



Manufacturing Efficiency and Flexibility to Increase Housing Capacity



The Housing Challenge

The UK's Housing, Communities and Local Government Committee says that the Government will not be able to meet its own ambitious target of building 300,000 homes a year by the mid-2020s by using traditional methods alone. Instead, a "significant proportion" of homes must be built using what are known as modern methods of construction (MMC).

The committee urged the government to unlock the potential for modern methods of construction to build homes more quickly and more cheaply, while maintaining build quality.

Skills shortages and slow construction along with cost control are seen as significant barriers faced by those wanting to provide additional housing. **They must be addressed to release the brakes on new housing provision.**

Read our Precis of the Govenment's paper on modern methods of construction.



Download the report here: https://tinyurl.com/innovareflexi





A Simplified, Low-Risk Answer

The solution isn't just about finding lower costs of production, but to take into consideration the wider aspects, in terms of the utilisation of land to maximise the amount and quality of homes developed, and what type of homes will help people enjoy their surroundings once completed.

> The technical solution needs to take account of the social responsibility as well as the economic necessity to find more pragmatic and effective ways to build at the required speed and quality, as well as managing the environmental impact.



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To make this change possible, we have developed an integrated systemised housing solution called Flexihomes by Innovaré. We have re-thought and re-engineered the process of creating new housing, from initial feasibility to delivery.

Flexihomes by Innovaré is a partnership.

The partnership is focused on delivering high-quality affordable homes quickly and sustainably. The partnership works on the basis of common long-term goals that facilitate the delivery of short-term actions.



This is a full-service, end-to-end solution designed to bring new levels of confidence and certainty to all tenure types of hosuing.

Our innovative approach uses manufacturing disciplines, component-led design and streamlined business processes to deliver greater speed, efficiency and cost control.

There is less reliance on scarce traditional construction skills and maximum certainty over the outcomes.

The flexibility of the individual house designs enables clients to achieve the optimum density of housing.

The systemised designs ensure that density can be embedded into the very early stages of the project ensuring financial viability can be realised at the outset with confidence.

Systemised Housing - Demonstration House





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Protecting the Environment

Innovaré is fully committed to the goals of sustainability and environmental protection and the Net Zero 2050 emissions target. This objective is likely to accelerate the plans for all organisations, reflected in **over 100 Local Authorities declaring a climate emergency**.

WE AIM TO SAFEGUARD THE ENVIRONMENT For future generations by:

- Continually looking for ways to use resources more efficiently through good design, use of sustainable materials and reducing waste.
- Preventing pollution by complying with environmental legislation, policies and charters, and by continually improving the systems that help reduce the risk of environmental incidents.
- Communicating to all employees environmental risks and best practice.

ZERO WASTE POLICY

The carefully controlled design process minimises waste on every project. Offcuts are reused wherever possible and all i-SIP elements are 100% recyclable.

SUSTAINABILITY

Innovaré aims to procure all materials used on our projects so that we have a positive environmental, social and economic impact.

Materials are sustainably sourced and manufactured under the international chain of custody schemes PEFC[™] and FSC. We provide full FSC Chain of Custody documentation to prove the point of origin of our sustainably sourced timber.

INNOVARÉ FSC CERTIFICATE NUMBER: TT-COC-004446

- Zero Ozone Depletion Potential (ODP)
- Zero Global Warming Potential (GWP)
- Zero HCFC/CFCBRE
- Green Guide 'A+' Rated Products
- 100% recyclable







The Product

All homes can feature fully fitted-out bathroom and kitchen pods in a number of different finishes. These are assembled offsite and shipped as completed units to the site.

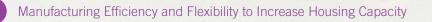
Watertight in

48 hrs

The rest of the structure is formed from Structural Insulated Panels (i-SIPs), precision-made in our UK based manufacturing facility.

Panels are configured to suit the demands of each project and shipped for onsite assembly on a just-in-time basis. As a pre-configured kit of parts the speed of build can be accelerated with each unit being watertight within 48 hours.

The built-in thermal performance and tight manufacturing tolerances ensure that energy efficiency of the finished homes matches the design performance standards.



Bathroom Pod

Kitchen Pod



Control, Accountability, Certainty

Behind the solution is a fully integrated process, aligned with the RIBA plan of work to ensure complete end-to-end control and accountability.

Housing programmes no longer need to be impeded by multiple organisations, subcontractors and information flows that lead to slippages, cost overruns and commercial risks. The componentled design approach brings tight coordination across each phase of the plan by removing the interfaces that would otherwise exist with traditional construction methods. An integrated delivery team manages the complete project from design to handover.





The Process

An integrated in-house delivery team will manage your project from design to on-site assembly, in line with the RIBA plan of work.



Flexibility of design combined with accurate cost projections ensure the optimum density of housing can be achieved to realise the financial viability at the very early stages.



Our expertise de-risks projects by helping to ensure that sites are viable and the available space is fully utilised through the design flexibility of the product.



CAD and BIM methodologies guarantee buildability and building performance. The manufacturing process brings control, simplicity and certainty over costs and build times.



Fewer defects and comprehensive 'as-built' documentation simplify the handover and ongoing maintenance of new homes. Maintenance requirements are minimal, providing long-term cost savings to housing providers of all tenure types.



Systemisation Increases Speed

Systemised housing has the speed and repeatability of volumetric methods but without the design constraints of building from modules that are often limited by transport or site access.

> Designs contain many standardised components, yet each can easily be adapted to suit individual site dimensions or the required housing density.



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Design Flexibility Without the Price Premium

The product and the process mean repeatability and consistency to guarantee quality, costs, timing and building performance.

To provide even greater scope to shape around the specific requirements of each site, design is flexible to make the best use of available land, respond to local needs and enhance the viability of projects. This approach gives flexibility in plotting to accommodate the numerous site constraints, deliver on the financial appraisal whilst maximising manufacturing efficiency



The fully integrated component-led design and build process brings the guarantee of faster and reliable build times, repeatable quality levels and reduced costs.





Innovaré

Innovaré has an unrivalled - fifteen year track record of innovation in industrialised building technologies.

As well as schools and health facilities, we also have extensive experience of working with architects, designers and lead contractors on housing projects of multiple tenure types.





For more information contact enquiries@innovaresystems.co.uk or visit www.innovaresystems.co.uk/Flexihomes



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