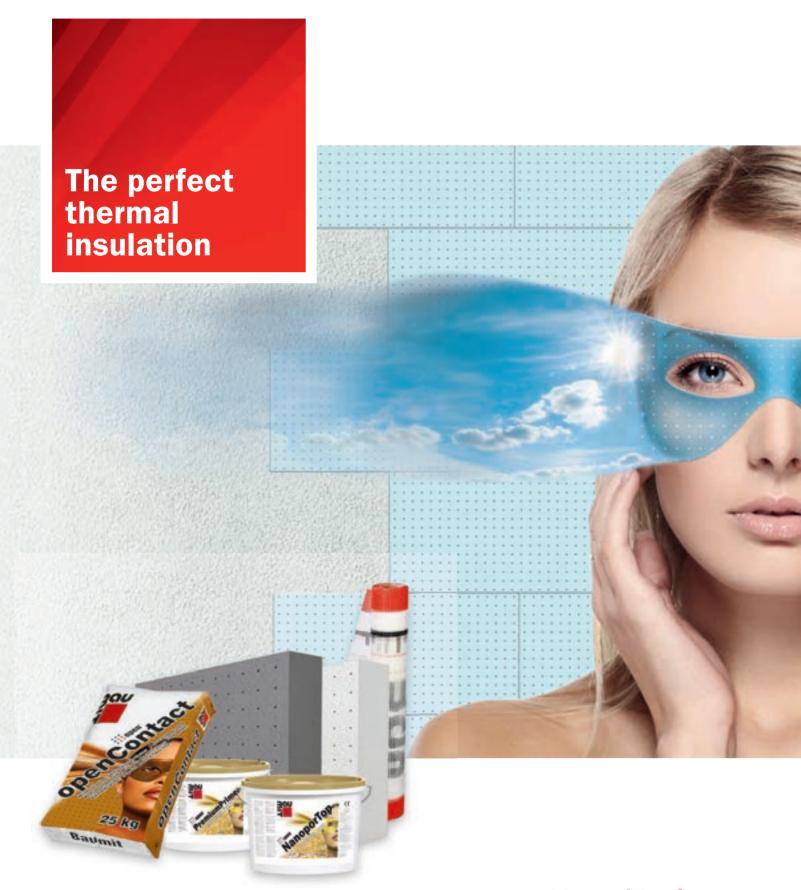
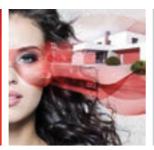
# **Baumit External Wall Insulation Systems**





Ideas with a future.

External Wall Insulation

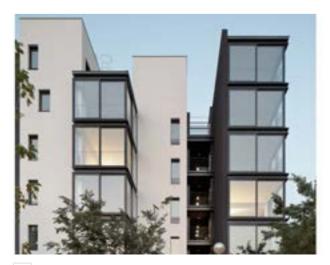


### A multitude of benefits



## 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 a 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 households 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

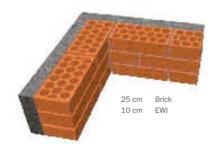
External wall insulation helps to regulate internal temperatures. During the coldest months it helps to reduce heating costs, whilst helping to keep buildings cool in the hottest months of the year.

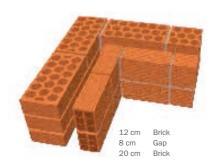
#### Gain internal space or save on ground costs

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  ${\rm CO}_2$  is emitted.









## Optimal performance 365 days a year



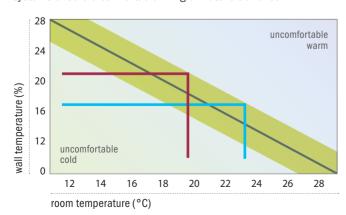


## **Make smart improvements**

Anyone who wants to save energy has to implement efficient energy saving improvements. Façade insulation plays a key role here, as enormous heat losses arise in this area. A well insulated house will help reduce heating costs.

#### **Equalize differences**

The difference between room and wall surface temperature should not be more than 3° C (between 19 and 22° C). Baumit EWI systems ensure a comfortable living climate is achieved.



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

## 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.

## **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.



## 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 a Baumit EWI system

- To create a comfortable indoor climate throughout the year
- Permanently reduce heating costs
- Protect external walls from cracks and weathering
- Prevent development of cold bridges
- Protection from mildew build up
- Be kind to the environment by reducing CO₂ emissions
- Increased value of your home
- Freedom of design and creativity
- Help reduce costs if building a new home





## **ETIC Systems Overview**

	OPENSYSTEM  O  O  Unique OpenAir Technology Breathable buildings New build and refurbishment	STARSYSTEM EPS  BBA approved system Flexibility and protection Available in a wide range of solutions	STARSYSTEM MINERAL  MINERAL  Fireproof  Mineralic  Highly permeable
TOPCOAT	NanoporTop	SilikonTop	NanoporTop
PRIMING	PremiumPrimer	PremiumPrimer*	PremiumPrimer*
BASECOAT	openContact	StarContact white	StarContact white
REINFORCEMENT	StarTex	StarTex	StarTex
INSULANT	OpenTherm	StarTherm	MineralTherm
ADHESIVE	openContact	StarContact white	StarContact white

The external wall insulation systems must be applied in accordance with Baumit recommendations and current best practice. Refer to Baumit Product Data Sheets for further information.

<sup>\*</sup>UniPrimer can be used as a substitute to PremiumPrimer

### STARSYSTEM **STARSYSTEM POWERSYSTEM NATURE ■** Wood fibre for High impact resistance ■ 30% better performance ■ Solution for special building natural insulation For extreme requirements requirements ■ Highly breathable ■ Cement free ■ 100% recyclable ■ More space for living TOPCOAT NanoporTop NanoporTop SilikonTop PremiumPrimer\* PremiumPrimer\* PRIMING PremiumPrimer\* StarContact white MC-55 **PowerFlex** BASECOAT REINFORCEMENT StarTex StarTex StarTex StarTherm Resolution StarTherm Nature StarTherm INSULANT StarContact white **StarContact white** ADHESIVE **StarContact white** FIXING ANCHOR STR U 2G STR U 2G STR U 2G



## **Baumit OpenSystem Breathable Insulation**



## **Always comfortable**

Whether you are building a new home or refurbishing an old one, Baumit OpenSystem is always the best solution. All components are vapour permeable allowing the walls to breathe. This creates optimal living conditions whether in summer or winter. The Baumit OpenSystem uses EPS boards containing a consistant pattern of holes of about 2 to 3 mm diameter. These ensure the high vapour permeability and enable water vapour to be released to the outside.

## A good looking façade that lasts

The Baumit OpenSystem has some notable features that will help your building to not only perform well but also to look good. Combining the best fixing technology, vapour permeability, high performance insulation and an innovative topcoat with nanotechnology, Baumit OpenSystem helps to create a building that will last for decades.

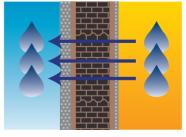
## 99% air

The heart of Baumit OpenSystem stands out due to its very low primary energy consumption during production. The OpenSystem consists of 99% air and only a small proportion of EPS, which in turn requires very little energy to produce. This is very positive in terms of the environmental impact, because the less energy that is used to produce thermal insulation, the more environmentally friendly the thermal insulation system is.

#### **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 °C, humidity should be between 40 to 60%.

Approximately 10 litres of water vapour per household per day need to be diffused to the outside. Baumit open®- System with its high breathability ensures a comfortable indoor climate.





#### **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

### **SYSTEM COMPONENTS**



**Baumit NanoporTop**Self-cleaning topcoat render



2 Baumit PremiumPrimer Superior quality primer



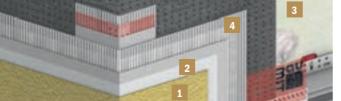
3 Baumit openContact
Vapour permeable adhesive and basecoat reinforcing mortar



4 Baumit StarTex
Glass fibre reinforcing mesh



5 **Baumit OpenTherm 031**Vapour permeable EPS façade insulation board





6 **Baumit StarTrack**Unique supplementary anchor fixing





## **Baumit StarSystem EPS The Classic Solution**



## An investment in the future

Play safe with Baumit StarSystem; invest in a worry-free future. Not only do you save money daily on your heating costs, but you are also investing in your building 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

Each element of the StarSystem is what makes it so durable. 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. The elasticity of the system means that over time it flexes as required and offers good resistance to objects that impact the surface.

#### Water and dirt stand no chance

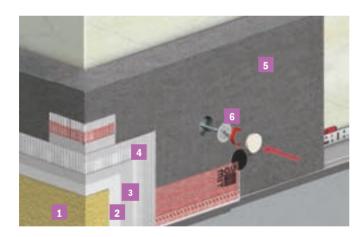
Baumit SilikonTop has a higher flexibility than your standard render. Water and dirt just run off the surface keeping the façade clean and dry and looking great for years to come.

### **Superior quality**

Baumit PremiumPrimer can be used with all synthetic and mineral decorative finishes, for pre-treatment of hard or non-absorbent mineral substrates, as well as for the preparation of coloured substrates. The silver grey EPS facade insulation board, Baumit StarTherm consists of expanded polystyrene. It is highly water permeable and has excellent insulating properties.







### **Benefits:**

- 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 COMPONENTS**



1 Baumit SilikonTop
Elastic topcoat render



2 Baumit PremiumPrimer Superior quality primer



3 Baumit StarContact White Vapour permeable adhesive and basecoat reinforcing mortar



4 Baumit StarTex
Glass fibre reinforcing mesh



5 Baumit StarTherm 032 Silver grey EPS façade insulation board







## **Baumit StarSystem Mineral The all rounder**



## Mineral external wall insulation

Baumit StarSystem Mineral is a proven mineral external thermal insulation composite system suitable for all building classes. Mineral wool boards as a thermal insulation layer are covered with a mineral base coat (reinforcing layer) consisting of a levelling layer, base coat and fibreglass mesh. The weather resistant topcoat is then applied over this.

Baumit StarSystem Mineral can be applied to all load-bearing substrates. It is suitable for old and new buildings, varying style homes and also for commercial construction.

#### The all-rounder

StarTherm Mineral insulation board contains no combustible components. They are made of mineral wool fibres, which are bonded to a board with resins.

A stand out system with excellent sound and fireproofing properties, as well as being highly water permeable. It noticeably improves the indoor climate.

## **Model student in efficiency**

Thermal insulation, with its associated energy savings, is making a significant contribution to climate protection. When used correctly, far more  $\mathrm{CO}_2$  and other greenhouse gases are saved than have been generated by the production of the insulation materials.

Major advantage: mineral raw materials are available in virtually unlimited quantities.

#### **Benefits:**

- Suitable for all load-bearing substrates
- No limitation of the building class
- Fire resistant
- Excellent physical properties
- Excellent water vapour permeability
- Pure mineral ETICS





### **SYSTEM COMPONENTS**



1 Baumit NanoporTop
Self-cleaning topcoat render



2 Baumit PremiumPrimer Superior quality primer



3 Baumit StarContact White Vapour permeable adhesive and basecoat reinforcing mortar

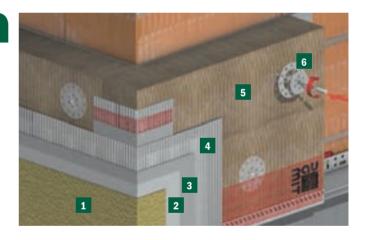


4 Baumit StarTex
Glass fibre reinforcing mesh



5 Baumit StarTherm Mineral 036 High grade mineral fibre insulation boards







## **Baumit StarSystem Resolution Space saving high performance insulation**



### Less is more

The Baumit StarSystem Resolution external wall insulation system 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 ETIC systems. This is of particular benefit when it comes to specific building problems and architectural detailing (e.g. windows, eaves). You can save money and still achieve the perfect insulation value.

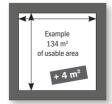
## A slender system for strong solutions

When used together with the accompanying components, the Baumit StarTherm Resolution insulation boards enable a thin ETIC System to be built to accommodate limitations on thickness. It offers unbeatable advantages when there is minimal space available.

#### No need to extend the eaves

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







All external wall insulation systems must be applied in accordance with Baumit recommendations and current best practice. Please see Baumit Product Data Sheets for further information.



## **Innovative Material**

The closed cell structure of Baumit StarTherm Resolution insulation is made from phenolic boards, which allows greater 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 long 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.

#### **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

### SYSTEM COMPONENTS



Baumit NanoporTop Self-cleaning topcoat render



2 Baumit PremiumPrimer Superior quality primer



3 Baumit StarContact White Vapour permeable adhesive and basecoat reinforcing mortar



4 Baumit StarTex
Glass fibre reinforcing mesh



Baumit StarTherm
Resolution 022

Rigid phenolic façade insulation board







## **Baumit StarSystem Nature Natural through and through**



## The ecological way to insulate

Baumit StarSystem Nature 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  ${\rm CO}_2$  within the insulation, whilst also helping to reduce  ${\rm CO}_2$  emissions.

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

## **Free from additives**

The core of the system is the Baumit StarTherm Nature 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 and the white lime. The system uses coats of a mineral base and topcoat renders.

### **Benefits:**

- Natural insulation made from wood
- Highly breathable
- Improved noise reduction

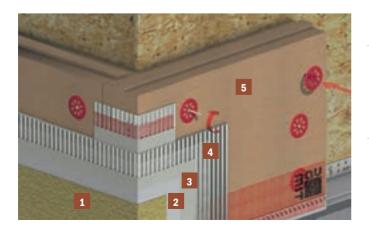






## **Breathable insulation**

The Baumit StarSystem Nature has very good thermal insulation values, is water vapour permeable, dimensionally precise and actively helps to protect the environment. The components not only have a high heat storage capacity, they are also breathable. This means that the facade can 'breathe'. The Baumit StarSystem Nature therefore meets all the requirements for comfortable and healthy living and has excellent noise reduction properties.



### **SYSTEM COMPONENTS**



1 Baumit NanoporTop Self-cleaning topcoat render



2 Baumit PremiumPrimer Superior quality primer



Baumit Multicontact
MC55 W
Reinforce mulit-purpose bonding mortar



4 Baumit StarTex
Glass fibre reinforcing mesh



5 Baumit StarTherm Nature 045 Wood fibre façade insulation board







## **Baumit PowerSystem**The best impact resistance



## **Strong facades for high stresses**

The incidence of severe weather appears to have increased dramatically in recent years. It is therefore no longer just a question of ideal thermal insulation, but issues such as impact protection and weather protection have come to the forefront.

The shield works by being tough and elastic at the same time. This is the secret of Baumit PowerSystem. The toughness and elasticity of the system are perfectly balanced, which is beneficial for the facade. In particular, modern architecture without roof projections exposes facades to high stresses. In addition, when thermal improvements are made using thick insulating layers, the facade protection is considerably reduced due to smaller roof projections. In both of these cases, Baumit PowerSystem provides a reliable solution.

## Tough and elastic at the same time

Effective facade protection is achieved with a highly flexible, strong shield, in which a fibreglass mesh is embedded. A high-quality Baumit facade render is then applied over the top. As well as having an attractive appearance, it also protects the layers underneath from moisture.

#### **Innovative protection**

The heart of this system is reinforcement using Baumit PowerFlex. This cement-free, ready mixed reinforcing mortar is a powerful innovation from the Baumit Research Centre. Particularly high quality binders combined with very elastic aramid fibres and precisely dosed fillers make Baumit PowerSystem the best impact protection for thermal insulation.

Baumit PowerSystem is ideal for use with Baumit StarTherm insulation where more resilience is required.



#### **Benefits:**

- Highly effective impact protection
- Weather protection all year round
- Thermal insulation and resilience in one

2

- Resistant to extreme weather
- For high mechanical stresses

### **SYSTEM COMPONENTS**



1 Baumit SilikonTop
Elastic topcoat render



2 Baumit PremiumPrimer Superior quality primer



Baumit StarTex
Glass fibre reinforcing mesh



4 Baumit StarTherm 032
Silver grey EPS façade insulation board

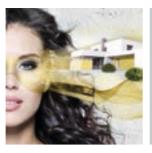


5 Baumit StarContact White
Vapour permeable adhesive and
basecoat reinforcing mortar





## Baumit Topcoats



## Unlimited possibilities for façade design



## Strong renders, beautiful façades

Baumit topcoats are proven to last for decades. They protect the facade from moisture, as well as from mechanical and thermal stresses. As the visible external layer of a building, Baumit topcoats enable homes to retain their original shine for many years.

Baumit Life offers an extensive range of 888 render and paint colours for your facade. This opens up a new dimension in designing buildings, providing complete freedom with it comes to facade design.

### **Baumit NanoporTop**

Thanks to nanotechnology, this topcoat render has a high self-cleaning 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.

### Nanotechnology for your façade





#### Normal Render



approx. 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 NanoporTop Render**



approx. 0.2 mm

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



#### Always the right choice

Baumit offers the perfect render solution to every project style and requirement. If you are going for a high-end solution, Baumit NanoporTop, with its unique self-cleaning effect, is always the best choice. If it is extremely long lasting, high durability with dirt-resistant you are looking for, you can achieve this with SilikonTop or SilikatTop. For the more straight forward projects, Baumit GranoporTop gives you solid quality with a great price-performance ratio. Finally, for more design focused projects where colour choice is important, Baumit StyleTop has you covered.





#### **Baumit SilikonTop**

Weather resistant, breathable thin coat render made from a silicone resin base. Topcoats suitable for every type of basecoat.



#### Baumit Silikat Top

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.



#### **Baumit GranoporTop**

Synthetically bound, washable thin coat finish render with excellent weathering capabilities. Suitable for every façade render system.



#### **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.

#### More than just walls

Baumit offers a complete range of mineral 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, and of different grain sizes for multiple textures, to create the desired finish for your building.

### **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 mineral based, 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.











## **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.





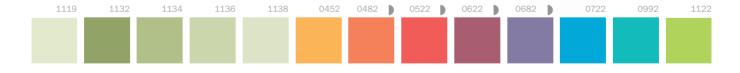
## Ideas with a future: Cool colours for dark facades

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.



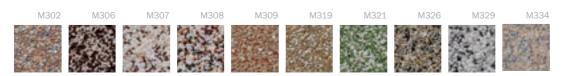
To ensure the highest quality and safety, Baumit 'Cool Pigments' are now included in our specially designed intense colour products – Baumit StyleTop renders and Baumit StyleColor paints.



## **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**







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## Ideas with a future.

