

Experience

Innovaré has delivered a diverse range of social and private residential build projects from small scale projects of 10 – 12 units to large scale developments of 100 plus units. Increasingly we are working with local councils and organisations in helping them develop affordable and sustainable social housing strategies utilising the speed, flexibility and cost effectiveness of modular, manufactured construction technology.

Because we manage each stage from design to installation nobody knows offsite better than we do. Here's a small selection from the wide range of residential projects we have created.

● CHEYNE TERRACE

A high specification luxury block of 26 apartments. The i-SIP System maximised internal space thanks to thinner wall thicknesses and simplified the installation of advanced heating, ventilation and lighting systems.

● POINTERS FIELD

This scheme included 12 affordable dwellings comprising 8 one bedroom flats and 4 two bedroom houses. It was completed in 6 weeks resulting in a development of distinctive, attractive and energy-efficient dwellings.

● KENDER ESTATE

470 affordable housing units built to a high standard to minimise both running costs for residents and maintenance costs for the landlord. The homes met Level 3 of the Code for Sustainable Homes. Optimisation of the build reduced costs while design variation was introduced by a range of renders and finishes.

● STANDINGS COURT

The scheme was for 12 homes that met the Passivhaus standards and 26 units that met Level 5 of the Code for Sustainable Homes. i-SIP made it significantly simpler and cheaper to meet the standards.

To see some more examples of completed projects check out our website: www.innovaresystems.co.uk



Innovaré Systems Limited

Unit 3, Siskin Parkway West, Middlemarch Business Park, Coventry, CV3 4PW
0845 674 0020 • enquiries@innovaresystems.co.uk • www.innovaresystems.co.uk

Better ways to build

Offsite Construction...More Sustainable Homes





A Modern Way to Build the Homes we Need

UK house building needs fresh thinking and innovative construction techniques to meet the challenges we face. We need to build homes faster and more cost-effectively, while stepping up to ever higher standards for energy use and sustainability.

Widely used in Northern Europe, the USA and Japan, offsite construction techniques using Structural Insulated Panels are being increasingly applied to UK housing projects, large and small. Build times are rapid and predictable, while offsite construction brings greater precision with less waste, noise and risk.

Innovaré's modular, panelised systems have exceptional thermal properties built in; so strict energy efficiency and sustainability standards are easier and less costly to meet. Innovaré has provided offsite construction solutions to housing projects from cost-effective mixed social housing to highly specified luxury apartment blocks - proving the versatility of the technology.

OFFSITE SIMPLIFIED

Innovaré is the only major UK supplier to offer a total design, manufacture and installation service for offsite solutions using Structural Insulated Panels (SIPs). This makes us your ideal technology partner if you are a developer, main contractor or architect and you want to create high quality, energy-efficient homes more quickly and more cost-effectively.

Partnership and collaboration are at the heart of our business. Our designers and engineers engage early in the project, helping you to take cost, time and complexity out of your project through our value engineering process.

Innovaré's panelised systems can form the entire structure of a building including roofs and internal or external walls or be used as infill for steel, concrete or glulam. It offers rapid and simple installation, low thermal bridging losses, and the fastest possible establishment of a watertight structure ready for fit-out.

Building More Affordable and Sustainable Homes

Whatever the housing project, offsite construction using the Innovaré's expertise in offsite construction not only reduces building costs, it also makes budgets more predictable and less susceptible to variations in the supply of labour and materials.

We offer inherently cost-effective construction techniques with fabric costs comparable with traditional materials. Significant benefits will be realised over both the whole cost of build and the lifetime cost of the building. The design flexibility means that greater simplicity can be engineered into the building design, offering significant savings on fit-out and M&E.

Once groundworks and preparations are finished, the building assembly and fit-out time can be reduced by up to 50% compared to traditional techniques. Homes are finished and ready for occupation quicker, which is beneficial for cash flow and financing costs.

With the need to build tens of thousands more affordable and social housing properties each year, the speed, cost and reliability benefits make a persuasive case for offsite construction by Innovaré. These benefits apply equally to high quality properties for private sale.

DEPENDABLE BUILD SCHEDULES

The construction process is highly controlled so the project sequencing is more reliable. Scheduling of follow-on trades can be made with greater confidence and the early creation of a watertight structure means they can start sooner. Precise manufacturing reduces defects and issues that have to be resolved on site.

SUSTAINABILITY

The carefully controlled design process minimises waste. Offcuts are reused wherever possible and all elements are 100% recyclable. Materials are sustainably sourced and manufactured under the international chain of custody schemes PEFC™ and FSC®.





Superior Performance - Flexible & Adaptable Design

Innovaré's panelised systems can be used for walls, floors and roofs. They can form all or part of a building. Offsite construction simplifies the process of delivering ambitious projects that precisely match client requirements for design, sustainability, price and performance.

Our systems can either form the structure of the building or be used as a thermally efficient infill or wrap for steel or concrete frames. The speed of installation and rapid establishment of a watertight envelope offers significant programming advantages over traditional techniques and alternatives such as light steel frame.

Virtually any roof style and covering, and any type of cladding can be used, making it easy to blend with existing buildings and meet any planning restrictions.

FIRE SAFETY

Innovaré continues to make a significant investment in a rigorous regime of both full scale and elemental fire testing. This meets and exceeds regulatory requirements for during and post-construction fire safety.

Our systems provide the highest rated 'during construction' fire solution, meeting the recommendations of the Chief Fire Officers Association (CFOA), the Health and Safety Executive (HSE) and the Association of British Insurers (ABI). Factory-fitted A1 non-combustible, vapour permeable boards can provide instant during-construction fire protection and improve in-use fire and acoustic performance.

THERMAL PERFORMANCE

Our panels are inherently well insulated. The large panel format also produces a minimal number of seams, all of which fit tightly thanks to the precise manufacturing tolerances. Achieving exceptional thermal performance with a relatively thin wall section maximises internal space and can greatly simplify the installation of services. Thermal properties are adjusted by varying the thickness of the insulation core and the selection of surface coating.

ENVIRONMENT AND ACOUSTICS

Adopting an adaptive comfort philosophy requires a robust fabric-first solution, with the design flexibility to accommodate natural ventilation strategies. This approach prevents high space heating costs, cold draughts during the winter and overheating in the summer.

High levels of thermal performance and airtightness are achieved because our systems including fenestration openings are designed to fine tolerances making the internal environment easier to control. Where required, phase change materials or dense boards can be incorporated to increase the thermal mass without adding significant weight or floor loading.

The acoustic properties are managed through the internal lining and external cladding specification. These properties are laboratory tested to guarantee the required acoustic performance.

PASSIVHAUS

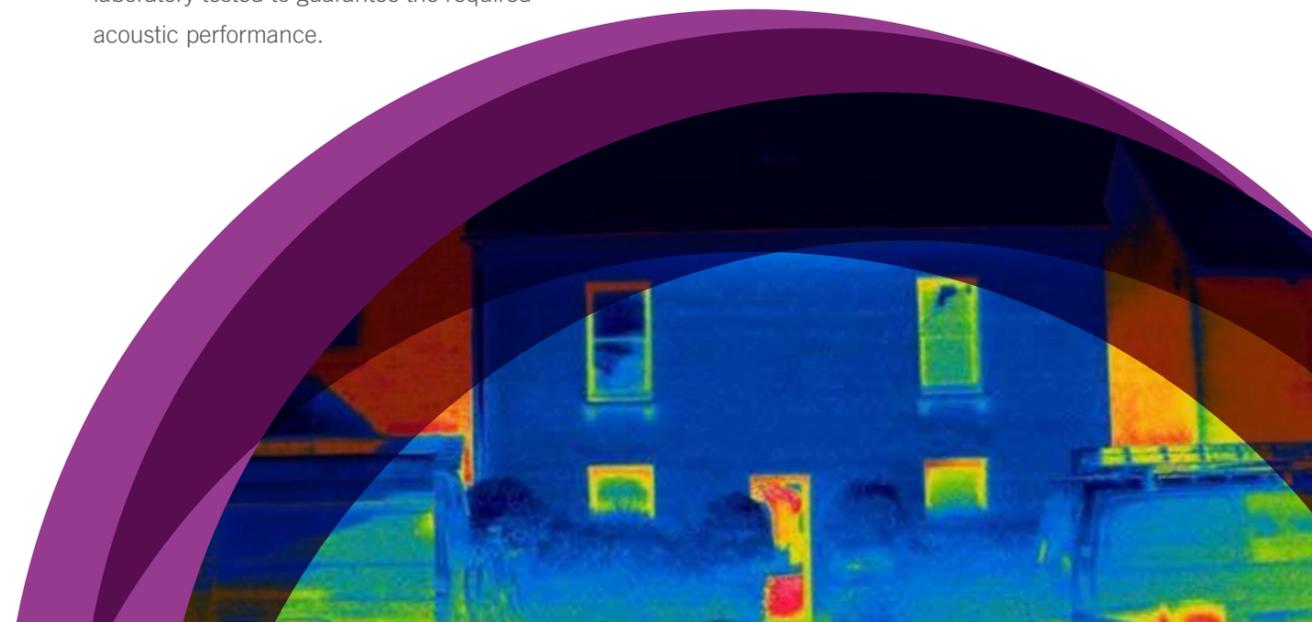
Our i-SIP System has been used successfully on several projects designed to meet the Passivhaus standard, where buildings have minimal energy consumption for heating and cooling.

The tightly fitting seams in the i-SIP System minimise air permeability while the in-built thermal properties provide the insulation needed without excessive wall thicknesses or complex construction. Finally, the expertise of the Innovaré design team simplifies the installation of the mechanical ventilation and heat recovery systems needed to meet the standard.

CODE FOR SUSTAINABLE HOMES

Housing projects increasingly demand that buildings meet strict sustainability standards. In most cases homes built using traditional methods will need expensive renewable energy add ons to meet the higher levels of the Code for Sustainable Buildings.

Because the i-SIP System achieves excellent levels of thermal insulation in a relatively thin wall; and because walls, windows and door frames all fit snugly straight from the factory, renewable energy add ons are generally not needed. Innovaré operates and zero waste policy.



Optimised Solutions – a Modular Kit of Parts

The modular nature of Innovaré's panelised systems blend the flexibility to meet individual requirements with the efficiency of a standardised product and production process. The result is a kit of parts delivered to the construction site that can be rapidly assembled to create a structure configured to meet the exact needs of the project.



FLOORS

The modular approach makes it easy to adapt floor, wall and roof designs to meet specific performance requirements or architectural challenges. For simpler residential projects it is often possible to use a preconfigured kit of parts to save further time and cost.

Open web joists, I-joists or solid timber joists are pre-assembled with timber decks to form cassettes. These can be rapidly installed onsite. They offer superior acoustic properties within a thinner floor section than with other techniques.

Metal web joists are used to simplify the installation of soil pipes and services and no drilling is needed onsite. This ensures that the structural integrity of the building is maintained to design levels. Unlike timber framed buildings the i-SIP System is not subject to differential movement.

ROOFS

Our systems adapt to virtually any roof design or covering. Pitched, mono-pitched or sawtooth designs are easily accommodated. Roofs are usually supplied as large panels supported on purlins and roof beams. Pitched SIP roofs provide an open unobstructed void that is part of the thermal envelope - ideal where accommodation is required in the roof space.

WALLS

Flat roof systems are normally delivered as cassettes which can be sealed and insulated in our manufacturing facility ready for any conventional roof covering. Roof cassettes can include factory fitted single-ply membrane. These cassettes are insulated and weather resistant before they reach the site - avoiding delays caused by weather. The system eliminates the need for hot works and reduces work at height.

Our systems can be used to form the full structure of buildings up to four storeys as well as being efficient for infill or wrap to primary frames for apartment or multi-room construction. Large format panels, manufactured in sizes up to approx. 6m x 3m allow rapid installation to accommodate programme and design requirements.

Load bearing or non-load bearing internal stud partitions are supplied and installed as timber studwork with sheathing boards. Wall panels bear onto the foundation or primary frame slab via a treated timber sole plate, securely fixed to the sub-structure.