IMS-P: 7.4.6
Issue: 1
Date: 01/08/2018

IG | Masonry Support

GOLD SERIES

Inspiring Innovation In Brick

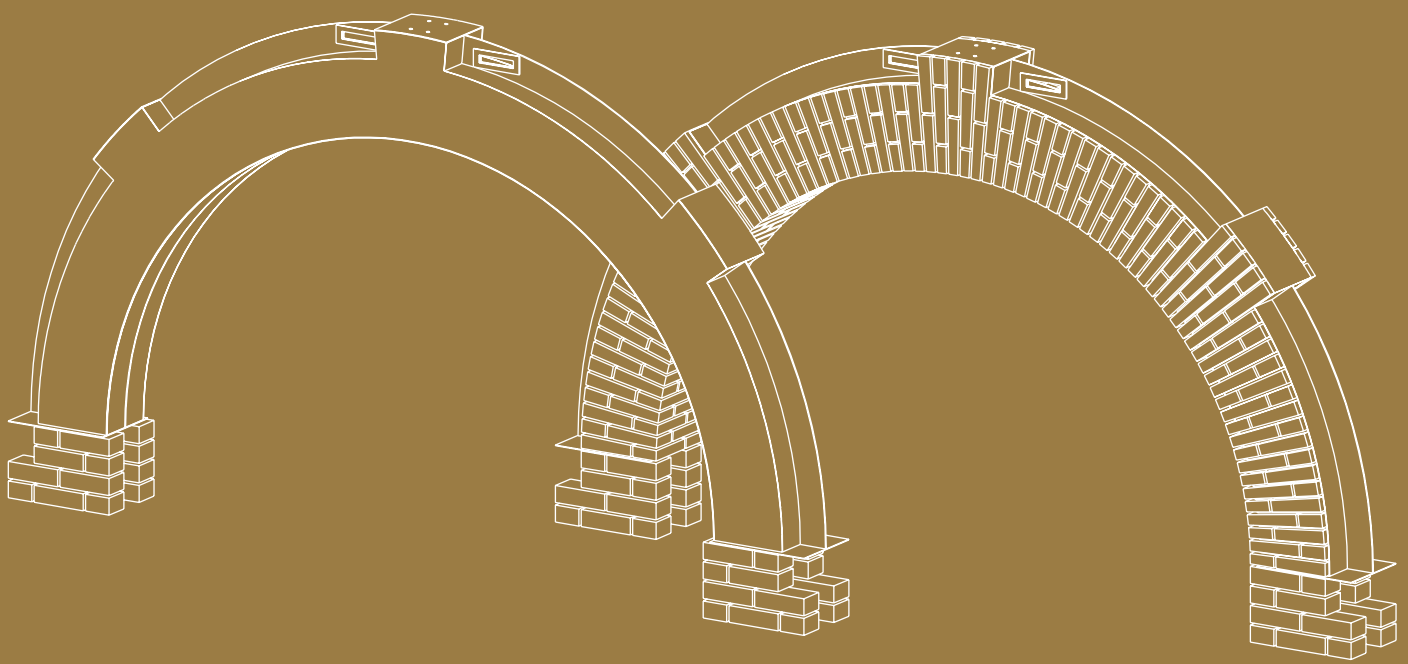
IG Masonry Support

'Gold Series' highlights IG Masonry Support's most prestigious Award Winning Projects.

IG Masonry Support is dedicated to delivering intelligent engineering with offsite craftsmanship.

We create the illusion of floating soffits of brickwork with hidden structural steel.

Throughout this portfolio, we acknowledge the people involved in delivering each project and the engineering excellence of IG Masonry Support.



04

16

10

04 — 09
Private Residence Berkshire

This Berkshire property is located in a beautiful woodland area, surrounded by green space. The modern design of the property, with large areas of glass and cantilevered balconies, immerses the residents into nature. The north and south facing elevations exhibit a range of materials, combining intricate brick elements, glazed elevations and timber panelling to ensure the new build compliments the surrounding environment.

10 — 15
South Gardens Elephant Park

South Gardens is part of a £1.5bn urban regeneration scheme, located in one of Central London's greenest areas. Bringing residents closer to nature with cleverly landscaped gardens and roof terraces, the award winning development demonstrates Maccreanor Lavington's acute attention to detail and pragmatic use of materials.

16 — 21
Stonebridge Park London

Stonebridge Park's award winning development has created an entirely new neighbourhood, producing 117 new homes in the area. Modelled in three different types of accommodation, each apartment building exhibits distinct and diverse characteristics.

22

28

34

22 — 27
Marlborough Primary School London

The Marlborough Primary School development is part of a large regeneration project within the Kensington district. The carefully considered design replaces the original Victorian building, creating a modern and vibrant learning environment. The new school exhibits a rich variety of materials, with particular attention paid to the brick elements.

28 — 33
Church Road Belfast

The property on Church Road demonstrates an urban approach to modern architecture. Brickwork elements formed an integral part of the design, utilising a single red brick type throughout the development. The accumulation of unique forms are defined by large recesses within the façade.

34 — 39
Peabody, Burridge Gardens St. John's Hill

St John's Hill is a regeneration project, transforming the original estate in Burridge Gardens to create modern living spaces. The large scale development was constructed in three phases that collectively rejuvenate the area.

Private Residence Berkshire

Products Used

Brick Slip Masonry Support, B.O.S.S.® & Brick Slip Lintels

WINNER
RIBA
South Award
2018

RIBA Awards

WINNER
ID&A
Luxury Residence
2017

International Design & Architecture Awards

Private Dwelling

Berkshire

Architect

Gregory Philips Architects

Contractor

Relicpride

Overview

This Berkshire property is located in a beautiful woodland area, surrounded by green space. The modern design of the property, with large areas of glass and cantilevered balconies, immerses the residents into nature. The north and south facing elevations utilise contrasting materials, to compliment the brick elements and surrounding views.

Relicpride specialises in prestige high specification homes. Their team contacted IG to develop a range of bespoke brick slip products to achieve intricate brick detailing on both the exterior and interior of the property.

Challenge

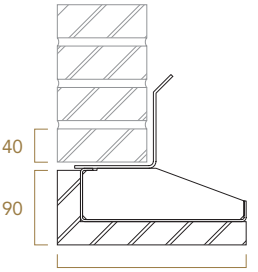
The brick elements played an important part of the architects vision for this contemporary, high specification home. A variety of openings of different sizes throughout the exterior of the dwelling created the need for numerous brick soffit solutions. The brick detail on the fireplace inside the property required a continuous brick soffit that spanned over 2.5 meters in length; this was just one of the intricate challenges this Berkshire project posed. To achieve the details traditionally, onsite, would have been a time consuming task that required brick cutting and additional skilled labour.

Solution

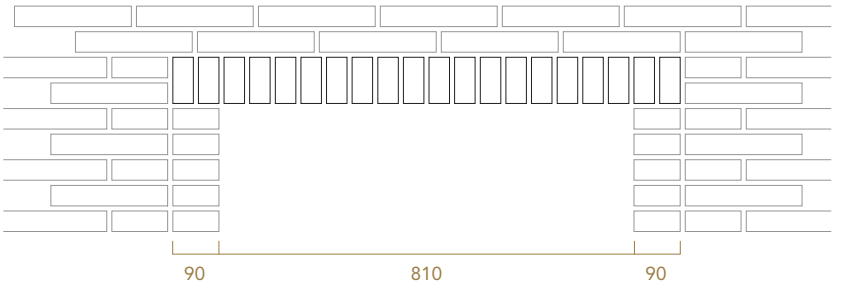
IG's Brick Slip Lintels achieved the brick soffits over the smaller span openings on the north elevation of the dwelling. Internal openings and along the south elevation, IG employed welded masonry support and B.O.S.S.® (Brick On Soffit System) bolt up technology. The handmade Petersen Tegl D91 brickwork featured throughout exterior elevations also continues inside the dwelling. IG's technical team developed a bespoke brick slip masonry support system for a number of internal applications including the fireplace in the dining room, demonstrating the versatility of IG's brick slip products.

A consignment of the brick being used onsite was collected by IG to ensure that the prefabricated components blended seamlessly with the brickwork onsite.

The finished high specification dwelling has been recognised for its architectural excellence at the International Architecture and Design Awards, winning the Luxury Residence Europe category in 2017 and has also won a RIBA Award in 2018.



Section view



Elevation

IG designed bespoke brick slip solutions to achieve numerous complex brick requirements throughout the interior and exterior of this luxury residence.

The offsite prefabrication of these components offered us the assurance of a strict quality controlled product, combined with a considerable time-saving on installation.

One particular feature was a cantilevered brick slip lintel which formed the support for a double fireplace complete with log store. This arrangement presented the effect of a floating corner to the main chimney breast which has a real wow effect.

Eamon Coyle
Director, Relicpride Limited

Relicpride

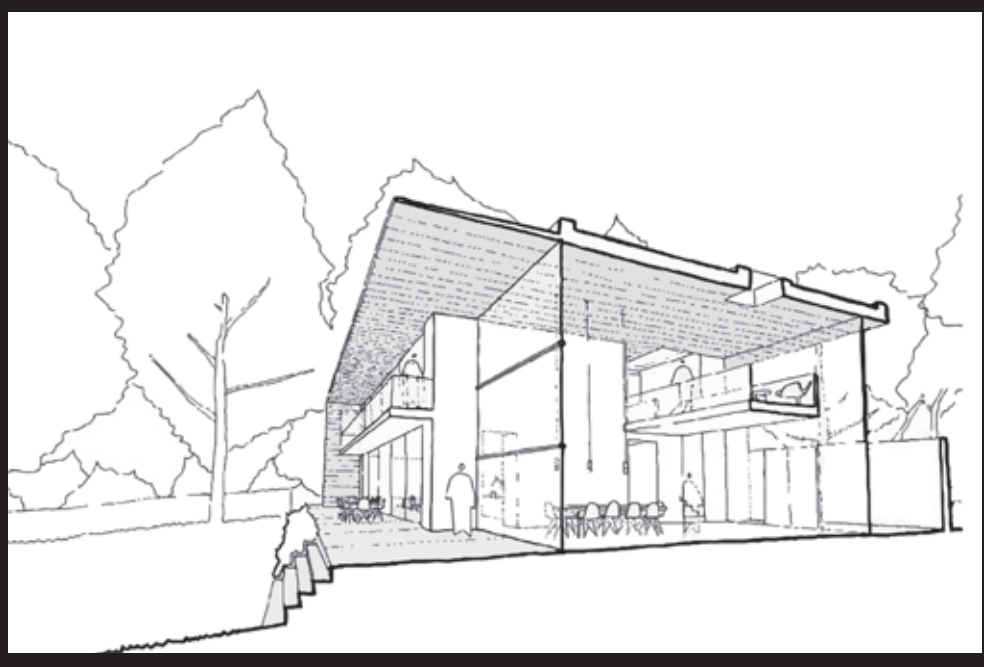
Liam & Eamon Coyle
Directors, Relicpride Limited

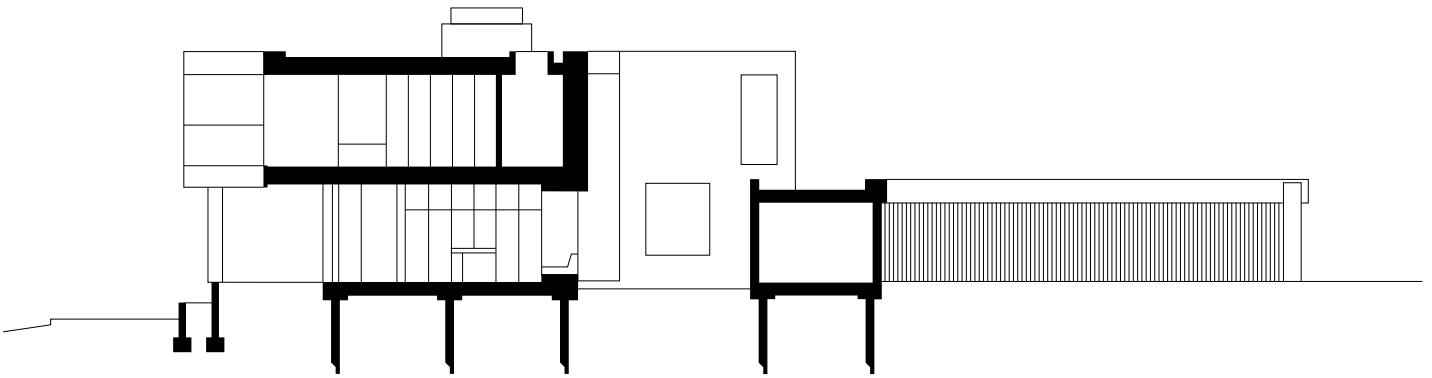
Relicpride Limited is a privately owned building company based in Bushey, Hertfordshire.

Its high quality residential portfolio includes many properties in Central London where exceptional attention to detail and project management is key.

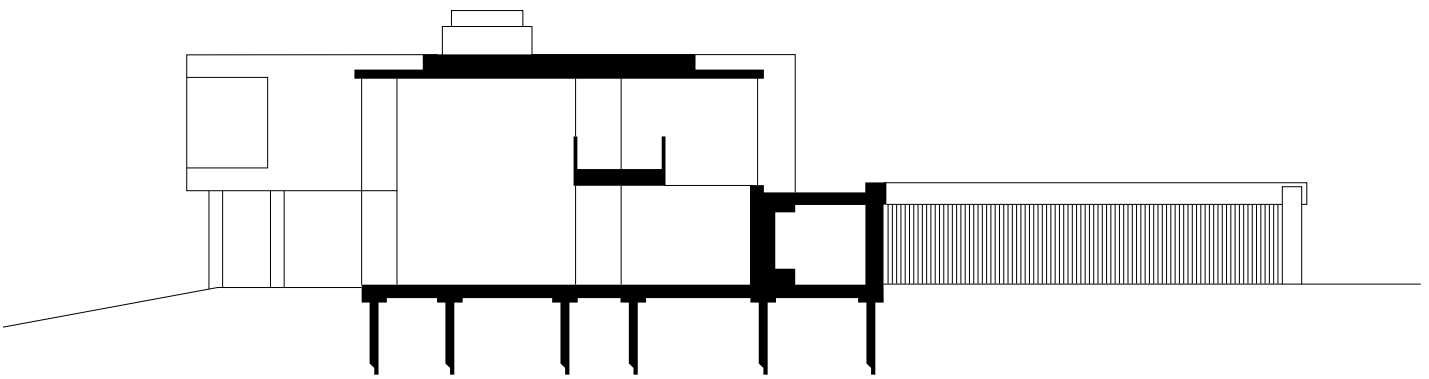
Relicpride specialises in high end residential houses and has obtained a reputation for delivering value and quality which it protects and maintains with pride.

relicpride.com





East facing elevation



West facing elevation

South Gardens Elephant Park

Products Used

Brick Slip Lintels

WINNER
BRICK AWARDS
Supreme Award Winner 2017

Brick Awards

WINNER
BRICK AWARDS
Large Housing Development 2017

Brick Awards

WINNER
HOUSING DESIGN AWARD
Completed Winner 2018

Housing Design Awards

Mixed-use Urban Regeneration Project

South Gardens, Elephant Park

Developer

Lendlease

Architect

Maccreanor Lavington

Brickwork Contractor

Lee Marley Brickwork

Overview

South Gardens is part of Lendlease's £2.3bn Elephant Park regeneration project, which will deliver 3,000 new homes in Elephant & Castle between now and 2025. Bringing residents closer to nature with cleverly landscaped gardens and roof terraces, the award winning development demonstrates Lendlease's acute attention to detail and pragmatic use of materials. IG developed a range of bespoke prefabricated brick slip components to help achieve the complex requirements of the development. Factory controlled conditions allowed for greater accuracy and significantly reduced the need for brick cutting onsite.

The quality of the brickwork is exceptional on what must have been a difficult project, given the variety of detail within the elevational design. The result is a high quality finish throughout and a calming and well landscaped environment in which to live. Superb quality.

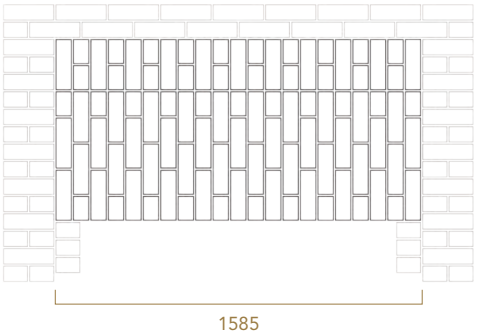
Judges' Comments
Brick Awards 2017

Challenge

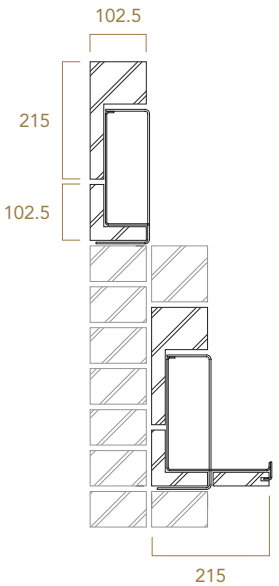
The South Gardens development is expressed in different scales, incorporating low-rise townhouses, mid-rise mansion blocks and taller buildings scaling up to sixteen storeys.

Maccreanor Lavington specified bricks from three manufacturers, Michelmersh, Ibstock and Wienerberger. Brick selection made each block of the development unique, defining elevations through carefully considered brick combinations. Ibstock's White Engobe brick provides a subtle contrast within the façade, used throughout the development above openings to achieve a beautiful brick soffit.

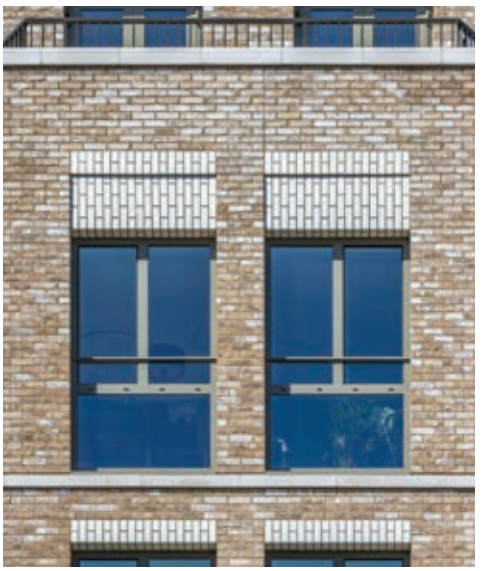
IG was challenged to design brick slip lintels specific to each application, accommodating the different opening sizes and soffit requirements.



Elevation



Section view



Solution

The complex brick detail achieved at South Gardens highlights the design versatility of IG's offsite brick slip solutions. Capable of accommodating any brick type or bond pattern, IG's technical team created effective solutions for achieving the stretcher on end bond detail above all window and balcony openings. Each splayed bay balcony required four brick slip lintels to span the 1585mm and 1135mm openings between brick piers.

IG's prefabricated brick slip lintels enabled Lee Marley Brickwork to achieve the desired brick detail quickly and effectively. IG considered onsite handling, designing manageable components that were lifted into position by hand.

The development was awarded Supreme Winner and Best Large Housing Development at the Brick Awards 2017 and a Housing Design Award 2018. The outstanding build quality and execution of the complex façade is a testament to all involved.

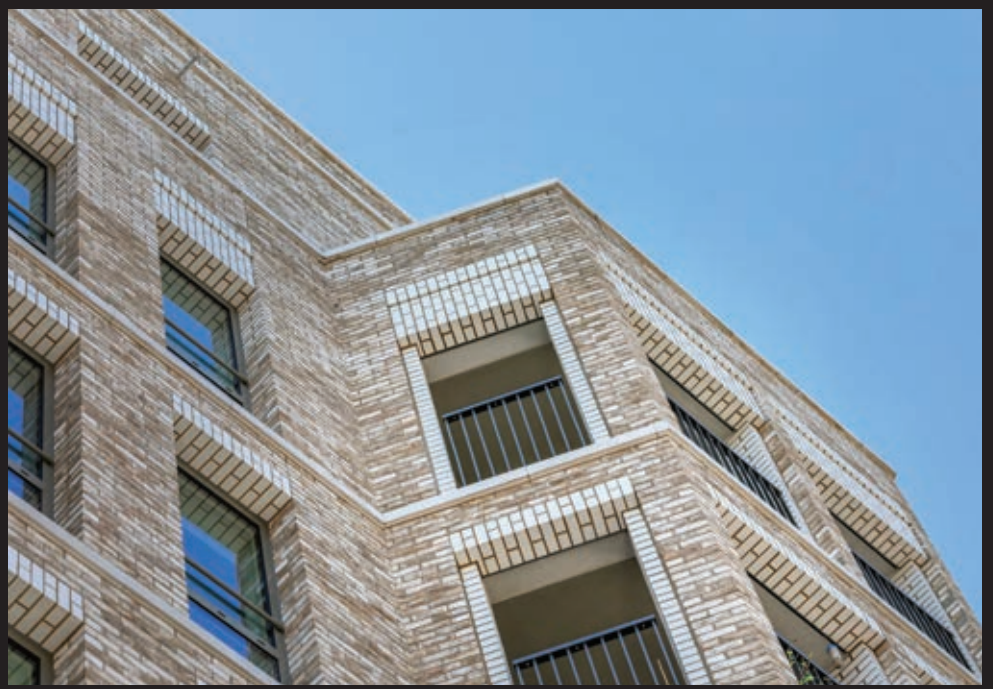
Site plan showing the South Gardens residential development

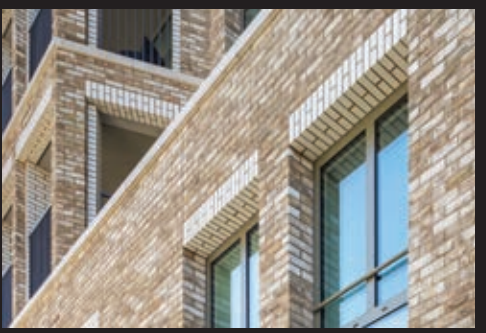
Maccreanor Lavington

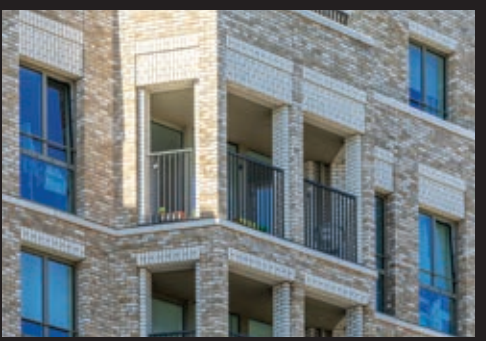
Gavin Finnan
Associate Director
Maccreanor Lavington

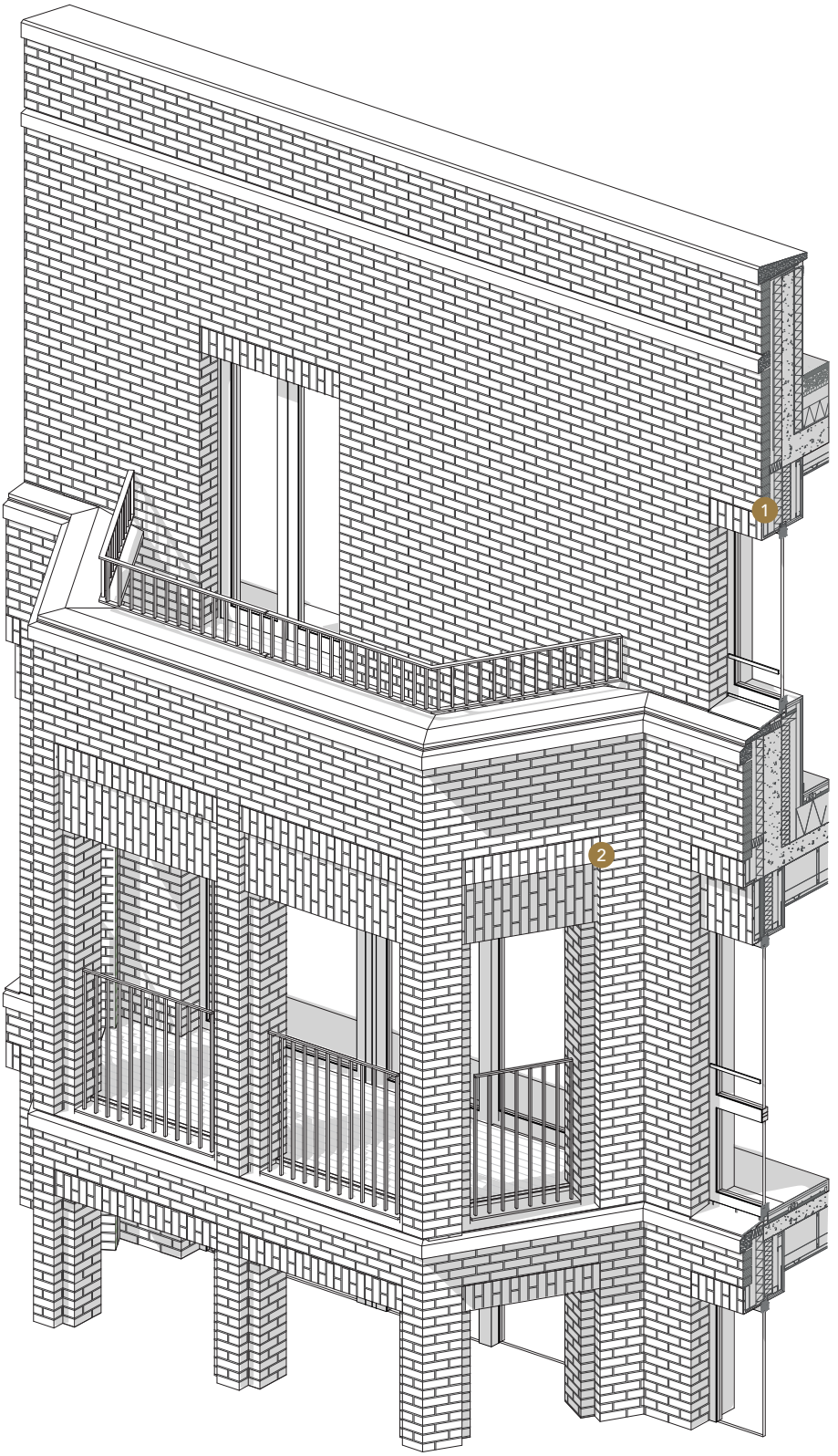
Maccreanor Lavington was established in London and Rotterdam in the early nineties by Gerard Maccreanor and Richard Lavington. Their diverse portfolio ranges from individual buildings to large scale urban design. Maccreanor Lavington has particular expertise in housing, public buildings and the regeneration of town centres and former industrial zones. The practice has received numerous awards including the Supreme Award at the Brick Awards 2017 for South Gardens.

maccreanorlavington.com









1 & 2
White brick clad lintel
made by IG Masonry Support
with white engobes

IG developed a range of bespoke prefabricated brick slip components to achieve the desired brick soffits quickly and effectively.

Stonebridge Park London

Products Used

B.O.S.S.® & Brick Slip Lintels

WINNER
NHA
Best Large Development
2016

National Housebuilder Association Awards

Residential Development

Stonebridge Park, London

Architect

Cullinan Studio

Contractor

Durkan

Overview

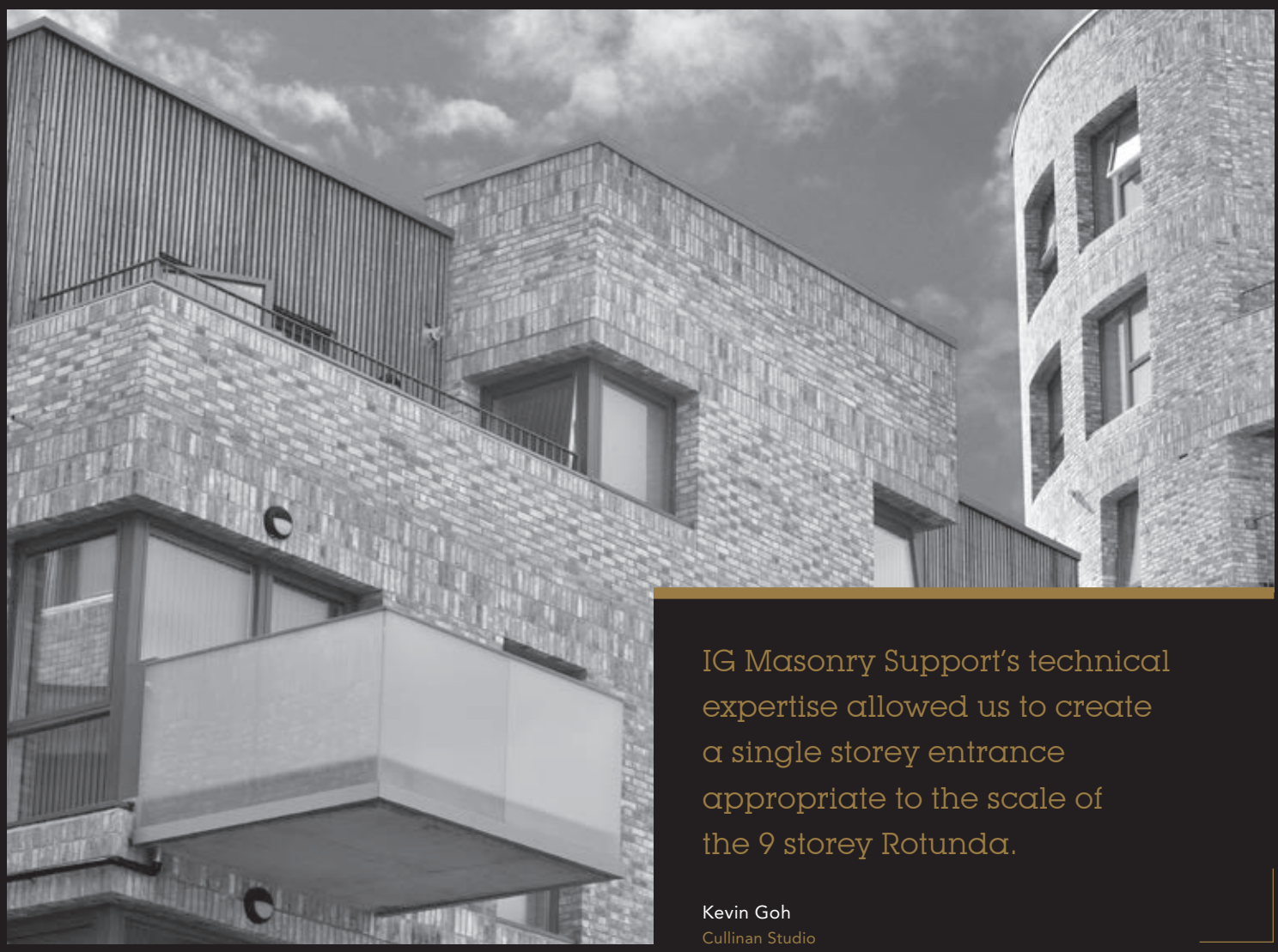
Stonebridge Park's award winning development has created an entirely new neighbourhood, producing 117 new homes in the area. Modelled in three different types of accommodation, each apartment building exhibits distinct and diverse characteristics. These prominent structures required a range of IG's prefabricated solutions.

IG supplied a combination of straight and curved Brick Slip Lintels and B.O.S.S.® (Brick On Soffit System). The complex corbelled brick feature entrance was a real masterpiece, demonstrating the effective integration of offsite technology.

Challenge

The Rotunda, a 9 storey, circular building, exhibits impressive brick elements. The ground floor main entrance to the Rotunda required a 4.8m wide, 3.6m tall, 2m deep corbelled brick feature. IG accommodated the external wall radius of the cylindrical structure, developing manageable brick slip units to achieve the complex design.

The double soldier course detailing married both onsite and offsite building methods, with the top course of brick laid traditionally above each B.O.S.S.® unit.



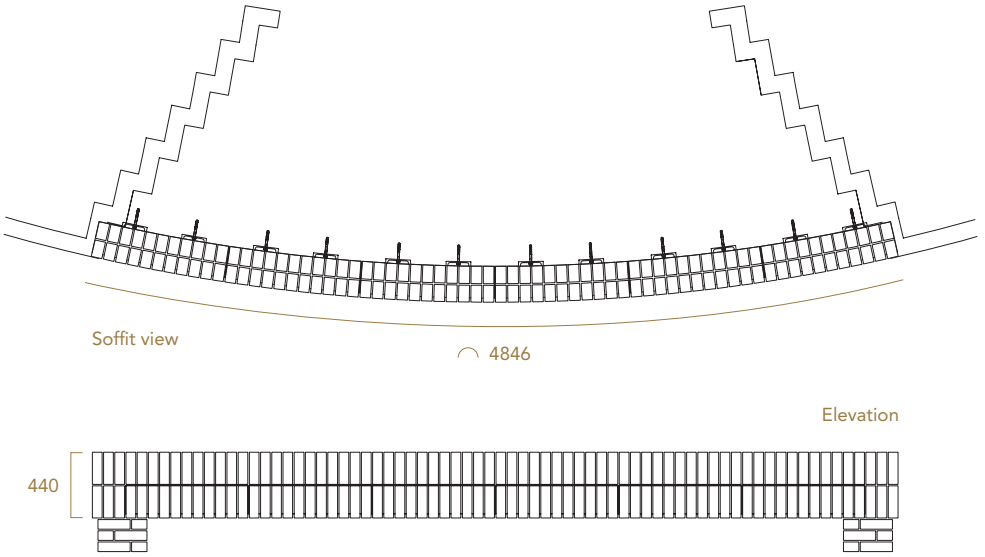
IG Masonry Support's technical expertise allowed us to create a single storey entrance appropriate to the scale of the 9 storey Rotunda.

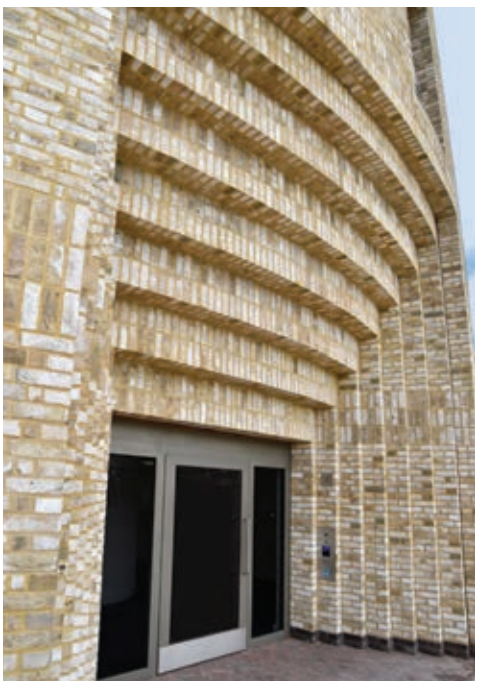
Kevin Goh
Cullinan Studio

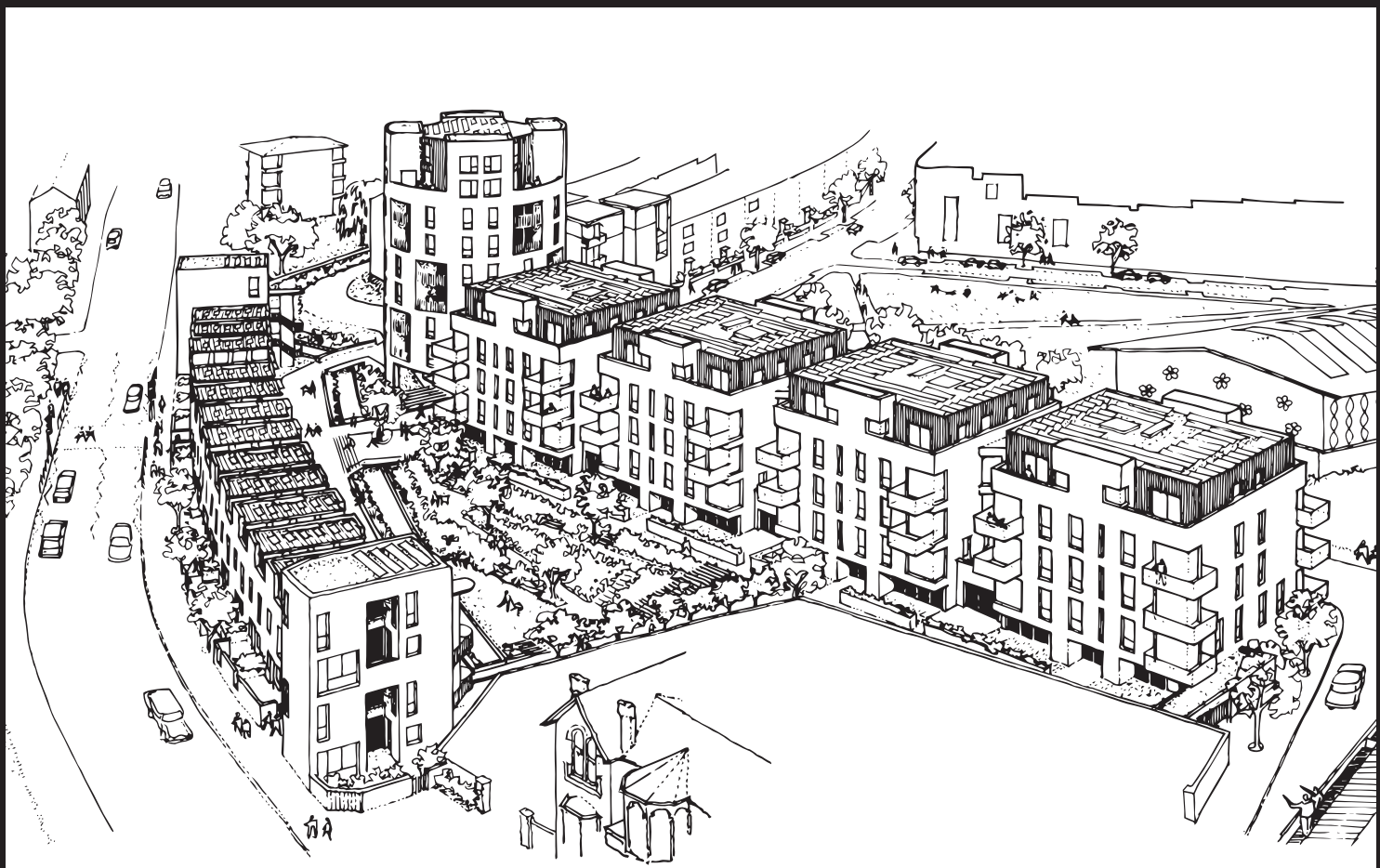
Solution

Constructing the corbelled brick detail required 38 curved B.O.S.S.® units bolted to IG's pre-installed welded masonry support. IG considered onsite handling, ensuring brick slip units were delivered in manageable components to facilitate optimum adjustability.

IG supplied installation drawings and a step by step method statement to support the brickwork contractor onsite. An IG engineer attended the site prior to and during the installation, ensuring the prefabricated system was installed effectively, achieving the desired façade.







Architectural sketch showing the Stonebridge Park residential development

Cullinan Studio

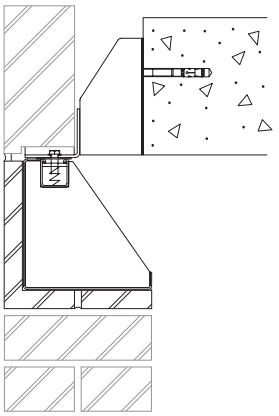
Cullinan Studio creates beautiful, intelligent and sustainable buildings, spaces and places that delight those using them and benefit society as a whole.

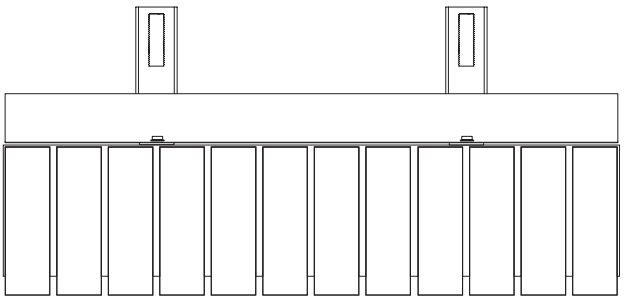
Its aim is to design buildings and places using the highest standards of creativity and skill. Their buildings and masterplans respond creatively to their context, climate and local culture.

cullinanstudio.com

IG B.O.S.S.® Technology

IG supplied numerous B.O.S.S.® (Brick On Soffit System) units to the Rotunda Building on the Stonebridge Park project. Within its profile, the B.O.S.S.® design incorporates a stainless steel channel. This channel is utilised for fixing the B.O.S.S.® unit to the underside of the Welded Masonry Support. The benefit of including a channel means the unit can slide back and forth to its desired position; offering the installer onsite increased adjustability. For the Rotunda Building, IG rolled the channel and designed all the units to correspond with the radius of the building.





Marlborough Primary School London

Products Used

Glazed Brick Slip
Bullseyes & B.O.S.S.®

WINNER
RIBA
Regional Award
London 2018

RIBA Awards

WINNER
RIBA
National Award
2018

RIBA Awards

Educational Development
Marlborough Primary School

Architect
Dixon Jones Limited

Contractor
Mace

Brickwork Contractor
Lesterose Builders Limited

RIBA

© Paul Riddle

Overview

The Marlborough Primary School development is part of a large regeneration project within the Kensington district. The carefully considered design replaces the original Victorian building, creating a modern and vibrant learning environment. The new school exhibits a rich variety of materials, with particular attention paid to the brick elements.

IG's prefabricated solutions enabled quick and effective installation of challenging architectural features. The large bullseye portholes throughout the main façade of the building addressed the development's requirement for natural light. Each of the circular openings are supported by IG's brick slip bullseyes with a single course of glazed green brick creating an eye-catching detail.

Challenge

Marlborough School's new state of the art facilities have created a more spacious and vibrant learning environment. The architect's design addressed the requirement for natural light within the dense urban landscape by incorporating lightwells and large porthole windows. Each brick slip bullseye required a single course of glazed green brick to surround the opening, creating a distinct and colourful feature.

The use of glazed brick helps to increase the reflection of light into the building, further contributing towards the light intake of each porthole opening. Lesterose required seven bespoke bullseyes with an internal diameter of 2915mm and two smaller variants of 910mm. Lesterose also required IG's B.O.S.S.® (Brick On Soffit System) to achieve long spans of complex brick soffits throughout each floor of the development.

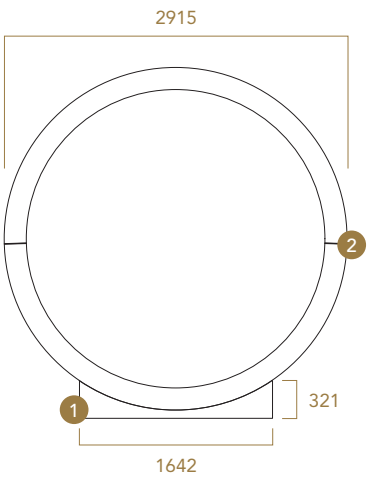
The Solution

Two variations of the brick feature bullseye lintels were required onsite. The smaller bullseyes were delivered to site as one-piece prefabricated solutions. However, for logistical purposes the larger bullseye installations were delivered in two components and bolted together onsite.

Using brick from site, IG bonded pistol slips to the structural steel backing lintels, ensuring colour and texture remained consistent with brickwork onsite.

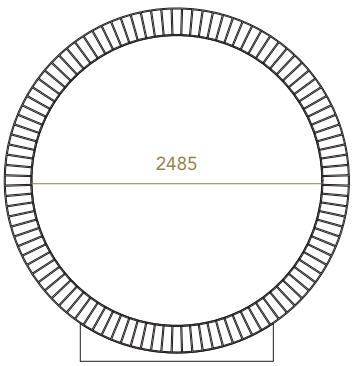
Each of the larger bullseye arches required 102 pistol bricks. These pistol slips were made to accommodate a 10mm chamfered edge around the full circumference of the bullseye feature, providing a drip detail to ensure durability of the brickwork.

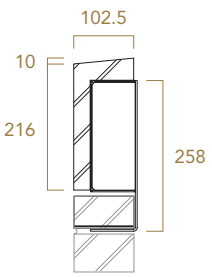
The finished glazed brick elements enhance the façade achieving dramatic contrast, defining the form of each bullseye opening. In addition, B.O.S.S.® units were also installed allowing the contractor to achieve continuous brick soffits, with very complex bond patterns.



1
Factory fitted locating lintel

2
Connections to be bolted together

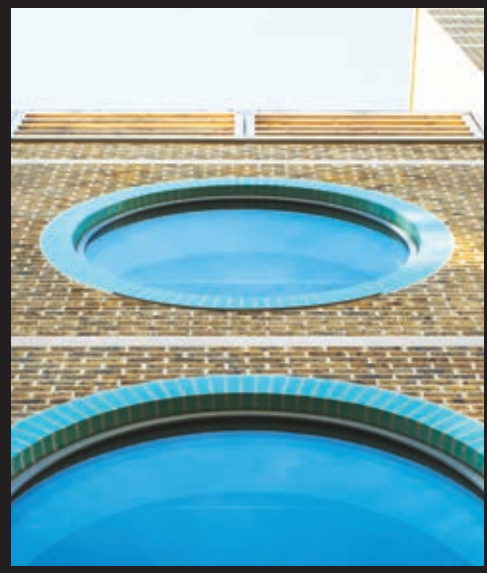




Section view

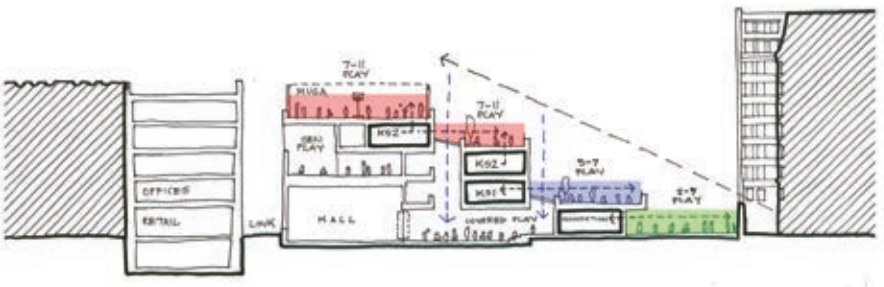
The integration of the colourful glazed brickwork and large geometric openings formed an integral part of this urban design. IG's prefabricated components facilitated the large scale bullseye details with a simplistic design that provided ease of installation. The two piece design for larger installations enabled much safer handling onsite, well suited for construction in Central London.

Nick O'Keeffe
Director Lesterose Builders Ltd



Artists impression of
the original concept theme.
Illustration by Peter Hull

Original School Buildings



New School Development

Dixon Jones

Paul Jolly RIBA
Associate Director
Dixon Jones

Through their involvement in a wide range of work, Dixon Jones has established collective experience of different project types, scales, clients and methods of procurement. Each commission is developed in response to the particular context and client requirements, from the private house to complex mixed use developments and masterplans. They have a particular interest in the civic contribution that buildings make to the city; the potential to connect internal and external public space and define new routes. Many of the projects are places for the arts, education and music or residential and commercial buildings in sensitive urban sites and existing listed buildings.

dixonjones.co.uk

Church Road Belfast

Products Used

Brick Slip Soffit Panels
& Brick Slip Lintels

WINNER
BRICK AWARDS
Best Housing Development
2015

Brick Awards

Private Dwelling

Church Road, Belfast

Architect

Hall McKnight Architects

Contractor

Strong Construction Limited

Overview

The property on Church Road demonstrates an urban approach to modern architecture. Brickwork elements formed an integral part of the design, utilising a single red brick type throughout the development. The underside of the first storey at the property's entrance required intricate brick detailing. IG Masonry Support facilitated the seamless continuation of the brickwork onto the soffit. IG designed a brick soffit panelling system that could easily achieve the masonry soffit. The series of interconnecting panels provided a lightweight prefabricated solution allowing a fully clad 20m^2 brick soffit.

The design and realisation of this house was impressive. The brickwork elements were well proportioned and integrated to dramatic effect.

Judges' Comments
Brick Awards 2015

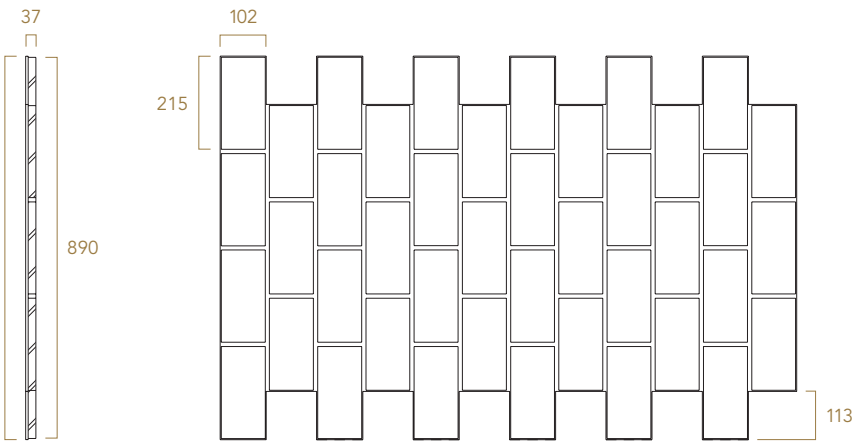
Challenge

The property on Church Road presented very complex brickwork elements. Attentive to every detail, each elevation is composed of distinct forms, defined by deep recesses in the façade. The first floor protrudes out above the entrance to the property. The brick reveal on the underside of the cantilever required a brick slip cladding system in order to achieve the detailing specified within the architect's designs. IG Masonry Support was approached for a multitude of prefabricated brick slip soffit panels to achieve the bond pattern required for the 20m^2 masonry soffit.

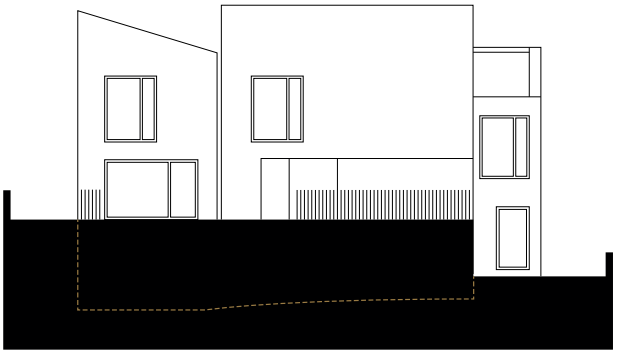
Solution

IG Masonry Support designed 26 brick clad soffit panels to achieve the brick detailing required for the deep soffit reveal above the entrance. The prefabricated units were manufactured offsite and delivered complete with bricks bonded. The lightweight panels facilitated fast and efficient installation, allowing the seamless continuation of brick on the underside of the cantilever. Achieving a seamless transition between onsite and offsite building materials, the interconnecting soffit panels collectively achieved the brick soffit detail. Strong Construction Limited installed the units, fixing them to the timber substructure with screws. The stainless steel screws were positioned within the mortar joints and hidden once pointed.

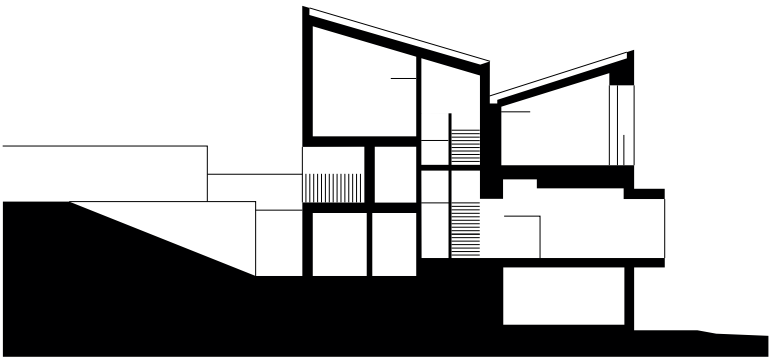
The completed installation achieved the stunning deep brick soffit detail to great effect. The property became the deserving winner of the Best Housing Development 1 - 5 Units Award at the 2015 Brick Awards; this is a tribute to the unique design and craftsmanship required to deliver it.



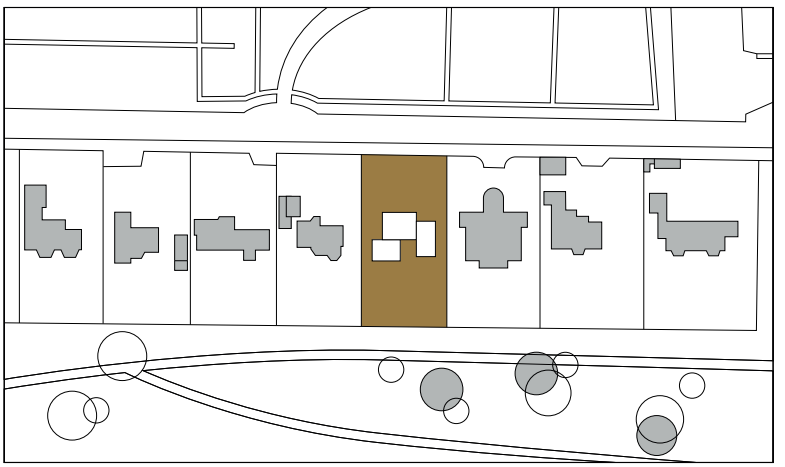
Brick Slip Soffit Panel



East facing elevation



North facing elevation



Plan view

Peabody Burridge Gardens St. John's Hill

Products Used

Brick Slip Masonry Support & Brick Slip Lintels

WINNER
BRICK AWARDS
Best Large Housing Development 2016
Brick Awards

WINNER
BHA
Development of the Year 2017
British Homes Awards

WINNER
RIBA
London Regional Award 2017
RIBA Awards

Residential Development
Peabody, Burridge Gardens, St John's Hill

Architect
Hawkins\Brown

Contractor
SISK

Brickwork Contractor
Lee Marley Brickwork

RIBA

Overview

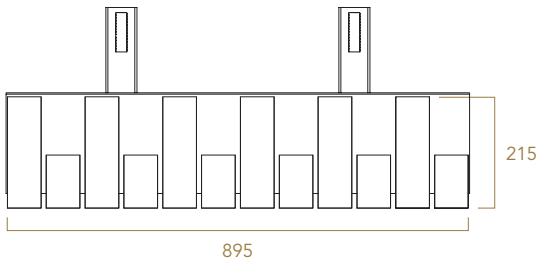
Peabody, St John's Hill is a regeneration project, transforming the original estate in Burridge Gardens to create modern living spaces. The large scale development was constructed in three phases that collectively rejuvenate the area.

An extensive range of brick types provide each block with distinct identity. The combination of dark engineering bricks with the glazed yellow brick type achieves an elegant vibrance to the otherwise industrial feel of the development. The use of contrasting brick types continues throughout the project.

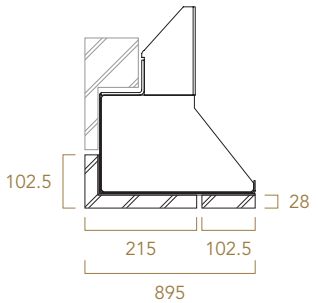
Lee Marley Brickwork worked closely with IG on the project to deliver a high quality finish. Their installation team were instrumental in creating a seamless façade, in line with the vision of the client.

Challenge

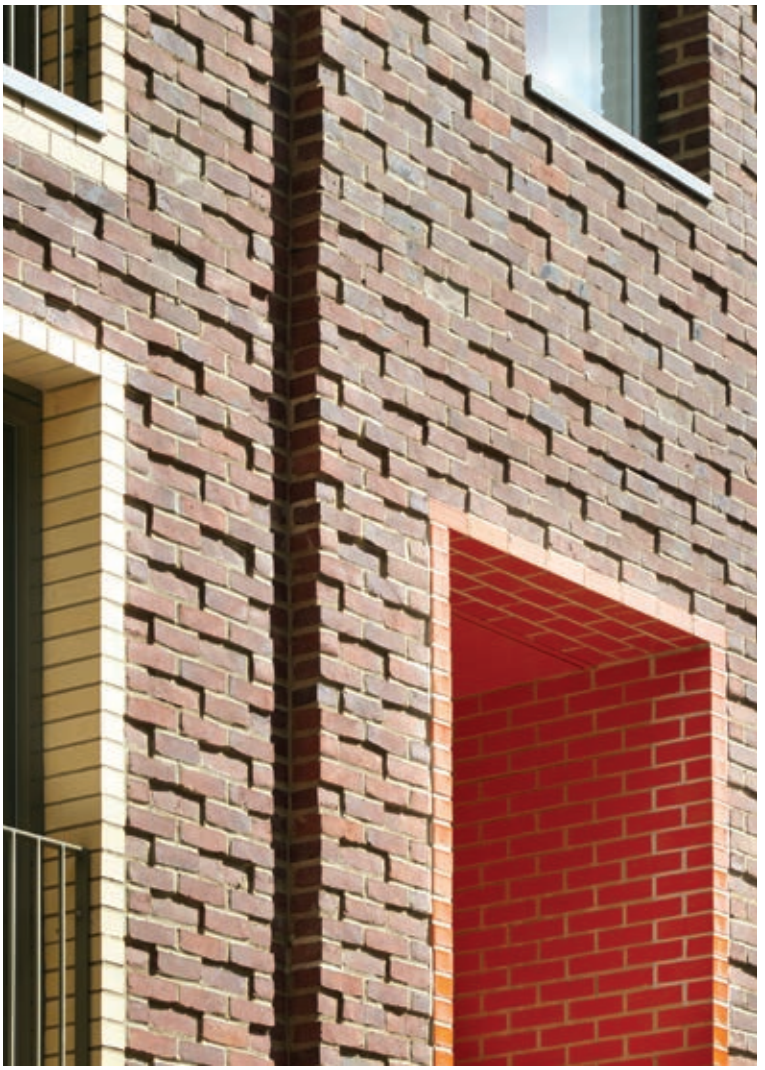
IG's technical team developed a system to accommodate a range of different cavity widths, including some over 300mm wide. Each residential block is distinguished by numerous brick types and bond patterns. The diverse range of brick slip components accommodate a combination of industrial engineering bricks and various glazed brick types. The challenge on this project was to develop a system that could allow for stretcher on end bond pattern and also develop a damp proof course detail to accommodate the staggered bricks.



Elevation



Section view



The offsite brick slip components produced by IG worked perfectly alongside traditional onsite methods to achieve the architect's design for this impressive façade.

Lee Marley
Managing Director
Lee Marley Brickwork

Solution

IG's brick slip system offered an offsite, lightweight solution capable of accommodating any bond pattern. The development required a combination of brick slip lintels and brick slip masonry support. Utilising prefabricated components helped speed up the pace of construction, reducing onsite labour.

Produced offsite, IG's components are manufactured within a strict quality controlled environment. Components were delivered to site as required ready for installation and final pointing.

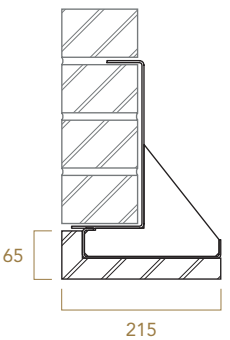
IG developed a unique damp proof course detail, accepted by both Architect and NHBC, allowing the half lap bond pattern to proceed. Please contact IG for details of this system.

Hawkins\Brown

Hawkins\Brown is an internationally renowned award winning practice of over 250 architects, interior designers, urban designers and researchers.

Founded in 1988, it designs and delivers innovative and socially sustainable buildings across multiple sectors.

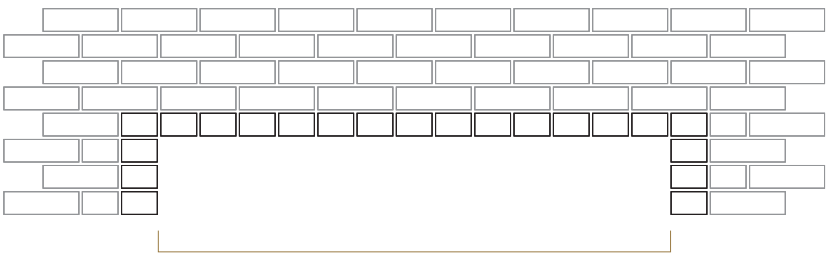
hawkinsbrown.com



Section view

In total IG Masonry Support supplied over 100 metres of BBA approved, Brick Slip Lintels to the Peabody, St. Johns Hill project.

The below profile incorporates a stainless steel channel section. This is IG's Heavy Duty profile. A Standard Duty and Extra Heavy Duty profile also exists. As standard each brick is cut to 25mm thick and then bonded, in IG's factory, to the stainless steel lintel. A BBA approved epoxy adhesive, designed specifically for bonding bricks, is used in the process.



Elevation

Structural opening

Performance

BBA Certification for
B.O.S.S.® Bolt on Soffits

BBA Certification for
High Performance Adhesive

Exova

LUCIDEON

British Standards Institution
ISO 9001

British Standards Institution
ISO 14001

CE

NHBC

Material Specification

The perforated soffit plates, gusset plates and channel are manufactured using austenitic stainless steel to BS EN10028-7: 2016 Grade 1.4301/1.4307 or Grade 1.4301/1.4307 HR. The steel sections of the system are CE marked and manufactured in accordance with BS EN 1090-1: 2009.

Fire Testing

Having undergone fire resistance testing utilising BS EN 1363-1: 2012, IG Brick Slip Lintels have achieved a two hour fire performance certificate.

During the fire test undertaken by Exova Warrington Fire Research, IG's lintel was judged on its ability to support the applied load and failure was deemed to occur; until either the lintel collapsed or the test load could not be maintained at a constant rate. Failure was also deemed to occur if the brick slips de-bonded from the steel lintel.

The product was tested for 132 minutes in total and the lintel continued to satisfy the test criteria, while the brick slips remained in place and intact throughout the test.

Patented Mechanical & Chemical Bond

The patented perforated steel in an IG Brick Slip Lintel allows the adhesive to squeeze through the perforations and form a 'mushroom' on the inside, providing a mechanical and chemical bond between the steel lintel and the bricks.

Simulated Weathering & Freeze Thaw Cycling Pull Tests

IG has assessed the performance of the bond between the brick slip and lintel after simulated weathering and freeze thaw cycling. Due to the results of this comprehensive testing, IG was the first manufacturer to be awarded a BBA certificate for bricks bonded to steel lintels.

Controlled Conditions

IG Brick Slip Lintels are produced offsite in a factory environment which ensures that the bonding process occurs in optimum controlled conditions free from wet weather, extreme temperature and excessive dust.

Lucideon Building Technology

Independent testing carried out by Lucideon has verified that in destructive testing there were no failures in the steel/adhesive interface.

Test Report No. 131830 &
Test Report No. SW238/02

NHBC Standards 2014

NHBC accepts the use of IG Brick Slip Lintels, provided they are installed, used and maintained in accordance with the BBA Certificate, in relation to NHBC Standards, Chapter 6.1 External Masonry Walls. Extract from IG Brick Slip Lintels BBA. Cert 15/5250.

BBA Certification

BBA Cert. 15/5250 (Product Sheet 1)
Certification for IG Masonry Support's Brick Slip lintel. IG was the first manufacturer to be awarded BBA certification for bricks bonded onto a steel lintel. Within the scope of this BBA is the standard, heavy and extra heavy duty range.

BBA Cert. 15/5250 (Product Sheet 2)
Certification for IG Masonry Support's B.O.S.S.® Bolt Up Soffit System. Within the scope of this BBA, B.O.S.S.® has 4 typical profiles each with a different bond pattern. For further information on IG Masonry Support's BBA Certification please visit our website.

BBA Cert. 12/4893
Certification for the epoxy adhesive IG Masonry Support uses on all their brick slip products. This epoxy adhesive is manufactured by ChemFix Ltd and has been specifically engineered for the brick industry.

IG | Masonry Support

IG Swadlincote

Ryder Close
Cadley Hill Industrial Estate
Swadlincote
South Derbyshire
DE11 9EU

T 01283 200 157
F 01283 226 616
E support@igmss.co.uk

IG Ireland

Ballyreagh Industrial Estate
Cookstown
Co. Tyrone
Northern Ireland
BT80 9DG

T 028 8676 0334
F 028 8676 1011
E info@igmss.co.uk

IG Cwmbran

Avondale Road
Cwmbran
Gwent
NP44 1XY

T 01633 486 486
F 01633 486 465

igmasonrysupport.com

Masonry Support Helpline
01283 200 157