

Case Study 163

Melfield Gardens, Lewisham – an intergenerational housing scheme for older people and students, designed to a Passivhaus standard

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Written for the Housing Learning and Improvement Network by **Irene Craik**, Director, Levitt Bernstein.



About this case study

This Housing LIN Case Study explores Melfield Gardens in Lewisham. Winner of an award at the 2021 Housing Design Awards, these 100% affordable homes for Phoenix Community Housing combine intergenerational living with HAPPI principles whilst targeting a highly sustainable Passivhaus standard. The Housing LIN also featured the scheme at its recent HAPPI Hour. More at: https://www.housinglin.org.uk/Events/HAPPI-Hour-Fostering-innovation-in-designing-for-Ageing

Introduction

Melfield Gardens is a highly sustainable, affordable housing scheme on a constrained infill site in the London Borough of Lewisham for Phoenix Community Housing, a not-for-profit resident-led housing association. It is designed to a Passivhaus standard as the first step towards zero carbon. Most of the new homes are for people aged over 55 years, with some accommodation allocated for postgraduate students to bring the benefits of intergenerational housing. In return for spending time each week with older residents, the students will be charged a sub-market rent.

"It's vitally important that we don't just build new homes but homes that contribute to the battle against climate change and well-designed schemes that create places where people are proud to live. There's a huge demand for affordable housing both for older people and for students. The new development at Melfield Gardens will help to meet the need for both and offer a place where different generations can mingle and support each other. I can't wait to see them being built."

- Jim Ripley, Chief Executive at Phoenix Community Housing

Intergenerational and age-friendly design

Melfield Gardens will provide 30 affordable independent living homes for residents aged 55+, and two, fourbedroom homes for postgraduate students. In return for being 'good neighbours', the students will be charged a lower rent. Each will spend time assisting older residents, offering company or participating in recreational activities in the communal spaces. There are all sorts of ways in which the students could contribute to the community being created – whether simply chatting



or arranging and participating in social activities, students can all help combat loneliness. As highlighted by the Campaign to End Loneliness, loneliness and isolation are well-known issues

within the older population in the UK, but there is a growing awareness of mental health issues with students as well. So, it is not seen as just young people helping older people; it can and should be a meaningful two-way relationship and help tackle some problems that young people deal with at university.

The scheme is split into two subtly splayed buildings that embrace a pedestrian-friendly central landscaped space. This space has to work hard, providing a welcoming approach to the residents' homes, discrete access for refuse vehicles to the adjacent Millcroft House, retention of a public path through the site to Beckenham Hill Station, as well as creating a lovely setting and views. The new residents will access their homes from this space, and the shared entrance cores, external decks and front doors will overlook it, increasing the sense of community and awareness of neighbours. Here we have taken cues from our award-winning Hazelhurst Court extra care scheme, two minutes' walk away, where a similar courtyard approach has been very successful. A shared 'garden room' sits at the foot of the western building, wrapping around into the protected garden to the rear for residents and their visitors.



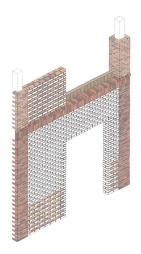


To make the new Category 2+ and 3 homes as attractive as possible to the older residents, a dual aspect and flexible 'one-bedroom-plus' model has been adopted. This incorporates an additional 'study/hobby room' with a pocket door to allow it to become part of the main living space or remain separate. This provides residents with greater flexibility to tailor their homes to their own requirements as they age in place, in line with HAPPI principles. This space could be used as additional living space, somewhere temporary for a carer or relative to sleep in, storage or for hobbies or work. Phoenix see this as a way of attracting older people to 'rightsize' to more manageable and appropriate homes, thereby freeing up larger family homes for tenants who might currently be in overcrowded accommodation. This was a proven success of Hazelhurst Court.





1Bed+ flexible dwelling for older residents

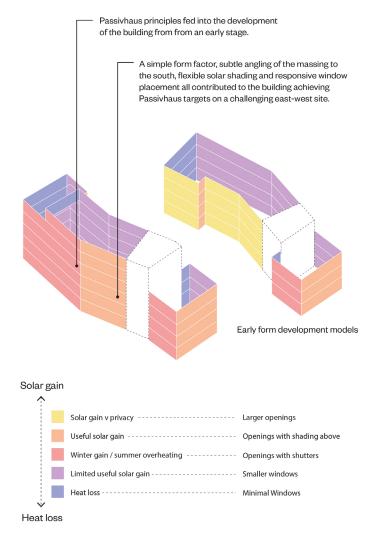


All homes are light and airy with windows on at least two sides. Front doors and kitchen windows look out on to the central landscaped space, with living rooms, bedrooms and balconies facing outwards with longer views. The architecture is based on a simple palette of materials, predominantly in two colours of brick, using thoughtful brick detailing and giving more expression to entrances where special profiled glazed bricks are used. The new buildings pick up on subtle detailing from the adjacent tower, so the new interventions complement the existing.

Highly sustainable Passivhaus design

As well as learning from this innovative social pilot, Phoenix is keen to achieve a fully certified Passivhaus building as the first step towards a zero-carbon future. This 'fabric-first' approach, with very high levels of insulation and air tightness which reduce energy consumption to extremely low levels, demands design rigour and excellent teamwork. The architectural team continues to work closely with sustainability experts Etude, who have provided guidance from first principles through to detailing and technical specification and undertake thermal and daylight modelling at key stages.

The east-west orientation of the site is less than ideal for Passivhaus (northsouth is preferable), so it was essential to optimise the 'form factor' of the buildings by keeping the massing and form simple, minimising overshadowing between the blocks, building on what is a challenging infill site. The size and placement of the triple-glazed windows were carefully considered in relation to orientation, and shutters will reduce overheating on the west-facing façades. Brick banding, slight recesses, ribs and columns will add expression to the facades without adversely impacting the insulation layer in the wall buildups. Although marginally more costly than a standard construction approach, the simple Passivhaus building form gives cost efficiencies and the quality control required on site is proven to deliver a better build quality with fewer defects.





Alongside the high performing building envelope, Passivhaus-certified products will help to achieve desired U-values, airtightness and reduce carbon emissions. Due to the high thermal performance of the building envelope, each home will only need the equivalent of one small electric radiator, with the entire scheme being direct electric. Controls of the ventilation and heating systems will be user-friendly, and the homes will be no more difficult to manage than a standard new build apartment.

Resident-led design - co-design in practice

Levitt Bernstein and Phoenix Community Housing are committed to community engagement and communication to support the transformation of Melfield Gardens. Co-design was especially important due to the proximity of Phoenix's Millcroft House and the Melfield Gardens houses. Any proposal had to reassure these residents that there would be benefits for them in the form of improved public realm, parking, entrances, safety and security.

An initial consultation event was held for adjacent residents in March 2019, followed by a wider event in July 2019, with a final public event in January 2020. Feedback helped shape proposals, such as revealing the need for the accessible pedestrian route through the site. The extensive consultation also meant neighbours felt heard and reduced the number of objections to the scheme (with only three received during the planning application process). Levitt Bernstein also used VR headsets to give Phoenix tenants the opportunity to experience the new buildings in an immersive 3D way, as well as the more traditional drawings and models.







Lessons learned

The project ran very smoothly through the pre-planning stages and much of this was down to a clear vision from Phoenix that translated into a strong brief early on. The early decision to work to a Passivhaus standard ensured that the challenging requirements were designed in from the start. On other projects where it is introduced at a later stage, it has been a real struggle to meet the targets due to constraints that have become fixed. Appointing a design team experienced in the standard was also critical to the smooth design development and planning process.

Next steps

Melfield Gardens received planning consent in Spring 2021 and is currently being tendered to contractors, with the aim of starting on site in early 2022. Firming up agreements with the university whose postgraduate students will have access to the scheme will continue during this period.



Note

The views expressed in this paper are those of the author and not necessarily those of the Housing Learning and Improvement Network.

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About Levitt Bernstein

Levitt Bernstein is a practice of architects, urban designers and landscape architects with over 120 staff working from design studios in London and Manchester. We believe that good design can transform lives and apply this principle to our housing, education, health, arts and commercial projects of all shapes and sizes across the country.

Email: hello@levittbernstein.co.uk Web: www.levittbernstein.co.uk

Twitter: @LevittBernstein

LinkedIn: https://www.linkedin.com/company/levitt-bernstein/

About Phoenix Community Housing

Phoenix Community Housing was established in 2007. It is London's first Community Gateway housing association, offering shareholding membership to residents and placing them at the heart of decision-making. Phoenix owns and manages around 6,300 homes in the Bellingham, Downham and Whitefoot wards of south Lewisham.

Email: info@phoenixch.org.uk Web: www.phoenixch.org.uk Twitter: @phoenixtogether

LinkedIn: https://www.linkedin.com/company/phoenixcommunityhousing/

About the Housing LIN

The Housing LIN is a sophisticated network bringing together over 25,000 housing, health and social care professionals in England, Wales and Scotland to exemplify innovative housing solutions for an ageing population. Recognised by government and industry as a leading 'ideas lab' on specialist/supported housing, our online and regional networked activities, and consultancy services:

- connect people, ideas and resources to inform and improve the range of housing that enables older and disabled people to live independently in a home of their choice
- provide insight and intelligence on latest funding, research, policy and practice to support sector learning and improvement
- showcase what's best in specialist/supported housing and feature innovative projects and services that demonstrate how lives of people have been transformed, and
- support commissioners and providers to review their existing provision and develop, test out and deliver solutions so that they are best placed to respond to their customers' changing needs and aspirations

To access a selection of related resources on design homes for older people, including the influential HAPPI reports, check out the Housing LIN's curated 'Design Hub' at: https://www.housinglin.org.uk/Topics/browse/Design-building/

And for more information about how the Housing LIN can advise and support your organisation on community-led approaches to shaping your 'offer' for an ageing population, go to: https://www.housinglin.org.uk/consultancy/consultancy-services/

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Email: info@housinglin.org.uk Web: www.housinglin.org.uk

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