













**Fire Doors & Fire Doorsets** 

**Staircases** 

**Roof Trusses** 

JJI-Joists

**Metal Web Posi-Joists** 

Glulam













davidsmith.co.uk









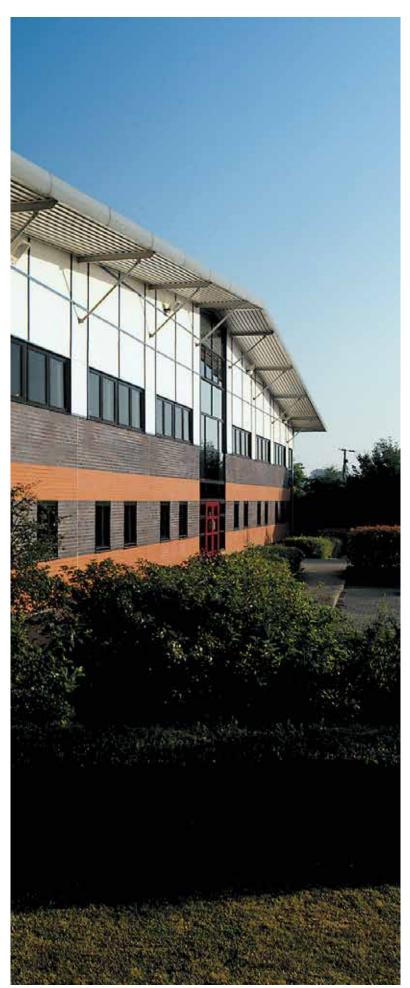












Established over 60 years ago by David Smith, We remain a family owned and managed business now part of the Wyckham Blackwell Group of Companies. We pride ourselves on our ability to expand and develop our product range, utilising modern production techniques whilst maintaining traditional craftsmanship and quality throughout the product range throughout the product range.

Manufacturing bespoke staircases, roof trusses, engineered joists, Glulam and fire doors & fire doorsets, and with a wealth of knowledge and expertise in these products, we are well suited to design, manufacture and supply all your timber engineering needs.

# **Timber Engineering Specialists**

Located at our purpose-built premises in St Ives, Cambridgeshire, and with significant design and manufacturing capability, we are well suited to service large commercial orders, as well as offering one-off products, typically of a more bespoke nature.

Using the latest automated equipment, we can offer high levels of precision and flexibility in our processes. As well as achieving consistently high product standard, we operate cost-effectively, which benefits our customers who need to control costs while maintaining appropriate levels of quality.

Each product division has its own design team, using the latest CAD software to prepare technical drawings and product specifications. These designs are then programmed directly into specialist machinery to produce each component; assembly is enhanced by the skills and craftsmanship of our long-serving local workforce.

#### **Technical Advice and Service**

We are customer-focused in everything we do. Technical advice, practical guidance, attention to detail and the ability to deliver bespoke timber engineered solutions are all part of our commitment to excellent service and value for money.

Our years of experience and depth of technical knowledge enable us to identify the best products for particular applications. When involved in the planning stages of projects, we can add value by providing direction on the product technology and its capabilities.

Whether plans are at the drawing stage or you are a contractor working to specified requirements, we are always on hand to provide advice.

# **Our Customers**

Our customers include house builders, housing associations, commercial contractors and individuals building their own homes. To provide successful solutions, we find ourselves working alongside architects, structural engineers, surveyors and specialist contractors, involved in both public and private sector projects.

# **Environmental**

We recognise that our business operations have a significant impact on the environment. David Smith St Ives Ltd is committed to minimising the impact its activities have on the environment, and strives to exceed legislative requirements.

# **Sustainably Sourced**

We are a founder member of the Truss Rafter Association (TRA), and active members of the Programme for the Endorsement of Forest Certification (PEFC) and Forest Stewardship Council® (FSC®). We have been granted certification to the FSC® and PEFC Chain of Custody schemes. Our products are predominantly manufactured from timber and we actively seek to partner only those timber suppliers who operate a policy of responsible timber management. David Smith St Ives Ltd will not knowingly use species of timber that are prohibited, or are from illegal sources, and will endeavour to work only with suppliers who can demonstrate their environmental responsibility and awareness. We operate with the guidance of, and comply with, the EU timber regulations.

#### Reduce, Re-use and Recycle

Wood residues produced as part of the manufacturing process are segregated to allow recycling into animal bedding and other specialist products, leaving only the true waste material, which is used on-site to fuel our burners/boilers for heating: these specialist pieces of equipment produce low emissions and are regulated and authorised by the Local Authority. This system greatly reduces the amount of road transport traditionally needed to remove waste materials.

Our extraction system filters and returns the air to the factory to minimise heating loss and maintain air quality. We use air from the factory, which gains 'free' heat from human and electric motor activity, together with solar energy to dry products in our spray shop. This removes the need to provide additional heating energy.

Our preservative treatment plant uses water-based fluids to reduce harmful emissions. Empty paint cans, wherever possible, are returned to the supplier for recycling when the supplier next delivers, saving on unnecessary transportation.

Packaging card, paper and plastics are segregated on-site and stored for economic collection and recycling by contracted off site specialists. We make extensive use of machine-specific and timer controls to turn off unnecessary motors to save energy. We ask that pallets be returned to us for reuse when we next deliver.











We are one of the UK's leading manufacturers of high performance architectural fire doors & fire doorsets for commercial and high class residential applications. We have an excellent reputation for working in partnership with our customers, providing cost-effective solutions for the budget of each project. Our products are designed and manufactured in-house, combining the latest technology with the skills of craftsmen to produce doorsets that deliver outstanding levels of performance. Our continuous programme of product development keeps us ahead of our competitors and ensures that we meet today's rigorous legislative requirements. Our attention to detail during design, our flexibility in manufacturing, and our dedication to delivering to programme, ensure a smooth installation.

We offer a range of door constructions that are evaluated to suit performance requirements, budget, and customer preference. All are of a solid core construction and can be used in a variety of configurations and sizes.

They are proven under full-scale test to perform as fire-resistant doorsets and have achieved the maximum category of severe duty for durability.

Combining these cores with a comprehensive range of coloured finishes, timber veneer, high pressure laminate, PVC or metallic facings provides a wide range of options that can be tailored to suit each project.

# **DSP Range**

Produced from a core of specifically engineered multi-layer particleboard, a material that provides exceptional properties for stable, high performance door leaves. FD30 and FD60 fire resistance, acoustic insulation up to Rw33dB as an unglazed door.

#### DSF Range

Constructed with timber stiles and rails and a core of particleboard sandwiched between substrates. This versatile construction offers great flexibility for unusual requirements and designs. FD30 and FD60 fire resistance, acoustic insulation up to Rw33dB as an unglazed door.

## **DST Range**

Manufactured using a core of laminated timber and faced with high density substrate, used for extreme durability requirements and higher levels of acoustics. FD30 and FD60 fire resistance, acoustic insulation up to Rw35dB as an unglazed door.

#### **DSTm Range**

A highly engineered door core using thin strips of timber laminated together and faced with a high density substrate. Extremely durable and with the scope to provide larger and more onerous configurations. FD30 and FD60 fire resistance, acoustic insulation up to Rw35dB as an unglazed door.

# **DSJ Range**

Doors manufactured from solid timber components to produce traditionally crafted stile and rail, panelled and glazed doors. An extensive range of door designs, patterns and mouldings provide the customer with bespoke products that meet FD30 and FD60 fire resistance.



# **High Performance Doorsets**

Highly engineered doorsets that take our more recognised ranges to the next levels of performance. Careful consideration has been taken with the designs and detailing to make sure that they complement and match all other doorsets in the DS ranges.

#### **DSM Range**

A very high performing, fire resisting range of doorsets manufactured from a mix of timber and non-combustible materials. The slender door thickness and timber appearance provides visual continuity with other products from David Smith St Ives Doorsets. The range is available in all configurations, achieving FD90 and FD120 fire resistance and Rw30dB acoustic insulation.

#### **DSA Range**

Our high performing acoustic range is engineered from a combination of different materials for the door leaves and frames. Used with specific frame and seal arrangements, these doorsets are designed for maximum acoustic performance whilst maintaining FD30 or FD60 fire resistance and achieving acoustic insulation up to Rw45dB.

#### **DSX Range**

From our long experience in the health sector we have developed a full range of lead-lined doorsets that provide protection from harmful radiation in areas where X-rays are used. The doorsets are lined with lead of a specified thickness from Code 3 to Code 7, as designated by the National Radiological Protection Board or the appointed advisor, achieving FD30 and FD60 fire resistance and acoustic insulation up to Rw36dB.

# **Door Faces**

#### **Timber Veneer**

Our wide range of veneer species provide natural beauty and character of timber from around the world. Finished with our performance lacquer or anti-bacterial coating to provide good resistance to scratches and general abrasions.

#### Medicote

Our anti-microbial clear finish is applied to prevent the survival of bacteria and micro-organisms on timber surfaces. Developed to protect against MRSA, E. coli and Salmonella amongst others, the coating is 99% effective within 24 hours, and continues to protect for the lifetime of the coating.

#### Colourcote

In addition to our high quality paint primer, we can factory finish our Premium PG door leaves with a solid colour coating that has the hard wearing characteristics of a lacquer finish. This is available in the full range of RAL colours with a smooth sheen appearance.

#### Laminate

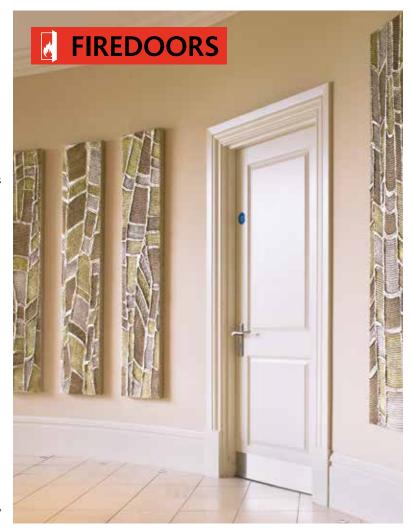
High pressure laminates from Polyrey and Formica are available in plain colours, woodgrains or patterns for situations where there is a need for high resistance to surface scratching and impact damage. The face of the door leaf is complemented with hardwood lippings, exposed, concealed or finished with our very popular S-rad detail.

#### PVC

PVC is ideal for doors that require very high resistance to impact damage. The two millimetre thick material absorbs general knocks and the through colour masks surface scratches. We offer the material as a facing with exposed, concealed or S-rad hardwood lipped edges, or as a material that fully encapsulates the door leaf, faces and edges.

#### Metal

Steel, stainless steel or aluminium is used to face or line door leaves for reasons of security in or around a building, with protection against impact damage, or even as a barrier to prevent moisture ingress. As a facing material, it can also be made decorative with applied patterns, or coloured with a polyester powder coating.











# **FIREDOORS**

#### **Door Frames**

We have developed an extensive range of frames that provide our customers with a choice that is unique and exclusive to David Smith St Ives Doorsets. Frames alter the appearance of the doorset and are used in different guises to achieve practical and pleasing features.

The sectional profiles, the construction and the materials used to manufacture frames contribute to the performance levels of all doorsets. We are able to combine these requirements with our doors to give the optimum doorset performance and looks.

#### One Piece Rebated

A frame section that is machined from a single piece of timber, rebated to accommodate the door thickness. Using minimal components, this is a straightforward fixing option.

# **Frames with Stops**

This frame section is in two parts, a lining section that is fixed to the supporting structure, and a separate door stop that is fitted to the lining. The advantage is that the stop can be used to conceal fixings and also provides a degree of adjustment to compensate for fixing tolerances.

#### **Projecting**

A system engineered for the onerous situation where the frame and face of the door leaf are required to project proud of the plane of the wall structure. This could be for reasons of practicality or as a design feature.

#### **Shadow Gap**

A frame without architrave developed to give a flush to wall appearance. The main feature of this design allows a shadow gap around the perimeter of the frame created by using a timber packer or a plaster bead.

#### Lushframe

Similar to a shadow gap frame but with the added benefit that the frame and door leaves can finish flush with the plane of the wall on the pull or push face of a single action set.

#### Multilam

The frame components are produced from laminated layers of timber, plywood or MDF. The multiple layers can be used to form a decorative effect with the outer layer creating a projecting periphery feature.

# **Integral Architrave**

A frame made up of two sections that slide together to provide tolerances for irregular wall thicknesses. Each section incorporates an integrated architrave profile that laps on the wall.

#### **Speedfit Aets**

A frame component system developed for ease and speed of installation, consisting of a traditionally fixed frame section with push-fit stops and architraves that are held in place with adhesive.

#### **Profiled Stee**

For the ultimate in durability, our profiled steel frames can be combined with our timber doors to achieve up to FD60 fire resistance. The frame sections are manufactured from folded steel with welded or bolted corner joints, and finished with a high quality polyester powder coating.

#### Frame Material

For a plain colour to complement or match door leaves, our on-site painted frames are the ideal solution. With a choice of durable hardwood, Scandinavian redwood or MDF, the material can be tailored to suit the budget and use.

For a natural or luxurious look, there is the opportunity is to use a unique or exotic hardwood from one of the certified well-managed forests around the world.

For added performance, steel can be used to produce the frame itself or to clad a timber frame for added durability and low maintenance. PVC is ideal for encapsulating or cladding frame sections to provide protection, cleanliness and hygiene.



# **Bespoke Designs**

Our 60 years of experience within the construction industry have highlighted the importance of versatility and creativity. Working closely with our customers and their specific needs, we have been able to develop a wide range of special products and some bespoke features.

# **Face Design**

The facing material provides the main decorative finish to a door leaf but, with the addition of engraving or inserts, the aesthetics can be changed to something quite unique. With the use of CAD linked to sophisticated computer numeric controlled machinery, we can engrave pre-set or bespoke designs into the faces of door leaves. Using similar techniques we are also able to insert strips of coloured veneer or decorative metals to produce simple lines or geometric shapes.

# **Vision Panels**

The choice of glazing in door leaves is primarily based on the safety of all individuals negotiating access, including the requirements of Approved Document M and the DDA.

Although vision panels serve a genuine purpose, they become a prominent feature that can be used to enhance the appearance of door leaves. Our exclusive range of bead profiles, aperture configurations and materials provide customers with the means to create their own unique designs.

#### **Material Selection**

For all of our products, we use high quality timbers and veneers from environmentally certified forests around the world. This huge range of natural materials combined with coloured laminates, PVC and metal, are available to mix and match for the most unusual and individual concepts.

# **Associated Joinery**

With our expertise in joinery, we can supply products and ancillary items that complement our doorsets. Our machining facilities also produce special trim, architrave, skirting, and window boards in softwood, hardwood, MDF or veneered MDF.

#### Screens

Screens tend to be a common feature within contract doorsets packages. Working alongside the major glass producers, we have developed a system of fire-rated and acoustic screens that are very adaptable in size, appearance and construction. They can be combined with any of our door and frame ranges and are produced from matching materials to provide uniformity throughout the design.

# **Ironmongery**

Legislation requires that fire door assemblies must fully represent a full-size, tested construction; this includes frame, door, seal, glazing and essential ironmongery.

To provide full certification from one source and remove the burden from our customers, we offer a full range of fully compliant essential ironmongery that can also be fitted with the necessary fire protection.

Alternatively, for the complete ironmongery package, the design and scheduling could be carried out by experienced and fully qualified GAi staff who work alongside our doorset designers. We are able to offer a comprehensive range of quality products from recognised suppliers as a complete solution for each project.

# **Product Certification**

A combination of any of our products as doorsets, door kits or combination screens will give the assurance of compatible units which have been tested and assessed for fire resistance, smoke control, durability and acoustic performance. Our aim is to supply our customers with a complete and compliant package.









For both residential and commercial building projects, large or small, our experienced and dedicated team of designers provide advice from the initial design stage right through to material selection, delivery, installation and decoration.

Each staircase is made to measure; we work from customers' sketches and ideas, or architect-drawn plans, developing the design to our customers' requirements, with site visits to check measurements where necessary. From the simple to the very special, our skilled craftsman produce stunning bespoke staircases, which can make a dramatic statement in an individual home, or create the right ambience in a commercial setting.

We utilise the latest CNC manufacturing facilities linked directly to our CAD software, ensuring accurate and efficient production. We offer a full installation service which ensures continuity and quality; as an alternative we deliver the staircase with full instructions and fixing kit for customer installation.





# **Bespoke Design**

Staircases are often the focal point of your home and one of the most important architectural features to be fitted. From the outset, we pay close attention to detail to ensure that the staircase fits its surroundings and meets your aspirations whilst working within your budget. We recognise that every staircase is unique and personal and our experienced and dedicated design team can advise you on the best solutions to make your staircase become a reality.

#### **Traditional**

With 60 years of experience in the staircase industry, our craftsmen and designers excel at delivering beautiful traditional staircases, with elements such as curved flights, cut strings, turned spindles, volutes, curtail steps, shaped balconies as design features that create an individual, traditional style staircase. We also match spindles and string patterns to existing buildings, enabling extensions, conversions and refurbishments to look and feel authentic.

#### Modern

With ever-changing trends in design, architectural furniture is required to suit a specific style and look. In designing and manufacturing our modern staircases, we use the skills learnt in creating traditional staircases to provide staircases with elements such as open risers, plain strings, glass balustrade panels, stainless steel posts and fixings, and continuous handrails. With more technology available, you have more freedom to explore the possibilities that present themselves when you allow your imagination to run free.



















# **Components**

All timber components are sourced from sustainably managed forests and selected for their quality, prior to being machined on our CNC manufacturing equipment and then finished by hand to produce a superb finish. Our highly skilled craftsmen assemble each staircase with care and an experienced eye to make sure the finished product meets our customers' expectations.

#### Timber

Ornately turned spindles, the straight lines of stopchamfered or, indeed, any combination of the two in materials of our customers' choice are matched to a vast array of handrails machined as continuous with ramps and wreaths, or mortised and tenoned into newel posts or, again, a combination of these to match your requirements. The choices are endless, including matching to existing components or developing a customer's unique idea.

# **Alternatives**

A glass balustrade can give an open feel and provides a contemporary finish to your staircase. When choosing glass as a balustrade it can be either in panel format supported by metal clamps or as a structural glass and post-less system, either with or without a timber handrail. Glass can be clear, coloured or opaque and can be enhanced with lights to give an individual finish.





# **Team**

At David Smith St Ives Staircases, we pride ourselves on long-term commitment and have a wealth of experience in our dedicated team. Many have over 40 years' experience in joinery and staircases. We look after every detail, from the very first ideas you have through to the initial design on our latest CAD software which will enable our team to make those ideas fit your budget.

Our experienced design team will then look after the finer details, ensuring that your ideas can become a reality. By visiting the site, talking to architects and understanding our customers' needs, we find the solution that is right.

Our team of longstanding craftsmen will handcraft the components into a completed staircase which meets our customer's expectations.

# **Delivery & Installation**

With our own fleet of vehicles, we deliver at the right time and with the correct vehicle to suit site conditions and our customer's needs. Our own dedicated team of craftsmen will then come to site and expertly install the staircase, if you have selected this option, creating the finely crafted piece of furniture that an individual staircase should be.











# **Experience**

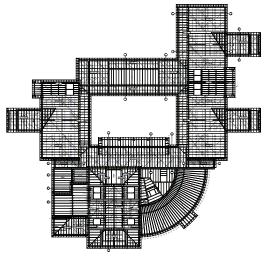
David Smith St Ives Roof Trusses have been designing and manufacturing roof trusses in conjunction with Mitek Systems for over 35 years. This longstanding relationship ensures that we are at the forefront of the industry, and enables us to access the latest technology when developing roof solutions for our customers.

Supplying a wide range of customers from National House Builders to DIY enthusiasts, we have a wealth of experience and expertise in developing the very best roof solutions for your needs.

David Smith St Ives Roof Trusses are committed to quality and we pride ourselves on our long-serving local workforce; it is through them that we are able to produce consistent quality time and time again.

Our trusted rafters are produced to CE mark requirements and manufactured to meet ISO 9001 quality assurance. We closely monitor our suppliers to ensure that we are only using the best quality material from regulated sustainable sources. We are FSC® and PEFC Chain of Custody certified and comply with the requirements of the EU Timber Regulations (EUTR).

We are a member of the Trussed Rafter Association (TRA), the trade body responsible for the UK trussed rafter industry, amd work closely with them in their commitment to improving standards of quality, service and safety.









# **Service**

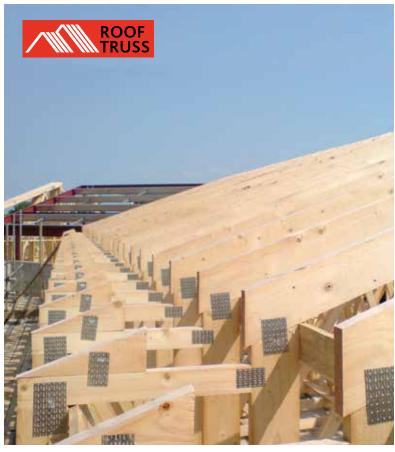
With a large design team we are able to offer a quick response time, whether resolving technical issues, producing drawings for sites, or providing quotations.

We work closely with architects, engineers and surveyors to provide full roof solutions, helping to identify potential issues before they become a reality and endeavouring to ensure that the customer always receives the most cost-effective solution.

With our technical expertise, we are always willing to assist in feasibility studies of new roof proposals, and help many architects and engineers in this way.

Whilst the core of our work is with National House Builders, we often demonstrate our capabilities and innovation on specialist, one-off projects such as care homes, apartment blocks, schools and hospitals. We produce clear, comprehensive and precise design drawings to facilitate the efficient erection of our trusses.

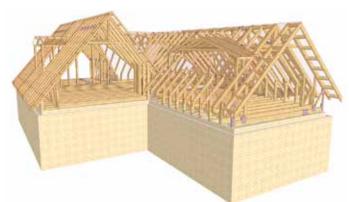
We appreciate the importance of the local builder and self-build market, and use our extensive experience to guide and assist when tackling complex conversions, renovations or simple extensions. We have dedicated meeting rooms and always welcome those who wish to discuss their requirements in person.













# **Attic Trusses**

Attic trusses have proved a popular and cost-effective solution to gain extra habitable or storage space within the roof of a project. They offer maximum returns to the developer, house builder and homeowner, without increasing the footprint of a project.

David Smith St Ives Ltd have extensive experience in providing 'Attic Trusses' solutions. Whether this be with Attic Trusses, Lattice Trusses, Space-Rafters, or Glulam Beams, our technical team will work with you to develop the best solution for you.

Using the latest 3D Mitek design software, we can show customers visualisations of the design proposal and clearly highlight any issues that may be faced. Working with our Staircase department, we can also ensure that the correct apertures are allowed for practical staircases.

# **Spandrel Panels**

Factory-clad, timber-frame spandrel panels offer significant time and cost savings in replacing the need for blockwork within the roof space above the ceiling line.

Manufactured to the profile of the roof, they conform to current building regulations for fire and acoustic performance, but can be tailored to your needs should enhanced performance be required.

Delivered pre-slung and with a protective membrane to resist the elements, they offer considerable Health and Safety advantages over a more conventional build, whilst also enabling buildings to become water-tight faster.





# Manufacturing

Our modern manufacturing unit enables us to produce high volumes of trusses efficiently and accurately. With four hydraulic presses and a state of the art multi-bladed CNC saw, we are capable of making in excess of 1,500 trusses a week.

The factory's purpose-built nature provides us with the flexibility to produce trusses of heights and spans that are beyond the capabilities of many of our competitors. Spans in excess of 15 metres or heights in excess of 4.6 metres are possible and with the CNC resources available across the company; we truly can make trusses of all shapes and sizes!

Our on-site timber treatment plant gives us the flexibility to react quickly to our customers' needs, whilst ensuring that we are in control of this environmentally sensitive aspect as we specify only water-borne, organic preservation treatment.

# **Distribution**

David Smith St ives Roof Trusses offer nationwide coverage. Using a combination of our own delivery vehicles and trusted outside hauliers, we pride ourselves on our flexibility to meet our customers' ever-changing needs.

All our drivers are trained to the latest standards in site safety and handling to ensure that not only does your product reach you in pristine condition, but your operatives are instructed to unload products in a correct and safe manner. Furthermore, we offer a factory-fitted sling service, facilitating the safe craning of trusses direct from our delivery vehicle.







David Smith St Ives Joists is an authorised distributor of James Jones & Sons' JJI Joists. Established in 1905, James Jones & Sons Ltd is committed to excellence in customer service, quality products, superior engineering and prompt delivery.

The JJI Joist is a structurally engineered timber joist, combining high-grade softwood with an engineered composite panel. Using advanced technology, these components are combined to produce an innovative alternative to conventional construction timber. They are produced on the first purposemade i-joist production line in the UK, custom-built to produce JJI Joists to UK preferred dimensions.

The JJ-IntelliRoof™ is a fully engineered panellised solution for fast on-site erection of a fully decked, insulated, watertight and braced JJI Joist Attic Trusses. The system is independent of the building construction method and can be used with traditional masonry construction or timber frame with equal ease.

BJ-Beam is a high specification engineered Glulam beam. This forms a structural unit of great strength and dimensional stability to complement the JJI Joist for high load and rim beam applications.

JJi Joists are available in a range of sizes familiar to the UK construction industry, with joist depths ranging from 195mm to 450mm. JJI Joists are constructed from 9mm OSB web and C24 softwood flanges, ranging from 45mm to 97mm in width. Due to the unique form of the JJI Joist British Board of Agreement Approval, it is possible to design and produce large volumes of non-standard JJI Joists to allow for particular span and depth situations that cannot be covered by the standard range. The 220 JJI Joist also provides a more cost-effective way of complying with Part E (sound) of the Building Regulations for intermediate floors, as no insulation is required when it is installed at 400mm centres and above.

Whatever size company you are part of, be it a large main contracting company or a sole trader, the new Part L Building Regulations affect you. Since air leakage is a major cause of failure to comply, the Cullen Gripper is a useful tool in the battle to ensure compliance. The Cullen Gripper is an easier-to-use option than masonry hangers. Designed for use in conjunction with the JJI Joist, the Cullen Gripper provides an airtight seal at joist end, and can be used on both external and party walls.



# jji joists vs concrete

The JJI Joist is FSC® certified. Whilst concrete scores very poorly environmentally, JJI Joists have a BRE Environmental Profile and are 'A' rated under most applications defined by the 'Green Guide to Specification'.

The loadings on foundations can be reduced, as JJI Joists are much lighter than concrete.

Using JJi Joists, a floor system can be pre-assembled as a cassette panel, resulting in a more accurate and easier installation.

Generally, lead times are 2-3 weeks.

# jji joists vs solid timber

Number of joists to install is cut by over two-thirds.

Number of hangers required is cut by 75%.

JJI Joists are available in lengths up to 15 metres.

No extra insulation is needed between joists.

Longer spans give more design flexibility.

Installing services through the property is easier.

# jji joists vs metal web

Holes from MVHR are not hindered by metal struts or lateral stiffening timbers.

JJI Joists are the system of choice for service engineers.

Design software for beam and integrated hole analysis is freely available.

Cut to length is easier as no solid blocking or metal to cut through.

# jji joists - total solution

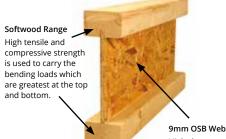
JJI works closely with manufacturers of wall hangers, ties and fixings to provide a full package. in addition, James Jones & Sons Ltd co-operates with floor deck manufacturers, especially Steico (UK), to develop new combined solutions.

Installing Steico Weather Dek2® deckboard onto JJI Joists is one solution to ensure compliance with the 40dB requirement of Part E of the Building Regulations without requiring additional insulation or special plasterboard.

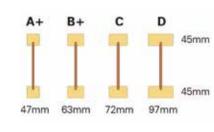
Adding WeatherDek2 Fast Fix increases the acoustic performance of the floor to 41dB, giving you even better sound resistance. Steico Weather Dek2® also conforms with European manufacturing and environmental certification EN312/iSO 14001, which ensures the highest level of raw material selection, baseboard quality and manufacturing control. All boards are stamped for ease of identification, giving added assurance.



# jji joist composition



# jji joist flange sizes



High shear strength is used to carry the shear loads which are greatest at the mid depth of the section.



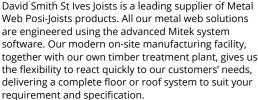












Using leading edge computer software, our highly experienced design team produce detailed structural design drawings and calculations for your project. Our expertise helps to make cost-savings where possible and to solve complex design challenges.

Metal Web Posi-Joists is constructed from two parallel stress-graded timber flanges connected to the patented V-shaped, galvanised metal web. The unique metal web design offers increased stiffness and better performance in compression when tested against the market's leading competitors.

# Metal Web Posi-Joists Design Flexibility

The use of metal web floor systems has grown significantly in the UK, with engineered joists replacing both traditional solid timber joists and concrete flooring. Metal web joists improve construction efficiency by reducing installation time, producing less site waste and providing long-term stability. Metal web joists are simple to set out and install, crucially allowing for services to run virtually unimpeded within the floor zone.

#### **Open Web Design**

The open web design allows for greater design freedom when planning for services, due to an easier, more practical installation solution. Additionally, no drilling or hole-locating is necessary, which reduces the possibilities of incorrect workmanship, saving valuable time on-site for service engineers and so reducing labour costs.

# Flexibility

Greater clear spans give potential to omit the internal load-bearing walls that would be required for traditional solid timber joists. Metal Web Posi-Joists is suitable for use in ground floor applications and a variety of end support details, such as 'top chord supported', can be provided. Metal Web Posi-Joists is also perfect for roofing applications; its inherent strength means it is highly competitive against other timber products or steel. With spans available in excess of 12 metres, Metal Web Posi-Joists is ideal for flat, low or steep roof applications.





# **Metal Web Posi-Joists Features**

Metal Web Posi-Joists offers an excellent alternative to both traditional joists and i-beams. The key benefits are:

#### Lightweight

With smaller timber sections and the lightweight metal web, Metal Web Posi-Joists as a finished product is lighter than its timber equivalents. This gives greater handling possibilities on-site.

#### Installation

The speed of setting out joists on-site is increased due to a larger bearing surface which, in turn, improves joist stability and enables easier fixing of decking materials. Fixing times are also greatly reduced as the floors are made to measure and supplied with clearly detailed layout drawings.

#### Long term stability

Metal Web Posi-Joists beams are dimensionally stable. Cross-grain shrinkage is kept to a minimum due to the smaller timber sections used in the design and this, in turn, leads to quieter, longer-lasting floors.

#### Improved sound and vibration

Metal Web Posi-Joists SJ10 (254mm deep) offers outstanding acoustic performance and meets the minimum requirements for sound resistance in intermediate floors in England, Wales and Scotland without the need for insulation, resilient bars or additional insulation.

# **Distribution**

David Smith St ives Joists offer nationwide coverage using a combination of our own delivery vehicles and trusted outside hauliers. We pride ourselves on our flexibility to meet our customers' ever-changing needs.







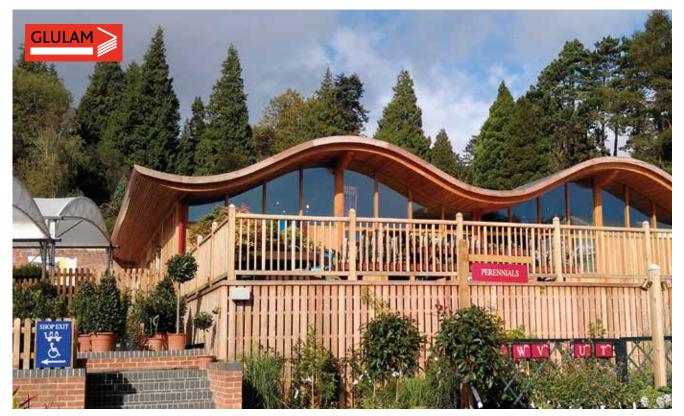


# GLULAM

# **Project Services**

We offer a complete design package, taking our customers' concepts to create a visual representation and ensuring that our vision matches our customers' requirements. We prepare detailed plans on the latest CAD software, allowing the development of the ideas and agreeing solutions with our customers before finalising the agreed project solution. Our team of craftsmen work on the Glulam, creating the components required to ensure that the project is delivered correctly to specification and at the highest quality. Our team of specialist craftsmen will attend on site to complete the installation. We have completed many projects, from small porches to churches and airport terminal buildings, consulting with architects, project managers and builders to finish projects on time and within budget.





# **Application Suitability**

Glulam products are an eco-friendly alternative to concrete and steel. Its durability is second to none, it is light and easy to handle, requires no boxing in or cladding, and can be pre-cambered to counteract the effects of deflection in long spans. Glulam's competitive price makes it a clear choice for all types of construction.

A core feature of the Glulam product is its inherent load-bearing strength. This strength allows architects to design large wooden spans, offering shapes and lines pleasing to the eye and of a tactile nature. The use of large spans creates open spaces which gives a sense of wellbeing and relaxation.

# **Swimming Pools**

The use of Glulam as the structure of a swimming pool building is widely accepted due to its excellent resistance to the heated, highly chemical environment encountered. Curved portals or straight beams are both popular, and are not limited by size, as 40 metre spans are fairly commonplace.

# **Bridges**

Pedestrian and light vehicular bridges are popular due to their environmentally friendly construction and aesthetic qualities. Blending into their rural surrounds make them ideally suited to golf courses, parks, wetlands and estates.

#### Churches

Curved timber portals can be used to create aesthetically pleasing, high vaulted ceiling buildings suited to churches. We have been involved in a number of these types of projects.

# **Curved Roof Structures**

The nature of Glulam allows curved structures to be created for interesting rooflines and domes with light wells sitting on top of structures; even curved 'wave' style roofs are possible with minimum difficulty through careful application and design.









# **Capability**

We design and manufacture a range of technically advanced Glulam timber solutions, tailored to our customers' ideas and specifications, providing a solution to cover all major construction requirements.

# **Associated Connections**

We offer a full range of bespoke and standard galvanised mild steel or stainless steel connections and fixings to complement our customers' requirements for frame or structure. Connections and fixings can be concealed within the Glulam or become a feature of the finished project to suit your aesthetic requirements.







# **Delivery**

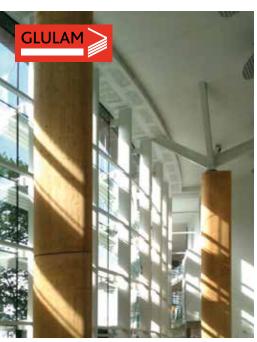
Our fleet of specialist delivery vehicles ensures that we can transport Glulam efficiently to our customers' requirements.

# **Machining Capabilities**

With our experienced craftsmen and full range of large specialised carpentry tools and machinery, we can work on all sizes and shapes of Glulam to convert all designs and specifications into the total designed solution.

# **Staying Green**

We use only timber sourced under the EUTR regulations from sustainable sources, a commitment assured through our PEFC and FSC® certification.





For all your Timber **Engineering Solutions** 

Part of the WB Group of companies



timberframe.co.uk



Crendon www.crendon.co.uk

**Wyckham Blackwell Ltd** www.wyckhamblackwell.co.uk

**Harmony Timber UK** www.harmonytimber.co.uk

**Glulam Timber Engineering Ltd** www.glulamte.co.uk

**Timber Innovations** www.timberinnovations.co.uk

> **Smartroof** www.smartroof.co.uk

**Glosford SIPs** www.glosfordsips.co.uk

The Roof Truss Company Northern www.roof-truss.co.uk



David Smith St Ives Limited, Marley Road, St Ives, Huntingdon, Cambridgeshire, PE27 3EX

Tel: 01480 309900 Email: info@davidsmith.co.uk

www.davidsmith.co.uk



























































