



SYSTEM SOLUTIONS

# Modular Façade Systems

The right façade choice for modular construction





# Modular Construction

As the UK continues to address the housing shortage, modular construction has become increasingly popular as a quick and cost effective way to build new homes.

With precision designed units manufactured in controlled factory conditions, it is important that systems and materials are utilised to aid the speed of production, while also providing an attractive, lightweight, yet durable finish.

Thermal performance and design flexibility are a major aim for house builders adopting modular construction. Therefore, our technically approved and certified Modular EWI systems can provide energy efficient solutions to any units built offsite.

We have developed EWI systems that have been specially designed to be applied in factory controlled environments, speeding up the process and suitable for use with a variety of modern construction techniques.



Our modular build system can work with a variety of construction techniques:

- ✓ ICF
- ✓ SIPS
- ✓ Wood-Cement Blocks
- ✓ Modular Timber Frame
- ✓ Modular Steel Frame
- ✓ Lightweight Panel Systems



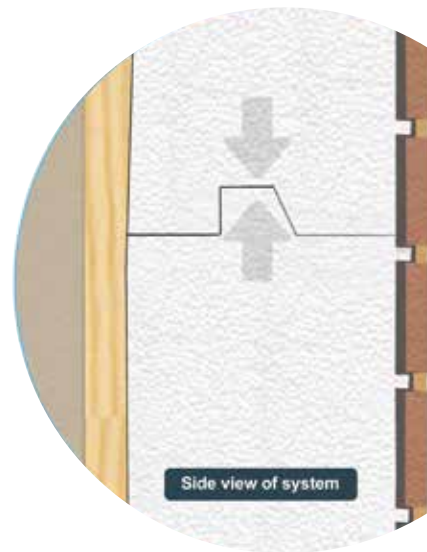
# Modular Brick Slip System

Our Modular Brick Slip system is a high impact unique clay brick slip available in a range of finishes and thicknesses (9mm and 15mm) enabling a traditional brick appearance to be achieved in significantly reduced installation times.

Wetherby clay brick slips are manufactured and fired in the same way as traditional clay bricks, providing a genuine brick finish. We also offer a range of pre-formed corners, also known as pistols, which contribute to the speed of application.

The unique tongue and groove interlocking configuration is designed on larger high density EPS insulation boards (1200mm x 1200mm). This significantly reduces boarding installation times while offering superior strength, high levels of impact resistance and protection against water ingress.

For projects utilising this finish, the insulation boards are ribbed to provide the course for the brick slips. Adhesive is applied to the slips and they are slotted between the ridges. Once set pointing can be done in the traditional method, ensuring they can be quickly installed in line and level, reducing application time and the need for skilled labour. Once the houses are erected on site, the final brick slips can be applied at the mid floor joints and pointed to give a seamless brick elevation.









# Modular

## Thin Coat Render Systems

Offering a lightweight finish for modular built properties, our thin coat renders are flexible in nature, making them ideal for application onto off-site construction properties. They can be applied off-site during the manufacture process or on site once the modules are in place, offering versatility to contractors and housing developers.

The flexible anti crack formulation and UV resistant pigments allow for areas to be seamlessly rendered with perfect colour consistency.

Enabling a wide variety of appearances to be achieved, our thin coat renders include silicone, acrylic and mineral renders, which are available in more than 360 different colour shades and a variety of textures. While our stone render can replicate a real stone block work appearance at a fraction of the price.

Our available thin coat render finishes for Modular systems are:

- ✓ Silicone / Acrylic
- ✓ 4 Seasons
- ✓ Mineral Render
- ✓ Stone Render







# Modular

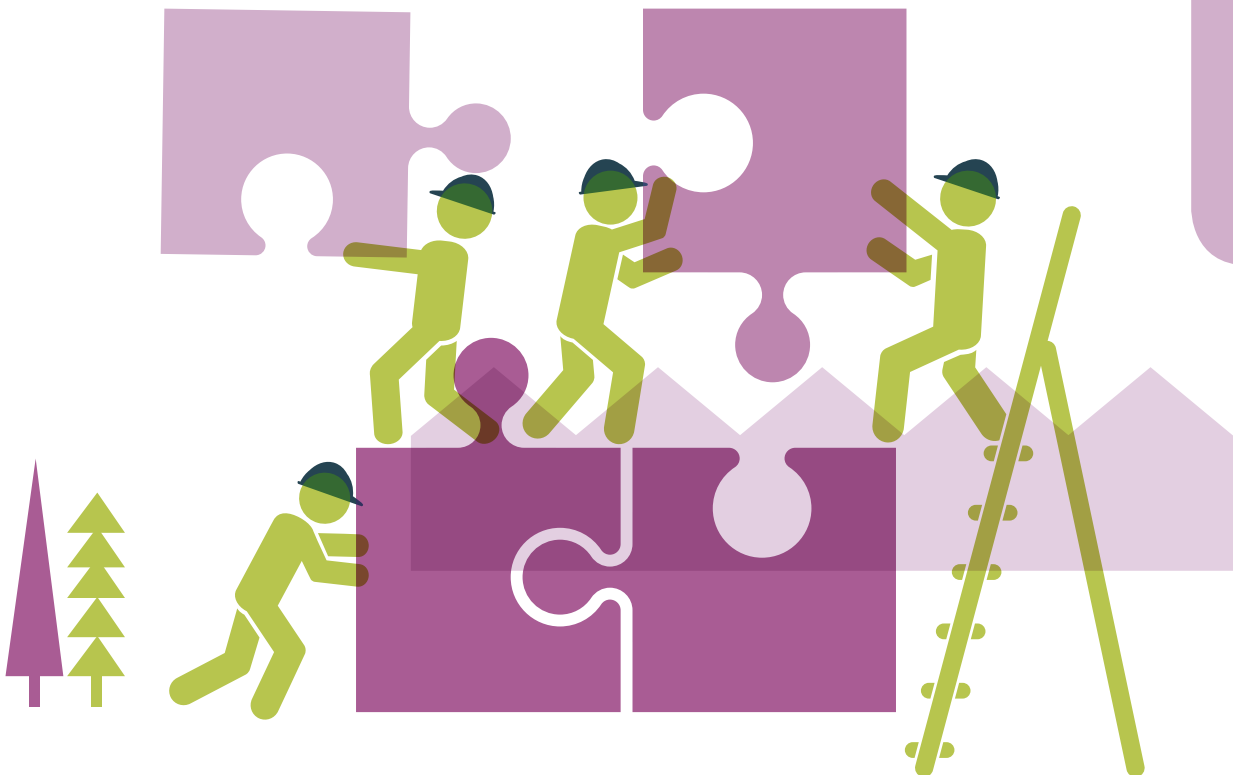
## Render Carrier Board System

Many new build construction techniques are now able to meet required thermal values, using SIPs or insulated steel/timber frame systems, meaning a render carrier board is an ideal solution where U-values are already achieved by installing the insulation within the structure.

Wetherby's Render Carrier Board is a high specification class A1 non-combustible board, which has been specifically designed for direct render applications, making it ideal for modular construction projects. Typically specified for use on timber frame and steel frame structures, our Render Carrier Board can be mechanically fixed directly to either timber battens or Wetherby cavity rails.

Using our render carrier board reduces wall thickness, increasing the building's internal floor space and reduces the buildings footprint providing a durable external skin with excellent impact resistance.

Offering ultimate flexibility for architects and end clients, our render carrier board is suitable for a wide range of unrivalled Wetherby finishes, including any of our thin coat finishes and clay brick slips. Whether designers are looking to create a bright, bold contemporary façade or replicate brick or stone blockwork, our extensive range of render colours and textures provide limitless opportunities allowing any design aspiration to be achieved.









# Modern Methods of Construction



## ICF

Insulating Concrete Form (ICF) systems are becoming more widely used for construction projects due to the quick assembly time, combined with the high strength structure that is achieved.

ICF systems are produced from large hollow lightweight blocks, typically manufactured from high density expanded polystyrene (EPS) that interlock to form the walls. Concrete is then poured into the hollow chambers of the blocks and, once set; it forms a high strength rigid structure wall system.

The formwork permanently remains in place as the thermal insulant, enabling exceptional u-values to be achieved. Our wide range of finishes are ideal to be applied directly to the formwork, significantly reducing installation time and costs.



## SIPS

Structural Insulated Panel Systems (SIPS) are broadly used as a viable alternative to traditional building methods. Pre-cut panels can be quickly erected on site enclosing the structure, allowing internal works to start much quicker.

SIPS building systems consist of a high performance insulating foam core, which has sheathing boards (usually Oriented Strand Boards) fixed to both sides to produce a strong, energy efficient and cost effective solution.

SIPS construction can also add insulation boards, to upgrade the thermal performance or use a render carrier board, with our wide range of finishes, textures and colours offering a professional, seamless finish.



## Lightweight Panel Systems (Aerated Concrete)

Aerated concrete units are a light and structurally strong building material, making them a popular construction method, as they enable easy assembly of solid, airtight walls.

The properties of aerated concrete make it very suitable for complete builds, or alternatively, it can be used simply for the extension or alteration of existing structures.

Aerated concrete can provide an ideal surface to directly apply Wetherby renders and clay brick slip systems, however, due to its low thermal properties we would recommend a Wetherby insulated render system to be installed to ensure thermal efficiency is maximised and U-values are reduced in line with current building regulations.



## Wood-Cement Blocks

Wood-Cement Blocks systems are interlocking modular walling units, that are dry stacked, without the need for a bed or mortar. The user-friendly system means there is no requirement for brick layers and the build can be achieved by a less-skilled labour force.

The raw finish of Wood-Cement Blocks provides an excellent key for the wide range of Wetherby renders and clay brick slips. However, further insulation can be fixed to these blocks, upgrading the thermal performance and providing the ideal substrate for our range of external finishes.





# Finish Options

## BRICK SLIPS

Available in more than 60 different colour finishes, with complementing shades of pointing mortar, our clay brick slips can meet any design aspiration.

Our full range of 9mm and 15mm brick slips can be found in our Clay Brick Slips brochure or alternatively visit our website [wbs-ltd.co.uk](http://wbs-ltd.co.uk)



7400 - Benamor



7404L -  
Almenara



63413g -  
Merida Grey



63413sb -  
Staffordshire Blue



7426 - Parador



7425n - Terramar



7421rs - Anoreta



7427 - Penina

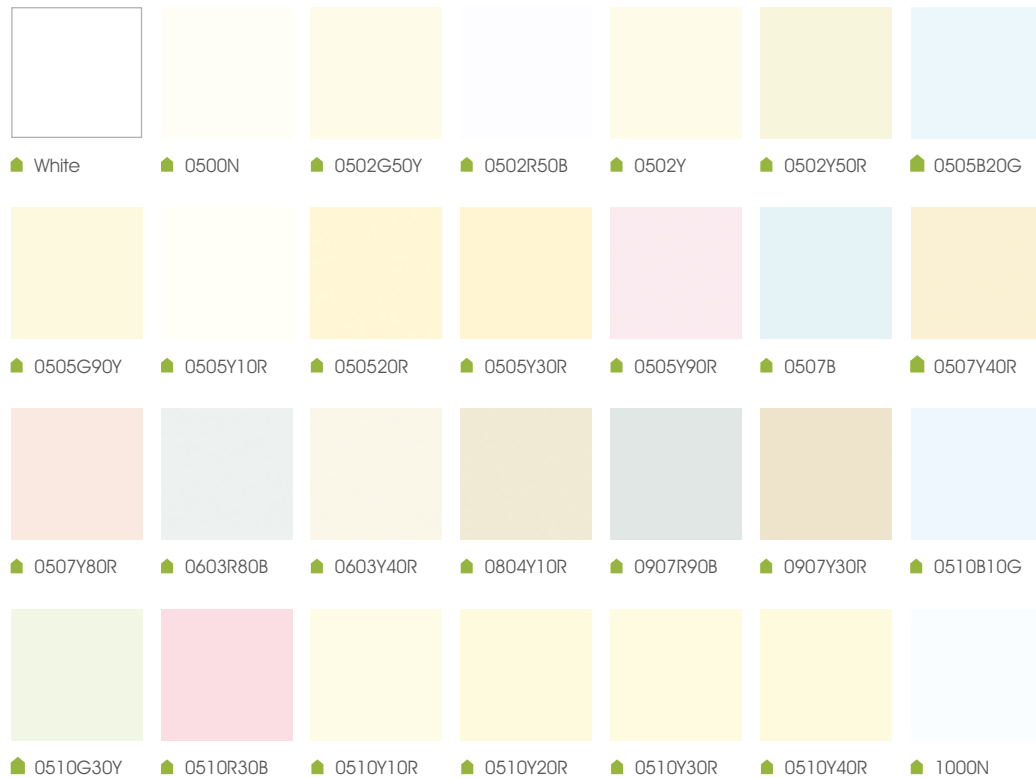
\*Images of colours have been reproduced as accurately as possible but as this is a real clay product there is a slight natural variation in colour with each system. We always recommend physical samples are ordered prior to purchasing any materials.



## THIN COAT

We have a comprehensive range of silicone, acrylic and mineral renders with more than 360 different shades available including a variety of textures.

For our full range please refer to our Thin Coat Systems brochure or alternatively visit our website [wbs-ltd.co.uk](http://wbs-ltd.co.uk)



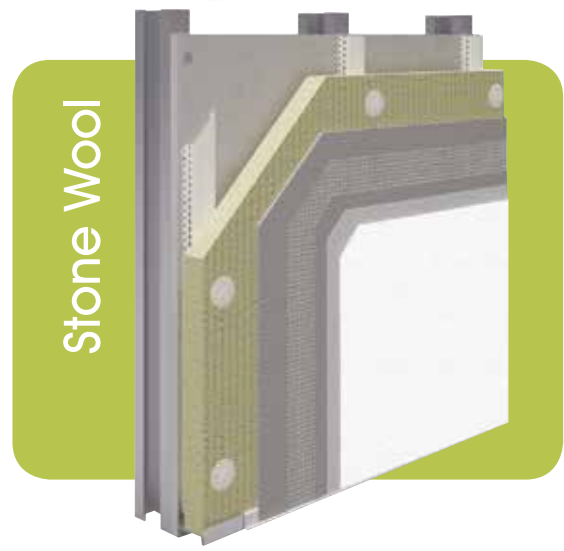
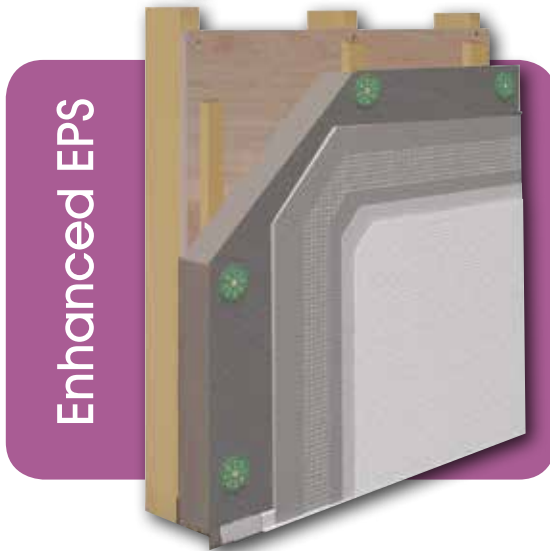
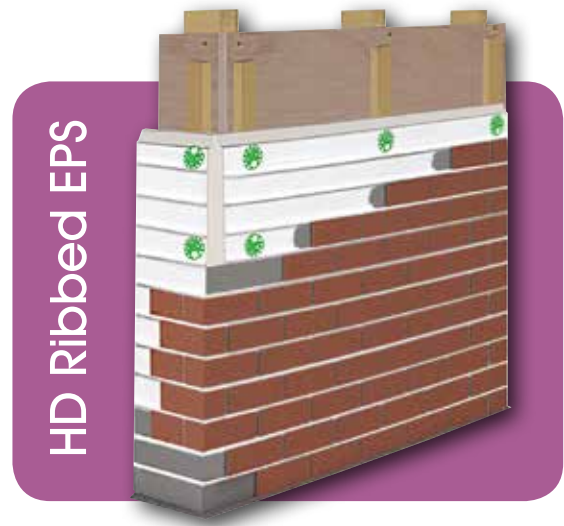
## STONE RENDER

Incorporating some of the most popular British stones, Wetherby Stone Render is available in a range of eight standard colours.





# Insulants



Thermal Performance and U values

Insulation	Thickness (mm)	K Value
EPS	20-400mm+	0.038 W/mK
Enhanced EPS	20-400mm+	0.032 W/mK
HD Ribbed EPS (High Density)	20-400mm+	0.036 W/mK
Stone Wool	30-270mm+	0.036 W/mK

More detailed information on our insulation materials can be found on our website at [wbs-ltd.co.uk](http://wbs-ltd.co.uk)

# Approvals & Certifications

Wetherby are at the forefront for testing and approving systems for Modular Construction and have been tested to BBA / BDA standards with full NHBC and Premier Approval.

---



Wetherby Building Systems Ltd are certified to Quality Standard ISO-9001, Environmental Standard ISO-14001, and Occupational Health & Safety Management Standard BS OHSAS 18001 (Certificate No. 16512)

---



Full members of the National Insulation Association

---



INCA System Designer

---



KIWA BDA Accredited System

---



BBA Accredited System

---



#### Head Office

Wetherby Building Systems Limited  
1 Kid Glove Road  
Golborne Enterprise Park  
Golborne  
Greater Manchester  
WA3 3GS

Technical Support: 0800 107 32 99  
Samples: 0800 107 32 88  
[wbs-ltd.co.uk](http://wbs-ltd.co.uk)



#### Glasgow

62 Hydepark Street  
Glasgow  
Lanarkshire  
G3 8BW  
Tel: 0141 221 8115

#### Bridgend

Unit 17A  
Brynmenyn Industrial Estate  
Millers Avenue  
Bridgend  
CF32 9TD  
Tel: 01656 720 422