



SIGNATURE PROJECTS

A SELECTION OF OUR BESPOKE DESIGN PROJECTS





Architects want to leave their signature on every exceptional building. Through expert lintel design Keystone makes the architect's vision a reality.

www.keystonelintels.com

Signature Projects

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BBA Certification



British Standards Institution
ISO 9001 & ISO 14001



Home Builders
Federation

NHBC

National House
Building Council



RIBA CPD
Approved



Builders Merchants
Federation



Investors in People
Accreditation



Building Research
Establishment



Support

The breadth of our product range covers every possible lintel solution within even the most creative building designs.

RANGE



HI-THERM

Keystone has redefined Lintel performance with Hi-Therm, designed to exceed the thermal requirements in current and future building regulations. Hi-Therm is supported by an advanced technical service package.



STANDARD LINTELS

Keystone produce a wide range of standard galvanized steel and stainless steel lintels. All Keystone standard lintels satisfy the thermal performance requirements of all UK building regulations.



SPECIAL LINTELS

Keystone offer a complete custom design service to ensure your project has the best lintel for the job. Our technical expertise is renowned for delivering solutions with total efficiency.



BRICK SLIP FEATURE LINTELS

Keystone Brick Slip Feature Lintels are a one piece prefabricated unit, manufactured bespoke to order, achieving even the most challenging architectural designs.



MASONRY SUPPORT & WINDPOST SYSTEMS

Keystone continues to set the standard for masonry support and windpost systems for a range of building frame configurations. Our Signature Titan system provides optimum performance and design flexibility.



CAVITY TRAYS

The Keystone Cavity Tray presents a lightweight, simple to install and long-lasting solution to preventing dampness from penetrating below the roof line.

Keystone gives a hassle free service from enquiry stage through to delivery on site. You can relax in the knowledge that your order is in the hands of experts.



TECHNICAL SUPPORT

Keystone provides comprehensive technical support for all products. Our free scheduling and specification service offers fast turnaround on standard lintels and windposts. Keystone leads the market with a bespoke design service for special lintels and brickwork feature lintels, including onsite measurement and technical assistance.

Our in-house experts use the latest thermal modelling software to advise clients on the optimum lintel solution for compliance with and beyond the latest building regulations.

By contacting our engineers at an early stage of your design process you will potentially gain significantly more design flexibility for the overall project. Please send your drawings to: technical@keystonelintelsuk.com

FASTRACK DATABASE FOR CAD

The Keystone Fastrack Database is accessible from the Keystone website and provides downloads of CAD files for a selection of Keystone Steel Lintels.

DELIVERY

Keystone's fast, efficient delivery service is renowned throughout the construction industry. Our logistics solution is recognised by our customers for superior supply chain management.

Keystone continues to provide the largest range of lintels available, with the shortest lead times in the industry. We have invested in large stock inventories at our three manufacturing and distribution centres which reassure our customers that all our standard lintels are instantly available upon request.

Keystone has revolutionised the steel lintel industry by manufacturing and delivering 'special' lintels with lead-times historically associated with ex-stock items.

Keystone products are available through a national network of merchant suppliers.

Stepped Triple Arch

A decorative entrance porch to a new entertainment complex.



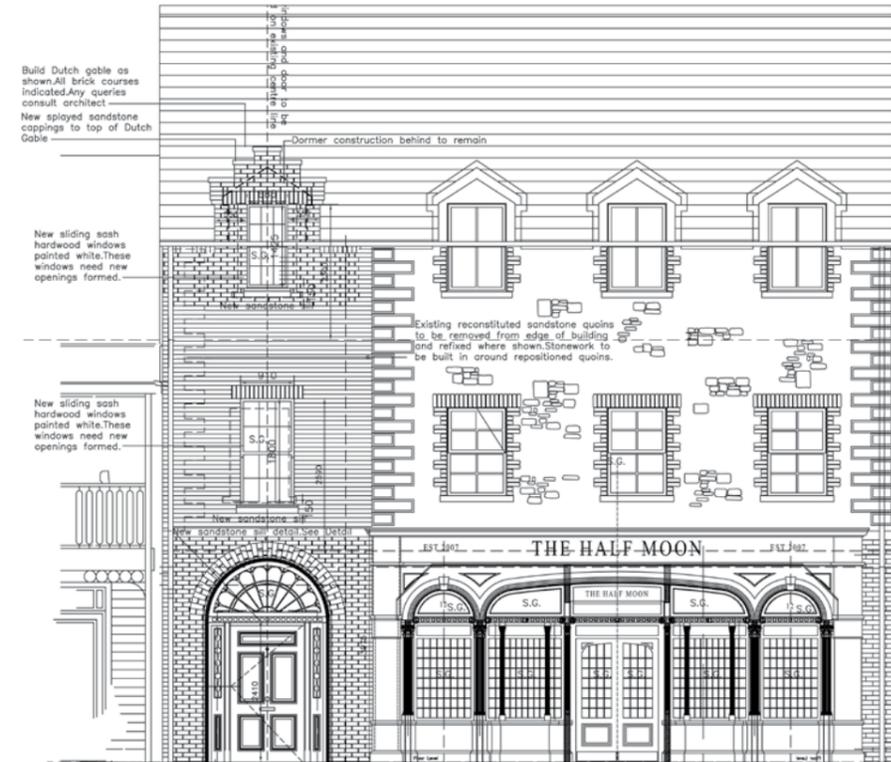
Working closely with architects - McCarter Hamill, Keystone engineer - Chris Patterson, designed a unique stepped triple arch lintel to facilitate the intricate details of the façade.



PROJECT DETAILS

Spanning 7.2 metres in length this fully insulated, 400mm wide lintel provides full structural support for the entrance porch. To enhance the overall aesthetics of the bar front, the Keystone Engineer ensured that no steelwork was visible once construction was complete.

The structure also incorporates a steel ladder frame bolted to the vertical support posts. This frame provides a load bearing facility for the decorative wooden framing of the windows and doors.



“It was reassuring to have Keystone’s creative technical department on hand when presented with this complex bar front. We acknowledge the invaluable support provided by Keystone, who worked as a member of the design team to ensure everything went to plan.”

Paul Hamill
McCarter Hamill



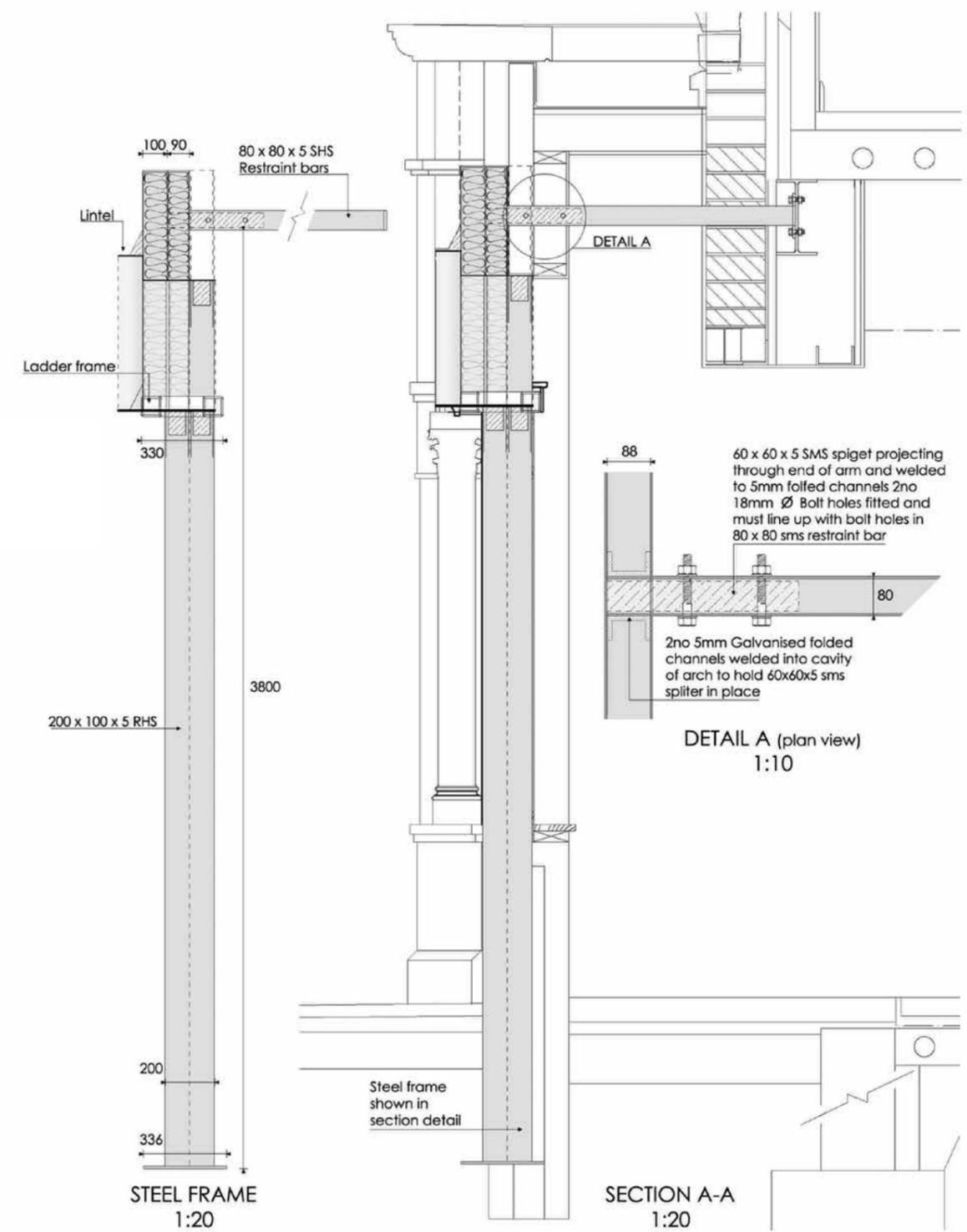
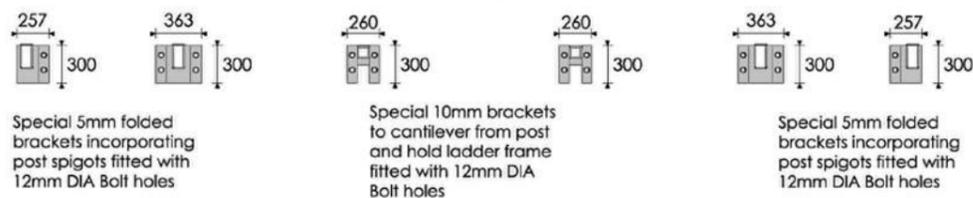
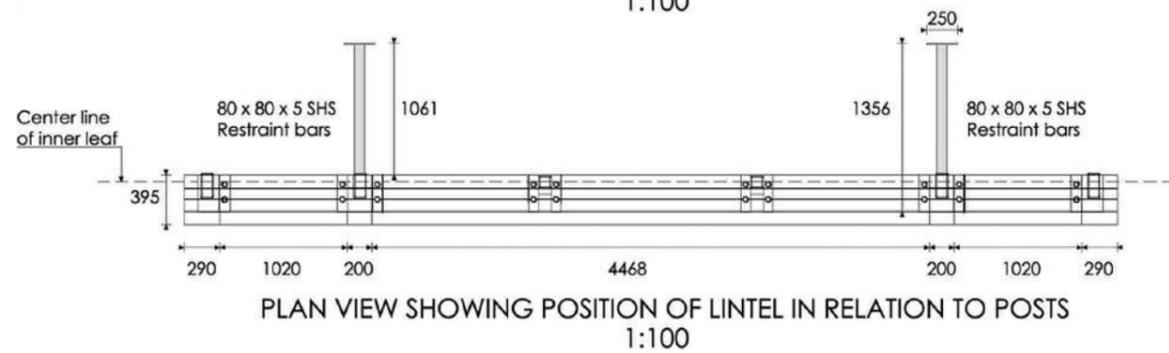
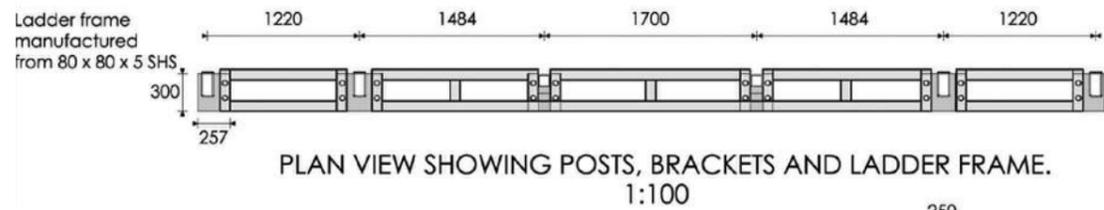
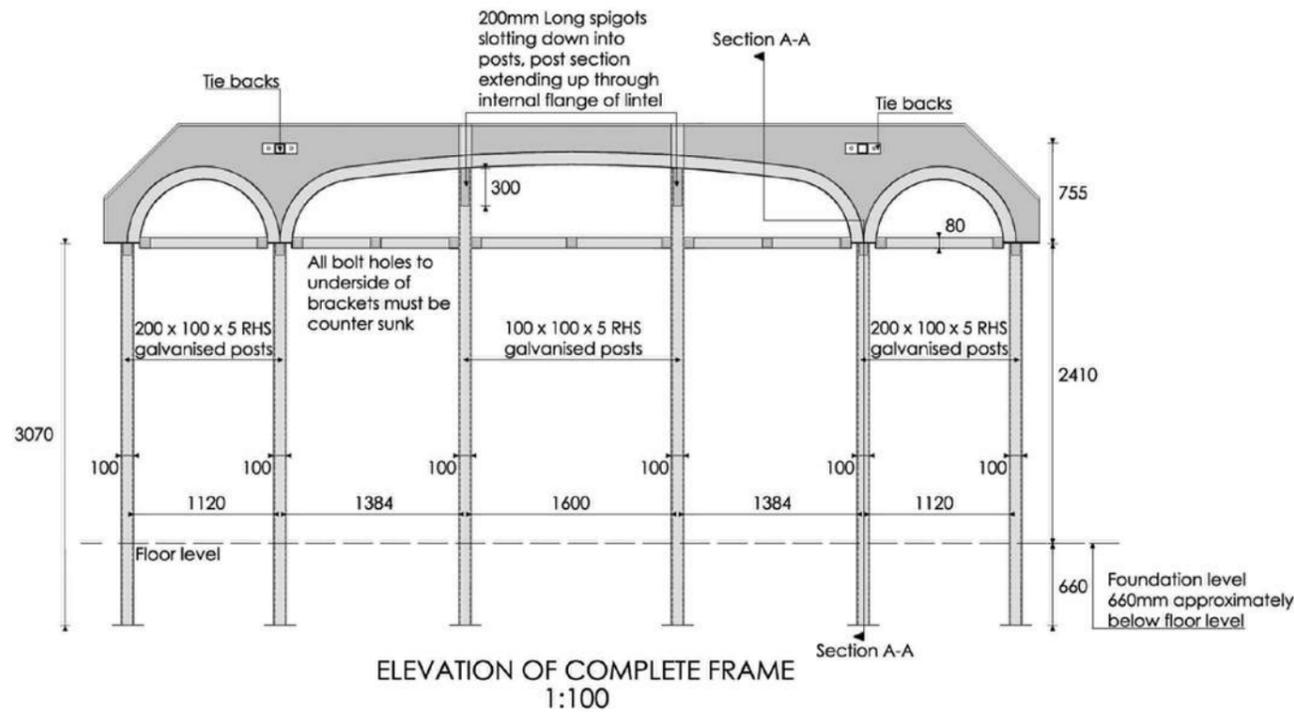
KEYSTONE ENGINEER TECHNICAL DRAWINGS

Stepped Triple Arch



Stepped Triple Arch Lintel

Client : M McElroy
 Architect : McCarter Hamill
 Contractor : McElroy
 Engineer : Chris Patterson



Glazed Gable Apex Sun Lounge

A key feature in this stunning home in Magherafelt.



Spanning nearly 7m in height and 6m in width the large glazed apex provides a beautiful feature to this prestigious project. The owners wanted light space and a connection with the outdoors and the large glazed gable apex was able to provide this.



PROJECT DETAILS

Keystone Engineer Paul Graham designed all the steel lintels for this property and was available on-site to assist the architect and builders. He also had to take into consideration the unusual wall construction which consisted of a double cavity of 100mm with two sections of block and one section of brick.

As well as the large Apex sun lounge, many other lintels were used to make this a beautiful family home, including a large 6m wide Arch lintel at the front of the property, a large double storey corner lintel and a ring beam corner lintel at the rear of the property.



Keystone provide peace of mind that a unique structure will be both structurally safe and value engineered.

Nigel Jones
GM Design

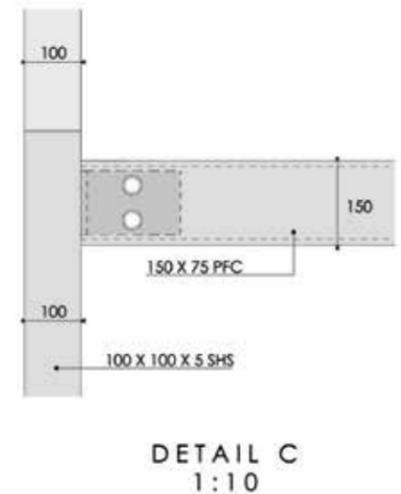
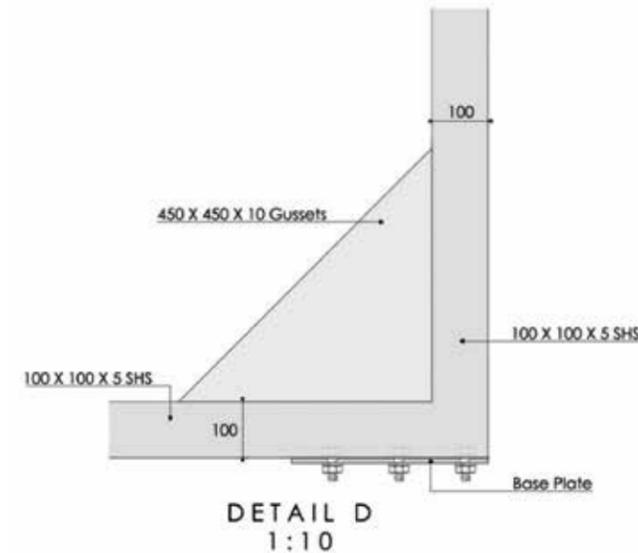
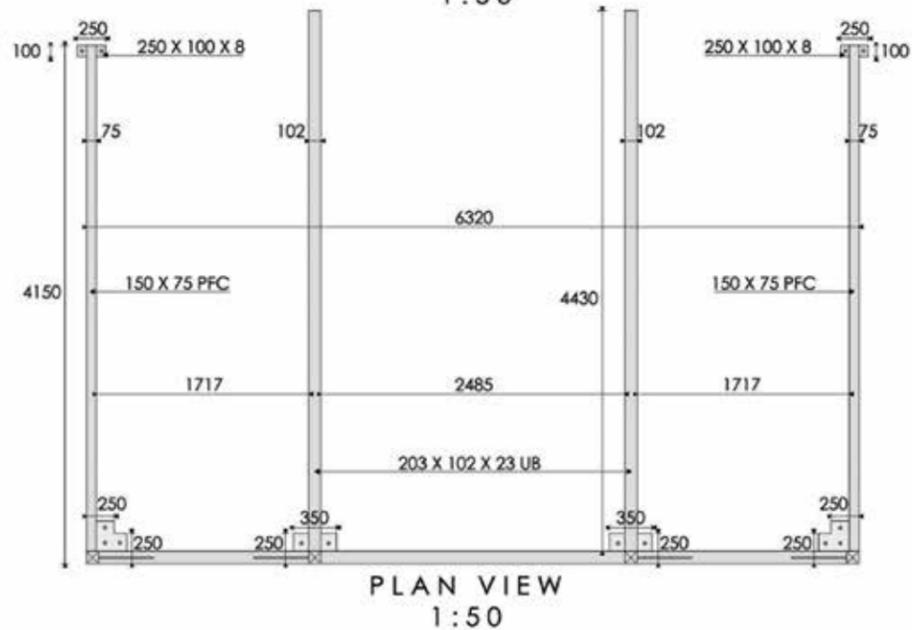
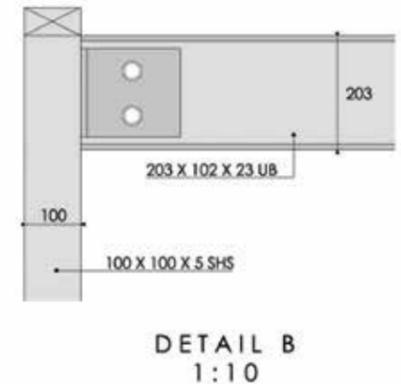
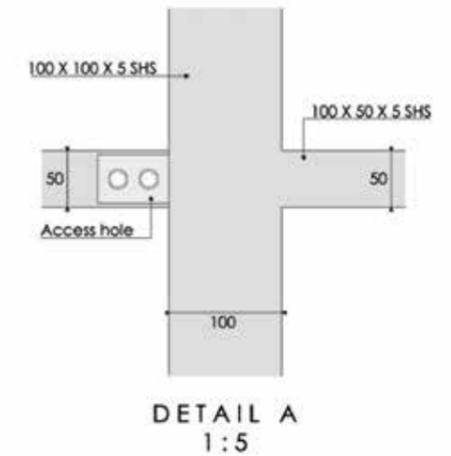
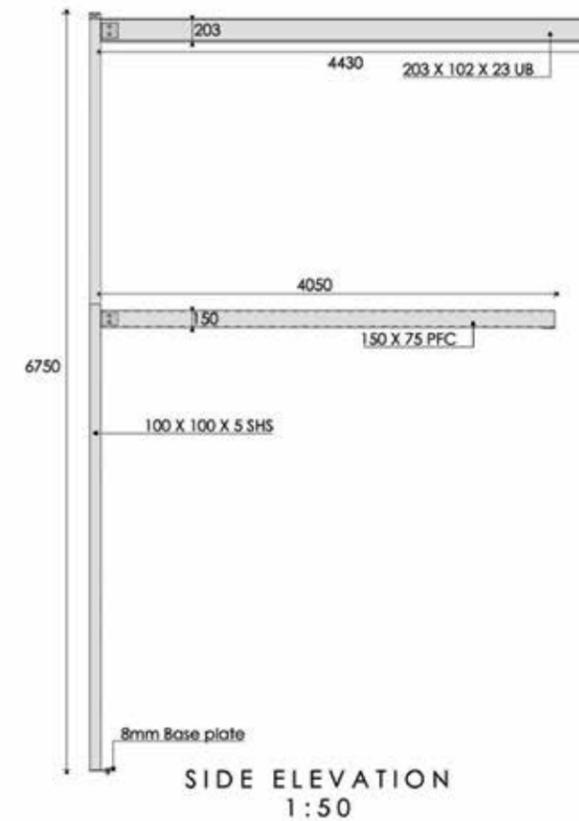
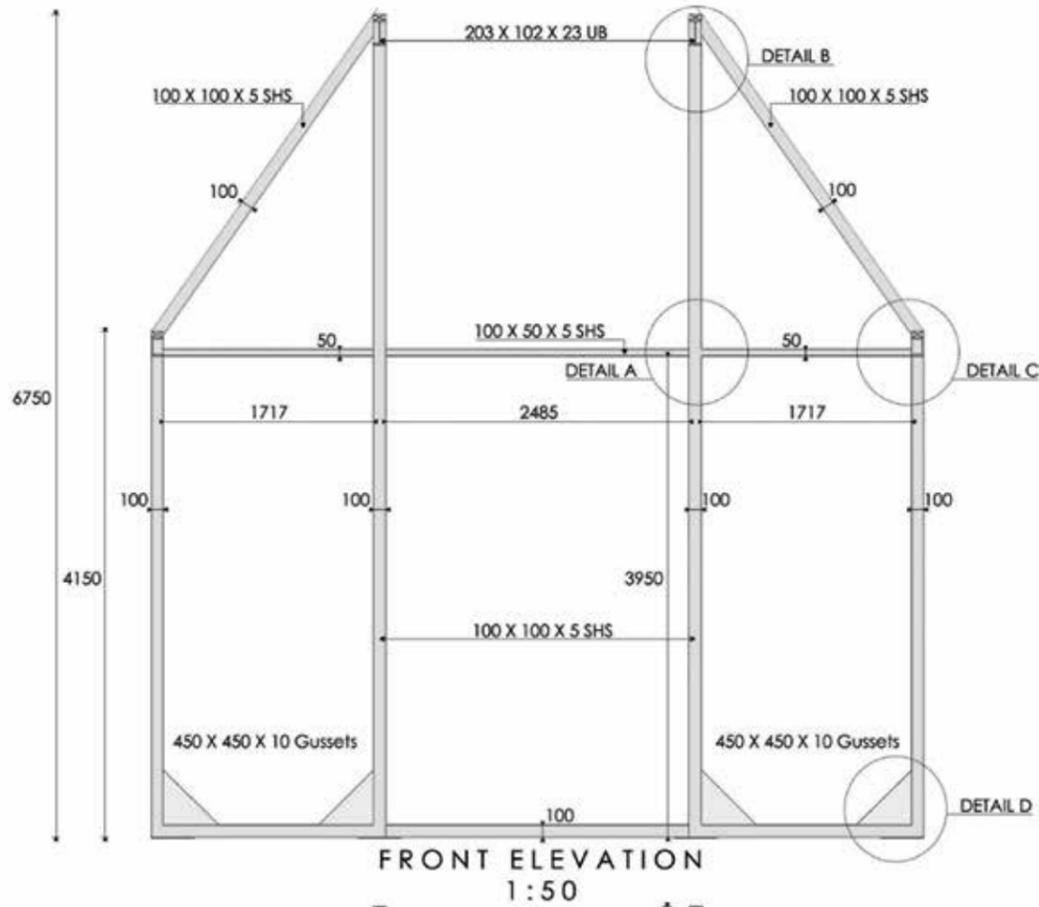


KEYSTONE ENGINEER TECHNICAL DRAWINGS

Glazed Gable Apex Sun Lounge



Glazed Gable Apex Sun Lounge	
Client :	Private House
Architect :	G M Design
Contractor :	Higgins Construction
Engineer :	Paul Graham



Glazed Gable Apex

Including cantilevered balcony.



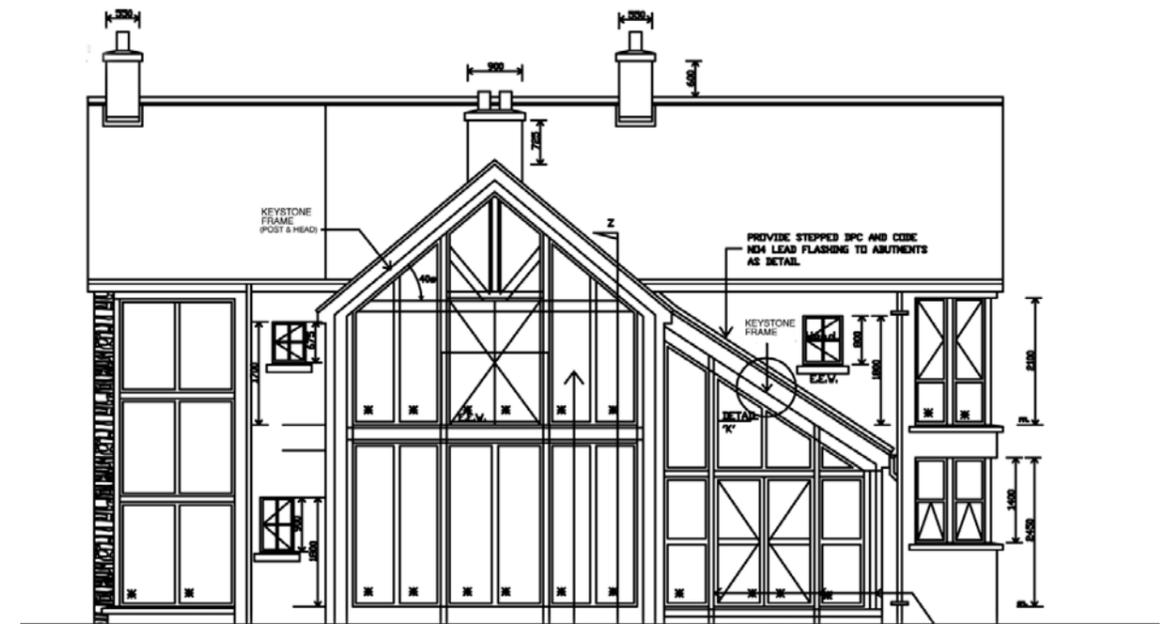
Working closely with architect - Andrew Coulter, Keystone engineer - Chris Patterson, detailed the unique two storey glazed gable apex with a cantilevered balcony, two story corner lintels and half apex corner lintels.



PROJECT DETAILS

Recently televised in the BBC's "House of the Year 2010", this family home is a quintessential example of Keystone's innovative engineering. Working closely with Architect - Andrew Coulter, Keystone Engineer - Chris Patterson, detailed the unique two storey glazed gable apex with a cantilevered balcony, two story corner lintels and half apex corner lintels.

The apex portal frame is 8.5 metres high and spans 5 metres wide. Keystone also supplied a ridgebeam to bolt back from the apex of the gable frame to provide support for the vaulted ceiling. This diversity of steel framing was created using a combination of structural steel sections and supports.



"Keystone ensured full structural support without compromising the original vision we had for the building. They made sure their steel systems slotted seamlessly into place."

Denver McMahon
Andrew Coulter Architects



Continuous Heavy Duty Arches

Agricultural, Food & Bio-Sciences Building.

The arches required for the government's Agricultural, Food and Bio-sciences building span 16.5 metres and carry a 600mm thick solid stone wall. Keystone engineer, Chris Patterson, designed the continuous five arch heavy duty system for this restoration project.



PROJECT DETAILS

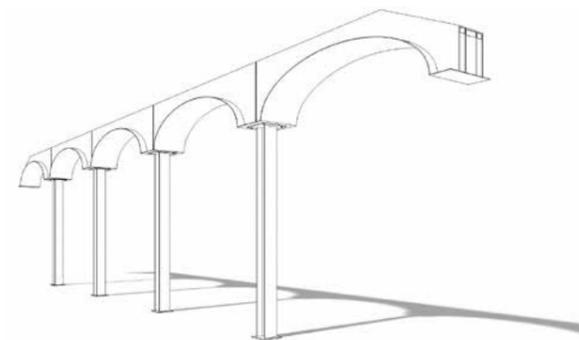
The original arches had been blocked up and supported by concrete lintels. The client wanted to reveal the traditional arches of the building and needed a support structure for the brickwork above. Due to the deterioration of the existing brickwork the contractor required further structural support and contacted the Keystone Technical Team to discuss a possible solution.

Steel pins were placed through the original stonework and supported from below. This suspended the upper floor of the building whilst the deteriorated bottom floor stonework was removed. Keystone posts were then put in place and the arches bolted on top. The original brick and stone were then replaced and the structural pins removed leaving Keystone's heavy duty arches to carry the load.



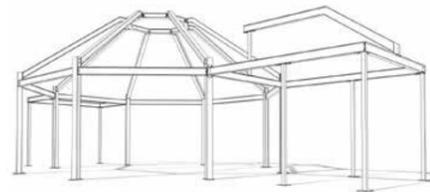
"It was beautiful to see the old barn arches restored. Keystone made our dream come true."

Derek Cahoon
Agriculture Food & Bio-Sciences Institute



Octagonal Portal Frame

Designed to cater for exclusive wedding ceremonies.



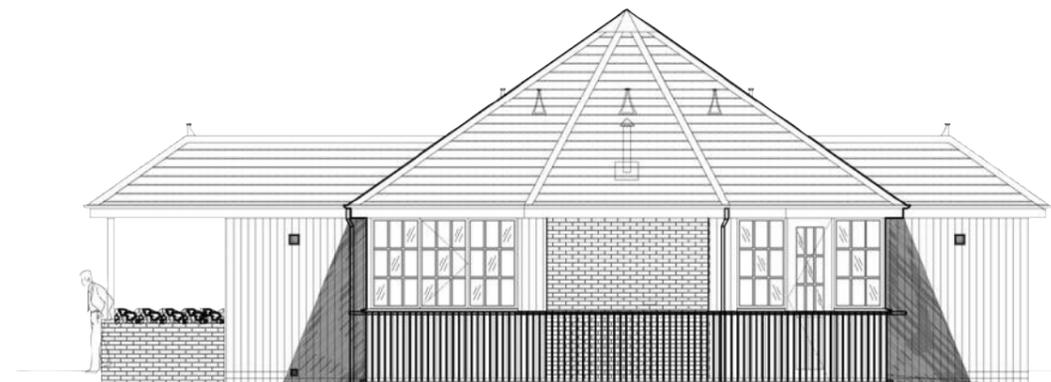
Galgorm Manor Hotel, a leading luxury hotel and spa, required a classic building to cater for exclusive wedding ceremonies. RRP architects liaised with Keystone engineer, Kyle Alexander, to create this bespoke structure.



PROJECT DETAILS

Measuring 16 metres in length, with the main vaulted ceiling spanning 9.7 metres, this deluxe private wedding venue combines modern open space with elegant style.

The Octagonal Portal Frame was manufactured using a variety of steel beams, columns and sections bolted together to create a structural support for the building.



"We are delighted with this unique building and we give great credit to Keystone's engineer for his expertise, professionalism and guidance on-site."

Beth Swindlehurst
Galgorm Manor Resort & Spa



Stepped Parabolic Corner

A stepped corner lintel with a parabolic arch.



Special stonework features in this elegant bungalow really make the building stand out. Mountcharles sandstone sourced from County Donegal in Ireland, add's rich vibrant colours and texture to the external finish.



PROJECT DETAILS

For this project, Keystone Engineer - Kyle Alexander designed a stepped corner lintel with a parabolic arch to suspend over 1 tonne of stone from the outer steel shelf. The lintel was designed to ensure that no steelwork was visible.

This system works by drilling holes into the outer steel shelf. Expansion plugs are then placed into the hanging sandstone and are bolted from

above through the holes in the steel shelf. In addition to supporting the load of the hanging stone, the fully insulated lintel carries a 500mm wide wall structure above.

Spanning 7 metres along the front face and returning a further 3 metres at the corner, this special lintel is a prime example of how Keystone lintels can adapt to the client's brief.



SIDE ELEVATION

“Keystone provided an exceptional service to create this custom built lintel. Suspending stone from the outer shelf ensured we had full structural support with no steel visible. Keystone make the Architects vision a reality.”



Joe Diamond
Diamond Architecture

Angled Apex Frames

Private house, Ballykelly.



Hamilton Architects wanted to create some breath taking features for the family home. This included two feature windows that lean into the sunrise to help fill the owner's home with colour and light.



PROJECT DETAILS

The architect liaised with an Keystone engineer who had to take precise measurements onsite to create two very different but equally stunning Angled Apex Frames.

The Angled Apex Frame measured 4.8 metres high and 4 metres wide and included fully insulated 180mm box sections. The frames had to be delivered to site in two sections, these were bolted onsite via pre-drilled access holes.

The homeowner wanted to create a feature of not only the lintels used but also on the finishes, deciding on a natural stone finish for the outside of the house. Due to the stone finish Keystone had to include welded gusset plates to carry the stonework on the outer leaf and to resist against sliding.



“Keystone designed the structural steelwork required to make this concept a reality.”

Kyle Alexander
Keystone Lintels



Venetian Arch Square Bay



PROJECT DETAILS

Contractor Hardwick Coleman and Whotten came to Keystone Lintels looking for a solution to form the spectacular entrance porch feature for this project in Derbyshire.

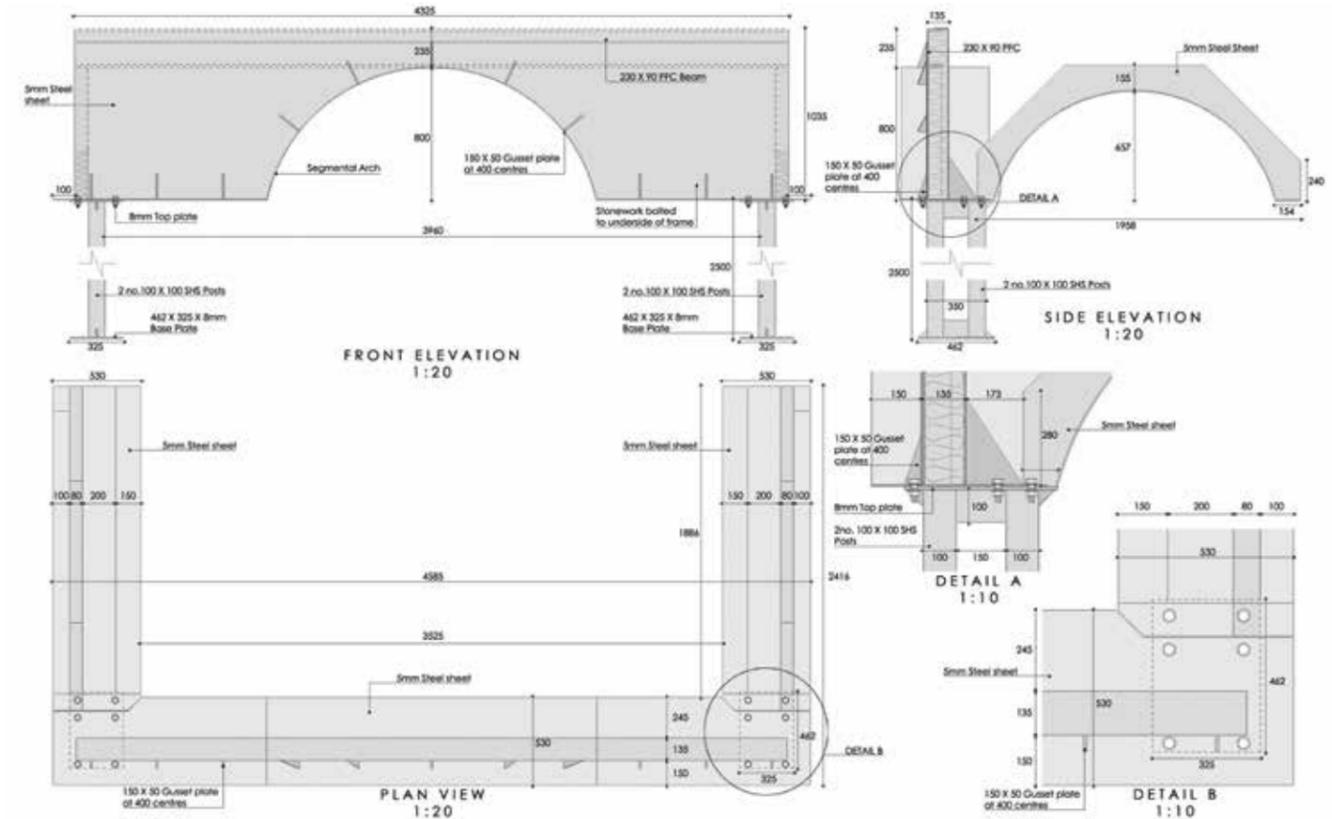
Keystone Engineer Andy Sharlot had a meeting onsite with the contractor and the reconstituted stone manufacturer to ensure the lintel and the stone would fit together. Andy then designed a bay with a full arch to each side leg and a Venetian arch to the front. The bay was designed to carry a

full storey constructed from a 300mm wide cavity wall above the lintel and to support 580mm wide stone underneath the lintel.

The lintel was then designed, manufactured and delivered to site and the lintel went up without a problem and all the stone fitted first time. Keystone proved that when something bespoke is required they can manufacture to the exact requirements.

Keystone have a great understanding and appreciation of the architects approach to a design and as a consequence help to bring the concept into built form.

Paul McLocklin
Montague Architects



Venetian Arch Square Bay

Client :	Private
Architect :	Montague Architects
Contractor :	Hardwick Coleman & Whotton
Engineer :	Andy Sharlot

Special Arch Lintels & Colonnade Supports

Complex lintel solutions for a new build mansion

Keystone designed and manufactured hundreds of special arch lintels and colonnade supports throughout this magnificent mansion. We also supplied numerous standard, heavy duty and extra heavy duty straight lintels. At £70 million it is reported to be the most expensive new home ever built in Britain.



Updown court, a neo classic georgian style home designed by US architects John B Scholz, provided enormous opportunities for creative lintel design.



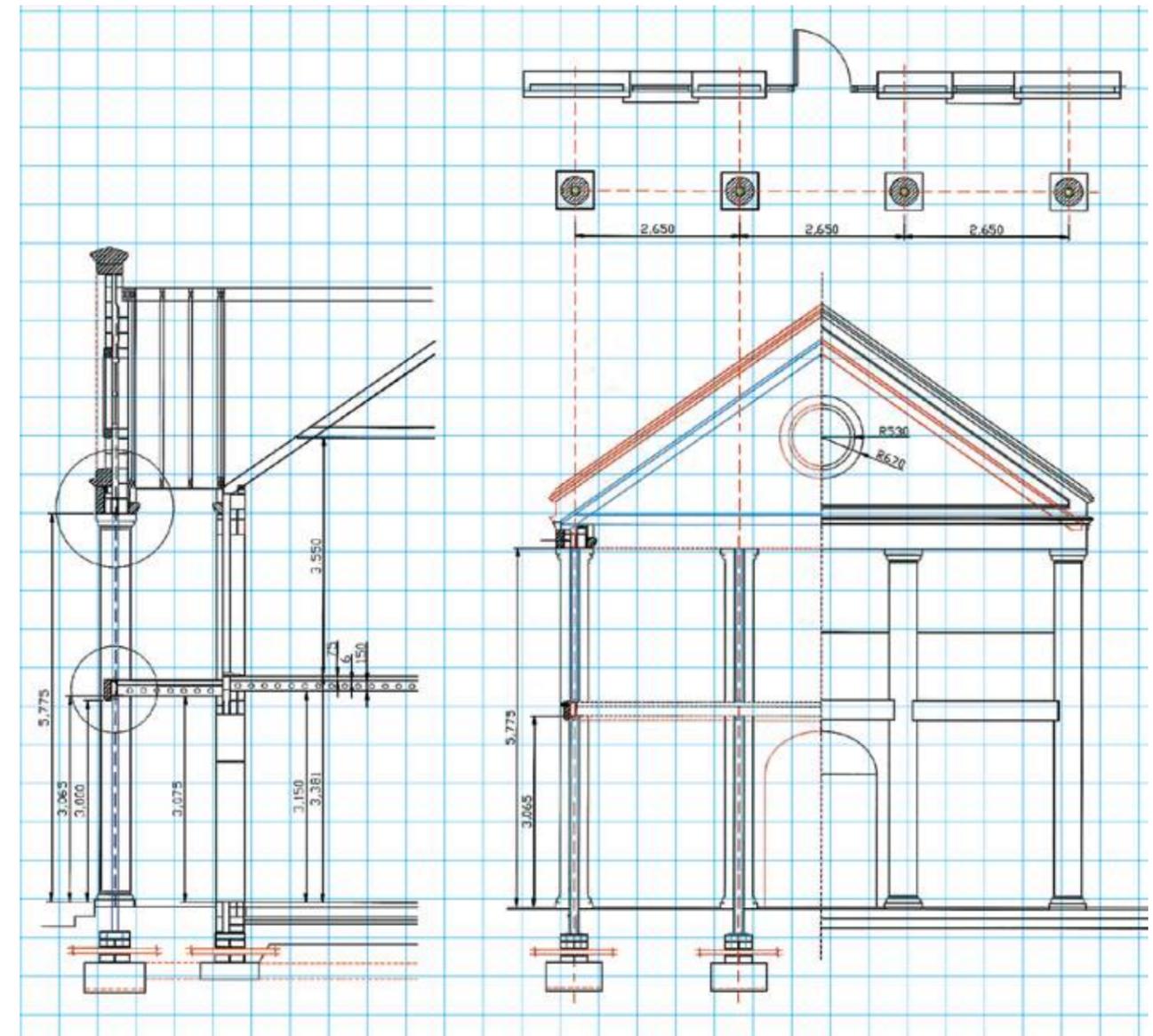
Balcony Support Details On Large Commercial Project



“Keystone’s ability to design and deliver standard and custom made lintels quickly and efficiently has made this job so much easier. A product and service we highly recommend.”

Mr S Jones
McAleer & Rushe

A prestigious refurbishment project which demanded a sensitive design approach and high performance lintels.



Taking Quality To Higher Levels

Homes that demand special specifications.

Our bespoke lintel service has provided solutions to a diverse range of domestic projects. From dramatic new builds to restoring victorian town houses, Keystone offer expertise, efficiency and value at every stage of the project.



KEEPING WITH TRADITION

"When converting this old dwelling into flats, we discovered the timber brickwork support detail on the second floor had deteriorated badly. After several restoration proposals were considered non-feasible, we called in Keystone. Their engineer made one site visit and came up with this solution. Five days later they delivered the goods. An excellent product with an excellent service"

Arthur Rogers
A & J Rogers



Cantilevered corbelled brickwork support system



Special bow-bay, arch and square bay lintels



Extra heavy duty flat parabolic arch lintel



Heavy duty corbelled lintels



Special Gothic Arch Lintels



TAILORED SERVICE

Keystone engineers help to make every Architects vision become a reality. If you wish to benefit from this service, simply call our office to speak with one of our creative Engineers with details of your project. We relish the opportunity to liaise with industry professionals on building projects, regardless of size.



This private residence is a mixture of medieval inspiration and modern lintel design.



Cantilevered Segmental Arched Corner Lintel

Keystone produced a bespoke design for this cantilevered segmental arched corner lintel and delivered to site within 5 days.

"Ordering this special cantilevered arched corner was a pleasure. Details like this can often cause expensive delays between site measurement, design and manufacture.

Using Lintels from Keystone, we alleviated these problems and have now constructed an entrance which was at first thought to be impossible!"

Gerry Gray
Contracts Manager
Felix O'Hare Contractors



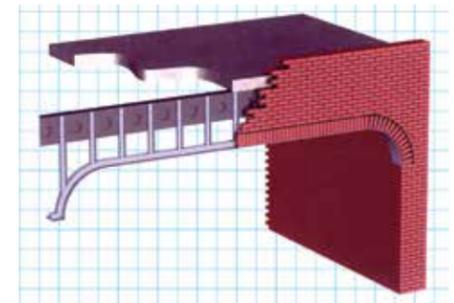
Extra Heavy Duty Flat Parabolic Arch Lintel

Three acre housing development sites near busy town centres are hard to find, and all too often have limited access.

When Development Architect Roger Sally approached this access problem he contacted Keystone for assistance.

"Keystone's Technical Department designed these 8000mm span Flat Parabolic Arch Lintels to support the apartment above and to provide an attractive archway to the landscaped courtyard of townhouses behind."

Roger Sally
Teague & Sally Architects



Hi-Therm

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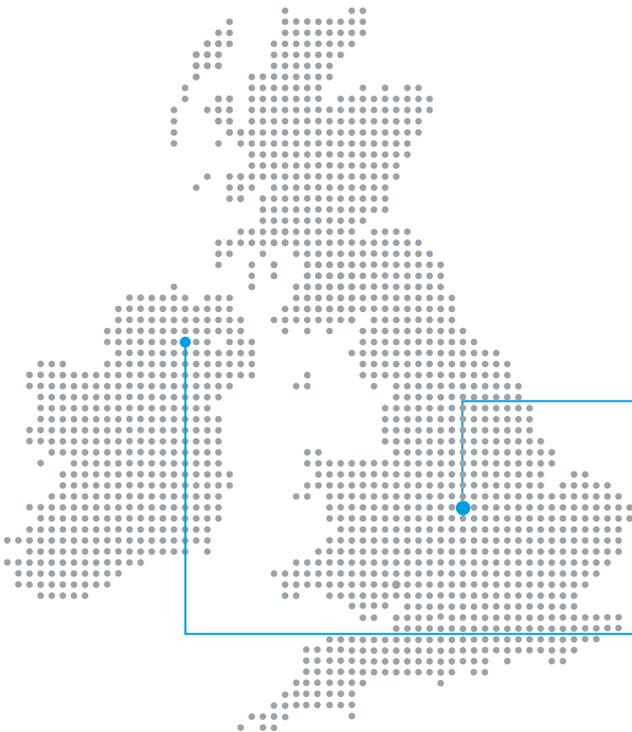
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Cavity Trays

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