## Baumit <br> External Wall Insulation Systems

baumit.com

The perfect thermal insulation

Ideas with a future.

## EWI

Systems


## Enjoy a better quality of life

Wellbeing and a healthy interior climate: these are the qualities that make a house a home. The most important way to create this pleasant environment is to choose the right thermal insulation. This will help to create a comfortable, ambient room temperature whatever the time of day or season.


## Saving energy through thermal insulation

Heating accounts for $75 \%$ of the average household's energy bills. So, it makes sense to insulate your home and save on heating costs. External wall insulation offers by far the simplest and most reliable solution for improved insulation performance. By wrapping the building in an insulating blanket, heat loss is dramatically reduced and the living environment is significantly improved. This proven thermal upgrade solution has been tried and tested over many decades on buildings around the world. It is ideal for old and new buildings, individual houses, apartments and non-residential buildings. Baumit has an EWI system to suit every type of building, substrate and building regulation.


## Durability and aesthetics

Baumit external wall insulation systems create a warm envelope for your home that help protect it from all types of weather. Differences in outside temperatures are evened out to ensure a comfortable interior environment whilst cracks to the external façade are prevented, giving a durable, beautiful, external appearance.

## Minimise energy costs

External wall insulation helps to regulate internal temperatures. During the coldest months it helps to reduce heating costs, whilst helping to keep buildings cool in the hottest months of the year.


Gain internal space or save on ground costs
By thermally insulating externally using Baumit EWI, internal space can be gained or external ground space saved. Cavities that take up extra space and a double layer of building materials can be replaced by single skin EWI that achieves the same thermal insulation (u-value).

Protect the environment
By installing a Baumit EWI system, you are not just saving energy, but also helping to protect the environment. This is due to the fact that a more insulated home is warmer in winter so less heating is required to achieve a comfortable indoor climate and less $\mathrm{CO}_{2}$ is emitted.


## EWI <br> Systems




## A cosy winter

A building needs to ensure that warmth doesn't escape to create an ambient room temperature. Baumit EWI systems work in a similar way to a coat, that keeps the heat inside. With external wall insulation, warmth is retained in the internal solid walls and not released to the outside. The walls then radiate this stored heat into the room, creating a cosy atmosphere. And the best bit about this is that you feel good whilst keeping heating costs to a minimum. Well sealed windows and doors and good ventilation also contribute towards a good living climate.


The warmer the temperature of the wall, the lower the room temperature should be.

## Cool summers

Baumit EWI Systems don't just help to create a warm environment in winter, they also act as a heat shield in summer. Overheating of buildings can cause problems. EWI Systems help to reduce the heat build-up in the walls, to create a pleasantly cool interior climate. Baumit 'Cool pigments' render topcoats and facade paints enable darker colours to be used on EWI Systems safely by the technology enabling these to remain cool. Light coloured render, additional protection from the sun and good loft insulation also help to optimise the effect.

## Equalize differences

The difference between room and wall surface temperature should not be more than $3^{\circ} \mathrm{C}$ (between 19 and $22^{\circ} \mathrm{C}$ ). Baumit EWI systems ensure a comfortable living climate is achieved.


## No more mildew

Different building materials direct the heat in different ways. Cold bridges can occur and cause varying temperatures on the inner walls. Corners and edges are particularly prone to build up of condensation. Moist areas such as these are the ideal breeding ground for algae and mildew. Baumit EWI systems help to regulate different temperatures and prevent mildew formation.


## Good reasons to choose Baumit EWI

- To create a comfortable indoor climate throughout the year
- To reduce heating costs over a lifetime
- Protect the wall from cracks and weathering
- No cold bridges
- Protection from mildew build up
- Be kind to the environment by reducing $\mathrm{CO}_{2}$ emissions
- Increased value of your home
- Gain more internal space by thinner walls
- Tested and certified by ETAG 004, NSAI under Irish Agrément certificate 09/0336 and BBA Agrément certificate 13/5082



## Baumit open® System Breathable external wall insulation



## Always comfortable

Whether you are building a new home or refurbishing an old one, Baumit open ${ }^{\oplus}$ System is always the best solution. All components are vapour permeable and so allow the walls to breathe. This creates optimal living conditions whether in summer or winter.

## How it works:

In addition to the temperature, an important factor in enabling a comfortable living climate to be created is relative humidity. At indoor temperatures of between 19 and $22^{\circ} \mathrm{C}$, humidity should lie between 40 to 60 \%.

Baumit open ${ }^{\circledR}$ System helps to create the optimal humidity inside due to its high vapour permeability.

Approximately 10 litres of water vapour per household per day need to be diffused to the outside. Baumit open ${ }^{\text {® }}$ System with its high breathability (similar to brick) ensures a comfortable indoor climate.


## System Description

1. Brick/blockwork
2. Baumit StarContact White vapour permeable, mineralic adhesive and reinforcing mortar to adhere and reinforce façade insulation boards, waterproof.
3. Baumit openTherm vapour permeable EPS façade insulation boards, specially designed for brickwork, with excellent insulating properties ( $u$-value $=0.10 \mathrm{~W} / \mathrm{m}^{2} \mathrm{~K}$ ). Baumit openTherm plus (u-value $\left.=0.10 \mathrm{~W} / \mathrm{m}^{2} \mathrm{~K}\right)$. Silver grey insulation boards with 15 \% higher thermal insulation.
4. Baumit StarTex reinforcing mesh
5. Baumit PremiumPrimer to regulate suction and also as a primer for NanoporTop.
6. Baumit NanoporTop Self cleaning topcoat render with nano particles. Baumit Accessories Baumit offers a range of accessories to create a tested system. From base, edge and joint profiles to the most suitable dowels.



## Minimise maintenance costs:

Baumit open ${ }^{\circledR}$ System external wall insulation system combines the best fixing technology, vapour permeability, high performance insulation and an innovative topcoat with nanotechnology. It all helps to create a building that will last for decades.

## Insulate with the best of the best:

With most expanded polystyrene insulation boards, the façade is enveloped in a second, thick skin. With Baumit open ${ }^{\circledR}$ System the EPS boards contain numerous holes of ca. 2-3mm diameter. These ensure the high vapour permeability and enable water vapour to be released to the outside.

## A good looking façade that lasts:

Baumit open ${ }^{\text {® System }}$ external wall insulation system has some notable features that will help your building to not only perform well but also look good for many years to come.

## Benefits:

- Homogenous wall build-up
- Breathable and highly vapour permeable
- Prevents condensation from water vapour

Ensures a comfortable indoor living climate

- Reduces building time as it dries out more quickly


## EWI

Systems


## Baumit StarSystem EPS Baumit StarSystem Mineral



## An investment in the future

Play safe. With Baumit StarSystem, you are investing in a worry-free future. Not only do you save money daily on your heating costs, but you are also investing in security for generations to come. Baumit StarSystem combines all Baumit's experience as a pioneer in External Wall Insulation.

The combination of a comfortable indoor climate and energy reduction techniques leads to an improved quality of life at home and at work. Baumit StarSystem helps to increase the value of a building by offering excellent insulation together with an attractive building envelope.

## Flexible, elastic and impact resistant

Baumit StarContact adhesive and reinforcing mortar easily exceeds the standard norms and regulations. This ensures that the façade remains attached to the brick/blockwork no matter what the temperature fluctuations, wind speeds or other environmental challenges may be. As a reinforcing coat, the name says it all. It is elastic and flexible and so, over time, it stretches and flexes as required and offers good resistance to objects that impact
the surface.

## Water and dirt stand no chance

Baumit SilikonTop has a higher flexibility. Water and dirt just run off the surface keeping the façade clean and dry.

## Free choice of insulation

Irrespective of which insulation is chosen (EPS or Mineral fibre), the Baumit StarSystem is always the right choice.



## Reasons to choose

- Excellent flexibility and impact resistance

Extremely weatherproof
Easy to apply

- Mineral gives excellent fire resistance
- Guaranteed security for generations
- 30 years experience
- BBA approved system


## System Description

## 1. Brick/blockwork

2. Baumit StarContact White adhesive is highly certified and has the best adhesive properties.
3. Baumit StarTherm EPS, silver grey EPS has $15 \%$ higher thermal efficiency. Baumit StarTherm Mineral Inflammable.
4. Baumit StarContact White \& Baumit StarTex - Flexible and highly certified reinforcing coat and mesh that help to protect from cracking and impacts.
5. Baumit PremiumPrimer is a great primer and helps to bind Baumit SilikonTop.
6. Baumit SilikonTop is flexible and hydrophobic so helps to remove dirt keeping facades clean and dry for longer. Baumit Accessories Baumit offers a range of accessories to create a tested system. From base, edge and joint profiles to the most suitable dowels.


## For the highest impact

## resistance

The Baumit PowerSystem is a cement-free external wall insulation system offering the highest levels of impact resistance.

A combination of the StarTherm grey or white EPS boards, the StarTex glass fibre reinforcing mesh, StarContact adhesive and the synthetically bound, fibre-reinforced reinforcing coat PowerFlex help to produce impact resistance of up to 70 joules. That is equivalent to a tennis ball travelling at $170 \mathrm{~km} / \mathrm{h}$ or a football at almost $100 \mathrm{~km} / \mathrm{h}$.

## Reasons to choose

- Highest impact resistance (ca. 70 joules)
- For use in areas of greatest impact (e.g. plinths, schools)
- Excellent flexibility
- Extremely weatherproof



## System Description

1. Brick/blockwork
2. Baumit StarContact White adhesive is highly certified and has the best adhesive properties.
3. Baumit StarTherm EPS Silver grey EPS has 15 \% higher thermal efficiency.
4. Baumit PowerFlex \& Baumit StarTex - Flexible and highly certified reinforcing coat and mesh that help to protect from cracking and offers the greatest impact resistance.
5. Baumit PremiumPrimer (optional) is a great primer and helps to bind Baumit SilikonTop.
6. Baumit SilikonTop is flexible and hydrophobic so helps to remove dirt keeping facades clean and dry for longer.
Baumit Accessories Baumit offers a range of accessories to create a tested system. From base, edge and joint profiles to the most suitable dowels.

Adhesive:
Insulation:
Basecoat: Reinforcement:
Topcoat:
Baumit StarContact White
Baumit StarTherm EPS
Baumit PowerFlex
Baumit StarTex
Baumit SilikonTop

## EWI

Systems


## Baumit ResolutionSystem High performance and thermal efficiency

 achieves the same thermal u-value with 8 cm that a normal insulation board can achieve with 12 cm . That means the same insulation with a third less insulation board thickness.

## Can be universally combined

Baumit ResolutionSystem can be used with all professional EWI systems. This is of particular advantage when it comes to specific building problems and architectural detailing (e.g. windows, eaves). You can save money and achieve the perfect insulation value. Phenolic also has the optimal fire resistance.

## Great benefits

- The lowest Lambda value (0.022)
- $30 \%$ better insulation performance

Thin insulation for extra thin applications

- Can be combined with other Baumit EWI systems


## A slender system for strong solutions

The Baumit ResolutionTherm insulation boards when used together with the accompanying components enable a thin EWI system to be built to accommodate limitations on thickness. It offers unbeatable advantages when space is at a premium.

## No need to extend the eaves

Extending the roof due to thick EWI systems is a costly business. Baumit StarSystem Phenolic is thin enough to avoid the need to extend the eaves - saving money.

## Innovative Material

The closed cell structure of Baumit StarTherm XS insulation boards, made from hard resin foam and covered on both sides with a fleece layer, allows great thermal values to be achieved from minimal thickness. The raw material is Bakelite resin one of the oldest and well known plastics - and it ensures a Iong life for the insulation. The regulations and guidelines for its manufacture ensure a consistently high production quality. The phenolic insulation is $100 \%$ free of CFCs and HCFCs.


## System Description

1. Brick/blockwork
2. Baumit StarContact White
3. Baumit ResolutionTherm
4. Baumit StarContact White \& Baumit StarTex
5. Baumit PremiumPrimer
6. Baumit NanoporTop

Baumit Accessories
Baumit offers a range of accessories to create a tested system. From base, edge and joint profiles to the most suitable dowels.


## The ecological way to insulate

Baumit NatureSystem external wall insulation system is the ecological alternative for everyone who wishes to build in a natural way. The heart of this system is the sustainable material of wood, that constantly grows to renew itself. This protects valuable natural resources and helps to permanently store CO2 within the insulation, whilst also helping to reduce CO2 emissions

The excellent thermal values, vapour permeability, noise reduction capabilities and ecological reasons make this environmentally friendly insulation very attractive.

Unbeatable advantages

- Natural insulation made from wood
- Highly breathable

Improved noise reduction

## Free from additives

The core of the system is the Baumit StarTherm Woodfibre insulation boards. The multi-layered insulation boards are produced without any artificial binders. The timber's own lignin serves to bind the wood fibres together. The individual layers are glued together with pure white lime. During production, the fine wood fibres are heated whilst being pressed so that the lignin becomes fluid and glues the wood particles together during cooling. The system uses coats of mineralic base and topcoat renders. Baumit wood fibre insulation boards meet the strictest European Health \& Safety and Environmental standards.



## System Description

1. Brick/blockwork
2. Baumit StarContact White
3. Baumit StarTherm Nature
4. Baumit StarContact White \& Baumit StarTex
5. Baumit PremiumPrimer
6. Baumit SilikatTop

## Baumit Accessories

Baumit offers a range of accessories to create a tested system.
From base, edge and joint
profiles to the most suitable dowels.

| Adhesive: | Baumit StarContact White |
| :--- | :--- |
| Insulation: | Baumit StarTherm Nature |
| Basecoat: | Baumit StarContact White |
| Reinforcement: | Baumit StarTex |
| Priming: | Baumit PremiumPrimer |
| Topcoat: | Baumit SilikatTop |

## Baumit Topcoats



## Colour and texture For design freedom



## Nanotechnology for your façade

The topcoat render, Baumit NanoporTop protects the surface of your building from many forms of dirt. Its' surface is microscopically smooth, so that the dirt particles find it difficult to take hold. A specially formulated recipe works together with the powers of nature to create a self-cleaning effect on the surface. The topcoat dries extremely quickly so depriving algae and fungus of good moist living and growing conditions. This helps to create a beautiful façade that stays clean and good looking for longer.


## Baumit NanoporTop

Thanks to nanotechnology, this topcoat render has a high self-clea ning ability and is vapour permeable. The microscopically smooth surface makes it hard for dirt particles to hold on and the quick drying surface reduces the chance of mico-organisms finding the right living conditions. Suitable for every EWI system and every basecoat.
■ Available in stippled texture (K1.5/K2/K3)


NanoporTop Render

ca. 0.2 mm
The microscopically smooth surface of Baumit NanoporTop Topcoat makes it hard for dirt particles to take hold.

Normal Render

ca. 0.2 mm
At this size, you can see that the surface of normal render is much rougher. This makes it easier for dirt particles to take hold.


## Baumit SilikonTop

Weather resistant, breathable thin coat render made from a silicone resin base. Topcoats suitable for every type of basecoat.
$\square$ Available in stippled and rilled textures (K1.5/K2/K3/R2/R3)


## Baumit SilikatTop

Coloured thin coat topcoat render with excellent vapour permeability. Ideal as a render finish for renovated buildings and for use with the natural StarSystem Woodfibre system. High breathability and hydrophobic.
$\square$ Available in stippled and rilled textures (K1.5/K2/K3/R2/R3)

## Baumit GranoporTop

Synthetically bound, washable thin coat finish render with excellent weathering capabilities.
Suitable for every façade render system.
■ Available in stippled and rilled textures (K1.5/K2/K3/R2/R3)

## Baumit StyleTop

Thin coat render in vibrant colour tones. This is made from particularly colourfast pigments and high quality binders to ensure a long life.
■ Suitable for use on EWI systems (please check with your Baumit advisor if wishing to use dark colours)
$\square$ Recommended to accentuate particular architectural features.
$■$ Available in stippled textures (K1.5/K2/K3).

## More than just walls

Baumit offers a complete range of mineralic and synthetic topcoats. Their features may differ to suit different builds, however one thing they all have in common is that they help to protect and improve the face of each building.

## Aesthetics and Individuality

You can choose from 888 colours of the Baumit Life Colour programme to create an individual home or building of your desires.

## Protection

Protecting your building is just as important as how it looks. Baumit has a wide selection of tried and tested renders with properties that can be hydrophobic to hydrophilic, vapour permeable, self-cleaning,
mineralic, synthetic or natural. All will protect your building, so take your pick to best suit your requirements.

## Durability

The high quality of Baumit binders and colour pigments in each product ensures that your building will look good over time and keep maintenance to a minimum. Baumit Nanopor can extend this life still further.

## The perfect finish

Baumit StyleTop renders and façade paints offer particularly intensive, vibrant colour tones to make your façade really stand out.

## Render Textures



wouco lite


## Baumit Taste of Life: the best of the best

Life. Coloured by Baumit: a world of colour as diverse as a rainbow. 888 colours with extras.
Taste of Life: a reduced palette of 88 colour hues that harmonise well.



## Ideas with a future: <br> Cool colours for dark facades

Everything is possible: Now with our innovative 'Cool Pigments' even the darkest colours from Baumit Life can be used on external wall insulation systems.

Baumit 'Cool Pigments' contain special particles that reflect a large portion of the solar light and so reduce the surface temperature. While conventional dark colours can become very hot in the sun and thereby harm EWI systems, Baumit renders and paints remain particularly 'cool' and so protect your EWI system.


To ensure the highest quality and safety, Baumit 'Cool Pigments' are now included in our specially designed intense colour products Baumit StyleTop renders and Baumit StyleColor paints.


## Baumit Renders: the power of topcoats

Impactful and diverse, Baumit topcoats and mosaic renders offer many design possibilities.
When combined with different colours they help to bring the building to life.

## Mosaic Renders




## Baumit StarTrack



## Technology from the future

Innovations that came from space exploration, aerospace design and other technical branches now revolutionise the Construction industry: adhesive rather than mechanical fix. With today's know-how and materials, it is far stronger and safer to adhesively fix than to mechanically fix using tracks and screws. This is as true for the renovation of old buildings as it is for new buildings. Baumit's adhesive and reinforcing mortars are so reliable that it is just a matter of anchoring the brick/ blockwork to the old render. Baumit StarTrack ensures a cold bridge-free insulation.

## Double the saving

The thicker the insulation, the more expensive, the longer the build-time and the more unstable the dowel fixing will be. Baumit StarTrack enables the insulation boards to be adhered to the substrate immediately irrelevant of the thickness of the insulation. So, a lot of money and time can be saved.


## Universally usable

Baumit StarTrack can be used on any substrate from brick, block to concrete or cement for old and new buildings. Baumit StarTrack replaces dowelling and mechanically fixing Baumit EPS EWI systems. Even old EWI systems can use Baumit StarTrack Duplex. StarTrack can be used everywhere irrespective of insulation thickness and they have already been used to affix insulation thicknesses of over 40 cm .

## Excellent performance

Mechanical fixing can cause numerous cold bridges to be created and can lead to unsightly dowel marks over time. By using Baumit StarTrack you can work fast to create cold-bridge free installations saving you time and money.

## Save costs

The normal method of dowelling and mechanical fix can lead to cold bridges being produced and unsightly dowel marks in the finish render. You can forget those with Baumit StarTrack. As they are directly fixed to the substrate, there are no cold bridges. As they lie underneath the insulation, there are no marks and energy costs are reduced.


Baumit StarTrack Red



Baumit StarTrack Blue


Baumit StarTrack Duplex


## 6 Reasons to use

## 1. Saves time

It is quicker to install your EWI system

## 2. Peace of Mind

With Baumit StarTrack you can see where you should anchor the insulation boards with the substrate.

## 3. No cold bridges

There are no holes in the insulation system, so the envelope stays warm

## 4. No dowel marks

Once installation is complete, you won't see any marks as the StarTrack mechanical fittings lie under the insulation.

## 5. Cost savings

It is even better value for money with insulation thicknesses greater than 12 cm , as Baumit StarTrack doesn't change irrespective of the increased thickness of insulation.

## 6. Universally usable

Baumit StarTrack can be used in every eventuality as it is not dependant on insulation thickness. You can never have too many StarTracks as these can be used on every substrate.


## Customer Service




## The key customer services we offer are:

■ Product datasheets, Safety datasheets and Application guidelines
■ Baumit Standard details as pdf or .dwg files
$\square$ CPD presentations to give an overview of what is available

- NBS Specifications as an aid to the preparation of tender documentation
- BBA Certification for the Baumit External Wall Insulation systems

Colour fans and samples to help with your colour and texture selection

- On-site application training for installers of Baumit EWI systems

Advice on EWI system and finish render selection
Baumit.co.uk website that holds a wide range of information and downloads


You can contact us if you have any questions. We are always ready to help at any stage of your build.


## All at a click.

## baumit.com



