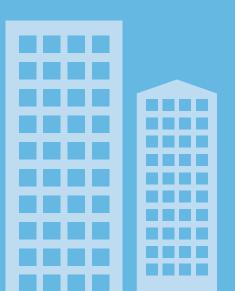




### Domestic Refurbishment

Creating a new way of living





### Ageing Housing Stock

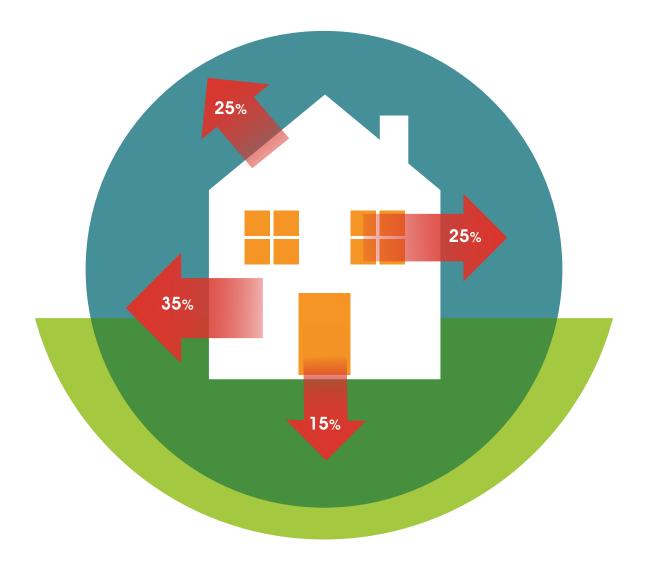
The UK's housing stock is among the least energy efficient in Europe and is responsible for nearly a quarter of the country's annual carbon emissions. This has seen the government, social housing providers and the private sector implement schemes to help vulnerable households improve the energy efficiency of their properties, save money on energy bills and make their homes warmer and more comfortable places to live.

After the second world war tens of thousands of properties were built quickly and cheaply to cater for the housing shortages, but with no consideration given to thermal performance, they are

now difficult and expensive to heat. The gradual onset of damp and condensation in these homes will also be leading to internal and external deterioration of the building, potentially causing health issues for residents.

Major regeneration schemes are taking place throughout the country to not only improve the thermal properties of thousands of vulnerable homes, but to also upgrade the exterior facades to make these areas more attractive places to live.





With around a third of a building's heat lost through the walls, insulating them is one of the quickest and most effective ways to improve energy efficiency, while transforming the exterior aesthetics of a property. As a result, recent years have seen a huge growth in the use of solid wall insulation, particularly following government-funded initiatives as local authorities, housing associations and private customers have turned to the solution as a way of avoiding demolition of aging properties.

With more than 30 years of experience in providing solid wall insulation solutions for domestic refurbishment projects, we understand the complex nature of these projects. Offering much more than supply of a wall insulation system; we can assist with tenders, planning permission, funding, accreditations and warranties, tenant consultations and community engagement programmes.

We are your solid wall insulation partner, with you every step of the process and going the extra mile to ensure your desired outcome is delivered.

### A solution for any property

### Solid wall properties

The UK has more than seven million properties built with solid walls, or a cavity too narrow to be insulated, which now fail to meet current building regulations. Losing approximately 45% of their heat through the walls, insulating these homes will make a significant impact.

Reducing the overall U-Value to well within Part L requirements, solid wall insulation will make solid wall homes much warmer and more comfortable to live in, while dramatically reducing fuel bills.

### Traditional build

These are usually structures erected with an inner skin of masonry, connected with steel wall ties, to an outer skin of brick, stone or block work. While there will typically be a cavity that can take insulation, there will always be a limit to how much material can fit into that particular space.

To meet or exceed building regulations, social housing providers, landlords and private homeowners are increasingly choosing solid wall insulation as a cost effective and flexible method of renovating traditionally-built housing. Non-traditional and PRC properties

A term broadly used to cover various methods of construction adopted between the First World War and the 1960s, these properties were essentially built to alleviate acute housing shortages. Many different systems were developed using materials such as precast and in-situ concrete, steel frame, timber frame and occasionally cast iron.

In the 1980s many of these house types were rendered defective under the 1984 Housing Defects Legislation. As a result, social housing providers and private landlords have been forced to bring these properties in line with current building regulations.





### High rise & multi-storey

Post-war high rise accommodation, usually built from pre-cast or no-fines concrete, has a poor reputation. Cold, damp and difficult to heat, the external maintenance of such properties has proven difficult, expensive and time consuming, at times leading to such deterioration levels that demolition can become the only perceived solution.

This is not the case, high rise and multi storey developments can greatly benefit from solid wall insulation and we have a portfolio of non-combustible systems ideal for high rise applications. Our team has unrivalled experience in assessing the many additional technical factors that are required with taller structures, including designing for structural movement and increased wind loads, to ensure an appropriate solution is supplied.

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In addition to improving the building's thermal performance and reducing condensation and damp, solid wall insulation also transforms the external fabric of the building with a range of attractive, weatherproof and easy to maintain finishes available.

# Externol Andron

Installing external wall insulation is the single most effective way to see significant energy efficiency improvements. With the benefits extending beyond the environmental enhancements, insulated render systems can transform lives, offering families a warm, comfortable, enjoyable living environment.

The often unrecognisable aesthetic makeover can also see residents taking a renewed sense of pride in their home, with the revitalised street scene giving a much-needed boost to local communities.

A robust solution, an EWI system involves the mechanical or adhesive fixing of insulation boards, which are applied with a reinforcement mesh, a base coat and a final decorative finish. The build up of layers encases the property and helps retain heat in the winter, as well as preventing it penetrating the property in the summer.

Offering a diverse product portfolio, we have developed a wide range of systems to work with different property types and, with a variety of insulation thicknesses available, we can confidently provide a solution that conforms to current building regulations. While the wide range of decorative finishes, from coloured silicone renders to genuine brick slips, ensures any design aspirations can be met.

We do not offer an 'off the shelf' product, we work together with our customers to design a bespoke solution to meet each individual project's needs. From property overlays and wind calculations during the specification stage, though to matching render with neighbouring properties or sourcing bespoke brick slips, every solution we provide is designed specially to meet that customer's requirements.









### The benefits of external wall insulation are clear:

- A cost effective alternative to demolition and rebuild
- Brings properties in line with modern building regulations
- Reduces condensation, heat loss and CO<sup>2</sup> emissions
- Cuts heating bills by up to 40%
- No need for occupants to move out during installation
- Protects the building fabric against the effects of weathering
- No compromise on interior space
- Low maintenance
- A positive effect on the environment
- Improves aesthetics to create an attractive street scene
- Provides a sense of pride for residents
- Brings local communities together

# LATERIO DE LA COMPANION DE LA

While EWI is an effective treatment for solid wall properties, it is not always possible. There are thermally inefficient homes that need to retain the exterior appearance of the property, particularly with terraced properties that are accessed from a public footpath, or if buildings are subject to heritage orders.

In these circumstances, planning constraints will not allow the external fabric to be altered, which is where the benefits of internal wall insulation (IWI) come into play. Ideal for properties where no cavity exists, IWI provides the thermal regeneration benefits of EWI without changing the exterior façade.

Our IWI solution is frequently used in conjunction with our EWI systems, as a hybrid system. In these cases IWI is installed to the front of a property - to fulfill planning constraints - and a suitable EWI option is applied to the rear and gable ends.

Internal wall insulation works by adding a thermal layer of material to the existing wall to prevent heat escaping, with a laminated plasterboard providing a surface for the desired decoration to be undertaken. Our pre-bonded solution means the insulation and plasterboard is installed in one operation, significantly reducing installation times when compared with alternative systems.

Our IWI system is one of the most flexible and cost effective solutions on the market. The product offers installers and contractors complete flexibility during installation as it can be used with a diverse range of fixing techniques to provide a reliable solution.



### The benefits of internal wall insulation cannot be overlooked:

- Creates warmer, more comfortable homes
- Brings properties in line with modern building regulations
- Limits condensation on internal walls
- Reduces heat loss and CO<sup>2</sup> emissions
- Cuts heating bills by up to 40%
- A positive effect on the environment
- Exterior appearance and features of property are retained



### Wetherby system solutions

### Through Coloured Render | Spar Dash | Brick Effect

Designed to offer a versatile solution for transforming the appearance of traditional social housing, our through coloured systems can be applied to a diverse range of property types and are ideal for low-rise housing developments.

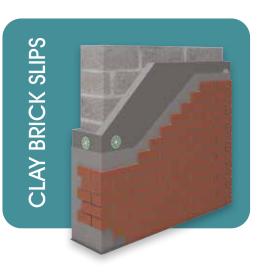
With a variety of insulation materials to choose from, including Enhanced EPS, White EPS, Stone Wool and Phenolic, the flexible system is applied with a either a spar dash or through coloured render finish, which can create a range of effects.



### Clay Brick Slips

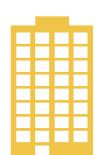
Developed for both traditional masonry constructed brick and block properties, and non-traditional housing types, which have a need to retain the existing aesthetic appearance, our clay brick slip system provides the ideal solution.

The system utilises enhanced EPS insulation, a graphite enhanced insulation board that provides a high-performance thermal insulation material. It is then finished with either our 15mm, 9mm or 7mm brick slips to offer a traditional brick finish for the property.









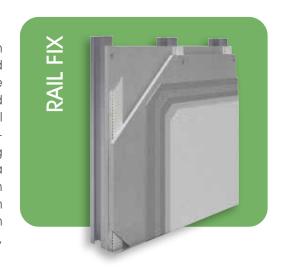






### Rail Fix

Unique in design, our rail fix system has been purpose-designed to provide an insulated render system incorporating a drainage cavity. Initially developed for the new build market, the rail fix system provides an ideal solution for non-traditional, PRC and systembuilt properties, where fixing into the existing structure can prove problematic or when a drainage cavity is required. Depending on the individual properties, a variety of insulation boards can be selected for this system, with finishes including: Brick slips, silicone, acrylic, mineral and stone render.



### Thin Coat Render

Our contemporary insulated render solution incorporating thin coat renders has been developed to offer an energy efficient insulation, combined with a clean, modern finish, to visually transform exterior facades. Some finishes offer 'year-round' installation capabilities which benefit contractors and installers working to strict project deadlines in the winter months.

Utilising our high-performance Enhanced EPS insulation board, the system can be finished with any of our thin coat renders including silicone, acrylic, stone and mineral render.



### Internal Wall Insulation

Ideal for solid wall properties that need to retain their exterior appearance, Wetherby internal wall insulation provides exceptional thermal performance with a class 0 fire rating.

The system comprises a high performance rigid Kooltherm insulation board, which is bonded to a 12.5mm standard plasterboard. The pre-bonded solution is suitable for use with a diverse range of fixing techniques including dot and dab, timber battens and metal furring.









## Storess

### Watford Community Housing Trust

One of the largest ECO-funded project in the UK, a £38m regeneration scheme to thermally upgrade 4,700 homes for Watford Community Housing Trust utilised SWI solutions from Wetherby.

"With such a major project, we needed to ensure that all the partners we work with have the expertise to handle such work. Wetherby's experience of successfully installing EWI solutions over the last 15 years, combined with its knowledge of working under the strict ECO guidelines, made it the ideal choice for us for this project."

Jamie Scott Robson,
Project manager for the WCHT scheme

### Merlin Housing Society

A major £20m refurbishment project, undertaken by Merlin Housing Society, successfully transformed 1,000 of the housing association's properties with SWI from Wetherby.

"This improvement programme delivered real benefits to our tenants; they are now enjoying warmer homes, which are cheaper to heat. Not only have we improved the energy efficiency of these properties, but by upgrading the exterior of the houses we have seen residents take a renewed sense of pride in their community."

### Richard Hopkins, Merlin Housing Society refurbishment project manager



Merlin Housing Society refurbishment



### Private Housing, Kirkby

In a programme that represented the largest private housing project to be completed under the CESP scheme, Wetherby initiated a £15.5m regeneration project, which saw 2,000 privately owned homes in Kirkby benefit from its solid wall insulation.

"In Knowsley, we are keen to explore different methods of reducing the borough's carbon emissions and this CESP scheme, initiated by Wetherby Building Systems, was a really effective way of doing that. The scheme has been very good news for residents because they are seeing significant savings on their energy bills at a time when household finances are being stretched."

### Cllr Dave Lonergan,

Knowsley Council's Cabinet Member for Regeneration, Economy & Skills



Kirkby CESP scheme

### Transforming residents lives.

"We can feel a massive difference since having the work done. The house is always warm and I don't need to put the heating on as often at all. I'm saving more than £10 a week which I can now spend on my grandson."

**Sonia Woodey,**Merlin Housing Society tenant

"The house is much warmer and we aren't using the heating as much as before the insulation was fitted, I'm really pleased with it. It also keeps the house cool in the hot summer months which is great."

Lorriane Blayney, Newtown Powys

"I'm really glad we had the work done. It was done very quickly and the workers were very tidy while they were in the house. We can really feel the difference and hopefully our energy bills will now start to come down. We are made up and would definitely recommend it to other people."

Jeanette Smith, private home owner, Kirkby "Since we have had the street done up, the atmosphere has changed. There is nothing better than walking back and seeing my home like this, it is quite emotional. Everyone in the street has said the same thing."

Eric Williams, resident, Hull

"Nine Acre looks amazing now, you can stand anywhere on the Quays and wherever you are you can see Nine Acre standing proud."

Barbara Harper, tenant at Nine Acre Court, Salford







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