

Tackling the housing crisis: delivering quality social housing in the 'new normal' world



By **Richard Weeks**, Technical Director, EDAROTH UK

August 12, 2020

During the pandemic lockdown, most of us had to adapt to spending much more time at home – and for many of us, our homes have become a safe haven. However, it's a different picture for the millions of people without a suitable home of their own. Living in poor-quality, cramped and temporary accommodation, the pandemic lockdown for them has brought on an even heavier burden.

In Autumn 2019 the [BBC reported](#) that an estimated 8.4 million people in England were living in unaffordable, insecure or unsuitable homes, according to the National Housing Federation. But as Covid-19 has created a shift in the role of the home, it has also thrown up many new challenges that are forcing us to rethink how we can do things better, or differently in what will be the 'new normal' world. In this article we focus on how, despite the ongoing effects of the coronavirus crisis, we can still start to rebuild the UK's social housing stock at scale and tackle the severe shortage of truly affordable housing head on.

Homes that are truly fit for purpose

From late March, for many weeks, millions of us were asked to follow government guidance to stay at home, save lives, and protect the NHS to help contain the spread of Covid-19. For some, this meant balancing homeworking and childcare in the same space. For others, the difficulties of living in cramped, poor-quality, inappropriate accommodation were thrown even further into relief. We have already seen how cramped, poorly ventilated and inappropriate accommodation can trigger higher infection rates and embed other health inequalities. We have yet to see the scientific evidence, but many experts have already suggested that the long-term effects of the lockdown will be even more severe for those living in poor housing, with impacts ranging from mental and physical health to children's development.

So, when it comes to tackling the housing crisis, these factors should prompt some very different thinking across our sector for the post-Covid-19 'new normal' world. First, we need to think differently about how new homes are built. Second, we need to ensure that we raise the bar for new housing design to provide social housing that is truly fit for purpose.

This includes flexible space that easily accommodates different members of a family and their changing needs, as well as a space for homeworking if needed, alongside high-speed Wi-Fi connectivity, plenty of natural light, and access to outdoor space, such as a garden or communal green space.

Desirable, aspirational living spaces

At Atkins, we have embarked on a new journey to meet this challenge: to deliver quality social housing, at scale, using modern methods of construction (MMC) supported by an end-to-end development solution. Panels and modules are assembled in our production facility, transported by road to the site, and then assembled by highly efficient teams with a broad skillset rather than specialised tradespeople. This is through Atkins' new subsidiary company, [EDAROTH](#), the name an acronym of 'everybody deserves a roof over their head', which radically shifts the traditional housebuilding model.

The apartments and houses we plan to create at-scale are not only built using modern methods, they are also designed to meet the requirements of modern living, and they are appealing to live in, and to look at. The internal areas of our houses exceed nationally described space standards by at least 10 per cent, with larger floor-to-ceiling heights that add to the sense of spaciousness. Intrinsic to their design is the understanding that the flexible use of interior space, use of light, and outdoor space, makes them not just suitable but desirable living spaces that people really want to live in, and take pride in.

As an indication of the desirability of our homes, we received hundreds of applications from the housing waiting list for our first homes at [Hillside Gardens in the London Borough of Lambeth](#) within hours of their release. [You can view the development's construction in this one-minute video](#). And, key to the overall ethos and purpose of EDAROTH is that these new homes can be constructed quickly, on difficult-to-access 'infill' sites in urban areas, with local authorities retaining the land, the property, and the long-term rental income. So, they also have great potential in boosting economic and social outcomes for their residents, local communities and local authorities, more of which we discuss later.

Controlled and socially distanced manufacturing

One of the more obvious challenges to the housebuilding sector caused by Covid-19 is that it is difficult to maintain social distancing on traditional building sites. Even in non-pandemic times building sites are places where health and safety risks must be continually assessed and managed. But when we look at offsite manufacturing as a route to delivering social housing at scale, the issue of Covid-19 does not pose the same problems, because most of the activity happens in a highly controlled factory environment. The actual building site is treated as an extension, the last element, of the factory process.

A blueprint for a new delivery approach

We are also exploring the expansion of this factory model to set-up local assembly hubs, to serve the housing needs across the UK whilst supporting local employment. This would be a very positive step forward for UK manufacturing to support post-Covid-19 economic recovery. Accessing manufacturing capability will also help to address the already limited capacity of the UK's housebuilding and residential construction sector and will support the delivery of many new homes.

We believe this blueprint for a new delivery approach – modern methods of construction, offsite manufacturing of component parts in efficient production lines similar to the automotive industry, and faster on-site assembly by multi-skilled teams who do not have to work in linear succession as do plumbers or electricians – heralds a significant shift in how we can accelerate the delivery of social housing at the speed and scale that is needed. Plus, it is a fully workable model in a post-Covid-19 world.

Adding social and economic value to communities

[In previous EDAROTH articles](#) we discuss how good social housing can become a community asset, through reinventing public spaces and improving greater economic security by generating stronger communities and boosting aspirations.

The need for economic growth throughout our communities has never been greater than now, as the UK starts its long recovery from the far-reaching economic impacts of Covid-19.

The MMC model that we are adopting supports this; largely because the client is the local authority, that retains land ownership, benefits from the long-term rental income, and owns the housing assets on completion – homes that are built to last for well over a century. There is a boost to housing stock in public ownership while simultaneously creating greater economic security for individuals, communities and local government. For many, having a permanent address is the first step towards permanent employment.

Safe, secure social housing reduces the substantial bills local authorities must pay to house families in often unsuitable temporary accommodation. Plus, much research shows that housing stability supports better educational outcomes and life chances for children; an increasingly important factor in a post-Covid-19 world as many school cohorts will be playing catch-up over the next few years.

The role of housing in meeting Net Zero targets

Before coronavirus we were already facing a climate emergency. As a company, Atkins, a member of the SNC-Lavalin group, is now viewing all its engineering activity through the lens of working towards net zero CO₂ by 2050, led by our [Engineering Net Zero initiative](#). New housing methods are no exception to this. Reducing the energy consumption and carbon emissions required to heat homes also reduces tenants' energy bills and tackles head-on the issue of fuel poverty that many lower-income families face.

We are proud that our EDAROTH homes are designed and built to achieve a 100-year design lifespan, with the highest energy efficiency EPC 'A' rating. Their predominantly off-site construction means they perform favourably when compared to traditional construction methods, [see p13 of EDAROTH's FAQs sheet \(.pdf\)](#). Other environmental benefits include more efficient transportation, less noise from delivery vehicles, less pollution from site traffic and reduced waste and reliance on natural resources. Building new homes that can accommodate more time spent at home, such as for homeworking, also has a significant knock-on effect on the UK's overall CO₂ emissions because they reduce the need to travel. This is already being cited as a significant factor in helping the UK achieve its net zero CO₂ target by 2050.

Our vision for housing provision through this new delivery model is about more than just components or materials. It is also about rebuilding and adding value to communities, and we believe that within the context of the 'new normal' our model lends itself well to accelerating that recovery, while providing quality homes for those who need them.

Richard Weeks is technical director for EDAROTH, responsible for our housing product and technical delivery of this exciting new initiative that is offering an innovative and high-quality solution to help tackle the social and affordable housing challenge.

 End of article