

# LoCal Homes

Contributors: LoCaL Homes

Innovation in Construction

**A social enterprise in the West Midlands, LoCaL Homes is a closed-panel timber frame manufacturer producing high-quality panels innovatively designed for modern, low carbon living.**

**LoCaL Homes operates as part of the Accord Group, one of the largest housing associations in the West Midlands and the first in the UK to have its own integrated design team and manufacturing facility.**

## Making history

In 2005, the Accord Group researched the UK market for off-site manufactured housing products with a low environmental impact, but nothing met the Group's needs. They formed a partnership with a Norwegian company and spent 12 months preparing a product to meet UK compliance requirements.

Accord then established InDesign which is one of a handful of architectural team working within the framework of a social housing provider. The six-strong team "was established with the vision of driving up and controlling design quality" (Director of Project Development). Their approaches are integral to Accord Group's ability to deliver low carbon housing solutions at the same cost as traditional homes.

The Group established its own offsite manufacturing facility in 2011 and LoCaL Homes was created. The final challenge was to build the homes and so in 2013 a Construction Services team was established.

*"We want designers to create brilliant buildings and exceed client expectations. Those designs have to be factory friendly, therefore our designers have an appreciation of the technical team who make it work."*

Director of Project Development, LoCaL Homes

LoCaL Homes' innovative delivery model fully integrates design, manufacturing and construction. High quality products are ensured through precise specifications and a controlled environment, which ultimately leads to better cost and time certainty for clients. This is especially important in the affordable (social) housing sector market which is highly 'cost-driven' in terms of funding and 'time-driven' from a demand perspective.

*It's rare that a design team can sit next to a manufacturer, however everyone has bought into the philosophy. Everyone works in partnership to achieve the same end goal"*

Director of Project Development, LoCaL Homes

Other benefits of LoCaL Homes' model includes greater flexibility and choice for existing and potential future clients in terms of building form, layout and finish; as well as significantly lower energy bills for residents.



**Design-led product innovation**

While construction materials such as timber and steel have been around for many years, the secret ingredient to highly energy efficient buildings is the performance and quality of the insulation. As Local Homes’ Director of Project Development pointed out: *“The innovation today lies in the combination of the materials – that’s what’s changed”.*

Taking inspiration from high performing timber panel systems used in Norway, LoCaL Homes began by researching, importing and testing houses from overseas to see what design lessons could be learned for of its own homes. As the Head of Manufacturing pointed out: *“we sought to maintain the same superstructure, whilst adapting the design to suit the British market”.*

LoCaL Homes’ two flagship wall products, the Eco 200 and ECO 100 series, have been designed to precise tolerances and are extremely thermally efficient, with ultra-low u-values<sup>1</sup>. The products can be produced with a range of external cladding options, which offer architectural flexibility and enable customers to select their own preferred exterior finish without sacrificing high performance.

Additionally, by using the Autodesk Revit programme, LoCaL Homes applies tight controls to maximise thermal building performance, deliver high quality workmanship and ensure reduced waste. Taking this to the next level, LoCaL Homes’ Head of Manufacturing commented that *“we sought to maintain the same superstructure, whilst adapting the design to suit the British market”.*

**The foundations for future growth**

As LoCaL Homes’ capacity increases, the manufacturer is expanding; working increasingly with other housing associations, local authorities, developers and contractors with an ambition to deliver low carbon housing schemes across the UK and beyond.

To support its expansion plans, LoCaL Homes has drawn up a warranty-backed franchise agreement, meaning that its business model, brand and reputation can be replicated more widely across the UK.

<sup>1</sup>A U value is a measure of heat loss. It is expressed in W/m<sup>2</sup>k, and shows the amount of heat lost in watts (W) per square metre of material (for example wall, roof, floor etc.) when the temperature (k) outside is at least one degree lower. The lower the u value, the better the insulation provided by the material. structural facings.

