

Structherm refurbishing for future generations

Structherm

Fastbuild | Cladding | Render

Structherm: The missing link...

Structherm Ltd has been externally refurbishing non traditional properties for over a quarter of a century. The following pages contain information on a joint project with Liverpool Mutual Homes and detail how Structherm's structural cladding

system has completely changed the face of some of their housing stock, bringing major benefits to residents, with the ultimate effect of keeping communities together.



The background...

The award winning Daneville Estate in Walton, Liverpool forms part of a Capital Investment Programme that is enjoying a period of sustained inward investment and regeneration, drawing on energy generated by the city's historic Capital of Culture celebrations.

The estate comprises of approximately 600 two-storey Boswell type properties, all of which were badly defective requiring varying degrees of refurbishment. Some of the problems encountered on the properties were of a serious

structural nature, with some houses suffering from varying degrees of detachment to gable walls, with most encountering random cracking that had periodically been patched up.

In some of the worst cases, properties were in such bad stages of disrepair, 63 of the 600 housing stock had been void for a total cumulative void period of 1000 years, with many of these properties earmarked for demolition.

The partnership...

Structherm worked in partnership with Liverpool Mutual Homes (LMH) to overcome all of these structural problems. The programme's main objectives were to improve the carbon footprint and sustainability of the entire housing stock, whilst increasing security and well being for the Daneville Estate residents.

Dave Woods, Head of Investment at LMH says, "We chose Structherm's Structural Cladding system as we felt it offered several qualities that meet our requirements. In the main, properties we have chosen to use the product on have major structural issues to the extent that they were un-mortgageable. The structherm system gave the buildings back their structural integrity and stability; it also gives the added benefit of making the properties mortgageable once more.

Whilst the structural solution was obviously paramount, the thermal qualities of the product gave dramatic improvements to the thermal comfort of our customers' homes.

In addition to these technical factors, the aesthetics of our properties is of high importance to LMH and the flexibility of render finishes and its visual quality is the icing on the cake. We have used a range of different finishes and the finished product is fantastic, it has transformed tired looking buildings into properties that LMH are proud to call ours.

The overall results are excellent and both LMH and our customers are amazed by the transformation Structherm's structural cladding system has had upon our properties."



The system...

Structherm's unique structural cladding system is the only BBA approved cladding system capable of providing an alternative option to demolition due to its structural nature, thermal performance and aesthetic qualities.

The unique panels are immensely strong and rigid, yet lightweight (easily handled by one man) and are designed as a two-way spanning, high tensile component that may be installed vertically or horizontally, providing a structurally continuous envelope around the building with a render finish. Due to the external application process of the system, residents were able to stay in their homes with minimal disruption to their lives.

Structherm's structural cladding system has not only made an impact on what the Daneville Estate looks like, but has greatly improved

thermal performance, producing U values of $0.29\text{Wm}^2\text{k}$, better than that required from Building Regulations. This means that the property is losing much less heat than before, thus working more efficiently, helping reduce heating and hot water costs from a potential £800 per annum to a projected £236 per annum (data provided by the Energy Saving Trust).

Improvements were also made on the load bearing capabilities and the long term stability of the overall structure, whilst impact resistance of the properties was also enhanced, with the system having the highest impact resistance performance on the market.

Due to the improvements made, the structural cladding system has given the properties a further life expectancy of at least 30 years.



Additional advantages of using this system include:

- Stabilises defective walls
- Offers unparalleled impact resistance
- Converts existing housing stock into highly insulated, low energy accommodation
- Complies with UK Building Regulations requirements and current Health and Safety Legislation
- Offers a wide range of textures, colours and effects, including brick effects
- Improves the acoustic performance to the external wall
- Provides a 'breathing wall' facade solution that overcomes traditional difficulties with condensation control
- Manufactured off-site into ready-to-install insulated reinforcement panels, helping meet the Government's aspirations to exploit all forms of MMC
- Backed by full BBA certification confirming that the product has a minimum design life of 30 years



Impact on the community...

Since the start of the project the estate has seen significant improvements and achievements. Once void properties now have a 100% take up, with a waiting list currently in place for houses on the estate. Thermal capabilities have also improved and physical appearance of the properties radically enhanced.

Steve Coffey, Chief Executive, LMH states, "LMH's mission is to create homes, communities and neighbourhoods where people want to live, where customers receive the highest possible

quality of service and where families and individuals can thrive and prosper. The Daneville Estate is an excellent example of a project which demonstrates this."

Structerm fully support this mission and are proud to be a part of this project. The estate is now a viable option of living for future generations, with the successes experienced so far determining a value match between both organisations, with the potential for future collaborative works more positive than ever.



Achieving Decent Homes Standards with Structerm's Mortgageable and Innovative Solutions

Other Structerm products include:

- Insulated render solutions
- Renders and finishes
- Thru-Wall for light steel framing
- Structerm FASTBUILD™