

Structural steel

Your structure. Our strength.

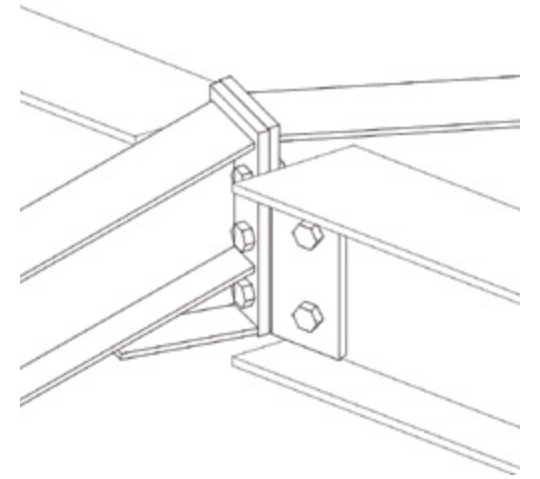




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KeyFab by Keystone Lintels. Specialist structural steel.



As the UK's market leader in steel lintel innovation, Keystone Lintels has built its reputation on engineering excellence, precision manufacturing, and trusted partnerships.

That same commitment to quality and performance is at the heart of KeyFab, our specialist structural steel division, created to deliver bespoke fabricated steel solutions for commercial, residential, and architectural projects across the UK and Ireland.

From complex load-bearing structures to architectural frameworks and bespoke fabrications, KeyFab delivers a complete end-to-end service. Our in-house engineering experts manage every detail, from early design input and technical detailing through to fabrication, finishing, delivery, and site support. With the reliability, expertise, and service standards synonymous with Keystone Lintels, KeyFab provides the flexibility of a bespoke steel fabricator with the assurance of a market-leading manufacturer.



Residential
Steelwork



Structural
Steel Beams



Structural
Portal Frames



Specialised
Steel Frames

Sectors we support

Residential & self-build

From bespoke homes to large-scale housing developments, KeyFab provides precision-engineered steelwork designed to make complex builds straightforward.

We work closely with architects, builders, developers, and self-builders from early design stages through to delivery, helping to translate structural requirements into practical, buildable solutions. From feature frames and cantilevered structures to supporting steels and custom lintel systems, every element is carefully considered to integrate seamlessly within the overall design.

Our solutions are developed with efficiency, installation speed, and compliance in mind, reducing on-site complexity while ensuring a clean, confident handover.



Education, healthcare & public sector

Precision, reliability, and safety are critical when working in regulated environments. KeyFab's technical expertise and rigorous quality assurance make us a trusted partner for contractors, consultants, and design teams delivering schools, universities, hospitals, and community facilities.

Our tailored design approach and coordinated logistics support enable the delivery of high-performance structural steelwork within challenging timeframes, ensuring safe and efficient installation in live operational environments.



Architectural & specialist projects

When design vision demands engineering innovation, KeyFab transforms ideas into buildable, beautifully integrated solutions. We work closely with architects, designers, and structural engineers to develop bespoke fabricated components, architectural features, and statement steelwork that achieve both aesthetic intent and technical precision.

What sets KeyFab apart is our deep understanding of construction technology, including masonry interfaces, structural openings, envelope integration, and load transfer. This ensures every solution is considered within the context of the full building structure, not just the steel element. By understanding how steel interacts with masonry, concrete, and architectural finishes, we ensure every detail fits seamlessly into the wider build. The result is steelwork that enhances the architectural vision rather than interrupting it.

From early-stage modelling through to final installation, our collaborative process delivers structural solutions that respect both creative intent and the practical realities of construction. Because great design demands more than fabrication. It demands understanding.

How we work

From concept to completion

Every project brings its own structural, architectural and construction challenges, but the principles behind our approach remain the same. From the earliest design discussions through to fabrication, finishing, delivery and aftercare, KeyFab manages each stage through one coordinated team.

By bringing engineering, detailing and manufacture together, we simplify communication, reduce coordination between suppliers and develop structural steel solutions that are practical to build, straightforward to install and engineered to perform.



The KeyFab process

01. Concept & consultation

Building the right solution starts with understanding the project.

Every successful project begins with collaboration. We take the time to understand the structural requirements, architectural intent, site constraints and construction programme before any design work begins.

Working closely with architects, qualified engineers, contractors and developers, we identify opportunities, resolve potential challenges and establish the most practical approach from the outset. Early engagement creates greater certainty throughout the project, helping minimise risk, improve buildability and avoid unnecessary changes later in construction.



02. Design & engineering

Turning ideas into coordinated structural solutions.

Our in-house engineering and detailing teams transform the agreed concept into a fully developed structural steel solution. Using advanced 3D modelling and detailing software, every connection, interface and structural element is carefully considered before manufacture begins.

Drawings are reviewed and approved before release to production, helping ensure the finished steelwork integrates seamlessly with the wider building structure while supporting efficient manufacture and installation.

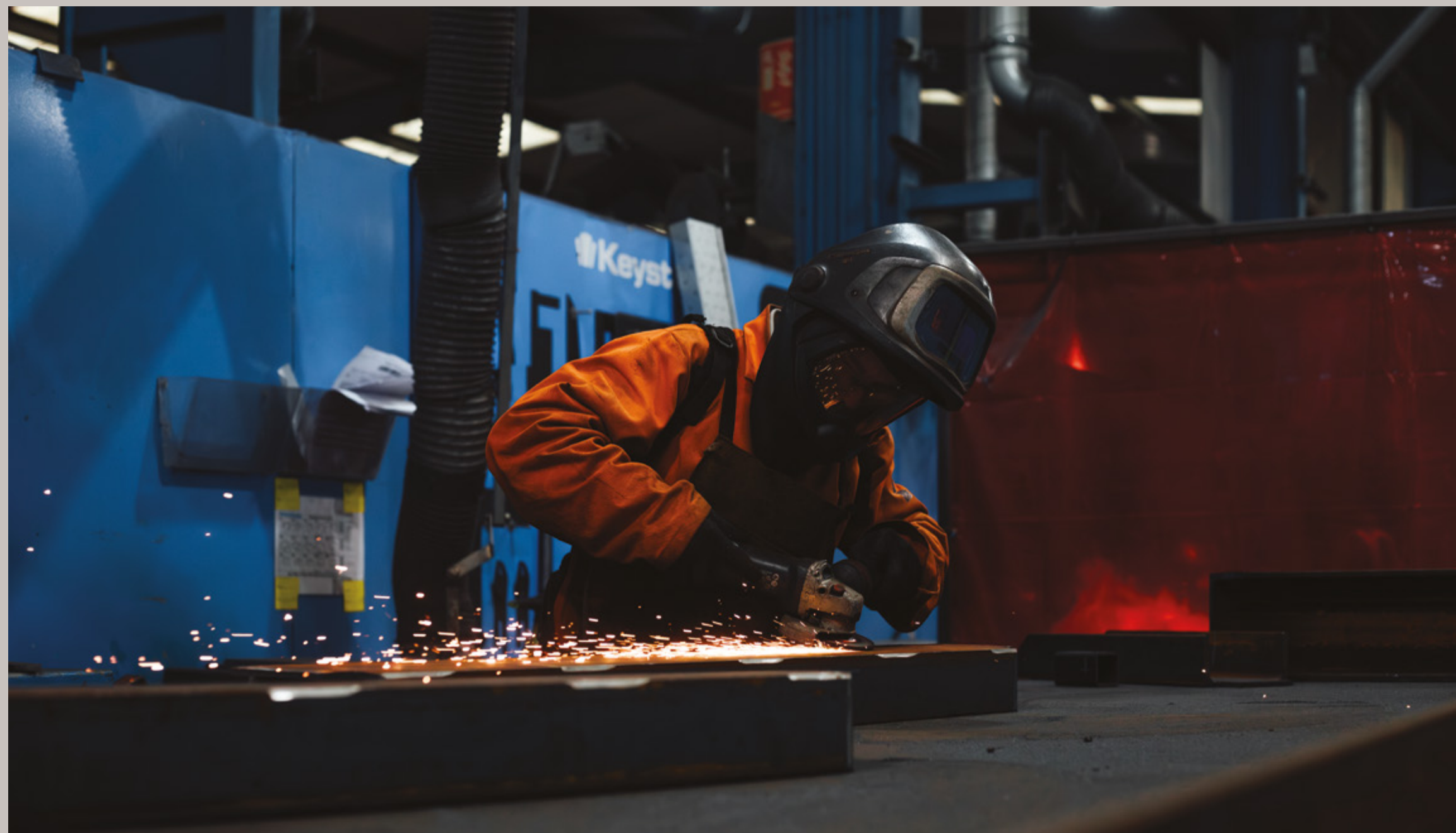
03. Fabrication & quality assurance

Manufactured with precision. Verified through quality.

Once designs are approved, production moves seamlessly into manufacture within our CE and UKCA marked facility, certified to EN 1090 Execution Class 2. Every component is cut, drilled, welded and assembled using controlled manufacturing processes designed to deliver consistency and accuracy throughout production.

Quality assurance is embedded at every stage, with full traceability, inspections and final checks completed before steelwork leaves the factory. The result is a finished product manufactured to recognised standards and ready for installation with confidence.

- CE and UKCA marked
- EN 1090 Execution Class 2
- Full traceability
- Rigorous quality assurance



04. Finishing

Prepared to meet your project requirements.

Finishing forms an integral part of the manufacturing process, ensuring every component is supplied in accordance with the agreed project specification. Whether the steelwork requires protective treatment or a specified finish, KeyFab coordinates the process before delivery to site.

By managing finishing as part of the complete steelwork package, components arrive prepared for installation, helping maintain programme efficiency and reducing the need for additional handling before construction continues.

05. Delivery & installation support

Coordinated around your construction programme.

Delivery is carefully planned to suit the requirements of each project, including site access, installation sequencing and programme deadlines. Every steelwork package is coordinated to arrive where and when it is needed, supporting efficient installation on site.

Our involvement continues throughout installation, with technical support available whenever clarification or guidance is required. By remaining engaged beyond manufacture, we help projects progress with confidence from factory to finished structure.

06. Completion & aftercare

Supporting successful project delivery.

Our commitment continues beyond delivery. We provide the relevant documentation and certification for the supplied steelwork while remaining available to support the project team through completion.

Because the same engineering team remains involved throughout the project, clients have continued access to the knowledge behind the original design and manufacture. It is this continuity that helps ensure every project is completed with confidence.

Woolfox Stamford



Client
Timber Innovations

KeyFab Engineer
David Allison

Location
Rutland

KeyFab was proud to be selected as the structural steel supplier for an exceptional private development located within a breathtaking 185-acre estate in Rutland.

Woolfox Stamford



“

KeyFab delivered a seamless, bespoke steel solution on time and to the highest standard — helping us achieve the design vision without compromise.

David Himmons - Managing Director



The Woolfox development has recently undergone a comprehensive transformation, with a strong emphasis on interior design, wellness, and luxury living. Set amidst landscaped grounds, mature woodland, lakes, and an adjacent golf course, each residence is thoughtfully positioned on a generous plot, offering uninterrupted views of the surrounding countryside. Residents benefit from access to premium amenities including a golf club, café, and shared recreational facilities.

Appointed to design and fabricate the structural steel framework, KeyFab delivered a bespoke steel portal frame solution tailored to the unique architectural and design specifications of the development. One key requirement was that all steelwork be fully concealed within the fabric of each home, maintaining clean, uninterrupted interior lines and preserving the aesthetic vision.

KeyFab worked in close collaboration with the design and construction teams, ensuring that all steel elements met precise sizing and integration requirements. The team also provided on-site support, guiding the builder through the installation process to ensure smooth execution.



Despite the challenge of a tight project timeline and short lead time, KeyFab rose to the occasion, demonstrating their commitment to excellence and reliability under pressure. All steelwork was carefully coordinated with the project design team, providing pre-drilled holes and bespoke connections to accommodate the hybrid steel and timber frame.

Surrounded by the historic charm of Rutland and Lincolnshire, with their quaint villages, thatched-roof cottages, and cobbled streets, this bespoke development blends modern luxury with timeless British heritage. KeyFab is proud to have played a part in bringing this visionary project to life.

KeyFab was chosen to provide a structural steel solution for a unique, self-build project in Rosses Point Co., Sligo, a design which demanded a cantilevered steelwork solution.

Client
TS Construction

KeyFab Engineer
David Lloyd Morgan

Location
Co. Sligo, Rep. of Ireland

Rock House Rosses Point

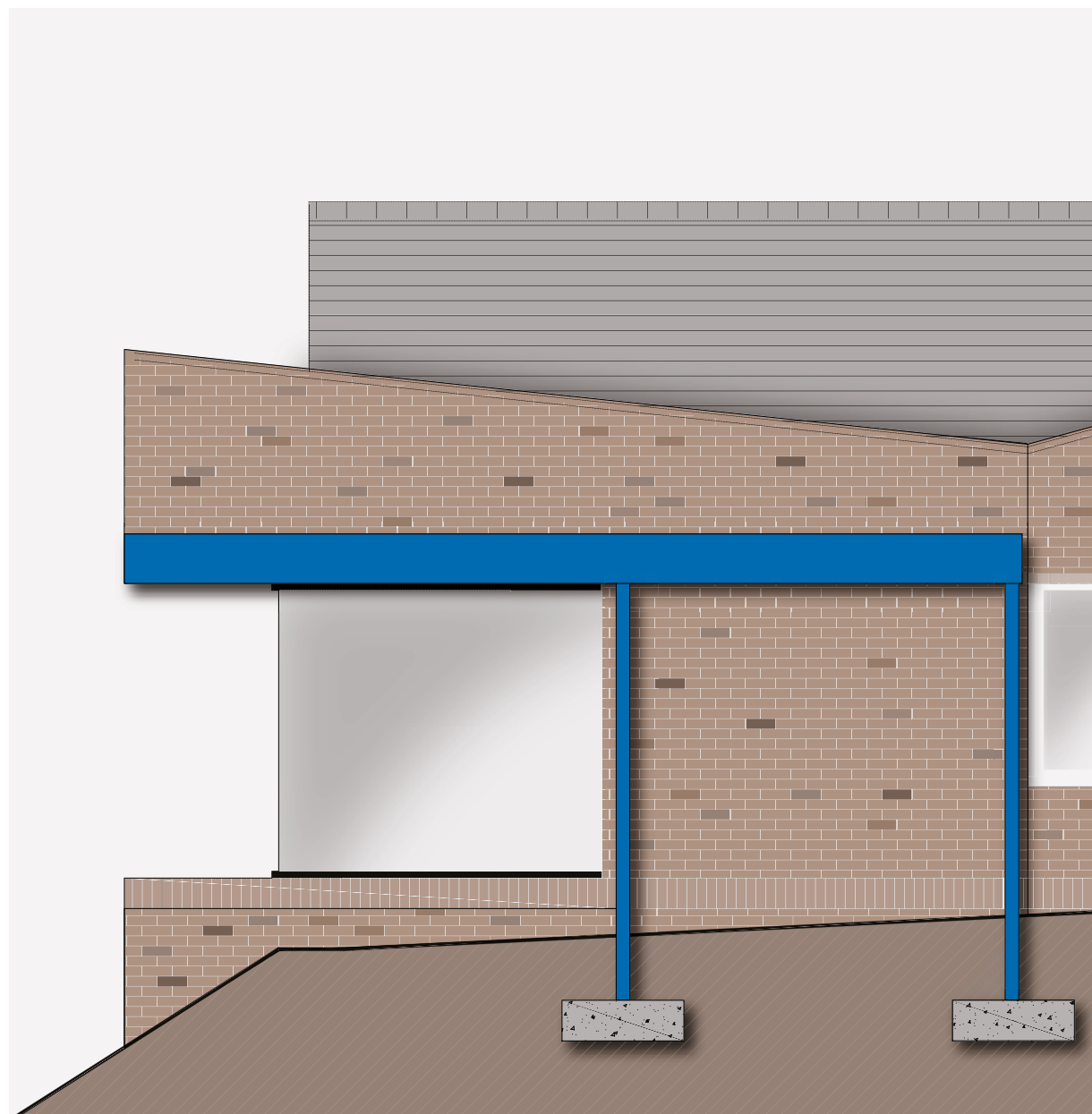


Rock House Rosses Point

With large windows providing expansive views of the Atlantic through irregular-shaped, acute angled windows, the initial design scheme had identified a supporting beam and corner post as the only workable solution. However, this risked watering down the original design and impacting views from inside.

After analysing the load conditions, we were able to propose an alternative approach that delivered on the original architectural intent without compromising on strength, while also remaining fully concealed within the brickwork envelope.

The solution was a propped cantilevered L-frame which redistributed the structural load. Not only did this remove the need for the corner post, it simplified the construction and integrated more simply with the surrounding brickwork.



Section detail showing integrated structural steel support system



Concealed propped cantilevered L-frame steel solution

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KeyFab delivered an innovative structural solution that preserved our client's design vision while ensuring robust performance and seamless buildability, proving themselves a trusted engineering partner.

Tony Gormley - TS Construction



Wednesfield School Lichfield Road

KeyFab was chosen to deliver the steel sub-structure for an innovative, Passivhaus certified timber-framed school construction.

Client
Timber Innovations
KeyFab Engineer
David Allison

Location
Wolverhampton, UK
Project
Steel frame structure



Wednesfield School Lichfield Road

We worked in collaboration with Timber Innovations to help deliver a pioneering timber frame design for a new primary school in Wednesfield, Wolverhampton.

As well as our technical expertise and reliable product offering, our ability to interpret complex architectural plans and provide precision-engineered solutions was critical to our selection for the highly specific requirements of the Passivhaus standard.

We worked with the structural engineer and Timber Innovations from the early design stages to deliver a steel frame system that enabled the airtight, energy-efficient construction that's fundamental to Passivhaus principles.

The new facility will provide nearly 450 much-needed primary school places and serve as a cornerstone for community regeneration.



“

KeyFab's technical expertise and precision-engineered steelwork were vital to the success of the Wednesfield Passivhaus school. Their seamless integration with our timber frame solution helped us deliver a sustainable, high-performance building on time and to specification.

Gareth Lloyd - Design Director

The Black House Burren

Edenross Contracts appointed KeyFab to provide a bespoke structural steel solution for The Black House, an architect-designed hillside home in Newry, Co. Down. The complex roof geometry required a highly detailed steel beam arrangement, comprising 28 individually fabricated components designed to work as one integrated structure.

Client

Edenross Contracts

KeyFab Engineer

Ruairi O'Neill

Location

Newry, Co. Down

Project

Bespoke structural steel
beam arrangement



The Black House Burren



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“Having the lintels and structural steel coordinated through one team worked extremely well. KeyFab understood the complexities of the project and delivered a well-engineered solution that integrated seamlessly with the build.

Malachy McCourt - Edenross Contracts Ltd

The distinctive roof design at The Black House demanded a complex structural solution. Rather than a conventional portal frame, KeyFab engineered a bespoke arrangement of 28 individually fabricated steel components, designed to come together on site as one integrated structure.

Close coordination with Edenross Contracts and the architect was central to the design process. Site visits allowed key angles and levels to be verified before manufacture, while detailed production and assembly drawings ensured each component was accurately fabricated and the complete steelwork package could be efficiently assembled on site.

Residential Development **Co. Galway**

Client

FVG Construction

KeyFab Engineer

Ruairi O'Neill

Location

Co. Galway

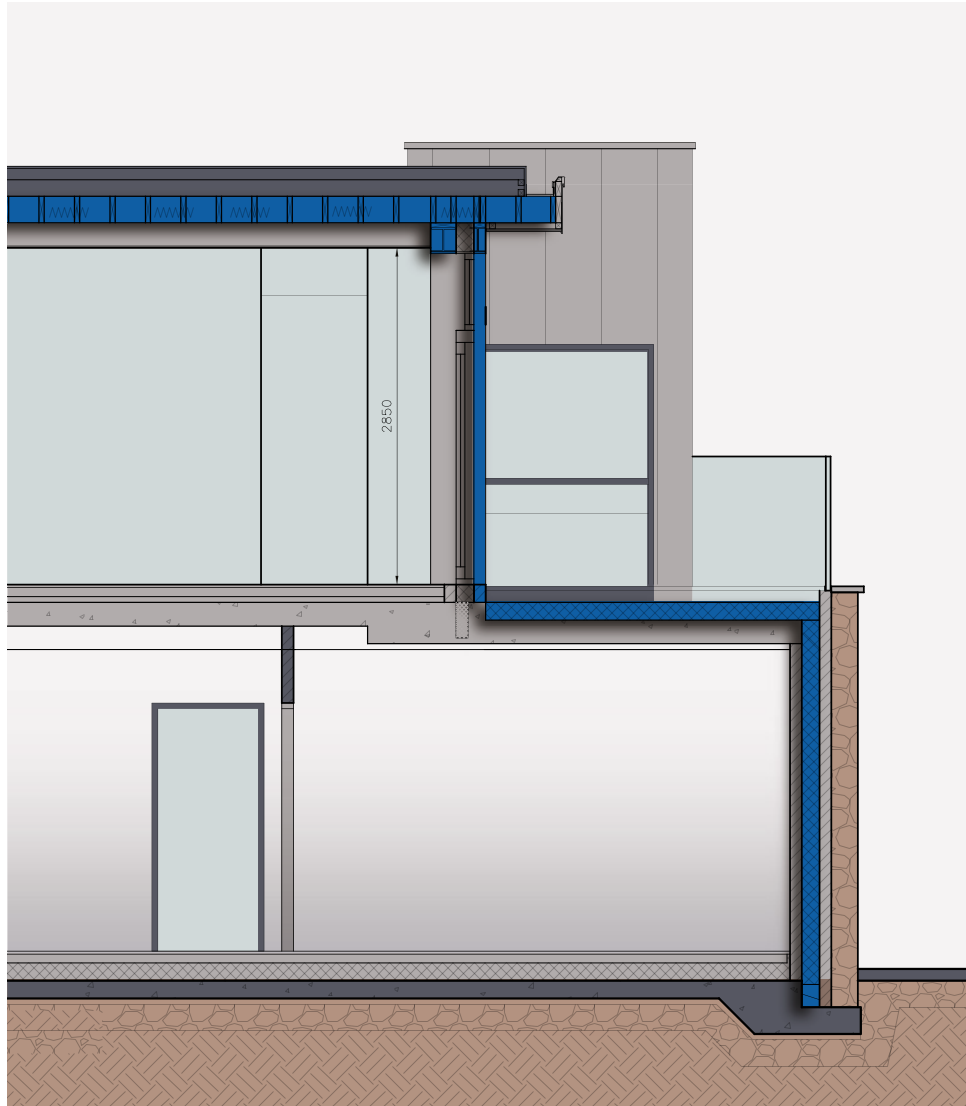
Project

Tailored Multi-Plot

Steel Frame System

A coordinated structural steel solution for twelve individual homes, balancing standardisation with bespoke detailing to meet performance requirements, efficiency and architectural intent.





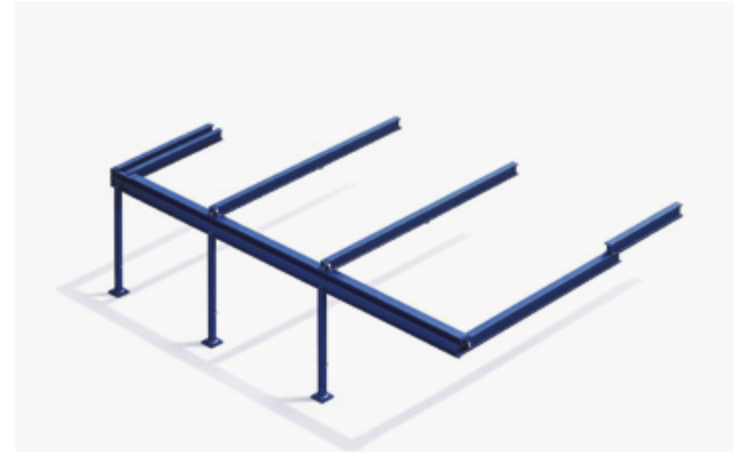
Section detail showing integrated structural steel support system



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KeyFab’s collaborative approach and technical expertise ensured the seamless delivery of tailored steelwork for our 12-home development—on time, efficient, and to the highest standard.

Val Gorham – FVG Construction



Multi-Plot Steel Frame System

Residential Development Co. Galway

KeyFab was engaged by FVG Construction to deliver structural steelwork for a twelve-home residential development. Each property required carefully considered structural support across openings, floor spans and roof junctions, while integrating seamlessly with masonry construction.

Working collaboratively from early design stages, KeyFab developed tailored solutions for each house type while identifying opportunities to standardise elements across the scheme. This approach improved installation efficiency, reduced lead times and maintained consistency without compromising individual design requirements.

Particular attention was given to load transfer into masonry, connection detailing and maintaining thermal and airtightness performance. Designs were also aligned with the construction programme, ensuring smooth sequencing and efficient on-site installation.



Waterfall Heights Bishopstown, Cork

Bespoke balcony steelwork with tolerance-adjusted connections.

Client
Bridgewater
Construction

Merchant
Cork Builders Providers

KeyFab Engineer
David Lloyd Morgan

Location
Bishopstown, Cork



“

The main challenge on this project was the variation in slab edge connector positions. Rather than leaving that to be resolved on site, we developed a connection detail that meant the balconies could be installed as intended, without modification, which made a big difference.”

David Lloyd Morgan – KeyFab Engineer

Waterfall Heights Bishopstown, Cork

KeyFab delivered a bespoke steelwork package for part-cantilevered balconies in two apartment blocks at the Waterfall Heights development in Bishopstown, Cork. The solution was engineered to accommodate slab edge variation and simplify the installation process, while contributing to the development's clean architectural finish.

Working closely with the project team, KeyFab designed and supplied 26 balconies and 10 ground floor rails, along with the associated structural steelwork, for Phase 1 of the build. We developed bespoke connector stubs to accommodate positional variation in the slab edge anchors.

We delivered fully-welded balcony structures to reduce the need for on-site assembly, while slotted connections on the split sections allowed for thermal movement on longer spans. The result was a practical, repeatable method that streamlined the installation and fitted in perfectly with the aesthetic of the finished façade.

Send us your drawings.
We'll schedule and quote your steelwork.

Our expertise
at your service.

NI/ROI Sales & Service
COOKSTOWN

GB Sales & Service
SWADLINCOTE

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