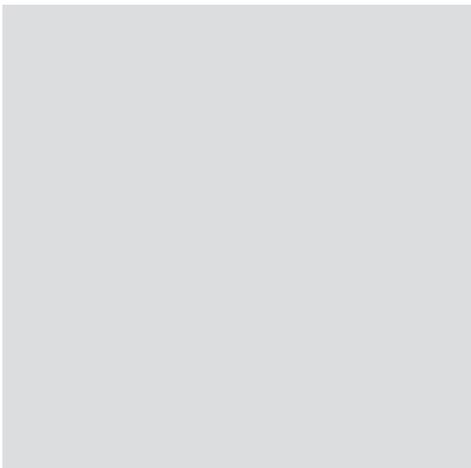


Spencerbeck House,
Redcar & Cleveland

Sector: Social Housing
High Rise
Refurbishment



After Refurbishment



Client:
Coast & Country Housing Ltd

Building Type:
No-Fines High Rise

Project Size:
10 Storey 2500m²

- Product:
- Structural Insulated Cladding & Render Finish
 - Wonderwall - Real Brick Slip Cladding to Ground Floor

Project Background:

Spencerbeck House had undergone no external refurbishment works since it was built three decades ago. Coast & Country Housing (CCH) is dedicated to improving the homes of its residents, developing more sustainable homes and improving tenants' quality of life so they decided to invest £2.5 million in the first major refurbishment programme for Spencerbeck House to bring the flats up to modern standards.

A full structural survey was carried out to determine the condition of the building. It was found to have a structurally sound concrete frame but failing no-fines concrete infill panels. The building also had extremely poor thermal performance resulting in high fuel bills for residents, pushing some into fuel poverty.

Client Requirements:

CCH wanted to refurbish the block to the highest standards providing comfortable, safe and economical to run homes for its residents. As part of the external works CCH required a solution that would:

- Solve the structural problems associated with the failing no-fines concrete infill panels
- Improve thermal performance and therefore cut fuel bills
- Improve the external appearance

Design Solution:

Structherm's unique Structural Insulated Cladding and Wonderwall systems were chosen for the external refurbishment of the building as they were able to offer solutions to each of CCH's requirements.

The Structural Insulated Cladding system is based on the performance of a unique, lightweight galvanised steel wire space frame with an insulated core. The vertical panel spanning method was used to provide a rigid, continuous envelope around the upper floors of the building.

To complete the system a 12mm layer of basecoat and then a high performing contemporary Acrylic finish was applied in a golden yellow colour. This finished layer provided the

properties with an attractive façade that fully met the client's aesthetic expectations.

On the ground floor Wonderwall, an insulated real brick slip cladding system, was used because of its robustness and impact resistant properties. The system comprised of a rigid phenolic insulation panel pre-bonded to a brickwork coordinating carrier sheet. The panels were fixed to the ground floor with an additional 50mm thickness of Enhanced EPS insulation between increasing the thermal performance of the system. Striking red, smooth brick slips were then fixed to the carrier sheet using a purpose made adhesive and a pointing mortar applied.

Results:

- The Structural Insulated Cladding has stabilised all the failing concrete infill panels and anchored back areas of loose material, making the building safe.
- Thermal performance has greatly improved with the U value dropping from 1.85W/m²K to 0.29W/m²K resulting in each flat costing less to heat.
- The fresh, contemporary appearance of the building along with new high performance thermal windows, solar panels and, internally, new wiring, kitchens, bathrooms, including a shower, and energy efficient heating systems have helped transform Spencerbeck House into an iconic building which dominates the skyline.



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