Marmalade Lane 5 Years On



Property Overview

Property age: 2018 new build

Project timescale: 2013 - December 2018

Type: Cohousing development of 1 + 2 bed flats &

3 + 4 bed terraced houses (42 homes)

Wall type: insulated timber wall panels & CLT **Floor area:** from $51m^2$ flats to $123m^2$ houses

A new-build cohousing development combining environmental wellbeing and community

Completed in December 2018, Marmalade Lane in Orchard Park includes 42 homes supplemented by a Common House and shared garden and built to high environmental standards. A core group of the original residents were involved in the design, with the intention to create a multi-generational community that would support more sustainable lifestyles. Nearly 5 years on, how is the community getting on, what has been successful, and what lessons do they have to share?

Meet your hosts, Alice & Vincent

Alice says: <u>Cohousing communities</u> are not communes: everyone has their own private home, their own front door and their own small garden or balcony. But each household also benefits from extra shared facilities and spaces that allow – but don't require – members to do things together. Living in a cohousing community brings a few extra responsibilities. Home owners are directors of the management company, <u>Cambridge Cohousing Ltd</u>, with responsibility for the running of the community and the management of the buildings and shared areas.

By pooling resources such as tools and equipment, and by acting collectively, cohousing communities gain more control over their environment. Residents have a shared desire for the belonging, neighbourliness and mutual support which many people feel is missing from modern life and contemporary housing developments. With a lighter environmental footprint, sharing resources also generally saves energy and carbon.

Sustainable lifestyles

The homes were built to high fabric performance and utilize low-carbon heating systems, providing an immediate reduction in the carbon intensity of the homes. But possibly of more importance is the impact of community in supporting more sustainable ways of living.

www.openecohomes.org

Marmalade Lane 5 Years On - Orchard Park -2023 Open Eco Homes is a <u>Cambridge Carbon Footprint</u> project. Charity number 1127376











The community shares practical facilities such as three guest rooms, a gym, a workshop and a laundry, so households need less stuff individually. Private car ownership has been reduced significantly by setting up a car club of 4 electric cars, used by 28 residents. An electric cargo bike is also shared with the rest of Orchard Park.

Communal meals bring the neighbours together on a regular basis, and make use of produce grown in the shared allotments. Residents organize bulk food deliveries between themselves, making more sustainable choices more affordable. By working together to cook, garden and manage the development, members learn new skills from each other. The facilities are also shared with the wider community, with residents regularly hosting Repair Cafes, Clothes Swaps and other events; and one of the expert gardeners has started to revive a local community garden.

Fabric performance

The homes are constructed of highly insulated timber framed panels manufactured in the <u>Trivselhus</u> factory in Sweden. Wall, floor and roof U-values are around 0.18, and windows and doors are triple glazed. Factory manufacture enabled high standards of air tightness to be achieved.

The grouping of the 42 dwellings into four 3-storey blocks gives compact building forms with a high ratio of volume to surface area, whilst still allowing for extensive glazing, giving light interiors and minimising the need for artificial light. South East and West facing glazing enable the collection of solar heat during the winter months. Hot water and heating is provided by air source heat pumps and the homes are ventilated by mechanical ventilation with heat recovery (MVHR). No gas is used on site.

Future plans

Since moving in, the residents have done a huge amount of work improving the shared garden and the Common House, and individual households have installed solar panels on their roofs. The next big project will be to install more panels on the roof of the apartment block.

 $Photos\ courtesy\ of\ Jan\ Chadwick$

www.openecohomes.org

Marmalade Lane 5 Years On - Orchard Park -2023

Open Eco Homes is a <u>Cambridge Carbon Footprint</u> project. Charity number 1127376

Key Specifications

- · Developer-enabled cohousing
- · Designed along Passivhaus principles
- · Off-site construction
- Multi-generational community with shared Common House, gardens & car-free lane

Insulation & Glazing

- Triple glazed doors & windows built into insulated wall panels
- Walls, floors & roofs U-value: 0.18
- South, East & West facing glazing for winter solar thermal gain

Heating & Energy

- Air Source Heat Pumps
- G/F Underfloor Heating
- MVHR
- · Solar PV-ready roofs
- · No gas on site
- · Water-saving fittings

Energy Consumption examples:

Energy Consumption of all-electric homes	Energy kWh/m²/pa	Carbon kgCO ₂ e/m²/pa	
1 bed flat (46m²)	59.8	11.6	
4 bed house (112m²)	39.3	7.6	



Key Contacts, Products & Advice:

Marmalade Lane Community:

K1 Cohousing Project **Developer:** TOWN

Construction company: <u>Trivselhus</u>

Building Contractor: <u>Coulson Group Ltd</u>

Project Architect:

Alice Hamlin, <u>Mole Architects</u> **Awards:** <u>The Architectural Review</u>

RIBA East Award winners



