MAIN AIMS AND OBJECTIVES
The main objective of the showcase is to develop different forms of Modern Methods of Construction which demonstrate design flexibility and have the ability to be integrated into larger developments. They must also have the capabilities to be mainstreamed across larger affordable housing programmes. The main aims of the showcase are to:
• test and demonstrate different house systems and renewable technologies
• test the cost, energy performance and flexibility of a number of new systems
• trial and promote sustainable housing products
• let the construction industry itself showcase new and innovative products
• deliver wider Community Benefits across the showcase
• promote affordable housing in Fife
• showcase sustainable housing methods

PARTNERSHIP
The showcase is a partnership between Kingdom Housing Association, Fife Council Enterprise, Planning and Protective Services, Fife Construction Forum and Green Business Fife Network.
Training opportunities for the showcase are being progressed through Fife Works and Opportunities Fife and educational activities are also being progressed with the local primary schools, Carnegie, Adam Smith and Elmwood Colleges and St Andrews and Napier Universities.

FUNDING
The Showcase cost is £3.5 million and funding assistance has been provided by the Scottish Government, Fife Council 2nd Homes Council Tax Fund and private finance through Kingdom Housing Association.
### HOUSE SYSTEM PROVIDERS

We initially received over 150 registrations of interest from which 10 different house systems were selected:

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<tr>
<th>HOUSE SYSTEM PROVIDER</th>
<th>HOUSE SYSTEM</th>
<th>DESCRIPTION</th>
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| Powerwall Space Frame Systems / Assist Architects | Powerwall Volumetric Space Frame | • A structural steel frame Volumetric System can be designed to meet any client/architectural design.  
• The system achieves high performance in thermal, acoustic and air-tightness specifications up to 22 storeys high. |
| Campion Homes Ltd / Scotframe | Scotframe Val-U-Therm | • A closed panel system which uses injected polyurethane insulation to fully fill every millimetre within each panel.  
• A suite of thermal solution options are available which can produce a U-value as low as 0.08W/m²K if required. |
| Stewart Milne Construction | Sigma II Build System | • Higher levels of prefabrication, to reduce build process and material waste.  
• A Fabric 1st approach to carbon compliance, resulting in easy to use, comfortable and low maintenance affordable housing. |
| Campion Homes Ltd / Porotherm | Porotherm Block System | • A precision engineered, clay block structural walling system.  
• Offers a modern construction method with the reassuringly traditional values of clay. |
| CUBE RETreat | Structural Insulated Panels | • A Cost effective, environmental and energy efficient solution.  
• Constructed by assembling pre-manufactured panels that are heavily insulated, removing the need for additional insulation. |
| Campion Homes Ltd / Scottish Passive House Centre | 1 x Passive House, 1 x Standard Timber Frame House | • A semi-detached 2 storey house accredited as built to Passive House standards.  
• The remaining semi-detached unit will be constructed to current standards providing a control against which the effectivity of the enhanced Passive House standards can be measured. |
| Future Affordable | Closed Panel Wall System | • A K2 wall system, designed to minimise cold bridging and be pre-fabricated from small section Scottish timber.  
• Each of the 3 houses being built will be constructed using different building regulations 2010, 2013 & 2016.  
• Thermobond insulation quilt, manufactured from recycled textiles sourced primarily from Scottish woolen mills. |
| Lomond Homes | Lomond Breathing Wall | • A high performance, cutting-edge construction technology.  
• Highly insulated, timber-framed, external wall construction, using dynamic insulation to recover and recycle heat energy which would otherwise be lost to the outside air. |
| CCIG OSM | I Q (Off Site) Building System | • An IQ System to deliver closed panel, timber frame, wall, roof and floor cassette panels for domestic and non-domestic buildings using off-site construction.  
• Can deliver low energy, low carbon, zero carbon & Passivhaus building performance levels, using a multitude of building components, from natural, breathable & hygroscopic, through to high performance, hi-technology methods. |
| Bobin Developments | Beco Wall Form Integrated Concrete Formwork | • Block components lock together to provide a formwork system into which concrete is poured.  
• Upon setting, the concrete becomes a high strength structure and the formwork remains in place as thermal insulation. |

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**INFRASTRUCTURE WORKS**

Campion Homes, one of Kingdom Housing Association’s framework contractors, is carrying out the main infrastructure works on the site, installing services and providing serviced plots for the house system providers.

**FRAMEWORK CONSULTANTS**

The following Framework Consultants have also been appointed to work on the Showcase. These Consultants will also be appointed for the other phases on the Showcase:

- Hardies – Employers Agent / CDM Co-ordinator
- Oliver & Robb – Architects
- Scott Bennett Associates – Engineers

**RENEWABLES**

Various types of renewable technologies are being incorporated into the properties. Some of the renewables were integrated into the original house type design as they are required to meet current building regulations. Enhanced renewables have also been incorporated into some of the units.

**EXHIBITION**

Once the house building is complete, an Exhibition to showcase the products, services and technologies related to the properties will be held, running from Monday 14 May until Thursday 31 May 2012. It will open with a week long programme of media visits, technical tours and visits from education groups, followed by a further period of two weeks for open viewing. This will also be an opportunity for other consultants, contractors and suppliers to showcase their own sustainable products and services.

**MONITORING AND EVALUATION**

Plans for a monitoring and evaluation programme are currently being finalised in conjunction with Napier University and other key partners. The monitoring and evaluation programme will provide an analysis of performance outputs and include a post occupancy study.