External Wall Insulation
State of the Art production built on over 140 years of experience has elevated JUB to being one of Europe’s leading manufacturers of paints, renders and External Wall Insulation systems.

The Jubizol EWI system was developed over 45 years ago making it one of the most established thermal solutions in Europe. This coupled with one of the widest ranges of finishes including Silicone, Silicate, Mineral, Acrylic as well as new self cleaning and heat reflective render technologies, ensures that we always give the best advice for any scheme.

Sustainable Manufacturing is at the core of JUB’s corporate philosophy. Ecological and environmentally friendly manufacturing processes are fused with the latest robotic driven production to produce a highly efficient plant whilst caring and protecting the local environment.

Our production is based around hydro power plants located on site as well as a solar powered expanded polystyrene factory. With investment in two chemical purification systems, a biological treatment plant and re-forestation program, JUB is well on its way to having Zero Carbon Impact on production and being fully sustainable by the year 2020.

Forefront Research and Development has helped maintain JUB’s position as one of the most advance technological companies in its field. Including climatic weather chambers for extreme weather testing, along with the part European funded cell facade wall, (which is an exposed live active wall measuring many results including shrinkage caused by temperature changes), ensures quality of performance and durability, no matter where the project is located.
External Wall Insulation

“Heat in your home is like holding water in your hands, it will always try and find a way to escape”

Increasing energy bills and diminishing resources of fossil fuels are a cause of great global concern and with energy efficiency playing a major role in the new build and retrofit industries, External Wall Insulation (EWI) is the perfect solution.

By thermally wrapping a building the costs of heating as well as cooling the building are dramatically reduced for both domestic and commercial property owners. With a wide range of finishes, textures and colours, design is never compromised and JUB’s technical solutions ensure compliance, durability and a breathable weather tight facade for years to come.

The JUB EWI systems are designed for a wide range of substrates including masonry, timber and steel frame as well as non traditional constructions.

JUB has been producing EWI systems for over 45 years and has a portfolio of systems and finishes for every type and design of modern and existing buildings.

Composition

1. Insulation board
2. Adhesive
3. Base coat
4. Reinforcement
5. Base coat
6. Primer
7. Top-coat
Design

“Architecture is a visual art and the buildings speak for themselves”

Julia Morgan

The art of design lies in the flexibility of the materials that you use. JUB’s External Wall Insulation and renders allow the designer a freedom of expression not seen before in the industry, utilising new technology to bring you the best of contemporary and traditional architecture.
Colours can define a feeling and with JUB’s Favourite Feelings colour chart you have over 500 colours of subtlety and intensity to inspire and compliment your designs. Colours that are long-lasting, durable and consistent, available across many of the finishes that JUB manufacture.

“There are no lines in nature, only areas of colour, one against another”
Manet

At JUB we don’t just manufacture the colour finishes, but we also manufacture the inks that are used to tint the products. As one of the few manufacturers that produce our own inks, we are ensuring the quality and longevity of the key component in a coloured finish.
Graphite Enhanced Expanded Polystyrene is a cost effective solution to thermally upgrading a building. It’s lambda value of 0.032W/mk is more efficient than the white EPS and allows for the use of a thinner board to achieve the required U Values for new build and refurbishment.

**Technical**

- 0.032w/mK graphite enhanced EPS.
- 0.038w/mK white standard EPS.
- System fire rating Euroclass B.
- BBA (12/4955) and European Technical Approval (09/0393) certification.
- G2 EPS which is 6 times more breathable than standard EPS.

**Design**

- Lightweight and easy to use.
- Cut to shape.
- Available in a wide range of depths.
- Compatible for the JUB cement free system.
- Suitable for use on curved facades.
- Suitable for all JUB finishes.
Mineral Wool insulation has good vapour permeability qualities and an excellent fire rating for use on high rise buildings, properties requiring high vapour permeability or where there is a greater specified fire performance required.

Technical

- 0.036w/mK Low density insulation board.
- 0.038w/mK High density insulation board.
- System fire rating Euroclass A2.
- BBA (12/4955) and European Technical Approval (10/0334) certification.
- Used as the firebreak in an EPS system.

Design

- Can accommodate curves in the design.
- Part of mineral only system when used with mineral renders.
- Suitable for use within 1 metre of a boundary.
- Good acoustic properties.
- Good impact qualities.
- Helps to maintain healthy internal conditions.
The Cavity Rail system is designed to fulfil the requirement of a drained cavity when an Insulation system is applied to a timber or steel framed building. Purposely designed to incorporate either a minimum 15 mm (steel frame) or 20mm (timber frame) drained cavity between the sheathing board and the insulation.

**Technical**

- EPS insulation boards.
- Drained base tracks that ensure the correct air movement.
- System fire rating Euroclass B.
- BBA Certification (11/4838).
- Intumescent fire stops within the cavity.

**Design**

- Lightweight with restricted loading.
- Conforms to NHBC and other insurance companies’ requirements.
- Suitable for a wide range of finishes.
- Easy to overcome uneven substrates.
- Can be used with a masonry background.
The JUBIZOL PB system is designed for the direct fix application to timber frame structures where no drained cavity detail is required. Application is generally to non domestic buildings and also park homes / portable buildings.

**Technical**

- EPS insulation boards.
- Direct fixing to JUB approved sheathing board.
- System fire rating Euroclass B.
- European Technical Assessment (ETA 13/0633).

**Design**

- Lightweight.
- Low structural loading.
- Conforms with specialist insurance companies’ requirements.
- Suitable for a wide range of finishes.
JUBIZOL SF
Steel Frame System

Direct application system
to steel frame.

The JUBIZOL SF system is designed for the direct fix application to steel frame structures where no drained cavity detail is required. Application is generally to non domestic, commercial buildings and predominately suitable for educational and healthcare sectors.

Technical

- EPS and Mineral Wool insulation boards.
- Direct fixing to JUB approved sheathing board.
- EPS System fire rating Euroclass B.
- Mineral Wool Euroclass A2.

Design

- Simple construction methods.
- Quick application.
- High levels of insulation possible.
- Potential for a seamless facade.
To gain a truly dark coloured render has always been difficult due to the higher absorption of solar radiation and therefore the excessive warming up of the surface. Naturally, the darker the colour the more absorption that will occur and with renders this can lead to thermal cracking, fading and a quickening of the ageing process.

JUB Trend is a new conception in renders with the ability to reflect the infrared part of the light spectrum and by doing so can have a 40% higher Total Solar Reflectance meaning the surface temperature can be up to 15 degrees Celsius less than standard renders.

**How does this change External Wall Insulation and Renders?**

All renders have a light intensity factor which determines the depth of colour, with pure black being at 1 and pure white at 100. With External Wall Insulation systems it has been generally said that you would not use a render with a light intensity factor of below 25, as the thermal gain onto insulation would quicken the ageing process and potentially induce cracking.

**With TREND from JUB all this has changed.**

The JUB organisation has developed a breakthrough tinting process which incorporates the new technology of IR Reflexion into one of our topcoat renders. This now enables the specification of renders with a light intensity down to 5 with an external wall insulation system and with the knowledge that the long-term performance and general product cost are not affected.
Finishes

A range of high quality, durable thin coat finishes.

Decorative, low maintenance finishes, suitable for the Jubizol External Wall Insulation systems as well as for application to JUB render only basecoats.

JUB manufacture many different types of render and therefore can guarantee the best advice for your project.

From cost effective durable renders to the Nano technology behind the new self cleaning renders, we have them all.

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**JUB Thincoat Finishes**

- **Jubizol Nano** 1.5 and 2.0mm grain sizes
  - *Self Cleaning Render suitable for coastal and woodland areas.*

- **Jubizol Silicone** 1.5 and 2.0mm grain sizes
  - *High performance render suitable for coastal and Woodland areas.*

- **Jubizol Unixil** 1.5 and 2.0mm grain sizes
  - *Universal application.*

- **Jubizol Acrylic** 1.5 / 2.0 and 2.5mm grain sizes
  - *Suitable for general inland application.*

- **Jubizol Mineral** 1.5mm
  - *Suitable for general inland application.*

- **Jubizol Silicate** 1.5 and 2.0mm grain sizes
  - *High breathability for general inland application.*

- **Jubizol 1mm Finish**
  - *Fine finish render for universal application.*

- **Jubizol Unixil Winter Finish 1.5mm**
  - *Winter application render.*

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**JUB High Performance Paints**

- Self-Cleaning Paint
- Silicone Paint
- Acrylic Paint
- Crack Bridging Paint
- Silicate Paint
- Concrete Paint
Finishes

A range of robust brick effect, brick slip and dash.

JUB Thickcoat Finishes

Jubizol Dash
A range of 10 standard colours of dash render with a selection of modern and traditional aggregate stones.

Jubizol Brick Effect Render
A two coat render system where you cut through the second coat (Brick colour) to reveal the first coat (Mortar colour).

Jubizol Flexible Brickslip System
Lightweight and flexible brickslip available in a wide range of textures and colours including terracotta tiles and a range of 3 mortar colours.

A range of finishes which are both modern and traditional as well as very robust and durable. Suitable for the Jubizol External Wall Insulation system as well as the JUB render only solutions.
Design Considerations

There are a number of design considerations that should be reviewed before the installation of an external wall insulation system. JUB will support your design process from the point of conception to the final sign off.

Some design consideration points are as follows.

**Thermal Performance** -
thickness of insulation required to meet current as well as passive house standards.

**Appearance** -
local planning constraints, the aesthetics for the design.

**Fire requirements** -
required fire rating, proximity to other buildings, high rise buildings and fire breaks.

**Structural suitability** -
is the substrate suitable for the loading of the system?

**Wind Loading** -
what effect will wind loading have on high rise buildings?

**Location** -
the building's location will affect the choice of topcoat render.

**Severe weather environment** -
the correct JUB specification is suitable for severe weather areas around the United Kingdom.

**Thermal Bridging** -
eliminate cold spots including plinth insulation to prevent thermal bypass.

**Movement**
accommodating movement in new and existing buildings.

**Manufacture** -
system components from one point of manufacture to ensure quality control and conformity.

**Warranty** -
JUB issues a standard 10 year product warranty through our approved installers.

**Choice of materials** -
guaranteed best advice service that ensures the client makes the right decision for their project.

**Sustainability** -
dedicated sustainability credentials and environmental policies.
Design Considerations

Generic U Value Tables

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Graphite Enhanced Polystyrene

Rock Mineral Wool Insulation

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The above calculations are for guide purposes only. JUB Systems will prepare a full calculations and condensation risks upon request.

To prevent thermal bypass at the floor level, then JUB Strong EPS can be used with waterproof render and a robust decorative finish such as Kurliplast 1.8mm.

Kurliplast Premium

is a decorative smooth robust marble render system for plinth protection, with exceptional UV and water resistance performance.
Appearance
is
Everything