



Housing LIN

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## Case Study 150

# A 21<sup>st</sup> Century eco-almshouse: St. John's Almshouses, Lichfield

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# Summary

This Housing LIN case study shines the spotlight on the award-winning St. John's Almshouses, a new Passivhaus certified residential scheme for older people in Lichfield, completed in August 2017. The client, St. John's Hospital, are a charitable trust and historic almshouses organisation which has had a presence on the site since 1129. The existing Grade I listed buildings date from 1495 and the new 21st century development comprises 18 new flats contained within two separate buildings, which are arranged around a new landscaped courtyard.

The design won this year's Architect's Journal Housing Project of the Year (up to £10 million).

# Project Description

The St. John's Almshouse project comprises 18 new flats within two brand new, Passivhaus certified buildings totalling approximately 1100sq.m GIA and set within an extensive landscaping scheme in the grounds of the existing Grade I listed almshouses in Lichfield.

The Almshouses provide sheltered accommodation, or more specifically, 'independent living for older people, with neighbourly support and care'. This social aspect is key to the design of the new apartments; arranged around a communal courtyard with an oak framed pavilion at its heart, the scheme seeks to reinforce the sense of community established over centuries at St. John's. Raised beds have been incorporated in the landscape design to encourage all residents to participate in the growing and sharing of food, and to socialise and support their neighbours.



The main client objectives were to provide the highest quality environment for the residents, and to reflect the ingenuity of the 15th century listed buildings which were groundbreaking in their day. To this end the buildings were designed to be Passivhaus certified, utilising high quality traditional materials with contemporary design and detailing.

The location of the site meant both the LPA and Historic England were heavily involved in the preplanning development of the scheme. As well as ensuring a suitable architectural response, it was essential that the impact of the building as seen from the adjacent Birmingham Road was mitigated, tree removal minimised, and bio-diversity enhanced.

The method of construction utilises masonry cavity walls with full fill insulation (cavities of 200mm and 170mm in the 2 and 3 storey blocks respectively) and wet plaster internally providing the airtightness layer.

Roofs comprise airtight OSB to the underside of timber trussed rafters with insulation at ceiling level. In-situ concrete ground floor and precast concrete upper floors add thermal mass to the buildings as well as ensuring robust fire and acoustic performance.

Given the context of the Grade I listed buildings it was a pre-requisite, both for the client and the local planning authority that the new buildings incorporated high quality materials and sensitive design, to sit harmoniously in their environment. To this end a palette of traditional and natural materials was chosen, including handmade bricks, clay plain roof tiles, copper cladding and green oak framing, with design cues taken from the use of oak in the existing buildings. The use of these high quality materials not only contributed to an aesthetic suitable for a conservation area, but also, coupled with the high levels of workmanship required by Passivhaus, should ensure the durability and longevity of the buildings for future generations of residents.

The two buildings, one two storey and one three storey, are both predominantly red brick, with the use of contrasting darker grey bricks at the upper levels and feature copper clad flats bringing a contemporary feel to the scheme.

The apartments are accessed via oak framed walkways and circulation towers (stairs and lifts to all upper floor apartments) which are located externally, aiding way finding and providing semi-private spaces where residents can meet and socialise informally. These architectural elements are inspired by the oak framed stairwells on the existing buildings and help create a visual link between the new and the old.

The two blocks include a mix of different apartment layouts, including 4 generous two bedroom apartments all located in the two storey block to the south of the courtyard. The three storey block houses 14 one bedroom apartments of three different layouts.

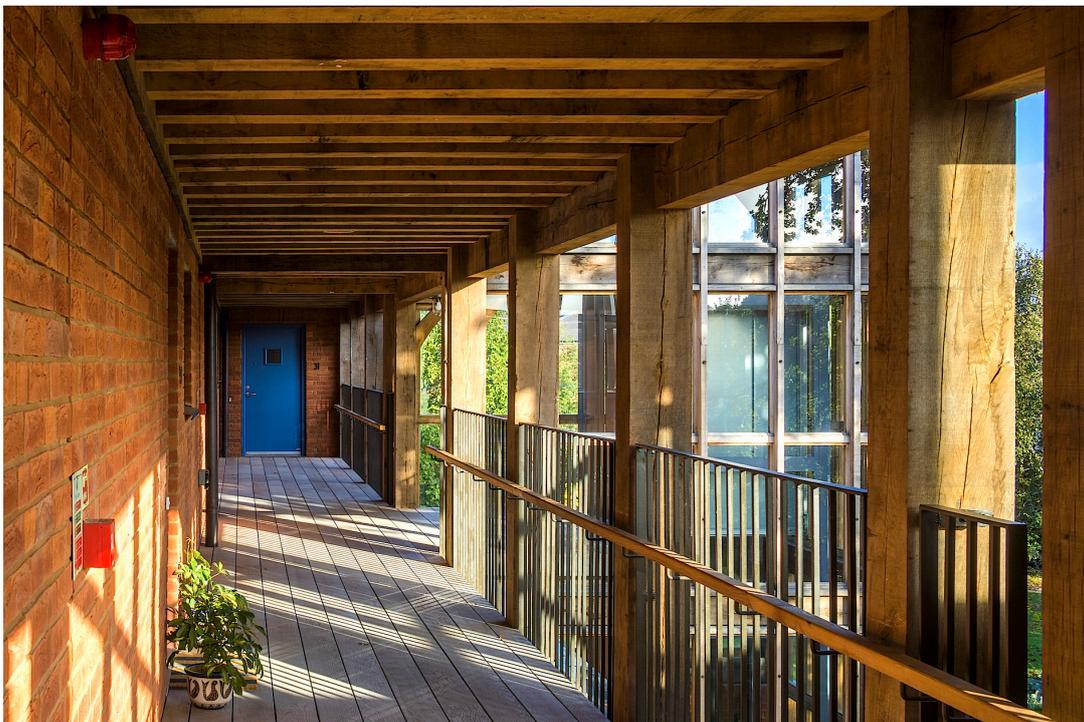
The apartments are all designed around generous entrance halls with open plan kitchen / living spaces and spacious bedrooms. They can all be accessed by wheelchair and each has been sized to allow suitable turning space throughout. The fixtures and fittings have been carefully chosen to provide a homely feel, including in the wet rooms where the trustees were keen to avoid an institutional appearance whilst providing facilities suitable for elderly residents and future adaptation specifically for wheelchair users.

## Community Impact & Engagement

The History of St. John's goes back to the twelfth century when pilgrims came from all over the country to visit the Lichfield shrine of St Chad. It was the first building those from the south encountered - just outside the City Gates, and was a place of hospitality and welcome.

St. John's Almshouse was established in 1495 when Bishop William Smythe authorised the construction of an almshouse for 9 men 'who through no fault of their own had fallen on hard times'.

Nowadays St. Johns provides accommodation for single older men, women and married couples who can live independently. The original and distinctive Grade 1 listed Tudor brick building is nationally famous for its iconic chimneys, some of the first domestic chimneys in the Midlands. St. John's occupies two locations, in St John Street and in Cathedral Close and prior to the development of the new buildings had 24 apartments and 31 residents. The provision of a further 18 new apartments in two wings means a significant increase both in apartments and number of residents in the heart of Lichfield City, close to all amenities.



The population of Lichfield had remained fairly static until the early 70's but since that date has continued to rise, partly due to its close proximity to Birmingham and expansion of the commuter belt. The local population is also ageing and in 2014 nearly 20% of the population were over 65. A shortage of suitable, accessible housing for older people, coupled with other demographic information and an increase in the number of applications for almshouses, convinced the Trustees that there was an increasing housing requirement for older people in need. It was against this background that they took the decision to undertake a major new development at St. John's, the first new building for over 50 years.

The Trustees are very conscious of the Christian foundation of St. John's and mindful of its roots to provide accommodation for those in need (financial, spiritual or emotional). Their vision has always been to provide secure, comfortable, accessible and affordable apartments in a beautiful setting to enhance the quality of a residents' life whilst enabling them to retain their independence for as long as possible.

The new almshouses provide spacious, high quality modern apartments in the heart of the city. Each apartment has its own secure front door and its own outside space or balcony. The Trustees hope the new buildings will encourage residents to make friends and share a wider social life through the life of the Chapel and other communal facilities.



The Trustees also believe that older people have a vital contribution to make to our community here in Lichfield and are convinced that the almshouses at St. John's are a living example of how older people's lives can be fulfilled and enriched by their surroundings.

The inspiration for the garden design is based on a medieval monastic garden which

traditionally provided food and medicine for the community. Raised beds have been incorporated to encourage all residents to participate in the growing and sharing of food, free from additives and pesticides and to socialise and support their neighbours, thus promoting general health and wellbeing and an improved quality of life in a safe and nurturing environment.

A large undercover Pavilion and seating area, that can be viewed from every apartment, has also been included in the centre of the quadrangle with the intention of encouraging fraternisation and helping to build the community. Other areas of the grounds include formal lawns, a wild flower meadow, mature woodland and car parking, all of which are accessible for people with disabilities.



*"We are delighted with how harmoniously our new buildings sit within their environment, blending seamlessly with our Grade 1 listed building and feel certain that the high levels of workmanship required by Passivhaus, will ensure that these buildings benefit future generations. We believe that the new almshouses are an exemplar project of how older people's lives can be fulfilled and enriched by their surroundings, allowing them to fully access and contribute to their community."*

*Feedback from residents, as they move into their new homes at St. John's, indicates that they are delighted with their new homes, as one resident enthusiastically said, 'It's like living in paradise!'"*

**Kathryn Duncan Brown (Chairman of Trustees at St John's Lichfield)**

# Key learning points

- Importance of high quality natural materials, especially within heritage setting.
- Use of fabric first approach, in this case Passivhaus, providing long term benefits and helping prevent fuel poverty.
- Air tightness requirements of Passivhaus are onerous and require rigorous attention to detail on site; specialist sub-contractors highly recommended.
- External circulation areas (stairs / lifts / entrance walkways) provide opportunity for informal socialising and act as semi-private extension of dwellings.
- Landscaping can provide focal point of developments, which may otherwise lack cohesion; provision of green spaces, opportunities for gardening and external covered spaces are key to establishing sense of community.

## Conclusion

This project is the culmination of years of planning and fundraising by the client and it was only through their steadfast commitment to quality, and in particular to achieving Passivhaus certification, that the end product has been such a success.

The client now has 18 additional apartments which have undoubtedly raised the standard of sheltered housing in Lichfield; the waiting list for the almshouses is testament to this and residents will continue to benefit from the quality of the build, the established community, and the low fuel bills for years to come.

## 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 KKE Architects

KKE Architects was established in 2005 and is a specialist in healthcare design – especially the design of hospices and palliative care (over 55 completed projects to date) – with a growing portfolio of education, residential and commercial projects. Also see their Housing LIN case study No.110 on Mary Stevens Hospice, Stourbridge, [Sensitive hospice design: A holistic end of life caring environment](#).

Finally, Olivia Kirk Gardens was responsible for the landscape design on St. John's Almshouses.



# About the Housing LIN

The Housing LIN is a sophisticated network bringing together over 40,000 housing, health and social care professionals in England and Wales to exemplify innovative housing solutions for an ageing population.

Recognised by government and industry as a leading 'knowledge hub' on specialist housing, our online and regional networked activities:

- connect people, ideas and resources to inform and improve the range of housing choices that enable older and disabled people to live independently
- provide intelligence on latest funding, research, policy and practice developments, and
- raise the profile of specialist housing with developers, commissioners and providers to plan, design and deliver aspirational housing for an ageing population.

To view other resources on almshouses featured by the Housing LIN, visit our dedicated webpage at: <https://www.housinglin.org.uk/Topics/browse/Housing/HousingforOlderPeople/Almshouses/>

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