



# Custom Made Brick Feature Lintels





Keystone leads the way with innovative Brick Feature products supported by an industry leading design service and fully comprehensive technical support.









The Keyslip Brick Details range offers unique brick feature products which enable complex brickwork detail to be carried out in a controlled factory environment.







#### 03

# The Keyslip range consists of Brick Feature Lintels and Lightweight Brick Headers and Sills.



#### **Brick Feature Lintels**

Keyslip Brick Feature Lintels offer a unique addition to Keystone's brickwork support systems. This one piece unit arrives onsite with the bricks, which have been collected from site, bonded to the load bearing lintel. This eliminates the need for a specialist brickwork contractor spending hours onsite, cutting bricks to suit complex brick details.

#### Lightweight Brick Headers

Keyslip Lightweight Brick Headers are installed on the outer leaf of a standard lintel. These lightweight products are manufactured offsite negating the need for brick cutting or mechanical handling onsite. Bricks are collected from site to ensure that the product blends seamlessly with traditionally laid brickwork.





# Lightweight Brick Sills

A perfect addition to Keyslip Lightweight Brick
Headers are Lightweight Brick Sills. Also manufactured
offsite, these sills are positioned underneath the window
sill, supported by the wall panel below. Lightweight
Brick Sills are delivered to site with bricks bonded ready
for final pointing and are tied back to inner leaf
blockwork for added stability.

With the industry's leading technical support and an extensive product range, Keystone is equipped with more than 25 years experience in delivering effective prefabricated solutions.

The Keyslip Range addresses the issue of skill shortages onsite, reducing the requirement for specialist trades and facilitating faster build programmes. These products offer builders a unique way to enhance the quality of their brickwork detailing in a highly labour efficient way, supported by Keystone's renowned customer service and technical support.

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Bespoke Brick Arch Lintel

Keyslip Bullseye Brick Feature Lintel

3 Bullseye Arch in production













# Keystone provides a hassle free service from enquiry stage through to delivery onsite.

You can relax in the knowledge that your order is in the hands of experts.

- 4 Final pointing of Gothic Brick Feature Arches
- 5 Keystone's dedicated customer service team
- Keystone leads the industry with a fast, efficient delivery service

4 6

## **Technical Support**

Keystone has combined experience with innovation to provide advanced offsite solutions to intricate brick detailing. These unique units enable complex brickwork detail to be carried out in a factory controlled environment. Our in house experts offer a bespoke design service for an extensive range of brick slip installations including arches, panels, soffits and other architectural features. By contacting our engineers at an early stage of your design process, you will potentially gain significantly more design flexibility for the overall project.

Our technical engineers offer onsite measurement and technical assistance. Please send your drawings to: info@keystonelintelsuk.com

Please refer to our Design Data Sheet on page 15 for detailed measuring advice.

#### Delivery

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

Keystone continues to deliver special and bespoke brick slip products with the shortest lead times in the industry. The Keystone manufacturing and delivery service for Brick Feature Lintels is agreed at the point of ordering, based on the availability of bricks, which may differ according to stock. Keystone products are available through a national network of merchant suppliers.

# Brick Feature Lintels

Keyslip Brick Feature Lintels are one piece prefabricated units, manufactured bespoke to order, achieving even the most challenging architectural designs.

#### Custom Made Brick Details

Keystone provides a technically advanced solution for an extensive range of architectural features including arches, panels, soffits and architectural features.

Produced offsite as a one piece prefabricated unit, the patented Keystone system ensures maximum performance thanks to the unique adhesion process.

Keystone receives a consignment of free issue brick being used onsite. This brick is then tailored to suit the client's design and fixed to the lintel. The finished Brick Feature Lintel joins seamlessly with the already constructed brickwork.

Every Brick Feature Lintel is manufactured bespoke to order, ensuring that each individual unit is customised according to the unique size, shape and aesthetic requirements of the project.

With optional return soffit, centre stone feature and insulation, the builder is able to specify each brick feature requirement through their local builders' merchant and Keystone's free Brick Feature Lintel design service.



# Brid - Cu - Pre - Lo - Lig - Op - Op

#### **Brick Feature Lintel Benefits**

- Customised to your requirements
- Precision cut bricks
- Load bearing lintel
- Lightweight for fast build programmes
- Optional brick clad soffit
- Optional centre stone feature
- Optional insulation

Keystone develops another industry first, a unique Brick Feature Lintel system which enables complex brickwork detail to be carried out in a controlled factory environment.

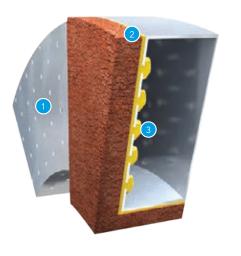
#### Patented System

The patented perforated steel in a Keyslip Brick Feature Lintel allows the adhesive to squeeze through the perforations and form a 'mushroom' on the inside, providing a mechanical lock between the steel lintel and the bricks.

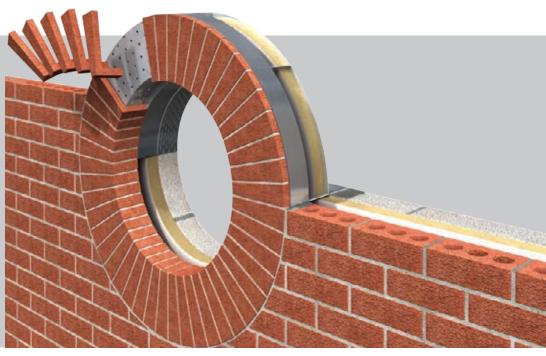
Perforated design allows the adhesive to pass through the steelwork

2 Brick Slips are bedded in a high performance BBA approved adhesive

The adhesive 'mushrooms' to form a mechanical lock on the inner side of the steel



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# Brick Feature Lintel Specification

# Flat Gauge Arch

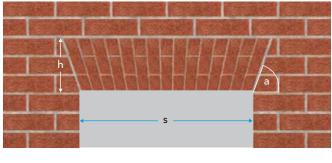
# Cavity Wall Range



#### How to specify

SPECIFICATION	
BFLFG/K-90	
BFL	Standard Loading
HDBFL	Heavy Duty Loading
FG	Flat Gauge Arch
90	90-105mm Cavity

#### **Feature**



h = BRICK FEATURE HEIGHT s = CLEAR SPAN OPENING a = SKEW

SPECIFICATION

BFLFG/K-90

CLEAR SPAN (S)
1200mm

SKEW (a)
70° SKEW

BRICK FEATURE HEIGHT (h)

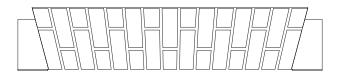
215mm HIGH

## BFLFG/K-90

#### Specification

For standard loading conditions specify BFLFG/K-90 to suit 100mm cavity

Also available for wider cavities and wide inner leaf

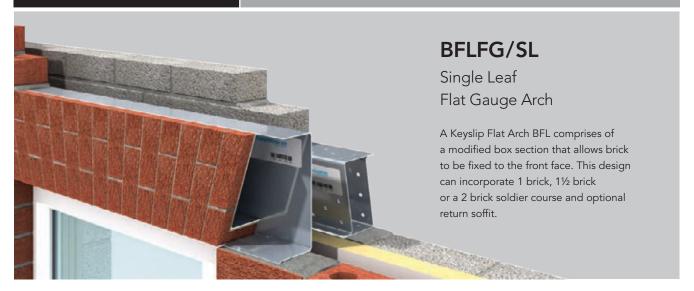




Elevation View

Section View

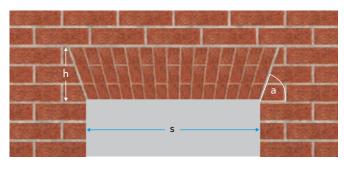
# Single Leaf Range



#### How to specify

# BFLFG/SL BFL Standard Loading HDBFL Heavy Duty Loading FG Flat Gauge Arch SL Single Leaf

#### Feature



h = BRICK FEATURE HEIGHT s = CLEAR SPAN OPENING a = SKEW

SPECIFICATION CLEAR SPAN (S)

BFLFG/SL 1200mm

SKEW (a)
70° SKEW

BRICK FEATURE HEIGHT (h)

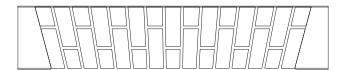
215mm HIGH

## BFLFG/SL

#### Specification

For standard loading conditions specify BFLFG/SL

For other loading conditions contact our Technical Department



Elevation View

Section View

keystonelintels.com

# Brick Feature Lintel Specification

# Segmental Arch

## Cavity Wall Range



#### BFLSA/K-90

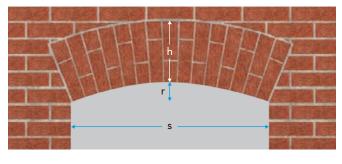
Cavity Wall Outer Leaf Segmental Arch

A Keyslip Segmental Arch Brick Feature Lintel comprises of a standard profile lintel with a steel box frame on the outer flange. The lintel is insulated in the cavity and spans from inner to outer leaf. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course (optional return soffit).

#### How to specify

# BFLSA/K-90 BFL Standard Loading HDBFL Heavy Duty Loading SA Segmental Arch 90 90-105mm Cavity

#### **Feature**



h = BRICK FEATURE HEIGHT r = RISE s = CLEAR SPAN OPENING

SPECIFICATION

BFLSA/K-90

CLEAR SPAN (S)
1200mm

RISE (r)

BRICK FEATURE HEIGHT (h)

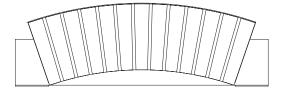
290mm HIGH

## BFLSA/K-90

#### Specification

For standard loading conditions specify BFLSA/K-90 to suit 100mm

Also available for wider cavities and wide inner leaf



Elevation View



Section View



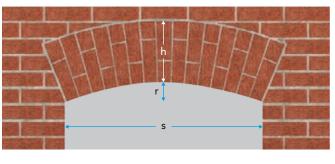
#### How to specify

#### SPECIFICATION

#### SLBFL/SA/K

BFL	Standard Loading
HDBFL	Heavy Duty Loading
SA	Segmental Arch
SL	Single Leaf

#### Feature



h = BRICK FEATURE HEIGHT r = RISE s = CLEAR SPAN OPENING

SPECIFICATION
BFLSA/SL

CLEAR SPAN (S)
1200mm

RISE (r) **75mm** 

BRICK FEATURE HEIGHT (h)

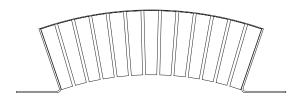
290mm HIGH

## BFLSA/SL

# Specification

For standard loading conditions specify BFLSA/SL

For other loading conditions contact our Technical Department





Elevation View Section View

#### Gothic Arch

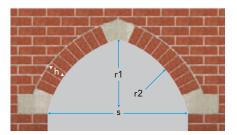
A Keyslip Gothic Arch BFL is a modified Gothic Arch Lintel with a box section on the outer leaf. The lintel is insulated in the cavity and spans from inner to outer leaf. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing Keystone's Gothic Arch BFL. Upon request the box frame, which the bricks are fixed to, will stop short of the end bearing of the lintel. This allows quoin stones to be placed into position onsite.



View showing the underside of Keystone's Gothic Arch BFL. This illustrates how the brickwork returns under the soffit of the lintel to ensure no steelwork is visible on the outer leaf.



Front elevation notes the essential measurements required to specify the Gothic Arch BFL.

h = BRICK FEATURE HEIGHT

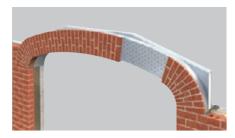
r1 = RISE

 $r^2 = RADIUS$ 

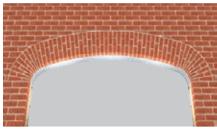
s = CLEAR SPAN OPENING

#### Parabolic Arch

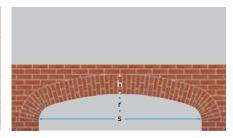
A Keyslip Parabolic Arch BFL is a modified Parabolic Arch Lintel with a box section on the outer leaf. The lintel is insulated in the cavity and spans from inner to outer leaf. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing Keystone's Parabolic Arch BFL with cut brick omitted to illustrate the detail behind the brick.



View showing the underside of Keystone's Parabolic Arch BFL. This illustrates how the brickwork returns under the soffit of the lintel to ensure no steelwork is visible on the outer leaf.



Front elevation notes the essential measurements required to specify the Parabolic Arch BFL.

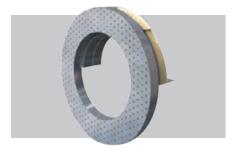
h = BRICK FEATURE HEIGHT

r = RISE

s = CLEAR SPAN OPENING

## Full Arch Bullseye

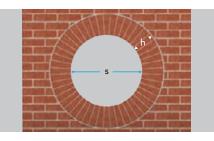
A Keyslip Bullseye BFL is a modified arch lintel with a circular box section on the outer leaf. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing Keystone's Bullseye BFL before Keystone fix the cut bricks to the unit.



View showing Keystone's Full Bullseye BFL with cut brick omitted to illustrate the detail behind the brick.



Front elevation notes the essential measurements required to specify the Bullseye BFL.

- h = BRICK FEATURE HEIGHT
- s = CLEAR SPAN OPENING

# Apex Arch

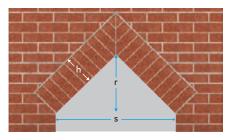
A Keyslip Apex BFL is a Special Apex Lintel with a box section on the outer leaf. The lintel is insulated in the cavity and spans from inner to outer leaf. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing Keystone's Apex BFL.



View showing the underside of Keystone's Apex BFL. This illustrates how the brickwork returns under the soffit of the lintel to ensure no steelwork is visible on the outer leaf.



Front elevation notes the essential measurements required to specify the Apex BFL.

- h = BRICK FEATURE HEIGHT
- r = RISE
- s = CLEAR SPAN OPENING

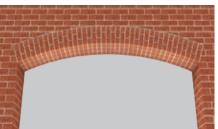
# Brick Feature Lintels Range

#### Full Soffit Segmental Arch

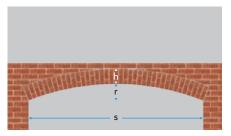
A Keyslip full width cavity wall Segmental Arch BFL is a modified Segmental Arch Lintel with a box section on the outer leaf. The lintel is insulated in the cavity and spans from inner to outer leaf. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing Keystone's Segmental Arch BFL.



View showing the underside of Keystone's Segmental Arch BFL. This illustrates how the brickwork returns under the soffit of the lintel to ensure no steelwork is visible on the outer leaf.



Front elevation notes the essential measurements required to specify the Segmental Arch BFL.

h = BRICK FEATURE HEIGHT

r = RISE

s = CLEAR SPAN OPENING

#### Semi Circular Arch

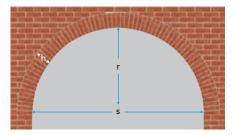
A Keyslip Semi Circular Arch BFL is a modified Semi Circular Arch Lintel with a box section on the outer leaf. The lintel is insulated in the cavity and spans from inner to outer leaf. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing Keystone's Semi Circular Arch BFL.



View showing the underside of Keystone's Semi Circular Arch BFL. This illustrates how the brickwork returns under the soffit of the lintel to ensure no steelwork is visible on the outer leaf.



Front elevation notes the essential measurements required to specify the Semi Circular Arch BFL.

h = BRICK FEATURE HEIGHT

r = RISE

s = CLEAR SPAN OPENING

# Design Data Sheet

complete all details and s	Please forward any relevant architect's or structural		
any			engineer's drawings to aid us in the preparation
	Mob		of your quotation.
ef			Technical Service Team <b>01283 200 150</b>
Brick Type			
Width of Joint	mr	n	
Shape of Brick Arch	Full Arch (Bullseye)	Full Arch	Gothic Arch
	Parabolic Arch	Segmental Arch	Flat Arch
Type of Brick Arch	Single Leaf Lintel with Brick Arch	Cavity Wall Lintel with Brick Arch	
Soffit Type	Non-return Soffit  H 100mm H  Keystone galvanised powder coated arch set	Return Soffit  100mm —  Keystone galvanised powder coated arch set	Other Detail
Angle of Skew (a)			
Brick Feature Height (h)	1 Brick	1½ Bricks	Other
Clear Span Opening (s)	mr	n	
Rise (r)	mr	n	
Centrestone Type	Not required	Brick Centrestone	Stone Centrestone
			Projecting BOTTOM  Distance (b) mm
Quoin Stone Type	Required	Not Required	1
Quantity Required	No	).	
	Brick Type  Width of Joint  Shape of Brick Arch  Type of Brick Arch  Soffit Type  Angle of Skew (a)  Brick Feature Height (h)  Clear Span Opening (s)  Rise (r)  Centrestone Type	Mob  Brick Type  Width of Joint	Mob  Brick Type  Width of Joint  Shape of Brick Arch  Parabolic Arch  Single Leaf Lintel with Brick Arch  Single Leaf Lintel with Brick Arch  Non-return Soffit  100mm   Keystone galvanised powder coated arch set  Angle of Skew (a)  Brick Feature Height (h)  I Brick  Clear Span Opening (s)  Rise (r)  Mob  Mob  Midd March  Full Arch (Bullseye)  Full Arch  Segmental Arch  Cavity Wall Lintel with Brick Arch  Return Soffit  Hoomm   Keystone galvanised powder coated arch set  Non-return Soffit  Hoomm   Full Arch  Segmental Arch  Return Soffit  Hoomm   Full Arch  Return Soffit  Return S

# Lightweight Brick Headers & Sills

Keyslip Lightweight Brick Headers are one piece prefabricated units, manufactured offsite for quick and easy installation.





# The Lightweight Solution

for achieving seamless Brick Headers & Sills

Installed above a standard lintel, Keystone's Lightweight Brick Headers sit on the outer leaf of a lintel, without compromising the structural support of the brickwork above.

Manufactured to bespoke specification, Lightweight Brick Headers can accommodate various head heights. The units are delivered to site complete with bricks bonded, ready for final pointing. These lightweight units can be lifted into place with ease, saving time on installation and the need for specialist trades. Keystone receives a consignment of free issue brick being used onsite to ensure that the products blend seamlessly with the already constructed brickwork.

Brick Slips are bonded to 70mm backing panels using a high performance BBA approved construction adhesive. The backing consists of two 8mm structural panels with insulation between, providing a lightweight material base. Magnesium board is approximately 40% lighter than cement fibre board commonly used which is a huge benefit for offsite handling and insulation.

The unit is then covered with a waterproof membrane to protect against moisture when stored onsite.







Lightweight Construction



Cost Savings



#### **LFGH**

## Lightweight Flat Gauge Header

Keystone's Lightweight Flat Gauge Arch can incorporate 1 brick, 1½ brick or a 2 brick soldier course.

- Unit edges protected with waterproof membrane
- 2 70mm thick insulated lightweight magnesium panel
- 3 25mm thick facing Brick Slip

Keystone's lightweight products enable complex brickwork detail to be carried out in a controlled factory environment.

# Lightweight Flat Gauge Header

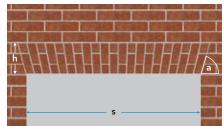
A Keyslip Flat Gauge Header is installed above a standard cavity lintel, without compromising the structural support of the brickwork above. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing Keyslip's Lightweight Flat Gauge Arch Header.



View showing the underside of Keyslip's Lightweight Flat Gauge Arch Header.



Front elevation notes the essential measurements required to specify the Lightweight Flat Gauge Arch Header.

- h = BRICK HEIGHT
- a = SKEW
- s = CLEAR SPAN OPENING

# Lightweight Brick Feature Headers & Sills

#### **LSAH**

## Lightweight Segmental Arch Header

The Keyslip Lightweight Segmental Arch Header can incorporate 1 brick, 1½ brick or 2 brick soldier course.

- Unit edges protected with waterproof membrane
- 2 70mm thick insulated lightweight magnesium board
- 3 25mm thick facing brick slip
- 4 Keystone Universal Arch

Keystone's lightweight products enable complex brickwork detail to be carried out in a controlled factory environment.

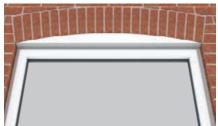


## Lightweight Segmental Arch Header

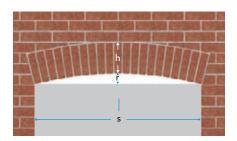
The Keyslip Segmental Arch Header is installed above a standard cavity lintel, without compromising the structural support of the brickwork above. This design can incorporate 1 brick, 1½ brick or a 2 brick soldier course.



Isometric view showing a Keyslip Lightweight Segmental Arch Header.



View showing the underside of a Keyslip Lightweight Segmental Arch Header.



Front elevation notes the essential measurements required to specify the Lightweight Segmental Arch Header.

- h = BRICK HEIGHT
- r = RISE
- s = CLEAR SPAN OPENING

#### **LWBS**

# Lightweight Brick Sill

Keyslip prefabricated, Lightweight Brick Slip Sills are manufactured offsite and delivered complete with bricks bonded for final pointing. To ensure continuity of the precision cut bricks, Keystone collects a consignment of brick being used onsite. Quick and easy to install, these units save time onsite and offer cost savings in comparison to traditional methods. These units are restrained to the inner block work for added stability.



#### **LWBS**

#### Specification

Specify LWBS to suit 100mm wide wall.



Elevation View Section View



# The Cost Saving Solution

for achieving seamless Brick Headers & Sills

Keyslip Lightweight Headers and Sills benefit from the quality associated with offsite manufacturing.

The units are delivered as one piece, ready for final pointing, therefore offering a reduction in skilled onsite labour and subsequent significant cost savings. Installation time is reduced compared with traditional methods therefore Keyslip products are suitable for fast build programmes.







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Keyslip Brick Details

# Bespoke Projects

Whytegates

Highgrove House Type

Potters Hill

Premier Inn, Farnham

Tall Trees

Blenheim House Type

Cheswick Place, Birmingham

Warren Close

Maxwell Road, Dublin

Corbelled Arch Brick Feature Lintel

Tesco 9m Span Arch Brick Feature Lintel

# Whytegates











## Description

Whytegates is an elegant 6 bedroom, 3 storey property, exhibiting features reminiscent of the arts and crafts movement. This project was a replacement dwelling constructed with high quality materials and significant attention to detail throughout.

The original family home was demolished, providing a blank canvas for Stephen Langer Architects.

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1 2.4m Corbelled Arch

2 Bullseye Brick Feature Lintel

3 Brick Feature Lintels

4 Intricate brick arch detailing

5 Finished lintels blend seamlessly with brickwork

Elegant 3 storey property featuring Keyslip brick products Private Dwelling Whytegates **Products Used** 

Brick Slip Feature Lintels

Architect

Stephen Langer Architects Ltd

Contractor

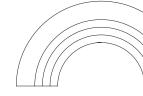
Ascent Building Ltd



#### Challenge

Ascent Building Ltd was assigned with delivering the architect's vision. The intricate brick detailing specified around the openings would require a great deal of skilled labour and brick cutting onsite if constructed using traditional methods. This would have been a time consuming task and required a high level of accuracy to ensure consistency across the brickwork.





Section View

Elevation View

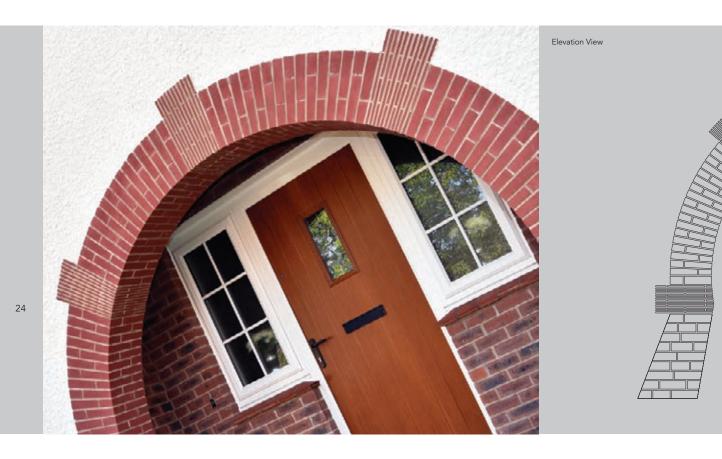
#### Solution

Keyslip Brick Feature Lintels offered an offsite solution which would achieve the decorative elements across the dwelling's exterior façade. Manufactured bespoke to order, these brick feature components included a 2.4m span Corbelled Arch which defined the porch entrance to the property. This single piece unit saved Ascent Building significant installation time.

The level of quality control which could be achieved with these products was a major advantage for the architect as all the brick cutting and bonding took place in a controlled environment, free from wet weather, extreme temperature and excessive dust. Keystone collected a consignment of the brick being used on site and the brick feature units were delivered to site with bricks bonded, ready for installation and final pointing. This ensured that the arch blended seamlessly with already constructed brickwork.

Keystone also supplied a range of other brick feature components including Flat Gauge Arches, Full Arch Lintels and Bullseye Lintels, all of which were manufactured bespoke to create the elaborate brick features on this stunning home.

# Highgrove House Type



# Description

Redrow strives to be at the forefront of design and innovation.

Redrow's Highgrove house type forms part of the Heritage collection, capturing a traditional appearance with modern influence. The Highgrove house design is featured across Redrow Homes nationwide.

A luxurious porch entrance with intricate brick detail provides a focal point at the front façade of the properties. The red brick arch, in contrast to the soft white render, creates a striking effect. Consistency and quality is essential when replicating this detail across numerous sites.

2

3

Luxurious brick porch entrance

2

The Brick Feature Arch is striking against the white render

Keystone's offsite product negated the need for brick cutting onsite

#### Residential

Highgrove House, Sites Nationwide

#### **Products Used**

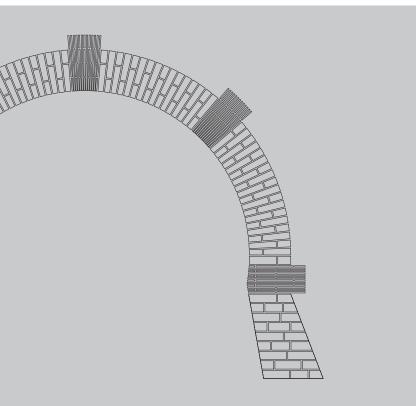
Brick Feature Arch Lintel

#### Architect

Redrow Homes

#### Contractor

Redrow Homes



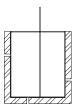


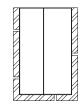


#### Challenge

The original specification included a concrete backed arch to achieve the brickwork required for the porch. This brought with it a number of health and safety issues. Each porch required the use of a tripod which had to be erected to offer support while the arch was being constructed and dismantled after each installation.

This traditional construction method was extremely time consuming and required brick cutting on site and skilled labour. Consistency was also a challenge when constructing each arch onsite.





Section Views

#### Solution

Keystone introduced Redrow Homes to a Brick Feature arch solution which would considerably reduce health and safety issues onsite and offer considerable time saving. Each bespoke Brick Feature Lintel was produced in a factory environment and delivered to site in one unit with bricks attached for final pointing. Keystone's prefabricated solution offered speed of construction while also reducing the need for specialist trades onsite.

The finished product was 70% lighter than the concrete equivalent. Keystone's offsite product enabled consistency with each product produced in a strict, quality controlled environment.

# Bespoke Projects

#### Potters Hill



#### Description

Potters Hill is an elegant red brick property of traditional influence. The project includes a variety of brickwork detail across a range of openings. A combination of segmental, flat gauge and soldier course patterns are featured throughout the dwelling, all of which were achieved using Keystone's bespoke brick feature range.

The fundamental component of achieving the traditional architectural style is the seamless transition between past and present building techniques.

Ascent Building Ltd utilised modern building methods to achieve the traditional architectural style. Accommodating multiple bond patterns, Keystone's Brick Slip Feature Lintel range complemented the distinct character of the dwelling, demonstrating the effective integration of modern building techniques.

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Elegant red brick property featuring Keyslip brick detail products

Exterior view of the property

Keyslip Brick Feature Lintels

4 Full Bullseye Arch

5 Finished lintels blend seamlessly with the brickwork façade Private Dwelling Potters Hill Products Used
Brick Feature Lintels

Architect
Stephen Langer Architects

Contractor
Ascent Building Ltd

**W**Keyslip





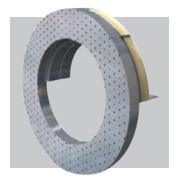




#### Challenge

The project featured intricate brick detail over a number of openings with various bond patterns throughout the property's exterior façade.

Traditional building techniques would have been time consuming and required specialist skilled labour and brick cutting on site. A concrete backed option would bring with it the health and safety issues associated with this heavier building technique.



Isometric view showing Keyslip's Bullseye BFL before Keystone fix the cut bricks to the unit.

#### Solution

Keystone's Brick Feature Lintel range offered the perfect solution to streamline the process and could accommodate a number of shapes and bond patterns. Keystone collected a consignment of the bricks being used onsite and tailored them to suit the house design. The bricks were bonded to the load bearing lintel in a factory environment ensuring that the process occurred in optimum controlled conditions, free from wet weather, extreme temperature and excessive dust.

The finished products were delivered as one piece units ready for final pointing and blended seamlessly with already constructed brickwork which was consistent with the dwelling's traditional characteristics.

# Premier Inn, Farnham







## Description

Premier Inn is one of the largest hotel chains in the UK, having recently expanded in the South East with a new 60 bedroom hotel in Farnham, Surrey.

The project required a large span Corbelled Brick Segmental Arch detail over the entrance. Keystone's technical team visited the site and designed a bespoke prefabricated solution.

4

5

- Keystone's Brick Feature Lintels over all openings blended seamlessly with the brickwork
- 2 Keyslip Brick Feature Corbelled Arch
- 3 Keystone developed a bespoke Brick Feature Lintel to accommodate the 6.2m span arch
- 4 Perforated arch lintels ready to have bricks bonded
- 5 Bricks bonded to perforated arch

1

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Premier Inn, Farnham

#### **Products Used**

Brick Feature Corbelled Arch Lintel

#### Architect

Hollington Architects

#### Contractor

Gilbert Ash



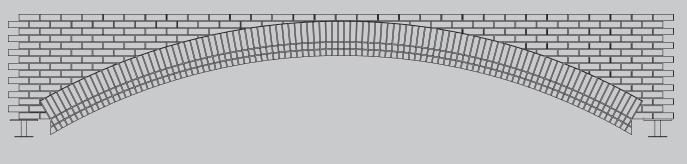
It would have been a time consuming task to construct the corbelled arch onsite. Keystone streamlined the process with their offsite solution. It really suited the pace of construction and looked great.



Troy Sanders - Gilbert Ash





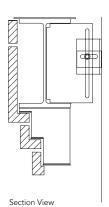


Elevation View

## Challenge

The main challenges were the sheer scale of the arch and the speed of construction required for this fast build programme.

To create the arch on site would require specialist skilled labour as well as brick cutting on site. This would also create health and safety issues associated with working at height.



An offsite solution would eliminate these health and safety issues and facilitate a fast build programme.

#### Solution

Keystone's design team developed a bespoke 6.2m span Brick Feature Arch. Keystone received a consignment of the brick being used onsite to ensure seamless integration with the rest of the exterior brickwork. The bricks were cut into slips and bonded to the structural steel lintel using a BBA approved construction adhesive. This offsite technology ensures quality control as the process is not subject to adverse weather conditions.

The Brick Feature Corbelled Arch was delivered as a one piece unit and lifted into place using a crane, which reduced the need for working at heights, facilitating a safer build programme. Installation was quick and easy, saving the contractor significant time onsite and the need for specialist trades.

The finished arch blends seamlessly with the rest of the brickwork and creates a distinct feature above the hotel entrance.

# Bespoke Projects

#### Tall Trees



# Description

Tall Trees is a residential development in Kent. The complexity of the brick detailing within the architect's plans presented a significant challenge.

The project specified a range of brick features over a variety of opening shapes and sizes. One of the most striking features is a unique arch over the front porch with brick on three sides.

1 4 5 7

The porch entrance required a Brick Feature Arch Lintel with brick on three sides

2 Keyslip Brick Slip Feature Lintels

3 Brick Slip Bullseye Arch

Two Bullseye Arches create a unique feature on the side elevation of the property Front façade of the property

The underside of the intricate arch detailing on the main porch

Keyslip Brick Feature Lintel products feature across all openings Private Dwelling

Tall Trees

**Products Used** 

Brick Slip Feature Lintels

#### Architect

Stephen Langer Associates Ltd

#### Contractor

Ascent Building Ltd







#### Challenge

The variety of shapes and sizes of the brick features required provided a challenge. If constructed onsite, the intricate brickwork at Tall Trees would have been extremely labour intensive using traditional methods.

The level of detail would have required skilled specialist labour onsite and working at heights. Onsite traditional methods can also be subject to delays due to adverse weather conditions.

#### Solution

Keystone's technical department specified a number of pre-fabricated Brick Feature Arches and Lintels to varied specifications, incorporating specially manufactured brick mullions, heads and Bullseye Brick Feature Lintels.

The porch entrance required a Brick Feature Arch with brick on three sides. All of the brick slip products were manufactured in our factory controlled environment. Brick was collected from site and each brick was crafted ensuring the decorative brick features captured the architect's vision.

The offsite manufacture of these bespoke solutions ensured optimum conditions for the bonding process and offered a level of quality and detail which would be much more difficult to achieve if produced onsite.



## Description

The Blenheim is a popular nationwide house type developed by Redrow Homes, one of the UK's leading house builders. These red brick properties incorporate a distinctive brick arch over the entrance porch.

type features a distinct Brick Slip Arch designed by Keystone

Redrow Homes' Blenheim house

- The Brick Slip Arch was produced entirely offsite
- Underside of the brick arch showing no visible steel
- The intricate brick detail provides an eye catching feature to the front of the buildings

1

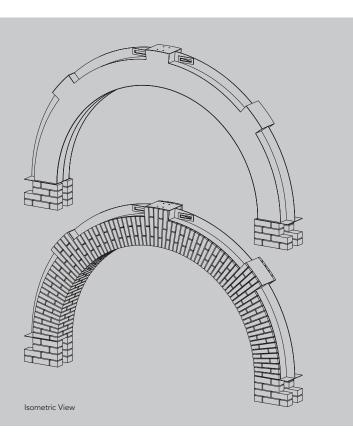
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Residential
Blenheim House Type

Products Used
Brick Feature Arch Lintel

Architect Redrow Homes Contractor Redrow Homes









#### Challenge

The Blenheim house type features across many Redrow developments throughout the UK. Speed of construction was an important consideration. Consistency would create a big challenge due to the number of different locations across the country on which this house type would be replicated.

The level of detail required for the arch would have been time consuming to create onsite and it would be difficult to ensure each porch was identical if they were being constructed by different brickwork specialists. A concrete backed option is heavy and brings health and safety risks.

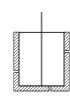
The challenge was to recreate this identical porch detail across a number of sites in the most labour efficient and safest way possible.

#### Solution

Keystone's technical team created a load bearing structural steel arch with exposed brick on the front, soffit and rear face. The 25mm brick slips were bonded to the perforated steel using a high performance BBA approved construction adhesive. Keystone's bonding system has undergone vigorous independent testing to assure its proven reliability.

The Brick Slip Arch was produced entirely offsite and delivered as a one piece unit ready for installation and final pointing. By collecting a consignment of the brick being used on site, Keystone ensured a seamless finish that complements Redrow's design. The finished product was 70% lighter than the concrete equivalent - saving significant time on installation.





Section Views

## Cheswick Place, Birmingham

Each of the lightweight units were delivered to site, ready for final pointing, saving considerable time and the need for specialist trades onsite.







Lightweight Feature Brick Header: Flat Gauge Arch

## Description

Bloor Homes are renowned for the development of high specification new build properties in the UK. The Cheswick Place development required multiple prefabricated solutions for the brick detailing specified. Keystone's Lightweight Brick Feature Headers would provide Bloor Homes with a lightweight solution, suitable for a fast build programme.

An offsite approach to construction methods is becoming more popular. This method of construction facilitates improved efficiency onsite, obtaining consistent levels of quality whilst also enhancing the speed of construction.

Lightweight Header

2

Lightweight Brick Headers integrate seamlessly with the brickwork on these house types

3

The lightweight units were delivered to site ready for final pointing

2

#### Residential

Cheswick Place, Birmingham

#### **Products Used**

Lightweight Brick Feature Headers

#### Architect

Bloor Homes

#### Contractor

Bloor Homes

**W**Keyslip



#### Challenge

The Cheswick Place development required numerous brick slip solutions to accommodate the various flat gauge arches and soldier course bond patterns featured within the design.

Bloor Homes required lightweight products to achieve the brick detail over the windows which would accommodate various width openings and could easily be replicated with consistent levels of quality and detail.

#### Solution

Keystone's Lightweight Brick Headers offered the perfect solution. The lightweight headers are installed above a standard cavity lintel, placed on to the outer leaf with no additional fixings required. These single piece units do not exceed regulations for a single man lift and therefore provide a safer option.

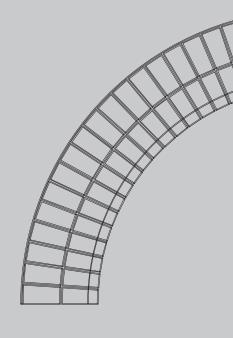
Keystone collected bricks from site to ensure that these units matched the remainder of the brickwork and each brick was precision cut to specification. The 25mm brick slips were then bonded to the lightweight units using a BBA approved adhesive.

These prefabricated units were produced within a strict quality controlled environment and offered high levels of consistency. Each of the lightweight units were delivered to site ready for final pointing, saving considerable time and the need for specialist trades onsite.

#### Warren Close



Front / Rear Elevation



## Description

Beaufield Homes has a distinct association with exceptional residential properties and the Warren Close townhouse in Surrey is no exception. The 3 storey, semi-detached family homes are built to a high specification. Beaufield Homes asked Keystone to develop a solution for the brick details required over the openings.

Striking red brick 3 storey townhouses

2 Corbelled Arch Brick Feature Lintel manufactured offsite

Final unit blends seamlessly with brickwork

Keystone Splayed Bay Lintels add character to the façade

1

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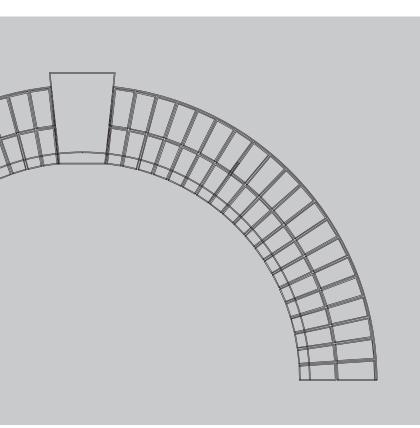
Corbelled Full Arch Lintel & Splayed Bay Lintels

Architect

Beaufield Homes

Contractor

ME / Iconic Designs





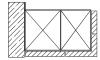


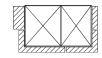


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#### Challenge

The porch entrance to the Warren Close property required a Corbelled Full Arch Brick Feature Lintel, faced with brick on three sides and a Keystone Corbel detail incorporated into the centre. The design and construction of the arch required the support structure to be concealed, blending seamlessly upon installation. Keystone was also challenged with producing Splayed Bay Special Lintels that incorporate Flat Gauge Brick Slip units. Keystone's technical team identified a one piece solution that incorporated this design, while significantly enhancing speed of construction.





Section Views

#### Solution

Keystone's technical team identified a one piece Splayed Bay Lintel solution which incorporated the Flat Gauge Arch details required above each window. Keystone also produced a bespoke Corbelled Arch Lintel for the entrance porch, capable of carrying the load required and achieving the decorative feature.

The prefabricated brick feature units were delivered to site, ready for installation and final pointing. The units offered the contractor a significant time saving onsite, whilst also contributing towards improved safety.

The final result is an impressive display of prefabricated components, providing solutions that facilitate fast build programmes.

# Maxwell Road, Dublin



## Description

When replacement dwellings were required in an existing row of traditional terrace homes, Amazon Developments turned to Keystone with the challenge of matching the brick arch head detailing above the doors and windows of the properties. Three new houses with individual design needs were matched to the existing architecture.

1 3 4

Brick Feature Arch

2 Flat Gauge Brick Feature Lintel

Underside of the lintel with brick faced soffit

Finished arch blends with traditionally built brickwork

Products Used
Brick Feature Lintels

Architect

Extend Architects & Bennett McCleary Architects

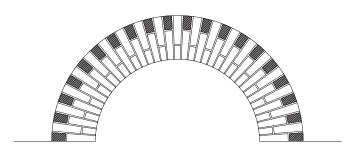
Contractor

Amazon Developments



#### Challenge

Matching the brick detailing above the doors of the existing traditional dwelling presented the biggest challenge. The new houses needed to remain consistent with the properties adjacent to them. It was important to incorporate features from the existing properties into the design to ensure a smooth transition between the old and the new.



#### Solution

Keystone's Brick Feature Lintels offered a quality controlled offsite solution. Two varieties of Brick Feature Arches were designed to span the 1230mm door openings, providing a decorative feature above each doorway.

The bond pattern remained similar for each arch, however the combination of brick types varied. Bull nose bricks provided a curved edge to each Brick Feature Arch, softening the façade.

The lintels were delivered to site complete with bricks bonded for final pointing.

# Corbelled Arch Brick Feature Lintel



Private Dwelling Magherafelt

Products Used
Corbelled Arch
Brick Feature Lintel



Corbelled Arch Brick Feature Lintel frame before cut bricks are attached.

**₩Keyslip** 

# Tesco 9m Span Arch Brick Feature Lintel



#### Commercial Premises Tesco Central Offices London

Products Used
Brick Feature
9m Span Arch Lintel



Nine metre span arch Brick Feature Lintel provided to Tesco Central Offices, London.

# Production

# **Brick Feature Lintels Production**



- Segmental Arch with Keystone in production
- Perforated steel lintel
- Bricks are bonded to steel lintel in factory controlled environment



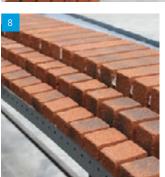




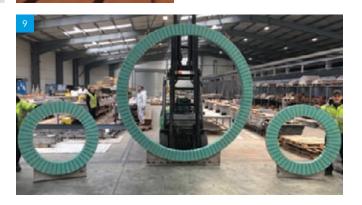




- 4 Bullseye Arch
  - 5 Keyslip Brick Feature Lintels in production
  - 6 Brick Slip Apex Arch



- Bullseye Brick Feature Lintel
- 8
  Precision cut bricks applied to steel lintel
- Bullseye Arches with glazed bricks



Notes	



Brick Details





# Brick Details

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#### Keystone Ireland

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