

Structherm | Fastbuild[®]
Primrose Hill Estate
Huddersfield

Client: Yorkshire Housing
& Wates



Building type:
3 storey apartment block

Project size:
2835m²

Package Supplied:
Fastbuild walls, lift & insulated
render plus Hanson 200mm
Hollowcore floors & staircases

Build time:
12 weeks

Background:

Primrose Hill is a project providing 79 affordable homes as part of the regeneration programme of the Primrose Hill Estate in Huddersfield. Following the entire demolition and clearance of existing housing stocks, the construction includes 48 apartments and 31 new homes over the area. Working in partnership with Kirklees Council and Kirklees Neighbourhood Housing, Yorkshire Housing is providing innovative energy efficient new homes for affordable rent and shared ownership which will transform the outlook of the estate.

Yorkshire Housing stipulated that modern methods of construction should be used for the project. Structherm's Fastbuild System was chosen alongside Hanson 200mm Hollowcore floors and staircases due to the ability to arrive at a cost certainty at a much earlier stage than with the other systems. This is achieved by using standard rates and experience from similar projects to calculate an anticipated maximum price. This is done from architects drawings without the need to develop detailed drawings at concept stage.

Design:

The design of the flats incorporate two specifications,



- 1) The flats should be constructed using modern methods of construction and;
- 2) The construction would be a model of

Left: Project in progress
Below: Render finish

renewable energy efficiency.

The project uses solar power as a means of energy efficiency. Photovoltaic panels are being attached to the roof of the construction providing 55kWp of electricity which can either be used by the residents or fed back into the grid. The concrete Fastbuild panels contribute to the energy efficiency of the building by way of Thermal Mass. The panels absorb internal heat gains, helping to prevent overheating and ensuring a more stable internal temperature. Night cooling purges the accumulated heat from the slabs, preparing it for the next day. Due to the circular design of the building, the project was initially built in two semi circular blocks. This then allowed for the cranes to enter the centre of the site without problems. The semi circular blocks were eventually completed by the installation of the lift shaft.

The design incorporates the service holes at the design stage of the project allowing for less wastage on site and neat installation. The Fastbuild system automatically conforms to progressive collapse.

External Finishes:

Due to the robustness of the Fastbuild panels, they are suitable to receive a wide range of renders, cladding, stone or brick. The internal core of the polo design has benefited from Structherm's Italian insulated render finish; the external radius was finished with cedar boarding.

System and Client Benefits:

- Speed of erection: Wates dramatically reduced construction timescales from 13 weeks to 10 weeks. Structherm was able to meet with these requirements.
- Water tightness: this can be achieved earlier therefore the internal fit out can be carried out while the external finishes are applied, saving time.
- Design flexibility: Structherm's CAD and technical team worked closely with the Architects to achieve the building's circular design

Wates Manager commented, *"The biggest attraction to Structherm was the simplicity of the Fastbuild system."*

For further information on this or other Structherm Fastbuild® projects please contact us on **0800 040 7460** or visit: **www.structherm.co.uk**

