



Design and build of modular homes with full site services



### About us

Connect Modular is a privately-owned company, part of The Wee House Group and backed by over 35 years' experience at director level. Extensive research into modern methods of construction has enabled us to become an industry leader in the manufacture of modular homes.

We strongly believe that modular construction is the most cost-effective, efficient and green method for addressing the UK's housing shortage. We work as principal contractor to deliver high quality affordable homes and inclusive communities.

Accreditations from the Build Off-site Property Assurance Scheme (BOPAS) and ISO 9001, alongside Premier Guarantee Systems Approval, ensure that our homes and our practices are held to the highest standards.







# The Management Team



Jennifer Higgins Managing Director



Ian Hope Technical Director



Sally Kennedy HR&Compliance Manager



Shelagh Milligan Marketing Manager



Emma Robertson Finance Manager



Richard Reid Commercial Manager



Ian Grimason Head of Production



David Dempster Production Manager



Gordon Seath Technical Manager



Paul Wiley Quality Assurance Inspector



### **Modular Construction**

With input from councils and housing associations, we have developed a range of modular house types- from 1 bedroom flats to 4 bedroom detached homes - which are highly energy efficient and fully compliant with 'Housing for Varying Needs'. All our homes are entirely constructed in Scotland, using materials from local suppliers where possible. Homes are more than 90% complete before leaving our Ayrshire factory and are delivered to site ready-fitted with kitchens, bathrooms, plumbing and electrics. Craned into position, they can be completed and ready for occupancy in a matter of weeks.





### Benefits of modular build:

- Build periods are minimised as site foundations and factory modules can be prepared simultaneously
- Project timelines can be accurately predicted as off-site construction is not affected by adverse weather
- Controlled factory conditions improve quality control and sustainability
- Waste is reduced by recycling and proper storage and protection of materials
- Use of dry materials eliminates the potential for high levels of moisture being trapped in the structure
- Reduced on-site time minimises construction traffic and disruption to neighbouring residents

#### **Training and Apprenticeships**

We are dedicated to nurturing new talent in the construction industry. Apprenticeships can offer a great career path for young people and our factory is the perfect environment for them to learn from our skilled and experienced workforce. We are proud to have a number of 1st, 2nd and 3rd year joinery apprentices currently working in our factory.





# Case Study- Mull & Iona Community Trust

# Location: Isle of Mull; Oskamull and Acharonich

Number of homes:

Property range: 2 and 3 bedroom bungalows

Project timeline: July 2020 -May 2021



#### **Modular Homes for Rural Community**

We have recently completed four affordable homes on two separate sites (Oskamull and Acharonich) in the remote location of Ulva Ferry on the Isle of Mull. The efficiencies gained through running site preparation and module construction concurrently meant the build was completed within seven months, delivered on time and on budget, in spite of taking place during the Covid-19 pandemic.

The development is comprised of four modular homes across the two sites: two 2-bedroom houses and two 3-bedroom houses, all of which were manufactured in The Wee House Company's Ayrshire factory and delivered to site 90% complete, with bathrooms and kitchens installed as well as plumbing and electrics already in place.

The style of the houses is in keeping with the local architecture and complements the picturesque setting - traditional cottage proportions clad in vertical larch with corrugated metal roofs and coloured front doors sit comfortably in the stunning, rural landscape with its rolling hills and outlook to the sea; quiet, tranquil and calm. In terms of design, a lot of consideration was

given to island living - larger than normal larder cupboards were included in the kitchen area to store additional shopping when ferries are intermittent in winter months and there is generous storage for outdoor apparel in the porch area.

Though traditional in appearance the houses are produced as modular units, under controlled factory conditions enabling precision as well as making quality control easier. Part funded by Ecology Building Society, the homes had strict environmental performance criteria to meet. This was achieved through a combination of high-quality insulation, better air tightness and the use of solar PV panels.

Local residents enjoyed watching the modules be craned into position on site, after being delivered to Mull via the Oban to Craignure ferry. Module dimensions were designed with meticulous accuracy to ensure safe passage on the ferry and across single track roads on the final leg of the journey.

Following years of feasibility work and fundraising to purchase land and meet construction costs, the delivery of these homes has secured the future sustainability of the fragile Ulva Ferry community, increasing the resident working age population by 10% and the school roll by 50%.

Helen MacDonald, Housing Project Officer at Mull and Iona Community Trust said:

"We have found working with The Wee House Company a really positive experience. From design and planning through to construction and the logistics of transporting the modules to site, their team have been brilliant to work with, quickly resolving any issues along the way. The new affordable homes sit so well in the Ulva Ferry landscape and will make such a difference to our community. I would highly recommend The Wee House Company and their modular construction approach to other community groups seeking sustainable, affordable housing solutions."









## Case Study- North Ayrshire Council

Location: Seamill, North Ayrshire

Number of homes: 31

Property range: 2 bed houses 1 and 2 bed flats

Project timeline: January -November 2019

# North Ayrshire Council deliver 31 modular, affordable homes through innovative programme

The development at Ardrossan Road, Seamill was designed and built by The Wee House Company Ltd. Homes were constructed in the company's Ayrshire factory before being transported to site; ready-fitted with kitchens, bathrooms, plumbing and electrics.

The affordable housing is a mix of general needs houses, general needs flats, amenity flats, and a fully wheelchair accessible flat.

Homes were thoughtfully designed for the efficient delivery and erection of 4 homes in a single day. Homes are made fully wind and watertight on site within this period, with only final painting left to be completed internally. The Wee House team worked quickly and effectively on site, minimising disturbance to neighbouring residents.

A block and render finish alongside slate-effect roof tiles makes these modular homes indistinguishable from their traditionally constructed counterparts in other areas of the site. Further still, the affordable housing incorporates traditional features such as painted cast window surrounds and decorative chimneys, tying in with the vernacular architecture.

The entire project took less than a year, beating targets. Work began in January 2019, with the first homes being occupied by tenants in July. All homes were complete and occupied by November 2019.

"The Wee House Company worked well with all council departments and were always really accommodating.

Although an innovative, new type of project, it was delivered on time and on budget."

Greig Wilton, Affordable Housing Co-ordinator, North Ayrshire Council.















### Accreditations

#### **BOPAS**

Connect Modular holds Buildoffsite Property Assurance Scheme (BOPAS) accreditation. The scheme provides quality assurance for non-traditional methods of construction.

Connect Modular manages the design of and carries out modular manufacture and on-site construction of 1 and 2 storey structural timber buildings.

### We hold accreditation in the following areas:

- Project Management Designer
- Manufacturer
- Constructor

BOPAS is a risk-based evaluation which demonstrates to funders, lenders, valuers and purchasers that homes built from non-traditional methods and materials will stand the test of time for at least 60 years.

#### **ISO 9001**

Connect Modular has been assessed and approved in accordance with ISO 9001:2015 quality management systems, standards and guidelines.

#### **Premier Guarantee System Approval**

Our build system is approved by Premier Guarantee who provide 10 or 12 year structural warranties for our homes.

#### **Safe Contractor**

We are fully approved by Safe Contractor, demonstrating commitment to Health & Safety best practise.









System Accepted

# Sustainability

Sustainability is a guiding principle in all that we do- aiming to meet the demand for new homes without compromising future generations' access to natural, social and economic resources. In our factory, cardboard and plastic packing is kept dry prior to bailing and recycling and general waste is more easily segregated. Combined with more efficient building methods, this results in up to 84.7% less waste than on traditional sites. Reduced time spent on-site minimises construction traffic and related emissions by up to 50% over the course of a development. All timber is sourced from sustainable FSC approved supplier and suitable offcuts are used elsewhere in the production line.

#### Silver Active

Enhanced building envelope insulation keeps utility bills low. An average homes costs just 90p per day for heating, hot water and electricity\*

Controlled factory conditions and rigid quality procedures ensure that better air tightness and low -u-values can be achieved consistently.

Solar photovoltaic panels provide renewable energy to every home.

\*Based on EPC figures for a 2 bedroom semi-detached house.

#### Secured by Design

We are committed to reducing crime through good design.

All homes can be manufactured and site layouts designed to achieve the Gold Award.



#### Net Zero Carbon

We are thrilled to be able to offer Net Zero Carbon modular homes and site design 30 years ahead of expected targets. Designs for these homes have been created around 'fabric first' principles of passive design, incorporating mechanical ventilation with heat recovery and wastewater heat recovery to significantly reduce energy demand on site.

A combination of efficient air source heat pumps and photovoltaic panels are used as renewable energy sources, maximising carbon dioxide savings whilst keeping build cost per unit to a minimum. The result is a reduction in carbon emissions of 101% over the baseline.

### Quality

#### Principle Contractor

In most contracts we take on the Principal Contractor role managing all aspects of the build project from design and consents, to manufacture and all ground works.

#### Zero Defects in Manufacturing

To maximise quality, we implement a 'right first time' policy and 'zero defects' ethos. To achieve zero defects, we have embedded ISO9001-aligned quality assurance procedures into our manufacturing and construction processes, incorporating regular checks and hold points. Our culture encourages staff to take pride in the quality of their work.





# Housetypes

Our factory set up offers limitless design options for layout and appearance.

Our homes can be designed to fit in with vernacular architecture or offer a cutting-edge aesthetic. Once assembled, modular units are indistinguishable from their site-built counterparts.













