability for use in external masonry cavity walls.

- Superwall 32 Cavity Batt certificate number: 89/2231: Product Sheet 3
- Superwall 34 Cavity Batt certificate number: 89/2231: Product Sheet 5
- Superwall 36 Cavity Batt certificate number: 89/2231: Product Sheet 2
- Superwhite 34 Blown certificate number: 14/5086: Product Sheet 2

You can download all the mentioned certificates from the Superglass website at www.superglass.co.uk, or request a copy by emailing technical.stirling@etexgroup.com

**MIMA (Mineral Wool Insulation Manufacturers Association)**
MIMA represents the UK manufacturers of glass and stone mineral wool insulation.

MIMA provides independent information and advice on glass and stone wool insulation, promoting its benefits for energy efficiency, fire safety, acoustic performance, and environmental sustainability. They also work to ensure high industry standards and advocate for sustainable business practices.

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**Made in Britain**
The Made in Britain association is a not-for-profit organisation that supports and promotes British manufacturers. It provides a registered collective trademark that helps identify and verify products made in the UK.

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**Structural Timber Association (STA)**
The Structural Timber Association (STA) is a leading membership body in the UK that promotes the use of structural timber and hybrid forms of timber construction.

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**Sustainable Energy Association (SEA)**
The Sustainable Energy Association (SEA) is a member-based industry body in the UK that focuses on promoting sustainable energy solutions and policies.

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**Modular & Portable Building Association (MPBA)**
The Modular & Portable Building Association (MPBA) is a prominent trade association in the UK that represents the interests of the modular and portable building industry.

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**Supply Chain Sustainability School**
The Supply Chain Sustainability School is an award-winning, free virtual learning platform launched in 2012. It aims to upskill individuals and organisations within the built environment sector on sustainability practices.

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**Future Homes Hub**
The Future Homes Hub is an initiative designed to support the new homebuilding sector in meeting climate, nature, and sustainability objectives.

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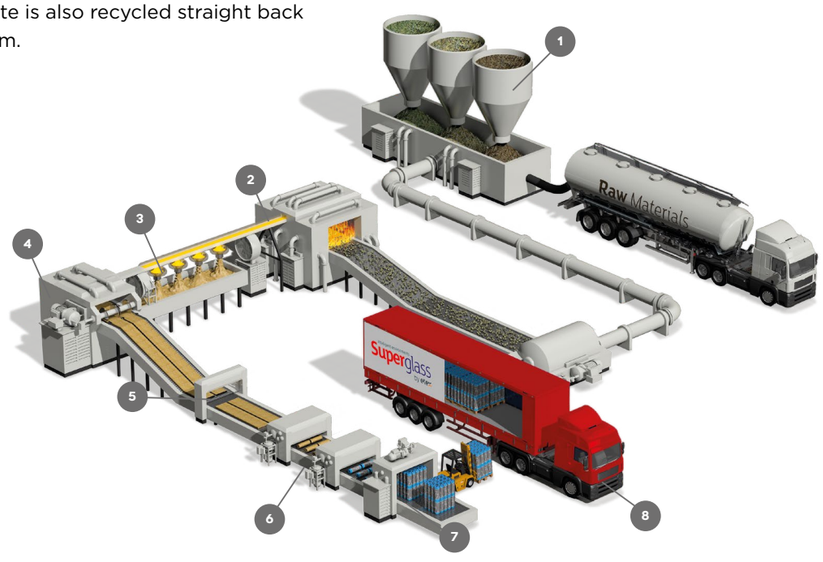
**Considerate Constructors Scheme (CCS)**
The Considerate Constructors Scheme (CCS) is a national initiative in the UK aimed at improving the image of the construction industry.

# Our advanced manufacturing plant.

A result of one of the biggest recent investments in the insulation industry, our plant in Stirling is a leading example of 21st century manufacturing.

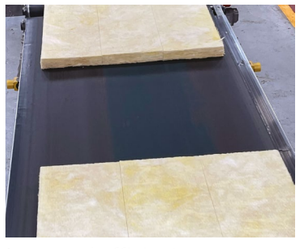
Fully certified to ISO 14001:2015 - Environmental Management Systems (EMS), our manufacturing facility in Scotland is one of the most advanced in Europe, designed to help protect the environment, using lean production techniques and waste elimination principles throughout the process. The latest technologies reduce energy consumption, whilst water usage is monitored on cloud-based sensors to identify and reduce leakage. New water filtration systems re-use wastewater in our process, reducing our need for fresh water and avoiding dirty water being discharged into sewer systems. Any fibre waste is also recycled straight back into the system.

1. Raw materials such as recycled glass cullet goes into the silos.
2. The raw materials mixture is then transported to the furnace for melting.
3. The fiberising process form the fibres.
4. The fibres then go through the forming hood then onto the curing ovens to create a mat.
5. The mat is then cut into the correct dimensions for the rolls, batts or slab products.
6. The products are then packaged into our easily identifiable packaging.
7. Products are then palletised and made waterproof.
8. Dedicated fleet of vehicles deliver Superglass products to a nationwide network of stockists.





Waste glass cullet raw material


Lean and efficient manufacturing


Compressed packaging to minimise delivery miles

# Products & application finder.

## WALLS

### External Masonry Cavity Walls

| | |
|---|---|
| Superwall 32 Cavity Wall Batts | 20 |
| Superwall 34 Cavity Wall Batts | 20 |
| Superwall 36 Cavity Wall Batts | 20 |
| Superwhite 34 Blown Cavity Wall Insulation | 24 |

### Metal Clad Walls

| | |
|---|---|
| Cladding Mat 32 | 27 |
| Cladding Mat 35 | 27 |
| Cladding Mat 40 | 27 |

### External Timber Frame Walls

| | |
|---|---|
| Timber & Rafter Roll 32 | 28 |
| Timber & Rafter Roll 35 | 28 |
| Timber & Rafter Roll 40 | 28 |
| Timber & Rafter Batt 32 | 28 |
| Adapt Slab 35 | 28 |

### Party/Separating Walls

| | |
|---|---|
| Party Wall Roll | 34 |
| Superwhite 34 Blown Party Wall | 37 |
| TF Party Wall Roll | 40 |

### Internal Walls & Partitions

| | |
|---|---|
| Acoustic Partition Roll (APR) | 42 |
| Multi Acoustic Roll | 42 |

## ROOFS

### Loft - Cold Pitched Roofs

| | |
|---|---|
| Multi-Roll 40 | 50 |
| Multi-Roll 44 | 50 |
| Superwhite 42 Blown Wool | 51 |

### Warm Pitched Roofs

| | |
|---|---|
| Timber & Rafter Roll 32 | 52 |
| Timber & Rafter Roll 35 | 52 |
| Timber & Rafter Batt 32 | 52 |
| Adapt Slab 35 | 52 |

### Metal Clad Roofs

| | |
|---|---|
| Cladding Mat 32 | 54 |
| Cladding Mat 35 | 54 |
| Cladding Mat 40 | 54 |

## FLOORS

### Suspended Timber Ground Floors

| | |
|---|---|
| Adapt Slab 35 | 56 |
| Multi-Roll 40 | 56 |

### Internal & Separating Floors

| | |
|---|---|
| Adapt Slab 35 | 58 |
| Multi Acoustic Roll | 58 |
| Acoustic Partition Roll (APR) | 59 |

**Note:** The above application categories are based on typical applications using Superglass products. If your application is not listed here, please contact the Superglass Technical Services Team. technical.stirling@etexgroup.com or call 0808 1645 134


# External Masonry Walls.

## Built-in Solution.

CCPI

CCPI Assessment Mark: 005800103/1026

See pages 60-61 for CCPI assessed logos

# Superwall Cavity Wall Batts.

**Full fill and partial fill built-in solutions.**

**Superglass Superwall** are British Board of Agrément (BBA) approved, non-combustible glass mineral wool insulation cavity wall batts, manufactured with a water-repellent additive to resist moisture ingress. The flexible batts are supplied at 455mm wide to allow friction fitting between standard vertical wall tie spacings, reducing the need for on-site cutting and waste.

## Application

Superglass Superwall is designed to provide thermal insulation in full or partial fill in new external masonry cavity walls. The products are BBA approved for use in all UK exposure zones (subject to conditions detailed in the BBA Certificate).

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Superwall 32 | 0.032 W/mK |
| Superwall 34 | 0.034 W/mK |
| Superwall 36 | 0.036 W/mK |

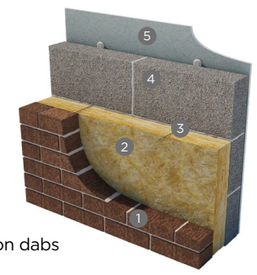
## Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

## Typical Applications

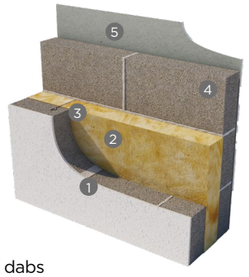
**Brick & Block Construction**

1. Outer Leaf - 102.5mm Brick
2. Superwall Cavity Batt in full fill or partial fill cavity (partial fill requires a minimum 50mm residual clear cavity)
3. Wall ties
4. Inner Leaf - 100mm Blocks
5. 12.5mm Standard Plasterboard on dabs




**Block & Block Construction**

1. Outer Leaf - 100mm Blocks with render
2. Superwall Cavity Batt in full fill or partial fill cavity (partial fill requires a minimum 50mm residual clear cavity)
3. Wall ties
4. Inner Leaf - 100mm Blocks
5. 12.5mm Standard Plasterboard on dabs








## Partial Fill Solution With 50mm Residual Clear Cavity

| Outer Leaf - Brick | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) |
|---|---|---|---|---|---|---|
| Inner leaf - Blocks | 100mm Dense (1.13W/mK) | 100mm Medium Dense (0.45W/mK) | 100mm Ultra Lightweight Aggregate (0.31W/mK) | 100mm High Strength Aircrete (0.19W/mK) | 100mm Standard Aircrete (0.15W/mK) | 100mm Lightweight Aircrete (0.11W/mK) |
| 100mm Superwall 36 | 0.28 | 0.27 | 0.27 | 0.26 | 0.25 | 0.24 |
| 125mm Superwall 36 | 0.25 | 0.24 | 0.23 | 0.23 | 0.22 | 0.21 |
| 150mm Superwall 36 | 0.21 | 0.21 | 0.20 | 0.20 | 0.19 | 0.19 |
| 175mm Superwall 36 (100+75mm) | 0.19 | 0.18 | 0.18 | 0.17 | 0.17 | 0.17 |
| 200mm Superwall 36 (2x100mm) | 0.17 | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 |
| 250mm Superwall 36 (100+150mm) | 0.14 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| 100mm Superwall 34 | 0.27 | 0.26 | 0.26 | 0.25 | 0.24 | 0.23 |
| 125mm Superwall 34 | 0.24 | 0.23 | 0.23 | 0.22 | 0.21 | 0.20 |
| 150mm Superwall 34 | 0.20 | 0.20 | 0.19 | 0.19 | 0.18 | 0.18 |
| 175mm Superwall 34 (100+75mm) | 0.18 | 0.17 | 0.17 | 0.17 | 0.16 | 0.16 |
| 200mm Superwall 34 (2x100mm) | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 | 0.14 |
| 250mm Superwall 34 (100+150mm) | 0.13 | 0.13 | 0.13 | 0.12 | 0.12 | 0.12 |
| 100mm Superwall 32 | 0.26 | 0.25 | 0.24 | 0.24 | 0.23 | 0.22 |
| 125mm Superwall 32 | 0.23 | 0.22 | 0.22 | 0.21 | 0.20 | 0.20 |
| 150mm Superwall 32 | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.17 |
| 175mm Superwall 32 (100+75mm) | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 | 0.15 |
| 200mm Superwall 32 (2x100mm) | 0.15 | 0.15 | 0.15 | 0.14 | 0.14 | 0.14 |
| 250mm Superwall 32 (100+150mm) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 |

## Full Fill Solution

| Outer Leaf - Brick | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) |
|---|---|---|---|---|---|---|
| Inner leaf - Blocks | 100mm Dense (1.13W/mK) | 100mm Medium Dense (0.45W/mK) | 100mm Ultra Lightweight Aggregate (0.31W/mK) | 100mm High Strength Aircrete (0.19W/mK) | 100mm Standard Aircrete (0.15W/mK) | 100mm Lightweight Aircrete (0.11W/mK) |
| 100mm Superwall 36 | 0.30 | 0.29 | 0.28 | 0.27 | 0.26 | 0.25 |
| 125mm Superwall 36 | 0.25 | 0.24 | 0.23 | 0.23 | 0.22 | 0.21 |
| 150mm Superwall 36 | 0.21 | 0.21 | 0.20 | 0.20 | 0.19 | 0.19 |
| 175mm Superwall 36 (100+75mm) | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.17 |
| 200mm Superwall 36 (2x100mm) | 0.17 | 0.17 | 0.17 | 0.16 | 0.16 | 0.15 |
| 300mm Superwall 36 (2x150mm) | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 |
| 100mm Superwall 34 | 0.28 | 0.27 | 0.27 | 0.26 | 0.25 | 0.24 |
| 125mm Superwall 34 | 0.24 | 0.23 | 0.22 | 0.22 | 0.21 | 0.20 |
| 150mm Superwall 34 | 0.20 | 0.20 | 0.19 | 0.19 | 0.18 | 0.18 |
| 175mm Superwall 34 (100+75mm) | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 | 0.16 |
| 200mm Superwall 34 (2x100mm) | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 |
| 300mm Superwall 34 (2x150mm) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.10 |
| 100mm Superwall 32 | 0.27 | 0.26 | 0.26 | 0.25 | 0.24 | 0.23 |
| 125mm Superwall 32 | 0.22 | 0.22 | 0.21 | 0.21 | 0.20 | 0.19 |
| 150mm Superwall 32 | 0.19 | 0.19 | 0.18 | 0.18 | 0.17 | 0.17 |
| 175mm Superwall 32 (100+75mm) | 0.17 | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 |
| 200mm Superwall 32 (2x100mm) | 0.15 | 0.15 | 0.15 | 0.15 | 0.14 | 0.14 |
| 300mm Superwall 32 (2x150mm) | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 |

Note:
The U-Values have been calculated assuming the wall ties to be stainless steel at 2.5 per $m^2$ and with a cross-sectional area of:
- Cavity Width: 100mm – 124mm = 12.5$mm^2$
- Cavity Width: 125mm – 150mm = 24$mm^2$
- Cavity Width: Greater than 151mm = 60$mm^2$

Air gap correction level is zero. Multiple layers are required for several of the solutions detailed above.

For any U-Value calculations for alternative construction build-ups, please contact our Technical Services Team on **technical.stirling@etexgroup.com** or visit our online U-Value calculator at **www.superglass.co.uk/U-Value-calculation/**

# Block & Block Construction.

## Partial Fill Solution With 50mm Residual Clear Cavity

| Outer Leaf - Blocks | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) |
|---|---|---|---|---|---|---|
| **Inner leaf - Blocks** | **100mm Dense (1.13W/mK)** | **100mm Medium Dense (0.45W/mK)** | **100mm Ultra Lightweight Aggregate (0.31W/mK)** | **100mm High Strength Aircrete (0.19W/mK)** | **100mm Standard Aircrete (0.15W/mK)** | **100mm Lightweight Aircrete (0.11W/mK)** |
| 100mm Superwall 36 | 0.28 | 0.28 | 0.27 | 0.26 | 0.25 | 0.24 |
| 125mm Superwall 36 | 0.25 | 0.24 | 0.24 | 0.23 | 0.22 | 0.21 |
| 150mm Superwall 36 | 0.21 | 0.21 | 0.20 | 0.20 | 0.19 | 0.19 |
| 175mm Superwall 36 (100+75mm) | 0.19 | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 |
| 200mm Superwall 36 (2x100mm) | 0.17 | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 |
| 250mm Superwall 36 (100+150mm) | 0.14 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| 100mm Superwall 34 | 0.27 | 0.26 | 0.26 | 0.25 | 0.24 | 0.23 |
| 125mm Superwall 34 | 0.24 | 0.23 | 0.23 | 0.22 | 0.21 | 0.21 |
| 150mm Superwall 34 | 0.20 | 0.20 | 0.20 | 0.19 | 0.19 | 0.18 |
| 175mm Superwall 34 (100+75mm) | 0.18 | 0.18 | 0.17 | 0.17 | 0.16 | 0.16 |
| 200mm Superwall 34 (2x100mm) | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 | 0.14 |
| 250mm Superwall 34 (100+150mm) | 0.13 | 0.13 | 0.13 | 0.12 | 0.12 | 0.12 |
| 100mm Superwall 32 | 0.26 | 0.25 | 0.25 | 0.24 | 0.23 | 0.22 |
| 125mm Superwall 32 | 0.23 | 0.22 | 0.22 | 0.21 | 0.20 | 0.20 |
| 150mm Superwall 32 | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.17 |
| 175mm Superwall 32 (100+75mm) | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 | 0.15 |
| 200mm Superwall 32 (2x100mm) | 0.15 | 0.15 | 0.15 | 0.14 | 0.14 | 0.14 |
| 250mm Superwall 32 (100+150mm) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 |

## Full fill solution

| Outer Leaf - Blocks | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) |
|---|---|---|---|---|---|---|
| **Inner leaf - Blocks** | **100mm Dense (1.13W/mK)** | **100mm Medium Dense (0.45W/mK)** | **100mm Ultra Lightweight Aggregate (0.31W/mK)** | **100mm High Strength Aircrete (0.19W/mK)** | **100mm Standard Aircrete (0.15W/mK)** | **100mm Lightweight Aircrete (0.11W/mK)** |
| 100mm Superwall 36 | 0.30 | 0.29 | 0.28 | 0.27 | 0.26 | 0.25 |
| 125mm Superwall 36 | 0.25 | 0.24 | 0.24 | 0.23 | 0.22 | 0.21 |
| 150mm Superwall 36 | 0.21 | 0.21 | 0.20 | 0.20 | 0.19 | 0.19 |
| 175mm Superwall 36 (100+75mm) | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.17 |
| 200mm Superwall 36 (2x100mm) | 0.17 | 0.17 | 0.17 | 0.16 | 0.16 | 0.15 |
| 300mm Superwall 36 (2x150mm) | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 |
| 100mm Superwall 34 | 0.29 | 0.28 | 0.27 | 0.26 | 0.25 | 0.24 |
| 125mm Superwall 34 | 0.24 | 0.23 | 0.23 | 0.22 | 0.21 | 0.21 |
| 150mm Superwall 34 | 0.20 | 0.20 | 0.19 | 0.19 | 0.18 | 0.18 |
| 175mm Superwall 34 (100+75mm) | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 | 0.16 |
| 200mm Superwall 34 (2x100mm) | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 |
| 300mm Superwall 34 (2x150mm) | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.10 |
| 100mm Superwall 32 | 0.27 | 0.26 | 0.26 | 0.25 | 0.24 | 0.23 |
| 125mm Superwall 32 | 0.22 | 0.22 | 0.21 | 0.21 | 0.20 | 0.20 |
| 150mm Superwall 32 | 0.19 | 0.19 | 0.18 | 0.18 | 0.17 | 0.17 |
| 175mm Superwall 32 (100+75mm) | 0.18 | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 |
| 200mm Superwall 32 (2x100mm) | 0.16 | 0.15 | 0.15 | 0.15 | 0.14 | 0.14 |
| 300mm Superwall 32 (2x150mm) | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 |

Note:
The U-Values have been calculated assuming the wall ties to be stainless steel at 2.5 per m² and with a cross-sectional area of:
- Cavity Width: 100mm – 124mm = 12.5mm²
- Cavity Width: 125mm – 150mm = 24mm²
- Cavity Width: Greater than 151mm = 60mm²

Air gap correction level is zero. Multiple layers are required for several of the solutions detailed above.

For any U-Value calculations for alternative construction build-ups, please contact our Technical Services Team on **technical.stirling@etexgroup.com** or visit our online U-Value calculator at **www.superglass.co.uk/U-Value-calculation/**

# Superwall Cavity Wall Batts v PIR U-Value Comparison.

## Superwall 32 Cavity Wall Batts (0.032W/mK)

| | | U-Value Required (W/m2K) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0.18 | | 0.17 | | 0.16 | |
| **Internal Block Type** | **Insulation** | **Product Thickness (mm)** | **Cavity Thickness (mm)** | **Product Thickness (mm)** | **Cavity Thickness (mm)** | **Product Thickness (mm)** | **Cavity Thickness (mm)** |
| 100mm Lightweight Aircrete (0.11W/mK) | PIR - 0.021W/mK* | 90 | 100 | 100 | 110 | 100 | 110 |
| | PIR - 0.022W/mK** | 85 | 135 | 85 | 135 | 100 | 150 |
| | **Superwall 32 Cavity Batt** | **150** | **150** | **150** | **150** | **175 (100+75)** | **175** |
| 100mm Standard Aircrete (0.15W/mK) | PIR - 0.021W/mK* | 90 | 100 | 100 | 110 | 115 | 125 |
| | PIR - 0.022W/mK** | 85 | 135 | 100 | 150 | 100 | 150 |
| | **Superwall 32 Cavity Batt** | **150** | **150** | **150** | **150** | **175 (100+75)** | **175** |
| 100mm High Strength Aircrete (0.19W/mK) | PIR - 0.021W/mK* | 100 | 110 | 115 | 125 | 115 | 125 |
| | PIR - 0.022W/mK** | 85 | 135 | 100 | 150 | 100 | 150 |
| | **Superwall 32 Cavity Batt** | **150** | **150** | **175 (100+75)** | **175** | **175 (100+75)** | **175** |
| 100mm Ultra Lightweight Aggregate (0.28W/mK) | PIR - 0.021W/mK* | 100 | 110 | 100 | 110 | 115 | 125 |
| | PIR - 0.022W/mK** | 100 | 150 | 100 | 150 | 115 | 165 |
| | **Superwall 32 Cavity Batt** | **150** | **150** | **175 (100+75)** | **175** | **200 (2x100)** | **200** |
| 100mm Medium Dense (0.45W/mK) | PIR - 0.021W/mK* | 100 | 110 | 115 | 125 | 115 | 125 |
| | PIR - 0.022W/mK** | 100 | 150 | 100 | 150 | 115 | 165 |
| | **Superwall 32 Cavity Batt** | **175 (100+75)** | **175** | **175 (100+75)** | **175** | **200 (2x100)** | **200** |

## Superwall 34 Cavity Wall Batts (0.034W/mK)

| | | U-Value Required (W/m2K) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0.18 | | 0.17 | | 0.16 | |
| **Internal Block Type** | **Insulation** | **Product Thickness (mm)** | **Cavity Thickness (mm)** | **Product Thickness (mm)** | **Cavity Thickness (mm)** | **Product Thickness (mm)** | **Cavity Thickness (mm)** |
| 100mm Lightweight Aircrete (0.11W/mK) | PIR - 0.021W/mK* | 90 | 100 | 100 | 110 | 100 | 110 |
| | PIR - 0.022W/mK** | 85 | 135 | 85 | 135 | 100 | 150 |
| | **Superwall 34 Cavity Batt** | **150** | **150** | **175 (100+75)** | **175** | **175 (100+75)** | **175** |
| 100mm Standard Aircrete (0.15W/mK) | PIR - 0.021W/mK* | 90 | 100 | 100 | 110 | 115 | 125 |
| | PIR - 0.022W/mK** | 85 | 135 | 100 | 150 | 100 | 150 |
| | **Superwall 34 Cavity Batt** | **150** | **150** | **175 (100+75)** | **175** | **200 (2x100)** | **200** |
| 100mm High Strength Aircrete (0.19W/mK) | PIR - 0.021W/mK* | 100 | 110 | 115 | 125 | 115 | 125 |
| | PIR - 0.022W/mK** | 85 | 135 | 100 | 150 | 100 | 150 |
| | **Superwall 34 Cavity Batt** | **175 (100+75)** | **175** | **175 (100+75)** | **175** | **200 (2x100)** | **200** |
| 100mm Ultra Lightweight Aggregate (0.28W/mK) | PIR - 0.021W/mK* | 100 | 110 | 100 | 110 | 115 | 125 |
| | PIR - 0.022W/mK** | 100 | 150 | 100 | 150 | 115 | 165 |
| | **Superwall 34 Cavity Batt** | **175 (100+75)** | **175** | **200 (2x100)** | **200** | **200 (2x100)** | **200** |
| 100mm Medium Dense (0.45W/mK) | PIR - 0.021W/mK* | 100 | 110 | 115 | 125 | 115 | 125 |
| | PIR - 0.022W/mK** | 100 | 150 | 100 | 150 | 115 | 165 |
| | **Superwall 34 Cavity Batt** | **175 (100+75)** | **175** | **200 (2x100)** | **200** | **200 (2x100)** | **200** |

*Full fill PIR insulation build up
**Partial fill PIR insulation build up

The above U-Values were calculated using a 102.5mm brick outer leaf and a 12.5mm standard plasterboard.

Air gap correction level is zero. Multiple layers are required for several of the solutions detailed above.

**Note:**
The U-Values have been calculated assume the wall ties to be stainless steel at 2.5 per m² and with a cross-sectional area of:
- Cavity Width: 100mm – 124mm = 12.5mm²
- Cavity Width: 125mm – 150mm = 24mm²
- Cavity Width: Greater than 151mm = 60mm²


# External Masonry Walls.

## Blown Solution For New Build Applications.

CCPI

CCPI Assessment Mark: 005800159/0327

See pages 60-61 for CCPI assessed logos

# Superwhite Blown Cavity Wall Insulation.

## Full fill blown solution - new build.

**Superglass Superwhite 34** is a non-combustible and British Board of Agrément (BBA) approved glass mineral wool blown cavity wall insulation, manufactured with a water-repellent additive to resist moisture ingress. For use as a full fill solution for new build external masonry cavity walls. The product carries a 10 year material guarantee.

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 14/5086

### Application

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Superwhite 34 | 0.034 W/mK |

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 over 12m in height subject to a satisfactory inspection of the wall construction and a height restriction waiver has been issued by Superglass Insulation. The product is BBA approved for all UK exposure zones (subject to conditions detailed in the BBA Certificate) and can also be installed in masonry party/separating walls.

### Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

### Installation

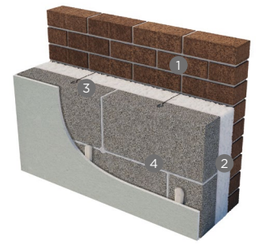
Superglass Superwhite 34 is installed by a network of approved technicians after the walls are built and the building is watertight.

# Brick & Block Construction.

### Typical U-Values Achieved

| Outer Leaf - Blocks | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) | 102.5mm (0.77W/mK) |
|---|---|---|---|---|---|---|
| Inner leaf - Blocks | 100mm Dense (1.13W/mK) | 100mm Medium Dense (0.45W/mK) | 100mm Ultra Lightweight Aggregate (0.31W/mK) | 100mm High Strength Aircrete (0.19W/mK) | 100mm Standard Aircrete (0.15W/mK) | 100mm Lightweight Aircrete (0.11W/mK) |
| 100mm Superwhite 34 Blown Cavity Insulation | 0.28 | 0.27 | 0.27 | 0.26 | 0.25 | 0.24 |
| 125mm Superwhite 34 Blown Cavity Insulation | 0.24 | 0.23 | 0.22 | 0.22 | 0.21 | 0.20 |
| 150mm Superwhite 34 Blown Cavity Insulation | 0.20 | 0.20 | 0.19 | 0.19 | 0.18 | 0.18 |
| 175mm Superwhite 34 Blown Cavity Insulation | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 | 0.16 |
| 200mm Superwhite 34 Blown Cavity Insulation | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 |
| 300mm Superwhite 34 Blown Cavity Insulation | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.10 |

### Typical Application




**Brick & block construction**

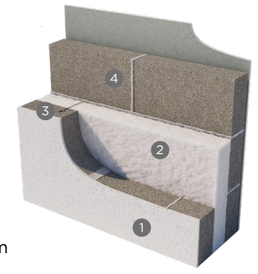
1. Outer Leaf - 102.5mm Bricks
2. Superglass Superwhite 34 fully filling the cavity
3. Wall ties
4. Inner leaf - 100mm Blocks with 12.5mm Plasterboard on dabs

# Block & Block Construction.

### Typical U-Values Achieved

| Outer Leaf - Blocks | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) | 100mm Dense (1.13W/mK) |
|---|---|---|---|---|---|---|
| Inner leaf - Blocks | 100mm Dense (1.13W/mK) | 100mm Medium Dense (0.45W/mK) | 100mm Ultra Lightweight Aggregate (0.31W/mK) | 100mm High Strength Aircrete (0.19W/mK) | 100mm Standard Aircrete (0.15W/mK) | 100mm Lightweight Aircrete (0.11W/mK) |
| 100mm Superwhite 34 Blown Cavity Insulation | 0.29 | 0.28 | 0.27 | 0.26 | 0.25 | 0.24 |
| 125mm Superwhite 34 Blown Cavity Insulation | 0.24 | 0.23 | 0.23 | 0.22 | 0.21 | 0.21 |
| 150mm Superwhite 34 Blown Cavity Insulation | 0.20 | 0.20 | 0.19 | 0.19 | 0.18 | 0.18 |
| 175mm Superwhite 34 Blown Cavity Insulation | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 | 0.16 |
| 200mm Superwhite 34 Blown Cavity Insulation | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 |
| 300mm Superwhite 34 Blown Cavity Insulation | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.10 |

### Typical Application




**Block & block construction**

1. Outer Leaf - 100mm Blocks with render
2. Superglass Superwhite 34 fully filling the cavity
3. Wall ties
4. Inner leaf - 100mm Blocks with 12.5mm Plasterboard on dabs

Note:
The U-Values have been calculated assuming the wall ties to be stainless steel at 2.5 per $m^2$ and with a cross-sectional area of:
- Cavity Width: 100mm – 124mm = 12.5$mm^2$
- Cavity Width: 125mm – 150mm = 24$mm^2$
- Cavity Width: Greater than 151mm = 60$mm^2$

For any U-Value calculations for alternative construction build-ups, please contact our Technical Services Team on **technical.stirling@etexgroup.com** or visit our online U-Value calculator at **www.superglass.co.uk/U-Value-calculation/**

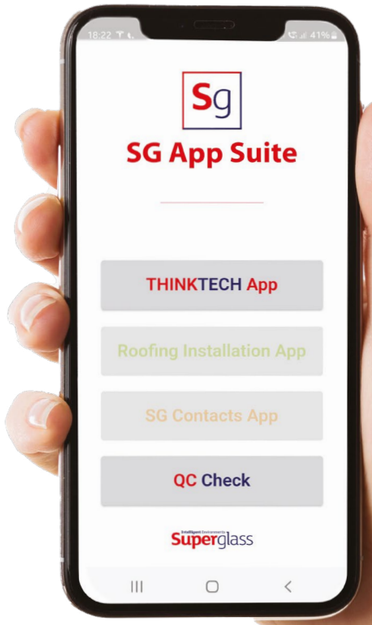
# The THINKTECH app.

## Using technology to close the performance gap.

Our market leading technology has been developed primarily to help housebuilders prove their Superwhite insulation has been correctly installed and therefore able to meet Part L of the Building Regulations. The THINKTECH app also enables technicians to be accurate in calibrating their blowing machines – making the process even more efficient.

## Make meeting regulations easy

The installer simply scans the unique QR code on each Superwhite bale. The app then guides them through the survey process to record the necessary information. Once the installation's complete, the app calculates key job parameters to produce an automated installation report – including 10-year material warranty, data and health and safety sheets – ready to be downloaded to show Building Control at handover.





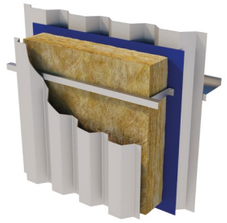
# Superglass Cladding Insulation.

## Thermal insulation in metal clad walls.


**Superglass Cladding Mat** is a non-combustible glass mineral wool insulation roll. The roll is supplied 1200mm wide to suit commonly used rail and bracket systems.

### Application

Superglass Cladding Mat is designed to provide thermal and acoustic insulation in the walls of twin skin profiled metal clad systems and portable & modular buildings.



### Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

### Thermal Performance

In terms of thermal performance, Superglass Cladding Mat offers a range of declared thermal conductivities (lambda (λ) value) for the designer to select from depending on the specific U-Value requirements.

### Typical U-Values (W/m²K) achieved - walls

| Insulation Thickness (mm) | Cladding Mat 32 | Cladding Mat 35 | Cladding Mat 40 |
|---|---|---|---|
| 280 | 0.14 | 0.15 | 0.16 |
| 260 | 0.15 | 0.16 | 0.18 |
| 240 | 0.16 | 0.17 | 0.19 |
| 200 | 0.19 | 0.20 | 0.22 |
| 180 | 0.21 | 0.22 | 0.25 |
| 160 | 0.23 | 0.25 | 0.28 |
| 140 | 0.26 | 0.28 | 0.32 |

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Cladding Mat 32 | 0.032 W/mK |
| Cladding Mat 35 | 0.035 W/mK |
| Cladding Mat 40 | 0.040 W/mK |

Rail Spacing: 1200mm | Rail Width: 40mm | Rail Thickness: 1.2mm

The above calculations were carried out for standard twin skin rail and bracket systems. These are to be used as a guide only, the system designer/manufacturer should be consulted for project specific U-Value calculations.


# External Timber Frame Walls.

CCPI

CCPI Assessment Mark: 005800130/0227

See pages 60-61 for CCPI assessed logos

## Superglass Timber & Rafter Insulation.

**Rolls and Batts to achieve thermal performance.**

**Superglass Timber & Rafter Roll/Batts** are non-combustible glass mineral wool insulation products. The flexible rolls and batts are manufactured to allow friction fitting between common stud/rafter spacings minimising gaps at joints and reducing on-site cutting.

### Application

Superglass Timber & Rafter Rolls and Batts are designed to provide thermal insulation for external timber frame walls, warm pitched roofs, and suspended timber floors.

### Fire Classification

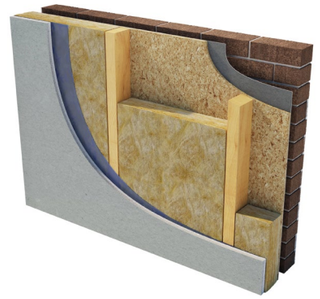
Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Timber & Rafter Roll or Batt 32 | 0.032 W/mK |
| Timber & Rafter Roll 35 or Adapt Slab 35 | 0.035 W/mK |
| Timber & Rafter Roll 40 | 0.040 W/mK |

# Timber Frame Wall Applications.

### Typical U-Values achieved

| Description | Thickness (mm) | Thermal Conductivity (W/mK) | Thermal Resistance (m²K/W) |
|---|---|---|---|
| Outer Brickwork | 102.50 | 0.77 | |
| Unvented low emissivity cavity | 50.00 | | 0.77 |
| Reflective Breather Membrane | | | |
| Oriented strandboard (OSB) | 9.00 | 0.13 | |
| Superglass insulation between timber studs* | (see table below) | | |
| Reflective Vapour Control Layer (VCL) | | | |
| Unvented low emissivity cavity between timber battens** | 25.00 | | 0.78 |
| Standard Plasterboard or Insulated Plasterboard | (see table below) | | |
| Plaster Skim | 3.00 | 0.80 | |



| Insulation between timber stubs | Thermal Conductivity (W/mK) | Insulation and timber stud thickness (mm) | U-Values achieved (W/m²K) | |
|---|---|---|---|---|
| | | | 12.5mm Standard Plasterboard (0.19W/mK) | 37.5mm Siniat Thermal PIR (1.20 m²K/W) |
| Timber & Rafter Roll or Batt 32 | 0.032 | 230 (90+140) | 0.14 | 0.12 |
| Timber & Rafter Roll 35 or Adapt Slab 35 | 0.035 | 230 (90+140) | 0.14 | 0.12 |
| Timber & Rafter Roll 40 | 0.040 | 230 (90+140) | 0.15 | 0.13 |
| Timber & Rafter Roll or Batt 32 | 0.032 | 180 (2x90mm) | 0.16 | 0.14 |
| Timber & Rafter Roll 35 or Adapt Slab 35 | 0.035 | 180 (2x90mm) | 0.17 | 0.14 |
| Timber & Rafter Roll 40 | 0.040 | 180 (2x90mm) | 0.18 | 0.15 |
| Timber & Rafter Roll or Batt 32 | 0.032 | 140 | 0.19 | 0.16 |
| Timber & Rafter Roll 35 or Adapt Slab 35 | 0.035 | 140 | 0.20 | 0.16 |
| Timber & Rafter Roll 40 | 0.040 | 140 | 0.21 | 0.17 |

*Timber bridging is assumed as 15%. Bridge thermal conductivity of 0.12W/mK
**Timber bridging is assumed as 9.50%. Bridge thermal conductivity of 0.12W/mK

For any U-Value calculations for alternative construction build-ups, please contact our Technical Services Team on **technical.stirling@etexgroup.com** or visit our online U-Value calculator at **www.superglass.co.uk/U-Value-calculation/**

# External Timber Frame Walls.

## Dual Brand Hybrid Solution.

CCPI Assessment Mark: 005800130/0227

See pages 60-61 for CCPI assessed logos

**Solution incorporating glass mineral wool throughout.**

In 2025, The Superglass and URSA brands came together to form Etex UK Insulation Ltd.

For today's low rise timber frame residential projects, this now allows external walls to be specified, whilst achieving U-Values as low as 0.12W/m²K, when you combine **Superglass Insulation** with **URSA WALLTEC BLACK 32** & **URSAPAN BLACK.**

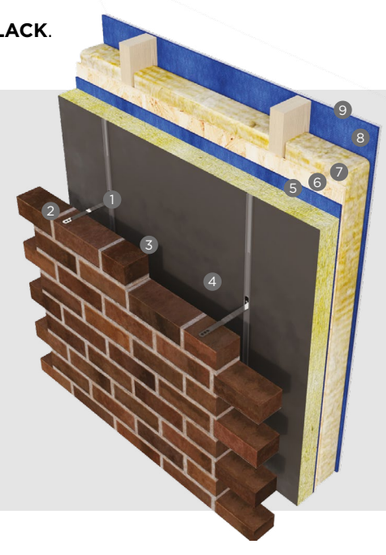
Combining these non-combustible (Euroclass A1) glass mineral wool insulation products allows specifiers to create an advanced solution without the need for rigid board insulation products.

This solution has the **URSA WALLTEC BLACK 32** or **URSAPAN BLACK** fixed externally to the outer leaf brickwork* and the Superglass insulation products between the timber studs.

*Please refer to the **URSA WALLTEC BLACK 32** and **URSAPAN BLACK**. literature for suitable fixings and instructions.

### Typical Applications

1. Channel and tie system
2. 102.5mm Outer Leaf Brickwork
3. 50mm unvented cavity
4. **URSA WALLTEC BLACK 32** or **URSAPAN BALCK**
5. Breather membrane
6. 9mm OSB
7. **SUPERGLASS INSULATION BETWEEN THE TIMBER STUDS**
8. Vapour control layer
9. 12.5mm Standard Plasterboard






# URSA WALLTEC BLACK 32 OR URSAPAN BLACK Used Externally.

**URSA WALLTEC BLACK 32** and **URSAPAN BLACK** are non-combustible British Board of Agrément (BBA) approved glass mineral wool insulation slabs. They are treated with a silicon-based water repellent and features a black glass fibre tissue facing. Supplied 1350mm x 600mm.

### Benefits & Features

- BBA approved for use in rainscreen applications. Certificate number 20/5832.
- Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to EN 13501-1:2018 Reaction to Fire.
- Declared thermal conductivity (lambda (λ) value) of: URSA WALLTEC BLACK 32 = 0.032W/mK, URSAPAN BLACK = 0.035W/mK.
- CE Marked.
- Manufactured in accordance with ISO 14001:2015 – Environmental Management Systems (EMS) and ISO 9001:2015 - Quality Management Systems (QMS).

# Superglass Insulation Between Timber Studs.

**Superglass Timber & Rafter Roll** and **Adapt Slab 35** are glass mineral wool insulation products. The flexible rolls and slabs are manufactured to allow friction fitting between common stud spacings, minimising gaps at joints and reducing on-site cutting.

### Benefits & Features

- Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.
- Declared thermal conductivity (lambda (λ) value) of: Timber & Rafter Roll 32 - 0.032W/mK. Timber & Rafter Roll 35/Adapt Slab 35 - 0.035W/mK. Timber & Rafter Roll 40 - 0.040W/mK.
- UKCA and CE Marked.
- Manufactured in accordance with ISO 14001:2015 - Environmental Management Systems (EMS) and ISO 9001:2015 - Quality Management Systems (QMS).

## Typical U-Values (W/m²K) when using Superglass insulation between the timber studs and URSA WALLTEC BLACK 32 externally.

| URSA WALLTEC BLACK 32 | | | | | | |
|---|---|---|---|---|---|---|
| Timber Stud & Insulation Thickness (mm) | Superglass Insulation between studs | U-Value (W/m²K) | | | | |
| | | 60mm WALLTEC BLACK 32 | 80mm WALLTEC BLACK 32 | 100mm WALLTEC BLACK 32 | 120mm WALLTEC BLACK 32 | 130mm WALLTEC BLACK 32 |
| 140 | Timber & Rafter Roll 32 | 0.17 | 0.15 | 0.14 | 0.13 | 0.12 |
| 140 | Timber & Rafter Roll 35 or Adapt Slab 35 | 0.17 | 0.16 | 0.14 | 0.13 | 0.13 |
| 140 | Timber & Rafter Roll 40 | 0.18 | 0.16 | 0.15 | 0.14 | 0.13 |
| 90 | Timber & Rafter Roll 32 | 0.21 | 0.18 | 0.17 | 0.15 | 0.15 |
| 90 | Timber & Rafter Roll 35 or Adapt Slab 35 | 0.21 | 0.19 | 0.17 | 0.15 | 0.15 |
| 90 | Timber & Rafter Roll 40 | 0.22 | 0.20 | 0.17 | 0.16 | 0.15 |

Timber bridging is assumed as 15%. Bridge thermal conductivity of 0.13W/mK.

**Channel & Tie Fixings**
**No. per m²:** 4.93
**Fastner Lambda (W/mK):** 17
**Cross-section (mm²):** 28

## Typical U-Values (W/m²K) when using Superglass insulation between the timber studs and URSAPAN BLACK externally.

| URSAPAN BLACK | | | | | | |
|---|---|---|---|---|---|---|
| Timber Stud & Insulation Thickness (mm) | Superglass Insulation between studs | U-Value (W/m²K) | | | | |
| | | 100mm URSAPAN BLACK | 120mm URSAPAN BLACK | 130mm URSAPAN BLACK | 140mm URSAPAN BLACK | 150mm URSAPAN BLACK |
| 140 | Timber & Rafter Roll 32 | 0.14 | 0.13 | 0.13 | 0.12 | 0.12 |
| 140 | Timber & Rafter Roll 35 or Adapt Slab 35 | 0.15 | 0.14 | 0.13 | 0.13 | 0.12 |
| 140 | Timber & Rafter Roll 40 | 0.16 | 0.14 | 0.14 | 0.13 | 0.13 |
| 90 | Timber & Rafter Roll 32 | 0.17 | 0.16 | 0.15 | 0.14 | 0.14 |
| 90 | Timber & Rafter Roll 35 or Adapt Slab 35 | 0.18 | 0.16 | 0.15 | 0.15 | 0.14 |
| 90 | Timber & Rafter Roll 40 | 0.18 | 0.17 | 0.15 | 0.15 | 0.15 |

Timber bridging is assumed as 15%. Bridge thermal conductivity of 0.13W/mK.

**Channel & Tie Fixings**
**No. per m²:** 4.93
**Fastner Lambda (W/mK):** 17
**Cross-section (mm²):** 28


# Superglass Party Wall Roll.

## Acoustic and thermal insulation between dwellings.

**Superglass Party Wall Roll** is a non-combustible glass mineral wool insulation roll. The flexible roll is cut at 3x455mm widths to fit between standard wall ties, reducing the need for on-site cutting and waste.


## Application

Superglass Party Wall Roll is designed to provide thermal and acoustic insulation within masonry party/separating walls.

Superglass Party Wall Roll may be used as a component in several Robust Details Solutions including proprietary systems E-WM-22, E-WM-23 & E-WM-27. It may also be used in party wall systems which require on-site pre completion. The product can be used as part of a full fill solution to achieve a zero effective U-Value.

| Superglass Products | Thermal Conductivity (Lambda (λ) value) | Minimum Density |
|---|---|---|
| Party Wall Roll | 0.036 W/mK | 18kg/m³ |

## Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

## Typical Application

1. Blocks with Plasterboard on dabs
2. Superglass Party Wall Roll
3. Wall ties
4. Blocks with Plasterboard on dabs


## robustdetails

Since Superglass Party Wall Roll is specifically mentioned in the Robust Details Handbook, you can confidently specify it, knowing that the chosen construction method will meet current Building Regulations.

## Superglass Party Wall Roll Can Be Used In The Following Robust Details Approved Solutions

| Robust Details Solutions - England, Wales & Northern Ireland | | | | |
|---|---|---|---|---|
| Robust Detail | Minimum Cavity Width (mm) | Block Type & Density (kg/m²) | Parge Coat Required | Wall Finish |
| E-WM-1 | 75 | Dense Aggregate - 1850 to 2300 | No | Wet Plaster |
| E-WM-2 | 75 | Lightweight Aggregate - 1350 to 1600 | No | Wet Plaster |
| E-WM-3 | 75 | Dense Aggregate - 1850 to 2300 | Yes | Render and gypsum-based board on dabs |
| E-WM-4 | 75 | Lightweight Aggregate - 1350 to 1600 | Yes | Render and gypsum-based board on dabs |
| E-WM-5 | 75 | Besblock 'Star Performer' - 1528 | Yes | Render and gypsum-based board on dabs |
| E-WM-6 | 75 | Aircrete - 600 to 800 | Yes | Render and gypsum-based board on dabs |
| E-WM-10 | 75 | Aircrete - Thin Joint System - 600 to 800 | Yes | Render and gypsum-based board on dabs |
| E-WM-11 | 100 | Lightweight Aggregate - 1350 to 1600 | Yes | Render and gypsum-based board on dabs |
| E-WM-12 | 75 | Plasmor 'Aglite Ultima' - 1050 | Yes | Render and gypsum-based board on dabs |
| E-WM-13 | 75 | Aircrete - Thin Joint Untied System - 600 to 800 | Yes | Render and gypsum-based board on dabs |
| E-WM-16 | 100 | Dense Aggregate - 1850 to 2300 | Yes | Render and gypsum-based board on dabs |
| E-WM-18 | 100 | Dense Aggregate - 1850 to 2300 | No | Wet Plaster |
| E-WM-19 | 100 | Dense or Lightweight Aggregate - 1350 to 1600 or 1850 to 2300 | Yes | Render and gypsum-based board on dabs |
| E-WM-21 | 100 | Lightweight Aggregate - 1350 to 1600 | No | Wet Plaster |
| E-WM-22 | 100 | Lightweight Aggregate - 1350 to 1600 | No | Gypsum-based board on dabs |
| E-WM-23 | 100 | Aircrete - Standard and Thin Joint - 600 to 800 | No | Gypsum-based board on dabs |
| E-WM-25 | 100 | Porotherm - Thin Joint - n/a | Yes | Ecoparge gypsum-based board on dabs |
| E-WM-26 | 100 | Besblock 'Star Performer' - 1528 | No | Gypsum-based board on dabs |
| E-WM-27 | 75 | Lightweight Aggregate - 1350 to 1600 | No | Gypsum-based board on dabs |
| E-WM-29 | 75 | Porotherm - Thin Joint - n/a | Yes | Ecoparge gypsum-based board on dabs |
| E-WM-31 | 100 | H+H Celcon Elements - thin joint - 575 | No | Gypsum-based board on dabs |
| E-WM-34 | 100 | Plasmor 'Aglite Ultima' - 1050 | No | Gypsum-based board on dabs |

Please note: The requirements of the Robust Details Handbook should be strictly followed.

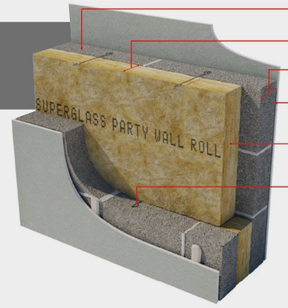
## U-Values Achieved When Fully Filling The Party/Separating Wall Cavity

| U-Value (W/m²K) | Party Wall Construction |
|---|---|
| 0.0* | Solid |
| 0.5 | Unfilled cavity with no effective edge sealing |
| 0.2 | Unfilled cavity with effective edge sealing around all exposed edges and in line with insulation layers in abutting elements |
| 0.0* | Fully filled cavity and with effective edge sealing around all exposed edges and in line with insulation layers in abutting elements |

* By either building a solid wall or fully filling a party wall cavity with mineral wool insulation results in a U-Value of 0.0W/m²K, i.e. zero heat loss.

# Recommended Robust Details® Solutions.

## Robust Detail E-WM-22




**Block density:** 1350 to 1600 kg/m³

**Cavity width:** 100mm (min)

**Block thickness:** 100mm (min), each leaf

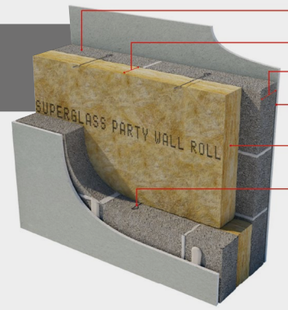
**Wall finish:** Gypsum based board mounted on dabs (nominal 10kg/m²)

**Insulation: Superglass Party Wall Roll**

**Wall Ties:** Approved Document E 'Tie type A'

**External flanking wall:** Masonry (both leaves) with 50mm (min) cavity - fully filled or partially filled with Superglass Cavity Wall Insulation.

## Robust Detail E-WM-23




**Block density:** 600 to 800kg/m³

**Cavity width:** 100mm (min)

**Block thickness:** 100mm (min), each leaf

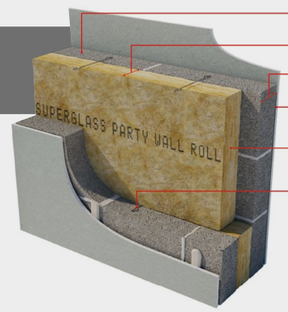
**Wall finish:** Gypsum based board mounted on dabs (nominal 8kg/m²)

**Insulation: Superglass Party Wall Roll**

**Wall Ties:** Approved Document E 'Tie type A'

**External flanking wall:** Masonry (both leaves) with 50mm (min) cavity - fully filled or partially filled with Superglass Cavity Wall Insulation.

## Robust Detail E-WM-27




**Block density:** 1350 to 1600 kg/m³

**Cavity width:** 75mm (min)

**Block thickness:** 100mm (min), each leaf

**Wall finish:** Gypsum based board mounted on dabs (nominal 8kg/m²)

**Insulation: Superglass Party Wall Roll**

**Wall Ties:** Approved Document E 'Tie type A'

**External flanking wall:** Masonry (both leaves) with 50mm (min) cavity - fully filled or partially filled with Superglass Cavity Wall Insulation.

Please note: The requirements of the Robust Details Handbook should be strictly followed.


# Superwhite 34 Blown Party Wall Insulation.

**Acoustic and thermal blown insulation solution for between dwellings.**

**Superglass Superwhite 34** is a non-combustible glass mineral wool blown insulation for use as a full fill solution for new build masonry party/separating walls.

## Application

Superglass Superwhite 34 is designed to provide thermal and acoustic insulation and help provide a zero U-Value within new build masonry party or separating walls as described in related building regulations.

The product may be used as a component in several Robust Details solutions including proprietary systems E-WM-33 and E-WM-35.

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Superwhite 34 | 0.034 W/mK |

## Fire Classification

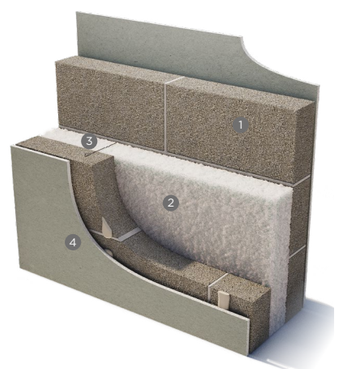
Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

## Installation

Superglass Superwhite 34 is installed by a network of approved technicians after the walls are built and the building is watertight.

## Typical Application

1. Blocks with Plasterboard on dabs
2. Superglass Superwhite 34 Blown Insulation
3. Wall ties
4. Blocks with Plasterboard on dabs



robustdetails

Since Superglass Superwhite 34 is specifically mentioned in the Robust Details Handbook, you can confidently specify it, knowing that the chosen construction method will meet current Building Regulations.

## Robust Details Solutions Which Can Incorporate Superwhite 34

| Robust Details Solutions | | | | |
|---|---|---|---|---|
| **Robust Details** | **Minimum Cavity Width (mm)** | **Block Type & Density (kg/m³)** | **Parge Coat Required** | **Wall Finish** |
| E-WM-1 | 75 | Dense Aggregate - 1850 to 2300 | No | Wet Plaster |
| E-WM-2 | 75 | Lightweight Aggregate - 1350 to 1600 | No | Wet Plaster |
| E-WM-3 | 75 | Dense Aggregate -1850 to 2300 | Yes | Render and gypsum-based board on dabs |
| E-WM-4 | 75 | Lightweight Aggregate - 1350 to 1600 | Yes | Render and gypsum-based board on dabs |
| E-WM-5 | 75 | Besblock 'Star Performer' -1528 | Yes | Render and gypsum-based board on dabs |
| E-WM-6 | 75 | Aircrete -600 to 800 | Yes | Render and gypsum-based board on dabs |
| E-WM-10 | 75 | Aircrete - Thin Joint System -600 to 800 | Yes | Render and gypsum-based board on dabs |
| E-WM-11 | 100 | Lightweight Aggregate - 1350 to 1600 | Yes | Render and gypsum-based board on dabs |
| E-WM-12 | 75 | Plasmor 'Aglite Ultima' - 1050 | Yes | Render and gypsum-based board on dabs |
| E-WM-13 | 75 | Aircrete - Thin Joint Untied System - 600 to 800 | Yes | Render and gypsum-based board on dabs |
| E-WM-16 | 100 | Dense Aggregate - 1850 to 2300 | Yes | Render and gypsum-based board on dabs |
| E-WM-18 | 100 | Dense Aggregate - 1850 to 2300 | No | Wet Plaster |
| E-WM-19 | 100 | Dense Aggregate - 1850 to 2300 or Lightweight Aggregate - 1350 to 1600 | Yes | Render and gypsum-based board on dabs |
| E-WM-21 | 100 | Lightweight Aggregate - 1350 to 1600 | No | Wet Plaster |
| E-WM-25 | 100 | Porotherm - Thin Joint - n/a | Yes | Ecoparge gypsum-based board on dabs |
| E-WM-26 | 100 | Besblock 'Star Performer' -1528 | No | Gypsum-based board on dabs |
| E-WM-34 | 125 | Plasmor 'Aglite Ultima' - 1050 | No | Gypsum-based board on dabs |

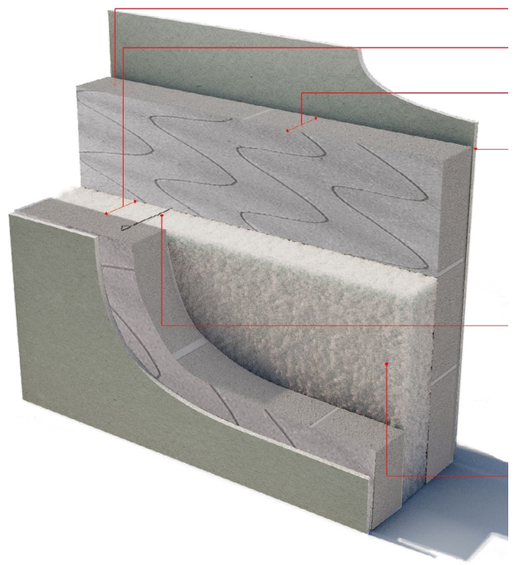
The above table is to be used as a guide only. Always refer to the Robust Details Handbook.

## U-Values Achieved When Fully Filling The Party/Separating Wall Cavity

| U-Value (W/m²K) | Party Wall Construction |
|---|---|
| 0.0* | Solid |
| 0.5 | Unfilled cavity with no effective edge sealing |
| 0.2 | Unfilled cavity with effective edge sealing around all exposed edges and in line with insulation layers in abutting elements |
| 0.0* | Fully filled cavity and with effective edge sealing around all exposed edges and in line with insulation layers in abutting elements |

* By either building a solid wall or fully filling a party wall cavity with mineral wool insulation results in a U-Value of 0.0W/m²K, i.e. zero heat loss.

## Recommended Solutions



| | E-WM-33 | E-WM-35 |
|---|---|---|
| **Block density:** | 1350 to 1600 kg/m³ | 600 to 800kg/m³ |
| **Cavity width:** | 100mm (min) | 100mm (min) |
| **Block thickness:** | 100mm (min), each leaf | 100mm (min), each leaf |
| **Wall finish:** | Gypsum based board mounted on dabs (nominal 8kg/m²) | Gypsum based board mounted on dabs (nominal 8kg/m²) |
| **Wall Ties:** | Approved Document E 'Tie type A' | Approved Document E 'Tie type A' (see Appendix A) For thin joint, wall ties must be Ancon Building Products Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre |
| **Insulation:** | **SUPERGLASS SUPERWHITE 34 BLOWN INSULATION** | |
| **External flanking wall:** | Masonry (both leaves) with 90mm (min) cavity, fully filled with Superwhite 34 Blown insulation. | Masonry (both leaves) with 90mm (min) cavity, fully filled with Superwhite 34 Blown insulation. |

## Benefits

- Compliant with standard 12.5mm plasterboard (nominal 8 kg/m² density)
- No parge coat required
- Party Wall Thermal Bypass - Full fill solution to aid zero u-value compliance
- No requirement for pre-completion acoustic testing when using the Robust Details scheme
- Installed at high speed by approved contractors
- Provides one insulation technique on-site when used in conjunction with Superwhite 34 in external walls

**The requirements of the Robust Details Handbook should be strictly followed.**


# Timber Frame Party & Separating Walls.

CCPI Assessment Mark: 005800127/0227

See pages 60-61 for CCPI assessed logos

# TF Party Wall Roll.

## Acoustic and thermal insulation between dwellings in timber frame construction.

**Superglass TF Party Wall Roll** is a non-combustible glass mineral wool insulation roll. The flexible roll is supplied 2x675mm or 1200mm wide, reducing the need for on-site cutting and waste.

### Application

Superglass TF Party Wall Roll is designed to provide thermal and acoustic insulation within timber frame party/separating wall cavities.

Superglass TF Party Wall Roll may be used as a component in Robust Details solutions E-WT-1 and E-WT-2, It may also be used in party wall systems which require on-site pre-completion and can be used as part of a full fill solution to achieve a zero effective U-Value.

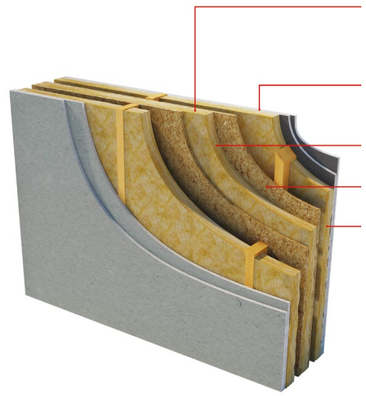
### Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

| Superglass Products | Thermal Conductivity (Lambda (λ) value) | Minimum Density |
|---|---|---|
| TF Party Wall Roll | 0.036 W/mK | 18kg/m³ |

## Recommended Robust Details® solutions.

### E-WT-1



**Wall width:** 240mm (min) between inner faces of wall linings. 50mm (min) gap between studs (must not be bridged by any diagonal bracing)

**Wall lining:** 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²), both sides - all joints staggered

**Insulation: SUPERGLASS TF PARTY WALL ROLL OR ADAPT SLAB 35**

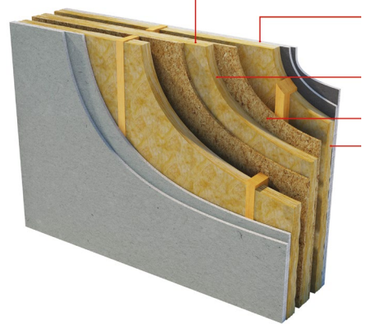
**Sheathing:** Partial sheathing of party wall - Please refer to Robust Details Handbook

**Absorbent material:** 60mm (min) mineral wool batts or quilt (density 10 - 60kg/m³) both sides i.e. Superglass Adapt Slab 35 or Timber & Rafter Roll

**Ties:** Between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically

**External (flanking) wall:** Outer leaf masonry with minimum 50mm cavity

### E-WT-2



**Wall width:** 240mm (min) between inner faces of wall linings 50mm (min) cavity (gap between wall panels) 68mm (min) between stud frames

**Wall lining:** 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²), both sides - all joints staggered

**Insulation: SUPERGLASS TF PARTY WALL ROLL OR ADAPT SLAB 35**

**Sheathing:** 9mm (min) thick board

**Absorbent material:** 60mm (min) mineral wool batts or quilt (density 10 - 60kg/m³) both sides i.e. Superglass Adapt Slab 35 or Timber & Rafter Roll

**Ties:** Between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically

**External (flanking) wall:** Outer leaf masonry with minimum 50mm cavity

### U-Values Achieved When Fully Filling The Party/Separating Wall Cavity

| U-Value (W/m²K) | Party Wall Construction |
|---|---|
| 0.0* | Solid |
| 0.5 | Unfilled cavity with no effective edge sealing |
| 0.2 | Unfilled cavity with effective edge sealing around all exposed edges and in line with insulation layers in abutting elements |
| 0.0* | Fully filled cavity and with effective edge sealing around all exposed edges and in line with insulation layers in abutting elements |

* By either building a solid wall or fully filling a party wall cavity with mineral wool insulation results in a U-Value of 0.0W/m²K, i.e. zero heat loss.


# Superglass Acoustic Insulation.

**Acoustic insulation for internal wall systems.**

All Superglass acoustic insulation products help reduce the passage of sound, enhancing both comfort and privacy. Furthermore, the flexible nature of the rolls allows for friction fitting installation between studs and in a wide variety of partition types. For fire rated partitions, insulation is to be clamped between Siniat Metal Angle fixed through to head track or soffit. Two fixings per 600mm strip, approx. 300mm apart.

| Superglass Products | Minimum Density |
|---|---|
| 100mm Multi Acoustic Roll | 10kg/m³ |

| Superglass Products | Nominal Density |
|---|---|
| 25mm Acoustic Partition Roll (APR) | 18kg/m³ |
| 50mm Acoustic Partition Roll (APR) | 16kg/m³ |

siniat
Shaping the way people build

When specifying acoustic partitions, you need to be confident that you will achieve the required sound performance. Minimising sound transmission between rooms and maximising acoustic comfort for the building's occupants.

A whole system approach to specification is the optimum way to deliver all the acoustic performance you need, with every component working together in a system that's been rigorously tested to perform.

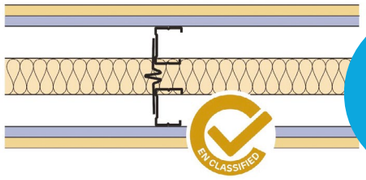
Superglass insulation complements Siniat internal partition systems, with both companies working collaboratively as part of the global Etex Group.

Recent updates to Approved Document B emphasise a requirement to use European classifications and fire resistance technologies in accordance with EN 1363-1 and EN 1364-1. All systems shown have been tested to EN 1364-1 directly or extended using Direct Field of Application (DIAP) rules included in EN 1364-1 or extended using the Extended Field of Application (EXAP) standard EN 15254-3. All systems have been classified to EN 13501-2.

# Acoustic performance in internal partition wall systems - Schools and Hospitals.

## System Name: Twin(AB)-CS50R-15Un15dB-50G(200)

**System Type: Partition**

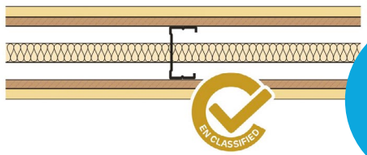



63dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 15mm Siniat dB Board | 1 x 15mm Siniat Universal Board | Twin Siniat CS50/Rx C-Studs at 600mm centres with Acoustic V Brace | 50mm Superglass Acoustic Partition Roll (APR) | 63 -8 | 5 | EI 120 |

## System Name: CS70R-15Un12Ply-25G

**System Type: Partition**

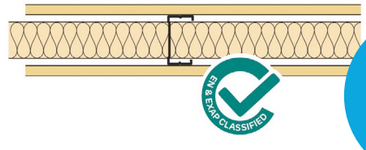



52dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 12mm Plywood | 1 x 15mm Siniat Universal Board | Siniat CS70/Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 52 | 3.75 | EI 60 |

## System Name: CS70R-15Un-50G

**System Type: Partition**




50dB (Rw)

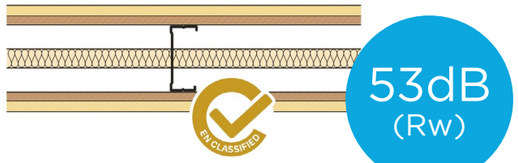
| System Components | | | Performance | | |
|---|---|---|---|---|---|
| Boarding on each side | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| 1 x 15mm Siniat Universal Board | Siniat CS70/Rx C-Stud at 600mm centres | 50mm Superglass Acoustic Partition Roll (APR) | 50 | 3.75 | EI 60 |

For further information relating to any of the Siniat products shown please contact **technical@siniat.co.uk** or visit **www.siniat.co.uk/en-gb/**

# Acoustic performance in internal partition wall systems - Schools and Hospitals.

## System Name:
## CS90R-15Un12Ply-25G

**System Type: Partition**

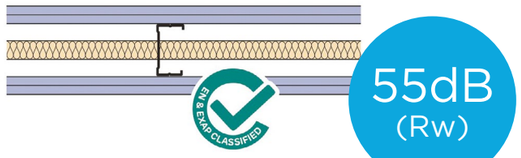



53dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 12mm Plywood | 1 x 15mm Siniat Universal Board | Siniat CS90/Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 53 | 4.65 | EI 60 |

## System Name:
## CS70R-212dB-25G

**System Type: Partition**

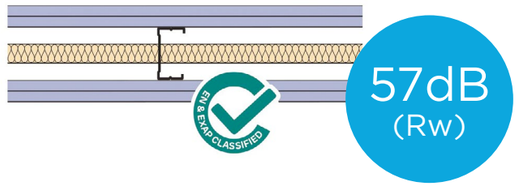



55dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 12.5mm Siniat dB Boards | 1 x 12.5mm Siniat dB Boards | Siniat CS70/Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 55 | 4.6 | EI 60 |

## System Name:
## CS70R-215dB-25G

**System Type: Partition**



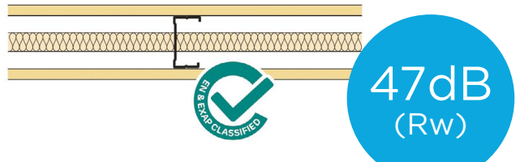

57dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 15mm Siniat dB Boards | 1 x 15mm Siniat dB Boards | Siniat CS70/Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 57 | 5 | EI 90 |

For further information relating to any of the Siniat products shown please contact **technical@siniat.co.uk** or visit **www.siniat.co.uk/en-gb/**

## System Name:
## CS70R-15Un-25G

**System Type: Partition**



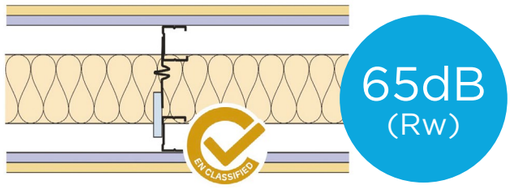

47dB (Rw)

| System Components | | | Performance | | |
|---|---|---|---|---|---|
| Boarding on each side | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| 1 x 15mm Siniat Universal Board | Siniat CS70/Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 47 | 3.75 | EI 60 |

# Acoustic performance in internal partition wall systems - Residential Buildings.

## System Name:
## Twin(AB)-CS50R-15Un15dB-100G(250)

**System Type: Partition**

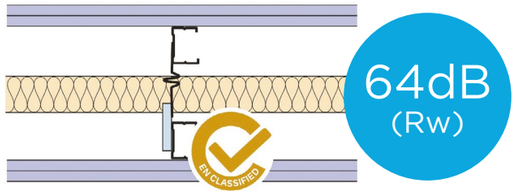



65dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 15mm Siniat dB Board | 1 x 15mm Siniat Universal Board | Twin Siniat CS50/Rx C-Studs at 600mm centres with Siniat Acoustic V Brace and suitable stud or channel | 100mm Superglass Multi Acoustic Roll | 64 -6 | 5 | EI 120 |

## System Name:
## Twin(AB)-CS50R-215dB-50G(250)

**System Type: Partition**

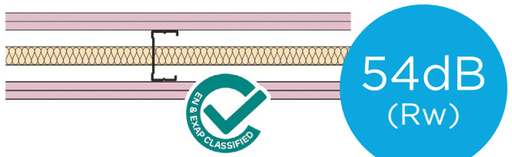



64dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 15mm Siniat dB Boards | 1 x 15mm Siniat dB Boards | Twin Siniat CS50/Rx C-Studs at 600mm centres with Siniat Acoustic V Brace and suitable stud or channel | 50mm Superglass Acoustic Partition Roll (APR) | 64 -6 | 5 | EI 90 |

## System Name:
## CS70R-212F-25G

**System Type: Partition**



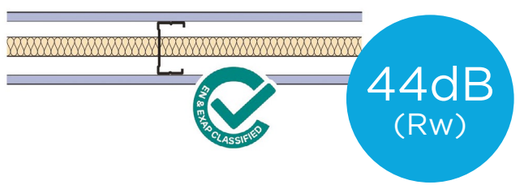

54dB (Rw)

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 12.5mm Siniat Fire Boards | 1 x 12.5mm Siniat Fire Boards | Siniat CS70/Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 54 | 4 | EI 120 |

For further information relating to any of the Siniat products shown please contact **technical@siniat.co.uk** or visit **www.siniat.co.uk/en-gb/**

## System Name:
## CS70R-12dB-25G

**System Type: Partition**

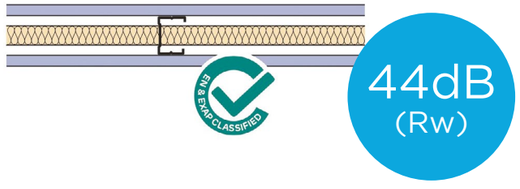



44dB (Rw)

| System Components | | | Performance | | |
|---|---|---|---|---|---|
| Boarding on each side | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| 1 x 12.5mm Siniat dB Board | Siniat CS70/ Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 44 | 3.5 | EI 30 |

## System Name:
## CS50R-15dB-25G

**System Type: Partition**

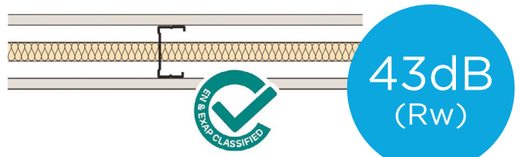



44dB (Rw)

| System Components | | | Performance | | |
|---|---|---|---|---|---|
| Boarding on each side | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance (EN 1364-1) (minutes) |
| 1 x 15mm Siniat dB Board | Siniat CS50/ Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 44 | 3 | EI 30 |

## System Name:
## CS70R-15St-25G

**System Type: Partition**



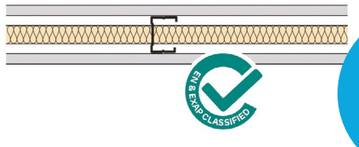

43dB (Rw)

| System Components | | | Performance | | |
|---|---|---|---|---|---|
| Boarding on each side | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| 1 x 15mm Siniat Standard Board | Siniat CS70/ Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 43 | 3.4 | EI 30 |

For further information relating to any of the Siniat products shown please contact **technical@siniat.co.uk** or visit **www.siniat.co.uk/en-gb/**

# Acoustic performance in internal partition wall systems - Residential Buildings.

## System Name:
## CS50R-15St-25G

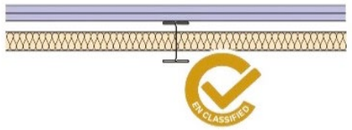


41dB (Rw)

### System Type: Partition

| System Components | | | Performance | | |
|---|---|---|---|---|---|
| Boarding on each side | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| 1 x 15mm Siniat Standard Board | Siniat CS50/Rx C-Stud at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 41 | 4.8 | EI 30 |

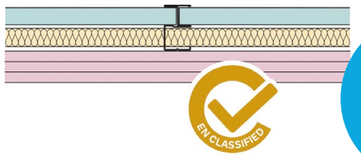
## System Name:
## IS60B(400)-212dB#0-25G



### System Type: Independent Wall Lining

| System Components | | | Performance | | |
|---|---|---|---|---|---|
| Boarding | Frame Type | Insulation | Fire Resistance to EN 1364-1 (minutes) | EN Fire State Max Height (metres) | Direction of fire exposure |
| 2 x 12.5mm Siniat dB Board (to one side only) | Siniat IS60/B I-Studs at 400mm centres | 25mm Superglass Acoustic Partition Roll (APR) | EI 30 | 4.1 | From boarded direction only |

## System Name:
## CH60B-19FC#315F-25G



49dB (Rw)

### System Type: Shaftwall

| System Components | | | | Performance | | |
|---|---|---|---|---|---|---|
| Boarding on each side | | Frame Type | Insulation | Acoustic Rw +Ctr (dB) | EN Fire State Max Height (metres) | Fire Resistance to EN 1364-1 (minutes) |
| Inner | Outer | | | | | |
| 1 x 19 mm Siniat Fire Core Board | 3 x 15 mm Siniat Fire Board | Siniat CHS60/B CH-Studs at 600mm centres | 25mm Superglass Acoustic Partition Roll (APR) | 49 | 4.8 | EI 120 |

For further information relating to any of the Siniat products shown please contact **technical@siniat.co.uk** or visit **www.siniat.co.uk/en-gb/**


# Superglass Loft Insulation.

## Solution for new & retrofit installations.

**Multi-Roll 40 & 44** is a non-combustible glass mineral wool insulation roll. The rolls comes partially perforated, allowing it to be used between standard joist spacings or as a full-width layer over the joists. This design minimises the need for on-site cutting and waste.

### Application

Superglass Multi-Roll is design to be used as thermal insulation between and over the timber joists of new and existing lofts/cold pitched roofs.

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Multi-Roll 40 | 0.040 W/mK |
| Multi-Roll 44 | 0.044 W/mK |

### Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

### Typical Application

1. Superglass Loft Insulation between timber joists
2. Additional layer(s) cross-laid over timber joists




# Cured Loft Insulation.

### Typical U-Values Achieved In Cold Roofs Using Superglass Multi-Roll

| | Multi-Roll 44 (0.044W/mK) | | | | | | |
|---|---|---|---|---|---|---|---|
| U-Value (W/m²K) | 0.18 | 0.15 | 0.13 | 0.11 | 0.10 | 0.09 | 0.08 |
| Insulation (mm) cross-laid over timber joists | 100 | 150 | 200 | 250 (100mm+150mm) | 300 (2x150mm) | 350 (200mm+150mm) | 400 (2x200mm) |
| Insulation (mm) between timber joists | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| | 12.5mm Plasterboard (0.19W/mK) | | | | | | |

| | Multi-Roll 40 (0.040W/mK) | | | | | | |
|---|---|---|---|---|---|---|---|
| U-Value (W/m2K) | 0.17 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | 0.08 |
| Insulation (mm) cross-laid over timber joists | 100 | 150 | 200 | 250 (100mm+ 150mm) | 300 (2x150mm) | 350 (200mm+ 150mm) | 400 (2x200mm) |
| Insulation (mm) between timber joists | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| | 12.5mm Plasterboard (0.19W/mK) | | | | | | |

Calculated using 600mm timber joist centres (9% bridging) and loft hatch with 50mm insulation

For any U-Value calculations for alternative construction build-ups, please contact our Technical Services Team on **technical.stirling@etexgroup.com** or visit our online U-Value calculator at **www.superglass.co.uk/U-Value-calculation/**

# Blown Loft Insulation.

**Superglass Superwhite 42** is a glass mineral wool blown loft insulation with a water repellent additive to enhance it's resistance to moisture. Installed by professional insulation contractors to a minimum density of 14.5kg/m³.

### Application

Superglass Superwhite 42 is designed specifically to provide thermal insulation in new or existing loft/cold roof spaces of up to 500mm. Blowing the insulation can be a better solution particularly in hard-to-treat lofts, where conventional rolls can't be easily installed.

### Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

### Installation

Most mineral wool blowing machines can be used to install Superwhite 42 under the supervision of a professional company.

### Typical U-Values Achieved In Cold Roofs Using Superglass Superwhite 42

| | Superwhite Loft Blown Wool (0.042W/mK) | | | | | |
|---|---|---|---|---|---|---|
| U-Value (W/m²K) | 0.17 | 0.14 | 0.14 | 0.12 | 0.11 | 0.10 |
| Insulation (mm) over timber joists | 100 | 150 | 170 | 200 | 250 | 300 |
| Insulation (mm) between timber joists | 150 | 150 | 150 | 150 | 150 | 150 |
| | 12.5mm Plasterboard (0.19W/mK) | | | | | |

Calculated using 600mm timber joist centres (9% bridging) and loft hatch with 50mm insulation

# Warm Pitched Roofs.

CCPI

CCPI Assessment Mark: 005800130/0227

See pages 60-61 for CCPI assessed logos


## Superglass Timber & Rafter Insulation.

**Thermal insulation between rafters.**

**Superglass Timber & Rafter Roll/Batts and Adapt Slab 35** are non-combustible glass mineral wool insulation products. The flexible rolls and batts are manufactured to allow friction fitting between common stud/rafter spacings minimising gaps at joints and reducing on-site cutting.

### Application

Superglass Timber & Rafter Roll/Batt and Adapt Slab 35 is designed to provide thermal insulation for external timber frame walls, warm pitched roofs, and suspended timber floors.

### Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

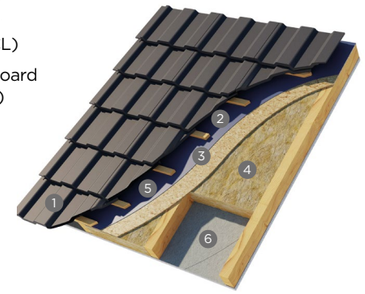
| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Timber & Rafter Roll or Batt 32 | 0.032 W/mK |
| Timber & Rafter Roll 35 | 0.035 W/mK |
| Adapt Slab 35 | 0.035 W/mK |

## Warm Pitched Roof Insulation.

| Description | Thickness (mm) | Thermal Conductivity (W/mK) | Thermal Resistance ($m^2K/W$) |
|---|---|---|---|
| Roof Tiles | 20.00 | | |
| Ventilated cavity between timber battens | 50.00 | | |
| Standard Breather Membrane | | | |
| Insulation between timber rafters* | See table below | | |
| Reflective Vapour Control Layer (VCL) | | | |
| Unvented low-e cavity between service void/battens* | 25.00 | | 0.53 |
| Insulated Plasterboard | See table below | | |

### Typical Application

1. Roof tiles
2. Ventilated cavity between battens and counter battens
3. Standard Breather Membrane
4. Insulation between timber rafters (see tables below)
5. Reflective Vapour Control Layer (VCL)
6. Insulated Plasterboard (see tables below)




### Timber & Rafter Roll Range

| Insulation between timber rafters | Thermal Conductivity (W/mK) | Insulation & rafter thickness (mm) | U-Values achieved ($W/m^2K$) | | | |
|---|---|---|---|---|---|---|
| | | | 37.5mm Siniat Thermal PIR (1.20$m^2K/W$) | 52.5mm Siniat Thermal PIR (1.89$m^2K/W$) | 62.5mm Siniat Thermal PIR (2.34$m^2K/W$) | 72.5mm Siniat Thermal PIR (2.79$m^2K/W$) |
| Timber & Rafter Roll 32 | 0.032 | 230 (90+140) | 0.13 | 0.12 | 0.11 | 0.11 |
| Timber & Rafter Roll 35 | 0.035 | 230 (90+140) | 0.14 | 0.12 | 0.12 | 0.11 |
| Timber & Rafter Roll 32 | 0.032 | 180 (2x90) | 0.15 | 0.14 | 0.13 | 0.12 |
| Timber & Rafter Roll 35 | 0.035 | 180 (2x90) | 0.16 | 0.14 | 0.14 | 0.13 |
| Timber & Rafter Roll 32 | 0.032 | 140 | 0.18 | 0.16 | 0.15 | 0.14 |
| Timber & Rafter Roll 35 | 0.035 | 140 | 0.19 | 0.17 | 0.16 | 0.15 |

*Timber bridging is assumed as 9% at 600mm centres. Bridge thermal conductivity of 0.13W/mK

### Adapt Slab 35

| Insulation between timber rafters | Thermal Conductivity (W/mK) | Insulation & rafter thickness (mm) | U-Values achieved ($W/m^2K$) | | | |
|---|---|---|---|---|---|---|
| | | | 37.5mm Siniat Thermal PIR (1.20$m^2K/W$) | 52.5mm Siniat Thermal PIR (1.89$m^2K/W$) | 62.5mm Siniat Thermal PIR (2.34$m^2K/W$) | 72.5mm Siniat Thermal PIR (2.79$m^2K/W$) |
| Adapt Slab 35 | 0.035 | 250 (100+150) | 0.13 | 0.12 | 0.11 | 0.11 |
| Adapt Slab 35 | 0.035 | 240 (100+140) | 0.13 | 0.12 | 0.11 | 0.11 |
| Adapt Slab 35 | 0.035 | 230 (90+140) | 0.14 | 0.12 | 0.12 | 0.11 |
| Adapt Slab 35 | 0.035 | 200 (2x100) | 0.15 | 0.14 | 0.13 | 0.12 |
| Adapt Slab 35 | 0.035 | 180 (2x90) | 0.16 | 0.14 | 0.14 | 0.13 |
| Adapt Slab 35 | 0.035 | 170 (70+100) | 0.17 | 0.15 | 0.14 | 0.13 |
| Adapt Slab 35 | 0.035 | 150 | 0.18 | 0.16 | 0.15 | 0.14 |
| Adapt Slab 35 | 0.035 | 140 | 0.19 | 0.17 | 0.16 | 0.15 |

*Timber bridging is assumed as 9% at 600mm centres. Bridge thermal conductivity of 0.13W/mK

For any U-Value calculations for alternative construction build-ups, please contact our Technical Services Team on **technical.stirling@etexgroup.com** or visit our online U-Value calculator at **www.superglass.co.uk/U-Value-calculation/**

# External Metal Clad Roofs.

CCPI

CCPI Assessment Mark: 005800128/0227

See pages 60-61 for CCPI assessed logos

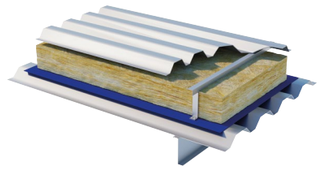

## Superglass Cladding Insulation.

### Thermal insulation in metal clad roofs.

**Superglass Cladding Mat** is a non-combustible glass mineral wool insulation roll. The roll is supplied 1200mm wide to suit commonly used rail and bracket systems.

### Application

Superglass Cladding Mat is designed to provide thermal and acoustic insulation in the roofs of twin skin profiled metal clad systems and portable & modular buildings.



### Fire Classification

Deemed non-combustible with a fire classification of Euroclass A1 (the highest possible rating) when tested to BS EN 13501-1:2018 Reaction to Fire.

### Thermal Performance

In terms of thermal performance, Superglass Cladding Mat offers a range of declared thermal conductivities (lambda (λ) value) for the designer to select from depending on the specific U-Value requirements.

### Typical U-Values (W/m²K) Achieved In Roofs

| Insulation Thickness (mm) | Cladding Mat 32 | Cladding Mat 35 | Cladding Mat 40 |
|---|---|---|---|
| 280 | 0.14 | 0.15 | 0.17 |
| 260 | 0.15 | 0.16 | 0.18 |
| 240 | 0.16 | 0.17 | 0.19 |
| 200 | 0.19 | 0.20 | 0.23 |
| 180 | 0.21 | 0.23 | 0.25 |
| 160 | 0.24 | 0.25 | 0.28 |
| 140 | 0.27 | 0.29 | 0.33 |

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Cladding Mat 32 | 0.032 W/mK |
| Cladding Mat 35 | 0.035 W/mK |
| Cladding Mat 40 | 0.040 W/mK |

Rail Spacing: 1200mm | Rail Width: 40mm | Rail Thickness: 1.2mm

The above calculations were carried out for standard twin skin rail and bracket systems. These are to be used as a guide only, the system designer/manufacturer should be consulted for project specific U-Value calculations.

**Technical Services Team: Technical.stirling@etexgroup.com**

**Project:** Becketwell Performance Venue, Derby
**Product:** BEMO N65/400 Aluminium Standing Seam
**Installer:** Keyclad Ltd

**MC:** Bowmer & Kirkland
**Completion:** 2024
**Superglass product:** Cladding Mat 40 (200mm, 160mm)
**Copyright:** BEMO



# Insulation For Ground Floors.

## Superglass Rolls and Slabs for thermal and acoustic performance.

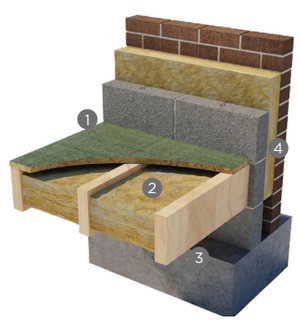
In a suspended timber ground floor, insulation is installed between the joists and supported by netting.

It's crucial to consider the thermal and acoustic performance of the insulation in this application. Our glass mineral wool insulation solutions for suspended timber ground floors ensure that all gaps between joists are filled, preventing air movement and unwanted heat loss.

| Superglass Products | Thermal Conductivity (Lambda (λ) value) |
|---|---|
| Adapt Slab 35 | 0.035 |
| Multi-Roll 40 | 0.040 |

### Typical Application

1. Chipboard flooring
2. Superglass insulation between timber joists
3. Foundations
4. External masonry wall




# Suspended Timber Ground Floors.

### Typical U-Values Achieved

| Insulation and Joist Depth (mm) | Superglass Insulation | P/A Ratio Exposed perimeter (m) / Floor area ($m^2$) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 0.10 | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 | 0.70 | 0.80 |
| 100mm | Adapt Slab 35 | 0.16 | 0.21 | 0.24 | 0.26 | 0.27 | 0.28 | 0.29 | 0.29 |
| 100mm | Multi-Roll 40 | 0.17 | 0.22 | 0.25 | 0.27 | 0.29 | 0.30 | 0.30 | 0.31 |
| 150mm | Adapt Slab 35 | 0.14 | 0.17 | 0.19 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 |
| 150mm | Multi-Roll 40 | 0.14 | 0.18 | 0.20 | 0.21 | 0.22 | 0.23 | 0.23 | 0.24 |
| 200 (2x100mm) | Adapt Slab 35 | 0.12 | 0.14 | 0.16 | 0.16 | 0.17 | 0.17 | 0.18 | 0.18 |
| 200mm | Multi-Roll 40 | 0.12 | 0.15 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 |
| 250 (100+150mm) | Adapt Slab 35 | 0.10 | 0.12 | 0.13 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 |
| 250 (100+150mm) | Multi-Roll 40 | 0.11 | 0.13 | 0.14 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 |

Timber bridging is assumed as 11% at 400mm centres. Bridge thermal conductivity of 0.13W/mK. Based on noggings every 3 metres.

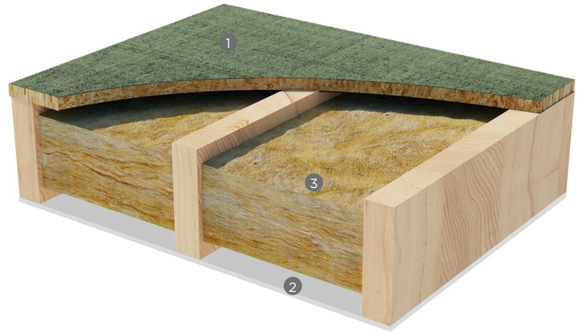
For any U-Value calculations for alternative construction build-ups, please contact our Technical Services Team on **technical.stirling@etexgroup.com** or visit our online U-Value calculator at **www.superglass.co.uk/U-Value-calculation/**

# Internal Floors.

In internal floors, insulation is crucial for acoustic performance, reducing unwanted noise in the room below. Typically constructed from timber, these floors offer both structural support and sound insulation. The sound absorption properties of our glass mineral wool insulation solutions make them perfect for internal floor constructions.

## Typical Application

1. T & G Flooring
2. Plasterboard below timber joists
3. Superglass insulation between timber joists




## Superglass Acoustic Insulation For Internal Floors

**Superglass Adapt Slab 35** is a non-combustible glass mineral wool insulation slab. The flexible slab is supplied at 400mm & 600mm widths to allow friction fitting between common stud/joist spacings minimising gaps at joints and reducing on-site cutting.


| Superglass Products | Nominal Density |
|---|---|
| Adapt Slab 35 | 22kg/m³ |

**Superglass Multi Acoustic Roll** is a non-combustible glass mineral wool insulation roll. The flexible roll is partially perforated at 2x600mm and 3x400mm widths to allow friction fitting between common stud/joist spacings, minimising gaps at joints and reducing on-site cutting and waste.


| Superglass Products | Minimum Density |
|---|---|
| Multi Acoustic Roll | 10kg/m³ |

**Superglass Acoustic Partition Roll (APR)** is a non-combustible glass mineral wool insulation roll. The roll is supplied at 1200mm & 2x600mm widths to allow friction fitting between common stud/joist spacings, minimising gaps at joints and reducing on-site cutting & waste.


| Superglass Products | Nominal Density |
|---|---|
| 25mm APR | 18kg/m³ |
| 50mm APR | 16kg/m³ |

# Internal and Separating Floors.

Acoustic performance is a key requirement in separating floors, where both sound insulation and absorption are crucial. The sound absorption properties of our glass mineral wool insulation make Superglass products ideal for separating floor applications. Superglass offers a wide range of solutions that help meet sound-related building regulations and Robust Details.

| | | Absorbent Material | | Floating Floor Insulation | |
|---|---|---|---|---|---|
| Robust Detail | Joist Type | Thickness | Recommended Superglass Product | Thickness between battens | Recommended Superglass Product |
| E-FT-1 | Timber I-joists | Minimum 100mm | Multi Acoustic Roll or Adapt Slab 35 | Minimum 25mm | Acoustic Partition Roll (APR) |
| E-FT-3 | Timber flange and metal web joists | Minimum 100mm | Multi Acoustic Roll or Adapt Slab 35 | Minimum 25mm | Acoustic Partition Roll (APR) |
| E-FT-5 | Timber I-Joists | Minimum 100mm | Multi Acoustic Roll or Adapt Slab 35 | | |
| E-FT-6 | Timber flange and metal web joists | Minimum 100mm | Multi Acoustic Roll or Adapt Slab 35 | | |

## Typical Application

1. Floating Floor
2. Floor Decking
3. Joists
4. Absorbent Material
5. Ceiling

# Clarity.
# Confidence.
# Trust.

As part of our commitment to continuously improving our standards of communication, we are registered with the Code for Construction Products Information (CCPI) and are proud to be the first insulation manufacturer to have the majority of our product sets assessed by CCPI, helping to give specifiers, installers, house builders and stockists more confidence regarding the information provided, on the glass mineral wool insulation products they select from us.

**Clarity**

**Confidence**

**Trust**

CCPI
ASSESSED PRODUCT INFORMATION
005800127/0227
Superglass Acoustic Insulation

Superglass Acoustic Insulation:
Acoustic Partition Roll (APR);
Multi Acoustic Roll;
Party Wall Roll;
TF Party Wall Roll.

CCPI
ASSESSED PRODUCT INFORMATION
005800129/0227
Superglass Loft Insulation

Superglass Loft Insulation:
Multi-Roll 40;
Multi-Roll 44.

CCPI
ASSESSED PRODUCT INFORMATION
005800103/1026
Superwall Cavity Wall Batt

Superwall Cavity Wall Batt:
Superwall 32;
Superwall 34;
Superwall 36.

CCPI
ASSESSED PRODUCT INFORMATION
005800128/0227
Superglass Cladding Insulation

Superglass Cladding Insulation:
Cladding Mat 32;
Cladding Mat 35;
Cladding Mat 40.

CCPI
ASSESSED PRODUCT INFORMATION
005800130/0227
Superglass Timber & Rafter Insulation

Superglass Timber
& Rafter Insulation:
Timber & Rafter Roll 32;
Timber & Rafter Roll 35;
Timber & Rafter Roll 40;
Timber & Rafter Batt 32;
Timber & Rafter Batt 35;
Adapt Slab 35.

CCPI
ASSESSED PRODUCT INFORMATION
005800159/0327
Superglass Blown Wool Insulation

Superglass Blown
Wool Insulation:
Superwhite 34 Blown Insulation - Cavity Wall;
Superwhite 34 Blown Insulation - Party Wall;
40 Blown Cavity Insulation;
Superwhite 42 Blown Wool.

# Notes

intelligent environments
Superglass by etex

Etex UK Insulation Limited | Thistle Industrial Estate | Kerse Road | Stirling | FK7 7QQ | UK

SSG006
September 2025

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