

Jerramfalkus

Approach to modular construction



Contents

Introduction to modular construction	1
Modular expertise	2
Recent projects	2
Advantages of modular construction	3
Approach to modular construction	4
Cost and programme	5
Working together	6
Company information	8
Contact us	9

Introduction to modular construction

Modular buildings are delivered to site principally in two forms, namely as substantial elements of a building or in a volumetric capacity. These elements can comprise parts such as walls, frames, doors, ceilings, and windows, or a number of complete prefabricated modular building units.

Other examples of modular buildings include;

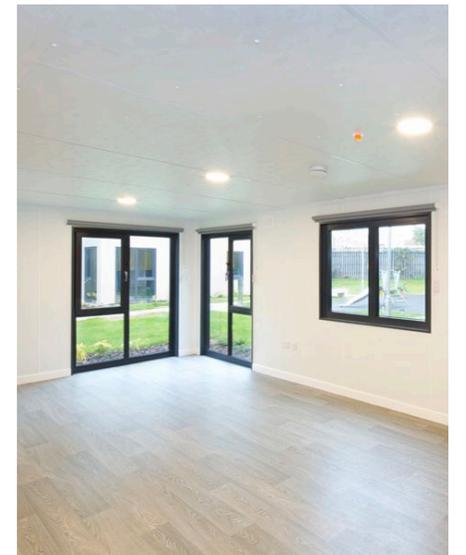
- Educational buildings and nurseries.
- Offices.
- Showrooms and marketing suites.
- Healthcare buildings (consulting rooms, and operating theatres).
- Catering buildings.
- Ministry of Defence buildings.
- Hotels.
- Manufacturing facilities such as clean rooms.
- Housing.
- Equipment housing.
- Emergency buildings for urgent accommodation requirements.

In a rapidly changing construction environment technological innovation has often attempted to address a need be it acute housing shortage, carbon reduction or the wider economic or environmental challenges deeply felt throughout our communities.

As a construction approach Modular Construction and our willingness to embrace this building method has seen us deliver a variety of residential, community and commercial projects all with varying degrees of offsite fabrication.

We recognise the potential of Modular Construction and its ability to meet net zero / carbon reduction and volume building targets and it is our desire to be at the forefront of its delivery.

Modular buildings, often referred to as prefabricated buildings or **volumetric construction** are essentially buildings made up of pre-engineered components manufactured on assembly lines in factories then assembled on site in a variety of arrangements.



Modular expertise

Jerram Falkus' modular and off site construction experience has broadened over the years and we are seeing an increase in demand to find new construction solutions.

We have found modular construction to be a huge benefit to our public sector clients who are looking for less disruption, less waste and have education and housing projects to deliver in a short period of time and to a strict budget.



Recent projects

We have delivered a number of modular schemes for the London Borough of Barking and Dagenham;

- **The Adult College, Sydney Russell School** - single storey building, modular construction. Insitu brick and rainscreen cladding and single ply cut-to-falls insulated roofing.
- **Weighbridge site** - 92 homes; 24 one-bedroom flats, 36 two-bedroom flats and 32-three-bedroom homes.
- **Wivenhoe Road site** - 20 two-bedroom apartments across two blocks.
- **Margaret Bondfield site** - Due to start works in March 2021. 15 new modular homes.

The residential schemes for Barking and Dagenham will be used as temporary accommodation, for local families who are currently homeless and waiting on the housing list.

Infrastructure

As part of each new modular project, Jerram Falkus will design and install foundations, drainage, infrastructure, fencing and external works. This work is usually undertaken on site during the modular production period so that it is completed "just in time" for programmed delivery of the units.

Staircases

Upper floors can be served by external staircases and landings which may either be faced-fixed to the modular units or integrated in to off-site fabricated modules. Similarly, it is possible to incorporate passenger lifts to ensure full Part M compliance to upper floors. These alternatives can be explored with our clients in the early stages of design development.

Advantages of modular construction

The advantages of modular buildings over more traditional forms of construction include;

- **Speed** of supply and installation. Rapid installation on site (approx. 6-8 units per day).
- **Reduced cost** (through supply chain management, economies of scale, reduction of waste and working in a controlled environment).
- **Improved quality control** (achieved through repetition, inspection and operating in a factory controlled environment). Build quality is increasingly important in achieving environmental standards such as BREEAM. Buildings very often fail to achieve their designed performance because of poor quality control on site.
- **Reduced time on site.**
- **Reduce disruption**, noise and waste.
- **Reduced need for on-site storage**, plant and other equipment.
- Reduced labour costs.
- **Greater control** over the full supply chain.
- The potential to de-construct for re-location, re-use or re-sale.

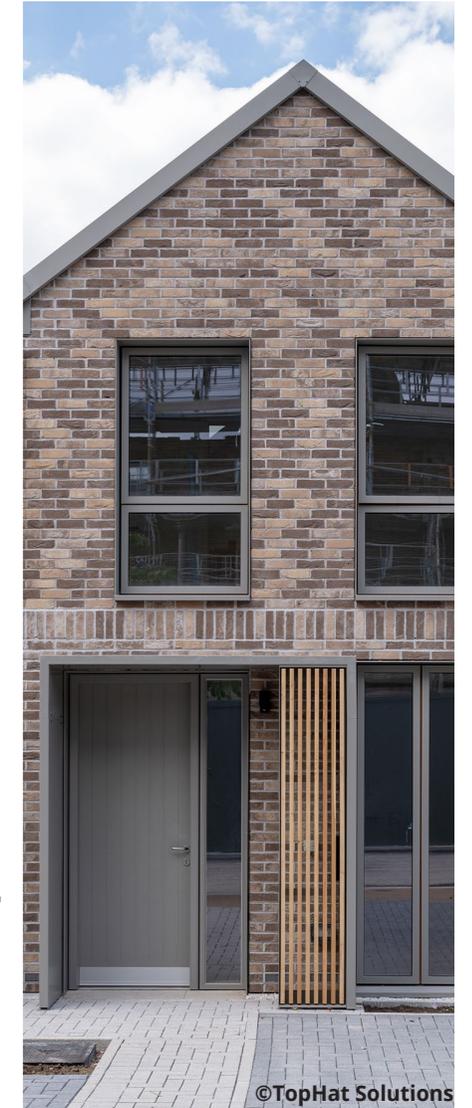
The Government has recently announced a £350m Carbon Emissions reduction package to effectively achieve a Net Zero target by 2050.

Modular construction can contribute toward this reduction given its clear sustainable and low carbon impact. We are pursuing more projects of this nature and aim to make a contribution to the 2050 target.

We recognise that collaboration between clients, consultants and all stakeholders together with the wider construction industry shall lead to a decarbonised environment. The environmental benefits of modular construction are:

Minimising material waste:

The factory / manufacturing conditions where modules are assembled allows for the elimination of waste is by recycling materials, controlling inventory and considered selection of building materials.



References:
https://www.designingbuildings.co.uk/wiki/Modular_buildings
https://www.steelconstruction.info/Modular_construction

Working together



Left to right: Cllr Sade Bright (LBBD), Cllr Darren Rodwell (LBBD), Tara Mahony (Be First), William Jerram (Jerram Falkus) - Weighbridge Site

"The flat looks great and I am sure it will make a wonderful new home for local families who otherwise may have had to live in hostels, or expensive temporary accommodation, sometimes outside the borough." **Councillor Darren Rodwell, London Borough of Barking & Dagenham**



Left to right: Peter Bowtell (Jerram Falkus) Cllr Siama Ashraf (LBBD), Martin Andvik (Be First) - Wivenhoe Road site

"These new homes will be for local families who are on our council waiting list and have no permanent home. By using the latest modular technology we can build at pace so we can put a roof over their heads more quickly." **Cllr Siama Ashraf, London Borough of Barking & Dagenham.**



Left to right: Tom Mathers (Be First), Cllr Darren Rodwell (LBBD), Ed Bartlett (Jerram Falkus) - Weighbridge site

"As a contractor we appreciate that modular housing is helping us to deliver construction projects faster for our clients, addressing the shortfall in housing available." **Ed Bartlett, Project Leader Jerram Falkus Construction.**



Interior of a 3 bedroom modular home at the Weighbridge Development

"By using offsite construction we are able to deliver these new homes faster and more efficiently to the client, on what would be a challenging site to develop using standard construction methods." **Peter Bowtell, Construction Director, Jerram Falkus Construction.**



"Offsite Construction and MMC has the ability to transform our industry, significantly improving productivity and sustainability for everyone. Contractors like Jerram Falkus, who take the time to understand the process and the benefits that offsite delivers, are an essential part of the industry's growth."

**Andrew Shepherd
Managing Director, TopHat Solutions**

©TopHat Solutions

Company information



Jerram Falkus is an established, family-run construction business that has been operating in London and the South-East for more than 135 years. We work with both the public and private sectors on projects with average values between £2m and £40m. Our specialisms include; Education, Housing, Healthcare, Heritage and Sport & Leisure.

In addition to construction the Jerram Falkus Group also comprises a development and joinery division which also operate from our offices and workshop in Shoreditch, London.

The businesses can either be deployed together to deliver

integrated, end-to-end projects or engaged individually on specialist projects.

Our foundations

Founded on core values that still underpin everything we do, we aim to take a long-view, create the best possible experience for every stakeholder, and deliver enduring quality.

When James William Jerram founded the company in 1884 he may not have realised he was starting a construction business that would be thriving 135 years later. That said, he did know that an organisation built on the right foundations, would prosper over time.

To this day those founding principles still represent the core of our business; always adhering to the highest standards, anticipating change to future-proof our work, putting our clients at the heart of everything we do and ensuring we deliver projects of enduring quality.

It is this commitment to excellence that has not only ensured the we have built long term relationships with our clients and provided a nurturing environment within which our team can thrive, learn and do their best work. It is these principles that we have embedded in our values.

Jerram Falkus always Build to Last.

Contact us

We would be delighted to be discuss and become involved in your future modular project opportunities.

Address

Jerram Falkus Construction Limited
14 Anning Street
London
EC2A 3LQ

Telephone

T: 020 7729 2424

Website

www.jerramfalkus.co.uk

