BETTER BY DESIGN



# SIGNATURE PROJECTS

# A SELECTION OF OUR BESPOKE DESIGN PROJECTS

# IG BETTER BY DESIGN

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



**BBA** Certification



British Standards Institution ISO 9001 & ISO 14001



Home Builders Federation



National Building Specification Approved



RIBA CPD Approved



Builders Merchants Federation



National House Building Council



Investors in People Accreditation



Building Research

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# Signature Projects

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# IG Support

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

### RANGE



### **HI-THERM**

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



### STANDARD LINTELS

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



### SPECIAL LINTELS

IG 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.



### BRICKWORK FEATURE LINTELS

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



### MASONRY SUPPORT & WINDPOST SYSTEMS

IG continues to set the standard for masonry support and windpost systems for a range of building frame configurations. The innovative Qwik Fix angle provides a versatile solution when masonry support is required.



### **CAVITY TRAYS**

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

IG provides comprehensive technical support for all products. Our free scheduling and specification service offers fast turnaround on standard lintels and windposts. IG 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: drawings@iglintels.com

Please refer to our Fax Back Forms for special lintel requirements. Detailed measuring advice and Fax Back Enquiry Forms are available for download at: www.iglintels.com/technical.

### **FASTRACK DATABASE FOR CAD**

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

### **NBS PLUS**

IG provides specification details via RIBA NBS Plus, accessible by subscribers to the NBS Plus system.

### **DELIVERY**

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

IG 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.

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

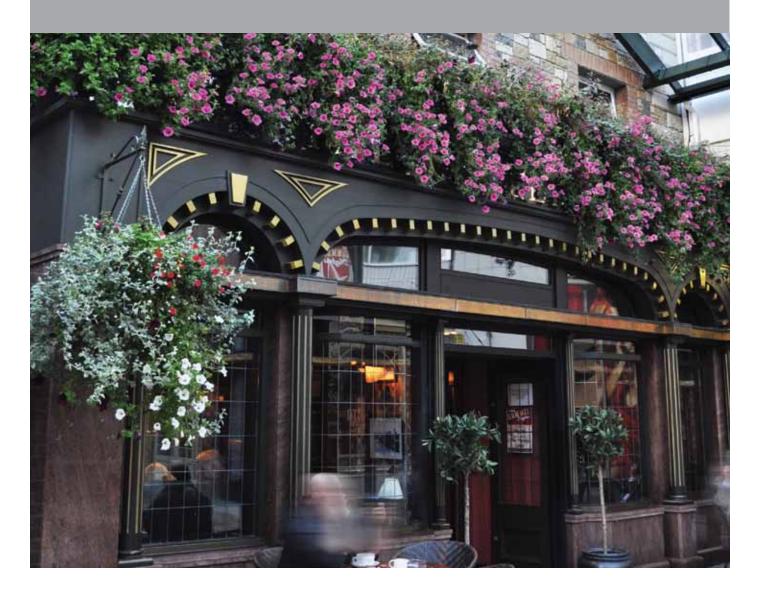
IG products are available through a national network of merchant suppliers. For information of merchant suppliers in your area please visit our website at: www.iglintels.com/merchants

# Stepped Triple Arch

A decorative entrance porch to a new entertainment complex.

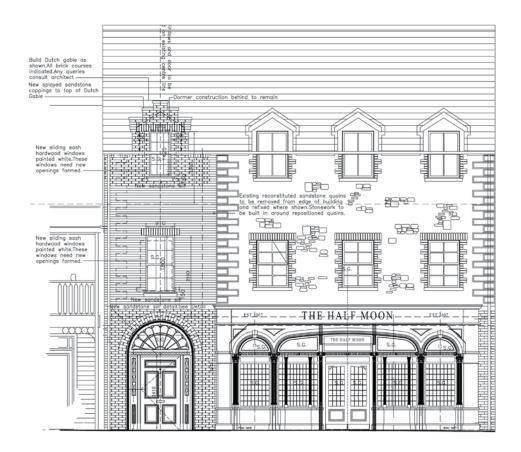


Working closely with architects - McCarter Hamill, IG engineer - Chris Patterson, designed a unique stepped triple arch lintel to facilitate the intricate details of the façade.



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 IG 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.

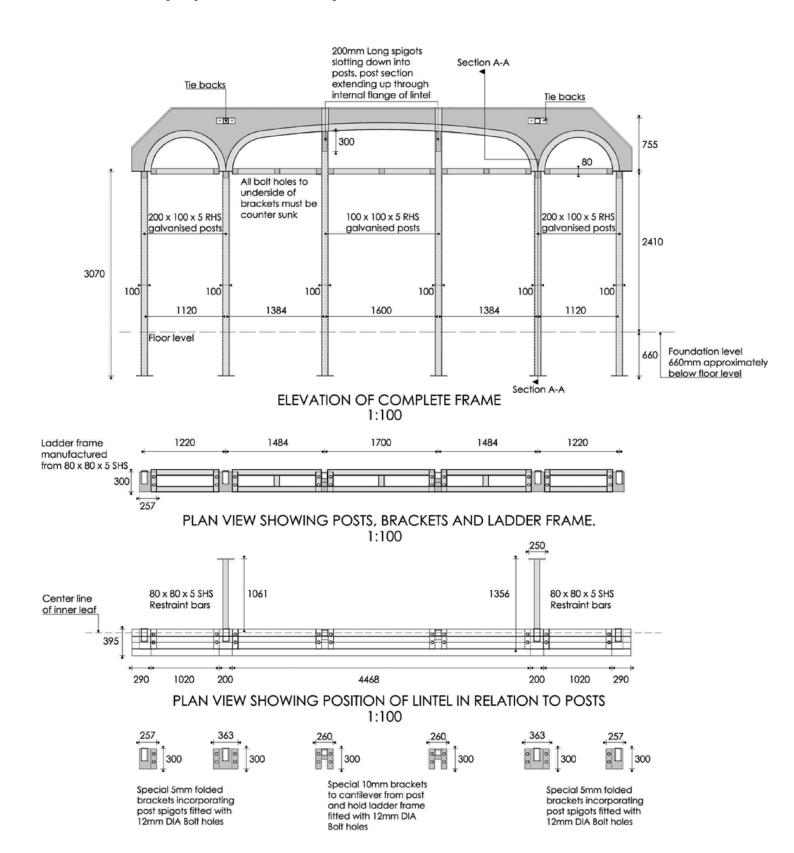


"It was reassuring to have IG's creative technical department on hand when presented with this complex bar front. We acknowledge the invaluable support provided by IG, who worked as a member of the design team to ensure everything went to plan."

Paul Hamill McCarter Hamill



# Stepped Triple Arch

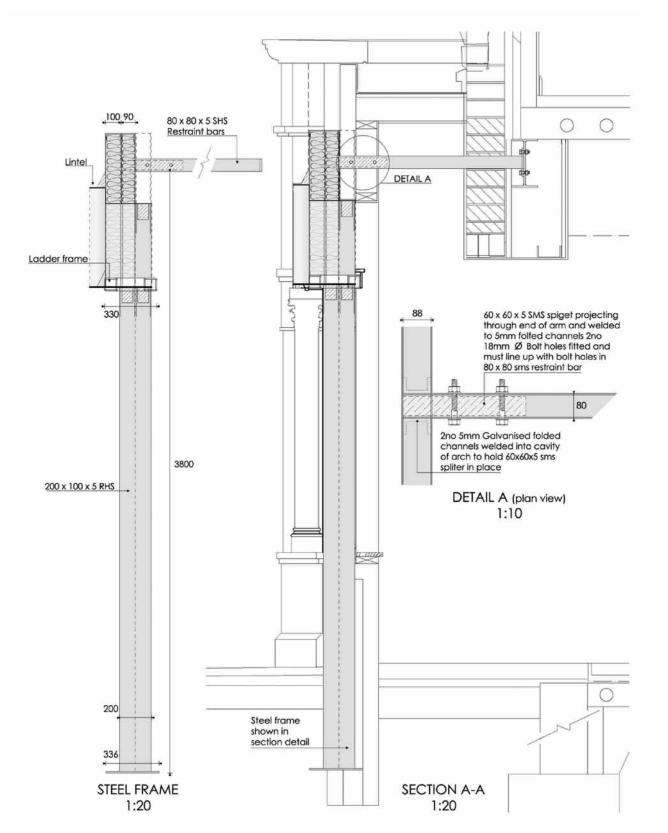






### Stepped Triple Arch Lintel

Client: M McElroy
Architect: McCarter Hamill
Contractor: McElroy
IG 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.



IG Engineer Paul Graham designed all the steel lintels for this property and was available onsite 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.

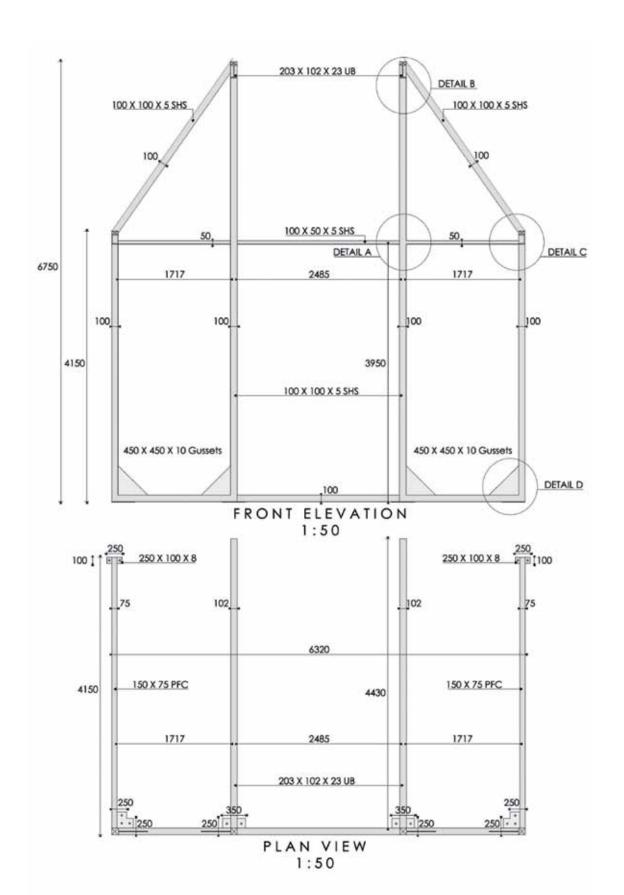


IG provide peace of mind that a unique structure will be both structurally safe and value engineered.

**Nigel Jones** GM Design



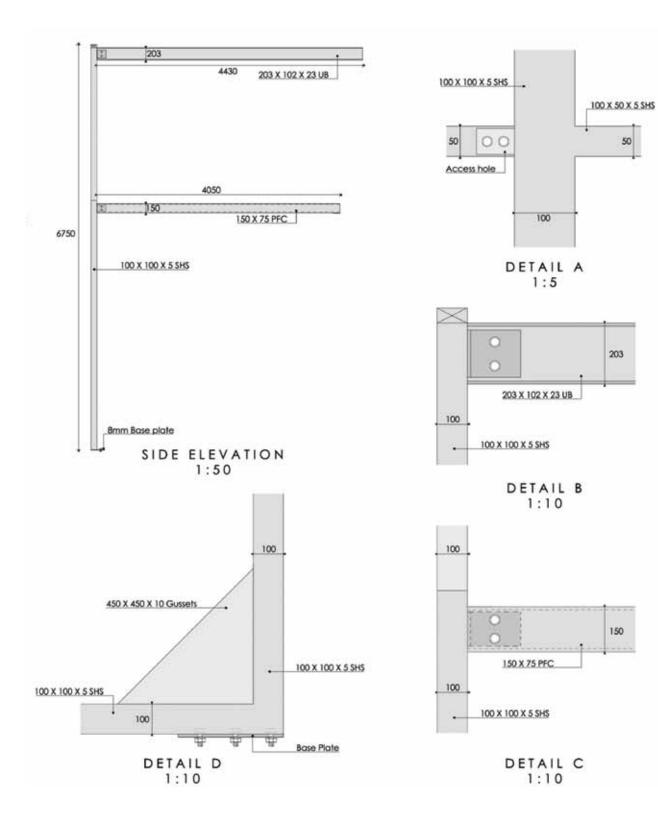
# Glazed Gable Apex Sun Lounge







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



# 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 IG engineer, Kyle Alexander, to create this bespoke structure.



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.

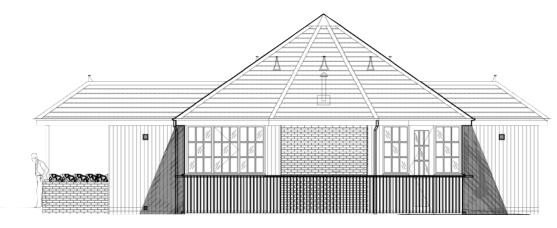
The Octagonal Portal Frame was manufactured using a variety of steel beams, columns and sections bolted together to create a structural support for the building.









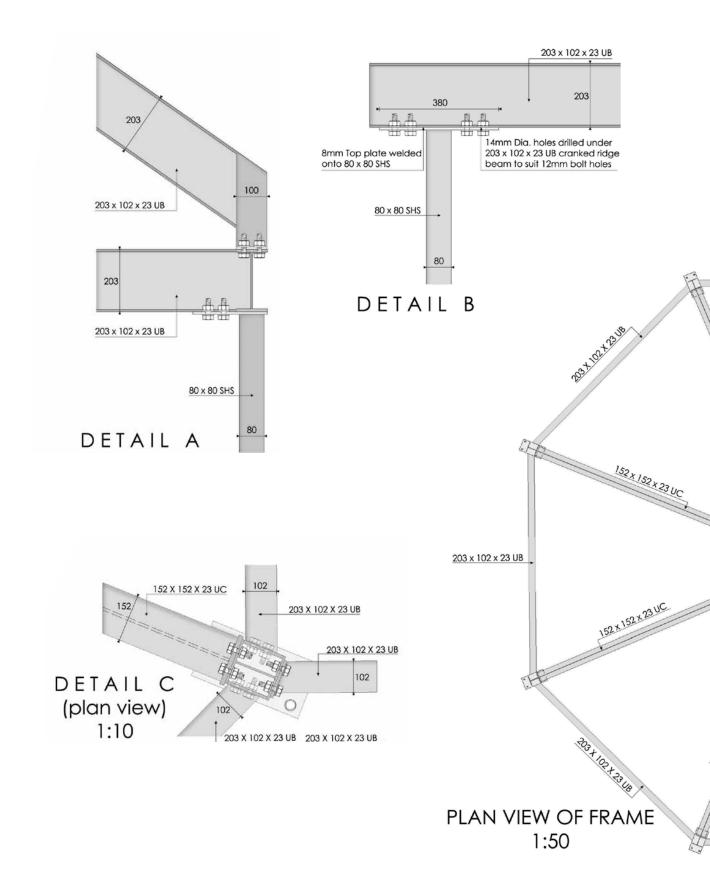


"We are delighted with this unique building and we give great credit to IG's engineer for his expertise, professionalism and guidance on-site."

**Beth Swindlehurst**Galgorm Manor Resort & Spa



# Octagonal Portal Frame



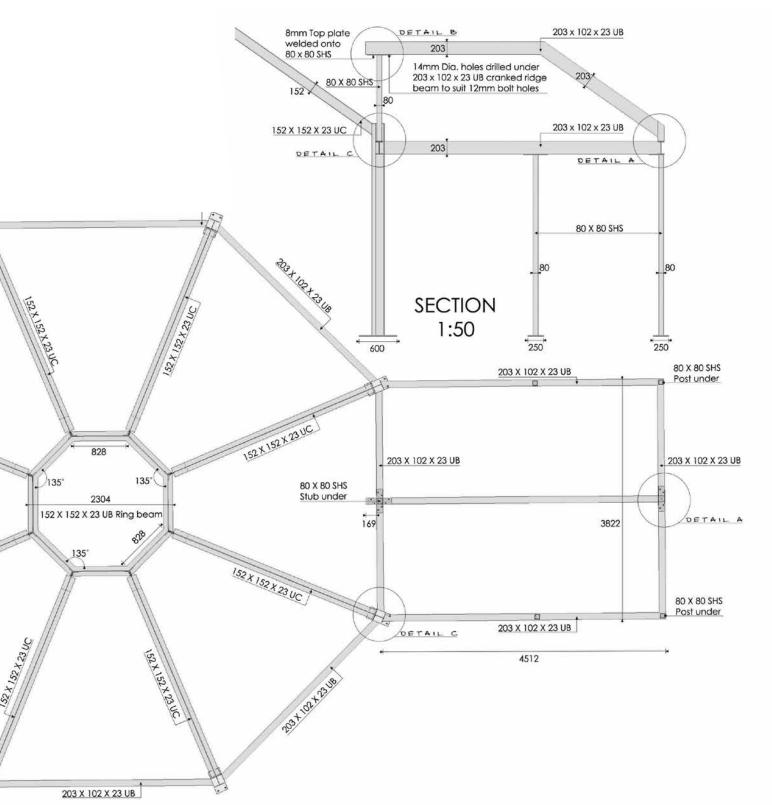




Octagonal Portal Frame	

Client : Galgorm Manor Hotel
Architect : RPP Architects

Contractor : 
IG Engineer : Kyle Alexander



# Glazed Gable Apex

Including cantilevered balcony.

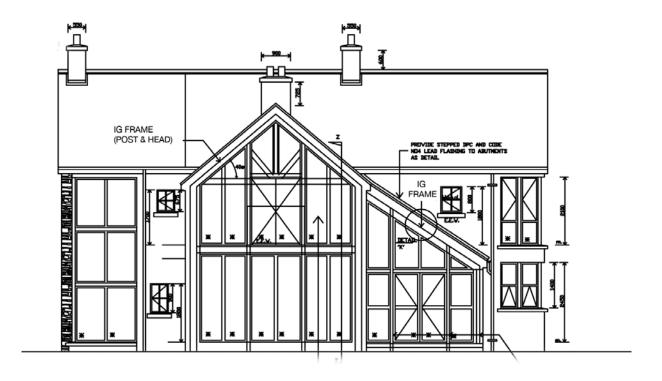


Working closely with architect - Andrew Coulter, IG engineer - Chris Patterson, detailed the unique two storey glazed gable apex with a cantilevered balcony, two story corner lintels and half apex corner lintels.



Recently televised in the BBC's "House of the Year 2010", this family home is a quintessential example of IG's innovative engineering. Working closely with Architect - Andrew Coulter, IG 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. IG 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.

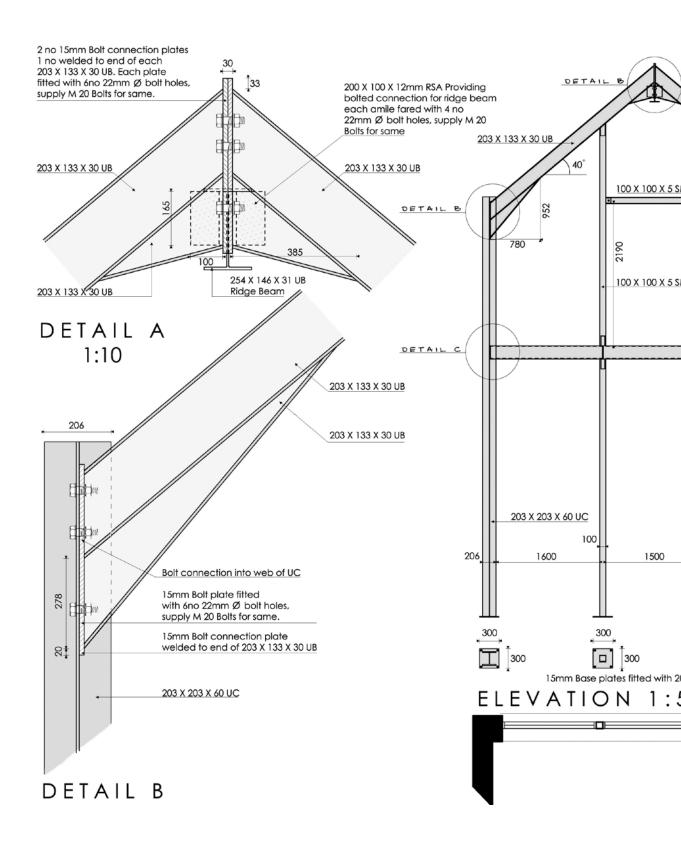


"IG ensured full structural support without compromising the original vision we had for the building. They made sure their steel systems slotted seamlessly into place."

**Denver McMahon** Andrew Coulter Architects



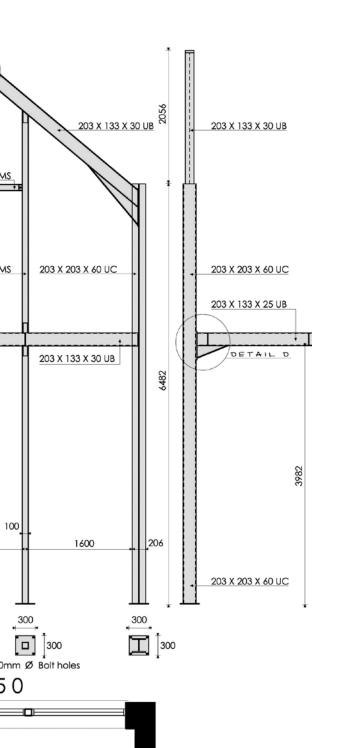
# Glazed Apex Gable

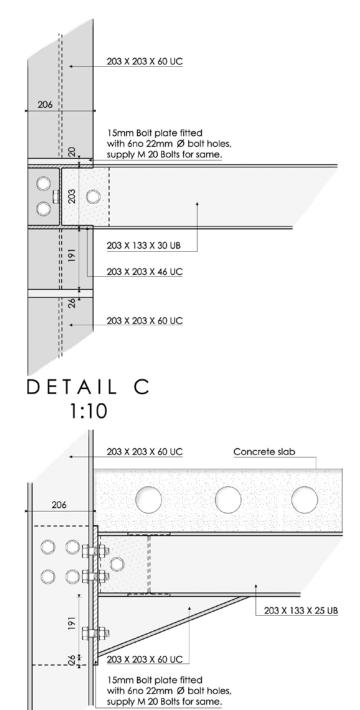






Glazed Gable Apex with Balcony		
Client :	Private	
Architect :	Andrew Coulter Architects	
Contractor :	H&J Martin	
IG Engineer :	Chris Patterson	





DETAIL D

# 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. IG engineer, Chris Patterson, designed the continuous five arch heavy duty system for this restoration project.



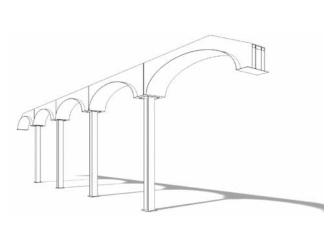
The original arches had been blocked up and supported by concrete lintels. The client wanted to reveal the traditional arches of the building and needed a support structure for the brickwork above. Due to the deterioration of the existing brickwork the contractor required further structural support and contacted the IG Technical Team to discus 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. IG 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 IG's heavy duty arches to carry the load.



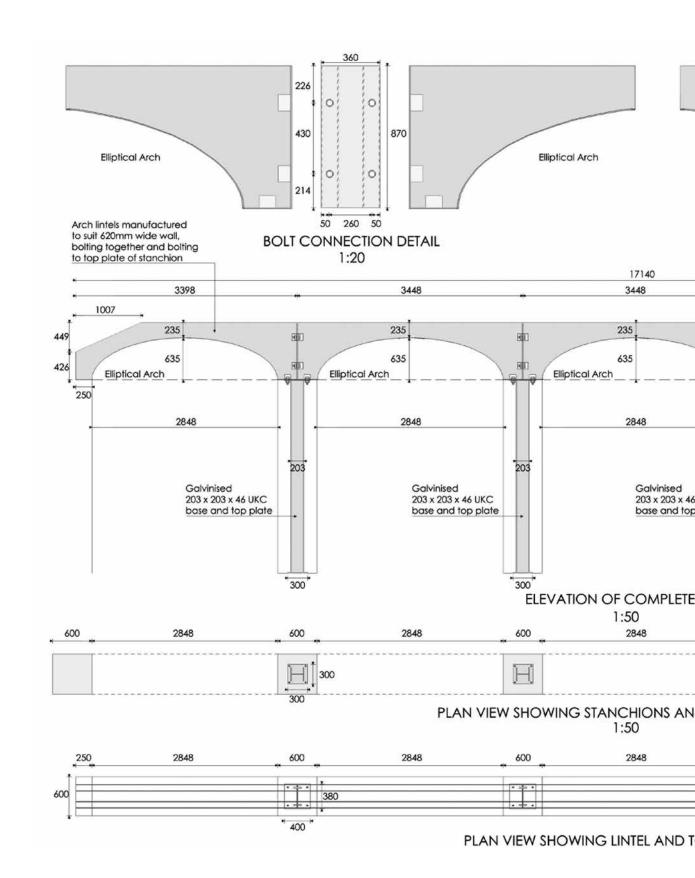
"It was beautiful to see the old barn arches restored. IG made our dream come true."

**Derek Cahoon** Agriculture Food & Bio-Sciences Institute





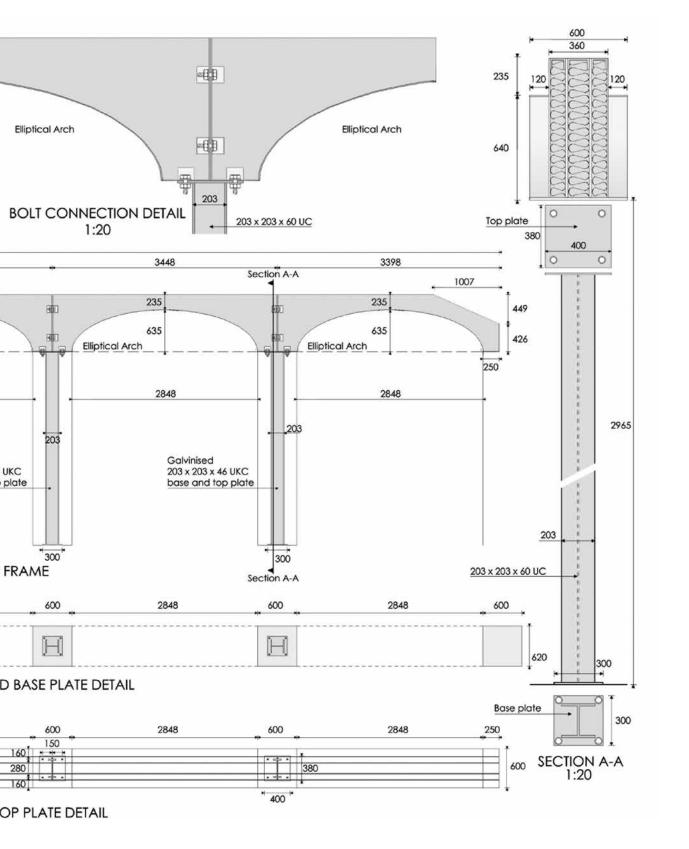
## Continuous Heavy Duty Arches





### Continuous Heavy Duty Arches

Client :	Agri-Foods & Bio-Sciences
Architect:	Todd Architects
Contractor :	H&J Martin
IG Engineer :	Chris Patterson



# Structural Apex Frame

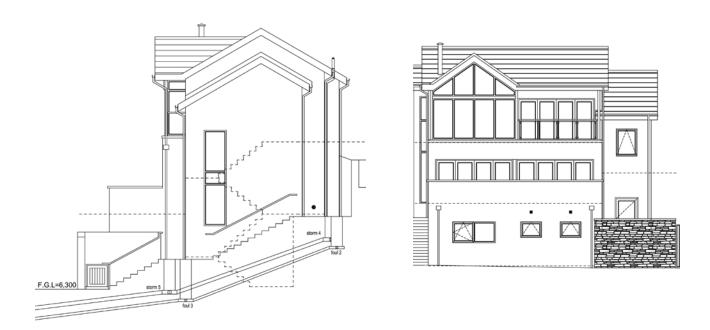


A double height apex window frame.

The dramatic double height apex window, at the front of the building, flood this beach front home with light and sunshine. The main open plan living area opens on to a balcony terrace with sliding retractable doors. The design maximizes the sea views by drawing the outside in.

G.M. Design Architects called on IG's creative lintel department to detail this unique lintel. IG Engineer - Kyle Alexander, developed the structural steel framework to support the glazed gable apex and the roof structure above the balcony terrace.

Spanning 8 metres long and 4.5 metres high this complex steel frame was constructed from a range of steel sections.

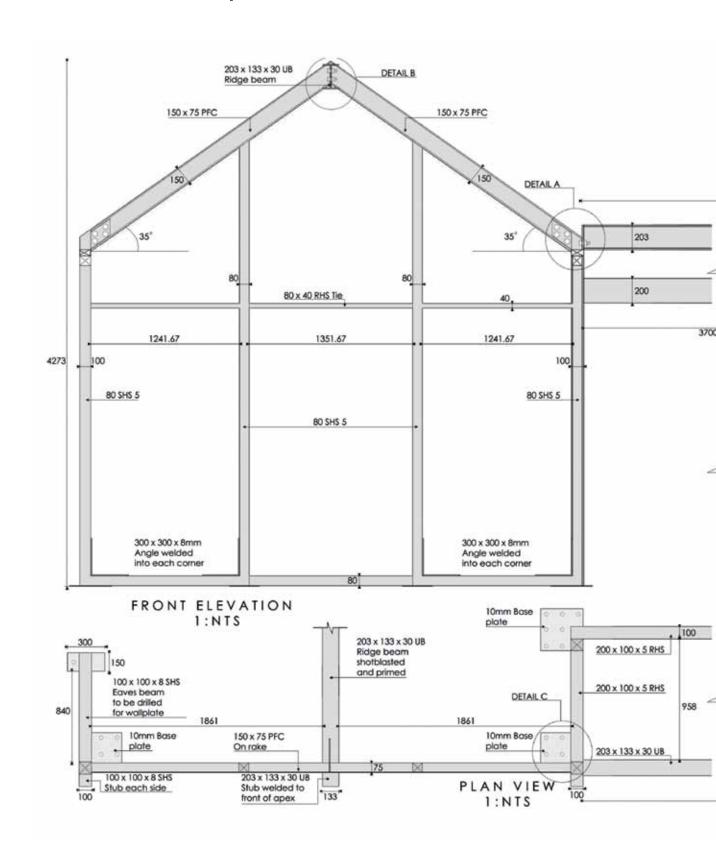


"A really interesting project for our team to work on. When presented with the clients brief we knew immediately that IG Engineers should be involved in the design stage. We were very impressed with the level of service provided by IG."

**Derek Logue** GM Design

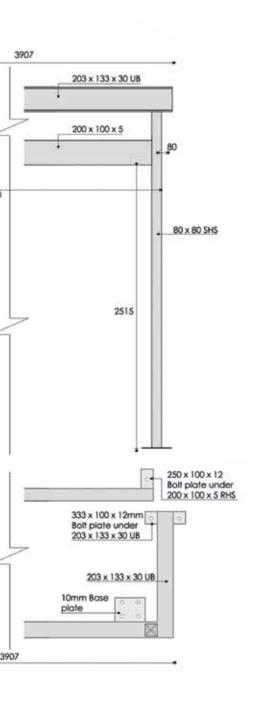


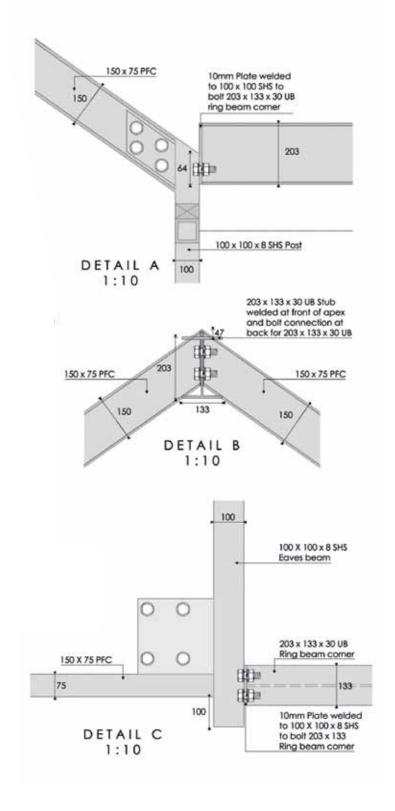
# Structural Apex Frame





Structural Apex Frame	
Client :	Private
Architect :	GM Design
Contractor:	Glebeview Builders
IG Engineer :	Kyle Alexander





# Special Roof Design

Award winning country home with elegant proportions.



Located on an impressive 28 acre site, this elegant country home won the Sunday Telegraph's Home and Living, Best Traditional House in the UK, in 2007. At 950 square metres this new build is vast but despite its scale it appears snug and appropriate due to delicate detailing.



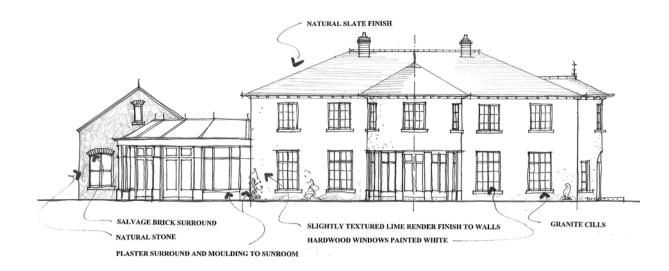
IG Engineer created an exceptional structural steel roof as well as a two storey bowed lintel frame and two arched lintels for the stone quarters. The steel roof structure spans 19 metres in length, 12 metres wide and has a total height of 2.8 metres.

Before the structure went to site the full steel frame was erected in IG's manufacturing facilities to ensure it could be slotted perfectly into place. The frame was then dismantled and delivered to site by IG. This magnificent steel roof structure

helps make this project a bit more special.

Architect Des Ewing has successfully softened the impact of the sheer size and newness of this dwelling by creating a playful mix of old and new architecture.

The main house is linked to a smaller stone wing by a curved gallery, lending the building a much more organic feel typical of older houses that have spread and extended over time.

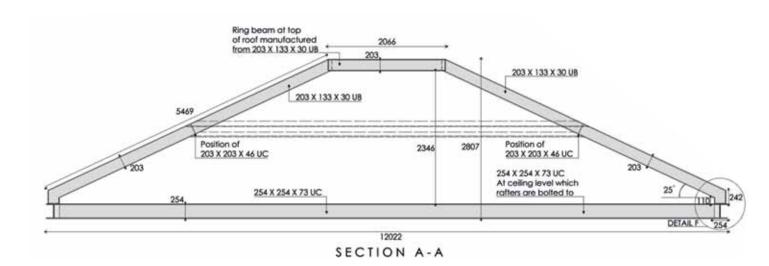


# "We like to use market leaders, quality is always assured when we use IG Lintels "

Des Ewing Architect



# Special Roof Design

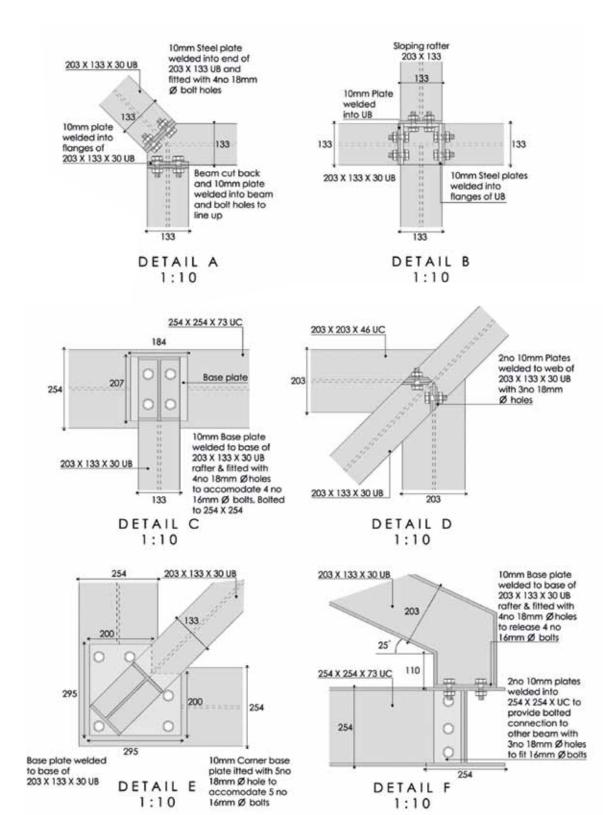


19212 DETAIL C 254 X 254 X 73 UC 203 X 123 X 30 UB 203 X 123 X 30 UB 2293 DETAIL D 203 X 203 X 46 UC 203 X 123 X 30 UB 2229 203 X 123 X 30 UB DETAIL A DETAIL B 203 X 123 X 30 UB 12022 2293 2229 1800 2229 2293 133 133 203 2229 203 203 X 203 X 46 UC 133 133 203 X 123 X 30 UB 203 X 123 X 30 UB 2293 254 X 254 X 73 UC **DETAIL E** 6997 4952 PLAN VIEW





Special Roof Design		
Client :	Private	
Architect :	Des Ewing	
Contractor :	Seaview Developments	
IG Engineer :	Chris Patterson	



# 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.





For this project, IG 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 IG lintels can adapt to the client's brief.

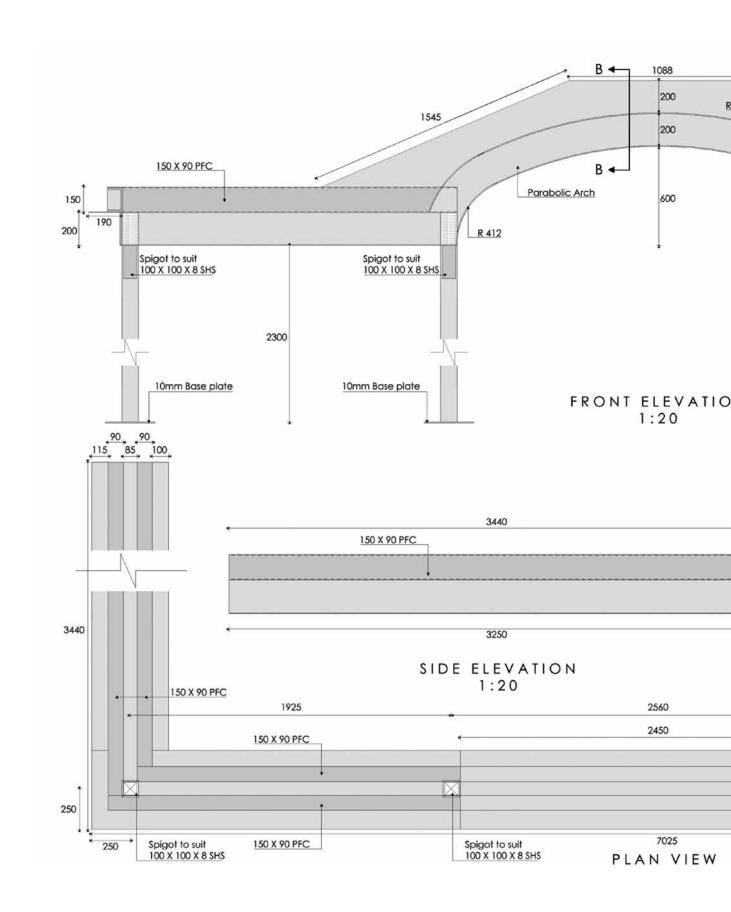


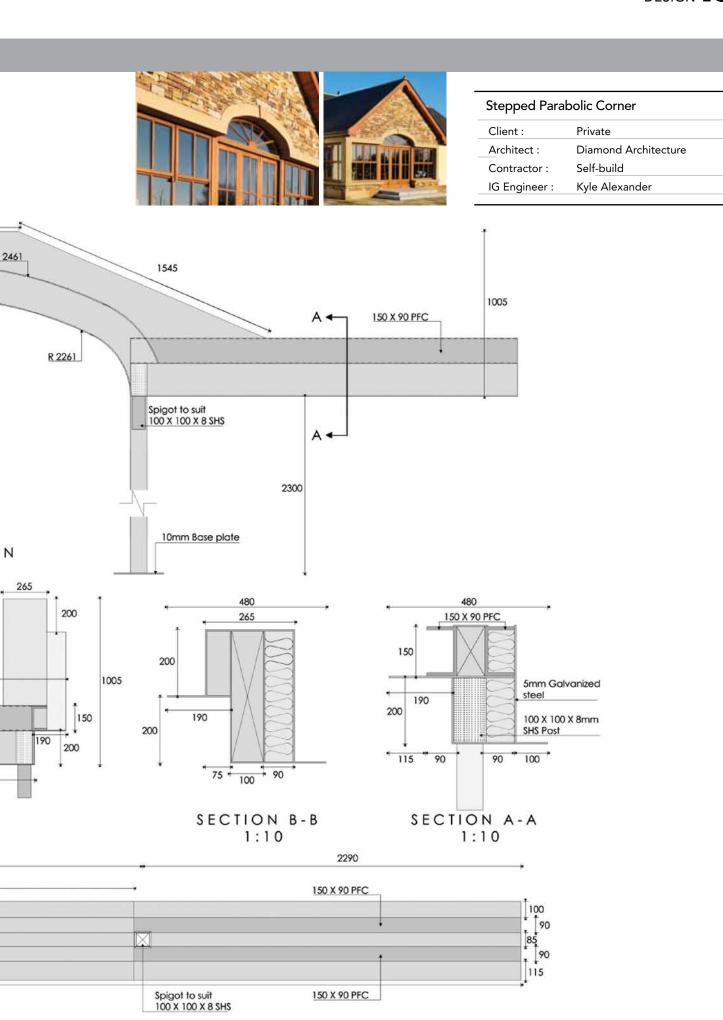
"IG provided an exceptional service to create this custom built lintel. Suspending stone from the outer shelf ensured we had full structural support with no steel visible. IG make the Architects vision a reality."

Joe Diamond
Diamond Architecture



# Stepped Parabolic Corner





## 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 IG 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 IG had to include welded gusset plates to carry the stonework on the outer leaf and to resist against sliding.



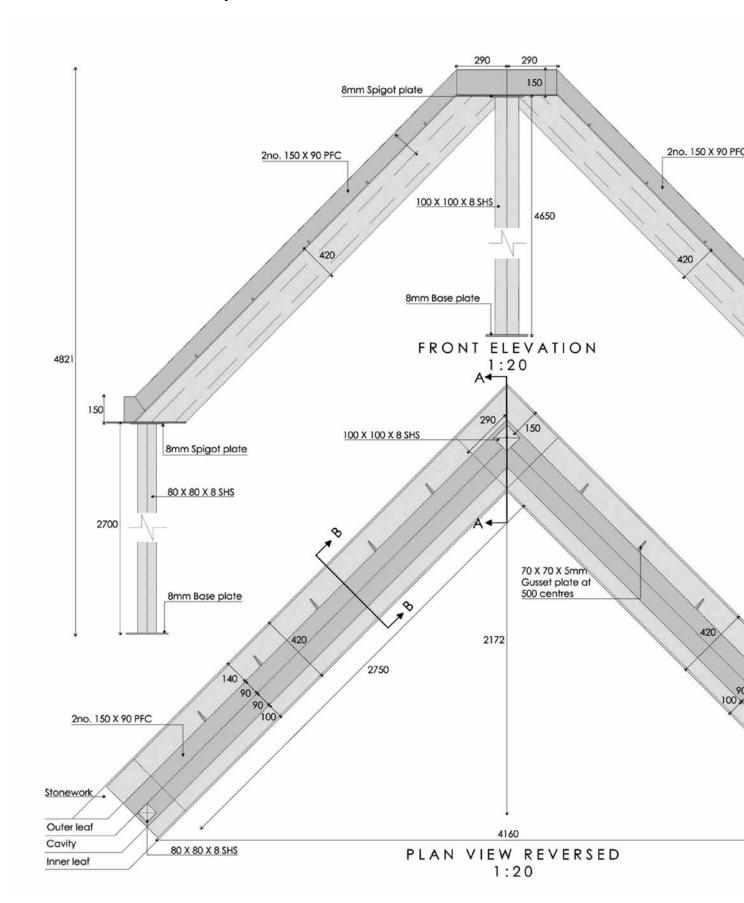
"IG designed the structural steelwork required to make this concept a reality."

Kyle Alexander IG Lintels



#### IG ENGINEER TECHNICAL DRAWINGS

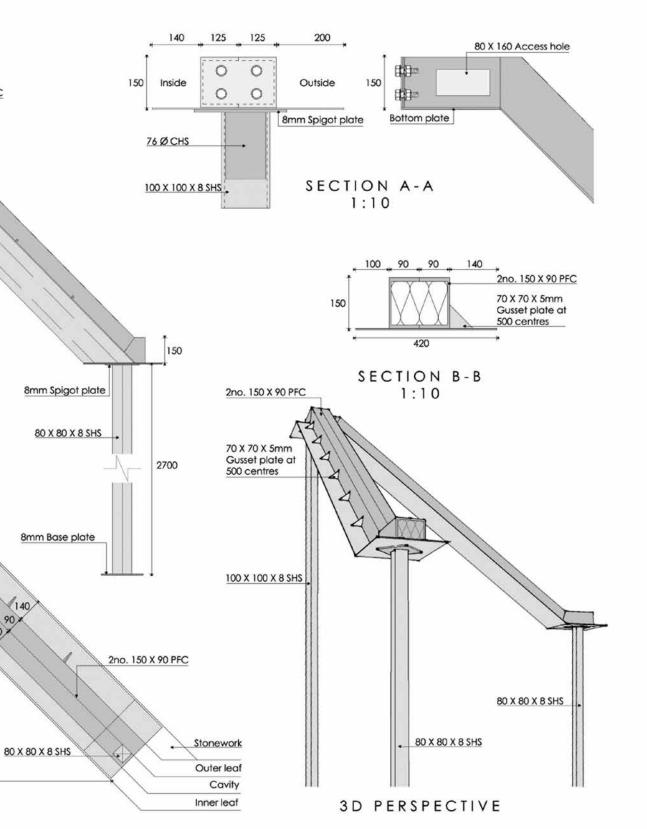
### Angled Apex Frames







Angled Apex Frames		
Client :	Private	
Architect :	Hamilton Architects	
Contractor :	_	
IG Engineer :	Kyle Alexander	



## Triple Bow Sun Lounge

An elegant feature for a prestigious project.

G.M. Design architects liaised with IG engineer, Odhran McGoldrick, to develop a special triple bowed sun lounge with a glazed lantern effect for this new build.





#### **PROJECT DETAILS**

Due to the precise onsite measurements taken by IG's Engineer, the full steel structure could be slotted perfectly into place. Two parallel flange channels were rolled 'back to back' to create the 3.3 metre radius bows.

A steel plate which was curved on plan, was welded to the channels to facilitate

blockwork on the outer flange. Two additional smaller bows with a radius of 1.25 metres create a lantern effect in the valuted ceiling of the sun lounge.

Spanning 6.5 metres in length with a total height of 4.7 metres this steel frame provides an elegant feature to this prestigious project.



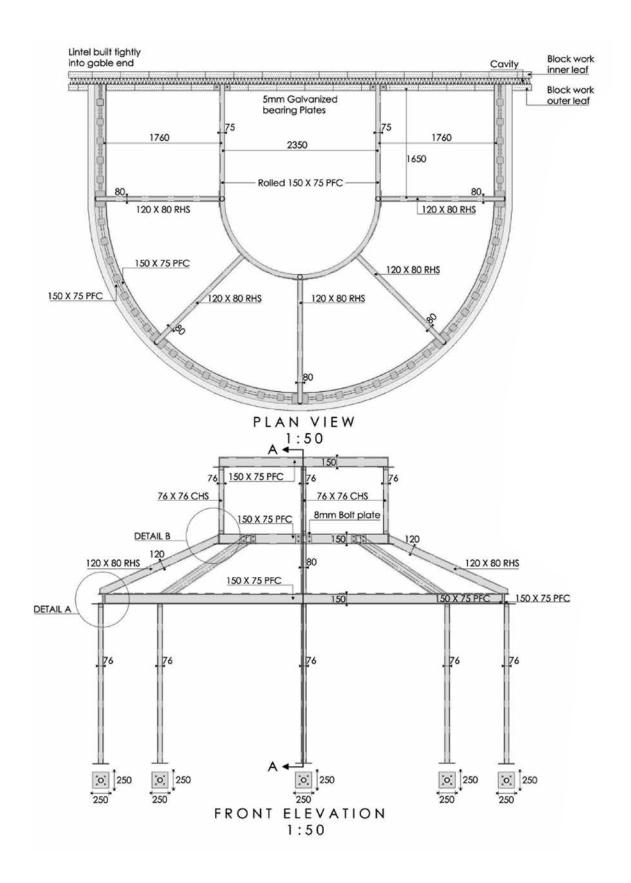
"Precise on-site measurements by IG Engineers, allowed the full steel structure to slot perfectly into place."

J & D Mooney Building Contractors



#### IG ENGINEER TECHNICAL DRAWINGS

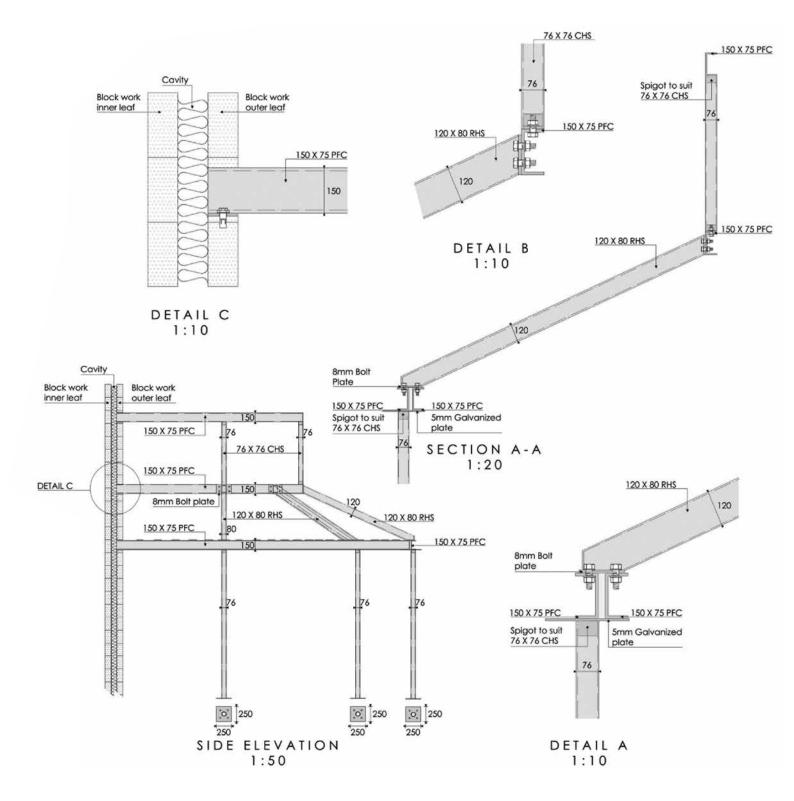
### Triple Bow Sun Lounge







Triple Bow Sun Lounge		
Client :	Private	
Architect :	GM Design	
Contractor :	J & D Mooney	
IG Engineer :	Odhran McGoldrick	



## Cantilevered Walkway

Retrofit balcony and walkway.



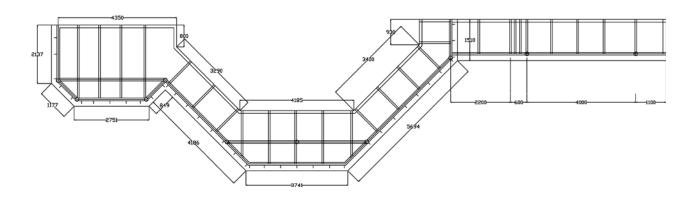
IG engineer, Odhran McGoldrick, designed a continuous cantilevered walkway after numerous discussions with the client, the original specification of a 5 metre balcony was transformed into a 22.5 metre walkway.



#### **PROJECT DETAILS**

The steel structure was manufactured from a mixture of universal beams, square and circular hollow sections bolted to a concrete ring-beam in the existing building. Specially designed fin plate bolted connections secured the walkway to IG galvanized steel posts. The outer flange incorporates an extended leaf to facilitate 300mm stonework.

The most notable feature of this project is that, the IG engineers measured, designed and detailed every aspect of the walkway. This retrofit walkway proved to be a perfect example of how IG's team can be relied upon to design, manufacture and deliver onsite to the clients exact requirements.



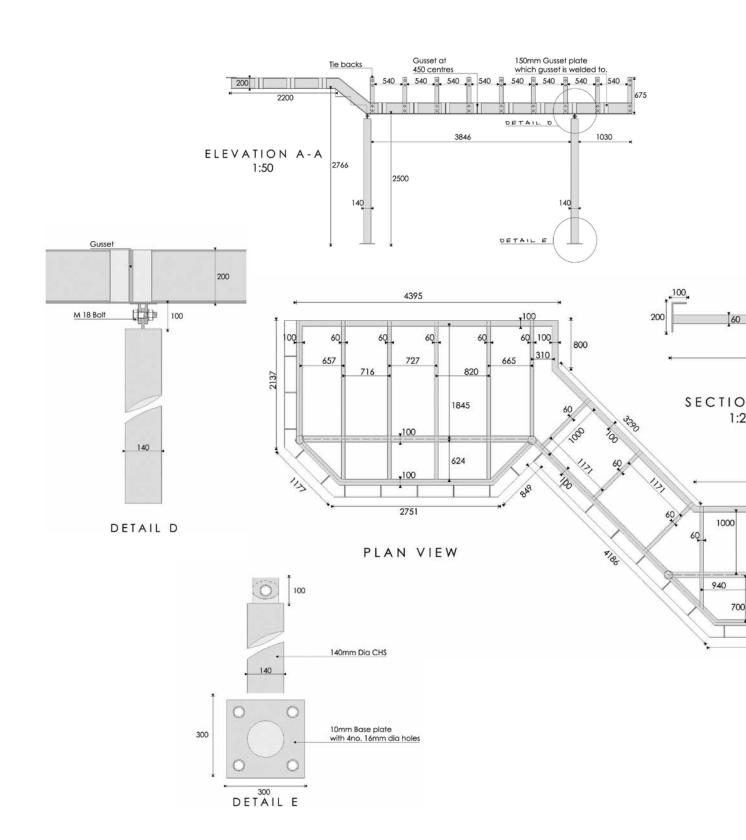
"This project proved how IG's team can be relied upon from individual design consultation to manufacture."

David Ford IG Technical Team Leader



#### IG ENGINEER TECHNICAL DRAWINGS

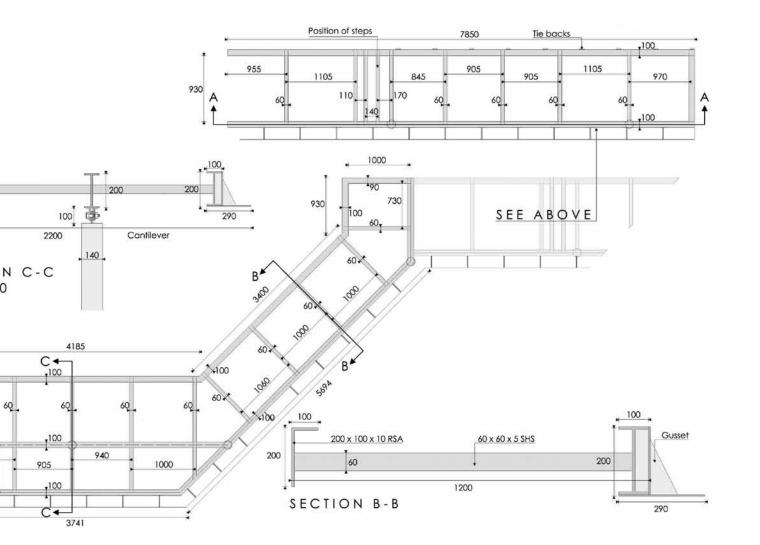
### Cantilevered Walkway







Cantilevered Walkway	
Client :	Private
Architect :	-
Contractor:	John Ladden
IG Engineer :	Kyle Alexander



## Venetian arch square bay

IG 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





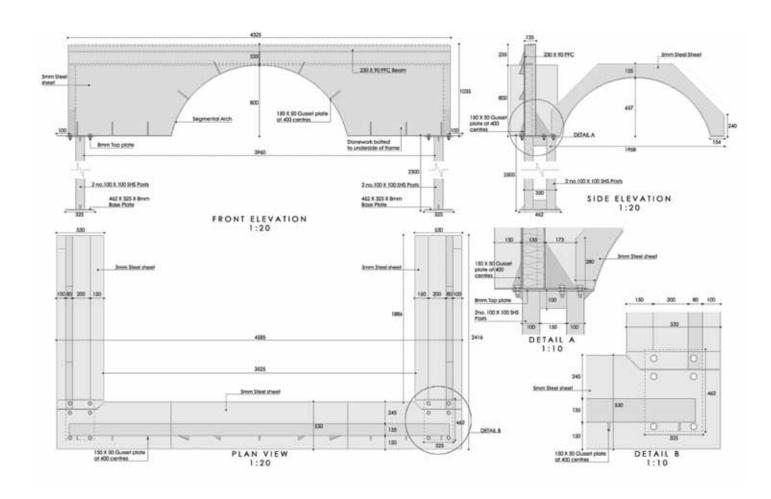
#### **PROJECT DETAILS**

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

IG 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. IG proved that when something bespoke is required they can manufacture to the exact requirements.



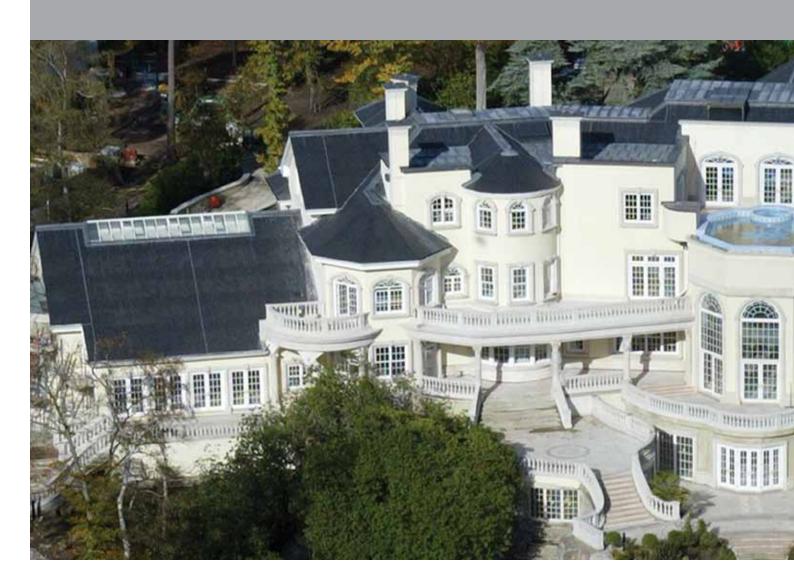


Venetian Arch Square Bay		
Client :	Private	
Architect :	Montague Architects	
Contractor :	Hardwick Coleman & Whotton	
IG Engineer :	Andy Sharlot	

### Special arch lintels & colonnade supports

Complex lintel solutions for a new build mansion

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



IG 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.









# Balcony support details on large commercial project

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

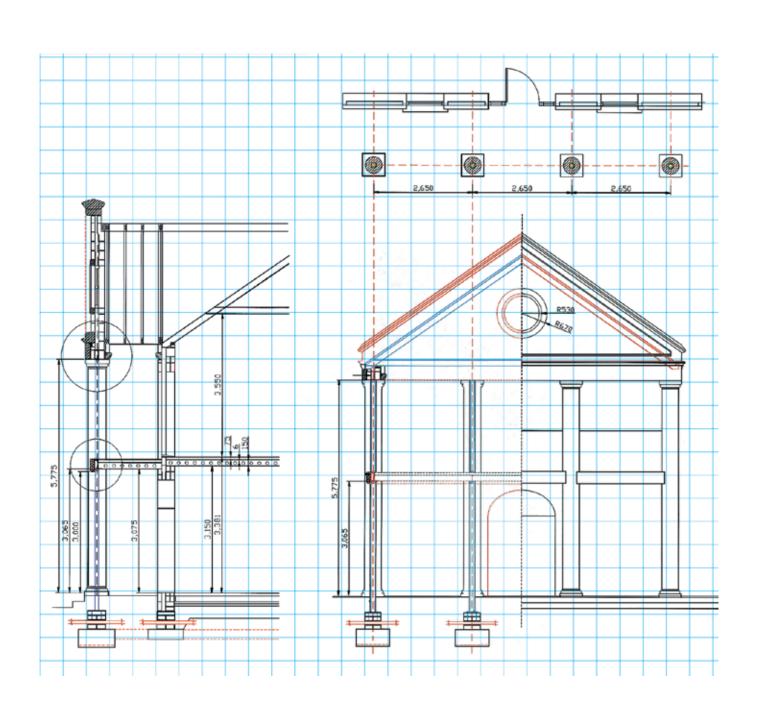






"IG's ability to design and deliver standard and custom made lintels quickly and efficiently has made this job so much easier. A product and service we highly recommend."

Mr S Jones McAleer & Rushe



## Flexibility is key to success

The leisure, retail and office sectors have proved a constant challenge for creative lintel design.



"The prestigious and internationally acclaimed Royal Portrush Golf Club required something special in its design. The help and advice given by IG's Technical Department encouraged me to include some quite complex details. I am delighted with what has been achieved."

Mr Kieran Mullan Senior Partner, GM Design.



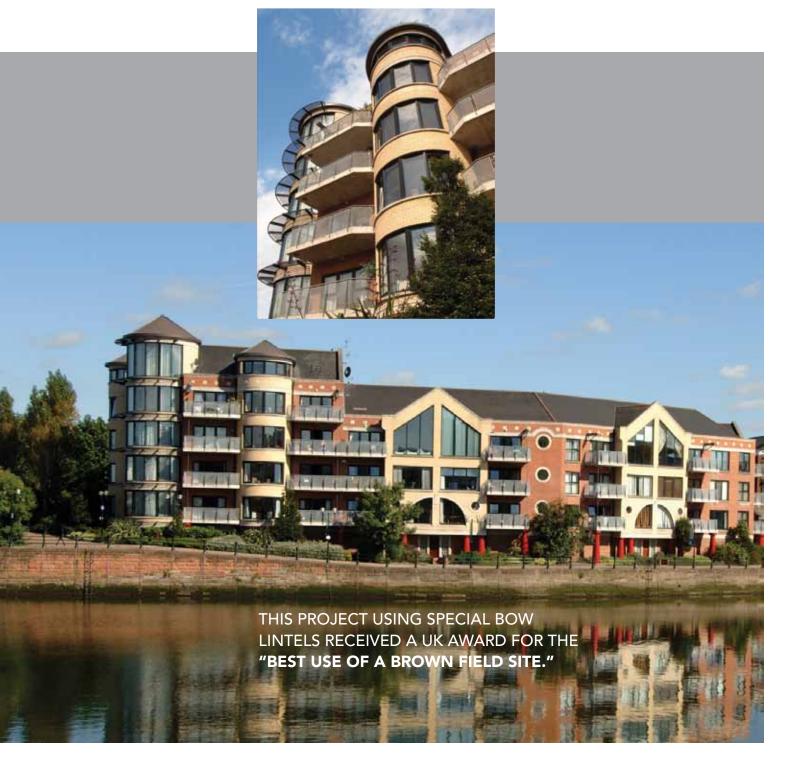
#### **AWARD WINNING PROJECT**

"Too often, using 'special' designs in a project is an invitation for delays. Using lintels from IG however gave my site foreman confidence. The steel lintels required for the unusual window head features were supplied correctly and on time."

**Mr Des Savage**Director, Savage Bros.

"The Greggs Quay development called for apartments designed to a very high specification. Creative lintel designs helped bring the original design concept to a reality"

Mr Colin Stewart McAdam Stewart Architects



## Taking quality to higher levels

Homes that demand special specifications.

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

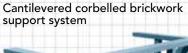


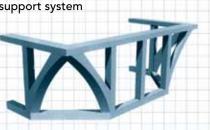
#### **KEEPING WITH TRADITION**

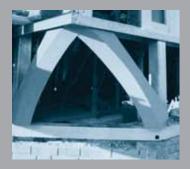
"When converting this old dwelling into flats, we discovered the timber brickwork support detail on the second floor had deteriorated badly. After several restoration proposals were considered non-feasible, we called in IG. Their engineer made one site visit and came up with this solution. Five days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

**Arthur Rogers** A & J Rogers

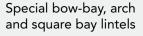














Extra heavy duty flat parabolic arch lintel



Heavy duty corbelled lintels

## Special gothic arch lintels

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





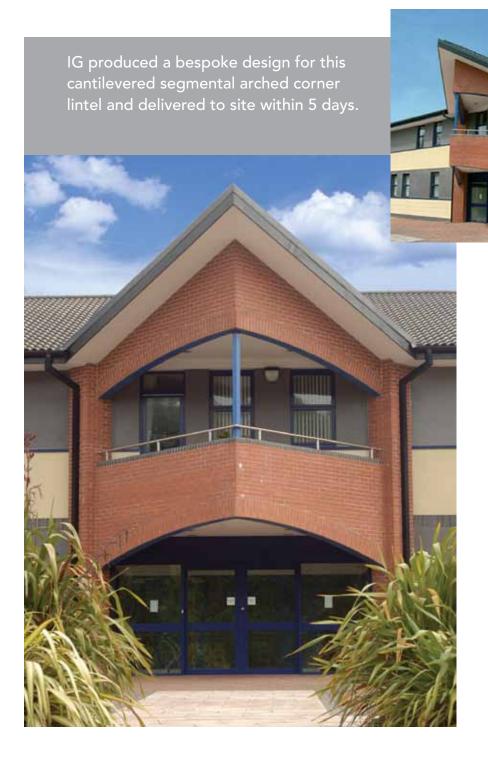
#### TAILORED SERVICE

IG 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.





# Cantilevered segmental arched corner lintel



"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 IG, 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



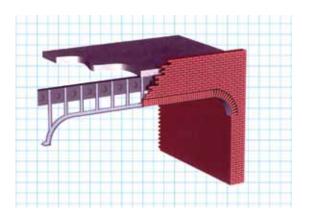
Three acre housing development sites near busy town centres are hard to find and all too often have limited access.



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

"IG'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



### BETTER BY DESIGN



#### Hi-Therm

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

#### **Special Lintels**

IG 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.

#### Masonry Support & Windposts

IG continues to set the standard for masonry support and windpost systems for a range of building frame configurations. The innovative Owik Fix angle provides a versatile solution when masonry support is required.

#### Standard Lintels

IG produce a wide range of standard galvanised steel and stainless steel lintels. All IG standard lintels satisfy the Thermal Performance requirements of all UK building regulations.

#### **Brickwork Feature Lintels**

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

#### **Cavity Trays**

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

#### www.iglintels.com















