

“ Building someone’s  
home is a privilege™ ”



**SELF BUILD**

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

[www.timberinnovations.co.uk](http://www.timberinnovations.co.uk)



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# Hello and welcome to Timber Innovations.

We specialise in **DESIGNING, MANUFACTURING AND INSTALLING** timber frame, SIPs and oak frame homes nationwide. Our expertise also extends to roof trusses/panels and engineered floors.

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

## Why?

*"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."*



*"I've been particularly impressed by the willingness and determination of all involved to see the job done, and to overcome the construction problems that are inevitable when designing and building a one-off product."*

Satisfied Client





# Environmentally Friendly

Sustainable Efficient

Fast

Beautiful Approach

PEFC

Fabric First

Natural Materials

Green Oak

## Environmental Quality and 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.

organisation, streamlined processes are in place to ensure the entire company's continued commitment to our environmental responsibility.

All of the timber products we use are PEFC (Pan European Forestry Council) 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





# Design/Engineering

If you require a cost for your project we can offer a full breakdown and design appraisal - you get an idea of the costs right from the start!

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.



## Questions?

Contact a member of the Design Team on:  
0121 314 7735  
or email:  
[design@timberinnovations.co.uk](mailto:design@timberinnovations.co.uk)







# Why Timber Frame?

Environmentally Friendly & Natural  
 Cost Effective  
 Reduced Running Costs  
 High Levels of Air Tightness & Insulation  
 Quick Build Time Onsite  
 High Levels of In-House Quality Controls  
 Glulam      Off-Site  
 Complete Package  
 Health & Safety  
 Passivhaus

“75% of self builders use timber as their primary method of construction”

The Structural Timber Association



## Timber Frame and 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

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.

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.







## CHECKENDON, SOUTH OXFORDSHIRE

Located in Oxfordshire this project was particularly unique as the client required a swift build process that had the correct specifications to be erected on top of their existing basement.

It was very important that this construction was quick to create a weathertight shell over the existing level. What's more the structure needed to be designed and the materials specified to ensure the basement could effectively support the building.

The client chose to use SIP panels from Timber Innovations as we could not only meet the erection time requirements but the lightweight construction limited the need for extra reinforcements on the pre-laid foundations – meaning significant cost savings and achieving an improved U-Value of 0.18.

The prefabricated system allowed the frame to be designed accurately and incorporated the basement design prior to arrival on site. The

precise engineering eliminated any discrepancies that could have occurred onsite.

Additional features included the integration of an MVHR system. Due to the use of SIPs, great insulation properties and inherently good air tightness values were achieved.

For the final 'WOW' factor we created a fully vaulted internal open space to maximise the first floor ceiling height and create a breath taking feature for this modern dwelling.

### The Important Bits...

- Complete SIPs package
- Basement on site prior to arrival - timber frame installed on top
- MVHR system incorporated into design
- Air tightness of 0.4 m<sup>3</sup>/m<sup>2</sup>/hr@50pa
- 0.18 U-Value
- SIPs wall and roof panels
- Glulam ridge beam exposed
- Timber cladding



“ For the 'WOW' factor we created a fully vaulted internal open space to maximise the first floor ceiling. ”

Timber Innovations



# Products We Offer



## Walls

- **Timber Frame**

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

- **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.

- **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 SIP 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

- **Standard Trusses**

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

- **Insulated Roof Panels**

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



## Specialist Products

- **Feature Trusses**

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.

## Specialist Products (cont)

- **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.

- **Bespoke Joinery**

Our highly skilled design team can discuss your requirements and find a way to meet any bespoke feature that you wish to include in your home.





Case Study: Demonstrating the Use of Specialist Products and Oak



## RIPON, NORTH YORKSHIRE

Incorporating bespoke oak features on a timber framed building has recently become much more popular. In this build the clients wanted the appearance of a traditional oak framed house, however they also wanted the thermal performance of a modern engineered timber frame – we were able to combine the two to create a striking home.

When the clients approached us with their plans and drawings, their main request was that their home had a dedicated area specifically designed as a music studio - a bespoke feature that Timber Innovations were very happy to incorporate into their designs.

There were also particular products they endeavoured to use on their self build project and we could of course accommodate these requirements. We provided them with an entire timber frame package with visible oak features along with a fully vaulted roof for extra aesthetic appeal. This internal open space maximised the first floor ceiling height and created

an amazing feature to suit the clients exact requirements.

Specific oak elements included internal oak feature trusses and posts that comprised the ground floor and first floor roofs, as well as a striking structural green oak balcony.

This home was particularly aesthetically pleasing as it was designed in such a way that it blended in with its natural surroundings beautifully.

### The Important Bits...

- Complete timber frame package
- Oak features incorporated into design
- Structural green oak balcony
- Fully vaulted – factory insulated roof panels
- Internal oak feature trusses and oak posts
- Factory fabricated metal web floor cassettes



“ All members of staff were easy to work with and very friendly and helpful during the design and build stages. ”

Satisfied Customer





# Architectural Services

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 TI 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



*"Timber Innovations have been a pleasure to work with and I couldn't be happier with the help they have given us towards achieving our dream."*







## WHITCHURCH, SHROPSHIRE

When the clients approached us for advice they only had a general outline of the requirements and ideas for their bespoke home. They wanted extremely high levels of air tightness and thermal performance; an area we have years of experience in. It was our job to make the drawings become reality by offering our full timber frame package plus much more.

After gaining further knowledge about all we could offer, the clients chose to use us for the supply and installation of the timber frame, plus our Architectural Services Department and other elements to support the project - triple glazed windows/doors package, cedar external cladding, a floating steel frame/oak tread staircase, a cantilever balcony floor section and a bespoke roof light.

Using a 'Fabric First' approach and tailored wall/roof panels this home was designed to specific U-Values (0.14) and air tightness levels (1.6 m<sup>3</sup>/m<sup>2</sup>/hr@50pa). Working together our in-house architectural and design teams were able to easily address potential issues. For example, the MVHR heat

recovery system and services were a specialist area that the design team were able to incorporate into the building, to ensure all pipework was hidden and easy to install.

The cantilever balcony floor section was extremely unique to this building as we designed and installed a bespoke roof light that allowed the client to make full use of the space and the exceptional views surrounding the property.

"This was the first project I managed, and without the help and 'hand holding' from Rob Jones (Director of Timber Innovations) it would not have worked." – Client.

### The Important Bits...

- Architectural services package
- Complete timber frame package
- Cedar cladding
- Triple glazed window/door package
- 'Floating' oak staircase
- Bespoke roof light
- Cantilever balcony floor
- Wall panel U-Value of 0.14



“ This was the first project I had managed, and without the help and 'hand holding' from Rob it would not have worked. ”

Client





# 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 TI Project Management Department, allowing you the choice of having us work closely with you on your project.

Management Department strive to make your project an enjoyable journey for you.

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



*"All you need is a plot of land and the desire to build, and we can help you right through to getting the keys to your new home."*







## RUGBY, WARWICKSHIRE

This project was located in Bilton, a historical Warwickshire village in the heart of the town of Rugby. The client, although interested in other build processes, was attracted by the speed and sustainability of a prefabricated timber frame home.

Due to a close relationship with a local building and groundwork's company we were able to offer the complete package for this project assisting the client at all stages of the construction of their home.

The prefabricated system allowed the construction onsite to be very quick, despite the overall size of the building.

Due to limited access onsite we were required to use a specific crane to manoeuvre the panels into position, demonstrating our ability to cater for any bespoke project.

This build was particularly unique as we were required to integrate steel

beams into the design of the building in order to support the masonry that was to be used externally. These steel beams were hidden within the first floor construction along with substantial metal web joists, designed to allow for commercial loadings.

For the final 'WOW' factor we created a fully vaulted internal open space to maximise the first floor ceiling height and create an amazing feature for this large, modern dwelling.

### The Important Bits...

- Complete project management
- Ground works package
- Complete timber frame package
- 0.18 U-Value
- Glulam ridge beam feature
- Integral masonry support steel beams
- Fully vaulted central ceiling



“The prefabricated system allowed the construction on site to be very quick.”  
Project Manager







# Useful Contacts

For Planning Advice visit:

[www.planningportal.gov.uk/planning](http://www.planningportal.gov.uk/planning)

For information on Building Regulations visit:

[www.planningportal.gov.uk/buildingregulations](http://www.planningportal.gov.uk/buildingregulations)

For information on SAP Guidelines visit:

[www.gov.uk/standard-assessment-procedure](http://www.gov.uk/standard-assessment-procedure)

For information on Passivhaus Standards visit:

[www.passivhaustrust.org.uk](http://www.passivhaustrust.org.uk)

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