

# Kingspan house

Your Complete Self Build Solution





## At **Kingspan House** we take the stress out of the Self Build process for you

That's because at Kingspan House we've been building Energy Efficient homes for years, so we don't just understand Building Regulations - we understand people.

As a company, we have helped thousands of Self Builders all over Ireland realise their dreams for an Energy Efficient home without ever having to compromise on comfort, quality or design.

Our unique construction methods are based on the same advanced techniques developed for our multi-award-winning Lighthouse project, which saw Kingspan redefine the boundaries of modern housing design and zero carbon living.

Today, we apply those same technical specifications and construction methods to every home we help create.

## The Complete House Solution

Kingspan House is a rapid build construction method that will see your home insulated and weather tight within 2 weeks.

Unlike traditional masonry construction methods, our advanced build solutions assure the design performance of your new home is achieved in reality and not just on paper.

Utilising a fabric first approach, Kingspan House uses its Ultima™ System to provide a highly insulated and airtight building fabric that when coupled with our extensive range of low carbon and renewable energy technologies - provide you with all of the essential components required to achieve an **A** Rated and Carbon Neutral performance.



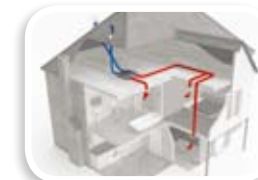
Solar Systems



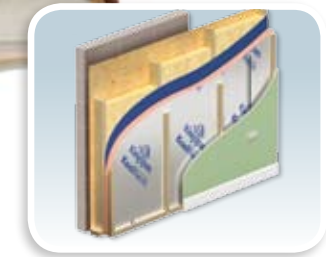
Roofing Systems



Open Web Floors



Air Recovery System



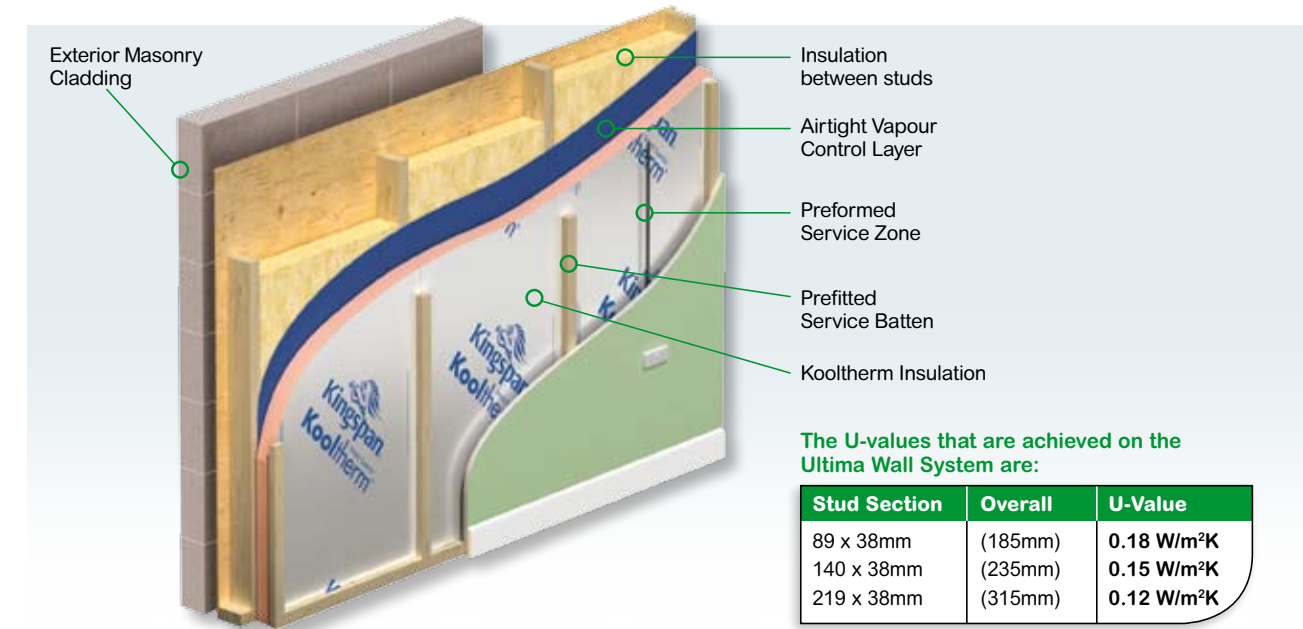
Ultima™ Wall System



Run your new home for as little as €1 a day.  
Send us **your plans** and we'll show you how.



# Ultima™ Wall System



Developed to deliver superior thermal performance, the Ultima Wall System not only meets Building Regulations, but exceeds them. Factory manufactured, the Ultima Wall System is quick and easy to install - reducing labour costs and build times.

- Exceeds Building Regulation by up to **225%**.
- U-Values **0.18 - 0.10 W/m<sup>2</sup>k**.
- Factory applied Insulation with Airtight Membrane and Service Void.
- Eliminates Cold Bridging, Air Leakage and Drafts.

## Performance Testing

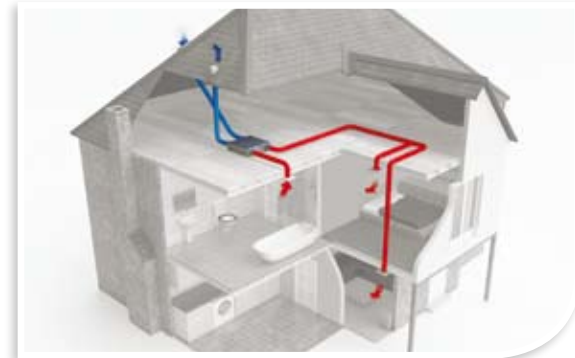
At Kingspan House we never take anything for granted - so in addition to our pre-delivery energy assessment, we carry out on-site Blower Door tests to guarantee the air-tightness of our Ultima System. We also use thermographic imaging to demonstrate the elimination of Cold Bridging.



Turn your plans for an **A** Rated dream home into a reality with **Kingspan House**.

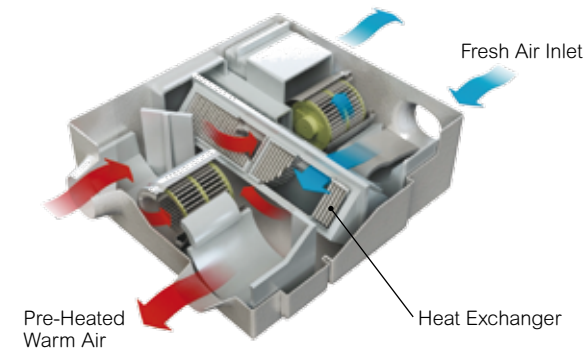


## Air Recovery System



To make a home Energy Efficient, it has to be airtight. However all homes require some form of ventilation. The Kingspan Air Recovery mechanical ventilation system not only ventilates your home, but through an in-built heat exchanger - it also actively recovers heat that would otherwise be lost during the ventilation process.

- Recycles up to **91%** of heat lost through ventilation.
- Maintains stable temperature and humidity levels.
- Incoming air is filtered providing superior air quality.



Kingspan Air Recovery - Mechanical Ventilation with Heat Recovery (MVHR)

## Roofing Systems



At Kingspan House we have a roof solution for every home. Our prefabricated truss and roof panel solutions are designed to maximise the utilisation of your roof space - allowing you to make the most of the roof over your head.

- Extensive range of highly insulated and airtight roofing solutions.
- U-Values to **0.10 W/m<sup>2</sup>K**.

## Solar Systems



At Kingspan House we utilise solar thermal vacuum tube technology that has been specifically developed for use in Northern Europe, which makes full use of the available daylight to heat your homes hot water.

- Provides over **70%** annual hot water **FREE**.
- Photovoltaic electric also available.
- Can provide the mandatory Renewable Energy contribution required by the Building Regulations.

## Engineered Flooring Systems



Our extensive range of Engineered Flooring Systems include an open web option that facilitates simple integration of services such as ducting for heat recovery ventilation units, plumbing pipework and electrical cabling.

If you prefer a concrete floor finish, our Self Levelling Liquid Screed combines enhanced acoustic performance with the easy integration of underfloor heating.





Building an Energy Efficient home is not just about saving you money and the environment - **it's the law!**

## Regulations and Standards

**Building an Energy Efficient home is not just about saving money and protecting the environment - it's the law!**

- **By law** you need a Building Energy Rating (BER) Certificate.
- **By law** your new home must conform to Building Regulations that require you to demonstrate a **40%** reduction in Energy Consumption.
- Under the 2010 Revision to Building Regulations, from July 1st 2011, it will be compulsory for all new homes to demonstrate a **60%** reduction in Energy Consumption.
- By 2013 all new homes must have a **Zero Carbon** rating.

At Kingspan House, our experience in overseeing and managing your Self Build process means that you don't have to worry about the legal complexities of the build process itself, as we will do all that for you - guaranteeing you complete peace of mind with our BER Performance Assurance Scheme.

### No one else has our Standards

Kingspan House building systems are the only Timber Frame Construction Systems to have the National Standards Authority of Ireland's - Agrément Certification. This Certification assures you that our Building System fully complies with all aspects of the Building Regulations and that the life expectancy of our Timber Frame Solutions are the same as those you would expect from traditional construction.

In addition to this, our range of Kingspan Thermomax Solar Hot Water Systems are the only Solar Systems to hold NSAI Agrément Certification.

#### Our accreditations include:

- NSAI Agrément Certification.
- ISO 9001 - Quality Management.
- ISO 14001 - Environment Management Standard.
- Members of the Irish Timber Frame Manufacturers Association (ITFMA).

### Building for a Sustainable Future

Timber is the only truly sustainable construction material and using wood from sustainably managed forests is the best way to reduce your homes carbon footprint.

That's why at Kingspan House we only use Timber and Engineered Timber Products from certified sustainable sources carrying either FSC or PEFC accreditation.

You can save almost a tonne of CO<sub>2</sub> for every cubic metre of wood you use instead of other building materials.





## Why choose **Kingspan House** as your complete Self Build solution?

### Commitment to Zero Carbon Housing

Kingspan has always been at the forefront of Ireland's thinking and response to the need for Energy Efficiency. This has seen the company become the nation's leading authority on the issue in terms of investment in Zero Carbon Research and Development.

In 2007 when the Irish Government first introduced their road map for the progression towards all newly built homes being Zero Carbon by 2013, Kingspan's Research and Development team had already proved that this was possible with the construction of the Kingspan Lighthouse.

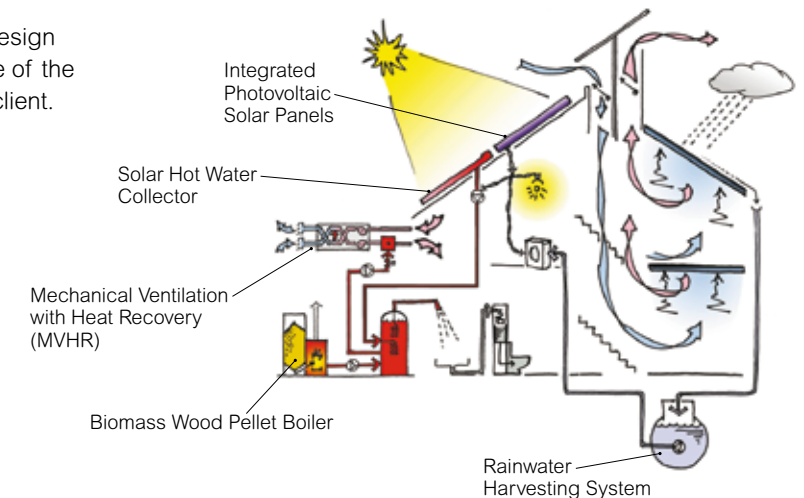
- The first Certified Carbon Neutral House to be built in Britain & Ireland.
- Annual running cost of less than **€50** for heating, lighting and hot water.

The lessons learnt during the Lighthouse design and construction phases now form the core of the Kingspan House offering to the Self Build client.

### In addition to outstanding Energy Efficiency:

- Kingspan House offers Expert Technical Advice that guarantees your house plans meet all current and future Building Regulations Standards.
- Kingspan House offers certainty on costs.
- Kingspan House offers certainty on build duration.
- Kingspan House will have your new house weather tight within **2 weeks** of arrival on site.
- Kingspan House uses advanced and proven construction methods that will reduce your build time by at least **12 weeks** compared to traditional build methods.
- Kingspan House provides a guaranteed **A** Rated Building Energy Rating.

The lessons learnt during the design and construction of **'The Lighthouse'** form the core of the Kingspan House offering to the Self Build client.





# Self Build Project Management Made Simple



Whether building your home using a building contractor or by direct labour, design & build project management can be a daunting task and expensive risk. Indeed - research shows that over **80%** of people who have built their own home admit that they would never do it again.

The most common mistake made by Self Builders is that they underestimate the build duration and the cost of their project at the outset. This is primarily due to a lack of building knowledge and experience. Mistakes made during the construction planning process will undoubtedly impact on the performance of your finished home due to a combination of inadequate construction process and specification knowledge coupled with poor quality construction.

As your build partner, Kingspan House are on hand to ensure you don't make these mistakes by simplifying the entire build process for you - with our factory manufactured Self Build solution.

## Direct Labour with Kingspan House

- **Regulation compliance designed into the package:**
  - Expert Technical Advise.
  - Building Energy Rating Certification.
- **Simplified self build process:**
  - Certainty on Construction Duration.
  - Certainty on Cost.
  - Up to **60%** of the materials required, being sourced from one supplier.
- **House sealed and weather-tight usually within two weeks of the kit arriving on-site.**
- **Typically 12 weeks construction programme reduction on (well managed) traditional build methods.**

At **Kingspan House** we take the stress out of the Self Build process for you.

Traditional v Kingspan House Self Build Management	Traditional Self Build	Kingspan House Self Build
<b>Planning Drawings</b>	Architect	Kingspan House or Architect ✓
<b>Full Construction Drawings</b> - Structural Design - Regulation Compliance - Specifications / Budgets	Structural Engineer Architect & Engineer Architect & Quantity Surveyor	Kingspan House ✓ Kingspan House ✓ Kingspan House ✓
<b>Project Management</b> - Supervision - On-Site Decisions	Client or Project Manager Architect & Project Manager	Kingspan House ✓ Kingspan House ✓
<b>Site Inspection</b>	Architect	Kingspan House ✓
<b>Opinion of Compliance</b>	Architect / Engineer	Kingspan House ✓
<b>Building Energy Rating Certificate</b>	SEAI - Building Energy Assessor	Kingspan House ✓

A complex range of professional services

A simple and more cost effective process with all professional services under one roof



Run your new home  
for as little as €1 a day.

Send us **your plans**  
and we'll show you how.

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