



Case Study

Almshouses, Girton



Case Study

Project Name

Almshouses

Location

Girton

Project Type

Residential

Specification

Passivhaus

Images

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The Project

Dovehouse Court is a low-rise, community-centred, accessible housing, specifically designed as permanent housing for over-55-year-olds who are able to live independently within the community.

The 15 energy-efficient, one-bedroom homes, suitable for couples or single residents, are arranged as five bungalows and two apartment buildings.

Dovehouse Court is constructed with a pre-manufactured timber structure system which ensures airtightness and thermal efficiency to meet Passivhaus standards, fulfilling the charity's commitment to sustainability and drive to reduce the cost of living for its residents.

Lowfields translated Mole architect's designs to create a fully bespoke timber system,

applying a fabric first approach that requires minimal energy.

Adopting a fabric first approach to achieve energy efficiency, the design uses natural materials constructed simply, prioritising abundant daylight and clear sightlines. Each dual-aspect home has minimal corridor space and includes spacious and flexible rooms.

The Details

0.6 ach

Airtightness @50 pascals

15

Homes

300 mm

Larsen Truss frame

1144 m².

Size of development





Scope of Services

Lowfield Timber Frames specified precision-engineered timber for the design, manufacture and installation of the Larsen Truss system. Lightweight trusses were tacked onto the sheathing to ease the insulation process. The slim, compressed timber web minimises thermal bridging, facilitating reduced heating costs to expand residents' budgets for living costs and other family expenses. Using blown Warmcel Insulation, within a timber frame structure significantly reduces the amount of embodied carbon used in the build.

Certified timber products minimise the need for heating when integrated into sustainable building solutions, achieving comfort through robust insulation and airtightness. The Larsen Truss system and thermally modified hardwood cladding designed for this project promote the housing association's aim for a cohesive, circular economy. The timber system also offers acoustic performance benefits, increasing insulation between rooms.

Ageism casts a long shadow over the search for dignified and affordable living in the UK. The spaces we retire to are shaped by society's values and marked by its biases. Against a widespread housing crisis, the need for inclusive, compassionate housing solutions for older people can become lost. What makes Dovehouse Court remarkable is that it goes beyond basic provision and, in doing so, proves the rule that has so few exceptions.

The recent Almshouse Longevity Study, published by Bayes Business School, found that living in an almshouse can boost a resident's lifespan by as much as two and a half years. Strategies to bring people together and eradicate loneliness make a significant contribution to this.



Outcome

This project is an exemplary Passivhaus residential scheme that minimises energy consumption and costs, providing sustainable and affordable almshouses in Girton. As the most stringent energy standard in the world, Passivhaus certification secures economic, environmental and social sustainability. The Girton Town Council scheme was officially certified shortly after the build was completed, guaranteeing ultimate performance and certifying that there are no gaps between predicted and actual results. The achieved airtightness for all homes was 0.6m³ /hr/m² @ 50Pa.

Timber construction offers a cost-effective solution for affordable housing initiatives. By streamlining construction processes and reducing material costs, timber enables the development of high-quality yet affordable homes. Pre-manufactured timber components further expedite construction, allowing for the rapid delivery of housing projects to meet urgent demand.

Timber allows for the customisation of living spaces to accommodate the specific needs of aging or disabled individuals, these units meet M4(2) access requirements, and are adaptable to residents' changing accessibility demands.



“The Charity’s vision to build generous Passivhaus homes for the over-55 residents of Girton was ambitious, and the result is a credit to the perseverance of the Trustees. We worked hard alongside a talented design and construction team to deliver homes that feel safe and are welcoming, light-filled and warm, with direct access to beautiful gardens. The development offers homes built to the very highest environmental specification, and we’re delighted to hear that living in Dovehouse Court is bringing such joy to the new residents.”

- Ian Bramwell- Director, Mole Architects



Case Study

Client

Girton Town Charity

Main Contractor

Barnes Construction

Architect

Mole Architects

Images

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