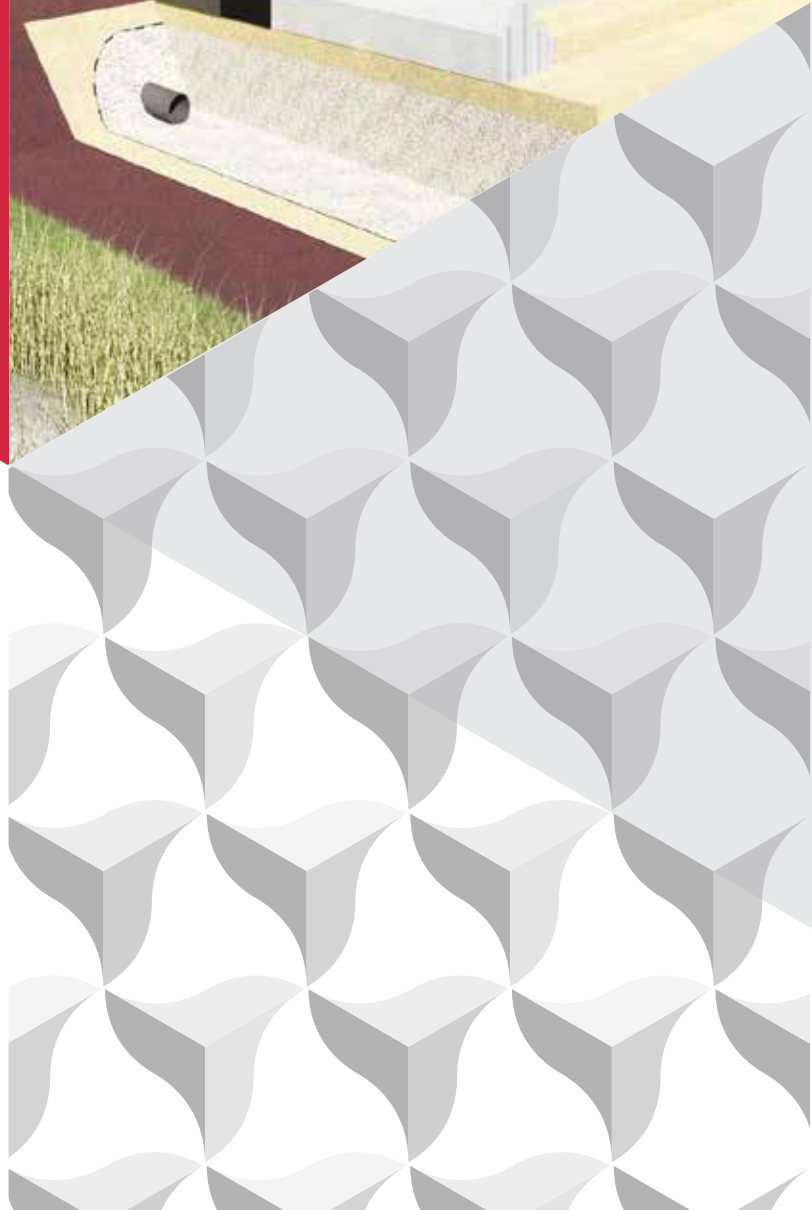


So good, even  
mother nature  
would approve...



**econeKT**  
THE INTELLIGENT BUILDING SYSTEM

INSULATED CONCRETE FORMWORK (ICF)



# Build faster, more affordable housing with Econekt's unique system.

With over four decades of experience and through partnerships with industry leaders, Econekt are delivering a solution which provides sustainable structural elements to build durable, environmentally friendly properties, meeting all building requirements but not costing the earth.

The development of Econekt's structural system offers a building solution that is virtually air tight, thermally efficient and reduces not only living and building costs but carbon emissions too. In addition this system offers an affordable way, to meet current and proposed building requirements whilst allowing Passivhaus standard to be more easily achieved.

What sets Econekt apart is their industry knowledge which when partnered with Izodom's research, development and practical experience of ICF technology allows one of the most advanced structural systems on the market to be provided as your standard solution.

The Izodom technology originated in Central Europe over twenty years ago and has been continually developed to enable it to be recognised as one of the most technologically advanced ICF systems manufactured in Europe, with an offering of over one hundred and twenty different structural elements, allowing simple construction whilst guaranteeing end results.

Izodom technology has been awarded the following accreditations and is suitable for use world wide, with projects throughout Central Europe, Russia, Africa, the UAE, UK and beyond exceeding government regulated standards in all areas of use.



# IZODOM

## Technology

Izodom ICF building technology was first developed in the early 1990's. Since then it has gone through a continual and thorough development process that now allows recognition as one of the most advanced ICF system on the market today.

The ethos behind the technology is to aid and simplify the construction of low energy and Passivhaus buildings, through the use of Insulated Concrete Formwork (ICF) walling and foundation elements contributing to the construction of over 18,000 houses since its formation.

## Wall elements

Produced in a variety of widths, to improve the u-values, the wall elements are manufactured from the BASF raw material of Neopor. This improves the thermal insulating properties of the elements when compared to EPS. There are over one hundred walling elements that ensure the onsite build process is a simple one. A full element brochure is available separately which demonstrates all on offer.



*Pre-formed lintel*



*Passivhaus standard wall element*

## Raft elements

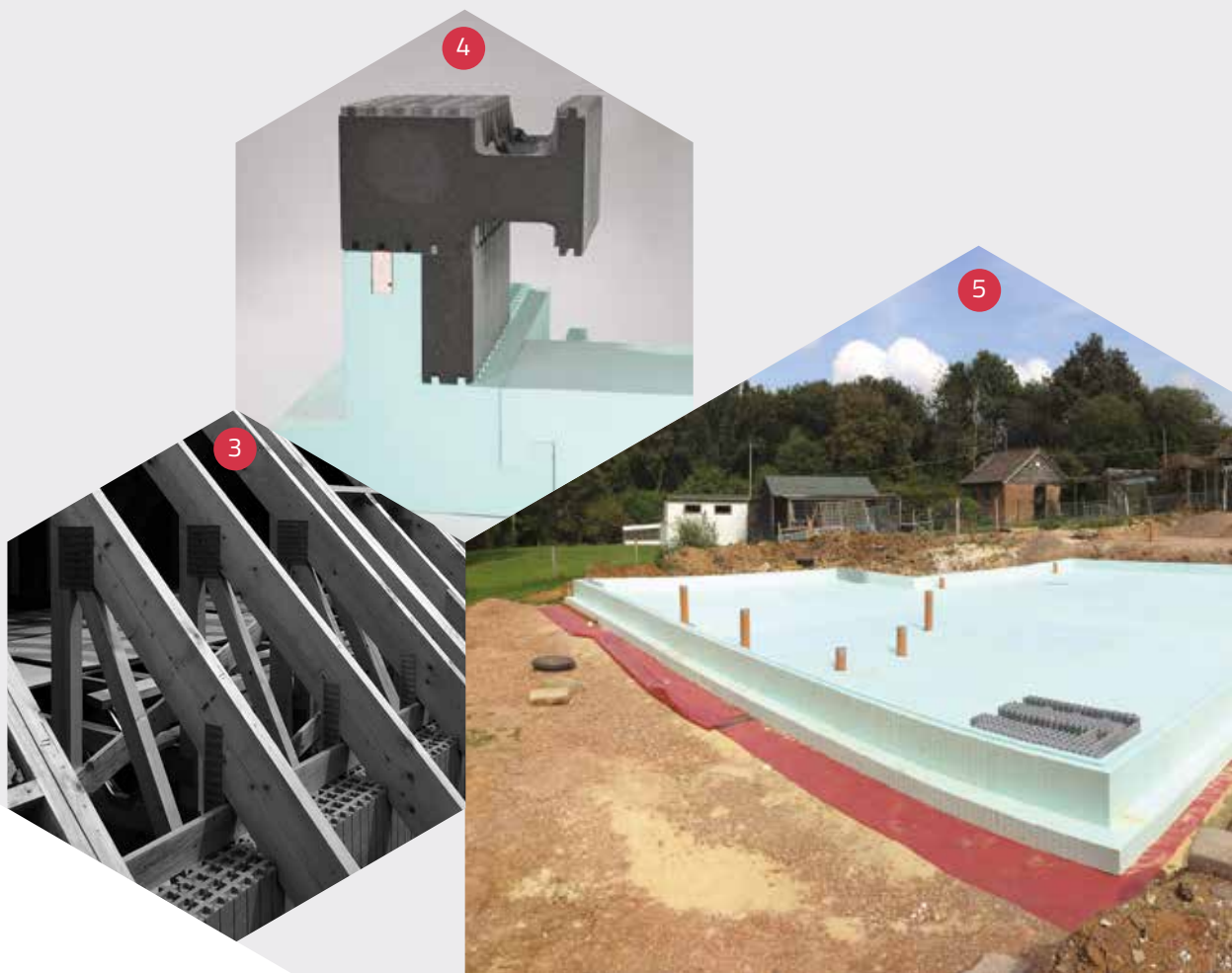
The passive raft foundation elements are manufactured from the BASF raw material of Peripor. This not only improves the thermal performance when compared to EPS of the elements but also the water absorption rate, making the raft ideal for low-energy, Passivhaus and basement builds. A full schedule and install key is provided for all project orders with the raft elements arriving to site ready for install, ensuring no on site modification is required.



*Raft foundation corner element*



*Raft foundation locking base pieces*





# AREAS OF USE

## Self Build

Recognised as a straightforward and versatile way for self-builders, whether directly as a self-build or built as a one-off, the Econekt system is ideally suited for this market. The one off and self-build market tends to focus more on the running costs and the ability to build low energy or Passivhaus with ease. The ability to construct an entirely insulated building envelope whilst effortlessly ensuring that thermal bridges are eliminated and running costs, both during construction or occupancy, are kept to a minimum makes the Econekt system a natural choice for self-builders.

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## Passivhaus

Having a system that has been accredited with Passivhaus Ambassador status ensures that building certified Passivhaus is something that the Econekt system can greatly assist with. With a wall system that can offer 0.1W/m<sup>2</sup>K u-value as standard and detailing that ensures thermal bridging is almost eliminated; building to Passivhaus standards could not be easier.

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## Basements

Due to the waterproof raw material of the raft, Peripor, and the inherent structural strength of the ICF walling components, basement construction is an area in which the Econekt system excels. The retaining strength of the Econekt system allows basement walls to be built in a more efficient and economical manner than more traditional methods. Aided by the waterproof materials used to manufacture the raft system allowing cost reductions in the requirement for additional tanking systems.

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## Social Housing

Through the promotion of the fabric first building ethos the Econekt system has been chosen by a number of regional housing associations for the structural envelope of a number of developments. The removal of large quantities of alternate energies ensures the on-going maintenance costs of the completed build is drastically reduced and offers the tenants a saving in their utility bills due to the high energy efficiency of the Econekt structure.

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## Image Key

1. Low-energy self-build, Loch Lomond and the Trossachs.
2. Roof truss install at low-energy self-build, Loch Lomond and the Trossachs.
3. Roof truss install, prior to final insulation layer being installed. Self-build, Argyll.
4. Demonstration of Passive raft and Passive walling elements thermal bridge free junction.
5. Passive raft foundation install, Hampshire.
6. Self-build project, Ayrshire.
7. Social Housing Project during concrete pour, Inverclyde.





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“Advanced systems generate ecological energy”

## Our system, your solution

Econekt are at the forefront of Insulated Concrete Formwork (ICF) construction and development.

Econekt are an innovative construction company focusing on the supply, distribution and production of sustainable buildings incorporating Izodom ICF walling and raft foundation components. By combining these elements along with other key structural components they are able to provide a complete structural system that can be utilised across a broad range of project types, achieving low energy and even Passivhaus standards with ease.

Econekt work with self-builders, architects and small residential developers to construct low-energy and Passivhaus homes throughout the UK – they also work with regional housing associations supplying key components of the Econekt system to contractors in the UK.

Through Econekt’s collaboration with industry leaders Econekt and Izodom have formed a relationship which has led to the development of Izodom ICF walling elements being the main structural walling component within Econekt’s structural system. It is through the formation of this relationship that Econekt have come to develop, build and distribute the Izodom technology throughout the UK.

The Izodom ICF walling and raft foundation technology has been developed in such a way that it aids Econekt’s promotion of the fabric first building philosophy. This philosophy allows low-energy and Passivhaus construction as a base standard for the builder and end user without the requirement for alternative energy sources. Using construction detailing which almost eliminates thermal bridging at all major junctions and allows for air-tightness levels compliant with Passivhaus standards, Econekt really can be considered the natural, sustainable and economical choice for your construction project.

# Technical Abilities

The Econekt system excels in its areas of use and also with the technical abilities of the system's key components, and the advanced nature of the system ensures a simple structural install whilst achieving industry leading standards.

Working with the raft foundation elements it is possible to install an area of up to 300m<sup>2</sup> of floor in a single day and achieve a u-value between 0.08W/m<sup>2</sup>K – 0.15W/m<sup>2</sup>K (perimeter to area ratio dependent).

With the walling elements a team can install in excess of 100m<sup>2</sup> of wall area, inclusive of the formation of window and door openings, in one day. This is done whilst achieving u-values of 0.1W/m<sup>2</sup>K or 0.15W/m<sup>2</sup>K dependent on the walling element chosen. In situations where lower u-values are required a custom built element can be created to enable this.

*\*install quantities based on a team of three working*

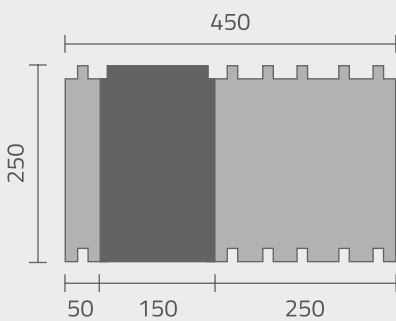


*The above QR code links to an Econekt time-lapse video of a project build*

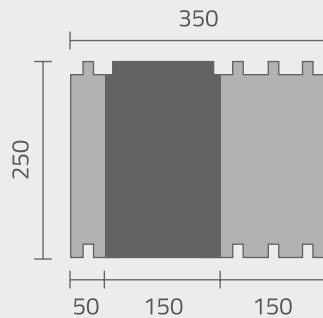
## Thermal Properties

### Izodom ICF Walling System

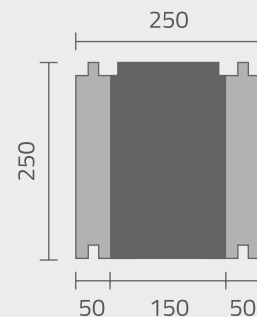
450mm Passivhaus  
standard element  
0.1W/m<sup>2</sup>K as a bare element



350mm Low Energy  
standard element  
0.15W/m<sup>2</sup>K as a bare element



250mm Internal load  
bearing wall  
0.28W/m<sup>2</sup>K as a bare element



### Izodom Passive Raft Foundation System

0.08 – 0.15W/m<sup>2</sup>K perimeter to area dependent.

250mm ground slab insulation and 250mm concrete slab

*See image 4 overleaf*



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