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OSHA: BETTER TOGETHER

The Off-Site Homes Alliance (OSHA) currently consists of 23 registered housing providers, pooling talent and working collaboratively to deliver a new generation of quality, energy efficient affordable homes. We spoke to Project Director, Mike Ormesher about progress so far.



OSHA and its supporting partners have a clear strategy to grow its offsite housing portfolio using both panelised and volumetric modular technologies. OSHA is made up of a steering committee and focused working groups seeking to engage with the Design for Manufacture and Assembly (DfMA) process - not only to aggregate demand - but to create supply chain efficiency, minimise risk and offer maximum opportunities for housing providers to deliver the lasting change affordable housing needs.

Driving Housing Change

The organisation is attracting huge interest amongst housing associations

and local authorities for its pioneering collaboration and the ways it is bringing together like-minded organisations to drive demand for offsite technology and factory-manufactured homes. "The efficiency of factory production lines in any manufacturing industry, relies heavily on a consistent flow of production throughput," says Mike. "Preferably with the least number of disruptive changes to the product specification. Offsite manufacture requires a very well organised DfMA approach, and it is essential that demand throughput is maintained to keep the factory financially sustainable.

"This is a complex process, which requires great skill and robust management. The pressures that manufacturers have with design changes, varying site conditions, access to complex and tight building sites and a stop-start demand activity, are often a consequence of clients wanting to trial different technologies on pilot schemes. Although highly practical from a client perspective, pilot schemes significantly affect the efficiencies of offsite factories, especially in Category 1 volumetric module production.

"At OSHA, we have designed many processes and tools to improve this situation. With our growing client base, we have a pipeline of aggregated demand (from circa 10,000 homes per annum, which is the average number of homes built per annum by the existing 23 partners, ready to be converted into more advanced CAT 1 & CAT 2 MMC technologies) that will allow a consistent flow of production through many factories, allowing manufacturers and their management teams to fully focus on production and

installation of quality homes rather than volume chasing, across many pilot schemes, with numerous clients offering differing (non-standardised) designs."

Streamlining Procurement

At the start of the OSHA programme in October 2020, the ability to deliver an offsite procurement strategy, with as much control and level of expert support for each individual registered provider and local authority, was seen as highly unlikely. But as Mike points out, with a slogan and mantra of 'better together than we can be alone' this is changing mindsets.

"The speed of delivery, long term quality, and performance assurance for the current and future affordable homes for residents is a major driver for industry-wide collaboration," says Mike. "Registered providers and local authorities require a sustainable and robust asset that stands the test of time and that can stand up to rigorous in-situ performance testing. This must ensure zero defects and a significant reduction in energy bills and carbon emissions. Zero energy bills and zero operational carbon are our immediate target with reducing embodied carbon to zero, also a longer-term aim.

OSHA has been developing a strategic toolbox of support via several offsite experts and a dedicated project director, to ensure the delivery of long term 'best in class' living conditions for residents. "Everything we do at OSHA is aimed at best-in-class delivery," says Mike "This required a systematic approach to housing procurement from the offsite sector and not just the USP of aggregated demand. The now well-established toolbox and newly badged 'OSHA eco-system'

will support the effective delivery of offsite homes. We have confirmed the launch of our national £2billion (four year) MMC framework for early January 2023, with a significant supply chain (CAT 1 and CAT 2) to deliver our needs, and to drive up performance, whilst driving down unnecessary costs, below that of traditional construction practices."

Working with architects, MEP designers, structural engineers, offsite manufacturers and OSHA's own in-house experts, it has created its own design pattern and zero carbon playbook, but what does this do and how is the overall DfMA approach helping deliver the much-needed new generation of energy efficient housing types?

"This significant and highly resourced asset provides a large range of house types with a controlled DfMA approach," says Mike. "This allows a more efficient production process and a better-quality finish due to consistency of design and supervision in the factory environment. The zero-carbon strategy is fully aligned to those home designs (currently 13 options) which means we can monitor the performance of a controlled set of designs, rather than procuring from a vast range of suppliers with varying technologies and with multiple design strategies.

"While the pattern book fits very easily into a CAT 2 panelised approach, we are aware that for CAT 1 volumetric delivery, this will take a bit more time to deliver. With the aggregated demand from many client partners, and a controlled logistics process for varying sites (not affecting the supply partners), we aim to get to an OSHA branded volumetric home very quickly, giving assurance of delivery, with assurance of design and performance management through ongoing site testing, via our Building Performance Evaluation (BPE) partners."

Collaboration and a New Way of Working

With a co-ordinated supply chain key to any construction project, OSHA is maximising collaborative effort to giving housing providers the best value for money with another important part of its toolbox being the creation of a Project Management Office (PMO), to sit alongside the



OSHA MMC Framework. The PMO will work alongside the OSHA Project Director and maintain an active presence from inception through to final delivery and on-site monitoring of the OSHA home delivery process.

"Site evaluation, suitability of technology, KPI dashboarding, PMV assessments, regional cost analysis and MMC support is a fundamental part of the service that the OSHA PMO will deliver," says Mike. "There is a plethora of support services that the OSHA partners can choose from, as part of their extremely competitive framework fee, and this will be left to the partners to decide how they use the time available from the PMO. Some will require significant support, and some will only require specific technical or forensic support, depending on the size of their in-house teams and offsite experience. However, the framework, pattern book, and PMO are still only a selection of the support tools available to existing partners, and any new ones wishing to join OSHA."

OSHA have now completed several research projects to underpin its strategy, all collectively developed into strong reports and business cases, and they have now completed the development phase of the programme. With the framework going

live in early January 2023, what are the next steps for OSHA in what will be an exciting and busy 2023? "We are fully focused on deploying the high-quality affordable homes we envisaged back in October 2020," says Mike. "On top of that deployment focus, we have several initiatives currently under review including a strategic partner manufacturing hub and a performance centre for R&D, plus a range of other support services.

"The biggest driver for us is to ensure we keep the movement developing. Any new public sector partners, who are looking to start their offsite and zero carbon delivery programmes, should really consider joining our public sector colleagues that have pioneered and paved the way on this journey. Remember, 'better together than we can be alone' is central to the OSHA philosophy and the stronger we are, the more efficient and capable our partners become."

For more information visit:
www.offsiteha.org

Images:

- 01. OSHA is driving change through offsite manufacture and DfMA
- 02-03. Success for registered providers and local authorities is coming from expert support networks and collaborative working