



Structerm
Greener | Warmer | Stronger



Structural External Wall Insulation

Refurbishment Solutions

Why choose Structherm?



Building Type: Boots Precast Concrete Panel
Client: Liverpool Mutual Homes

The Structural External Wall Insulation panel is a unique patented system. No other system is able to provide the structural benefits that the Structherm system offers and it is the only structural cladding system to carry a BBA Certificate.

Whether you are looking to externally refurbish your entire non-traditional housing stock, a high rise block of flats or just a few low rise properties, Structherm can provide an innovative and comprehensive package.

We have been providing unique refurbishment solutions for social housing for over 25 years. Our technical expertise in the design, manufacture and supply of pioneering refurbishment systems, combined with comprehensive support throughout the installation process, is unrivalled.

Our clients include:

- Liverpool Mutual Homes - Boswell Houses
- Birmingham City Council - Concrete Block Houses
- City West Housing Trust - Unity Houses
- Cobalt Housing Association - Boswell Houses
- Stirling Council - Orlit Houses
- Wolverhampton City Council - Wimpey No-Fines High Rise
- Chester & District Housing Group - Unity Mark II Houses
- New Forest District Council - Airey Houses
- City Of Edinburgh Council - BISF Houses
- Gentoo Group - Tarran Bungalows

We work closely with all those involved in the project including local authorities, housing associations, registered social landlords, architects, advisors and contractors who can confidently draw on our design and manufacturing expertise.

This brochure gives a brief overview of our unique Structural External Wall Insulation system, if you would like more information and technical specifications or you wish to discuss a particular refurbishment project, please contact us via email at: refurb@structherm.co.uk or phone us on **0800 040 7460**.

If you have housing stock which is of traditional construction and structurally sound then Structherm's comprehensive range of External Wall Insulation (EWI) systems can be used to overclad existing properties to upgrade their thermal efficiency and improve the aesthetic appearance.

Visit www.structherm.co.uk to download the EWI brochure or request a hard copy by calling or emailing us.



Sustainability

Addressing environmental sustainability and improving the energy efficiency of existing homes has never been more important.

The UK's 21 million homes are responsible for 27% of the country's carbon emissions. Government target is to make an 80% reduction in these by 2050. It is estimated that existing homes will make up 70% of the total housing stock by this date therefore social landlords have a pivotal role to play.

The decision to renovate rather than demolish can be key to promoting sustainability and community regeneration. Construction and demolition waste comprises 25% of UK waste. The Structural External Wall Insulation system is a cost effective method of improving thermal performance and thus reducing heating requirements and energy bills. The system extends the life of a defective building therefore helping to sustain the environment.

Structherm has transformed thousands of houses into warm, structurally sound, modern homes. The award winning Daneville Estate in Liverpool (see photos below) has seen a reduction in heating costs from a potential £800 per annum per dwelling to a projected £236 per annum. (Data provided by the Energy Saving Trust).

Green Deal & ECO Funding

The Green Deal enables private firms to offer consumers energy efficiency improvements to their homes, community spaces and businesses at no upfront cost, and recoup payments through a charge in instalments on the consumers energy bill. Consumers will see the Green Deal charge alongside the reductions in energy use which generate savings on their bill.

Customers wishing to externally insulate their properties taking advantage of the Green Deal will find Structherm's systems ideal for any property type.



Green Deal finance will not be the only source of support for energy efficiency measures in homes. The Government has replaced old funding schemes with a new Energy Company Obligation (ECO). The obligation is structured to enable it to function alongside the Green Deal finance market.

The ECO is focused on those households who need support over and above the Green Deal so that everyone can share in the British energy efficiency transformation. Importantly, it will provide measures which help the most vulnerable low income households, who tend to under-heat their homes, to heat their properties adequately and more affordably. It will also offer support to the expensive to treat properties, such as those with solid walls. The additional ECO support will be able to be combined with Green Deal finance as one package for consumers.

Building Type: Boswell
Client: Liverpool Mutual Homes



Low Rise Refurbishment

Structherm's Unique Structural External Wall Insulation system is a cost effective method of extending the life of a defective property, whilst also improving the appearance and thermal efficiency.

The system has been manufactured at our factory in West Yorkshire since 1983, in which time we have built up an impressive portfolio of projects including the refurbishment of many different non-traditional and prefabricated reinforced concrete (PRC) house types such as:

- Airey
- BISF
- Boswell
- Calder
- Cornish
- Cussins
- Easiform
- Orlit
- Reema
- Smiths
- Swedish Timber
- Tarran
- Unity
- Wates
- Wimpey No-Fines

Our experience in this sector means we are thoroughly familiar with the problems likely to be encountered in these and other types of properties including high rise blocks.



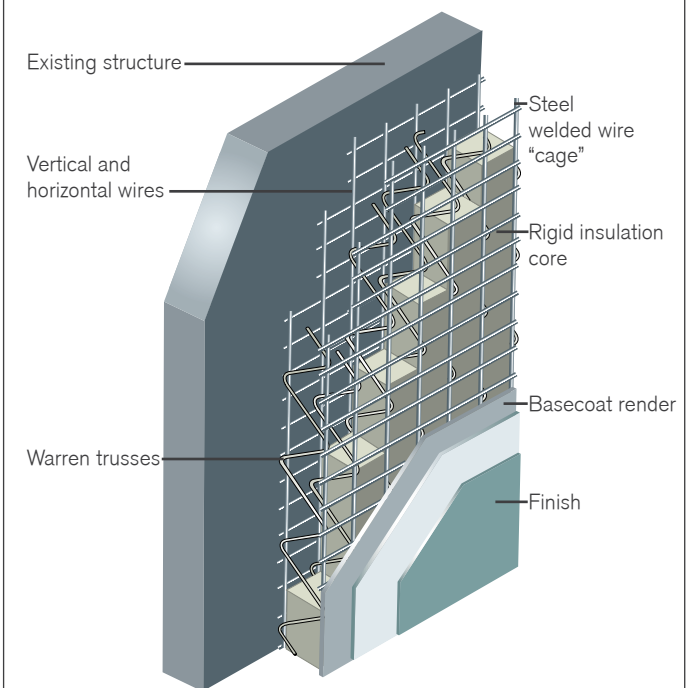
How it works:

The system is based on the performance of a unique, two-way spanning, lightweight prefabricated panel component with a rigid insulation core - the Structural External Wall Insulation panel. These panels are joined together with mesh to provide a rigid, continuous envelope around the building with real structural integrity.

A layer of basecoat render is then applied to the system which works with the panels to provide a high degree of spanning / racking strength.

To complete the system we have a wide choice of final render finishes, colours and textures. This finished layer of render provides an attractive façade that fully meets the client's aesthetic expectations (see our Renders & Finishes Datasheets).

Structural External Wall Insulation typical build up



Refurbishment programmes include:

- The overcladding of defective or inefficient system built structures to improve their structural and thermal performance, and their overall appearance
- Reconfiguring property façades such as reduction of glazed areas and window replacement (modifying solar gain, heat loss and glare)



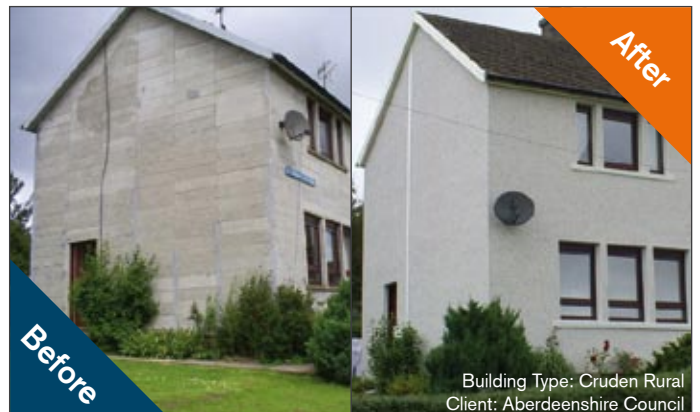
Resident benefits:

- Work mainly carried out externally thus minimising disruption to residents
- Residents remain in occupation
- Improvements in thermal performance result in lower energy bills, also helping reduce fuel poverty
- Lower levels of noise from outside
- Healthier living environment with less cold and condensation
- External appearance of whole streets transformed
- Communities brought together rather than torn apart



System benefits:

- Stabilises defective walls
- Eliminates cold bridging and interstitial condensation
- High impact resistance of 10 Nm, meaning less damage from vandalism
- Converts your existing older housing stock into highly insulated, energy efficient dwellings reducing CO₂ emissions
- Exceeds current Building Regulation U-Values
- Offers a wide range of textures, colours and effects, including brick effects
- Improves the acoustic performance of the external wall
- Provides a 'breathing wall' façade solution that overcomes traditional difficulties with condensation control
- Backed by full BBA Certification confirming that the product has a minimum design life of 30 years



Medium & High Rise Refurbishment



The Structural External Wall Insulation system can extend the life of defective medium and high rise blocks to transform them into modern, thermally efficient and structurally sound buildings.

Refurbishment programmes in this sector can include all of the solutions for low rise properties as well as the following options:

Additional refurbishment programmes for medium and high rise blocks can include:

- Enclosing balconies or walkways to increase internal floor area for residents. Particularly useful when balconies are infested with roosting pigeons, and an extremely popular choice amongst residents.
- Re-modelling of parapet / gables to increase safety and transform the skyline, an important factor for some Local Authorities as these buildings can often be seen for miles around and can improve the image of the whole surrounding area.

Building Type: Medium Rise Wimpey No-Fines Concrete
Client: West Dunbartonshire Council

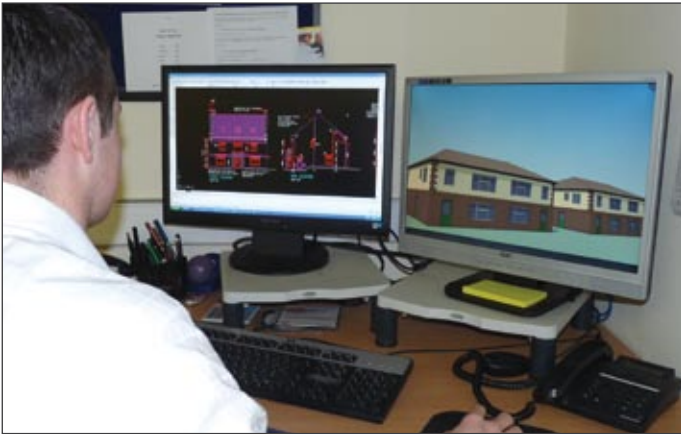


Design & Technical Service

Structherm has many years of experience in providing a comprehensive, integrated service. From initial concept right through to completion, our aim is to develop a full understanding of your business and operational objectives in order to ensure the smooth and timely delivery of your project.

We offer all our clients the best in design services to cover all aspects of their external refurbishment projects. Design work is carried out by our in-house qualified engineers and CAD Designers and our free feasibility service allows us to present a totally integrated holistic solution.

At every stage of your development, we provide everything necessary to enable us to arrive at the best design solution for your project.



Our service includes:

- Feasibility study preparation including cost analysis, works programme and NBS specifications
- U-value calculations to determine insulation type
- Value engineering
- Structural analysis and design including steelwork
- Panel layouts/drawings prepared using CAD for approval
- Risk assessments and method statements
- Site support to contractor, approved installer and client
- Street scene, artist impressions
- Product and colour samples

NBS Specifications

Structherm provide specifications in NBS format, the recognised national standard specification system for the UK construction industry.

Approved Installation Contractors

Fully trained Approved Installation Contractors (AIC's), operate nationally and are regularly assessed in the application of our products and systems which ensures that all projects are completed to the highest standards possible and allows us to maintain an extremely high level of quality on every job.



Installation of Structural External Wall Insulation

Testing

The Structural External Wall Insulation panel is a unique, patented system. No other system is able to provide the structural benefits that the Structherm system offers. The system was subjected to rigorous structural testing at the prestigious testing facility CERAM in Stoke-on-Trent to verify the racking and spanning capabilities. Successful results provided the BBA with the evidence they needed to provide Structherm with the only Structural External Wall Insulation BBA Certificate on the market.

Accreditations and Memberships

- Subjected to rigorous testing at CERAM
- BBA certified
- Ofgem Registered
- Warranty and product guarantee
- Minimum design life of 30 years
- Design covered by professional indemnity insurance
- INCA and NIA membership
- National Refurbishment Centre partner
- UK Green Building Council member



Structherm's product range includes:

- External Wall Insulation
- Renders & Finishes
- Wonderwall
- Acrylic Brick Slips

Structherm supplies the following sectors:

- Social Housing
- Education
- Commercial
- Private Landlords

Structherm Ltd is part of the Hanson-HeidelbergCement Group

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