THE COMPLETE GUIDE

EWIPRO® Render Solutions

2023/24 EDITION

www.ewipro.com

SWIGA

BBA Approval Inspection Testing Certification

RIBA Architecture.com

Installation Assurance Authority Right First time

East Midlands Energy Efficiency Regional Awards Winner Small Project (Under 250k) 2023

The Complete Guide to **External Wall Insulation and Render Solutions**

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EWI Pro is wholly committed to improving the external appearance, thermal efficiency, and environmental performance of commercial and domestic properties throughout the UK. We achieve our goal through the delivery of highly advanced render-only and external wall insulation systems. The current market is demanding, and our products and services deliver long-lasting solutions to installers, proprietors, and architects alike.

As installers and project planners, we have an incredibly rich and diverse history. The scope of our projects covers all of the UK building stock, from single story to high rise. Our BBA Approved systems range, which continues to grow, stands as a testament to our continued pursuit of excellence. We are constantly looking forward, subjecting our products and systems to further testing to bring the market unmatched quality and assurance. As the industry progresses, we adapt and stay ahead.

We take an innovative approach to designing and manufacturing our high-quality render products. Our exclusive silicone render range combines silicone and thin-coat render technology to provide a flexible, breathable, and durable render system that will stand the test of time. However, our dedication to delivering unrivalled quality does not stop there; we also provide our approved installers with comprehensive technical expertise and support throughout the entire installation process, ensuring every project is completed to an exceptional standard. Our work does not stop with support for just those in the industry. The market-leading Training Academy is available to all, and offers a blended approach to education, with six distinct modules, delivered by experienced professionals.

The environmental impact and energy crisis impacts the public and the industry. Through our advanced render and EWI solutions, we strive to reduce the carbon footprint at every stage. Many of our products have low Global Warming and Ozone Depletion Potential. The installation of our systems paves the way for a greener future, with warmer homes, and lower bills.

WHY CHOOSE EWI PRO?

ENHANCED EXTERNAL APPEARANCE

Our render-only and External Wall Insulation systems include a render finish that enhances both the functionality and external appearance of a building. Our renders are available in an extensive range of colours and textures to allow installers to create a unique finish that will stand the test of time.

INCREASED FAÇADE DURABILITY

Here at EWI Pro, our superior range of renders and external wall insulation products are highly flexible, breathable, and hydrophobic . These components help to improve the durability of the building's façade; they are less liable to crack, develop organic growth, and cause damp issues.

IMPROVED THERMAL COMFORT

Thermal comfort refers to a building sustaining a comfortable temperature throughout all weather conditions. Therefore, whatever the weather, an EWI Pro External Wall Insulation system ensures that structures remain at a comfortable temperature without the worry of using more energy.

INCREASED BUILDING LIFESPAN

As our render-only and External Wall Insulation systems cover the exterior of an entire building, the building is prevented from both heat loss and water ingress. The render acts as a weather-proof barrier for the building, thereby increasing its lifespan.

LOWER ENVIRONMENTAL IMPACT

With increased thermal comfort comes lower energy demands. Insulation products also lower the operational carbon of your home. All this combines to reduce your overall carbon footprint whilst keeping you warm.

ENERGY SAVINGS

Improved thermal comfort is powered by improved thermal efficiency. With insulated walls acting as a heat store, the heating is turned on for shorter periods and less often, resulting in energy savings and lower household bills.


EWI PRO

OUR SERVICES
THE TRAINING ACADEMY

The EWI Pro Training Academy is designed to guide installers, architects, and homeowners through the expertise and technical know-how required to install EWI Pro systems proficiently. Composed of both theoretical and practical sessions allows students to apply theory to practice before starting their projects.

COURSE 1 - INTRODUCTION TO EXTERNAL WALL INSULATION (EWI)
Our External Wall Insulation Training is designed to offer a comprehensive overview of the EWI Pro systems, delivering the technical knowledge and skills required to install our systems proficiently. Through a range of modules, the course is intended to provide you with an excellent understanding of external wall insulation, how it's installed and its benefits.

COURSE 2 - INTRODUCTION TO RENDER ONLY SYSTEMS
Our Render Training offers an in-depth insight into the range of finishes that can be achieved with the different EWI Pro render systems. The render training sessions are designed to offer a comprehensive understanding of the range of render systems on offer, with hands-on practice of installing EWI Pro render systems.

COURSE 3 - RENDER SPRAYING MACHINE INTRODUCTION
The EWI Pro Spray Render Training sessions are designed to provide installers with the underpinning expertise and technical know-how required for installing EWI Pro systems with a spray machine. Offering hands-on practice using a spray machine with an EWI Pro render, this course will equip you with the relevant experience before working on site.

COURSE 4 - ON-SITE TRAINING
Our EWI Pro on-site training consists of a visit from our technical team. They will attend your project and carry out training on-site.

COURSE 5 - PRODUCT FAMILIARISATION
Our Product Familiarisation course is aimed at experienced installers who do not currently use EWI Pro materials and would like a comprehensive overview of the EWI Pro product range. This training course combines classroom-based theory with practical training. Therefore, working knowledge of render systems is required.

COURSE 6 - ADVANCED RENDERING TECHNIQUES
Our advanced rendering techniques course is aimed at experienced installers who wish to enhance their knowledge of our EWI Pro product range. This programme will teach participants how to deal with problem areas such as below the damp proof course and use some of our decorative finishes such as Mosaic Render. The full-day course will consist of an in-depth theoretical presentation followed by hands-on practical training. All tools and equipment needed for the course will be supplied.

AYLESBURY TRAINING ACADEMY

Unit 4
Bridgegate Business Park
Gatehouse Way
Aylesbury
HP19 8XN

BRADFORD TRAINING ACADEMY

Unit 3
Wharfedale Road
Euroway Trading Estate
Bradford
BD4 6SG

ADDITIONAL SERVICES

Here at EWI Pro, we pride ourselves on providing a wide range of services to cater to the needs of all our approved installers. With both office-based technical experts and field operatives, we provide comprehensive support to applicators and specifiers alike to ensure projects are completed to the highest possible standards.

Backed by our unmatched, BBA-approved systems, the services we provide to applicators and specifiers include but are not limited to:

SITE-SPECIFIC SPECIFICATIONS

A site-specific specification comprises a detailed manual on how to install the system to a competent standard.

SITE SUPPORT AND TECHNICAL MENTORING

We regularly audit the site to ensure projects are being installed to the best possible standards.

APPLICATION ADVICE

Should any issues occur during the installation process, we can offer both over-the-phone advice and on-site support.

SYSTEM DETAIL DRAWINGS

These drawings outline various details for all system aspects, including joints, abutments and finishes, to ensure the systems are being installed correctly.

TECHNICAL GUIDANCE

We provide advanced U-value calculations, pull-out tests, wind load calculations, condensation risk analyses and other technical guidance specific to the project.

WARRANTY INFORMATION

We include all warranty and certification requirements, including IAA, SWIGA, BBA and NSAI, to offer peace of mind on completion of your project.

RENDERS


EWIPRO
Render Solutions

SILICONE RENDER
EWI-075

WATERPROOF

VAPOUR PERMEABLE

HYDROPHOBIC

UV RESISTANT

Silicone Render is our flagship silicone-based render. It is breathable, polymer-modified and renowned for being long-lasting and aesthetically pleasing, making it a classic render choice for homeowners and businesses alike. Due to its hydrophobic properties, the render has great self-cleaning capabilities, increasing its resistance to dirt and biological growth. Therefore, once installed, Silicone Render requires minimum upkeep, further positioning itself as a customer favourite.

Silicone Render comes in grain sizes: 0.5mm, 1mm, 1.5mm, 2mm, and 3mm. It is available in thousands of colours; either one of our 39 signature colours, or matched to any RAL or NCS colour.

NANO DREX SILICONE RENDER
EWI-077

Nano Drex Silicone Render is our most advanced thin-coat Silicone Render, offering unmatched performance regarding flexibility, breathability, and hydrophobic properties; it flexes with a building's natural movements, repels water when encountered with rain and lasts for years to come. Formulated using nano-silicone technology, Nano Drex Silicone Render also actively prevents problems with organic growth on the external walls of your home, ensuring no future issues with dampness or mould. What's more, owing to its hydrophobic properties, Nano Drex Silicone Render is ideal for use in areas that are highly exposed to organic matter.

NANO TECHNOLOGY

HYDROPHOBIC

PREMIUM BIO SILICONE RENDER
EWI-076

Premium Bio Silicone Render is one of our leading silicone-based coloured renders, offering advanced mechanical resistance and UV protection whilst maintaining elasticity and durability. Its advanced self-cleaning agents work to actively attack and break down organic growth, making it ideal for buildings in areas of high vegetation. Also, the silicone technology of Premium Bio Silicone Render actively helps it to retain its appearance, even in the most trying conditions.

BREAKS DOWN ORGANIC GROWTH

IMPACT RESISTANCE

SILICONE SILICATE RENDER
EWI-040

Our most popular hybrid silicone render, Silicone Silicate Render offers great performance, value, and versatility. Providing the key benefits of a thin-coat render, combined with the silicone render technology's advanced self-cleaning properties, Silicone Silicate is perfect for creating a classic finish that will maintain its brilliance in the long term.

POLYMER MODIFIED

HIGH ELASTICITY

FEATURES	 NANO DREX SILICONE RENDER EWI-077	 PREMIUM BIO SILICONE RENDER EWI-076	 SILICONE RENDER EWI-075	 SILICONE SILICATE RENDER EWI-040
Breathability	■■■■■	■■■■□	■■■□□	■■■□□
Self-cleaning ability	■■■■■	■■■■□	■■■□□	■■■□□
Flexibility	■■■■■	■■■■■	■■■■□	■■□□□
Durability	■■■■□	■■■■■	■■■□□	■■□□□
Bio Protection	■■■■□	■■■■■	■■■□□	■■■□□
Colour Retention	■■■■■	■■■■□	■■■■□	■■□□□

The above table demonstrates all the main features of the coloured silicone renders available within the EWI Pro range. This table should therefore be used as a guide for finding the right coloured render for your next project depending on your needs. For instance, if you are seeking unmatched breathability, flexibility and durability, Nano Drex Silicone Render is the product for you; however, if increased resistance to biological growth is a priority, consider Premium Bio Silicone Render.

RENDER ACCELERATOR
EWI-020

EWI-020 Render Accelerator is a high-quality liquid additive that can be used to accelerate the curing process of Silicone or Acrylic renders. If you live in a colder climate, where the drying process takes a long time, this product is a worthwhile investment. It allows installers to continue to install thin-coat render systems throughout the winter months. EWI-020 works to speed up this curing process, allowing for faster job completion rate.

This product is suitable for colour-through textured renders and has no negative effect on their appearance.

- SPEEDS UP DRYING
- IDEAL FOR WINTER
- USE FOR SILICONE RENDERS & ACRYLIC RENDER
- EASY TO USE

MINERAL RENDER
EWI-060

UV RESISTANT

SPRAY OR HAND APPLIED

VAPOUR-PERMEABLE

QUICK DRYING

EWI-060 Mineral Render is a dry mix render which has been designed to either be applied by hand or spray machine. It can be used as part of an external wall insulation or a thin-coat render only system. Mineral Render comes as a standard 1.5mm grain size and needs to be sealed with an approved silicone paint to ensure the system is resistant against lime bloom.

Note, without silicone paint application, the topcoat will not be sealed and will increase the risk of lime bloom and water ingress. This render is suitable for application onto EPS and Mineral Wool insulation systems.

Our Silicone Paint is available in thousands of colours; either one of our 39 signature colours, or matched to any RAL or NCS colour.

MONOCOUCHE RENDER
EWI-090

SPRAY OR HAND APPLIED

THROUGH COLOURED

BREATHABLE

WATER RESISTANT

EWI-090 Monocouche Render is a high-performance, and extremely versatile Portland cement-based, through-coloured scratch render. Being used on larger commercial or residential properties, and suitable for various substrates, EWI-090 is the ideal solution. The two pass application produces high water-repellency, breathability, and durability, all achieved for a long period with little maintenance. The natural stone-like finish is a highly desirable benefit of this render.

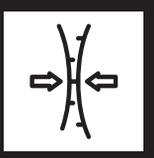
Our newly expanded range of 16 colours can deliver the aesthetic to match the natural stone finish. Make a statement with terracotta and cornflower, or go for a more subtle, classic look with latte or sourdough. EWI-090 Monocouche Render combines texture and colour to produce an exceptional façade.

MOSAIC RENDER
EWI-050

EWI-050 Mosaic Render is a ready to use render. It consists of coloured quartz aggregate held within a transparent acrylic resin binder. This render is highly durable, making it ideal for exposed surfaces prone to damage and soiling (for example the DPC area). Another key advantage of EWI-050 is how easy it is to maintain. The finished render façade can be scrubbed and cleaned without discolouration or loss of mechanical durability.

This render is available in stock as white, black or grey – with a standard quartz aggregate grain size of 1.2mm.

HIGH RESISTANCE TO UV-LIGHT



HIGHLY ELASTIC

BLACK **GREY** **WHITE**

ACRYLIC RENDER
EWI-010

EWI Pro's Acrylic Render will form a long-lasting, aesthetically-pleasing and protective barrier on your external walls. It is flexible and highly resistant to mechanical impact. This product is also great at holding vibrant colours and can be mixed into almost any shade .
Acrylic Render is a polymer-modified, thin-coat render, used as a decorative finish to an EWI system. This product is available in grain size: 1.5mm.

SUITABLE FOR INTERNAL & EXTERNAL SURFACES

COST-EFFECTIVE

AVAILABLE IN OUR 39 SIGNATURE COLOURS OR MATCHED TO ANY RAL OR NCS COLOUR

REQUEST SAMPLES FROM EWI PRO

Here at EWI Pro, we know that choosing a colour for your render is tricky, let alone the texture. Therefore, we have produced thousands of samples, all varying in grain size and colour, to assist you in choosing the right finish for your next render project.

Our full range of renders are available to order in sample pots or as sample sleeves. We highly recommend using these samples before making a final decision as grain size can impact the final colour finish. We also offer Render Sample Colour Charts which provide a more accurate representation of colour. We highly recommend looking at one of these charts before shortlisting potential colours.

Our Monocouche Render samples display our most popular six colours in a handy little pack. Feel the texture of a natural, stone-like finish in a colour suited to your tastes.

EWI Pro build-up systems come in a handy box. With a step-by-step visual and haptic presentation, installers and homeowners alike can get a sense of what will be installed.

The EWI Pro Colour fan details our 50 most popular colours with physical representations of the finished coating. As such, you can be sure that the colour you pick will look exactly the same on the finished façade.

PAINTS


OPEN
EWIPRO
Building Solutions
BBA
SILICONE
PAINT
EWI-005
Waterproof
Breathable
Flexible
Hydrophobic
External Application

SILICONE PAINT
EWI-005

INTERNAL & EXTERNAL USE

IDEAL FOR WET ROOMS

HYDROPHOBIC

BREATHABLE

Silicone Paint is a ready to use masonry paint. It offers a durable, waterproof decorative finish that resists environmental pollutants. Silicone Paint can be used externally or internally, either as the final stage in the Mineral Render system or to decorate the internal walls of a property especially in wet rooms or bathrooms.

Our Silicone Paint is a great way to refresh the façade without having to install new render or substrate.

Our Silicone Paint are available in thousands of colours; either one of our 39 signature colours, or colour matched to any RAL or NCS colour.

PREMIUM BIO SILICONE PAINT
EWI-006

Premium Bio Silicone Paint is a highly breathable silicone paint, suitable for both internal and external use. Much like EWI-005, it is superior to acrylic paint due to its enhanced durability. Premium Bio Silicone Paint is ideal for use in areas exposed to algae and mildew, such as forests, parks and other highly vegetated areas.

It will actively tackle any signs of organic growth, ensuring a clean and fresh appearance. Just like our other Silicone Paint, you can order this in any colour, including our signature colours or any RAL and NCS colours.

- RESISTANT TO ALGAE AND PLANT GROWTH
- HYDROPHOBIC
- IDEAL FOR HIGHLY VEGETATED AREAS
- BREATHABLE

BASECOATS


EPS
BASECOAT
EWI-220

BASECOATS

	BRICK OR BLOCK	CARRIER BOARD	INSULATION	
	✓	✓	✓	MINERAL WOOL KINGSPAN K5 EPS XPS
	✗	✗	✓	MINERAL WOOL KINGSPAN K5 EPS XPS
	✓	✗	✓	MINERAL WOOL KINGSPAN K5 EPS XPS
	✓	✗	✗	MINERAL WOOL KINGSPAN K5 EPS XPS
	✓	✗	✓	MINERAL WOOL KINGSPAN K5 EPS XPS
	✗	✗	✓	MINERAL WOOL KINGSPAN K5 EPS XPS

Our basecoats and adhesives are specially designed with each having a distinct purpose as part of our EWI Pro systems. Many of our bagged products are dual-purpose and hold a range of benefits that positively impact your project. The table displays the uses and compatibility of each product and is great to keep in mind when examining the benefits of each product. The seminal benefit of our range of basecoats and adhesives is breathability, as it ensures that every EWI Pro system is suitable for every substrate.


PERFORMANCE
BASECOAT
Water Repellent
Long Term Protection & Low Maintenance
Suitable for Hand or Spray Application
EWIPRO
Render Solutions
net weight
25 kg
EWI-222P
PERFORMANCE
BASECOAT

PREMIUM BASECOAT
EWI-225

BASECOAT/ ADHESIVE

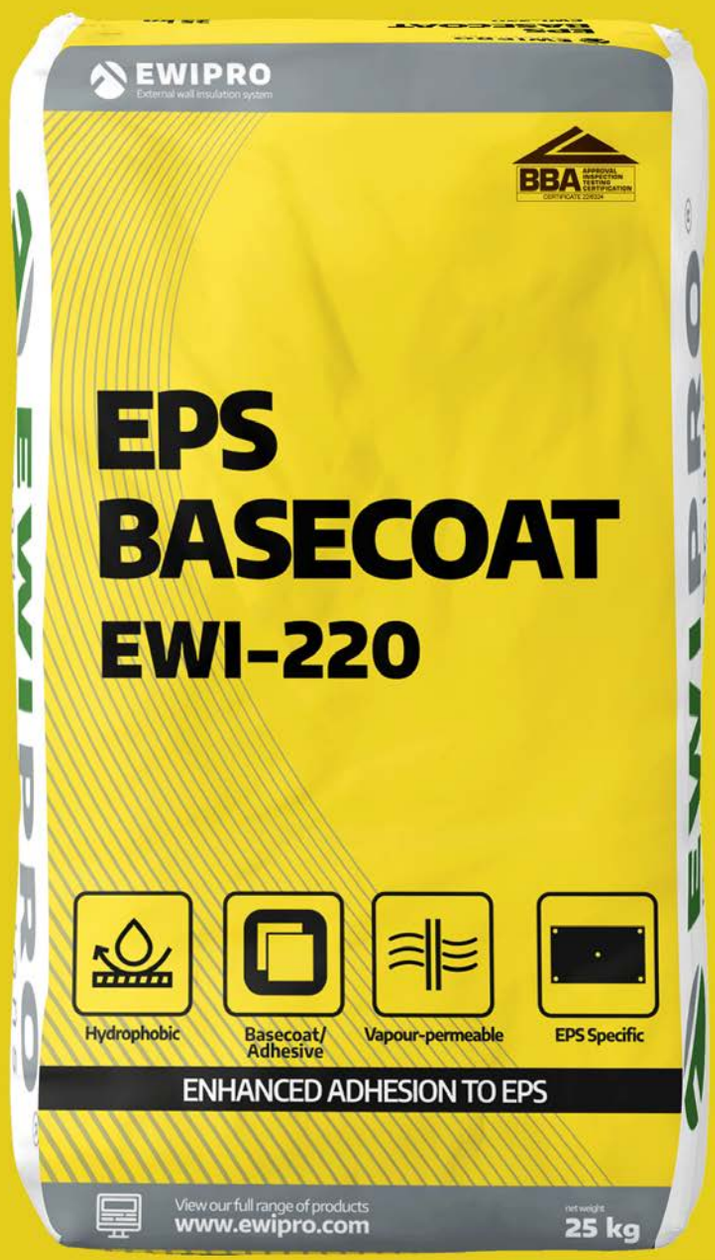
HIGHLY FLEXIBLE

USE WITH FIBREGLASS MESH

VAPOUR PERMEABLE

Premium Basecoat is breathable, high strength and durable. EWI-225 is EWI Pro's finest basecoat adhesive, and can be used for a range of solutions. For example, this product is ideal as a basecoat/adhesive for Mineral Wool, Kingspan K5 and Wood Fibre insulation boards, or as a render-only solution for a range of substrates, including render carrier board. The adhesive contains white Portland cement – making it stronger than other basecoat adhesives. Once the basecoat has dried it provides an incredibly strong and flexible reinforcement layer; we therefore highly recommend this product for 'render only' systems.

We suggest filling a large bucket with the correct quantities of water prior to adding the dry basecoat mixture. Use a paddle mix to mix the basecoat with water until you have achieved an even consistency mortar. Leave the bucket for 5-10 minutes after mixing, and then mix again prior to application.



EPS BASECOAT
EWI-220

UV
RESISTANT

SPRAY OR
HAND APPLIED

VAPOUR-
PERMEABLE

QUICK
DRYING

EWI-220 EPS Basecoat Adhesive is our most popular EPS compatible adhesive. It is a dual-purpose product, used to fix EPS insulation to substrates and also as part of the basecoat reinforcement layer. Once dry, the adhesive provides a strong, flexible and waterproof layer. Being dual-purpose, this product allows installers to have only one type of bag on-site, meaning less wastage.

The preparation process for EWI-220 is the same for both basecoat reinforcement layers and for fixing EPS insulation boards to the substrate. The following substrates are suitable for the application of EPS insulation boards using EWI-220: ordinary and cellular concrete, walls with ceramic or silicate elements, and plastered, painted or textured substrates.

PERFORMANCE BASECOAT
EWI-222P

EWI-222P Performance Basecoat is a polymer-rich cementitious basecoat that can be used on many different substrates, providing a breathable and water repellent protective coat. You can use EWI-222P on render-only projects as well as on EPS (where it can be used as an adhesive and a basecoat). EWI-222P should always be finished with a Silicone Render to ensure a robust and long-lasting decorative finish.

HIGH ADHESION

SPRAY OR HAND APPLIED

WINTER ADHESIVE
EWI-221

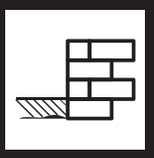
Winter Adhesive is the ideal product for use both within the reinforcement layer and for fixing insulation boards to a substrate, particularly in colder temperatures. Winter Adhesive is specifically designed to be used in temperatures as low as zero degrees to provide a waterproof, frost-proof and compact finish. Nonetheless, the product can be used all year round as a bedding adhesive to stick the insulation to the masonry substrate, providing maximum efficiency whatever the weather.

LOW TEMPERATURE APPLICATION

HIGHLY FLEXIBLE

AQUABASE
EWI-226

Aquabase is a highly water-resistant, vapour-permeable basecoat adhesive, ideal for application in areas that are prone to water ingress. Aquabase actively repels water and creates a stable and smooth surface for plastering works; it can be used with an embedded Fibreglass Mesh to enhance the overall tensile strength of the system; as such, it is often used below the DPC. With its complete water resistance, the product will ensure a completely smooth, durable basecoat that will stand the test of time.



IDEAL FOR BELOW DPC

VAPOUR PERMEABLE

LIGHTWEIGHT BASECOAT
EWI-269

EWI-269 Lightweight Basecoat is designed to be used internally or externally and can be applied onto high-performance blockwork, lightweight masonry structures and stonework. The Lightweight Basecoat can also be applied up to 25mm in one pass (if machine applied).

EWI-269 Lightweight Basecoat is a breathable basecoat. Once dry, the basecoat provides a strong, flexible and waterproof layer. Since our Lightweight Basecoat can be applied in a thick layer, it is ideal for use with our Orange Fibreglass Mesh.

LIGHTWEIGHT | BREATHABLE

LEVELLING MORTAR
EWI-260

EWI-260 Levelling Mortar is used on walls as a scratch coat or to prepare an uneven substrate prior to applying render for EWI Pro solid wall insulation systems. The product is a polymer-modified sand and cement mixture, which can be used for repairing and filling cavities in walls.

Our EWI-260 Levelling Mortar can be used to fill and repair holes and other imperfections up to a maximum thickness of 50mm, and the mortar can be applied on various different walls and substrates, including concrete as well as different types of block or brickwork.

INTERNAL & EXTERNAL USE | SPRAY OR HAND APPLIED

ONE COAT DASH COVER
EWI-065

One Coat Dash Cover is the perfect solution for covering over pebbledash without the hassle of removing it. Durable and vapour permeable, the basecoat can be machine-applied up to 25mm thick in one pass, effectively masking the pebbledash.

OCDC is a breathable, lightweight and flexible solution to covering over pebbledash. OCDC can be applied up to 25mm thick in one pass and once dry provides a perfectly flat surface ready to render or paint.

LIGHTWEIGHT | FLEXIBLE

PRIMERS


TOPCOAT
PRIMER
EWI-333
KREISEL

UNIVERSAL PRIMER
EWI-310

IMPROVES ADHESION

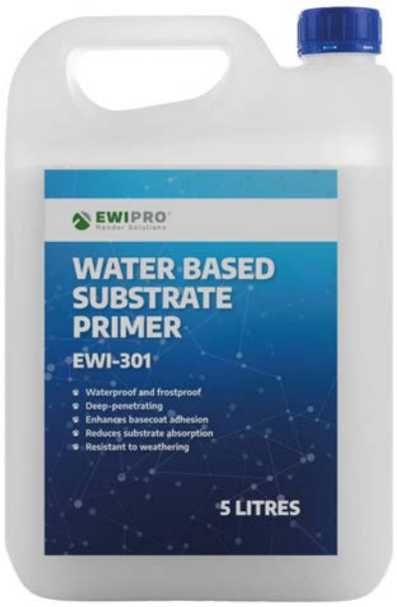
REGULATES ABSORPTION

VAPOUR PERMEABLE

CREATES MECHANICAL KEY

Universal Primer boosts the adhesion of materials to the substrate. Where an artificial key is required for binding materials, Universal Primer is an integral product as it contains quartz aggregate to create a textured surface onto which the adhesive can bind easily. It is tinted red to enable ease of application and is perfect for ensuring a robust finish.

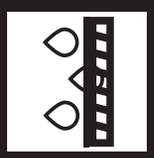
Universal Primer has the added benefit of regulating and reducing groundwork absorbency, and is particularly suited to low suction substrates. The primer works exceptionally well with our EWI systems as it is vapour permeable and frost-proof, therefore none of the performance capabilities of the system are compromised.



WATER BASED PRIMER
EWI-301

Water Based Primer is an essential primer for preparing the wall before installing. It dries completely transparent and works by limiting the amount of water that the substrate absorbs from the adhesive, thereby ensuring effective application of materials. Water Based Primer provides enhanced adhesion and enables a dependable and durable finish.

IMPROVES ADHESION

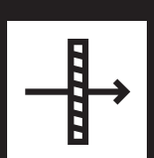


REGULATES ABSORPTION

DEEP PENETRATING PRIMER
EWI-302

Deep Penetrating Primer is an essential product for preparing the wall before installing render-only or external wall insulation systems. Like Water-Based Primer, it dries completely transparent and works to limit the absorptivity of the substrate. Deep Penetrating Primer is ideal for both new build brick and block-work, providing enhanced adhesion and enabling a dependable and durable finish.

INTERNAL AND EXTERNAL USE



DEEP PENETRATING

TOPCOAT PRIMER
EWI-333

DEEP PENETRATING

WATERPROOF

INCREASES ADHESION

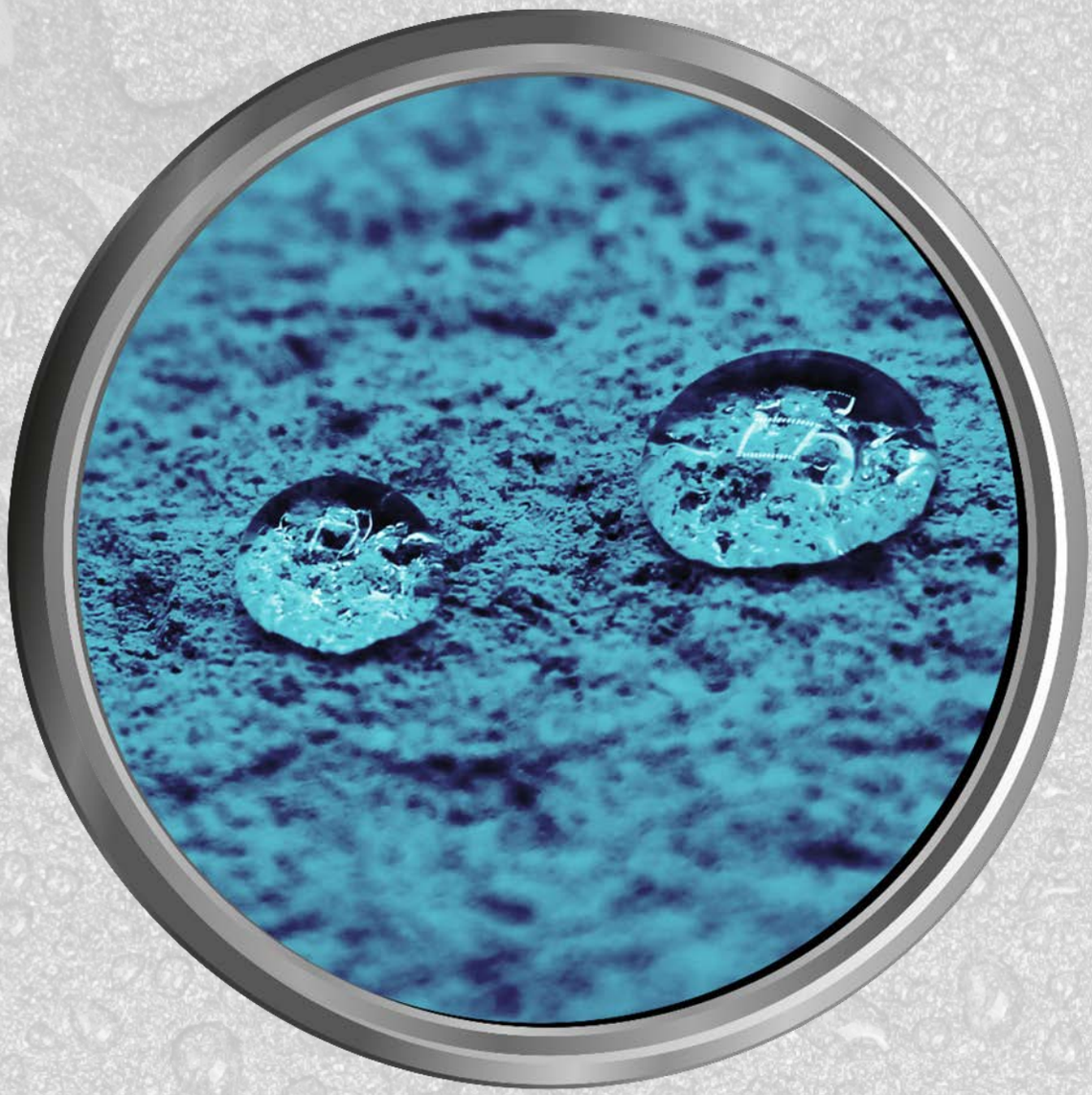
READY MIXED

Topcoat Primer is a deep-penetrating primer designed to prepare the basecoat before applying EWI Pro Silicone Renders. Topcoat Primer facilitates the application of render coats, creating a long-lasting finish that will withstand the test of time. Topcoat Primer can also be pigmented to match the colour of the render beneath it to ensure consistency.

Topcoat Primer is based on potassium water glass and water dispersion of silicone resin and helps strengthen the substrate and limits its absorptive capacity without compromising its breathability. Our Topcoat Primer should always be used during the summer months because it gives the render applicator more time to get the required finish on the render. However, even during the cooler months of the year the primer aids adhesion between basecoat and the silicone render so we do recommend using it all year around.


EWIPRO®
External wall insulation systems
BBA
TOPCOAT PRIMER
EWI-333
Waterproof
Vapour permeable
Increases adhesion of Silicone Renders
Regulates basecoat absorbency
7 kg
View our full range of products
www.ewipro.com
TOPCOAT PRIMER EWI-333
OPAKOWANIE
7 KG
DATA PRODUKCJI
08.03.2023/797/05

NANO DREX PROTECT



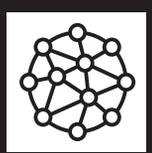
The Nano Drex Protect range is one of the most advanced EWI Pro product ranges. It comprises two high-quality products that can be used on brick or render façades. They are designed to provide an extra barrier of protection to the façades of a building; their vapour-permeable nature prevent the façades from rainwater damage, dirt penetration, and biological growth. The image above demonstrates the vapour-permeable properties of Nano Drex Protect in action; rather than being absorbed, the water is immediately repelled from the surface, thereby increasing the building's lifespan.

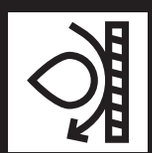
NANO DREX PROTECT BRICK GUARD
EWI-085

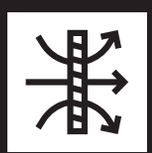
Nano Drex Protect Brick Guard is designed to protect exposed brickwork from the elements. As above, the product creates a breathable, vapour-permeable layer over brickwork to protect it from rainwater damage, dirt penetration and biological growth. Nano Drex Protect Brick Guard is extremely easy to apply and dries transparent with no glossy effect.

NANO DREX PROTECT RENDER GUARD
EWI-086

Nano Drex Protect Render Guard provides an additional barrier over the render to protect it from the elements. Nano Drex Protect Render Guard works to penetrate the render to create a breathable, vapour-permeable layer against rainwater damage, dirt penetration and biological growth. The product is extremely easy to apply and dries transparent with no glossy effect.


NANO TECHNOLOGY


HYDROPHOBIC


BREATHABLE


VAPOR PERMEABLE

RENDER CLEANER
EWI-PROCLEAN

FAST ACTING

NON TOXIC

USED ON A VARIETY OF SURFACES

NANO-CELL TECHNOLOGY

EWI Pro Clean Render Cleaner is specially formulated for the removal of unwanted silicone render, primers, and basecoats. The special formula allows the product to remove wet and dry renders, as well as other cementitious products. The unique formulation breaks down silicone render, removing it efficiently from windows, walls, and other unwanted areas. Pro Clean uses nano-energy cells which penetrate the render spillage and actively help lift it away, cutting the cleaning times and costs in half.

Our non toxic Render Cleaner comes ready to use, with no diluting required. It is the perfect product to have on site ensuring any spillages are cleaned away easily.


PRO CLEAN
RENDER CLEANER
FOR SILICONE RENDER AND BASECOATS

HERITAGE RANGE

HERITAGE

THE VERSATILE LIME RANGE

RESTORATION **REHABILITATION** **PRESERVATION**

The construction industry constantly innovates and evolves. However, one thing has remained the same. Lime render has roots in Ancient Rome, with Roman architects adding pozzolans to create the world's first natural hydraulic lime. The recipe remains unchanged almost 2500 years later, offering modern installers the same product that covered aqueducts and temples across the whole Empire. Crucially, lime-based products marry well with our eco-friendly, sustainable policy; with no chemical additives, our Heritage Range is completely natural and aesthetically timeless. Perfectly suited to the renovation of older buildings, the Heritage Range sets through carbonation, which means it actively absorbs CO_2.

What does heritage mean to us? Bringing historical importance to every Heritage Range project.

LIME RENDERS

NHL 2 | NHL 3.5 | NHL 5

Natural hydraulic lime (NHL) Render comes in three strength grades, labelled as feebly, moderately, and eminently hydraulic. The number indicates the compressive strength of the relative lime. Hydraulic lime is produced from limestone with naturally occurring impurities. It sets through the process of hydrolysis, a chemical reaction in which a molecule of water breaks one or more chemical bonds. In comparison to non-hydraulic lime, it has a faster initial set and greater compressive strength. Due to the faster set, it sets in extreme conditions like underwater.

One of the primary reasons for using lime render is breathability. The breathability of lime render refers to its ability to allow water vapour to pass through its structure, facilitating the movement of moisture in and out of a building's walls. This permeability is a crucial characteristic of lime render, providing several advantages over less breathable materials, such as cement-based renders.

EWI Pro Lime render comes in 3 forms; slow set NHL 2, medium set NHL 3.5, and fast set NHL 5. Lime render 3.5 is available in a soft version that provides a smoother finish for internal projects.

NHL 2
SLOW SET
LIGHT EXPOSURE

NHL 3.5
MEDIUM SET
MODERATE EXPOSURE

NHL 5
FAST SET
SEVERE EXPOSURE

BREATHABLE

SPRAY OR HAND APPLIED

NATURALLY FUNGICIDAL

LIME PLASTER
EWI-767

BREATHABLE

SPRAY OR HAND APPLIED

ANTIBACTERIAL & ANTIFUNGAL

ECO-FRIENDLY

Crafted from natural limestone, this highly breathable plaster regulates humidity levels, preventing moisture buildup and mould growth. Its innate flexibility reduces cracking, ensuring a long-lasting and low-maintenance finish.

Lime Plaster's high alkalinity imparts natural antibacterial and antifungal properties, promoting a hygienic living space. As a carbon-neutral product, it plays a role in combating climate change by absorbing CO_2 during the curing process. Furthermore, its excellent thermal insulation helps maintain comfortable indoor temperatures, reducing energy consumption.

LIME PAINT
EWI-707

Lime Paint, a timeless and eco-friendly choice, offers an array of benefits for both interior and exterior applications. Derived from natural limestone, this breathable paint creates a unique, soft patina while preventing moisture buildup and mould growth. Ideal for historical restoration projects or modern homes, it provides superior adhesion, reducing the need for constant repainting. Lime Paint is highly alkaline, making it a natural antibacterial and antifungal solution, ensuring a cleaner living environment. With its zero-VOC content, it supports healthy indoor air quality, making it a perfect choice for allergy sufferers and eco-conscious individuals.

INTERNAL & EXTERNAL USE

ODOUR FREE

LIME PAINT AVAILABLE IN 1L, 4L & 15L BUCKETS

LIME WASH
EWI-787

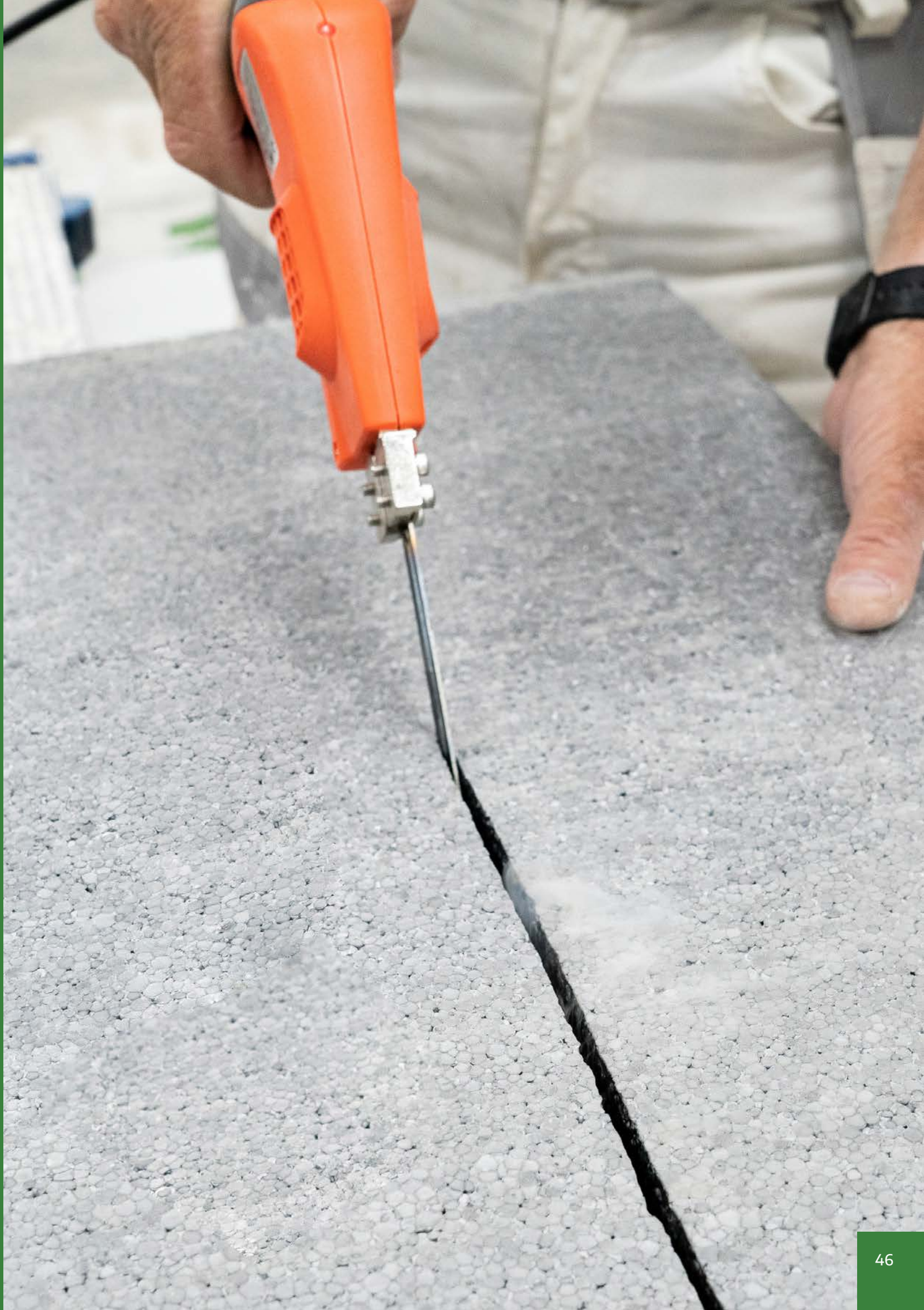
Lime Wash is primarily a protective layer for lime coatings and masonry substrates. On new lime renders and plasters, it unifies and protects the surface whilst the new plaster is building strength. As lime wash is essentially diluted lime putty, it maintains all breathable qualities, contributing to a fully breathable lime system. Lime wash is also a repairing material, being used to fill small shrinkage cracks on the lime coverings. Lime wash can also be used in conjunction with various aggregates to make shelter coats for friable masonry and will act as a sacrificial protective coat. Historically, lime wash was used as the primary decorative coat, however, it has been superseded by lime paint in that department

BREATHABLE

ECO-FRIENDLY

LIME WASH AVAILABLE IN 1L, 4L & 15L CONTAINER

INSULATION



MINERAL WOOL

A1
FIRE RATED

BREATHABLE

HIGH ACOUSTIC
PERFORMANCE

SUSTAINABLE

Mineral Wool offers both improved thermal performance and acoustic insulation; at the heart of our Mineral Wool insulation system is Rockwool. One of the most appealing aspects of Mineral Wool is that it offers outstanding fire resistance because Mineral Wool is non-combustible, meaning it acts as a fire barrier, helping to slow down the rate of flames without contributing to the fire.

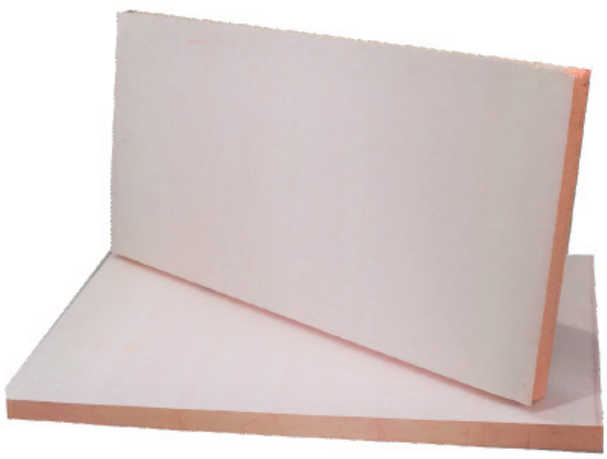
Mineral Wool systems are also excellent due to their breathability; the presence of fibres and moisture-repelling compounds help to wick moisture through the material and away from the substrate. Mineral Wool boards are made up of two density layers of wool, with the outer layer being the densest, thereby providing a firm surface on which the basecoat and render can be applied. Rockwool external wall insulation boards require metal pin mechanical fixings as well as adhesive to tie them to the wall (a minimum of 7 fixings are required per m^2).

EXPANDED POLYSTYRENE (EPS)

The focal point of our external wall insulation systems is Expanded Polystyrene (EPS). EPS is a high-performing, cost-efficient insulation material. When installed onto a property, EPS upgrades the thermal properties of the building, improving its U-values and reducing the risk of water penetration and condensation. EPS boards can be used on masonry and system-built properties as well as with our range of EWI Pro render systems. It is designed to be applied externally using EWI Pro EPS Adhesive and mechanical fixings. EWI Pro EPS boards are available in a range of thicknesses, from 20mm to 300mm, going up in 10mm increments.

LIGHTWEIGHT

EASILY CUT

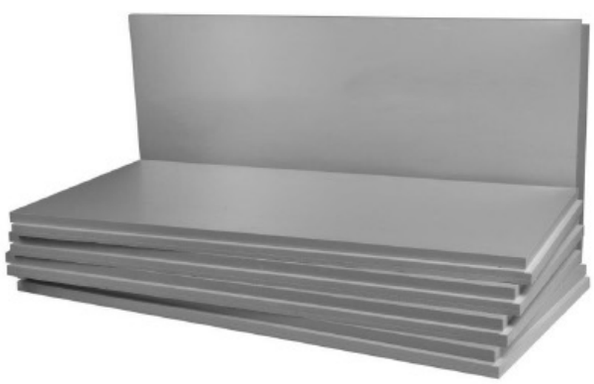


KINGSPAN K5

Kingspan K5 insulation is a premium insulation board for external wall insulation systems. With its rigid, fibre-free phenolic foam core and glass tissue facings, the insulation is ideal for use with our thin-coat renders to create a high-performing insulation system that is guaranteed to stand the test of time. Due to its excellent thermal performance, a 60mm board of Kingspan K5 insulation can achieve the same U-values as 90mm of EPS. This is particularly important for installations where there is a lack of available external space. The insulation board itself has very high compressive strength which works to minimise the risk of damage to the EWI system caused by mechanical impact.

SPACE-SAVING

HIGH PERFORMANCE



EXTRUDED POLYSTYRENE (XPS)

Extruded Polystyrene (XPS) is foam insulation with outstanding thermal properties, great moisture resistance and high compressive strength. Because our XPS insulation is a closed-cell foam, it has a particularly high density and will reduce the risk of water penetration, making it ideal for areas such as below the DPC. When installing XPS below the DPC, we recommend applying our Mosaic Render as the topcoat for enhanced durability. XPS easily upgrades the thermal properties of the building, providing a high-performing, cost-effective solution for lowering energy bills. It is available in a wide range of thicknesses to achieve different U-values.

HIGH COMPRESSIVE STRENGTH

CLOSED CELL

RENDER CARRIER BOARD

A1
FIRE RATED

HARD
WEARING

HIGH-STRENGTH

WATER
RESISTANT

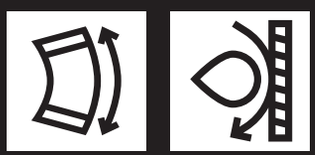
Render Carrier Boards provide a durable backing surface for the application of a thin-coat render system. The boards are normally applied to a carrying substrate, such as treated timber battens or lightweight steel frame, and are commonplace in large residential and commercial properties.

The durability of Render Carrier Boards means that they can not only withstand extreme weathering, including rain, wind and snow, but provide an excellent impact-resistant barrier. They do not rot or swell when they come into contact with water, so they can remain intact for years to come, even when located on the exterior of a property. When installing our thin-coat renders on Render Carrier Boards, we always recommend using our EWI-225 Premium Basecoat with embedded fibreglass mesh, typically applied at a thickness of approximately 5-7mm.

There are numerous types of Render Carrier Board, including Knauf's Aquapanel, STS, and Versarend. The EWI Pro thin-coat silicone render systems are compatible with all these and most other types of boards. A combined Silicone Render and Knauf Aquapanel system also carries a highly prestigious BBA Certificate (22/6324).

FIBREGLASS MESH 165g/m²

Orange Fibreglass Mesh (165g/m²) is a high-quality fibreglass reinforcing mesh and the most popular within the EWI Pro range. Intended for embedding within the basecoat reinforcement layer, this mesh provides excellent strength and flexibility to render-only and external wall insulation systems; it can also be used in areas that need additional strengthening, including windows, doors and areas of high impact risk. When using this mesh within the basecoat reinforcement layer, it is imperative that each vertical strip is overlapped by 100mm. The fibreglass is coated with acrylic acid copolymer liquid which makes it resistant to water, alkali and age damage, ensuring that the system remains crack-free for years to come.



FLEXIBLE WATER RESISTANT

PANZER MESH 300g/m²

Fibreglass Mesh (300g/m²) is a fibreglass reinforcing mesh within the EWI Pro range. Fibreglass Mesh is ideal for strengthening render-only and external wall insulation systems to guarantee an unsurpassed level of impact and crack resistance and a steadfast system that will withstand even the harshest of elements. In addition, this mesh can be used to enhance the strength of ceilings, walls and floors. Like the Orange Fibreglass Mesh, Fibreglass Mesh is also coated with acrylic acid copolymer liquid, ensuring a crack-free system that will stand the test of time.

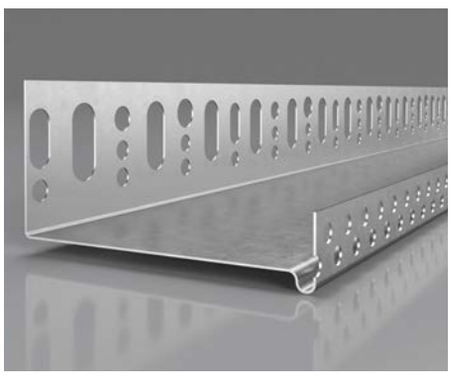
STRONG HEAVY DUTY

BEADING

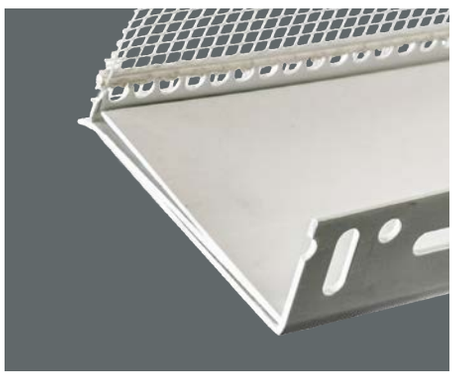

MaxiFlex

BEADING

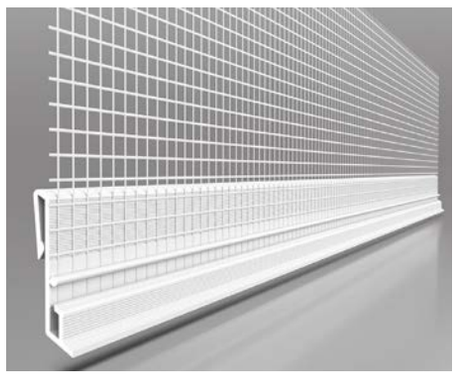
Beading and mesh are essential in render-only and external wall insulation systems to reinforce weak points within the structure. Here at EWI Pro, we offer a vast range of high-quality beading to suit every possible need, including corner beads, bellcast beads, stop beads, and more.



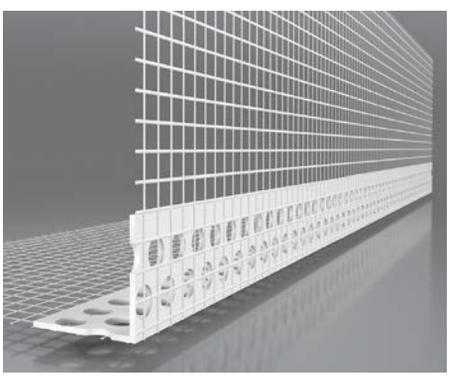
STARTER TRACK



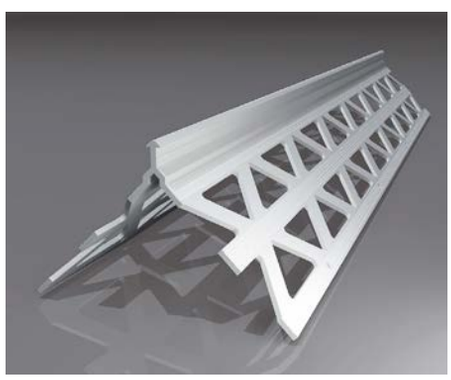
UPVC STARTER TRACK



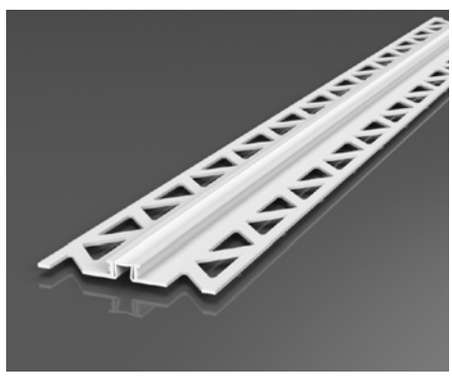
CLIP-ON PROFILE



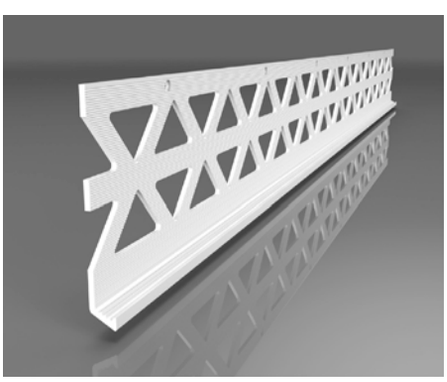
CORNER BEAD WITH MESH



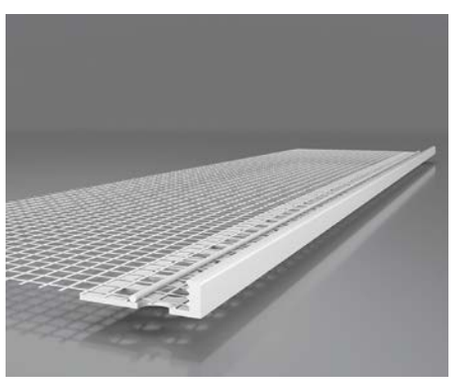
CORNER BEAD



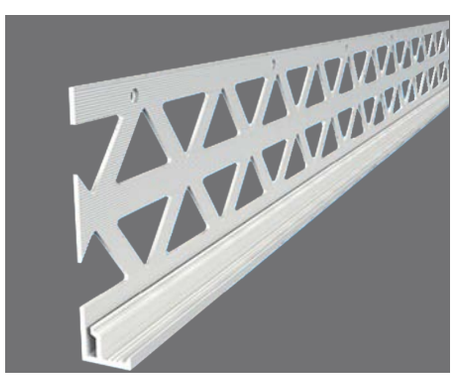
MOVEMENT BEAD



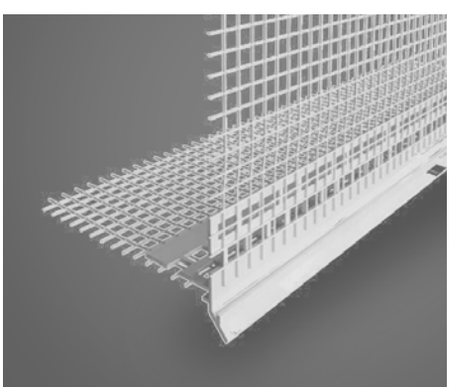
BELLCAST BEAD



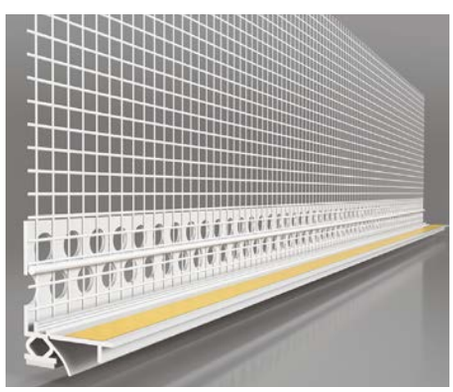
STOP BEAD WITH MESH



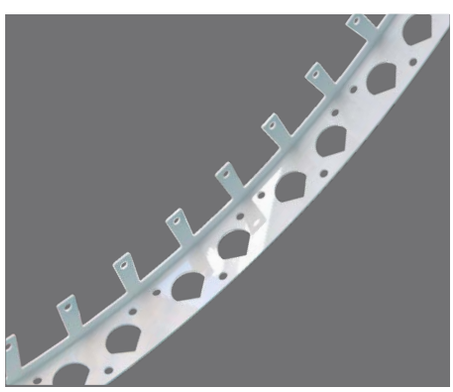
STOP BEAD



WINDOW HEADER BEAD



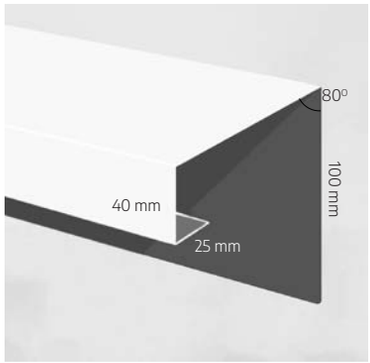
WINDOW REVEAL BEAD



ARCH BEAD

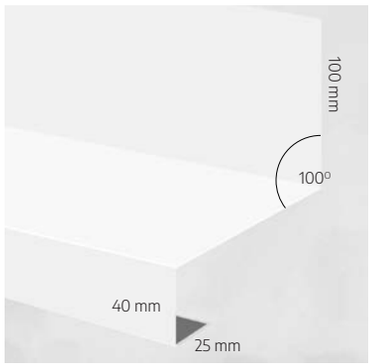
VERGE TRIMS & OVERSILLS

EWI Pro verge trims are made from powder-coated aluminium and designed to ensure that the external wall insulation system is completely waterproof. Verge trims deter water from the system, ensuring that the back of the insulation is protected from water ingress. We offer verge trims in a variety of shapes and sizes to provide a solution for every property and insulation system.



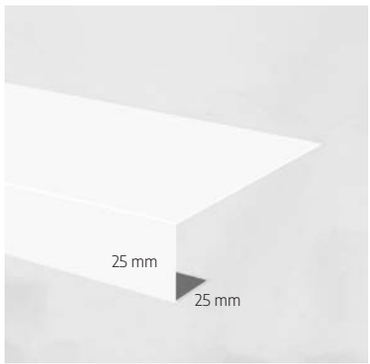
DROPDOWN VERGE TRIM

The Dropdown Verge Trim is designed to go under sills, soffit boards and applications that require fixing from below. This verge trim is available in various widths to house different thicknesses of insulation. An additional trim or suitable membrane or flashing should also be applied which tucks under the existing sarking felt. The primary reason for the installation of the secondary waterproof membrane is to repel any water ingress.



UPSTAND VERGE TRIM

The Upstand Verge Trim is designed to be used in applications where you fix from above, such as connecting to a flat roof or where the upstand can slide up behind the fascia board. It is available in various widths for different thicknesses of insulation. The Upstand Verge Trim creates a waterproof seal without the need for silicone sealant or expanding foam tape, thus ensuring water deters from the system.



OVERSILL

The Oversill Verge Trim is designed to extend the length of an existing windowsill, ensuring that it overhangs the insulation. The purpose of this particular type of trim is to prevent water ingress behind the insulation, which can cause serious damage.

VERGE TRIM CONNECTORS AND END CAPS

The Verge Trim Connector is used to secure the joint where continuous lengths of verge trim are installed. The connectors ensure effective waterproofing around all joints.

MECHANICAL FIXINGS

The EWI Pro external wall insulation systems are dual-fix systems. This means that the insulation boards are secured to the substrate using adhesive and mechanical fixings to further anchor them to the wall. As a result, EWI Pro systems offer unbeatable stability and durability.

METAL PIN HAMMER FIXINGS

Metal Pin Hammer Fixings are ideal for the professional installation of the insulation boards to the substrate. Made from plastic bodies and metal rods, they reduce thermal bridging to a minimum. As the rod is metal, they provide a huge amount of strength and are therefore suitable for supporting our Mineral Wool insulation systems.

PLASTIC PIN HAMMER FIXINGS

The Plastic Pin Hammer Fixings are designed to be hammered into the system and come in several lengths; they are particularly ideal for securing EPS insulation boards onto the substrate. Made entirely from plastic, they reduce thermal bridging and ensure that the system is effective and secure in the long term.

METAL PIN SCREW FIXINGS

Unlike some other fixings, Metal Pin Screw Fixings are screwed, not hammered, in. Made of plastic bodies and metal screws, they are available in eight lengths to cater to different insulation thicknesses and reduce thermal bridging to a minimum. The Metal Pin Screw Fixing anchor should always travel at least 35mm into the substrate.

METAL LAMELLA FIREBREAK FIXINGS

The Metal Lamella Firebreak Fixings are made of steel and are the mechanical fixing of choice to use in conjunction with firebreaks since they do not succumb to high temperatures. When used with Mineral Wool external wall insulation systems, this fixing type offers higher fire protection than other fixing types.

COVERAGE RATES

This section specifies the number of materials you will need for your project. These numbers have been compiled using the factory guidelines. Please note: due to the variability of site conditions, the actual coverage may vary from project to project.

SUBSTRATE PRIMERS

Product	EWI-301 Water-based primer (5L)	EWI-310 Universal Primer (20kg)
Coverage	20m²	50m²

ADHESIVES AND BASECOATS

Product	EWI-220 EPS Basecoat (25kg)	EWI-225 Premium Basecoat (25KG)	EWI-222P Performance Basecoat (25kg)	EWI-269 Lightweight Basecoat (25kg)
Adhesive & Basecoat for Insulation Coverage (per bag)	2.5m²	2.5m²	2.5m²	N/A
Basecoats only	N/A	6mm thickness = 4m²	10mm thickness = 3.5m²	10mm thickness = 3.0m²

MECHANICAL FIXINGS

Mechanical Fixings are used in EWI systems. Typically, the fixing length should be 40mm longer than the thickness of the insulation. However, if the insulation is being fixed onto pebbledash, the fixing length should be 65mm longer than the thickness of the insulation.

Product	Hammer fixing (Box of 200)	Screw fixing (Box of 200)
Coverage	7 fixings per m² or 5 fixings per 0.72 m² board	7 fixings per m² or 5 fixings per 0.72 m² board

MESH

Fibreglass Mesh is embedded within all EWI Pro basecoats as part of the reinforcement layer.

Product	Fibreglass Mesh	Panzer Mesh
Coverage	50m² Roll (42.5m² when overlapped)	25m² Roll (20m² when overlapped)

RENDER PRIMER

Render primers are designed to bond to the dried basecoat or reinforcement layer and aid the binding of the topcoat.

Product	EWI-333 Topcoat Primer (7L)	EWI-333 Topcoat Primer (20L)
Coverage	20m²	60m²

RENDER & TOPCOATS

Renders are sold either in pre-mixed buckets (e.g. Acrylic Render, Silicone Silicate Render, Silicone Render, Premium Bio Silicone Render and Nano Drex Silicone Render) or bags that need to be mixed with water (e.g. Monocouche Render and Mineral Render). Renders are sold in different grain sizes with 1.0mm and 1.5mm as the most popular grain sizes on the market.

Coverage per bucket	0.5 mm	1.0 mm	1.5 mm	2.0 mm	3.0 mm
	16-17m²	12-13 m²	9.5-10 m²	6-8 m²	5-6 m²

Product	EWI-060 Mineral Render 25Kg bag	EWI-090 Monocouche Render 25Kg bag
Coverage	9-10m²	1m²

BRICK SLIPS

BRICK SLIP RANGE

The EWI Pro Brick Slips realistically mimic the appearance of traditional brickwork whilst injecting modern elements into their design. They suit the tastes of both traditional and modern designers. The lightweight nature of the slips makes them suitable for internal and external use. They can also provide a rustic alternative to traditional kitchen tiles or the basis for an external cladding project.

Brick slips offer several benefits over traditional bricks. They are lightweight, easy to cut, easy to clean, space-saving, and perhaps most importantly, cost-saving! Moreover, brick slips are also non-combustible, just like regular brick, which further enhances their beauty and practicality.

EWI Pro Brick Slips come in Acrylic, Clay, Cement, and as stencils to provide a wide range of design options.

The EWI Pro range stretches further than just brick slips as we have also developed specially designed Brick Slip Adhesive and Brick Slip Grout. Both products are formulated to work in harmony with the slips, perfectly sticking them to the substrate. The grout is available in several colours allowing the designer to choose the finish they need.

BRICKSLIP ADHESIVE
EWI-234

EWI Brick Slip Adhesive is a high quality specifically designed adhesive, manufactured from organically bonded mineral raw materials. The adhesive can be used on a variety of substrates, internal or external. The Brick Slip Adhesive comes ready to use and serves exclusively as the adhesive for EWI Pro Brick Slips. The adhesive is also freezeproof and flexible.

INTERNAL & EXTERNAL USE

FLEXIBLE

BRICKSLIP GROUT
EWI-238

Brick Slip Grout is a highly versatile, quality mortar, designed to work with the EWI Pro Brick Slips. Used internally and externally, the Brick Slip Grout provides a waterproof protective layer for brick slip joints. The choice of 4 colours allows a pleasing decorative finish to all variations of Brick Slips. Available in White, Grey, Cream, and Black.

15 MINUTE WORKING TIME

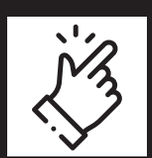
JUST ADD WATER

ACRYLIC BRICK SLIPS

Acrylic brick slips rely on an acrylic aggregate to increase weather resistance. Acrylic fibres are microscopic additives that result in the brick slips being incredibly lightweight and very easy to handle. They can also be cut with most household scissors and are easily shaped to fit around corners. A range of colours ensures that you have full control over the finished aesthetic.

The acrylic brick slip system consists of only two products; the adhesive and the brick slips. Once the slips are fully embedded, the adhesive acts as the grout. This combination creates a cost-effective system that is a DIY dream!

LIGHTWEIGHT



EASY APPLICATION

EASY CUT

FLEXIBLE

CLAY BRICK SLIPS

As with most clay, clay brick slips are fired in kilns and therefore maintain their natural and recyclable nature. The classic manufacturing process, combined with modern brick slip technology creates a slip that is easy to install and provides a rustic aesthetic. Clay will portray distinctly earthy tones and is suitable for internal and external applications.

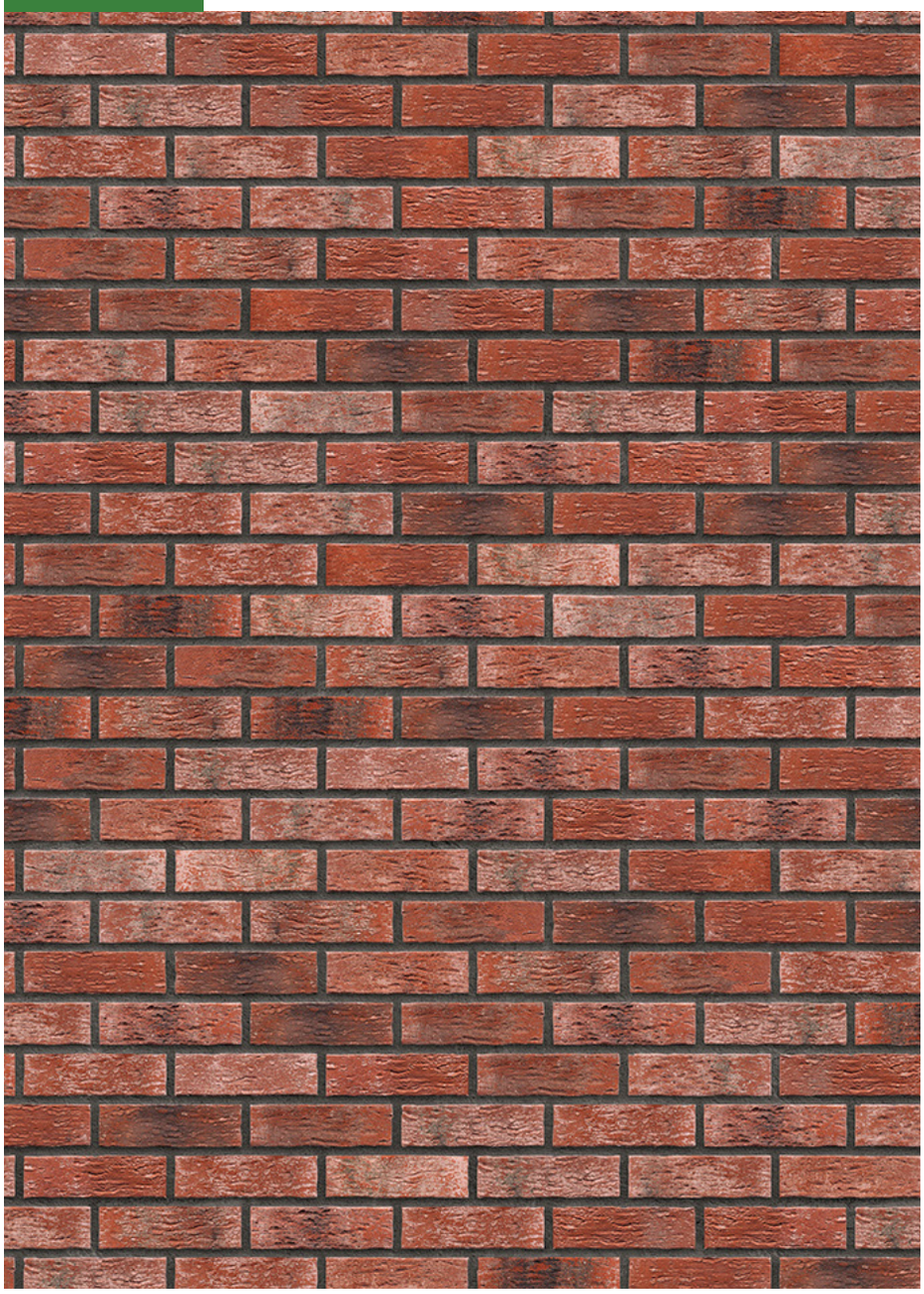
Crucially, clay bricks are environmentally friendly as they do not release cadmium. Clay brick slips also have frost resistance, water absorbability, resistance to stains, impact resistance, bending strength, chemical resistance, and resistance to agents of domestic use.

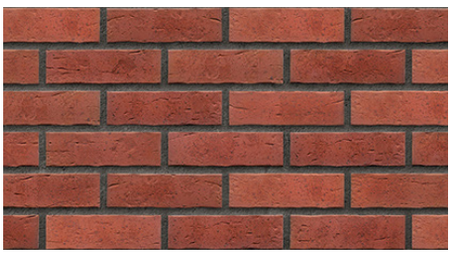
INTERNAL & EXTERNAL USE

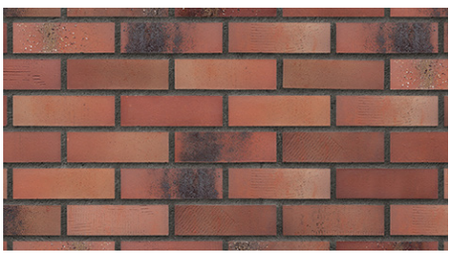
ECO-FRIENDLY

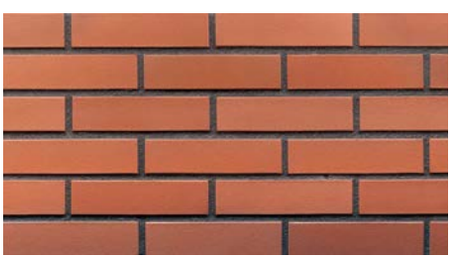
FROST-PROOF

HERITAGE





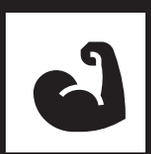




CEMENT BRICK SLIPS

Cementitious brick slips carry the inherent benefits of cement; they are generally strong, durable, and weather-resistant. They can be customised in terms of colour, texture, and size. As they are generally formed by being poured into moulds, they are consistent in size and shape.

Cement does offer a brutalist aesthetic to the final finished product, which can be a desirable design choice. The aesthetic is supplemented by durability and low maintenance; Cement brick slips are resistant to weathering, rot, and insects, making them a long-lasting cladding option.

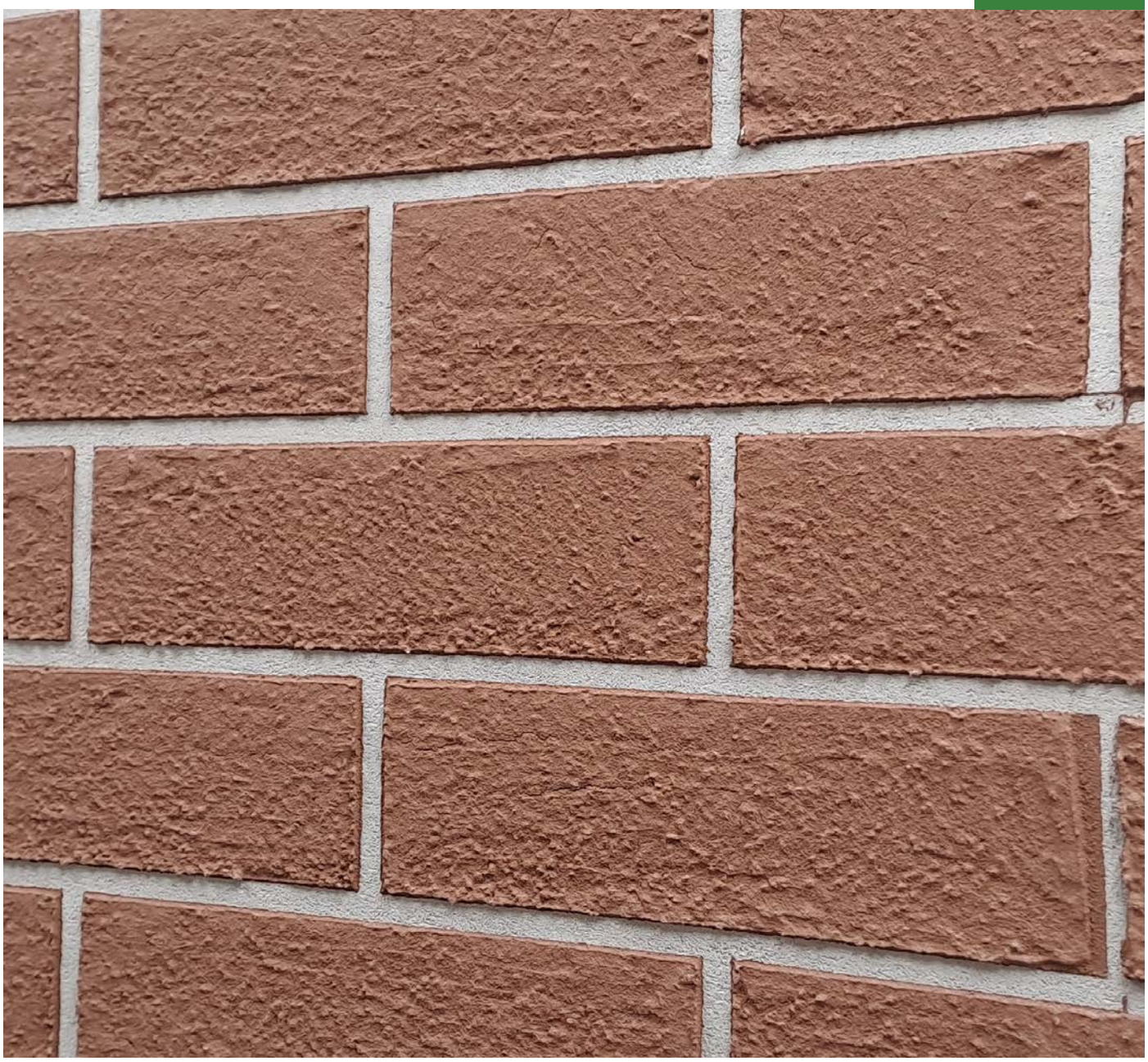


STRONG

WEATHER-RESISTANT

LONG LASTING

DURABLE



STENCIL BRICK SLIPS

The most lightweight solution if you desire a brick effect finish to your façade. Stencil brick slips are incredibly simple to install; the stencil can be in various sizes, shapes, and can mimic all forms of brickwork. The stencil is usually manufactured from a sticky-backed plastic that is stuck onto a primed wall. As such, the choice of material is completely up to you. The material can be silicone render or silicone paint; it can be sprayed on, or hand applied. Silicone render comes in a wide range of grain sizes therefore the final finish can be fully customised.

This simple finish system offers a sustainable alternative to heavier brick, while avoiding the hassle of dealing with multiple trades and cumbersome accessories.

COST EFFECTIVE

HAND OR SPRAY APPLIED

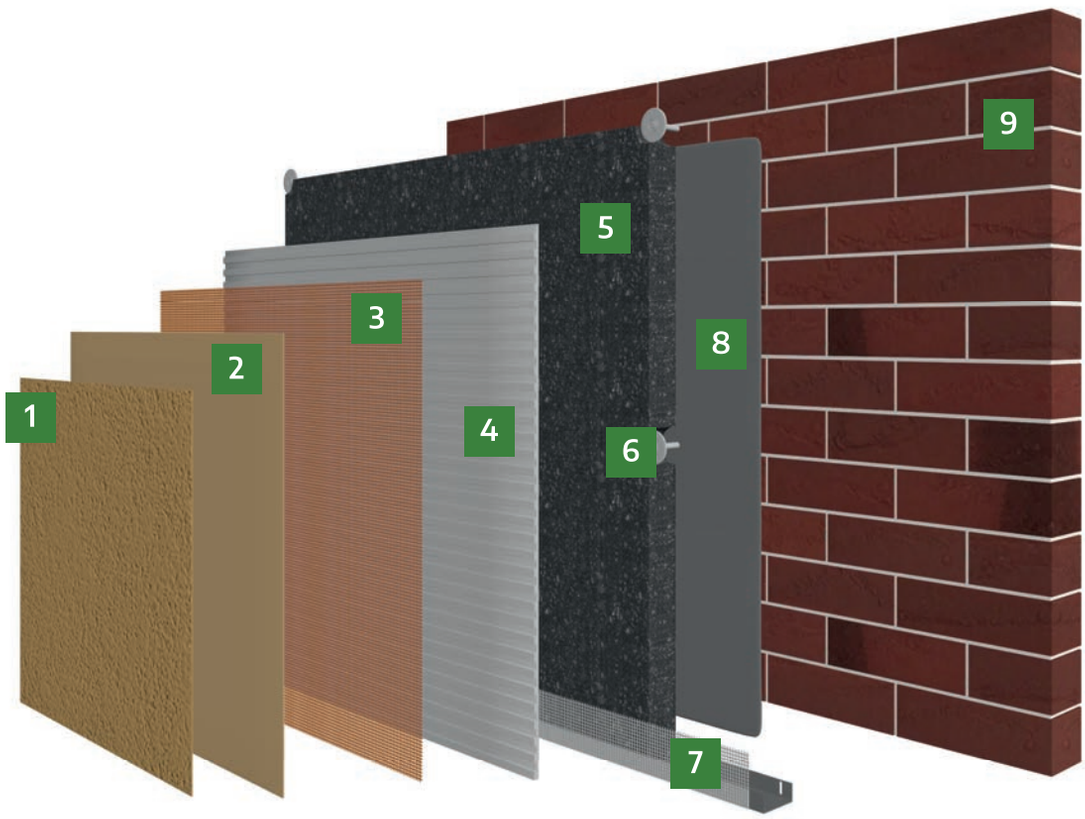
LIGHTWEIGHT

GRAIN SIZES	0.5 MM	1.0 MM	1.5 MM	2.0 MM	3.0 MM

VARIOUS FINISHES

SYSTEM BUILD UPS

SILICONE RENDER ONTO EPS INSULATION SYSTEM

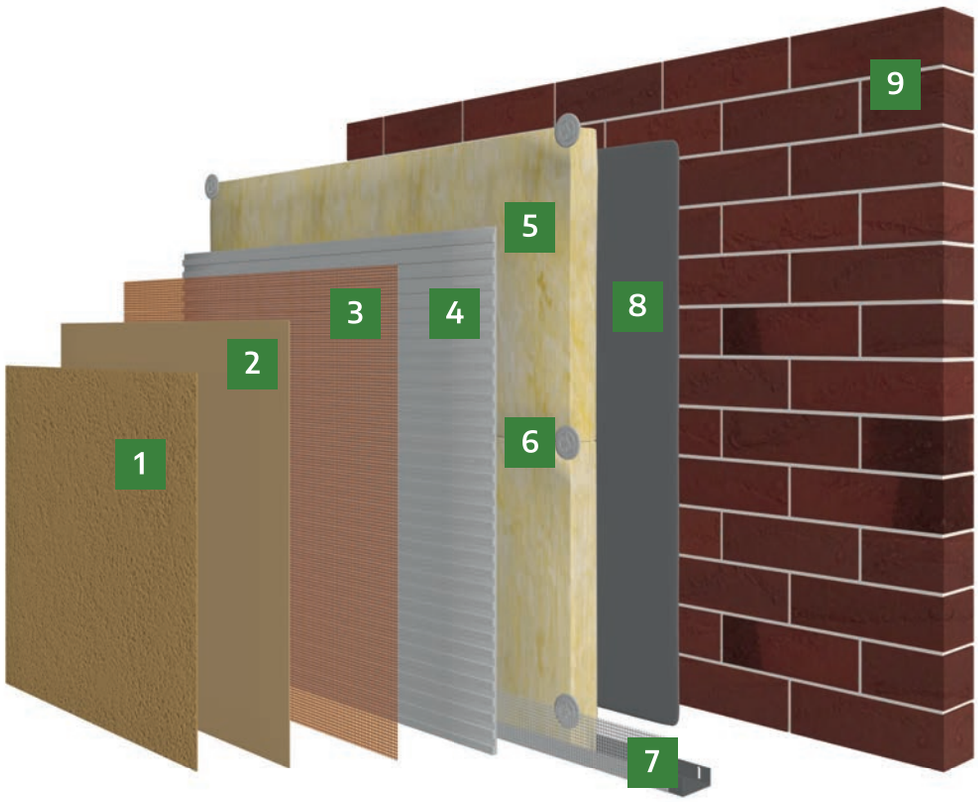


1. Silicone Render
2. Topcoat Primer
3. Fibreglass Mesh
4. EPS Basecoat
5. EPS Insulation
6. Mechanical Fixing
7. Starter Track
8. EPS Adhesive
9. Brick

Our most popular system build-up encompasses the seminal benefits of external wall insulation at an attractive price point. EPS is a cost-effective insulation board that delivers excellent thermal insulation while being lightweight and durable. The durability of the system is enhanced by the inclusion of Fibreglass Mesh. Silicone Render then provides a hydrophobic envelope for the system.

The BBA examined several key factors to ratify the system's suitability. It can improve the thermal performance of external walls; adequately resist wind loads and have sufficient resistance to impact damage; possesses a reaction to fire classification of B-s2, d0; contributes to limiting the risk of interstitial and surface condensation; and remains effective for a period of at least 30 years.

SILICONE RENDER ONTO MINERAL WOOL INSULATION SYSTEM

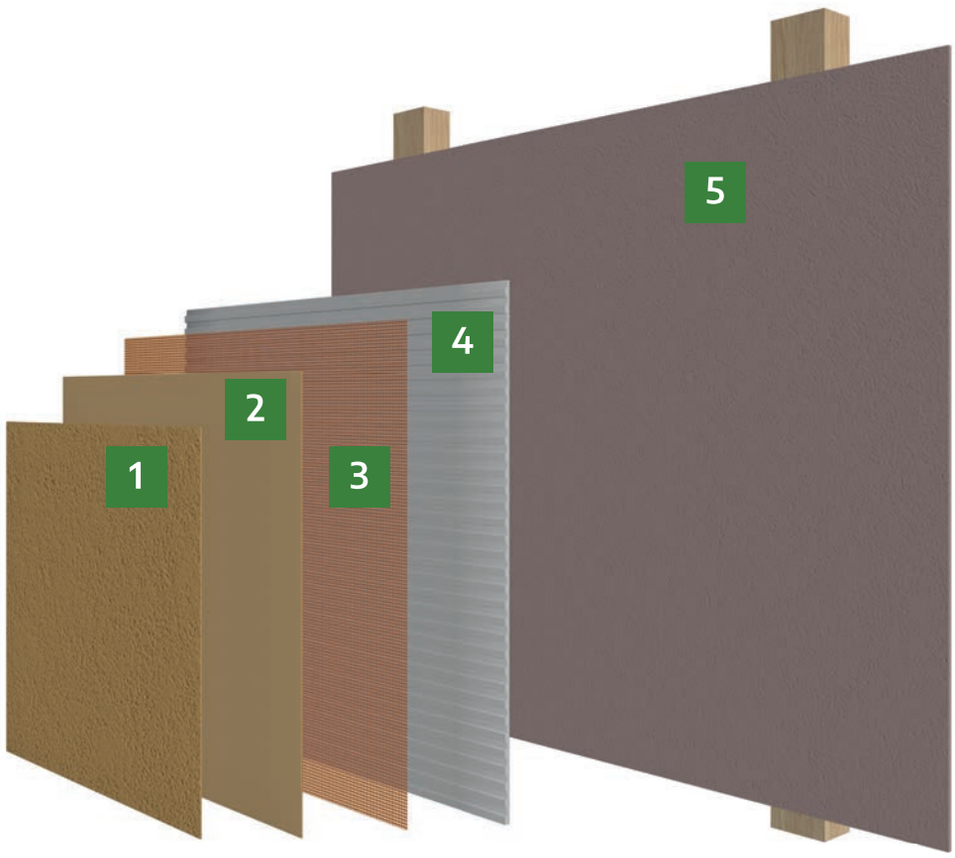


1. Silicone Render
2. Topcoat Primer
3. Fibreglass Mesh
4. Basecoat
5. Mineral Wool Insulation
6. Mechanical Fixing
7. Starter Track
8. Adhesive
9. Brick

The Mineral Wool system offers phenomenal breathability alongside its thermal performance. Due to the dual-density composition of Mineral Wool batts, the system also offers acoustic insulation. The system is particularly well-suited to high-rise developments as the boards act as a fire break feature, with resistance to heat up to 1000°C and a fire rating of A1.

The BBA examined several key factors to ratify the system's suitability. It can improve the thermal performance of external walls; adequately resist wind loads and have sufficient resistance to impact damage; possesses a reaction to fire classification of A2-s1, d0; contributes to limiting the risk of interstitial and surface condensation; and remains effective for a period of at least 30 years.

RENDER ONLY ONTO RENDER CARRIER BOARD SYSTEM

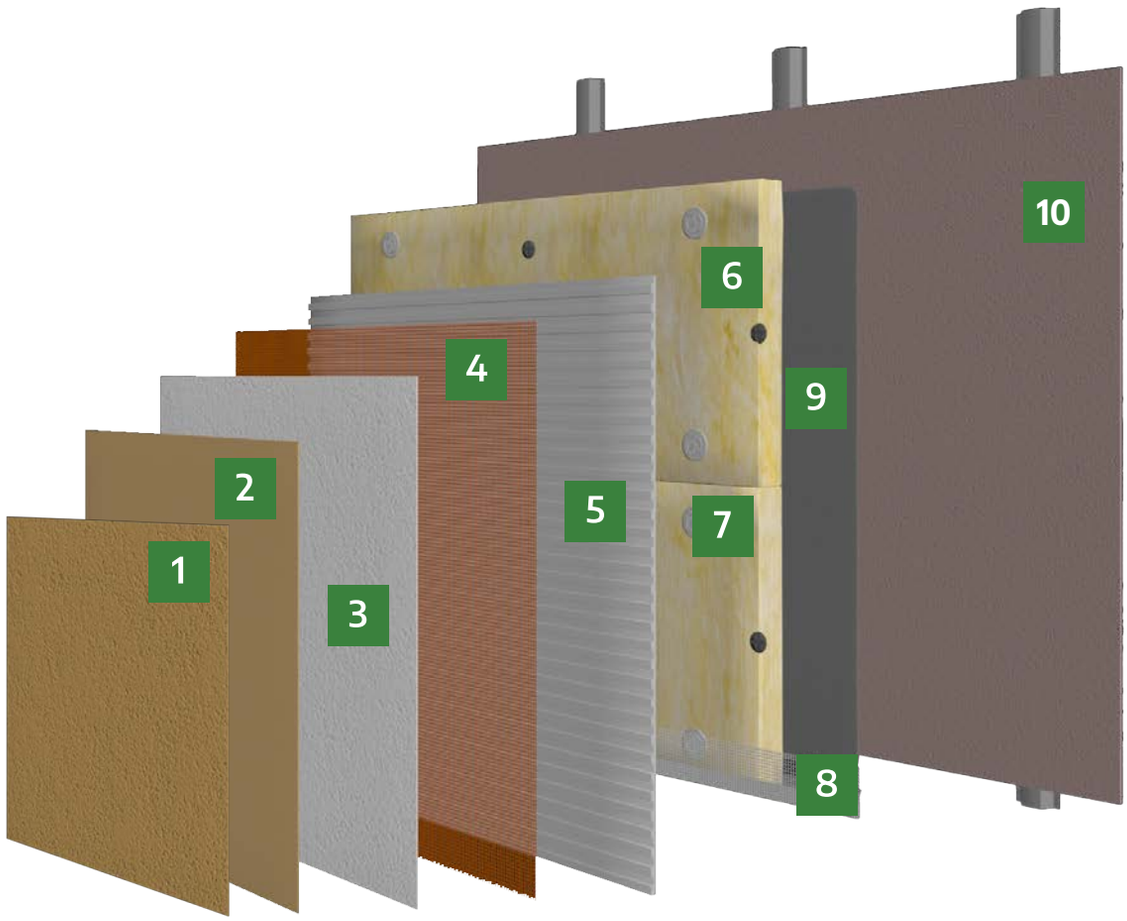


1. Silicone Render
2. Topcoat Primer
3. Fibreglass Mesh
4. Basecoat
5. Render Carrier Board

A popular solution for render-only projects is the installation of render carrier boards. Our BBA Approved render carrier board utilises the Knauf Aquapanel Exterior Cement Board. The combination of the cement boards with our thin-coat render range results in a ventilated and drained exterior wall panel system, sealed with a hydrophobic envelope. When fibreglass mesh is embedded within basecoat it enhances the durability of the system.

The BBA examined several vital factors to ratify the system's suitability. It can adequately resist the wind loads and impact damage likely to be met in service; possesses a reaction to fire classification of A2-s1, d0; tends to shed water and will considerably reduce the amount of water penetrating through the substrate; and will have a service life over 30 years.

MINERAL RENDER & MINERAL WOOL INSULATION ONTO FRAME SYSTEMS

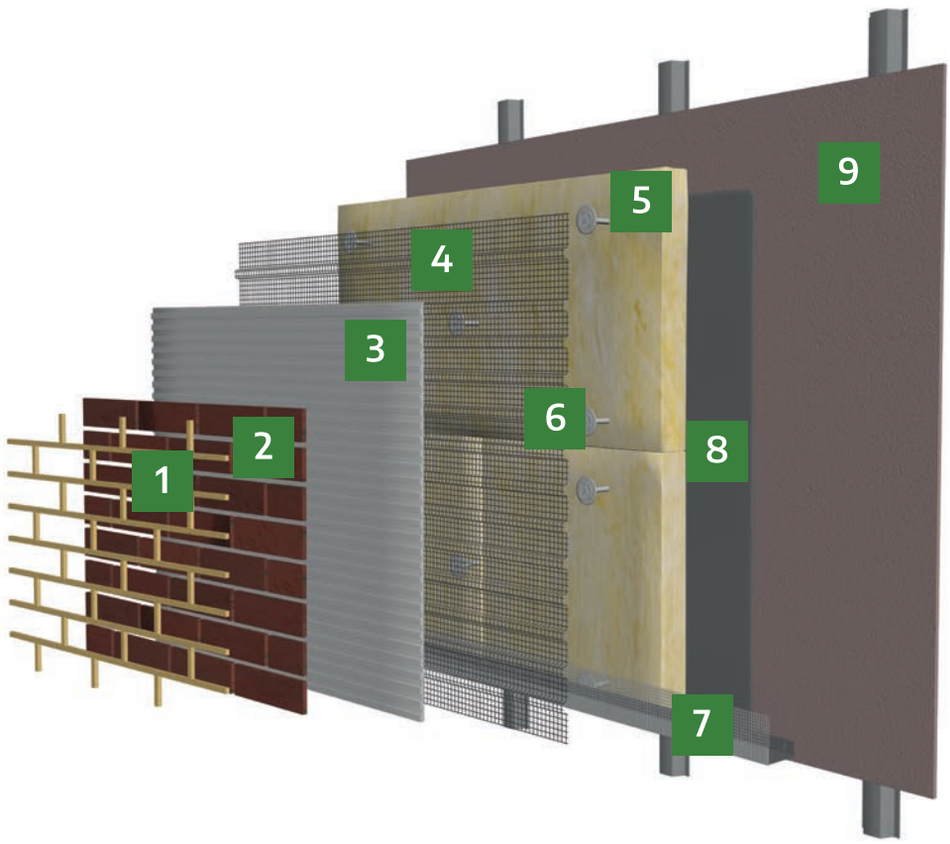


1. Silicone Paint
2. Mineral Render
3. Topcoat Primer
4. Fibreglass Mesh
5. Basecoat
6. Mineral Wool Insulation
7. Mechanical Fixing
8. Starter Track
9. Adhesive
10. Sheathing Board

Mineral Render is a decorative render system that pairs extremely well with Mineral Wool insulation boards. The render carrier boards present a sturdy, dimensionally stable substrate to hold the heavier Mineral Wool boards. The system is exceptionally durable as a result of the weight and composition of the products.

Mineral Render is a product ideally suited for winter application due to the accelerated drying times. The whole assembly can dry within 2 hours and fully cure within 12-24 hours. Once sealed with Silicone Paint, the system becomes hydrophobic and frost-proof. The combination of Mineral Wool and Mineral Render acts as a fire break. The system is currently undergoing stringent testing by the BBA and we hope to have certification soon.

BRICKSLIPS WITH MINERAL WOOL INSULATION ONTO FRAME SYSTEMS

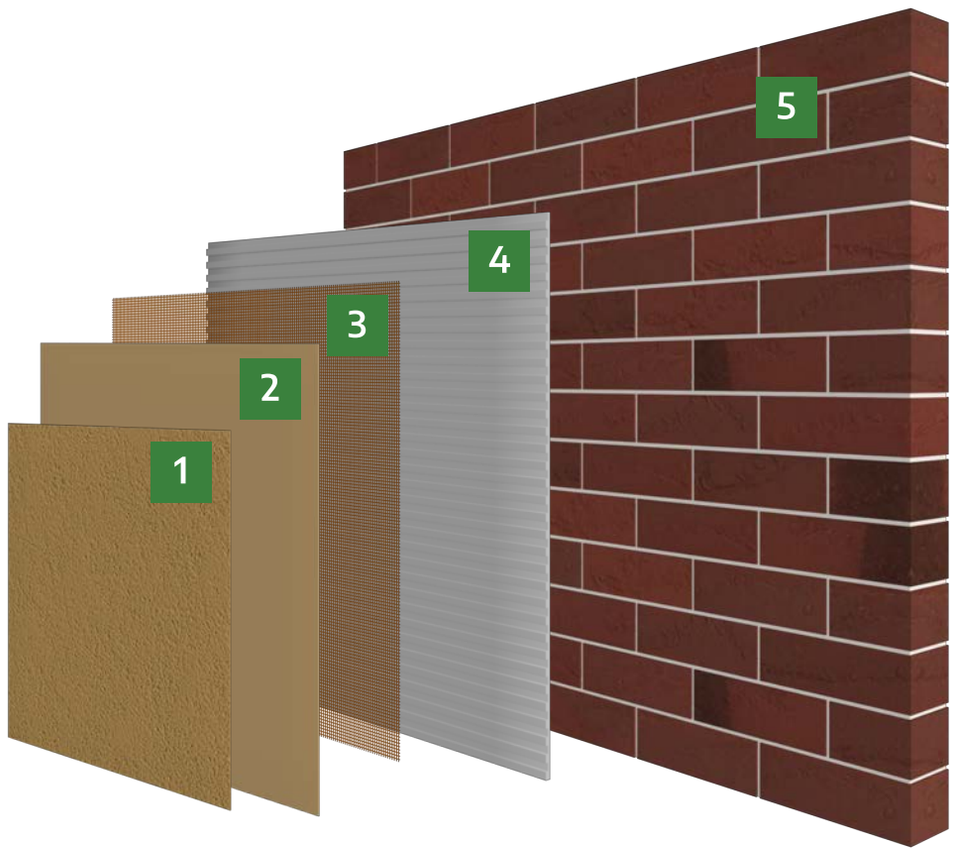


1. Grout
2. Brickslips
3. Adhesive
4. Fibreglass Mesh
5. Mineral Wool Insulation
6. Mechanical Fixing
7. Starter Track
8. Adhesive
9. Sheathing Board

The perfect substitute for traditional brickwork! Brick slips offer an attractive finish to any external or internal façade. The system has a similar assembly to most other systems, utilising our basecoats, fibreglass mesh, and insulation. However, our specially designed Brick Slip Adhesive ensures that the brick slips are securely attached to the wall.

The process of installation is much more simple in comparison to traditional brickwork; brick slips with joints essentially stack together like Lego bricks! Jointless brick slips can be cut with scissors and bent around corners with ease. The system is finished off with specially designed Brick Slip Grout, available in different colours to match other parts of the assembly. The system is currently undergoing stringent testing by the BBA and we hope to have certification soon.

RENDER ONLY SYSTEM ONTO BRICK

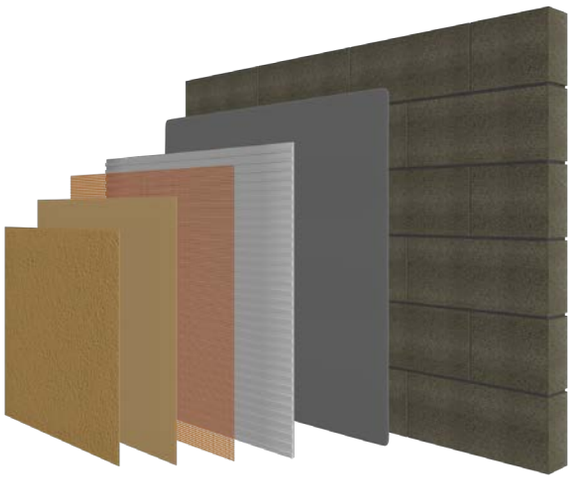


1. Silicone Render
2. Topcoat Primer
3. Fibreglass Mesh
4. Basecoat
5. Brick

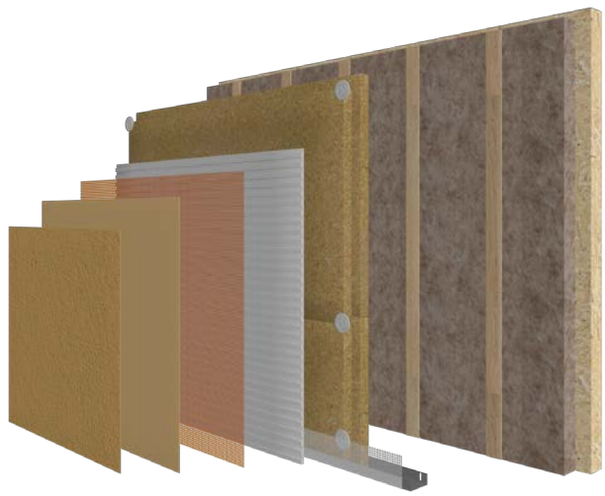
The render-only system places the spotlight firmly on our range of Silicone Renders. The basecoat layer will serve as a level base for the application of the render. Fibreglass Mesh reinforces and ensures that breathability is not compromised. The overlapping portions of the mesh ensure that there are no weak spots in the envelope that could be susceptible to cracking. Finally, our Silicone Render range provides a highly flexible, durable, and fully weather-resistant surface.

Our 4 Silicone Renders all offer extra benefits that reinforce the base functionality of silicone-enhanced renders. EWI-075 combines a strong set of benefits at a great price point. EWI-040 has enhanced resistance to mechanical impact. EWI-076 offers advanced mechanical impact resistance and active self-cleaning. EWI-077 offers an unmatched combination of all benefits; enhanced UV resistance, breathability, and total weather resistance. Active biological resistance ensures that the façade maintains its brilliance for up to 25 years.

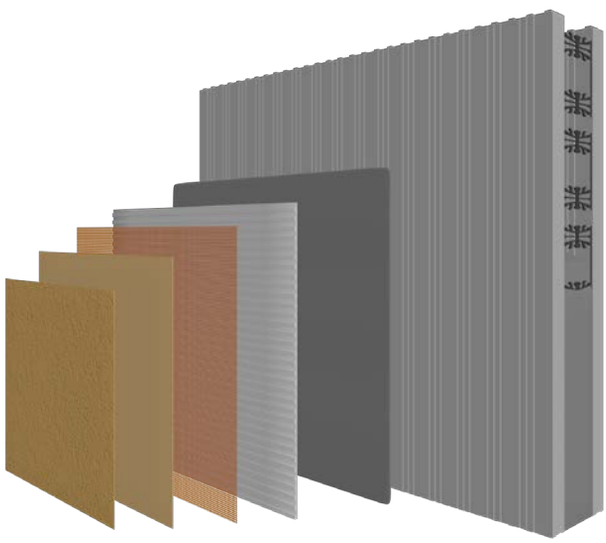
RENDER ONLY ONTO BLOCKWORK



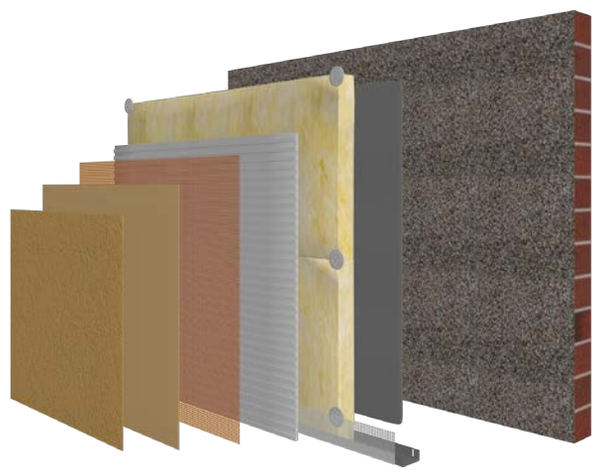
RENDER ONTO WOOD FIBRE INSULATION



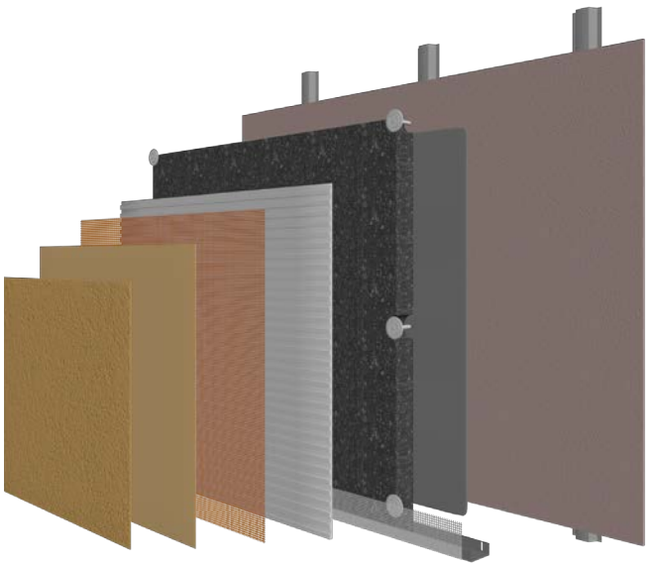
RENDER ONTO ICF



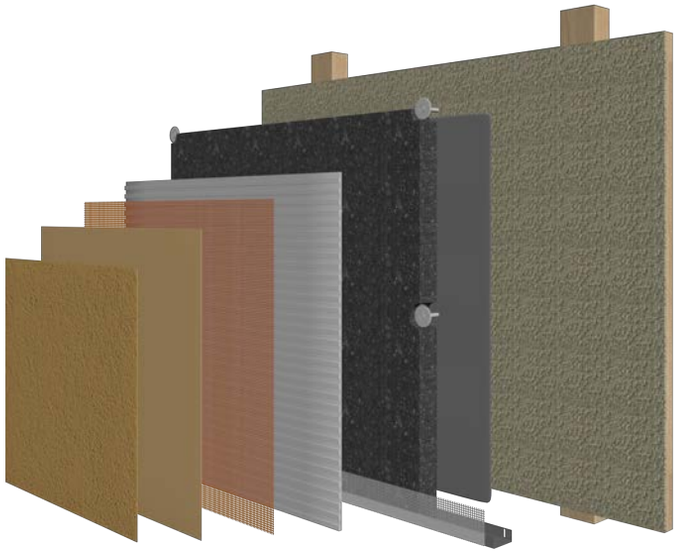
MINERAL WOOL ONTO PEBBLEDASH



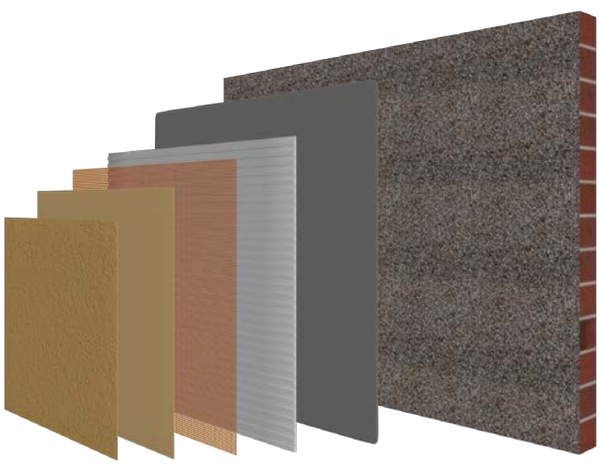
EPS ONTO RENDER CARRIER BOARD



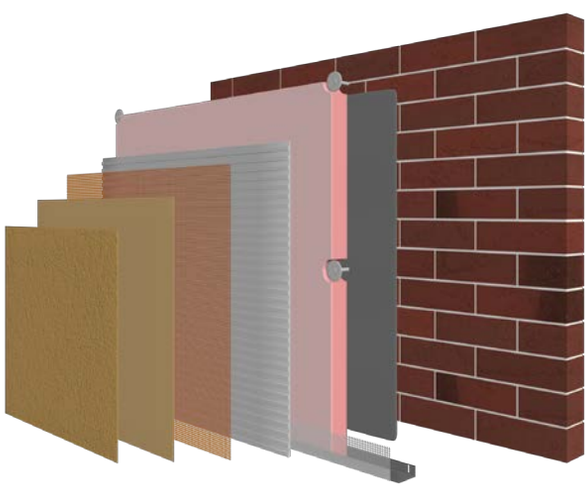
PARK HOME - RENDER ONTO RENDER CARRIER BOARD



RENDER ONLY ONTO PEBBLEDASH



KINGSPAN K5 ONTO RED BRICK



INSTALL GUIDES

EWI ONTO BRICK/BLOCK

STEP 1: SURFACE PREPARATION

As with every job, preparation is extremely important. Before applying any insulation to the substrate, it must be examined and checked. The substrate must be clean, dry and dust-free. If applicable, it also must be clear of paint and other substances which may affect the performance of the insulation adhesive. The best way to achieve a clean, ready surface is to use a high-pressure water jet or prepare the wall mechanically using a wire brush.

STEP 2: SUBSTRATE SUITABILITY CHECK

Before commencing any project, it is recommended to undertake pull-out tests to determine the correct fixing. To do this, you must use a Hydrajaw fixing tester (or equivalent) which allows you to test the strength of the substrate and ensure it is strong enough to hold the solid wall insulation system. It is recommended that the substrate is tested in 15 places per project; on larger projects, you may wish to carry out more. If you are unfamiliar with the process, our field-based operatives offer independent testing.

STEP 3: SURFACE PRIMING

Once the substrate has been prepared, it must be primed before any adhesive or insulation can be applied.

Before carrying out any works, we recommend priming the substrate with EWI-301 Water Based Primer, a primer that works similarly to PVA primer by sealing porous surfaces.

If the substrate requires increased adhesion (on very smooth surfaces, for example), we recommend using our EWI-310 Universal Primer.

This contains silicate which provides a rougher surface on which the adhesives and insulation boards can be mounted.

The amount of primer required will depend on the absorptivity of the underlying substrate. Typically, this can be anywhere between 50-300ml per m^2.

The primers will take approximately 4 hours to dry; however, additional coats may be required depending upon the absorptivity of the substrate. Between primer coats, allow 24 hours for drying.

Materials Required:

EWI-301 Water-Based Substrate Primer (5L)
EWI-310 Universal Primer (20kg)

STEP 4: STARTER TRACK INSTALLATION

Once the walls are primed, the Starter Track must be installed. The Starter Track is attached to the substrate above the DPC to not only provide a level surface for easy installation of the insulation, but also to protect the bottom of the surface of the insulation against weather, damp and other damage.

EWI Pro offer either a uPVC Starter Track or an Aluminium Starter Track. The uPVC Starter Track is our premium product and helps to minimise thermal bridging. The Aluminium Starter Track requires a uPVC starter track connector which provides a layer of mesh that helps to tie the system together when the reinforcement layer is added. Both types of starter tracks are fixed to the substrate using screws and wall plugs fixed at 300mm centres to ensure the Starter Track is secured in place.

STEP 5: APPLYING ADHESIVE TO INSULATION BOARDS

The graphite EPS insulation boards are attached to the substrate with one of our adhesives. Normally, we recommend using EWI-220 EPS Basecoat as the adhesive for attaching the EPS to the substrate because it means that, only one type of bag is required on-site.

Correct preparation of EPS adhesive is crucial. EWI-220 EPS Basecoat Adhesive should be mixed with clean water at a ratio of 6.5L per 25kg bag, then mixed using a heavy-duty power plaster mixer on a slow rotation. The final freshly mixed compound should be left for approximately five to ten minutes, then remixed for a short time before use. Bucket life is approximately one hour, although this may vary depending on weather conditions.

Materials Required:

EWI-220 EPS Basecoat
EWI-225 Premium Basecoat

Graphite EPS
Mineral Wool
Kingspan K5

To apply the adhesive onto the EPS insulation boards, we recommend following a modified 'dot-and-dab' method. Namely, a border of adhesive should be applied around the perimeter of the EPS board followed by three large dabs in the centre of the board.

Using a trowel, apply the adhesive evenly around the edges of the EPS board (3-4cm wide track) and inside that area, dot-and-dab ideally three adhesive spots.

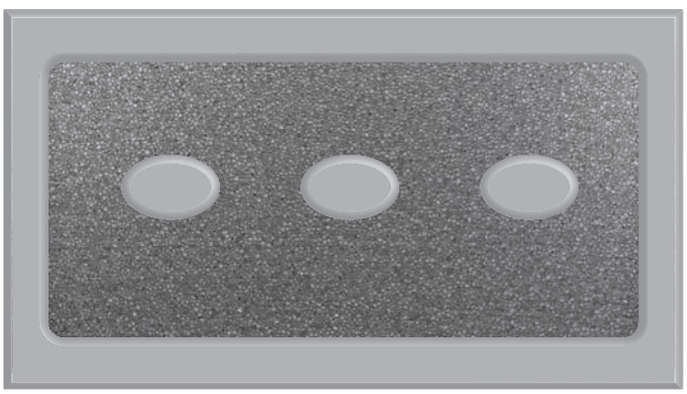
As a general rule of thumb, EPS adhesive should cover no less than 40% of the surface of the insulation sheet. It is also perfectly fine to use a notched trowel to apply a layer of the adhesive to the entirety of the EPS board, especially if the wall is flat.

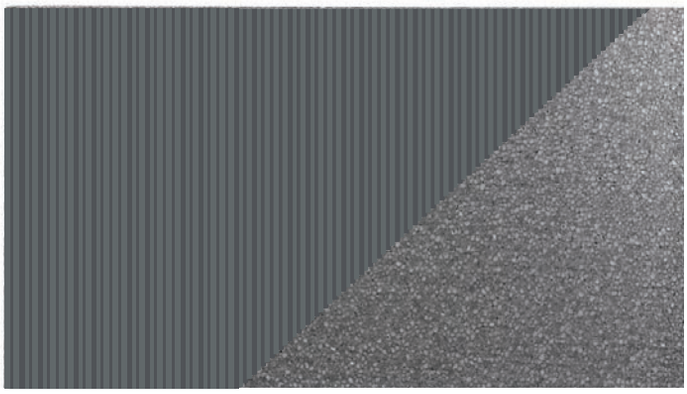
The amount of adhesive used by either of these methods should be approximately the same: each 25kg bag should be able to mount approximately 8-10m² of boards to the substrate. However, this does vary depending upon the quality of the surface on which the boards are being mounted; a flat wall will use less, while a textured wall will use more.

If applying Rockwool or Kingspan K5 to the substrate, EWI-225 must be used as the adhesive given that the presence of white Portland cement makes it even stronger. The process for application follows that of EPS.

STEP 6: APPLYING INSULATION TO THE SUBSTRATE

The insulation boards should be attached to the wall in a staggered formation. At the corners, it is vital to interlink the insulation from the two sides. When installing EPS insulation around window and door openings, the joints between the boards must not be in line with these openings as this will prevent cracks from appearing in future.





STEP 7: LEVEL CONTROL AND FILLING GAPS BETWEEN INSULATION BOARDS

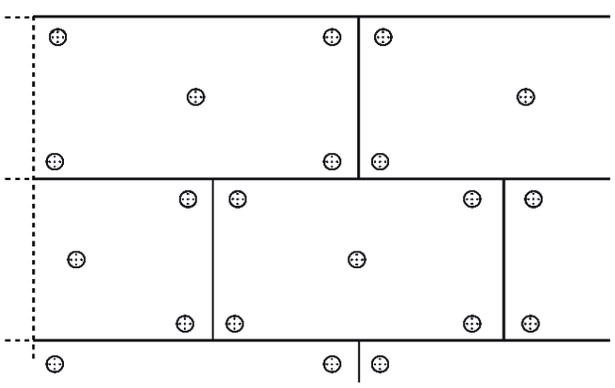
When attached to the substrate, ensure the EPS insulation boards are aligned properly both horizontally and vertically; this is best achieved using a spirit level. Where there are gaps between the boards that are larger than 2mm, fill them with polystyrene strips cut from the insulation boards. Do not use one of our bagged adhesives for filling these gaps; this is a common mistake which can lead to the formation of cold bridges and cracks around the joints between the boards.

STEP 8: MECHANICAL FIXINGS

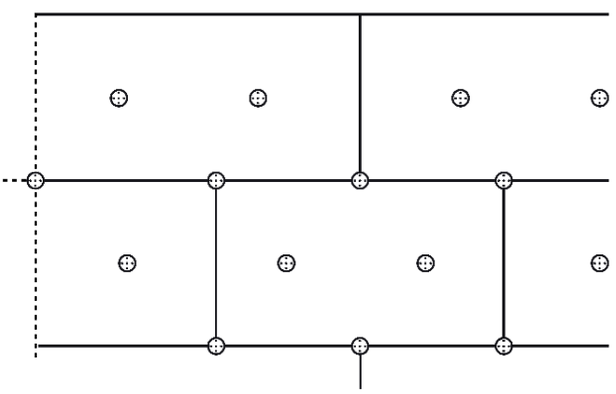
Mechanical fixings are used as an additional fixing mechanism to tie the insulation to the substrate and help make for an even more secure installation. The holes for the fixings should be drilled at least 2 or 3 days after the insulation boards have been attached to the substrate with the adhesive and before adding the reinforcing fibreglass mesh layer. We recommend using 5 mechanical fixings per board or 7 per m^2. Depending on the fixing that is used, they can either be hammered into place or screwed into the insulation with a power tool.

The mechanical fixings must be a minimum of 40mm longer than the thickness of the insulation. If Metal Pin Mechanical Fixings are used, we recommend using EPS dowel caps to minimise thermal bridging. These are held in place using the EWI-220 Adhesive and, once the system is dry, you should not be able to see any trace of the mechanical fixings.

Fixing Pattern 1

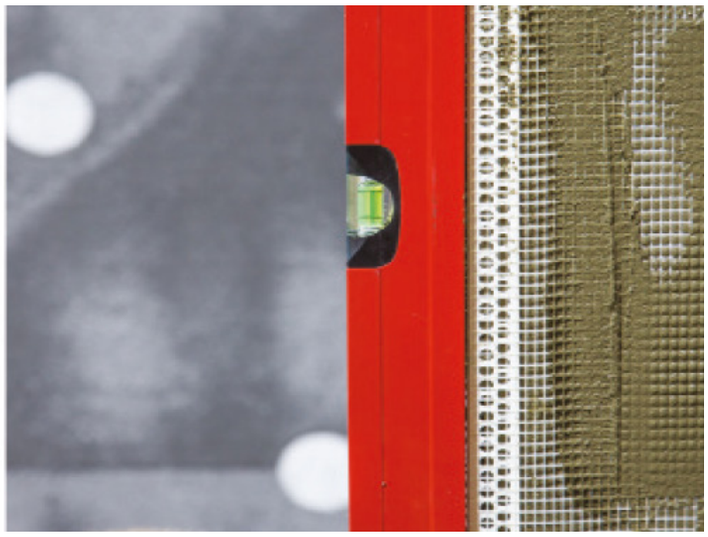


Fixing Pattern 2



STEP 9: SMOOTHING AND LEVELLING THE FAÇADE

The surface of the insulation boards must be smooth and level throughout the façade. All uneven areas should be made good before applying the reinforcement layer. For EPS, a polystyrene rasp can be used to smooth the outer surface of the graphite EPS boards. The EPS boards should be smoothed out at least one-to-two days after they have been installed to ensure the adhesive has had sufficient time to go off.



STEP 10: INSTALLING THE BASECOAT REINFORCEMENT MESH LAYER

For the reinforcement layer, use the EWI-220 EPS Basecoat for EPS insulation and the EWI-225 Premium Basecoat for any other insulation. The preparation of these basecoats is covered in Step 5 of this guide. The basecoat is applied with a notched trowel to the top of the EPS insulation boards; this layer needs to be approximately 5-6mm.

The mesh is then placed onto the basecoat in vertical strips and embedded into the adhesive using the flat edge of a notched trowel. Each vertical strip of Fibreglass Mesh should overlap its neighbouring vertical strip by approximately 100 - 150mm.

Materials Required:

EWI-220 EPS Basecoat
EWI-225 Premium Basecoat
Panzer Mesh

STEP 11: SILICONE RENDER APPLICATION

The renders listed are all ready to use straight from the bucket. If a coloured render is being used, ensure the colour matches your order.

Using a trowel, apply a thin layer of the render to the primer surface – remember, as these are thin-coat renders, your finished render layer must be just 0.5mm, 1mm, 1.5mm, 2mm or 3mm thick depending on the granulate render chosen. Once the render has been applied, smooth it out using the trowel, taking the excess off the wall to ensure an extremely thin layer.

Then, using a PVC float, work the render by moving it in circular movements; this will provide the textured finish of the render. Although it may seem complicated at first, the application procedure is easy and straightforward; however, we suggest practising on a small area first. Remember to have enough staff on-site to ensure that whole sections of walls can be completed at the same time. If you attempt to do 'half a wall' at a time, you will notice scarring where the two sections of render meet; natural breaks in render surfaces include corners and where render ends.

Materials Required:

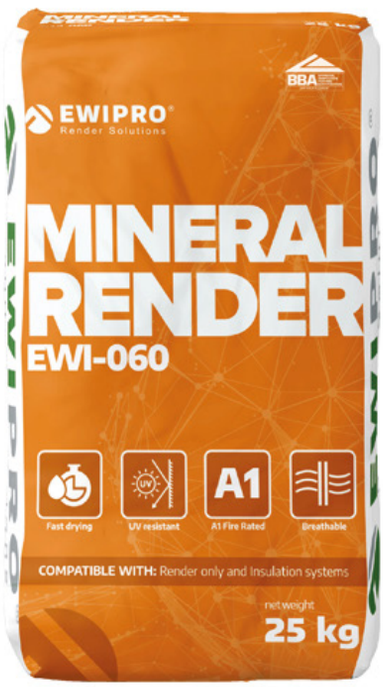
EWI-075 Silicone Render
EWI-076 Premium Bio Silicone Render
EWI-077 Nano Drex Silicone Render
EWI-040 Silicone Silicate Render

Unlike the ready-to-use renders, Mineral Render comes as a white, dry mix that is then painted over with a Silicone Paint to provide the desired colour. The dry-mix Mineral Render dries far quicker than the ready to-use liquid renders and is therefore installed in colder or more humid climates. The Mineral Render requires 6.5L of clean water per 25kg bag and the compound should be mixed using a heavy-duty power plaster mixer on a slow rotation to produce a homogenous white plaster before application.

Allow the render at least 24 hours drying time before applying one of our Silicone Paints. For a full and detailed guide to installing our renders, please see our thin-coat and thick-coat render install guides.

Materials Required:

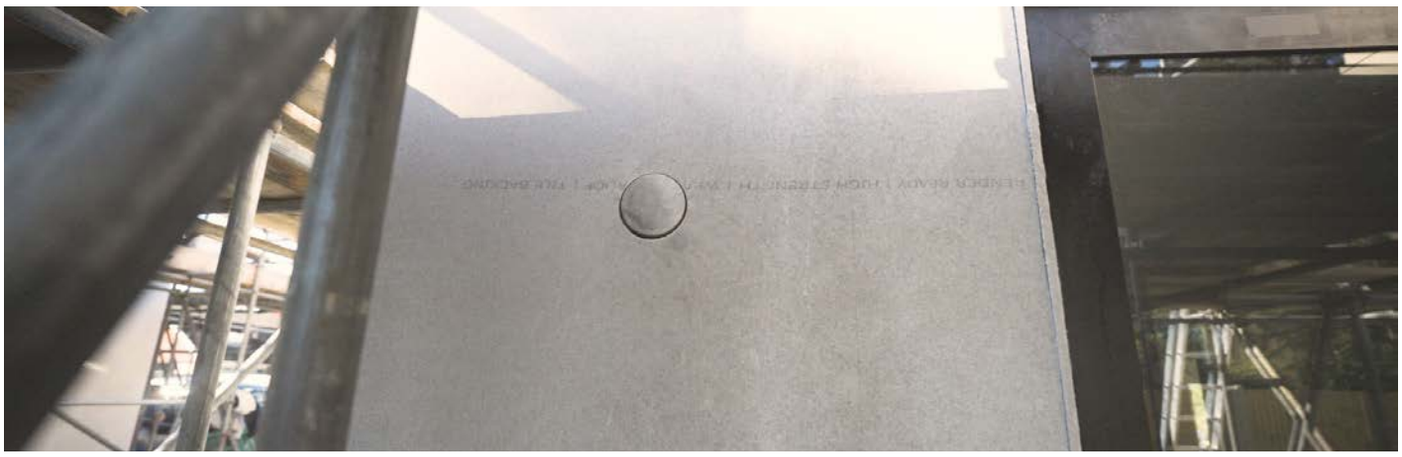
EWI-060 Mineral Render
EWI-006 Premium Bio Silicone Paint
EWI-005 Silicone Paint



RENDER ONTO CARRIER BOARD

STEP 1: SURFACE PREPARATION

Again, as with any job, preparation is extremely important. Before applying the render, the substrate must be examined and the render carrier board (RCB) installed. Per the manufacturer's specification, the render carrier board must be correctly installed onto either a light steel or timber frame; check the manufacturer's specification for joint spacing and taping between the joints and ensure the fixings are structurally stable and properly adhered to.



STEP 2: VENTILATED CAVITIES AND INSECT MESH

Before applying any reinforcing basecoats, the correct beading must be installed. On a ventilated cavity system, the boards normally sit at 400mm or 600mm centres in front of an air gap of at least 25mm. Any air cavity must be left uninhibited to allow for proper drainage whilst simultaneously safeguarding against any insect infestations; install a ventilated bead or insect mesh between the spacing to reduce this risk.

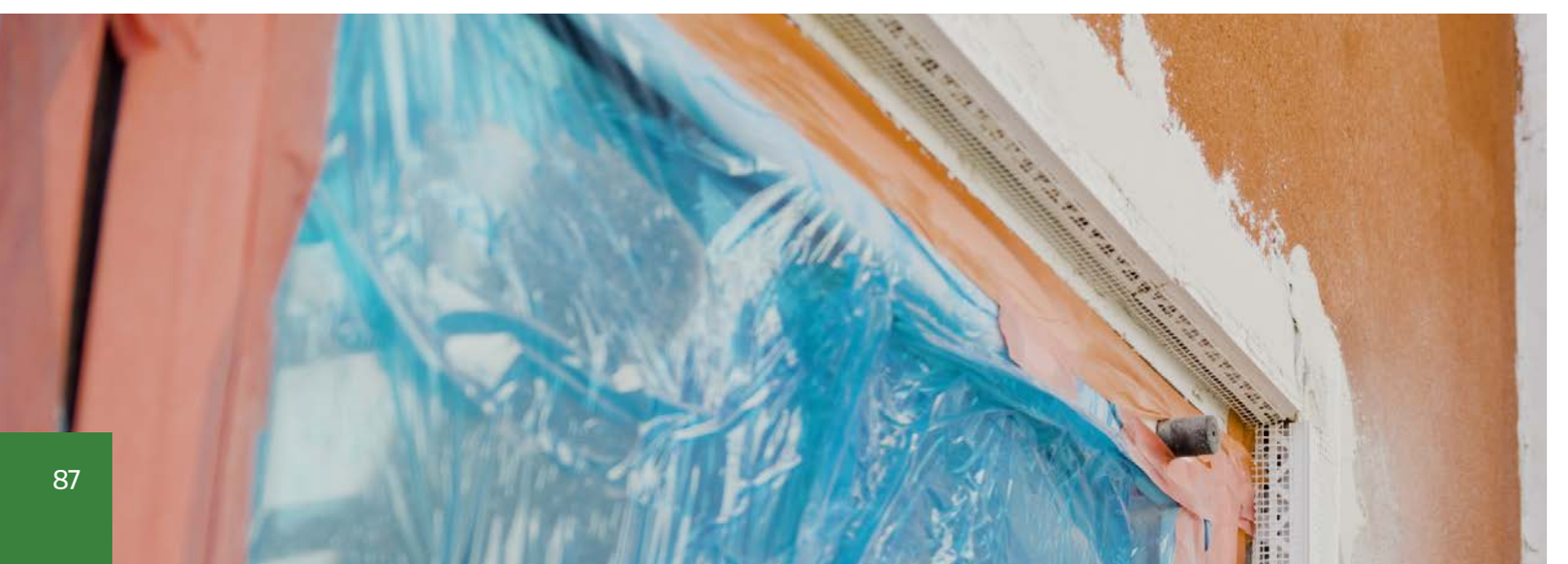
STEP 3: INSTALLING THE BEADING

Beading is used in our systems to reinforce areas that are likely to experience impact (e.g. external corners) and to try to direct water away from the surface of the render by providing a drip. All our beadings are uPVC-based and will therefore not rust. Cut beads to the required length and embed them into the basecoat layer.

The RCB tray (12mm) should be housed at the bottom of the boards. Take the Clip-on Drip Bead (6mm or 10mm) and slot this onto the front of the RCB tray to create a natural bell drip. Repeat this process until the base perimeter of the boards is completely covered.

Next, install corner beads with mesh onto any external corners, including elevation corners and around windows and openings.

To install the beading, simply mix EWI-225 Premium Basecoat with the appropriate quantity of water, leave the adhesive for five minutes then apply the product over the beading mesh to adhere it to the substrate. Repeat this process for all corners. To minimise the use of mastics around windows and the final render finish, consider using our Window Reveal Bead.



STEP 4: PREPARING THE BASECOAT LAYER

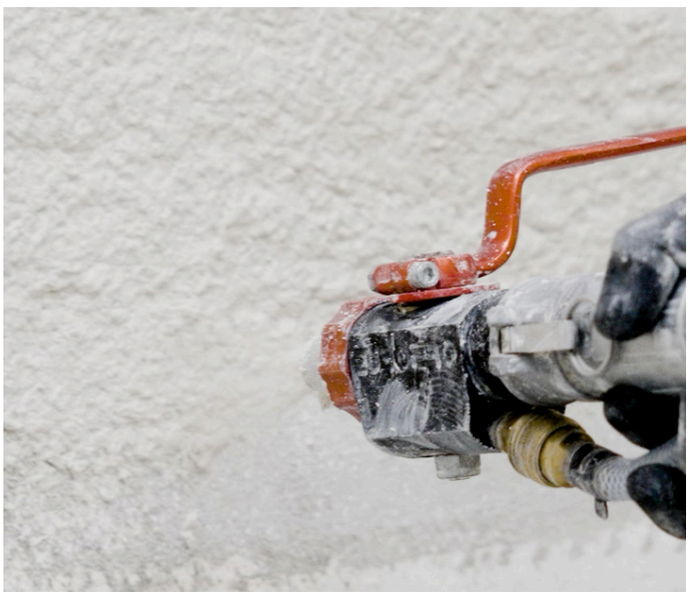
Once the beading is in position, the basecoat reinforcement layer is installed. Remember: the beads are completely embedded within the basecoat, so they should be invisible.

Using a trowel, apply the EWI-225 Premium Basecoat onto the substrate before embedding strips of Fibreglass Mesh within it.

Correct preparation of the EWI-225 Premium Basecoat is crucial. EWI-225 Premium Basecoat should be mixed with clean water at a ratio of 6.5 litres per 25kg bag, then mixed using a heavy-duty power plaster mixer on a slow rotation. The freshly mixed compound should be left for approximately five to ten minutes, then re-mixed for a short time before use. Bucket life is approximately one hour, although this may vary depending on weather conditions.

Materials Required:

EWI-225 - Premium Basecoat
Panzer Mesh



STEP 5: APPLYING THE BASECOAT LAYER

The basecoat can be applied as either a one or two-pass application with Fibreglass Mesh embedded within it.

The one-pass system should be applied with a notched trowel to the substrate at a thickness of 6-8mm. The mesh is then embedded within the basecoat in vertical strips using the flat edge of a notched trowel. Each strip of Fibreglass Mesh should overlap its neighbouring strip by approximately 100 - 150mm. The EWI-225 Premium Basecoat can be ruled off with a speed skim or sponge floated for a completely flat finish.

The two-pass system should be applied with a notched trowel to the substrate; this layer should be between 3-4mm. The mesh is then placed onto the basecoat in vertical strips and embedded using the flat edge of a notched trowel. Another coat of basecoat should be applied onto the mesh at a thickness of 3-4mm before the first coat has gone off. The EWI-225 Premium Basecoat can be ruled off with a speed skim or sponge floated for a completely flat finish.

STEP 6: PRIMING BEFORE RENDERING

Once the basecoat reinforcement layer has dried for 24-48 hours (depending on weather conditions), it needs to be primed before applying the render. The EWI-333 Topcoat Primer is simply painted on top of the basecoat reinforcement layer using either a paintbrush or a roller.

This should be left to dry for 12-24 hours prior to rendering. The primer is also through-coloured with the same tint as the topcoat to avoid staining the topcoat and to ensure the final colour comes through on the rendering finish.

Materials Required:

EWI-333 Topcoat Primer

STEP 7: RENDERING THE WALLS

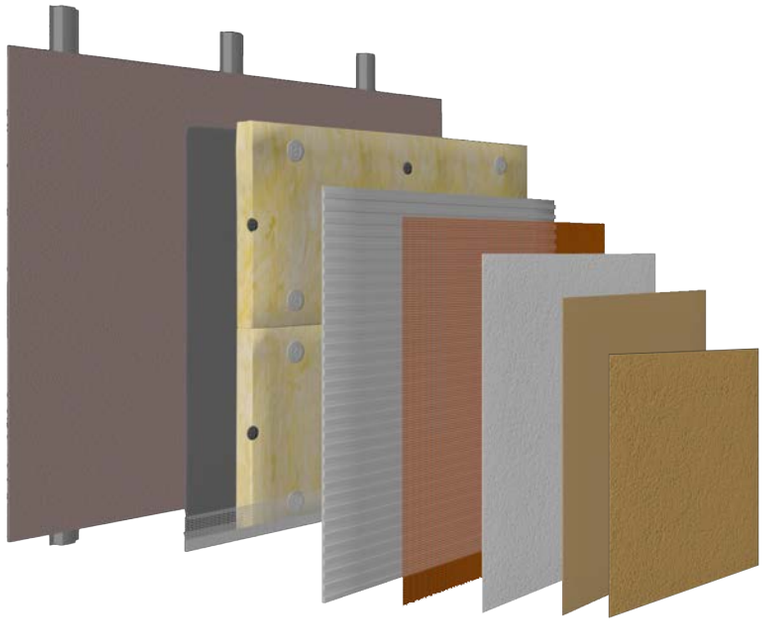
We recommend using one of our silicone renders when rendering onto Render Carrier Board.

Using a trowel, apply a thin layer of render to the primer surface – remember, as these are thin-coat renders, your finished render layer must be just 0.5m, 1mm, 1.5mm, 2mm or 3mm depending on the granulate render chosen. Once the render has been applied, smooth it out using a trowel, taking the excess off the wall to ensure an extremely thin layer.

Then, using a PVC float, work the render in circular movements; this will provide a textured finish of the render. Remember to have enough staff on-site to ensure that whole sections of walls can be completed at the same time. If you attempt to do 'half a wall' at a time, you will notice scarring where the two sections of render meet.

If the render is tinted, please check the bucket to ensure that it is the colour you are expecting (ideally comparing it to a sample pot). It is also recommended to mix three buckets of render into one large bucket at a time, topping up and re-mixing regularly, to ensure consistency in colour.

MINERAL WOOL & MINERAL RENDER (FRAME SYSTEMS)



STEP 1: SHEATHING BOARD PREPARATION

The presumption for the installation of the Mineral Wool & Mineral Render is that the carrying substrate is a sheathing board. These will typically be attached to either timber or steel frames, offering both weather protection for the structural elements, and additional structural support. The sheathing board will normally be attached at 600mm centres to ensure an extremely robust substrate, capable of holding the insulation and render installation. Most sheathing boards offer basic weather and fire protection.

STEP 2: STARTER TRACK INSTALLATION

The starter track is attached to the bottom edge of the sheathing board. This not only provides a level surface for easy installation of the insulation, but it also protects the base of the insulation against weather, damp and other damage.

We offer either a uPVC starter track or an aluminium starter track. The uPVC starter track is our premium product and helps minimise thermal bridging. Aluminium starter requires a clip-on profile, which provides a layer of mesh that helps to tie the starter track together with the insulation when the reinforcement layer is added.

Both types of starter track are fixed to the substrate self-drilling screws, fixed at 300mm centres to ensure the starter track is held securely in place.

STEP 3: PREPARING THE ADHESIVE

Once the starter track is in position, you will need to start fixing the Mineral Wool boards to the substrate.

The Mineral Wool insulation boards are attached to the substrate with our EWI-225 product. We always recommend using EWI-225 Premium Basecoat as the adhesive for attaching the Mineral Wool to the sheathing board as this is our strongest and most robust adhesive.

EWI-225 comes as a dry mix in 25kg bags and should be combined with clean water at a ratio of 6.5 litres per 25kg bag. To do this, use a heavy-duty power plaster mixer on a slow rotating setting. Freshly mixed adhesive should be left for approximately 5 minutes and then re-mixed for a short period of time before use. Bucket life is approximately 1 hour, although this is dependent upon the weather conditions.

We recommend applying the adhesive onto the Mineral Wool insulation boards either using a notched trowel to apply a layer of the adhesive to the entirety of the Mineral Wool board or using the adapted 'dot-n-dab envelope' method. The adapted dot-n-dab envelope method applies the adhesive to the whole perimeter of the board with 3 dots in the middle. This will provide an airtight finish.

The amount of adhesive used by either of these methods should be approximately the same. Each 25kg bag should be able to mount approximately 4-5m^2 of boards to the substrate.

Materials Required:

EWI-225 - Premium Basecoat

STEP 4: APPLYING THE MINERAL WOOL TO THE SUBSTRATE

The Mineral Wool insulation boards should be attached to the wall in a staggered formation. At the corners, it is important to interlink the insulation from the two sides.

When installing Mineral Wool insulation around window and door openings, it is important that the joints between boards are not in line with these openings. This will prevent cracks appearing in the future. For best results and ease of installation, we recommend the use of Lintel Mesh corners, which helps strengthen this area.

There is very little room for correction with the Mineral Wool boards. It is therefore important to ensure that the boards are aligned correctly both horizontally and vertically, with no gaps. This is best achieved using a spirit level.

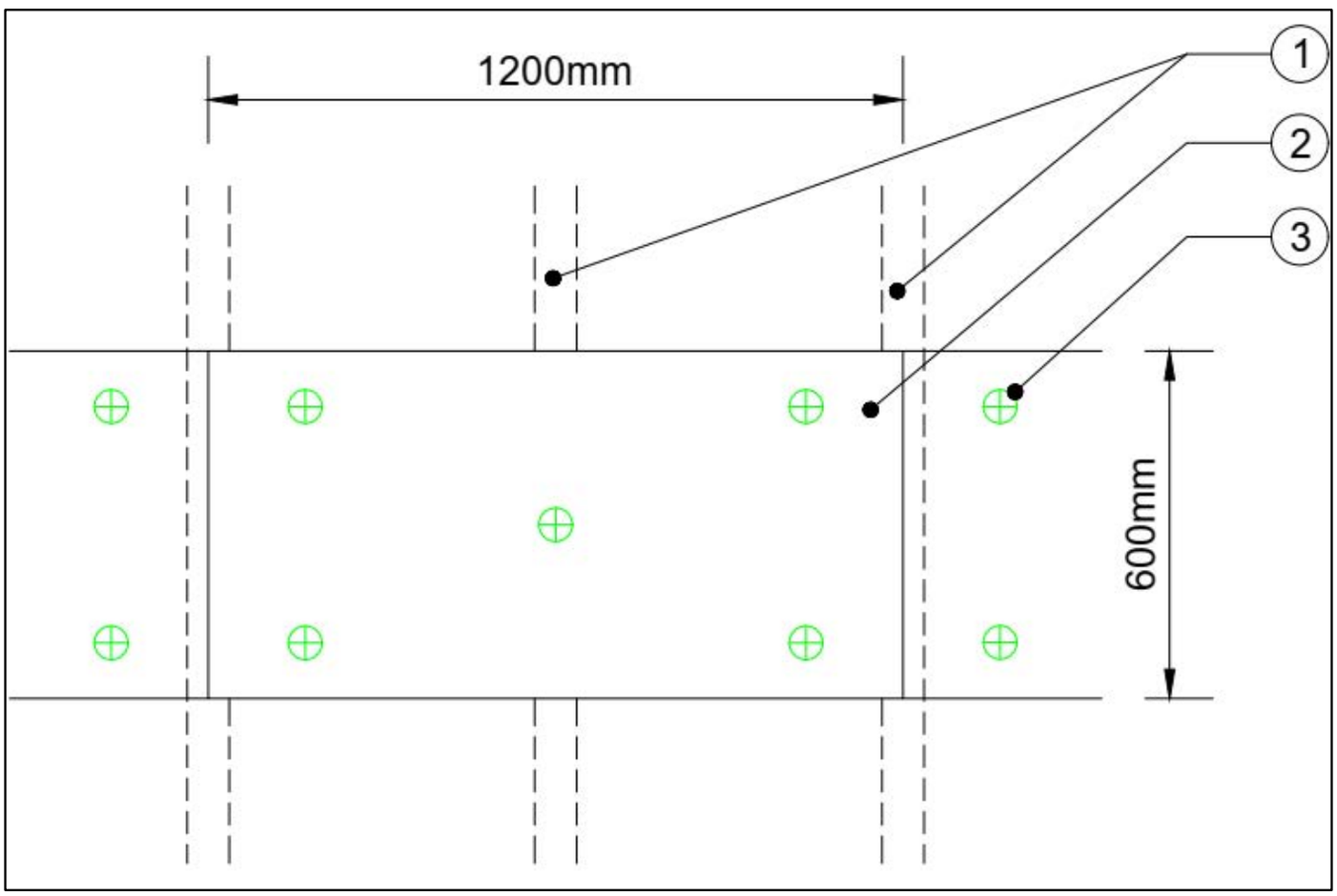
STEP 5: MECHANICAL FIXINGS

All our insulation systems require the use of mechanical fixings as an additional method of tying the insulation to the sheathing board. The mechanical fixings help to ensure a completely secure system. Installation of the fixings should take place at least 1-2 days after the Mineral Wool boards have been attached to the substrate with the adhesive.

When fixing Mineral Wool insulation to sheathing boards, we recommend using our Plastic Fixing Discs in combination with a suitable screw. The boards are fixed back to the structural frame (typically wood or steel battens). The fixing pattern is shown below.

Labels:

1. Steel frame
2. Rockwool dual-density slab
3. EWI fixings, at 5 fixings per slab



Each 1200 x 600mm board is attached to the sheathing board using the domino pattern of 5 fixings per slab. Around windows additional fixings are used to reinforce these areas.

STEP 6 PREPARING & APPLYING THE BASECOAT LAYER

For this stage you need to use the EWI-225 Premium Basecoat which is trowelled onto the insulation boards before strips of Fibreglass Mesh are embedded within it. Our Fibreglass Mesh is available in 50m² rolls, which once overlapped covers approximately 42m².

The EWI-225 Premium Basecoat is prepared in the same way as Step 3.

The basecoat can be applied as either a one pass or two pass application with Fibreglass Mesh embedded within it.

One Pass Application - The one pass system should be applied with a notched trowel to the substrate at a thickness of 6-8mm. The mesh is then embedded within the basecoat in vertical strips using the flat edge of a notched trowel. Each strip of Fibreglass Mesh should overlap its neighbouring strip by approximately 100 - 150mm. The EWI-225 Premium Basecoat can be ruled off with a speed skim or sponge floated for a completely flat finish.

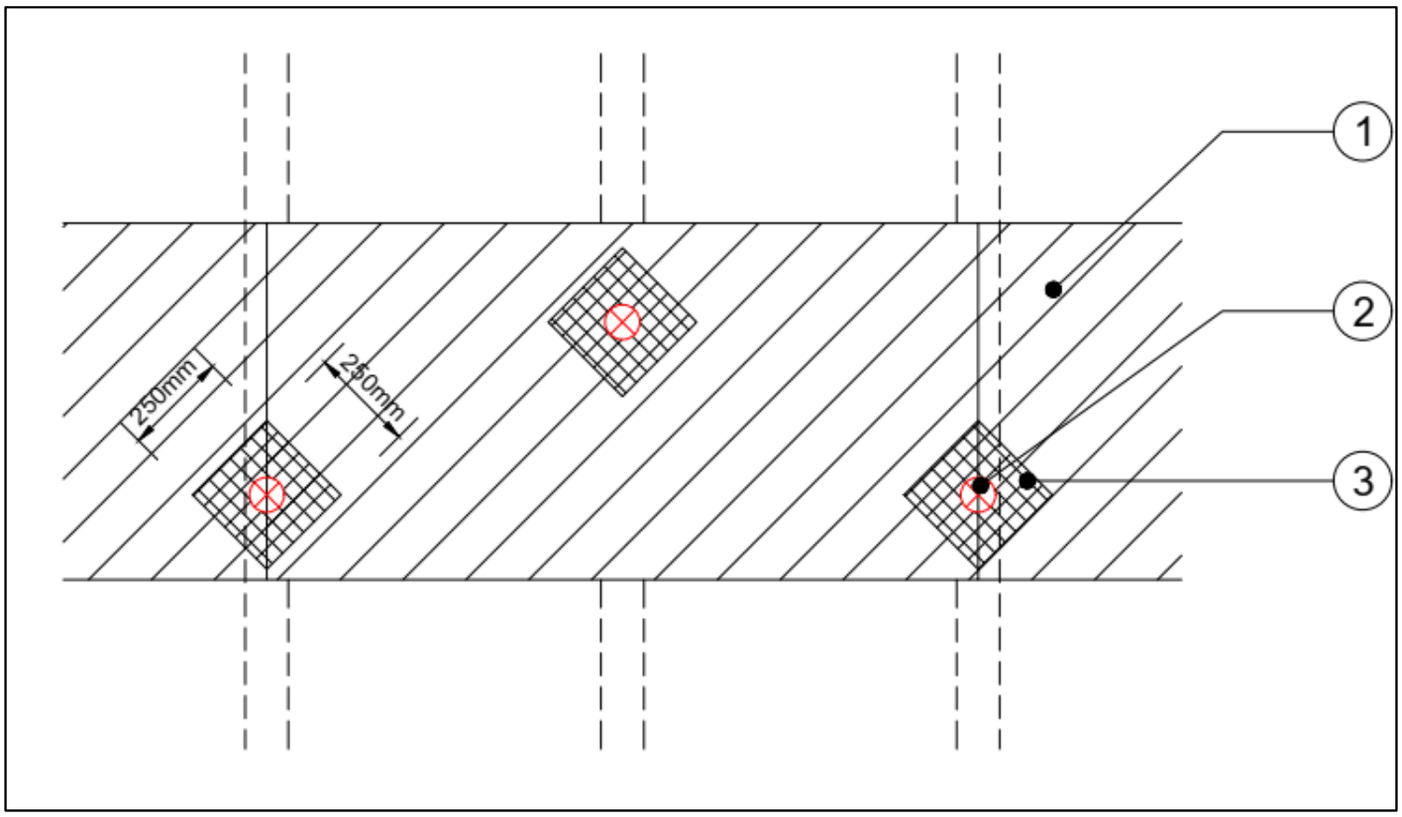
Two Pass Application - The two-pass system should be applied with a notched trowel to the substrate - this layer needs to be between 3-4mm. The mesh is then placed onto the basecoat in vertical strips and embedded using the flat edge of a notched trowel. Another coat of basecoat should be applied onto the mesh at a thickness of 3-4mm before the first coat has gone off. The EWI-225 Premium Basecoat can be ruled off with a speed skim or sponge floated for a completely flat finish.

STEP 7 INSTALLING ADDITIONAL FIRE FIXINGS INTO THE STEEL FRAME

In order to have robust pull-out values and to “fireproof” the system we would install additional fire fixings with metal washers into the steel frame. The fixings should be installed on the same day the basecoat layer has been applied – this is so that the fixings can successfully penetrate through the system and it embeds into the layer.

Labels:

1. Reinforcement coat with basecoat and fibreglass mesh
2. Fire fixing into frame (2 per slab)
3. 250mm x 250mm piece of additional fibreglass mesh, subsequently covered by additional basecoat



Additional 250mm x 250mm mesh strips are then cut out and installed over the fire fixings. They are embedded into the layer using the EWI-225 Premium Basecoat product. The installation should ensure that the fixings are fully covered, and the basecoat is nice and consistent.

Allow this layer to dry at least 24-48hrs before attempting to install the next layer in the process.

STEP 8 PREPARING & APPLYING THE MINERAL RENDER

Pour the dry mix into water, maintaining the proportion of 6.5 litres of water per 25kg of dry mix; then mix thoroughly with a mixer to produce a consistent texture. Leave for 5 minutes and then mix again before the product is ready for application.

Apply the render using a stainless-steel trowel to the substrate surface. The optimal thickness of the render is equal to the grain size and is achieved by removing any excess product from the substrate. To ensure an even textured finish, immediately rub up the surface of the render using circular motions with a plastic render float. Allow the render to dry completely before applying the final coat of Silicone Paint. Works must be protected from rain, snow, strong winds and direct sunlight. The average drying time for Mineral Render is 12-48 hours depending on weather conditions. The drying period may be significantly longer in low temperatures and high relative humidity.

STEP 9 SILICONE PAINT APPLICATION

Silicone Paint is crucial to seal in the Mineral Render, giving it frost-proof and hydrophobic qualities. The surface will also be resistant to algae and plant growth.

Check that the paint is the requested colour. Mix paint thoroughly in the container. When using more than one bucket of paint for the same surface, ensure that the batch numbers are matched.

Apply using brushes, rollers or spray equipment. Paint one surface continuously before moving onto the next surface – do not allow any parts of the painted surface to dry out in the process to avoid visible lines. Depending on weather conditions, the product should be applied after 3-7 days, and at the latest 21 days after rendering. In case of multi-layer render coats, the last layer must be 7 days old, although a single layer is usually sufficient.

Painting works must not be carried out during rain or snow, strong winds or direct sunlight without special shields to limit exposure to weather conditions. Paint coat drying time is 2-3 hours at a temperature of +20°C and about 65% relative humidity. Subsequent paint coats can be applied after 12 hours. This period can be longer in low temperatures and high relative humidity, e.g. in autumn. If the paint is still wet, falling mist can have the same effects as drizzle and may cause water stains and colour changes.

Paints with intense vibrant colours (reflection coefficient Y < 20%) should not be used for large façades; the resulting temperature and UV radiation in these conditions may reduce paint coat durability and cause colour fading.

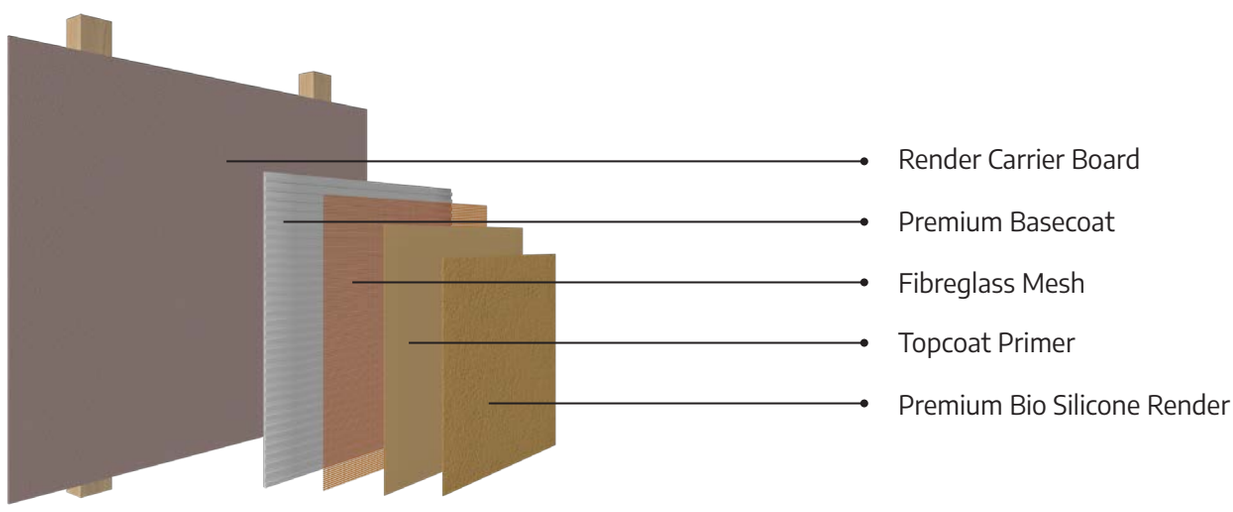
CASE STUDIES

RENDER ONTO CARRIER BOARD

Summary

- Substrate: Render Carrier Board
- U-Value change: N/A
- Topcoat: EWI-076 Premium Bio Silicone Render – 1.5mm
- Basecoat: EWI-225 Premium Basecoat
- Colour: RAL9016 Traffic White
- Location: Newquay
- Installer: First Renderers Ltd

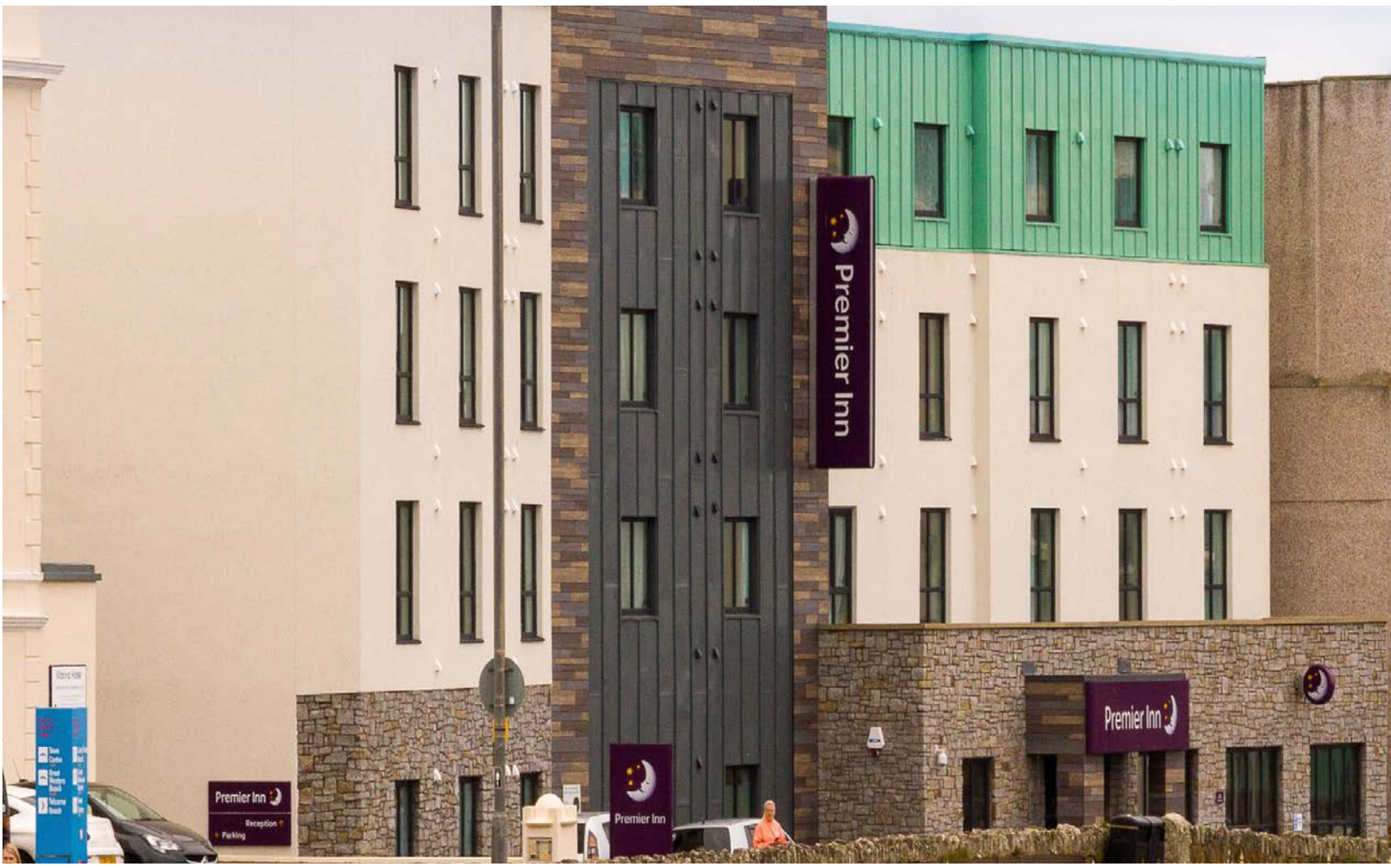
This exciting new build was constructed using a steel frame and completed with a decorative thin-coat system over render carrier board. Given their ability to withstand extreme weathering, movement and structure, render carrier boards provide an ideal foundation for thin-coat render systems; once the main structure is erected and has been fully boarded, the rendering process is relatively simple. As this large scale commercial project is in a high exposure zone, the specified system consisted of EWI-225 Premium Basecoat, 160g/m^2 alkali-resistant Fibreglass Mesh, and EWI-076 Premium Bio Silicone Render.



The basecoat on top of the render carrier board is embedded with fibreglass mesh to provide a reinforcing layer designed to prevent cracks. Per the architects' specification, the EWI-076 Premium Bio Silicone Render was through-coloured to RAL9016 Traffic White; the EWI-333 Topcoat Primer was tinted the same colour to ensure full consistency across the completed façade. What's more, not only can the Premium Bio Silicone Render withstand additional forces such as wind and water driven in from offsure in high exposure zones, but it also has slow-releasing anti-fungal agents which will maintain the façade's fresh appearance.

This large-scale project was specified by the EWI Pro Technical Team, the contractor, and the final client. In summary, specification involved the following components:
- A1 fire-rated Render Carrier Board
- Premium Basecoat and reinforcing mesh layer
- uPVC system beads

Hotel specifications:
- New build
- 1,700 SqM façade
- 83 rooms
- 41 guest parking spaces
- Restaurant and bar located on ground floor
- Situated along seafront
- Located in Narrowcliff, Newquay, Cornwall TR7

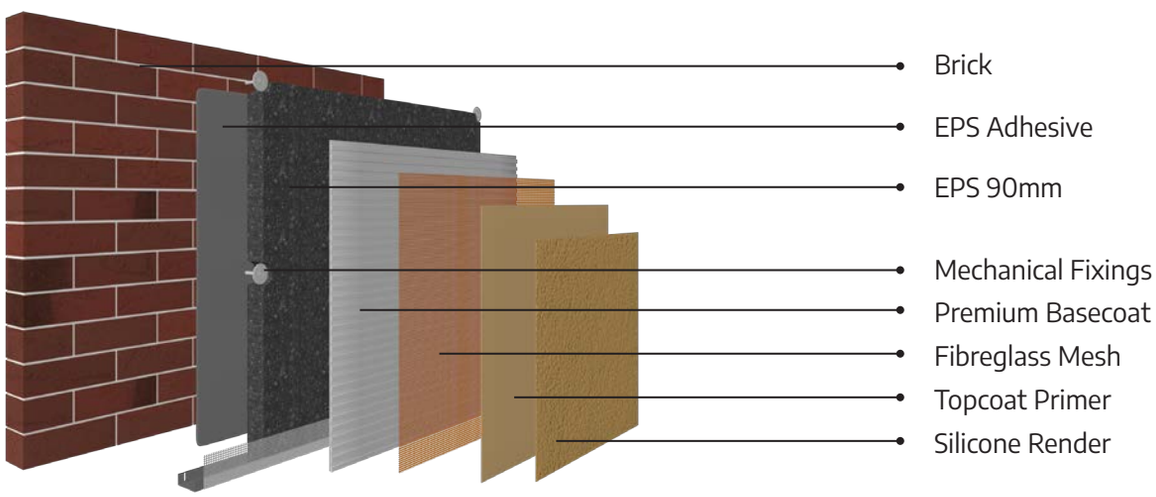


EPS ONTO BRICK

Summary

- Substrate: Existing Brickwork
- U-Value change: 2.7W/(m²K) - 0.3W/(m²K)
- Insulation: Expanded Polystyrene (EPS)
- Insulation Thickness: 90mm
- Basecoat: EWI-225 Premium Basecoat
- Topcoat: EWI-075 Silicone Render - 1.5mm grain size
- Colour: 28010 Porcelain
- Location: Twickenham
- Installer: WeInsulate

WeInsulate's retrofit of an existing brickwork residential property provides an example of our most popular system. Brickwork remains a popular form of construction but does not offer much in the way of thermal insulation.



The focus in this retrofit is the utilisation of our most popular products. EWI-225 Premium Basecoat doubles up as the stable adhesive for the application of the insulation boards, and the reinforcing basecoat to receive the render. EPS is a cost effective and high performance insulation board that does not sacrifice thermal performance. Following collaboration with the EWI Pro Business Development Team, WeInsulate installed 90mm of EPS insulation in order to achieve a U-value of 0.3W/(m^2K).

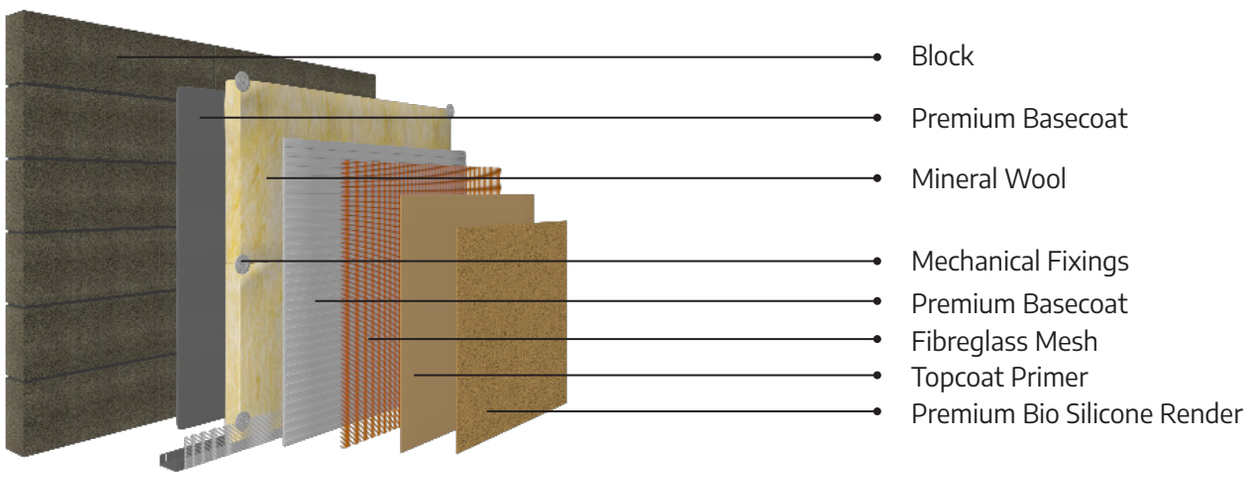
The 1.5mm grain size Silicone Render in 28010 Porcelain leaves a delicate and shiny façade. Despite the refined appearance, none of the rugged performance is sacrificed. The hydrophobic properties extend beyond the upper layer of the façade. The installers on this particular project also utilised our under the DPC (damp proof course) range. Extruded polystyrene (XPS) is a waterproof insulation board, which is crucial for preventing rising damp. The layer under the DPC is often susceptible to plinth staining; a finish of Silicone or Mosaic Render ensures that the plinth is easy to clean with a pressure washer and brush.

MINERAL WOOL ONTO BLOCK

Summary

- Substrate: New Blockwork
- U-Value change: 2.4W/(m²K) - 0.3W/(m²K)
- Insulation: Mineral Wool
- Insulation thickness: 120mm
- Basecoat: EWI-225 Premium Basecoat
- Topcoat: EWI-076 Premium Bio Silicone Render - 1.5mm grain size
- Colour: 20001 Pure White
- Location: Staines
- Installer: Eugene

The property is a new build utilising blockwork. The location on the riverside has prompted an incredibly intriguing architectural feature; the property is a new build that is elevated on stilts. As a result, it has enhanced flood protection, as well as utilising space below the property for storage.



The use of Mineral Wool offers a long list of benefits on top of the excellent thermal performance. Mineral Wool has a thermal conductivity of 0.036W/m²K, which at 120mm achieves a U-value lower than the required industry standard. Acoustic insulation and an A1 fire rating are other benefits that Mineral Wool offers for the property. The dual density batts of the product provide the acoustic insulation; the outer layer is compressed during manufacturing and as a result, the boards are dimensionally stable.

The insulation is ideal for use with a breathable thin-coat render system as Mineral Wool is vapour-permeable. The installer (who in this case study, is also the homeowner) has paired the insulation boards with EWI-076 Premium Bio Silicone Render at the behest of the EWI Pro Business Development Team. Eugene worked closely with the team and attended our Training Academy, with the final property façade a testament to both his dedication and our teachings. The Premium Bio Silicone Render provides a freeze-proof and hydrophobic envelope for the property. Perhaps more importantly, given the positioning of the property on the river bank, EWI-076 offers active protection against biological growth; slow-releasing antifungal agents maintain the fresh appearance of the façade.

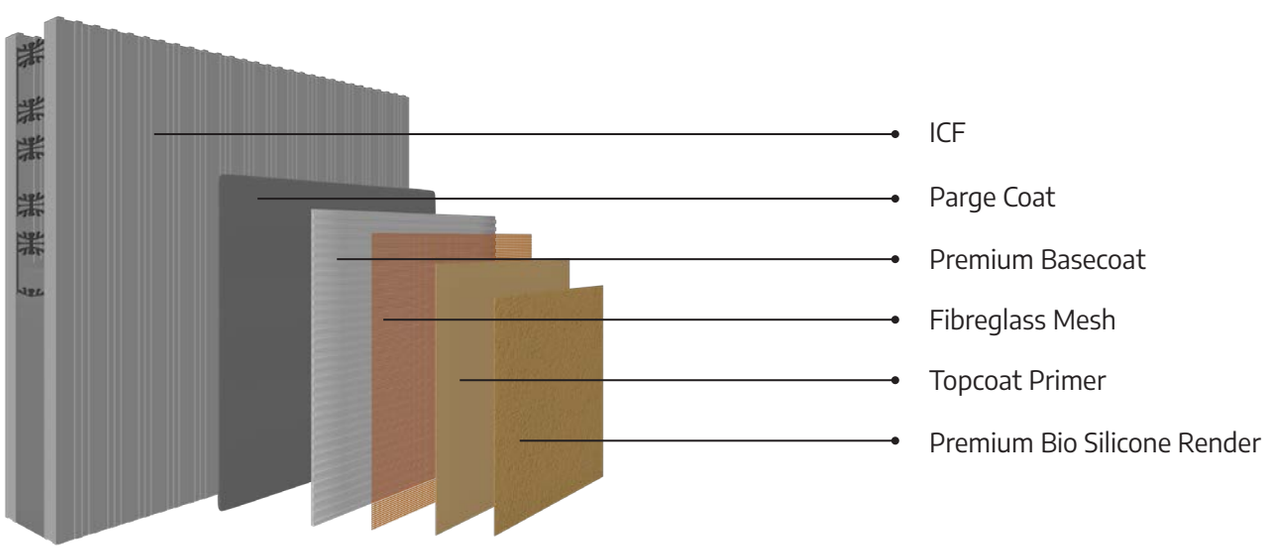
RENDER ONTO ICF

Summary

- Substrate: ICF New Build
- U-Value change: N/A
- Basecoat: EWI-225 Premium Basecoat
- Topcoat: EWI-075 Silicone Render - 1.5mm grain size
- Colour: 20001 Pure White
- Location: Walton
- Installer: Surrey Screed & Render LTD completed by Global Rendering & Plastering LTD

Perhaps offering inspiration to Eugene's property, this ICF residential new build is also strikingly elevated on a stilted framework. The location on a river bank makes it susceptible to flooding, hence the architectural choice.

Insulated Concrete Formwork is a method of construction growing in popularity due to its inherent insulating properties and easy handling. The shell of the block is manufactured out of expanded polystyrene and stacks together, much like Lego. Once erected, the concrete is poured into the cavities to form solid blocks. There are very few downsides to ICF construction. The newly constructed residential property has a U-value that satisfies building regulations, as well as being extremely durable and airtight.



The use of ICF almost eliminates the installation of external wall insulation, but the property still showcases several EWI Pro products. The combination of EWI-225 Premium Basecoat and Fibreglass Mesh enhances the stability and durability of the walls. Windows are often particularly problematic, acting as stress points and thermal bridges. However, window reveal and header beads reinforce the problem areas in this property. The façade is expertly finished with our most popular combination of EWI-075 Silicone Render is 20001 Pure White with a 1.5mm grain size. Silicone Render offers crucial benefits in an area of high moisture as it is hydrophobic, whilst offering resistance to cracking and freezing.

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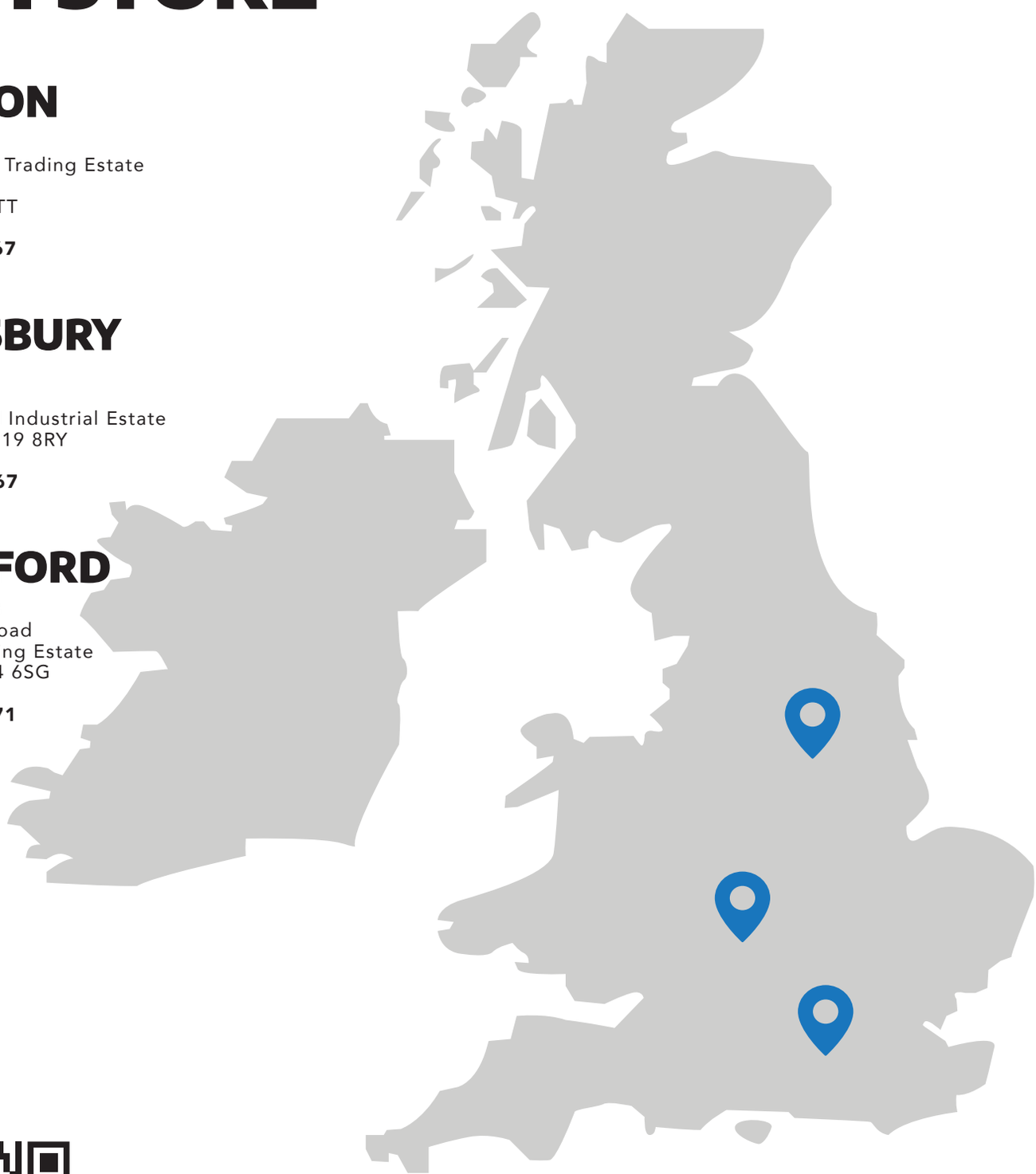

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