

PUBLICATION

# Thermally efficient social housing for young adults

By [youris.com](http://www.youris.com) GEIE

<http://www.youris.com>

**When young people move out of supported accommodation the leap to independent living can be tough. A new project in the north west of England is converting a former sheltered housing block for elderly people into managed accommodation for young adults, while also improving its thermal efficiency**



**When young people move out of supported accommodation the leap to independent living can be tough. A new project in the north west of England is converting a former sheltered housing block for elderly people into managed accommodation for young adults, while also improving its thermal efficiency**

Young people can find themselves homeless or in housing need for many reasons. **In the UK, once they are 16 years old they are often placed in managed rented accommodation.** But these units – often small flats with communal kitchens and living rooms, and private bedrooms – are not permanent solutions.

Moving on from such accommodation to living independently can be hard. In Salford, a city in Greater Manchester, in North West England, one social housing provider, Salix Homes, is creating affordable rental flats to help manage this transition. They will allow young adults to get use to living independently, but with support available if needed.

**Salford suffers from high levels of poverty.** According to government rankings it is the 16 most deprived area in England, and at 7% unemployment is higher than the UK average (5%).

**The area is, however, undergoing a major regeneration.** The BBC has moved a large proportion of its operations to the £550 million MediaCityUK development at Salford Quays and a new inland port, which should bring around 3,000 jobs to the city, is being built. There is also ongoing infrastructure development, regeneration of key urban areas and new housing being built.

Salix Homes is creating the flats in **Alexander Gardens**, a former sheltered housing block for elderly people in the Lower Broughton area of Salford, **about a mile from the centre of Manchester.** As well as providing social housing, the block is also a demo-site for the European Buildheat project, which promotes energy efficiency interventions for urban regeneration.

**At the end of 2015, after the site was selected, Alexander Gardens suffered extensive flooding.** “The River Irwell, which is not far from the site, burst its banks and completely flooded the ground floor,” explains David Kemp, Sustainability manager at Procure Plus, a not-for-profit procurement service for social housing providers that is involved in the project, “That gave us further impetus because suddenly the task became a bit more important and we had to look at flood resilience as well.”

To improve the buildings thermal efficiency the external cavity wall insulation has been upgraded. Mineral wool insulation, a lot of which was damaged by the flood, was removed and replaced with a polyurethane foam, called Technitherm. This is injected into wall cavities where it expands, filling and blocking air gaps.

Technitherm was originally designed to stabilise cavity walls by binding the two brick layers together, but it was found to have “excellent thermal insulation properties and be completely waterproof,” explains Kemp. “It is certified by the British Board of Agrément for use in flood zones, where other mineral wools and cavity products wouldn't be suitable.”

High thermal performance doors and windows with flood mitigation properties are also being fitted. Combined with the polyurethane foam in the walls, they should protect Alexander Gardens from future floods. Loft insulation is also being topped up in pitched roof areas and the flat-roof areas are all being insulated.

“The BuildHeat project is being used **to improve the thermal performance of the building, using materials that also provide flood resilience**, and also install a heating system which is cheaper for both us as landlord and the new tenants to own and run,” says Alan Edge, a project surveyor for Salix Homes. The building's twenty year old communal gas heating system is being ripped out and replaced by a ground source heat pump system.

In its previous life, Alexander Gardens' residents paid a flat rate for their heating and hot water, but this did not encourage energy efficiency. “The heating and hot water was pretty much on all the time,” says Kemp.

**The new residents won't pay heating and hot water bills, but each flat will have its own heat pump.** “That heat pump is powered by that residents own electricity, so if they don't pay their electricity bill in theory they can't have heating and hot water,” Kemp says. This was a deliberate decision to create independence. “You are responsible for your heating, you are responsible for your hot water, you are responsible for your electricity,” explains Kemp.

---

The current plan is to create 13 two bedroom flats and 23 one bedroom flats. A photovoltaic array is also being installed on the roof to power lighting and heating in the communal areas.

“This project is fantastic, because **housing is one of the key issues for young adults**,” says Councillor Lisa Stone, lead member for children’s and young people’s services at Salford Council. “Some will move for education and employment, others to escape unhappy parental homes but whatever the reason they need decent and affordable homes.”

By Michael Allen