



# TIMBER INNOVATIONS

BUILDING SOMEONE'S HOME IS A PRIVILEGE™

# Welcome to Timber Innovations

*We specialise in the design, manufacture and installation of Timber Frame, SIPs and Feature Frame homes nationwide. Our expertise also extends to Roof Trusses/Panels and Engineered Floors.*

## Why choose Timber Innovations?

*"Building someone's home is a privilege™"*

We're passionate about building homes for people in imaginative ways with timber.

## How?

We provide bespoke and imaginative timber designs that add value, increasing the aesthetic appeal, features and comfort within the constraints of your budget. Put simply, *"you get more for your money"*.

## What?

We tailor our timber packages to suit your build and needs. We design, manufacture and install timber framed houses, complemented by our Architectural Services and Project Management Teams, and believe in minimising our environmental impact.

*"We take on what you need us to do, to make your build run smoothly and hassle-free."*

Before you start learning more about Timber Innovations it is important for us that you understand why we are so passionate about becoming a part of your journey towards developing and building your dream home. The most important thing to us is that you receive the knowledge to allow you to confidently and positively put your trust in us, so that together we can create the home you have always wanted. We're always happy to discuss your project either over the phone, at your site or even better at our HQ so that we can show you around.

*"Building your home would be a privilege..."*

The Timber Innovations Team





## Environmental Quality & Responsibility

*It is extremely important to us that we not only provide you with a beautiful product but also to reassure you of the positive and sustainable impact of the materials we use at Timber Innovations.*

Timber is the only truly sustainable construction material, it absorbs carbon and stores it through its lifecycle.

All of the timber products we use are PEFC (Programme for the endorsement of forest certification) certified demonstrating that we understand the impact of carefully sourcing the materials that make up your new home.

Our design team have experience of designing and detailing 'Fabric First' solutions, from 'Building Regulations' compliance right through to 'Zero Carbon'/Passivhaus requirements.

We not only promote the efficient use of resources, energy and fuel in our factory but throughout the organisation, streamlined processes are in place to ensure the entire company's continued commitment to our environmental responsibility.

*Timber Innovations are committed to protecting the environment from depletion and degradation. As a business based on manufacturing timber engineered products, we recognise the issues of sustainability and embrace them.*

**Stephen Thompstone,**  
Chief Executive Officer





## Estimating Services and Design Engineering

*We can offer a full cost breakdown  
and design appraisal.*

We want to involve you in every aspect of our work to ensure your home completely meets your requirements and expectations. We will ensure you understand every element that we have included (& excluded) and why.

We have a highly skilled design and engineering team who are constantly using the most up to date software and design methods, ensuring our products are designed accurately and to the highest standard. It's important to us to ensure the building is engineered to maintain its structural integrity and appearance for decades to come!

So whether it's a contemporary building you are looking for or you wish for it to fit in with your traditional surroundings, the aesthetic appeal of the building will be enhanced through the use of a timber frame from Timber Innovations.





## Timber Frame & SIPs

*Timber Frame is the primary build method for self builders in the UK today with over a 75% market share – self builders clearly understand the benefits that a timber frame will deliver.*



- Speed
- Ease of construction
- Thermal performance
- Cost certainty
- Air tightness

Timber frame is the oldest form of construction and still one of the most popular in the world today. We provide precision engineered timber frame structures that are constructed using high quality, environmentally friendly materials, quick to build and ultimately cost effective when compared to other building materials

We use advanced panel designs ranging from simple building regulation compliance through to Passivhaus levels of insulation and air tightness.



Our timber engineering expertise also extends to areas such as roof trusses, metal web floor joists, insulated roof panels, glulam, SIPs, oak frame and various timber features too.

SIPs or 'Structural Insulated Panels' are a composite panel of OSB (Oriented Strand Board) with a core of structural insulation – offering an improved thermal performance to wall thickness ratio.



## Products We Offer

### Walls

#### Structural Insulated Panels (SIPs)

The Kingspan TEK® Building System comprises 142mm or 172mm thick Structural Insulated Panels (SIPs) connected with a unique jointing system for walls and roofs, and intermediate floors using I-beams or open web joists.

### Timber Frame

ISO 9001 quality controlled factory to ensure a consistently high build quality. Range of factory installed insulation and air tightness solutions.

### Oak Frame

For that typical, traditional oak frame look we can provide complete oak frame solutions or offer an 'in-between' option, combining oak frame features with traditional timber frame or SIPs methods of construction.

### Floors

#### Metal Web Beams

Our metal web beams have been developed to outperform traditional floor joists and allow services to be installed within the floor zone. The webs provide an open floor system that has superior clear span abilities using larger web sizes.

### Roofs

#### Trussed Rafters

Our extensive level of experience in designing, manufacturing, and installing trusses expands through a wide range of industry sectors, from simple gable to complex roof scopes and room in the roof designs.

#### Insulated Roof Panels

Our pre-insulated roof panels are the final touch to your self build home meeting your insulation requirements.

### Specialist Products

#### Glulam

Glulam is a structural timber product comprising of a number of layers of timber, bonded together with durable, moisture resistant, structural adhesives. By laminating a number of smaller pieces of timber, a single large, strong, structural member is manufactured. These structural members are used as vertical columns or horizontal beams, as well as curved or arched shapes to form unique features within the building.

### Feature Truss

Designed by us and made to order by our joiners, incorporating traditional craftsmanship, with the best modern engineering design.

### Oak

Oak features can give your new dwelling that traditional aesthetic appeal.



## Architectural Services & Project Management

Although we are well known for the design, manufacture, supply and installation of timber frame dwellings, sub departments of the company allow us to guide our clients through the entire process of creating their dream home, offering as much or as little input as required along the way.

The Architectural Services Department comprise all the elements required for your entire design service. We offer support for the self builder from the very start to guide you through the design and planning process, providing advice on building regulations, the incorporation of design features and ultimately working drawings, creating a comprehensive suite of drawings perfectly in line with your needs and ideas. Understanding the importance of creating and developing good customer relationships, we have been very successful guiding and assisting our customer's from the very start.

- Planning Permission
- Working Drawings
- Energy Calculations
- Building Regulations

### Project Management

Once we have installed your structural shell you are halfway to the completion of your dream home, however we can continue on your journey with you and provide you with ancillary supporting services.

Additional project managed elements are available via the Project Management Department, allowing you the choice of having us work closely with you on your project. We can guide you in understanding the costs of building your house right the way up to providing packages such as windows/doors, external finishes and roof finishes to name a few. With our approachable and supportive team, alongside extremely high quality construction methods and materials, we make our customers our number one priority. Through working with you to understand the budgeting of your build, time managing the project, ensuring regulatory policies are followed and pulling together all the necessary trades, the Project Management Department strive to make your project an enjoyable journey for you.



## Stratford Paddocks

Timber Innovations collaborated with the client to deliver three bespoke luxury homes near Stratford. Combining energy-efficient Kingspan TEK® SIP construction with tailored designs for superior performance and stunning countryside aesthetics.



*Blending traditional charm with contemporary living, these luxury timber-engineered homes showcase innovative design and craftsmanship.*



The project consisted of two 3-storey, 5-bedroom homes at 4,000 sq ft each and one 2-storey, 5,000 sq ft home with attic space, all designed with Kingspan TEK® 142mm Structural Insulated Panels (SIPs) and an additional PIR insulation layer.

Simon Hood, a renowned provider of quality homes, transitioned from traditional masonry to off-site SIPs construction for its superior energy efficiency, cost certainty, and speed of build. Timber Innovations expertly converted the initial traditional build plans into SIPs designs, maintaining a classic farmhouse façade while incorporating open-plan contemporary layouts at the rear, maximising stunning countryside views.

The project involved intricate designs, including vaulted roofs with galleried stairwells, glulam feature beams, and a dual-valley roof system. Additional structural enhancements, like HR steels for stiffer flooring, ensured the homes met the client's high standards. Exteriors featured a mix of traditional brick, reclaimed timber cladding, and render, creating a harmonious blend of modern and classic aesthetics.

This collaboration highlights Timber Innovations' ability to combine modern methods of construction with tailored design solutions, delivering high-performance, bespoke homes.







## Rutland Water

Set on a 185-acre estate, the development site has recently undergone extensive renovations, with interior design and wellness at the forefront of its makeover.



*Striking timber frame and timber-clad design meets sustainable elegance, creating a home that blends beauty with nature.*



The luxury development of 42 homes, sees each property sit on a generously sized plot, overlooking the surrounding golf course, lakes and woodland, Residents have access to the golf course, club & Café as well as plenty of shared amenities.

The area is saturated in British heritage, surrounded by the historic counties of Rutland and Lincolnshire, boasting many quaint villages with cottages, thatched roofs, cobbled pavements and country pubs.

The team at Timber Innovations understood the need for the project to hit a number of climate friendly goals.

We took a 'Fabric First' approach that ensured the most eco and thermally efficient homes were built in a climate friendly way with cost-effective life cycle costs and U-values of 0.15.

Insulation played a massive part in the building's energy efficiency – we used Class A non-combustible insulation made from recycled glass and Knauf SUPAFIL®.

Further features of the build included full timber frames with glulam structural elements, exterior cladding from English larch and air sourced heat pumps.

Each residence offers a four- or five-bedroom home that overlook the lakes and golf course and are within a short distance of the club's facilities.

The homes, all with an English countryside vibe, are clad with Larch timber sat upon a Stamford stone base, in keeping with the same honey-coloured masonry used in the old town. They feature an open plan, with natural finishes that incorporate an indoor-outdoor flow to take advantage of the beautiful landscape.

# The Long Barn

The Long Barn stands as a testament to the commitment and dedication of the client, who took a practical and thoughtful approach from the outset, beginning with the discovery of an ideal garden plot.

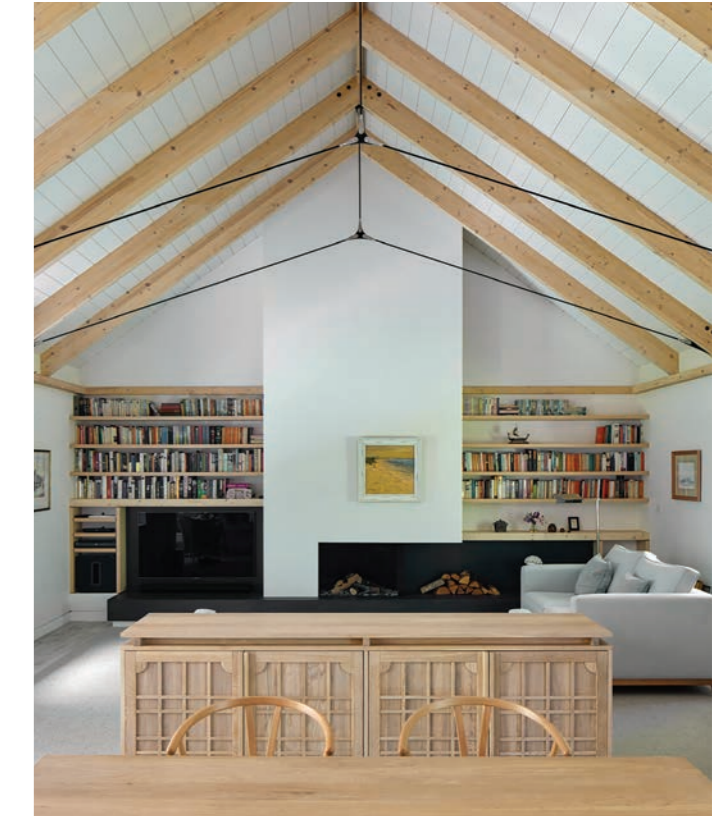


*We believe that this project truly ticks all the boxes when it comes to creating a forever home.*



Overcoming significant planning challenges, the design of Long Barn harmonises beautifully with its surroundings, offering stunning aesthetic appeal that respects the heritage of the nearby Grade II listed building. Every aspect of the home is ergonomically designed to meet the needs and lifestyle of the homeowners, providing comfort and flexibility for years to come.

This is more than just a home – it's a sustainable and efficient dwelling built with conscience. The use of eco-friendly materials, Passivhaus standards, and off-site timber frame construction reflect a forward-thinking approach to modern living. Long Barn rewards the rigorous efforts of the client and sets a high standard for what a forever home should be. Our client was extremely keen to take a pioneering approach, using the most sustainable techniques and materials possible. Now completed, Long Barn is a shining example of how carbon emissions can be significantly reduced to create a sustainable new home.





## Copper Bottom

This was a brilliant project that Wyckham Blackwell and Timber Innovations worked on together, in partnership with Adrian James Architects.



*Innovative design meets sustainability with verdigris copper cladding and energy-efficient timber engineering excellence.*



Wyckham Blackwell provided the complex truss arrangement which formed the cladding support and novel use of shape and Timber Innovations provided the highly insulated timber frame, to create the sculpted house.

As well as being a sustainability exemplar, the house has an innovative design, completely clad in verdigris green copper. The aim is to show that Passivhaus parameters need not lead to dull design but can inspire new and wonderful architecture. The house is compact to ensure energy efficiency, and the internal form is a simple cuboid with a shallow pitched roof to face the sun.





## Wall Types

A **Structural Insulated Panel (SIP)** consists of a sandwich of rigid insulation material between two layers of structural board, typically oriented strand board (OSB). This combination creates a strong, energy-efficient, and lightweight panel.

A **Timber Frame Panel** is composed of a framework of structural studwork, sheathed with OSB for stability and factory insulated (with a variety of insulation types). It is a lightweight, efficient, and sustainable building system.

A **Larsen Panel** is a type of timber frame construction that features two parallel timber studs connected with a structural gusset. This design enhances the panel's thermal and acoustic performance, making it a popular choice for energy-efficient and sound-insulated buildings.



### SIPs

- U-values from 0.19 to 0.11
- Panels available in: 142mm & 172mm & 200mm thickness



### Timber Frame

- U-values from 0.15 to 0.1
- Panels available in: 140mm to 225mm stud thickness
- Multiple fill options



### Larsen Passiv

- U-values to 0.07
- Breathable insulation
- Twin stud
- Cellulose, natural mineral wool, wood fibre, sheep's wool

## Natural Insulation Options

Today's market demands focus on the source, sustainability and carbon efficiency of all insulation materials from 'cradle to grave' and we've seen a step change in understanding of the benefits from using natural materials.

Our Larsen system can accommodate almost any insulation material and is adaptable to suit its thermal performance and target U-value by simply adjusting the panel depth to suit – even allowing for varying cladding types across the project.

The closed panel format ensures insulation can be factory blown into the panel at the desired density and our ISO quality checks offer confidence for the overall performance of the building envelope.



### Knauf SUPAFIL®

SUPAFIL® is made from loose fibrous Glass Mineral Wool that consists of 99% glass – up to 80% of which is recycled. The remaining 1% includes silicone to ensure the solution repels water as well as drops of mineral oil and antistatic to reduce dust and electrostatic charge.

### ROCKWOOL

ROCKWOOL insulation is a rock-based mineral fibre insulation comprised of Basalt rock and recycled furnace waste. Basalt is a volcanic rock (abundant in the earth), and recycled furnace waste is a by-product of the steel industry. The minerals are melted and spun into fibres.

### Wood Fibre

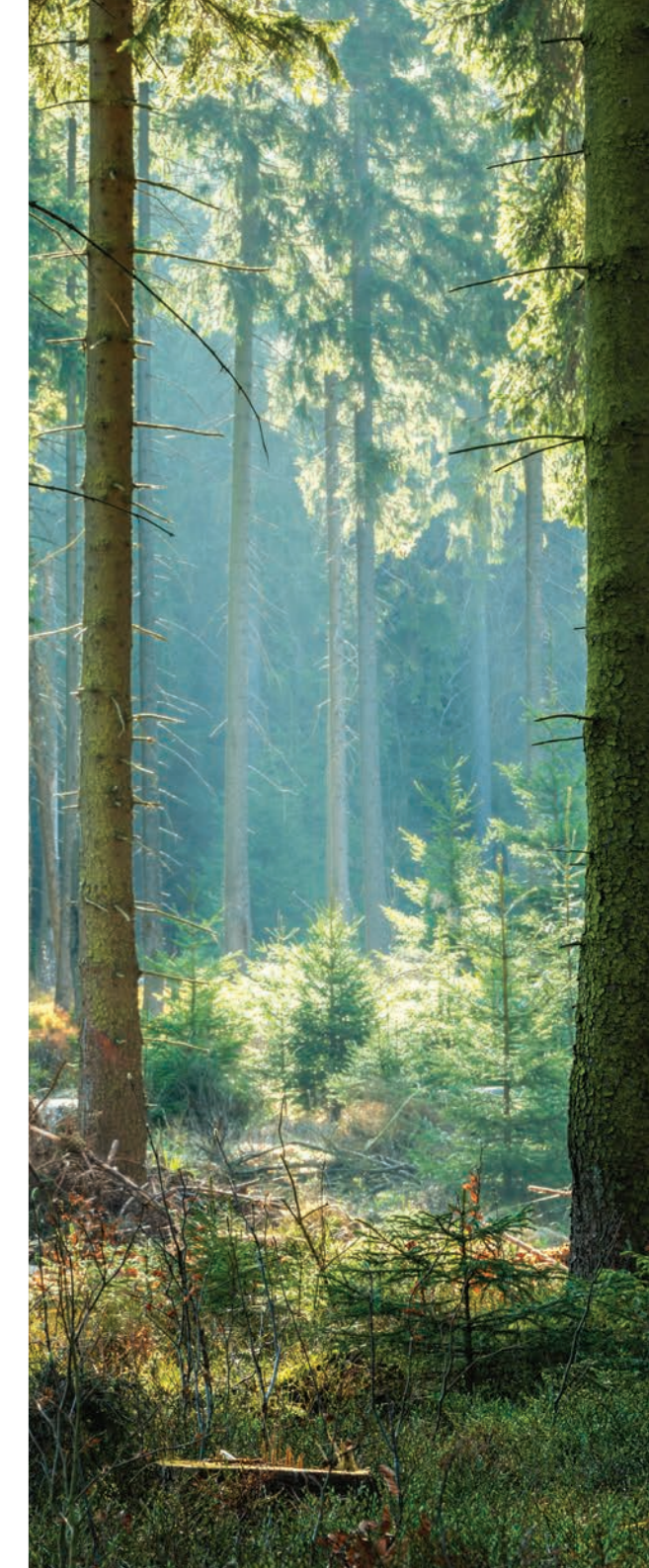
- Made from natural wood fibres
- Diffusion open – breathable
- Helps to regulate the indoor climate

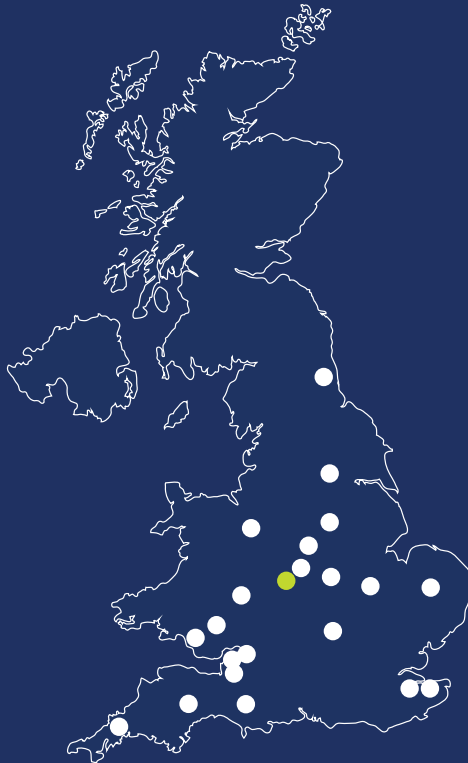
### Cellulose – Blown

- Manufactured from recycled newspaper
- High density fill helps stabilise temperatures
- Water vapour open for a healthy internal climate

### Sheep's Wool

- Abundant natural by-product
- Biodegradable and compostable
- Hygroscopic fibre





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