

Patent House and Patent Walk, Doncaster

England's largest net zero Retirement Living scheme

• Development type: Retirement Living

• **Developer:** M-AR

• Local authority partner: City of Doncaster

• Start on site: March 2022

• **Date of completion:** March 2023

Property type: 20 apartments for social rent



Our pioneering Patent House and Patent Walk scheme is England's largest net-zero Retirement Living complex to be built using volumetric modular construction — where large, enclosed, pre-made and fitted out sections are joined together on site to form a complete building.

The scheme, in Doncaster, provides 20 affordable homes where people aged 55 and over can live independently within a community setting.

Located off Cooke Street in Bentley, Patent Walk comprises eight two-bedroom bungalows, while Patent House is a three-storey block housing six one-bedroom and six two-bedroom apartments – all available for social rent.

Patent House and Patent Walk are made up of 64 self-contained volumetric modules – with each element pre-fitted with electrics, plumbing, heating, doors, windows and internal finishes – built by modular building specialist manufacturer M-AR Off-Site at its factory in Hull. This is the third project M-AR has delivered for Housing 21.



The homes have been designed to meet our updated 'low-carbon specification' which far exceeds current building regulations, putting it in line with the Future Homes Standard and 2050 net-zero targets.

The development's off-site construction has resulted in high-quality, energy-efficient buildings, while reducing on-site noise and air pollution. Waste generated during production was re-used or recycled, and the module frames are made of steel which can be recycled at the end of the building's life.

The homes benefit from a host of other features to reduce their carbon footprint, including photovoltaic solar panels to generate energy and reduce residents' fuel bills, plus air source heat pumps to heat their water.

In addition, they are fitted with a mechanical ventilation with heat recovery system which supplies and extracts air to reduce the amount of heating and cooling the buildings need, thereby further reducing running costs.

Residents have also been provided with electric vehicle charging points, in line with our commitment to building much-needed new homes that are designed to minimise environmental impact.

"I am delighted that as a council we have been able to assist with this incredible project, which will support many of our residents in the next chapter of their lives.

"Affordable and energy efficient housing for all groups in Doncaster is a huge priority and focus for the council and our partners and we are delighted in this latest step towards this."

 Cllr Glyn Jones, Deputy Mayor and Cabinet Member for Housing and Business at City of Doncaster Council