

# Agar Grove Camden - Heat Interface Unit Case Story



## The Largest Passivhaus Project in the UK

### The changing faces of Agar Grove

**Agar Grove in Camden has seen more than its fair share of changes throughout its history. Formerly known as St Paul's Road, the original estate was owned by wealthy lawyer William Agar. Agar became infamous for his opposition to having the Regent's Canal cut into his land.**

After his death in 1838, his widow granted numerous building leases, with the area rapidly becoming a slum known as Agar Town. Victorian writers referred to Agar town as 'the foulest slum in London' not unlike a Dickensian novel. The Midland Railway demolished the slum buildings to make way for warehousing to serve nearby St Pancras. The first council flats in the area were built by St Pancras Borough Council in 1905. These flats would lay the foundation for the Agar Grove Estate, built by the London Borough of Camden in 1966. The estate comprised of 4-storey blocks and the 19-storey Lulworth Tower, all in Modernist style.

### A new beginning

In 2013, Camden Borough Council proposed the redevelopment for Agar Grove, calling for demolition of the 4-storey blocks. In its place 493 affordable homes for new and existing tenants were constructed. The layout of Agar Grove was to be re-designed with an integrated landscaping plan involving communal gardens and play spaces. In addition, improved access and parking were introduced to increase the connectivity to the wider city. All existing tenants were given the right to reside in one of the new properties. And so, work began on the first of 6 Phases, programmed for delivery between 2016-2025.



Consultant: Robinson Associates

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## Going for Gold – the Passivhaus Standard

The core focus of Passivhaus is to dramatically reduce heating and cooling requirements, whilst providing excellent indoor comfort levels for residents. Agar Grove was set up with an abundance of energy saving features. These features include triple glazing, high levels of thermal insulation, airtightness and, most importantly, a highly efficient heat network.

### Achieving the standard

To achieve Passivhaus standards, the heat network needed to secure ultra-low heat losses. Robinson Associates, the projects M&E consultant selected a custom sized, fully insulated Danfoss 5 Series FlatStation Heat Interface Unit. The apartments were equipped with energy saving 2-zone thermostatic control radiators and the HIU units were fitted with M-Bus energy meters and self acting IHPT valves. Dissimilar to electric control valves on the market, the IHPT valve utilizes the laws of physics to operate. While the valve ensures efficiency and helps achieve the Passivhaus standard it also, importantly, guarantees peace of mind for the residents of Agar Grove.



### A brighter future

With each energy saving feature used Camden's Agar Grove not only achieved the prestigious Passivhaus standard but is now one of the largest Passivhaus developments in the UK. This has also led to the project being awarded the title of Residential project of the Year by CIBSE (Chartered Institution of Building Services Engineers). The project effectively demonstrated high levels of user satisfaction and comfort while delivering outstanding measured building performance. Agar Grove is now the largest Passivhaus Heat Network in the UK, demonstrating a new future for energy efficient buildings.