



# **TIMBER FRAME AND OFF SITE CONSTRUCTION** **THE TRADITIONAL BUILD METHOD**

## MAKING THE WHOLE PROCESS EASIER

With an improving market and increasing demand, we understand that you need to manage costs, meet performance regulations, build faster and meet higher quality standards to deliver your project on time and on budget.

Our team of design, manufacture and construction experts can provide you with guidance every step of the way, to reduce costs, design out waste, improve safety and ensure that your project meets all required specifications.

We design and manufacture all wall panels, roof trusses, spandrel panels and floor cassettes in-house, which gives us total control and the ability to guarantee the highest levels of quality and service for your project.



**OUR  
VERSATILITY  
MEANS WE  
CAN MEET  
INDIVIDUAL  
PROJECT NEEDS,  
WHATEVER  
THE SIZE.**

## PART OF YOUR TEAM

People are the foundation of our business, and we believe strongly in the power of relationships. We have a dedicated customer service department, and we pride ourselves on offering a partnered approach to our clients.

We think of ourselves as part of your build team, offering a personal touch along with design coordination and contract management. We will collaborate with you from the very start of the project to its successful completion. This will result in speed and cost benefits, and will make the process easier for all involved.

## WHY TIMBER FRAME?

Timber frame construction is widely recognised as a time-saving and cost-effective build method, with a variety of other practical, technical and commercial advantages:

- Speed of build
- Cost efficiencies
- Design flexibility and quality control
- Reduced on-site labour and material requirements
- Accurately finished structures
- Increased air-tightness
- Higher levels of comfort and lower fuel bills for end users
- Excellent thermal insulation
- Acoustic insulation well in advance of current regulations
- Reduced wastage and site storage requirements
- Superb environmental credentials
- Suitable for domestic and commercial applications in the public and private sectors

## SPEED OF BUILD

Timber frame facilitates a faster construction time, requiring around 20% fewer on-site labour days and a much shorter construction period.

By using our range of timber wall, floor and roof systems, overall build time can be reduced by up to one third, when compared to other methods of construction.

This in turn reduces site prelim costs, enables faster completion of projects, and ultimately improves the cash cycle.



## KEEPING COSTS DOWN

We are established leaders in timber frame technology, and will work closely with you to provide the ideal system for your requirements. Whatever the size, budget or complexity of your project, our expert team of specialist engineers and designers will work to deliver the most cost-effective timber frame solution for you.

By building with timber frame, you benefit from cost savings and programme certainty, and thanks to the speed of build, you also benefit from a quicker return on capital outlay.

There is also the opportunity for value added factory based enhancements, such as external wall insulation, vapour control layer, services battens and factory fitted windows.

## CUTTING PROJECT COSTS

When compared with alternative build methods, timber solutions provide savings in the following areas:

- site labour and management
- site prelims
- scaffolding
- waste and disposal
- carpentry on site
- security
- weather delays





## PERFORMANCE STANDARDS

Choosing to build timber frame with a 'fabric first' approach is one of the most effective ways to maximise energy efficiency, control build costs and achieve - or even surpass - current building regulations.

### U-values

We have a range of open and closed external wall panels, ensuring we can provide a timber frame solution to suit any specification.

### Air-tightness

Our open and closed wall panel solutions can be specified to achieve air-tightness as low as 1.5 air changes per hour. Where air-tightness above 3.0 is specified, the primary airtight layer can be the internal plasterboard. This ensures that all service penetrations are sealed, and seals all external doors and windows to the timber frame.

### Thermal comfort

When using a high performance fabric solution, it is imperative that ventilation (particularly where low levels of air change are specified) and solar gain within the building's design are taken into account. We can provide advice on areas for consideration .

### Acoustics

Timber frame solutions for separating walls and floors can be designed to achieve all current and future acoustic performance requirements.

We will support you through the whole process; providing advice and guidance to help you achieve your requirement standards. There are a number of solutions available within Robust Details for England and Wales, and within Technical Standards for Scotland.



## WITH YOU FROM CONCEPT TO COMPLETION



The optimum time to get in touch with us is right at the start of your project. Talking with our experienced team at the early stages enables us to provide you with the best guidance and add significant value to the process. By engaging with us from the outset, you get the following benefits:

- Advice on appropriate specification
- Contribution to buildability
- Reduced construction costs
- Tailored timber-frame solutions
- In-depth value engineering
- Sustainably sourced materials
- Solutions to achieve a range of performance standards
- Buildings designed to minimise load-bearing walls and foundations

## YOUR PROJECT

We offer our customers a single point of contact and can provide everything for a build without needing to outsource from elsewhere: from the timber frame, floor and roof to MDF finishings.

### Design

By partnering with you from the initial stages of your project, our dedicated team of experts can assist with concept design, and our design team will work with you to reduce cost and improve value engineering; tailoring a timber frame solution which really meets your requirements.

### Manufacture

With three plants around the UK, we are the largest timber frame manufacturer in the country, offering nationwide coverage and significant capacity, with the ability to increase our manpower to accommodate larger projects and shorter lead times.

### Build

As well as design and manufacture, our experienced construction and project management teams can manage the on-site erection process for you, using our fully trained and accredited partner erect teams.





## INNOVATION THROUGH TIMBER FRAME

Every project is value engineered, taking into consideration performance, speed, deliverability and cost. We offer three flexible systems to suit most budgets and buildings:



### **Open Panel System** **Reliable and cost effective**

A reliable and cost effective way of meeting energy efficiency standards using a conventional 89mm or 140mm open panel framework with structural sheathing, site-fitted insulation and vapour control layer. We offer several external wall options, with a range of party wall, floor and roof solutions to match.



### **Factory Insulated Panel System** **Improved efficiency and build speed**

Our pre-insulated solution supplies the external wall panels with the insulation fitted into position in the factory. This improves efficiency and reduces waste and time to fit on site. Robust and resilient to weather during transportation and erection, it offers flexibility in terms of energy performance and wall thickness.



### **ThermaTech**

Our ThermaTech factory pre-insulated wall system offers savings in waste, time and site processes. This option is available for external walls and benefits from factory-fitted quality and higher levels of assured fabric performance. ThermaTech conforms with the MHCLG Modern Methods of Construction (MMC) definition framework as a Category 2 primary structural system.

**OUR RANGE OF TIMBER  
FRAME SYSTEMS OFFER  
FLEXIBILITY, RELIABILITY  
AND CHOICE.**





## FLOOR SYSTEMS

Our floor systems meet the needs of a variety of building types. We utilise James Jones joists, MiTek Posi joists and softwood - which can all be supplied loose or in cassette format.



### I-joists

#### A high quality engineered timber product

Our James Jones joist system offers a lightweight product with a very high shear capacity. The carefully selected components used in the flange and web create a high-quality engineered wood product, designed to reduce movement and other problems associated with solid timber floors.



### Open web joists

#### The lightness of timber with the strength of a steel web

The Mitek Posi-Joist System combines the lightness of timber with the strength of the Posi-Strut steel web, meaning it can span far greater distances than would be possible with alternative timber products. Its unique open-web design provides an area in which plumbers and electricians can easily work on the installation of services and, even on longer spans, removes the need for herring-bone strutting.



### Floor Cassettes

#### A fast, flexible and cost-effective solution for floors

Floor cassettes provide a fast and cost effective solution for floors in timber frame construction. Floor cassettes can be manufactured using either I-joists or open web joists to meet customer requirements, and are ideal for both residential and commercial applications. They also provide a stable working platform, which speeds up the project time and offers additional health and safety benefits.

**WALKER TIMBER FLOOR SYSTEMS ARE SUITED TO A WIDE VARIETY OF BUILDING TYPES.**



## ROOFING SYSTEMS

Roof trusses provide a cost-effective and practical solution for roofing requirements, and cater for almost all buildings. We use the latest Milek Pamir design software and production control systems to meet the exact specifications that our customers require. Our in-house design team and large production capacity ensure that trusses are delivered on time, however large or small the order. We also supply pre-assembled spandrel panels for use as separating walls or external gables.





## ABOUT US

Originally formed from James Walker (Leith) Group, the Walker Timber Group is part of a family owned business which has been providing timber services since 1863. Our reputation stands on the quality of products and work that we offer, as well as our industry-recognised accreditation.

Operating from strategic locations around the UK, we offer national reach while also providing specialist local knowledge and expertise. Put simply, our customers get the benefits of a large network with a personal touch.

We offer our customers a single point of contact and can provide everything for a build without needing to outsource from elsewhere: from the timber frame, floor and roof to MDF finishings. Our team can take care of estimates, contracts and design - right through to arranging the erection of the project.

The Walker Timber Group comprises three long-established, well respected timber engineering companies:

**Bo'ness, Scotland - Walker Timber Ltd**

**Stafford, West Midlands - Walker Timber Engineering**

**Wisbech, Cambridgeshire - Walker Timber Engineering**



## HEALTH & SAFETY

We are committed to the highest standards of manufacturing, service, performance and safety.

To ensure that our quality standards are reflected throughout the group, we have a dedicated in-house health and safety and compliance manager, who ensures the health and safety of all our employees and those who interact with our organisation.

Health and safety is an integral part of the business process from design to manufacture and erection, and we always ensure that we only use properly trained, certified and experienced erection teams. Furthermore, as so much of the work takes place off site, building with timber frame offers a number of health and safety benefits:

- Reduced material handling on site
- Reduced risk of falls from height, due to safety decking
- Reduced traffic management risk



## FIRE MITIGATION

As a member of the Structural Timber Association (STA), we promote good practice on our sites, especially when it comes to fire mitigation.

UK Building Regulations and other fire safety regulations are among the most stringent in the world, and completed timber frame buildings constructed to the requirements of these Building Regulations (and related standards) are entirely safe and well-protected against fire.

On sites under construction there are often exposed materials, methods of working and security factors that may increase the risk of fire. We reduce this risk through good design and by taking simple precautions, ensuring good site security and adopting the STA Site Safe strategy.

The Site Safe policy is an audited and proven industry approach to managing the communication process relating to roles and responsibility for fire risk assessments and actions between the structural timber building system supplier and the contractor adopting the build method.

We promote the use of the STA's 16 Steps to Fire Safety.





# CERTIFICATION

Our products are all compliant with building regulations and NHBC technical standards, recognised by insurers and lenders.

Our standards and certifications include:



## Chain of Custody

The forests we source from are certified by the Programme for the Endorsement of Forest Certification (PEFC) and are PEFC Controlled Sources. We only deal with credible, long-established suppliers.

Where possible, we use our purchasing power to influence our suppliers to adopt responsible environmental policies.





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