

How should Off-Site Construction be part of the Affordable Housing Toolkit?

The Saint-Gobain Off-Site Solutions Roundtable Series 2024



Managed, researched and written for
Saint-Gobain Off-site Solutions by

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The incoming Labour Government has pledged to build 1.5 million affordable homes over the course of this five-year parliament, with promises to overhaul the planning system to deliver that target.

But against a backdrop of major changes to building and safety standards, tough net-zero targets and rising construction costs, not to mention an overheating skills and labour market, what would need to change to make this achievable?

Saint-Gobain Off-Site Solutions invited leaders from across the social and affordable housing market to participate in two roundtable discussions, the first in Manchester and the second in London, to get their views on the challenges and opportunities facing the industry, as well as their insight into the day-to-day realities of creating more quality affordable homes for more people across the UK.

We also wanted to better understand the role off-site construction could play, and indeed is already playing, in helping to provide affordable housing. What could we change in the way we work to help this vital sector deliver?

There have been high-profile setbacks in the 'Category 1' volumetric market in recent years which has hampered capacity and damaged confidence. However, other categories of off-site methods, including timber and steel frame, as well as panelised off-site manufacturing, are now commonplace on construction sites. So there are successes to learn from, as we move towards off-site manufacture being the norm.

The industry has found a lower-risk, hybrid approach to working, but how can we increase the use of, what is still generally referred to as Modern Methods of Construction (MMC), in the Affordable Housing Toolkit, and what do providers like Saint-Gobain Off-Site Solutions need to do to help achieve that?

The opinions and insight from our expert guests, the highlights of which we share here, were fascinating, extremely helpful and in some cases, eye-opening.

I would like to thank everyone that took part in 2024's Roundtable Series.

Will Jones

Marketing and Digital Director
Saint-Gobain Off-Site Solutions



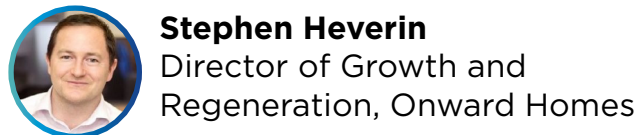
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The Saint-Goban Off-Site Solutions Roundtable Series 2024

Attendees

Bridgewater Hall, Manchester, 17th September 2024:



Stephen Heverin
Director of Growth and
Regeneration, Onward Homes



Helen Spencer
Executive Director of Growth,
Great Places Housing Group



Julian Howarth
Construction Director, Guinness
Partnership



Manuel Atkinson
Director, BTP Architects



Colin Lafferty
Senior development Manager,
Torus



Paul Mullane
Director of Development and
Sales, Halton Housing and
Building Better



Dominic Conway
Group Director of Development
and Growth, Bolton at Home



Tom Cox
Construction Solutions Director,
Saint-Gobain Off-Site Solutions



Dan Whelan
Deputy Editor, Place North
West (Chair)

The Landmark, London, 10th October 2024



Reuel Thompson
Development Manager, Watford
Community Housing



Jamie Parr
Founder and Director, Better
Delivery



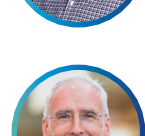
Lenka Muir
Assistant Director of
Development, Golding Homes



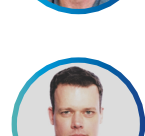
Tristan Samuels
Group Development and New
Business Director, Vivid Homes



Michael Shepherd
Investment Director, Man GPM



Mike Kirk
Chair, The Hyde Group



Will Jones
Marketing and Digital Director,
Saint-Gobain Off-Site Solutions



David Innes-Edwards
Managing Director, Frontier
Public Relations (Chair)

The Roundtables - Themes and Insight

The format of the roundtables encouraged attendees, from different parts of the industry, to share their experiences, sparking debate and discussion with their colleagues.

We have collated the key themes covered, supported by insights from the attendees.

1. Off-Site Construction

While there has been a lot of noise in the past about Modern Methods of Construction (MMC) offering a step change in the scale of construction of affordable housing, the view from our experts at the sharp end of delivering homes was much more nuanced, some with positive experiences, some not so positive.

“[A challenge for us] is how we engage with our principal contractor supply chain to maximise use of off-site solutions, which we believe to be part of the answer, particularly with sustainability in mind.

“It’s been a challenging time for many of our construction partners, and so we need to support them to adapt their processes to accommodate some of those materials, some of those products. We are looking at how can we work more closely with the supply chain to breakdown some of those barriers, and how that might help us tackle the costs more directly.” Helen Spencer, Executive Director of Growth, Great Places Housing Group

In fact the term MMC is possibly something of a distraction as social landlords and developers are less interested in the different kinds of

construction methods and more focused on what solution will deliver the best housing. They are particularly interested in the potential environmental and performance benefits that off-site construction can offer.



I’m constantly talking to my team about MMC and what new innovations are in the market. What else is out there? We need to keep that education going. Hopefully, just normalising the idea of zero bills for residents or near zero bills, the sustainability of the products that we’re creating. That’s the key for me over the next five years.



Colin Lafferty, Senior development Manager, Torus

However, what landlords really want is to be listened to, so that manufacturers deliver the right housing solution, rather than just trying to sell the products they currently make. They also need certainty around the quality, performance and sustainability of construction methods, during the build and when it becomes somebody’s home.

This kind of certainty would probably result in the greater use of MMC by more mainstream builders, which would open the way for improved skills in the industry and wider adoption across the sector, including affordable housing.

“I feel that whenever the bigger developers in the UK, such as Barratts, Taylor Wimpey and Persimmons, start using Off-Site Construction or other MMC methods to deliver huge sites, that’s when the skills would hopefully trickle down to the smaller levels, smaller developers, which would be a big part

of any housing association's pipeline." Reuel Thompson, Development Manager, Watford Community Housing

2. Residents

Roundtable attendees from across the supply chain were agreed that the needs of residents are paramount; their comfort and pride in the home, and crucially, their ability to keep warm and pay their energy bills during such economically challenging times.

"A lot of our customers are struggling with the cost-of-living crisis. We've never seen such high demand for new homes. We used to take approval papers through our Board anticipating circa 40-50 applications for every new home delivered. We're now talking 600-700. It's a sad reflection of the housing crisis and highlights just how many families are desperately in need. That's the scale of the challenge we face.

"It's a difficult balance with market conditions and costs as they are. We need to keep rents affordable for customers so they can sustainably live there; we don't want to build homes and people not be able to sustain their tenancy.



The challenge is then to keep one eye firmly fixed on the customer who's going to be living in the homes and then try and work how to achieve a viable development. It really does make for a very complicated process.



Helen Spencer, Executive Director of Growth, Great Places Housing Group

However, landlords face some tough

financial challenges. Prioritising budgets for essential retrofitting of housing stock means fewer new homes are being built, while the impact of implementing building and safety regulations also puts a strain on finances.

"The pot of money a housing association has to deal with all existing and new stock is not limitless, and you need to really place it where it's most needed, and recently we've had the challenges on existing stock: damp, mould, fire safety, a lot of changes in building regulations, the Building Safety Act.



All of that needs to be responded to. All of that costs money, and the supply chain in those areas is very overheated. Even if you have the money to do it, quite a lot of the time the capacity isn't there, especially on the fire safety side, and all of that translates into delays, and again more money.



Lenka Muir, Assistant Director of Development, Golding Homes

If the sector is to implement new construction methods and technologies, such as air and ground source heat pumps, then it needs to help residents understand the benefits of these innovations, rather than simply imposing them on people.

"We all need to be educated into how to use an air source heat pump over a boiler. Why is my house not getting warm? Why is my water not warm? We all might struggle if we were using the same system. It's education for everyone – residents and employees – as to how we can make the buildings better, and perform better, last longer. Everyone is happier." Reuel Thompson, Development Manager, Watford Community Housing.

3. Government Support

Successive Governments have identified a housing crisis in the UK, but very little has happened to move the dial in building new homes. The new Labour Government has pledged to build 1.5 million new homes over the next five years, but the detail of how they expect to achieve that, and pay for it, is still to come.

“Even with existing grant levels of around £225,000, there remains a material gap between the open market value of around £425,000 and the underlying value on a SRT of c £50,000 in London.

“I think there were 150 new social homes delivered in the last quarter in London, and the Government faces significant challenges in getting anywhere near the 90,000 [target] unless you see something really significant happening in terms of grant levels.



And I know there seems to be a focus on that being delivered through local authorities, but I think many local authorities have lost the skill sets to deliver that, so it needs to be done in partnership with housing associations who will in turn be doing it in partnership with potential third-party funders like Man Group.



Mike Kirk, Chair, The Hyde Group

Our experts are supportive of that ambition because they are dealing with a fast-growing demand from existing and prospective residents. But what they all want is a more collaborative and supportive relationship with the

Government and its agencies; a dialogue where they can highlight their challenges and potential solutions, rather than top-down targets to build more homes.



The Government needs to provide clarity to enable the private sector to work things out. I would like to see a future where there's a more centralised approach to pipeline aggregation and generally a more pragmatic approach to enabling new (MMC) products and systems to market.



Jamie Parr, Founder and Director, Better Delivery

And crucially they want better financial support that considers the growing costs and risks that landlords face and currently have to foot the bill.



4. Planning

Planning continues to be a barrier and is having a material impact on social landlords, both in terms of their ability to build more homes and the bottom line of their already stretched finances.

“The delay that planning is causing is costing money. If viability is already stretched, you can’t afford that. You need to have some certainty about what is acceptable and what isn’t, making sure that statutory deadlines are adhered to.” Lenka Muir, Assistant Director of Development, Golding Homes

Government promises for reform are well received, but they need to be more than cutting red tape to make more land available or to speed up decisions. They also need to address a lack of experience in the planning sector and support a more pragmatic approach to decisions.



From a design point of view, in recent years the planners have been driving design guides and their own design agenda over what we used to build five or ten years ago. If the planners had their way, today every house would be bespoke looking design, which inherently works against any MMC approach.



Manuel Atkinson, Director, BTP Architects

The plea from our experts was for the Government to listen to those already managing affordable homes, not just the developers and the architects, but crucially the landlords looking out for their residents now and in the future.

5. The Construction Sector

Part of the problem with MMC is the notable failure of high profile businesses, some of which have entered with a fanfare and promises to change the face of house construction. These collapses have damaged MMC’s reputation and hit the finances of developers and investors.

“With MMC, you worry about the size of the company you’re dealing with, how sure you are that they’ll still going to be here in three years’ time because they’re not established.



These are board member questions we get, and we don’t get them on normal construction projects to the same extent. Until the education is better, I think we’re going to have that.



Stephen Heverin, Director of Growth and Regeneration, Onward Homes

The long shadow of the tragedy at Grenfell has also rightly necessitated new building and safety standards, which although necessary and welcome, cost money to implement. It has also reportedly caused a crisis of confidence in large parts of the supply chain.

“My big challenge is the placement of risk in the right places; people being proud of the work they do, being able to guarantee the quality they deliver. And if things go wrong, then the buck stops there, let’s deal with it quickly and learn from it

“Because as an industry we’re bad at putting issues out in the open and then taking learnings from them and

implementing those lessons.” Lenka Muir, Assistant Director of Development, Golding Homes

All our experts called for a closer, more open, honest and transparent relationship with manufacturers to be able to identify and work together to resolve problems more quickly in the future and start to bring trust back to the entire supply chain.

“One thing that’s absolutely broken down in the industry is trust. This whole thing about ‘can you trust a building product supplier? Can you trust a contractor to use those products appropriately and deliver a solution that’s safe for our customers?’

“The lack of trust has to be one of the things we need to resolve. If we haven’t done that in five years’ time, we’re not going to move forward on anything.” Jamie Parr, Founder and Director, Better Delivery

The golden thread that could help create an improved climate of trust is data. The industry needs to pull together to create standardised data and reporting that guarantees the quality of materials, workmanship and the final product.



Ownership of data, that needs to be unlocked in the industry, but it needs to be presented in a way our systems can handle. Data needs to be relevant and able to be relied upon, completely correct, and produced in a way that flows into our existing systems. It needs to be a holistic data driven approach, where data is shared across the project team to create accurate digital twins, and for us all to be comfortable that what we are using is correct.



Lenka Muir, Assistant Director of Development, Golding Homes



6. Sustainability

In some respects addressing the sustainability and environmental challenges of new homes has been obscured by other issues, such as finance and planning. However, whole life carbon reduction is now an increasing industry priority.

More energy efficient new housing means warmer homes that are cheaper to run for residents. Innovation should also mean that homes have a longer lifecycle before they need to be replaced or upgraded.

Reducing the environmental impact of building new housing is not just required to meet Government Net Zero targets, it is also important to investors and the public at large, many of whom will live in these properties. It is key to building sustainable homes and ensuring a sustainable housing sector.

But to be effective and trustworthy, environmental governance needs to be built in to every part of the supply chain, an approach that is probably more achievable with off site construction methods.

“EPDs at whole house level are challenging from a manufacturing point of view, so we need to work more on that and understand that because you’re trying to deal with very fragmented worldwide supply chains.

“You’re trying to track where a screw came from, and it goes to three different people, and you’re trying to track it back to which port in China it came from. These things are challenging. It’s proof of competency throughout the supply chain, and I think that’s the big unlock we need to see.” Lenka Muir, Assistant Director of Development, Golding Homes

In Conclusion

We asked the question How should off-site construction be part of the Affordable Housing Toolkit? The answer we got was It already is... but it could potentially play a bigger role if persistent challenges are addressed.

These are barriers that manufacturers like Saint-Gobain could help address by working more closely with other stakeholders. But there are also structural issues that ripple throughout the industry that require top-down support and a change in the way off-site construction is perceived.

Here are Saint-Gobain’s six key findings:

1. Stop talking about MMC as a panacea and focus on the best construction solution

MMC became synonymous with the idea of building houses in volume and at speed to help solve the housing crisis, but it was never a “silver-bullet” solution and, as a result, MMC’s reputation has become tarnished.

However, timber and steel frames, panelised wall systems and readymade structural components are all widely used on housing developments, offering significant advantages of consistency of product and efficiency of construction, if they are specified and built properly.

Off-site construction methods can also bring added benefits of reduced carbon and waste, as well as contributing to better performing, warmer homes during their lifetime.

We’ve allowed a prolonged housing crisis to dictate how the sector has been funded, defined and presented, with public finance skewing the terms of engagement as opposed to market demand, because the industry is already using many categories on off-site construction.

Saint-Gobain's pledge is to engage with housing associations, developers, architects and builders to listen to their requirements and challenges and develop ways of overcoming problems and help build more and better affordable homes.

2. Residents come first

Social landlords aren't answerable to shareholders like PLCs, and as they retain ownership of a significant portion of their housing stock, they are well placed to innovate for the benefit of their assets and residents, driving good practice across the rest of the sector.

However, high profile business failures in Cat 1 volumetric MMC have caused a crisis in confidence at a strategic and operational level. Off-site construction needs to learn lessons, listen to landlords and developers and find a way forward that benefits everyone by building quality new homes that are cost, carbon and energy efficient.

Part of that learning is ensuring that the industry takes everyone – including residents – with it on the innovation journey. The benefits of new technologies, such as heat pumps, and the differences in modern construction compared with traditional methods residents are used to, should be explained to people so they are able to use them properly and can experience the benefits of warmer, lower carbon homes.

3. Better Government support is needed, both financially and managing risk

Whether directly or under the auspices of a body like Homes England, improved financial support is needed alongside an appreciation of the growing costs that housing associations are facing, particularly in terms of new developments and upgrading homes to meet higher environmental and safety standards.

There also needs to be recognition of the risk landlords take on with developments and the knock-on effect this has on insurance, with insurers unwilling to provide cover for certain projects, which can also scare off potential investors who want certainty of return.

If the Government were to share in some of the risk that developers face, and guarantee or underwrite a portion of the costs involved in housing projects, it would bring more confidence to the market for insurers, investors, developers and landlords.

4. Reform and refresh planning

It's a perennial complaint that successive Governments have failed to improve local planning. It's important not just to focus on "cutting red tape" as a way of approving more schemes, because more schemes doesn't necessarily mean more good quality homes.

A major part of the problem is the brain drain of experienced planning offices who have departed local authorities for the private sector and have left a knowledge gap. This has resulted in planning bottlenecks, delays and decisions that don't make sense and require developers to go back to the drawing board.

While the new Government's promise to recruit 300 new local authority town planners is good news, it might not be nearly enough to alleviate the issues in the sector. In addition to experience and knowledge, the planning sector also needs a dose of pragmatism so that more good schemes can be approved, including a willingness to consider standardised design offered by off-site solutions that can deliver at scale.

5. More responsibility and accountability is needed

The last few years have seen a number of scandals in the industry, from the fallout

of the tragic Grenfell fire through to cases of mould that have resulted in poor health and death.

But the industry has historically failed to learn from these problems and there often feels like a culture based upon a lack of responsibility, exacerbated by a siloed and complicated supply chain.

The industry needs to be better at acknowledging problems early on, owning and addressing them so they can be resolved. This means all stakeholders being more open and honest to enable cooperation to fix problems and ensure they do not happen again, supported by better tracking of data throughout the supply chain so that issues can be spotted more quickly.

6. Focus on sustainability as a benefit, not a hindrance

Regulations to reduce carbon emissions and improve building performance, such as the Future Homes Standard in England and Wales and the Scottish Passivhaus Equivalent, are likely to be implemented in 2025. While designed to help reduce both embodied and operational carbon, they are often seen as layering on more cost to the construction sector.

But ultimately this is about building sustainable homes and goes beyond helping to reduce carbon in the environment. Building better quality and warmer homes will reduce fuel bills for residents and deliver properties that require less renovation and upgrading.

Shifting the industry mindset will take closer cooperation, from architect to manufacturer and developer all the way through to landlord and resident. Manufacturers need to work with designers and developers to demonstrate the benefits of new technology, so they can be properly specified, while social landlords need to demand low carbon solutions that benefit their residents with warmer homes that are cheaper to run.

The supply chain needs to be better at tracking materials and their environmental impact to ensure low carbon options are used. Once again, better management and reporting of data is the golden thread that should run through the industry to demonstrate higher quality and better performance of social housing.



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We currently employ around **168,000** colleagues in more than **75 countries** and turn over more than **£50 billion** annually.

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