

DESIGN

from IBSTOCK BRICK

Spring 2016

In this issue: Elder & Cannon,
Anderson Orr, STAC Architecture,
Patel Taylor, Associated Architects,
plus detailing brick soffits and
Ibstock's Swanage Brickworks





Nando's restaurant, Hove, by STAC Architecture

DESIGN

from IBSTOCK BRICK

IBSTOCK

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Ibstock Update

STATE-OF-THE-ART BRICK FACTORY GETS PLANNING PERMISSION GREEN LIGHT

Ibstock is set to bring an additional 100 million bricks per year to the UK construction market, having secured planning permission to proceed with the development of a new state-of-the-art manufacturing facility at its existing site on Leicester Road in Ibstock.

As well as boosting employment opportunities in the area, Ibstock's multi-million pound investment will make a significant contribution to satisfying increased UK market demand for bricks. Ibstock's ability to manufacture an additional 100 million bricks annually at the site using local clay reserves will be equivalent to the quantity required to build approximately 15,000 homes each year.

As well as meeting the growing demand for bricks, the extended production facility will generate 50 new jobs to supplement the 340-strong Ibstock workforce in the area, helping to provide long-term and sustainable employment opportunities in the region.



Andrew Halstead-Smith, group marketing manager at Ibstock, says: "Our Ibstock site has a 200-year history of brick production and throughout this period the company has continued to invest to ensure the ongoing quality of our market-leading brick products. The new facility will be the world's most modern brick factory, using the very latest technologies to optimise production capability and reduce energy consumption. It is an exciting development both for Ibstock and the surrounding area, helping to generate new employment, secure existing jobs and enable us to upscale our production to meet the increasing demand for quality, UK-made bricks."

The new factory is expected to start production by February 2017.

MAKING LIGHT WORK OF BRICK SOFFITS

Creating brick-faced soffits and lintels could become simpler and quicker, thanks to a new lightweight stainless steel-based system from Ancon Building Products and Ibstock Kevington. 'Nexus' combines a specially developed Ibstock Kevington lightweight brick-faced stainless steel unit with Ancon's MDC stainless steel bracket angle support system. The system offers easier handling coupled with maximum adjustability, both vertically and horizontally, for quick and simple alignment on site.

Above
Ibstock's Leicester site.

Below
Nexus soffit at Haworth
Tompkins' Peabody
Silchester Estate project.



The new system offers significant benefits over traditional cast concrete alternatives – cutting weight by more than half, which in most cases will allow the brick-faced units to be installed without specialist lifting equipment, and saving installation time – making it particularly appropriate for fast-track or time-limited projects.

Individual Nexus units are designed and prefabricated off-site to suit different soffit dimensions, even modern deep soffits, so there is no cutting required on-site. They are simply offered up to the pre-fixed and pre-drilled Ancon MDC support system and bolted into position. The design allows units to be simply adjusted for alignment and, once in position, the brick facing is pointed.

Nexus units can be fabricated using almost any brick or masonry, with the chosen product being selected and precision cut, generally from the same batch as the main facade to ensure a perfect visual match. Various brick patterns can also be specified to match individual project designs and styles.

All system components are high quality and engineered for economy and durability, with slips

permanently fixed to the high-grade stainless steel Nexus system using a BBA-accredited bonding system. Nexus has been tested for long-term durability by Lucideon, the independent materials testing and analysis consultancy.

Ibstock Kevington sales director, Warren Dean says, “Nexus is an exciting new development that brings together the experience and expertise of two major companies – each market leaders in their own area. The advanced design will not only make it easier and quicker to specify and install modern brick-faced soffit and lintel features in a range of different building applications, but the two-part design means it will be far easier to achieve perfect alignment with the main brickwork facade.”

Further details and technical specifications for the Nexus® system are available download from www.ancon.co.uk/Nexus.

INVESTMENT IN NEW MIDLANDS CUTTING CENTRE AT IBSTOCK BRICKWORKS

Ibstock has opened a state-of-the-art cutting centre at its Chesterton brickworks as part of an ongoing investment programme. The installation of the fastest slipsaw in the UK – capable of processing 8,000 bricks a day – has resulted in doubling of production at the site, and increased staff numbers.

Ibstock’s Chesterton site specialises in custom-made bricks from the Ibstock Kevington range of special

shapes and prefabricated solutions, including Faststack, Fastwall, arches and underslung soffits. Iain Durrant, operations director at Ibstock Kevington, says: “Our Chesterton factory is well placed to support the supply of our specials across the UK. Many construction professionals are seeking ways to speed-up build timescales, and the investment supports our range of products and solutions that can do just that. Chesterton is one of the most efficient factories of its type in the world and the new cutting centre adds to what it offers to meet demand across construction.”





Anchoring Birmingham City campus

Forming a new 'front door' to Birmingham City University's City Centre Campus, The Curzon Building has been completed by Associated Architects'. The imposing scale of the project is tempered by the finesse of its detailed design, which includes extensive use of brick. Photos: Martine Hamilton Knight.

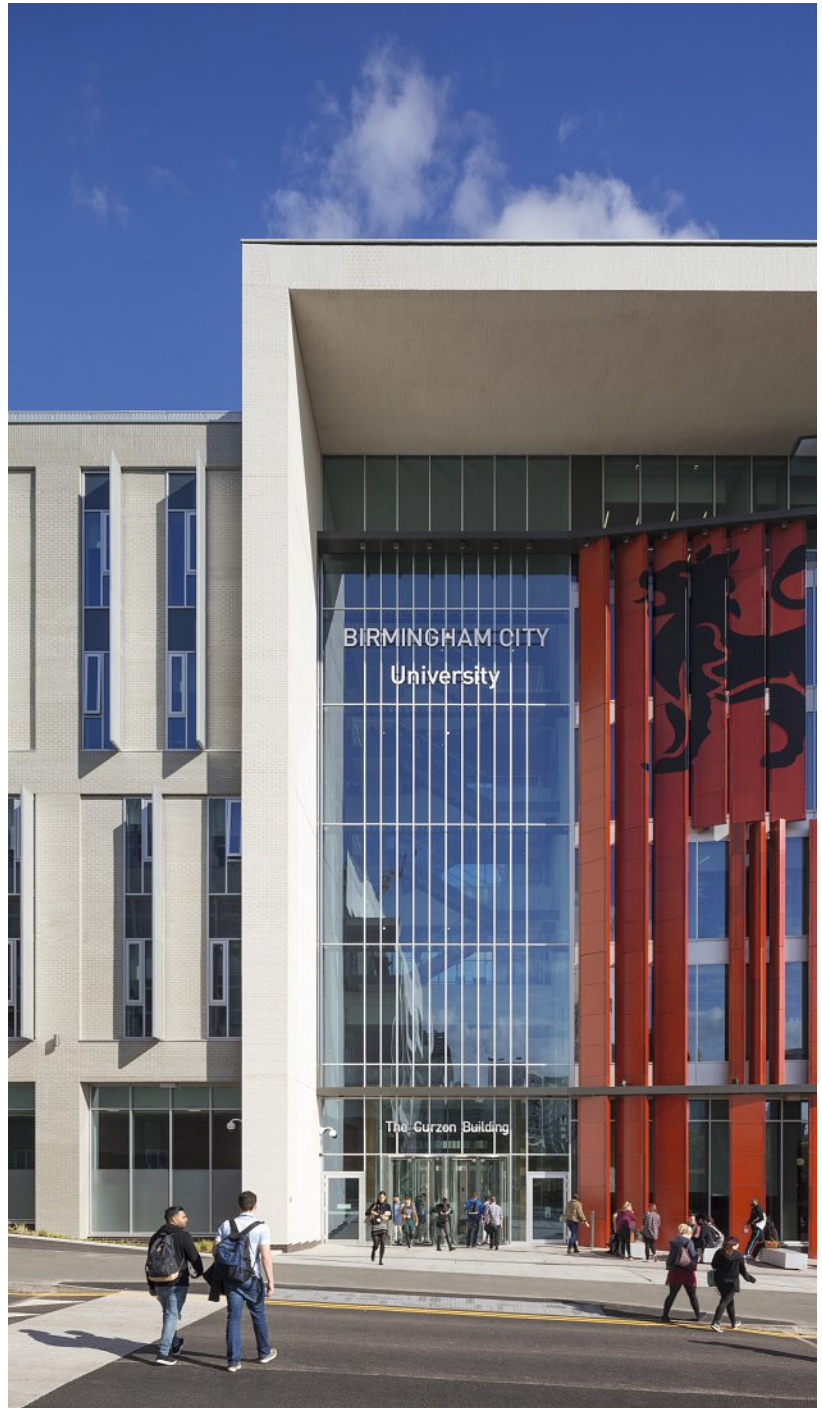


Visible from the West Coast Main Line railway as it approaches Birmingham, and on the eastern axis of the new City Park, The Curzon Building is the second phase of Birmingham City University's extension of its City Centre Campus. The building is designed to be a 'front door' for the university and to form a distinctive landmark at the eastern end of the park, in line with the aspirations set out in Birmingham's 'Big City Plan'.

This 22,000 square metre building acts as a student hub for the campus, providing facilities including a library, catering, student services and a student's union, incorporating the grade-two-listed Eagle & Ball public house. It also provides accommodation for the Faculty of Education, Law & Social Sciences, and Birmingham City Business School.

The building's two wings of accommodation, following Cardigan and Curzon Streets, are linked by a six-storey glazed atrium. In accordance with the city masterplan, the building has five occupied storeys on Cardigan Street and six on Curzon Street at the end of the park. A two-storey element of larger footprint contains the student hub around a secondary atrium engaging the public house. External space to the east is accessible from within the building to extend the use and enjoyment of the canal environment.

Low-energy targets are met by a high-performance envelope and by engaging the thermal mass of the structure. Mixed-mode ventilation with opening windows ensures excellent internal conditions with user control. A biomass boiler and adiabatic cooling help achieve a Breeam Excellent rating and Energy Performance Rating of A.

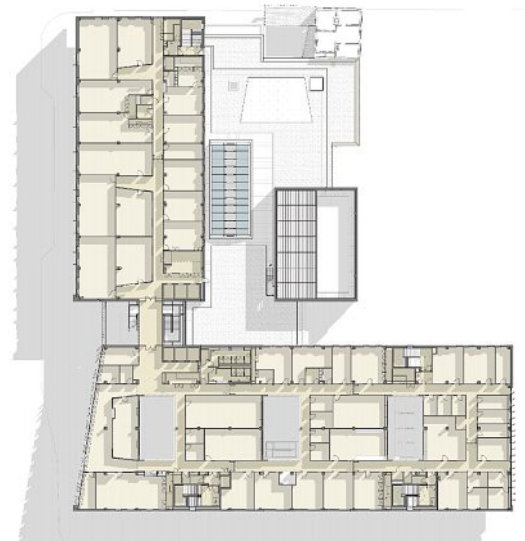


Left

The entrance portal, reaching to six storeys in height, establishes the building as a focal point for the campus.

Right

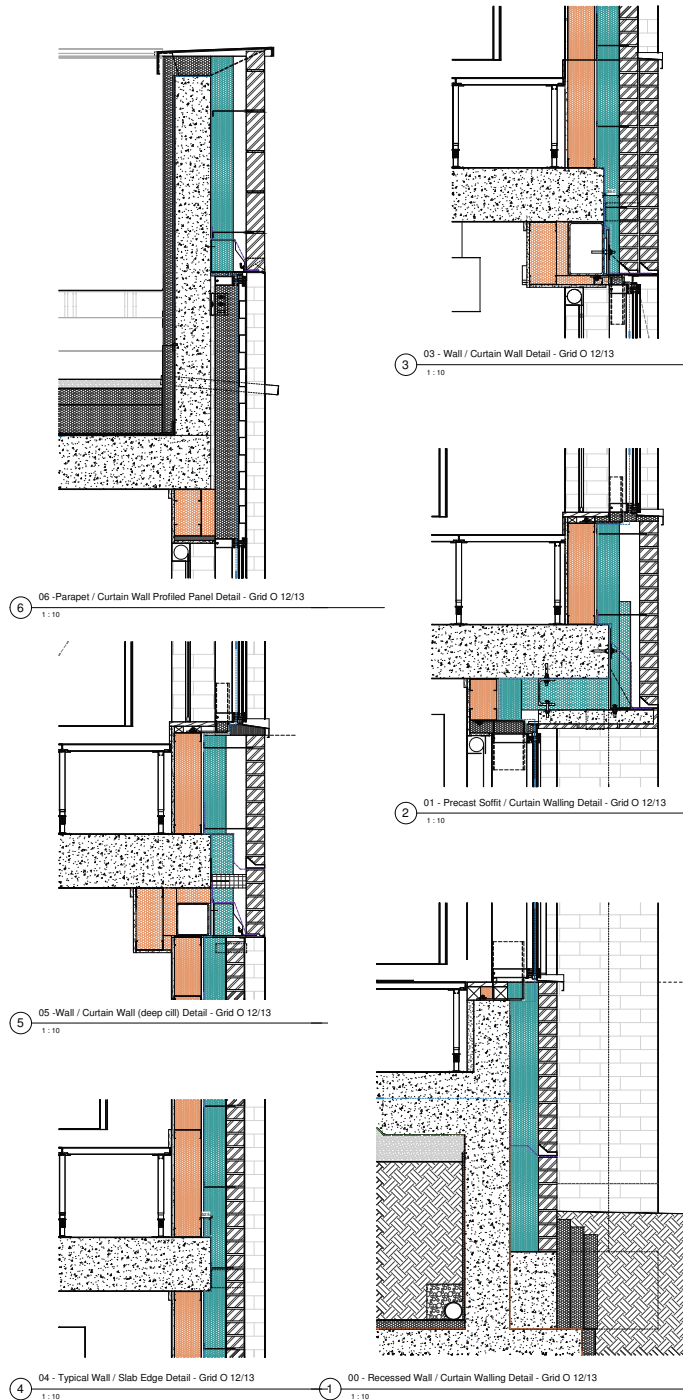
The Curzon Building is located on the north-east side of Birmingham city centre, adjacent to the rail line as it approaches the recently revamped New Street Station. Ground and second floor plans.



Brick is used extensively to face the principal elevations, forming a white brick wing to the south and a contrasting grey brick wing to the north. Both wings follow a similar composition of large brick piers to the ground floor incorporating black brickwork and large glazed areas to the setbacks. Upper floors are characterised by regular setback bays and an alternating pattern of punched window openings. A 1200mm thick band of vertical stretcher bond is used to form a consistent detail around the parapet. This was constructed using a combination of traditional brickwork and a brick slip system. The same slip system was also utilised internally to visually continue the external facade into the central atrium.

In contrast to the more uniform appearance of the brick colours to the main building, reclaimed stock bricks and lime mortar were used to reconstruct areas of the dilapidated grade-two-listed public house. Working closely with the conservation officer, care was taken to rebuild in the spirit of the original building, replicating the brick bonds and detailing around openings.

A key external design element is a six-storey white brick-clad arch facing onto the park. The arch incorporates a 40-metre-long brick slip-clad soffit and frames an angled glass facade with richly coloured red terracotta shading fins. Responding to the client's brief and the aspirations of the city planners, this grand gesture delivers a big visual impact to the end of the park, and forms a clear 'front door' for the university.



Left
External envelope section details showing brick facings.

Right
The structural grid is expressed in the brick facades by recessed panels, some of which are blind, while others incorporate windows and spandrels.

**BUILDING**

The Curzon Building,
Birmingham City University

BRICKS

Ibstock Oyster White
Ibstock Ravenhead Red Smooth

ARCHITECT

Associated Architects

MAIN CONTRACTOR

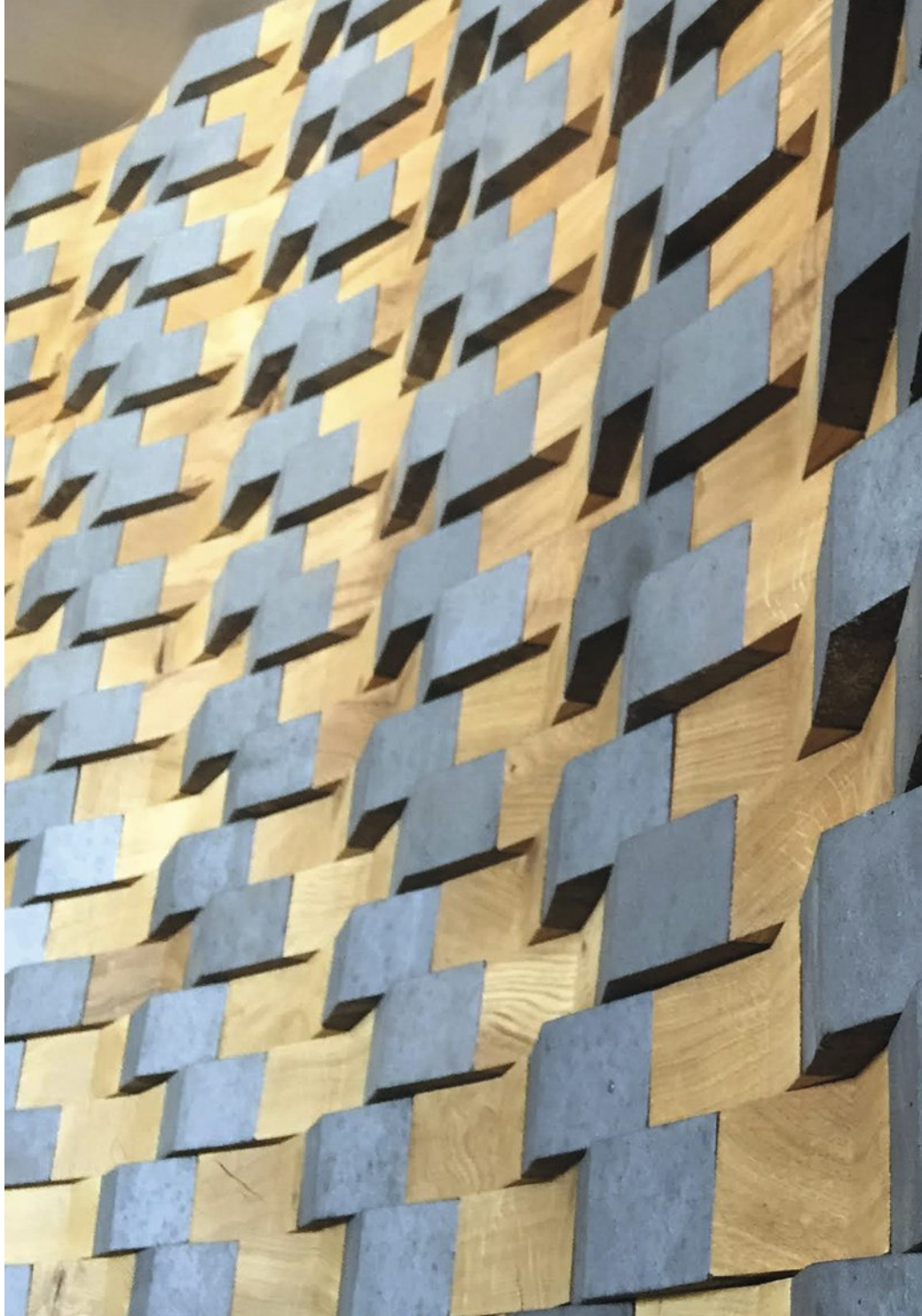
Wilmott Dixon Construction

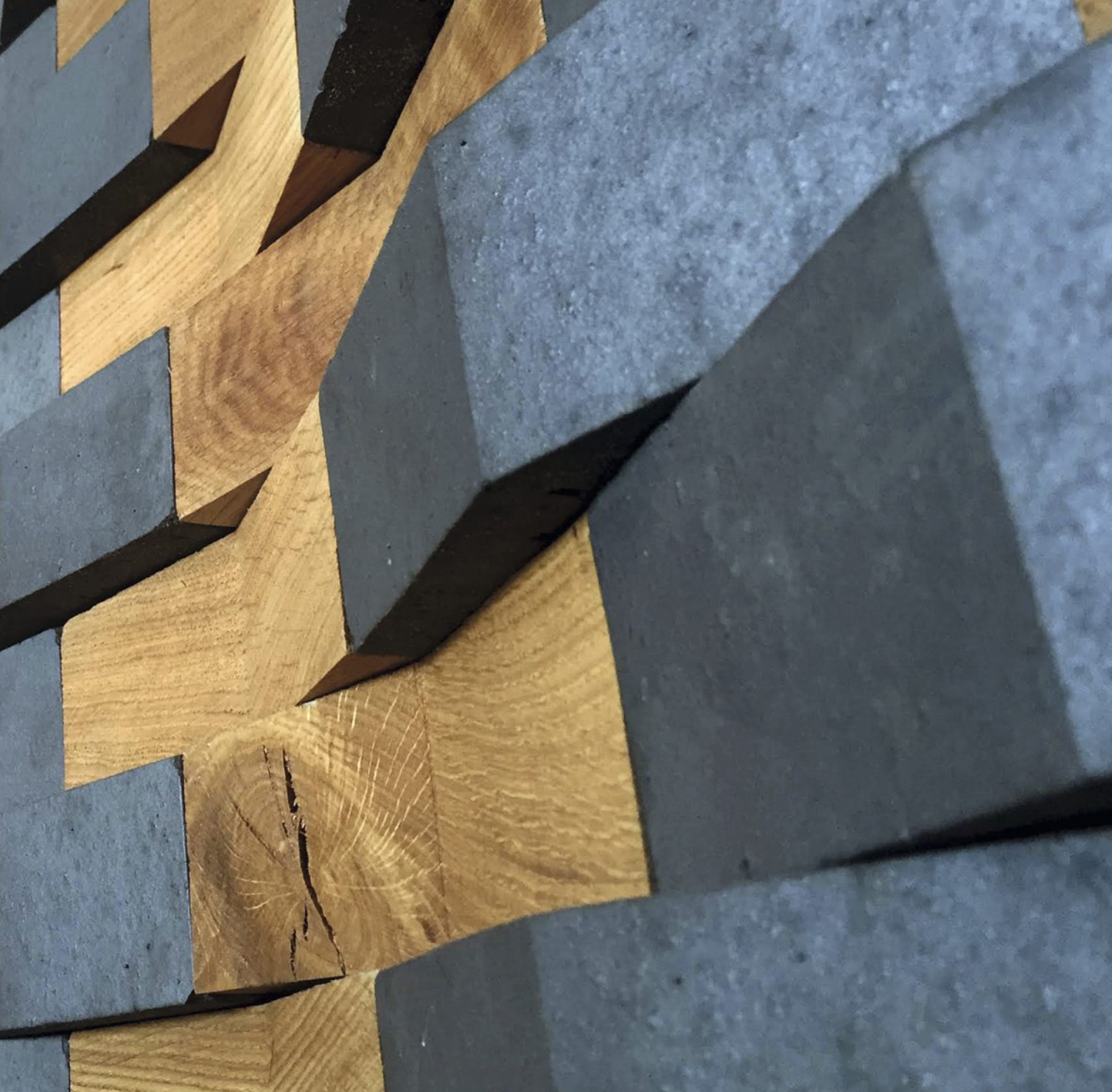
PHOTOGRAPHY

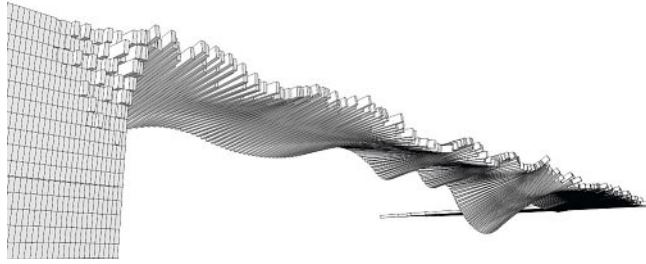
Martine Hamilton Knight

Architectural Ingredients

STAC Architecture's new restaurant for Nando's in Hove, East Sussex, makes local references in both its design form and its materials. Dark linear brickwork evokes the colour of beach pebbles, while extensive use of oak references a shipwreck that resulted in its timber cargo floating ashore. Together both dark brick and oak are inventively combined in decorative walls and panels throughout the interior spaces.







The concept for the design of the new restaurant for Nando's in Hove stems from the memory of a shipwreck off the Dorset coast in January 2008. Following the sinking of the Ice Prince, much of its cargo of more than 2000 tonnes of timber eventually washed up along the south coast, resulting in random but striking formations, most notably at Worthing beach.

STAC Architecture's intention was to recreate some of the movement and organic natural forms while acknowledging the memory of this spectacular event. The decision was taken to work with unfinished character oak externally, which will weather naturally over time, paired with a black brick that is reminiscent of the black pebbles strewn across the coastline.

After extensive research to find the optimum brick for the project, STAC came across Ibstock's Linear collection. Thinner and longer than standard bricks, this gave a more contemporary character to the exterior walls. The brick also features small depressions along the external face, as if 'eroded'. The Black Impression brick was used alongside the natural blue Umbra Sawtooth and copper glazed Umbra Sawtooth, and in conjunction with thousands of bespoke oak 'bricks' to create various features throughout the restaurant.

Externally the Linear Black Impressions were used in stack-bond format with bespoke corner bricks. Internally they were used to create an entrance draft lobby. "We had a bit of fun with the lobby and created a compound curved brick wall – this can be experienced from both sides and it is nice to see the manufacturer's stamp on the rear of the brick



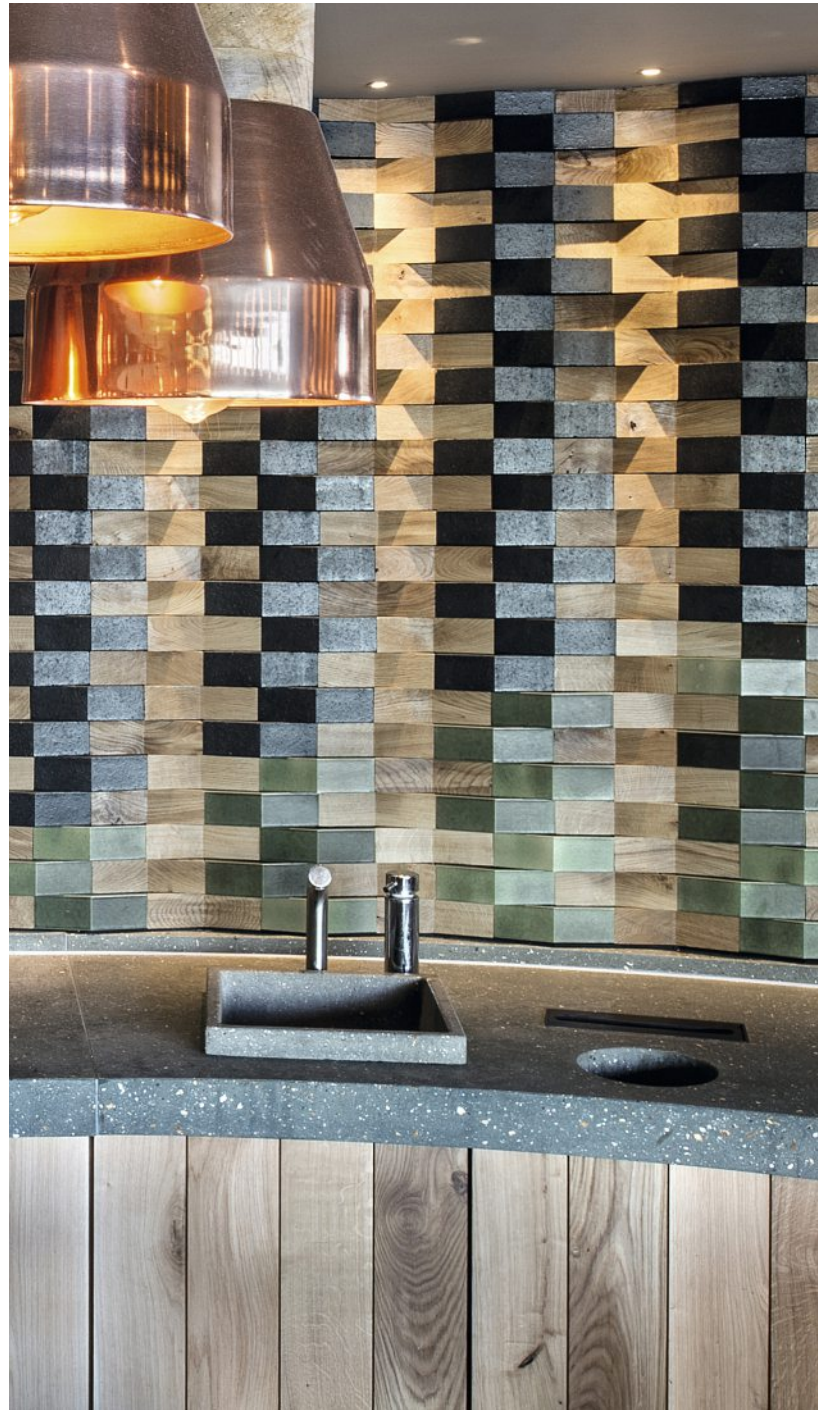
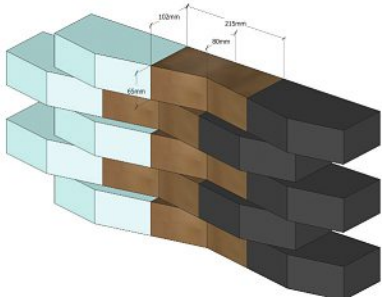
Left

The 'fan' of timber planks forms a distinctive canopy that marks the restaurant entrance and shelters an outdoor seating area.

Right

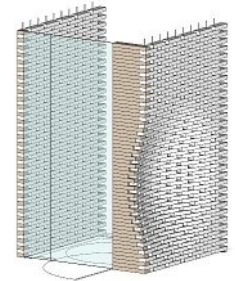
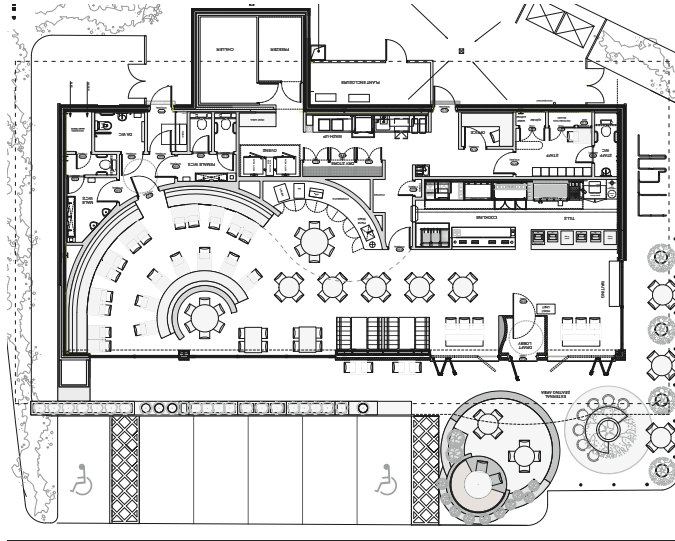
Traditional clay and oak 'bricks' are stacked to form internal walls. Timber is employed in the project in reference to a 2008 shipwreck after which tons of lumber were washed up on south coast beaches.





when one arrives”, says STAC’s Paul Thrush. The stacked brickwork incorporates curved reinforcement bars fixed at the base and head as well as being resin bonded to one another. This meant traditional mortar joints could be avoided, and provided a cleaner, more contemporary appearance. The ends of the lobby wall are complemented by oak bricks of varying lengths to provide fixing points for the frameless glass doors.

Visitors entering the main restaurant space are presented with a feature wall made of thousands of saw-tooth bricks, some copper glazed, that are used in conjunction with CNC’d oak bricks. The oak bricks are the same size as the saw-tooth but have a negative tooth rather than the bricks’ positive angled face. Together they create a zig-zag wall that forms a striking backdrop to the restaurant.



Above
Floor plan and entrance lobby isometric.

Left
The entrance lobby features open brickwork and timber blocks.

Right
The architect has exploited the modular nature of the bricks to design a 'swollen' wall that projects into the lobby space.

BUILDING

Nando's Restaurant, Hove

BRICKS

Ibstock Linear Black Impression
Ibstock Blue Umbra Sawtooth
Ibstock Copper Glazed Umbra Sawtooth

ARCHITECT

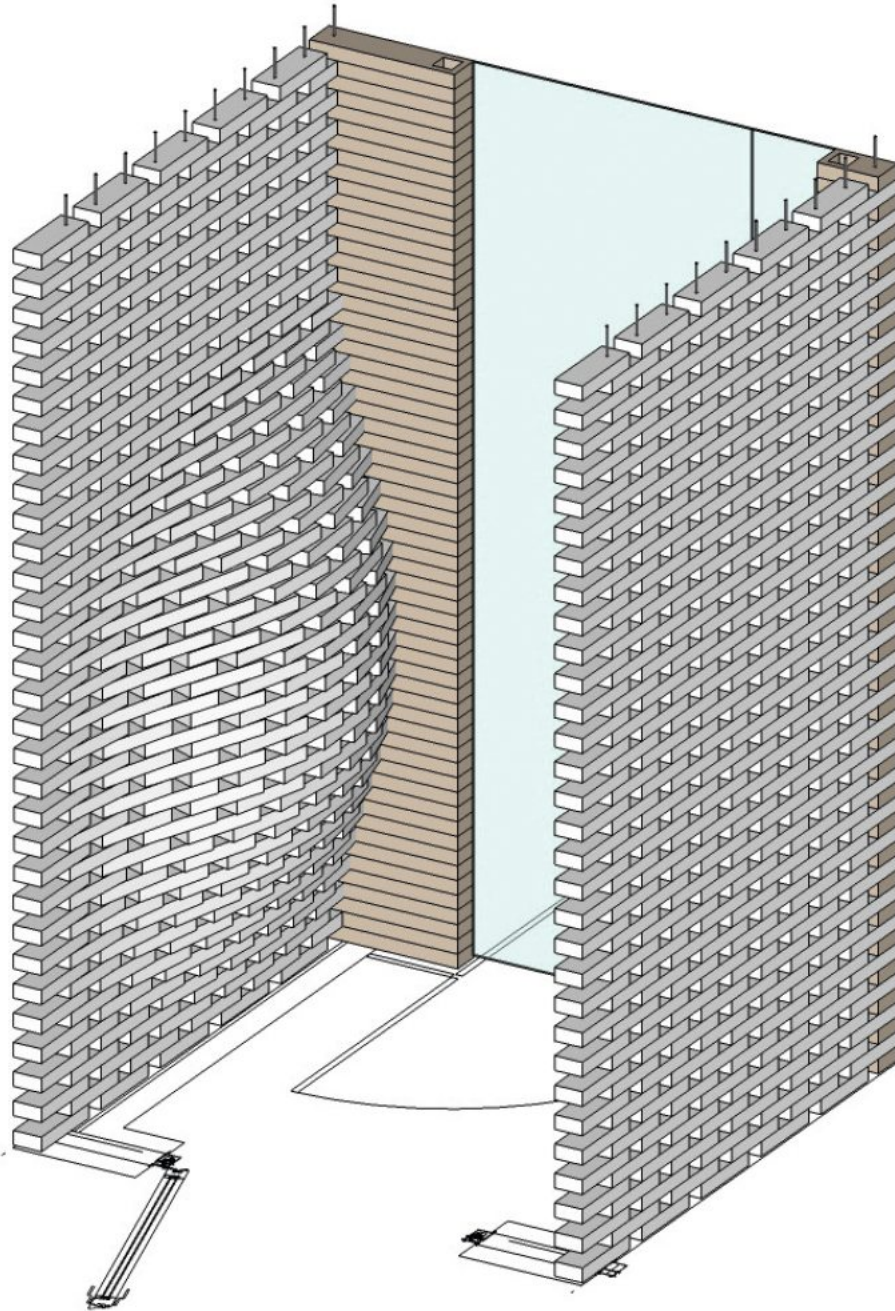
STAC Architecture

CONTRACTOR

The French Group

PHOTOGRAPHERS

Jonathan Banks (Photobanks),
James Parsons



Learning from the Tenement

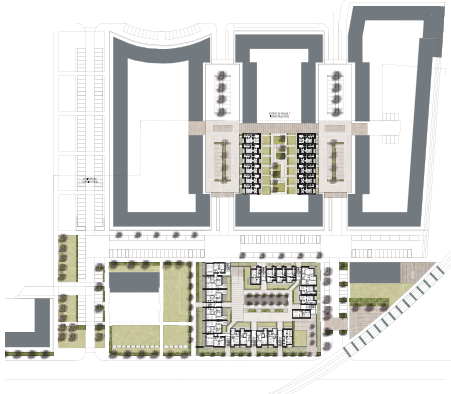
The Laurieston Gorbals district of Glasgow once consisted of streets of tenements that were torn down in the 1970s to be replaced by system-built high- and low-rise estate blocks. Flawed socially and in terms of thermal performance, these blocks are now being replaced by new buildings which draw on some of the merits of the original tenements.





A major £22m development of 200 affordable homes forms the first part of the regeneration of the Laurieston area of Glasgow. Working within a larger masterplan by Page & Park, the architect of this phase of the development, Elder & Cannon, was asked to design 88 units, including the prominent southernmost flatted block and two housing terraces.

According to Elder & Cannon, the key challenge was to create a sustainable development that rationalised the eccentricities of the southern site edge – responding to the railway line, the busy environment of Cumberland Street and the edge condition to the new park – and create an ‘object’ building of an appropriate stature to form a gateway partnership with a future building on the south-west corner of the masterplan.

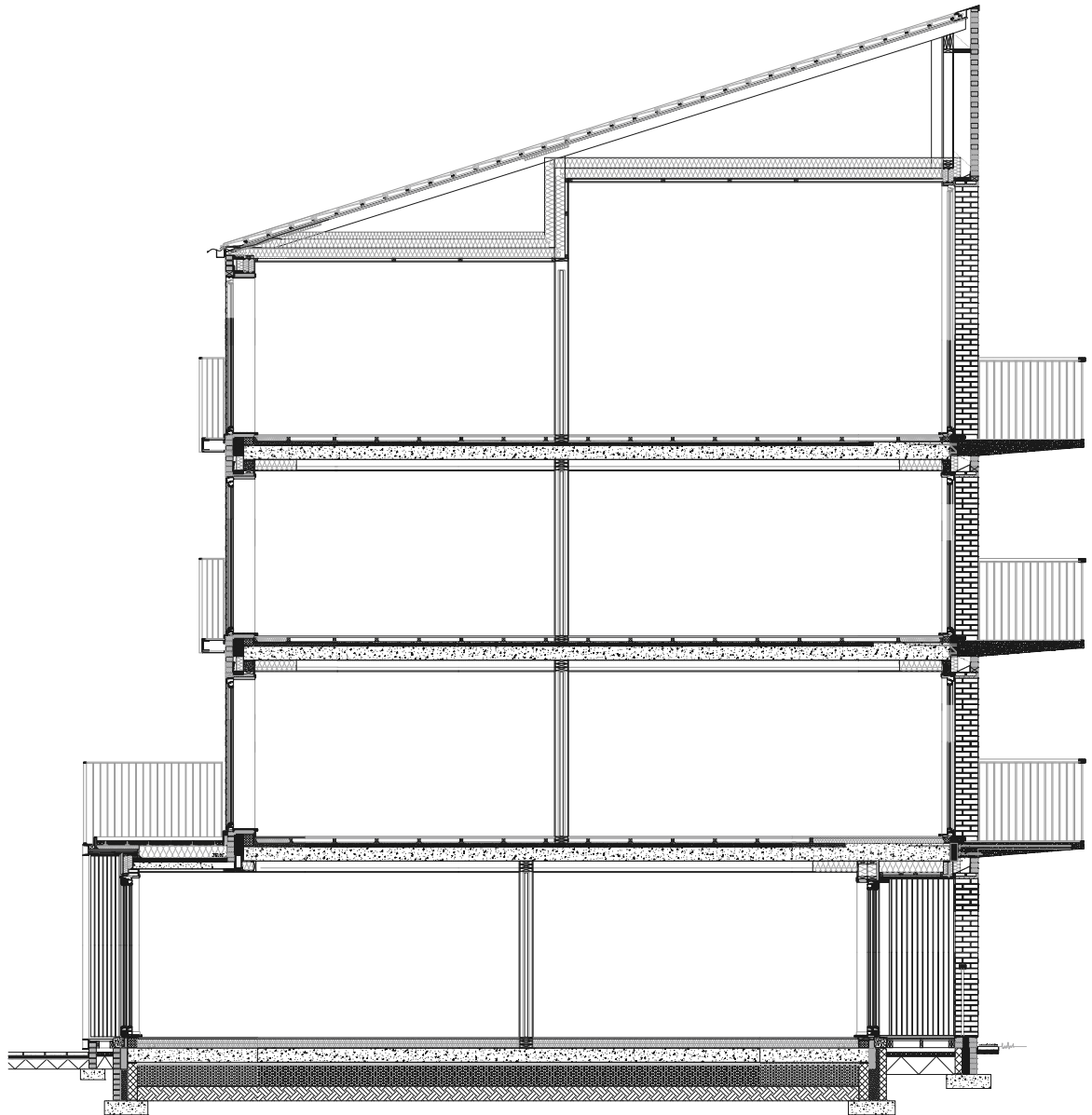


Left

The Laurieston district was cleared in the 1970s as part of the Laurieston-Gorbals Comprehensive Development Area with multi-storey tower blocks and some low-rise terraces replacing the run-down tenement buildings. The new Laurieston Transformational Regeneration Area, one of eight designated in Glasgow, incorporates much of the Laurieston-Gorbals CDA area.

Right

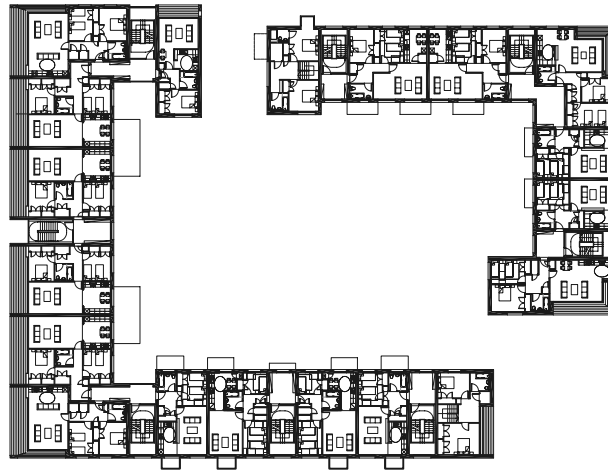
Constructional cross section through typical block.



The block was envisaged as a contemporary interpretation of the traditional four-storey Glasgow tenement, where identity is derived from control of detail, scale, proportion and materiality. Its success, says Elder & Cannon, is reliant upon the continued inclusion of the primary architectural elements, well proportioned windows, balconies, porches and appropriate quality to the primary materials of buildings and landscape.

In response to the proximity of the railway, the block breaks to form two new entry courtyards and L-shaped legs of accommodation which enclose a larger amenity courtyard. The north-eastern leg responds to the street and new public space created, accommodating maisonette homes with flats above. The south-western leg responds to the southerly aspect, generates a landscape buffer to Cumberland Street and addresses the garden and play area to the west. The blocks contain a wide mix of flats from one-bed up to six-bed arrangements to meet the mix requirements requested by New Gorbals Housing Association, rationalising these into a unified form through careful planning.

The courtyard terraces to the north are occupied by two- and three-storey homes arranged as linear blocks addressing shared surface courts with amenity space to the rear. The houses are three- and four-bed units. They adopt a similar materiality as the main block and prioritise rigour, scale and proportion as devices to control and order the elevation.

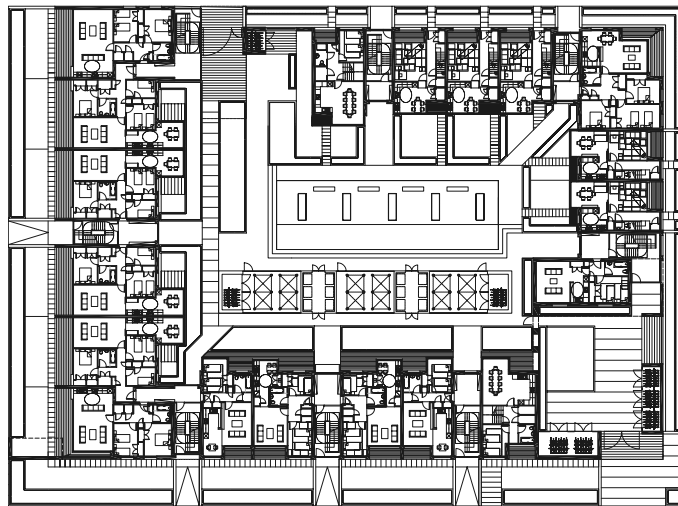


Left

Ground- and second-floor plans showing the open courtyard arrangement.

Right

Brick lends an overall coherence to the scheme while allowing for individual variation of windows and balconies. The project has achieved an Ecohomes 'very good' and energy use will be monitored during its first two years of habitation, with feedback given to tenants.





BUILDING

Laurieston Phase 1,
Glasgow

BRICKS

Ibstock Nevado Geel Gesmoord
Steenfabriek Facade Beek
Silverstone Daas Backsteen

ARCHITECT

Elder & Cannon Architects,
Page\Park Architects

MAIN CONTRACTOR

McTaggart Construction



PHOTOGRAPHER

Andrew Lee

The Almshouse Reconsidered

Patel Taylor's sensitive project provides low-rise, small-scale homes for the elderly, each with a small courtyard and opening onto a central communal space. By relocating tenants from larger family homes, The Lawns will also help Barking & Dagenham rebalance its housing provision.





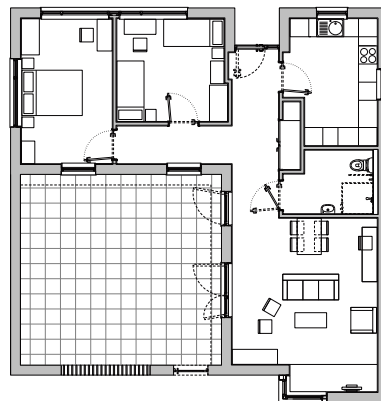
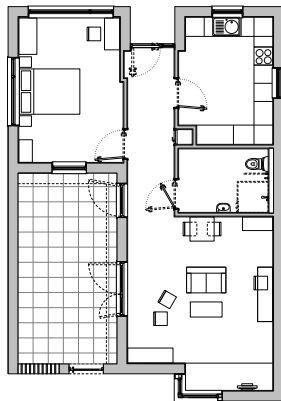
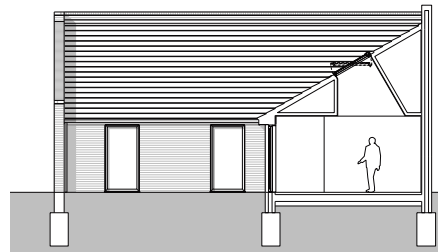
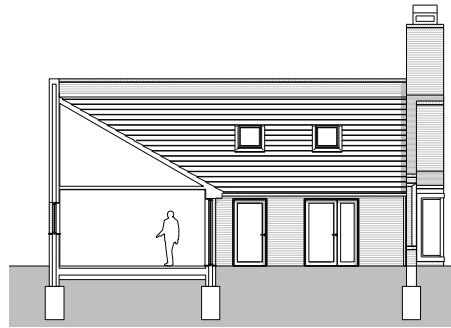


Right/below

Cross sections and plan variants of the one- and two-bedroom houses.

Left

The chimney projection and bay window are intended to evoke domesticity; site plans. Architect Patel Taylor was commissioned by Barking & Dagenham to develop a housing typology suited to the needs of the elderly on two vacant sites. The brief was to design one- and two-bedroom houses that were affordable while being owned and managed by the borough.



Architect Patel Taylor was commissioned in 2012 by the London Borough of Barking & Dagenham to develop a housing typology for the elderly community on two vacant sites. The design approach for The Lawns project draws on the rich tradition of housing for the older people, and in particular the English almshouse. Key elements of this type have been applied to create a development that has architectural character while also aiming to meet the needs of the elderly today. Patel Taylor identified two aspects of classical almshouses. First, the housing surrounds a communal garden or landscaped courtyard. In this project the landscaped courtyards comprise simple areas of lawn and mature specimen trees. Second, the architecture is of an intimate human scale. The dwellings are typically only one or two storeys and are given a domestic scale by the window configuration at ground-floor level, which forms a connection to the communal spaces.

As in a conventional almshouse layout, the communal landscaped garden at the heart of the development is surrounded by mostly single-storey accommodation, creating a sense of community and encouraging 'ownership' of the public space. "As a manifestation of placemaking, the configuration of the development seeks to bring a sense of place to an area otherwise lost in urban anonymity", says Patel Taylor. "The landscape design integrates high quality materials and small scale planting to soften the boundaries between the communal and private gardens. In extracting the key architectural components of the almshouse model, we developed a typology that interpreted their traditional character in a contemporary manner." The houses were

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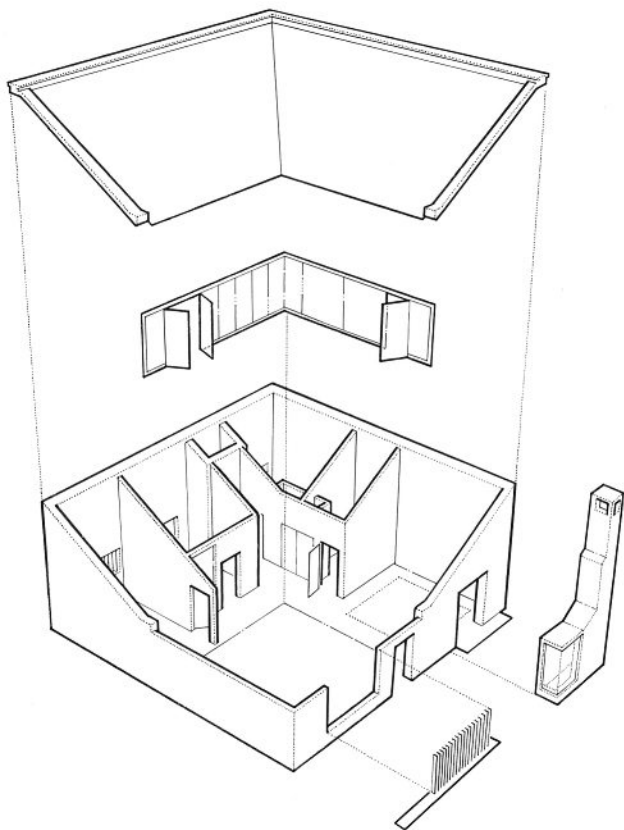
Left/right

The Lawns is among the first capital-funded local authority elderly persons' housing to be built for a generation, so the borough was keen that it should set a high benchmark for future projects. All the residents have downsized from larger properties, which in turn has released larger houses back to the council. The homes are built with future needs in mind, so all are fully accessible, allowing wheelchair users to have full use of their home and ensuring a better quality of life for their entire tenancy.

designed to be compact in mass and scale, with an L-shaped plan arranged around a small private courtyard. These are typically south-facing with walls punctured by a timber gate and trellis to provide residents with a visual connection to the gardens while retaining privacy. "The single bay window and chimney create an impression of domesticity within, and help to identify the individual homes", say the architects.

The project contrasts hard external elevations with softer interiors "to suggest security whilst dissolving physical boundaries between dwellings to promote a sense of community". The houses are well insulated and are constructed of traditional, high quality and robust materials. They achieve Code for Sustainable Homes Level 4 and have integrated photovoltaic cells for each dwelling.





Above
Exploded isometric.

Right
A precedent for Patel Taylor is Jorn Utzon's Fredensborg Housing, Denmark (1963), comprising 63 L-shaped homes for the elderly.







**BUILDING**

The Lawns Courtyard Housing, Barking

BRICKS

Ibstock West Hoathly Medium Multi
Bat Box type B

ARCHITECT

Patel Taylor

CONTRACTOR

Lakehouse Contracts

PHOTOGRAPHY

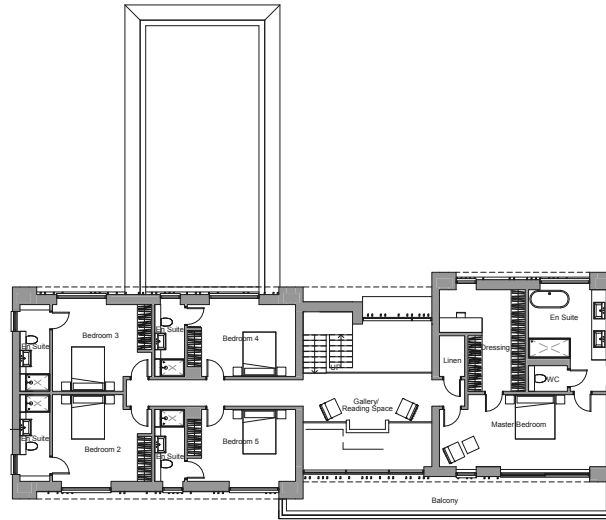
Peter Cook

Parallel Lines

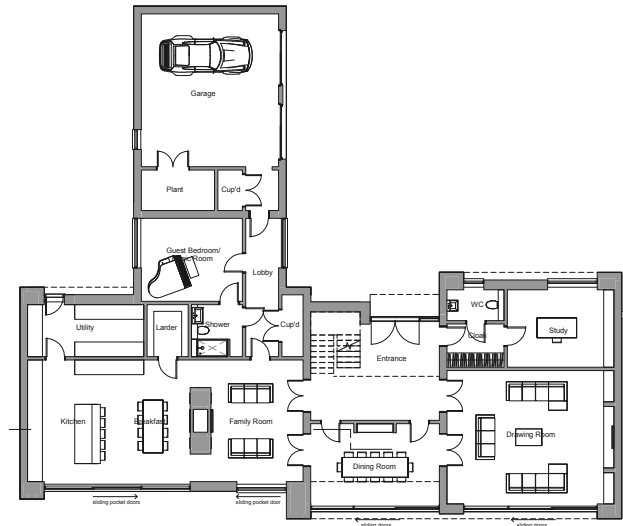
The contemporary lines of a low-energy dwelling near Oxford, designed by Anderson Orr Architects, are tempered by the buff-coloured linear brickwork that resonates with more traditional buildings in the vicinity.

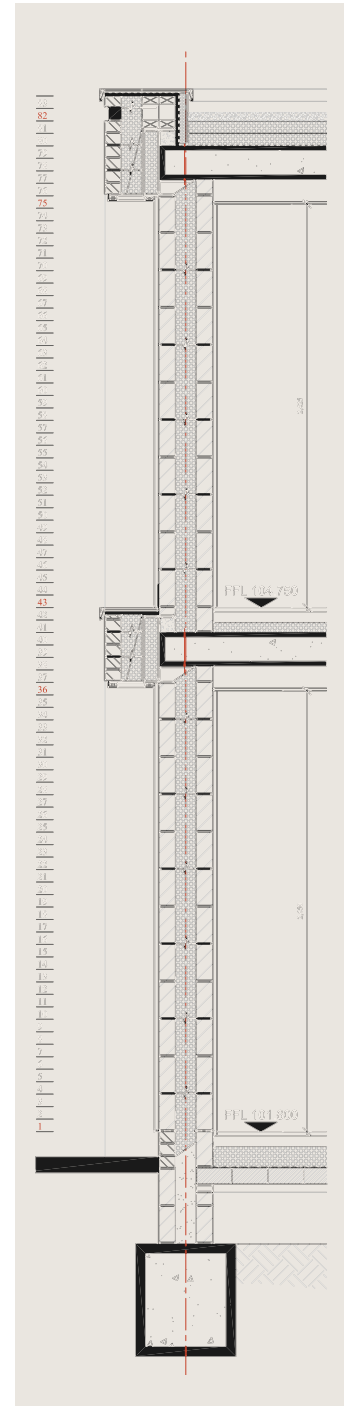


Left
Long section, ground- and upper-floor plans.



Right
Cross section; garden and entrance frontages. The projecting single-storey wing houses a garage and guest/music room.



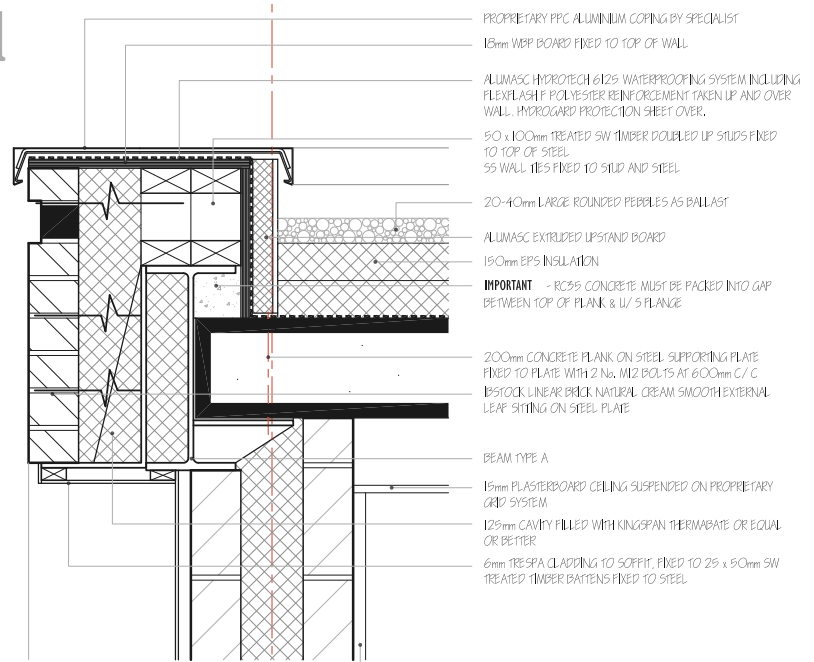


Anderson Orr Architects' brief for Foxcombe Lodge was to create an exemplar, low-energy family dwelling. The design aim was to minimise the visual impact on both the adjacent lane and wider context and form a sensitive relationship with neighbouring properties. The main two-storey rectilinear structure is orientated on a north-east to south-west axis, while a single-storey element, perpendicular to the principal form, houses a garage and guest bedroom/music room.

The elevations are designed to contrast and complement rather than replicate the traditional appearance of the neighbouring buildings. The principal materials are Ibstock Linear buff brickwork, grey aluminium windows and composite rainscreen cladding. Large elements of glazing to the north-west and south-east are recessed to reduce overheating in the summer. Vertical louvres at first-floor level also reduce overheating as well as providing privacy screening to the bedroom and bathrooms.

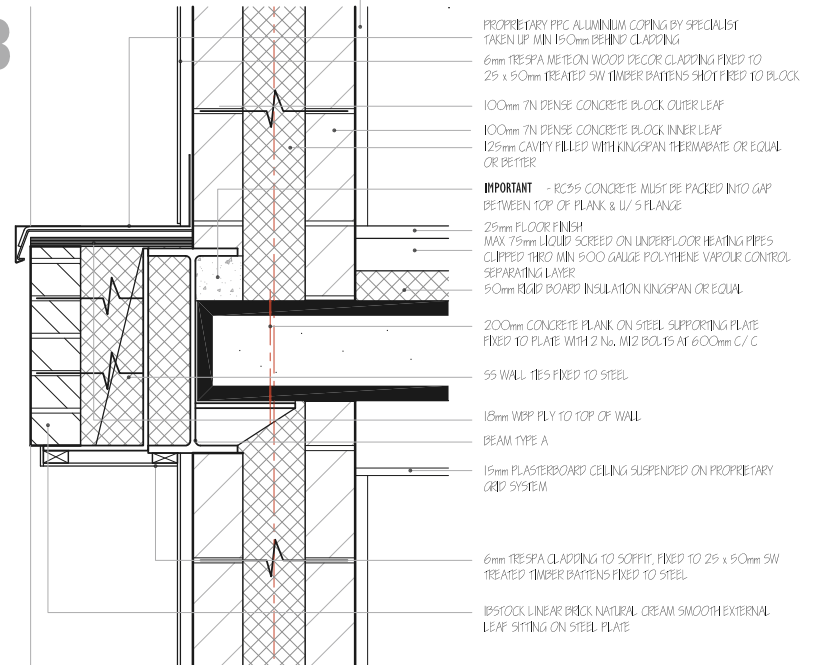
The ground-floor living spaces link to the garden through large glazed openings which are also recessed to minimise solar gain. The front entrance is flanked within a two-storey bay by a rainscreen-clad element that houses the staircase. At first floor level, the master bedroom suite and four other bedrooms are separated by double-height voids over the entrance and dining room, and linked by a gallery/reading space. All bedrooms have en-suite bathrooms and Juliet balconies, while a linear balcony off the master bedroom overlooks the garden.

01



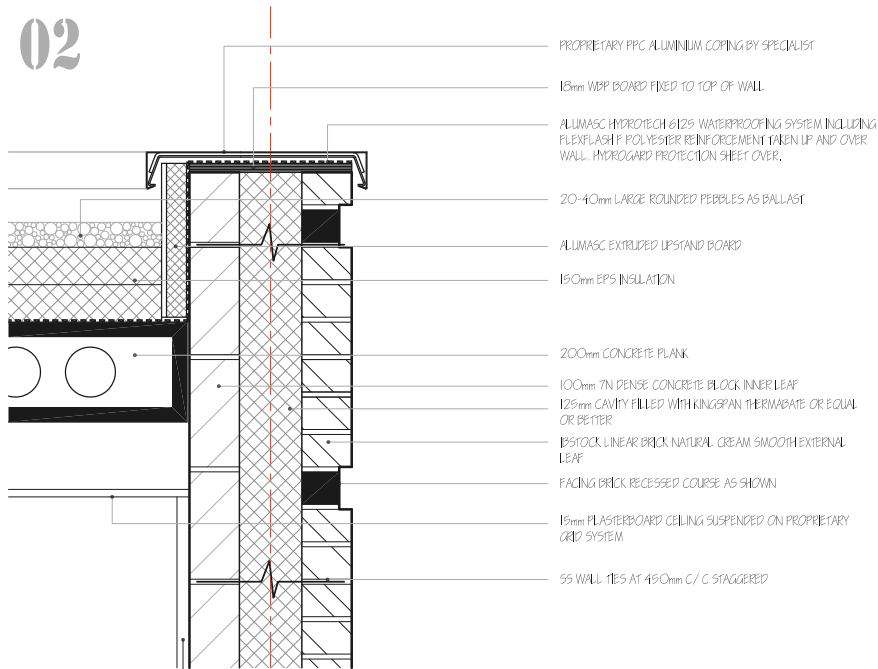
- PROPRIETARY PPC ALUMINIUM COPING BY SPECIALIST
- 18mm WBP BOARD FINED TO TOP OF WALL
- ALUMASC HYDROTECH 6125 WATERPROOFING SYSTEM INCLUDING FLEXFLASH F POLYESTER REINFORCEMENT TAKEN UP AND OVER WALL. HYDROGARD PROTECTION SHEET OVER.
- 90 x 100mm TREATED SW TIMBER DOUBLED UP STUDS FINED TO TOP OF STEEL
- 55 WALL TIES FINED TO STUD AND STEEL
- 20-40mm LARGE ROUNDED PEBBLES AS BALLAST
- ALUMASC EXTRUDED UPSTAND BOARD
- 150mm EPS INSULATION
- IMPORTANT** - RC35 CONCRETE MUST BE PACKED INTO GAP BETWEEN TOP OF PLANK & U/S FLANGE
- 200mm CONCRETE PLANK ON STEEL SUPPORTING PLATE FINED TO PLATE WITH 2 No. M12 BOLTS AT 600mm C/C
- IBSTOCK LINEAR BRICK NATURAL CREAM SMOOTH EXTERNAL LEAF SITTING ON STEEL PLATE
- BEAM TYPE A
- 15mm PLASTERBOARD CEILING SUSPENDED ON PROPRIETARY GRID SYSTEM
- 125mm CAVITY FILLED WITH KINGSPAN THERMABATE OR EQUAL OR BETTER
- 6mm TRESPA CLADDING TO SOFFIT, FINED TO 25 x 50mm SW TREATED TIMBER BATTENS FINED TO STEEL
- 15mm PLASTERBOARD ON DOT & DABS INTERNAL WALL FINISH

03



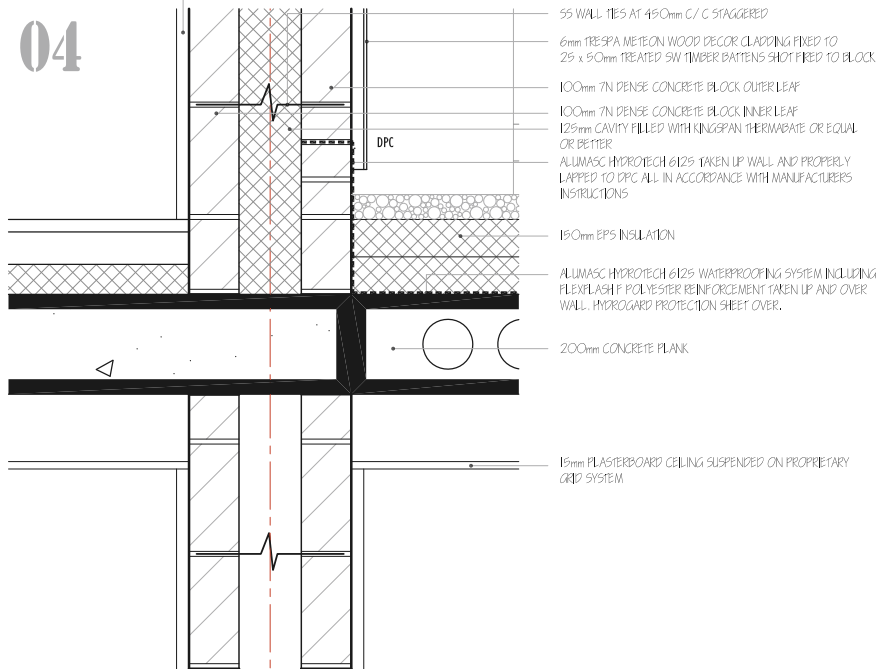
- PROPRIETARY PPC ALUMINIUM COPING BY SPECIALIST TAKEN UP MIN 150mm BEHIND CLADDING
- 6mm TRESPA METEON WOOD DECOR CLADDING FINED TO 25 x 50mm TREATED SW TIMBER BATTENS SHOT FINED TO BLOCK
- 100mm 7N DENSE CONCRETE BLOCK OUTER LEAF
- 100mm 7N DENSE CONCRETE BLOCK INNER LEAF
- 125mm CAVITY FILLED WITH KINGSPAN THERMABATE OR EQUAL OR BETTER
- IMPORTANT** - RC35 CONCRETE MUST BE PACKED INTO GAP BETWEEN TOP OF PLANK & U/S FLANGE
- 25mm FLOOR FINISH
- MAX 75mm LIQUID SCREED ON UNDERFLOOR HEATING PIPES CLIPPED THRU MIN 500 GAUGE POLYTHENE VAPOUR CONTROL SEPARATING LAYER
- 50mm BLAD BOARD INSULATION KINGSPAN OR EQUAL
- 200mm CONCRETE PLANK ON STEEL SUPPORTING PLATE FINED TO PLATE WITH 2 No. M12 BOLTS AT 600mm C/C
- 55 WALL TIES FINED TO STEEL
- 18mm WBP PLY TO TOP OF WALL
- BEAM TYPE A
- 15mm PLASTERBOARD CEILING SUSPENDED ON PROPRIETARY GRID SYSTEM
- 6mm TRESPA CLADDING TO SOFFIT, FINED TO 25 x 50mm SW TREATED TIMBER BATTENS FINED TO STEEL
- IBSTOCK LINEAR BRICK NATURAL CREAM SMOOTH EXTERNAL LEAF SITTING ON STEEL PLATE

02



- PROPRIETARY PPC ALUMINIUM COPING BY SPECIALIST
- 15mm WBP BOARD FINED TO TOP OF WALL
- ALUMASC HYDROTECH 6125 WATERPROOFING SYSTEM INCLUDING FLEXPLASH F POLYESTER REINFORCEMENT TAKEN UP AND OVER WALL. HYDROGARD PROTECTION SHEET OVER.
- 20-40mm LARGE ROUNDED PEBBLES AS BALLAST
- ALUMASC EXTRUDED UPSTAND BOARD
- 150mm EPS INSULATION
- 200mm CONCRETE PLANK
- 100mm 7N DENSE CONCRETE BLOCK INNER LEAF
- 125mm CAVITY FILLED WITH KINGSPAN THERMABATE OR EQUAL OR BETTER
- 1550K LINEAR BRICK NATURAL CREAM SMOOTH EXTERNAL LEAF
- FACING BRICK RECESSED COURSE AS SHOWN
- 15mm PLASTERBOARD CEILING SUSPENDED ON PROPRIETARY GRID SYSTEM
- 55 WALL TIES AT 450mm C/C STAGGERED

04



- 15mm PLASTERBOARD ON DOT & DABS INTERNAL WALL FINISH
- 55 WALL TIES AT 450mm C/C STAGGERED
- 6mm TRESPA METEON WOOD DECOR CLIPPING FINED TO 25 x 50mm TREATED SW TIMBER BATTENS SHOT FINED TO BLOCK
- 100mm 7N DENSE CONCRETE BLOCK OUTER LEAF
- 100mm 7N DENSE CONCRETE BLOCK INNER LEAF
- 125mm CAVITY FILLED WITH KINGSPAN THERMABATE OR EQUAL OR BETTER
- ALUMASC HYDROTECH 6125 TAKEN UP WALL AND PROPERLY LAPPED TO DPC ALL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS
- DPC
- 150mm EPS INSULATION
- ALUMASC HYDROTECH 6125 WATERPROOFING SYSTEM INCLUDING FLEXPLASH F POLYESTER REINFORCEMENT TAKEN UP AND OVER WALL. HYDROGARD PROTECTION SHEET OVER.
- 200mm CONCRETE PLANK
- 15mm PLASTERBOARD CEILING SUSPENDED ON PROPRIETARY GRID SYSTEM

BUILDING
Foxcombe Lodge, Oxford

BRICKS
Ibstock Natural Linear Cream

ARCHITECT
Anderson Orr Architects

CONTRACTOR
Lamburn Geekie

PHOTOGRAPHY
Gavin Fraser

Technical: Suspended Brickwork

Deep reveals and soffits are an increasingly popular design feature that can add extra visual depth and dimension to masonry facades. While creating these effects can be significant to the aesthetics of a building, they can also pose structural challenges as the load of the wall above must be maintained across the opening while seeming to be unsupported by structure.

While full brick systems are appropriate for occasional or small openings, prefabricated soffit systems, often employing

brick slips, can offer a number of advantages, especially where the openings are large or numerous.

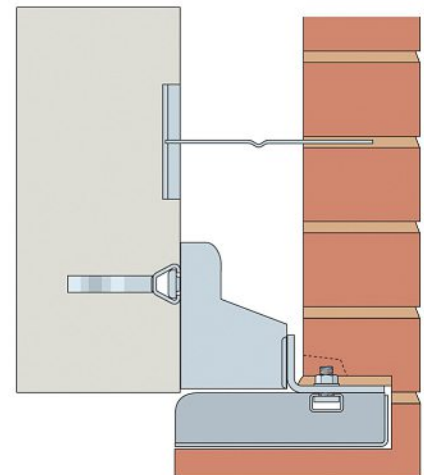
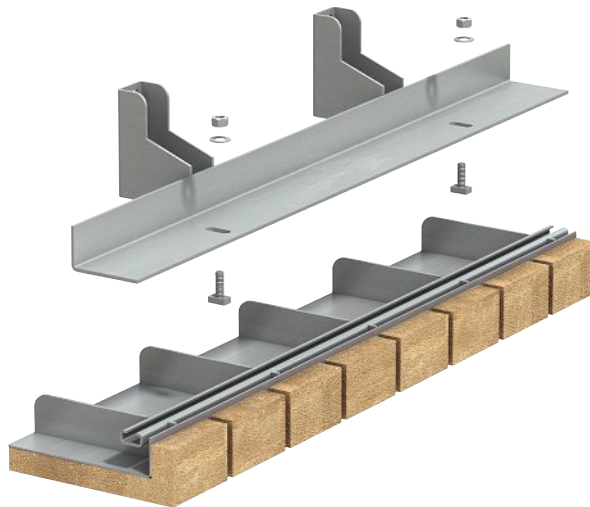
Nexus® is a new two-part system, developed by Ibstock Kevington and Ancon, that combines a high integrity stainless steel brickwork support system with prefabricated brick-faced units that can be lifted and bolted into position by hand. It allows for full adjustment so can assure perfect alignment. The system is significantly easier to handle than precast concrete systems. Typically the system reduces the weight of the soffit by

more than half, which in most cases will allow the brick-faced units to be installed without specialist lifting equipment. It also provides significant savings in installation time, making it particularly appropriate for fast-track or time-limited projects.

Individual Nexus® units are designed and prefabricated off-site to suit the soffit dimensions so there is no cutting required on site. The Nexus® panes can be manufactured to suit differing brick sizes, bonds and orientation, for example 240x115x48mm vertical

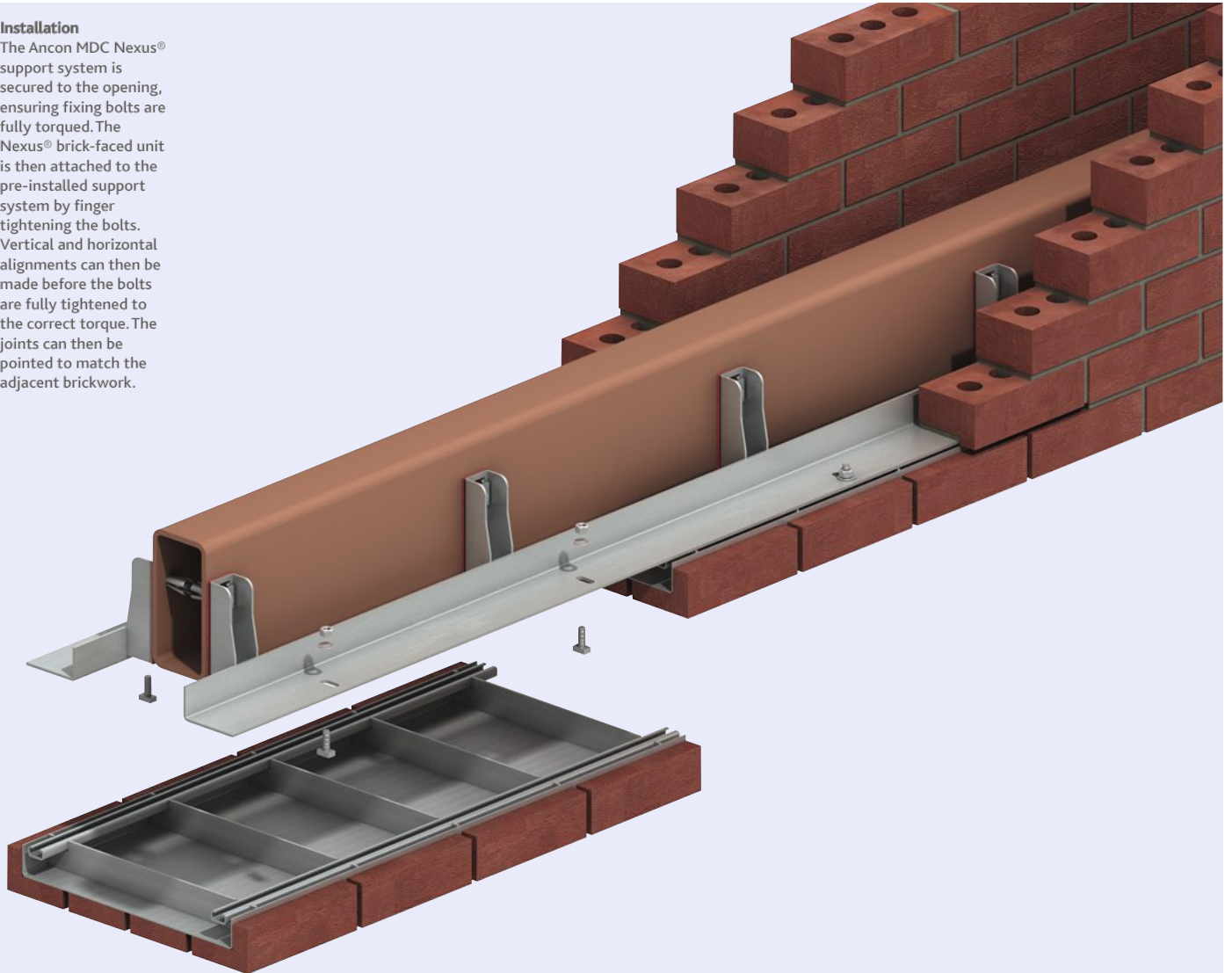
bond on the front face carried onto the soffit. They are simply offered up to the pre-fixed and pre-drilled Ancon MDC angle and then bolted into position using T-bolt fixings in a continuous channel. The two-part design allows maximum adjustability, both vertically and horizontally, for quick and simple alignment on site.

Below
Nexus Soffit Unit 65x215mm
with header bond.



Installation

The Ancon MDC Nexus® support system is secured to the opening, ensuring fixing bolts are fully torqued. The Nexus® brick-faced unit is then attached to the pre-installed support system by finger tightening the bolts. Vertical and horizontal alignments can then be made before the bolts are fully tightened to the correct torque. The joints can then be pointed to match the adjacent brickwork.



SPECIFICATION CLAUSES

Ancon MDC NEXUS Bracket Angle Support System

Ancon MDC Systems are tailored to suit each project, and are based on the cavity size at the support and the unfactored masonry load to be carried. Ancon will design an economical configuration of channel, bracket and angle.

Specification guideline: MDC NEXUS / type / cavity / unfactored masonry load, eg MDC NEXUS / 75 / 5.6

Ancon will design a standard system to suit a 75mm cavity and carry 5.6kN/metre run of masonry (unfactored).

Nexus® Unit

Brick or masonry slips permanently bonded direct to a grade 304 stainless steel unit using high strength adhesive. The size of the unit and bond pattern of the slips to suit project requirements.

TECHNICAL SPECIFICATION

Steelwork: High grade stainless steel, manufactured in Ancon's BS EN 1090-1 approved factory and CE marked.

Brick slips: 25mm thick and manufactured in accordance with BS EN 771-1 a(BS 4729) and CE marked.

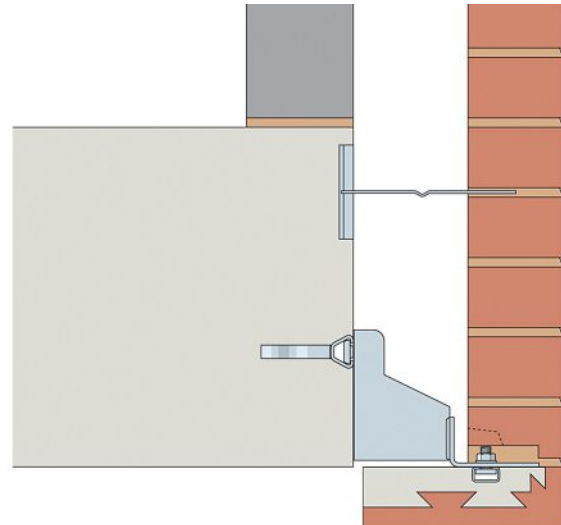
Adhesive: Metolux Metofix 3-1 epoxy adhesive.

PRECAST CONCRETE SYSTEM

Masonry Support Systems can be designed and manufactured to suspend precast, prefabricated masonry units. This system removes the build of complicated, time-consuming masonry soffits from a tight site schedule. These offsite manufactured units require a mechanical lifting device when bolting to the underside of a masonry support angle.

Below

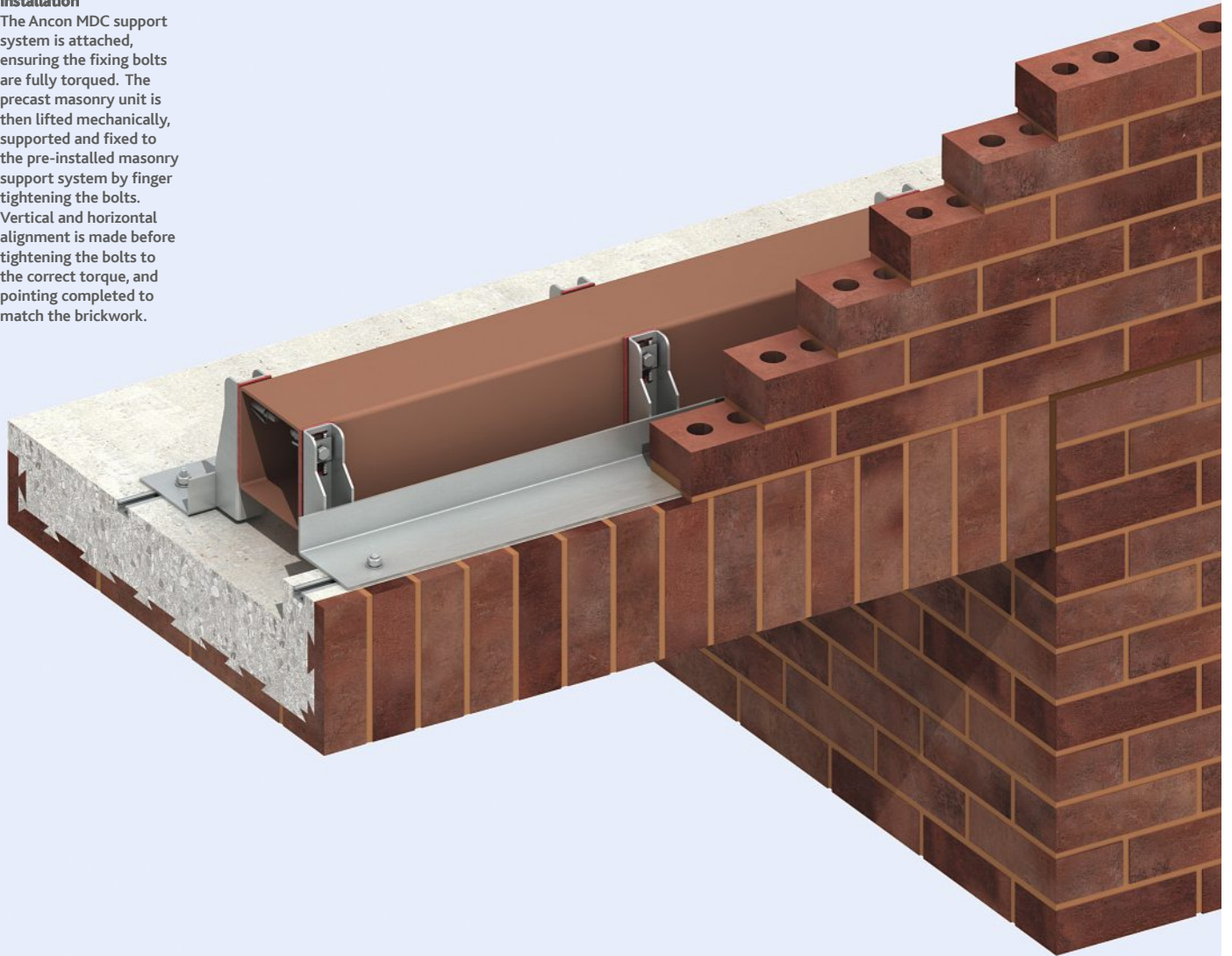
Precast Soffit Unit 65x215mm with header bond.



Installation

The Ancon MDC support system is attached, ensuring the fixing bolts are fully torqued. The precast masonry unit is then lifted mechanically, supported and fixed to the pre-installed masonry support system by finger tightening the bolts.

Vertical and horizontal alignment is made before tightening the bolts to the correct torque, and pointing completed to match the brickwork.



Profile: Ibstock's Swanage Brickworks

The Swanage Brickworks has a tradition of handmaking bricks that dates back to 1865, and today the Ibstock factory employs 15 handmakers at its Godlingston site on the north-west outskirts of the Dorset town.

The individually unique bricks are made in a range of colours, sizes and textures, and they are used in a wide range of building types. Typically, the most readily available sizes are 50mm, 65mm and 68mm, but other dimensions can be manufactured to order. Additionally, imperial-sized bricks are available for use in restoration and refurbishment projects, especially those in conservation areas and where listed buildings are involved. Moreover, non-standard sizes can be appropriate when matching existing brickwork or to create unique or novel bonding patterns.

A full range of manufactured and cut and bonded special shapes are available for all Swanage products, including bespoke blends. Matching up with existing shapes is also offered by Swanage, which can be particularly important with refurbishment projects, where intricate ornamental details require accurate replication.



Swanage products can also be matched up with the brick-cutting services of Ibstock Kevington to provide prefabricated arches, underslung soffits and other factory-made brickwork details for use with conventional masonry.

Significantly the Swanage Brickworks also offers a bespoke blending service for situations where an appearance other than that offered by standard off-the-shelf bricks is required. Typically this might be helpful in matching existing historic buildings or in creating a new blend for a significant or prominent project.

Swanage Brickworks also makes the grey glazed headers that have been part of the vernacular architecture of the Wealden counties of Kent and Sussex for centuries. Normally used alongside plain red stock or handmade bricks, the headers can be incorporated in a variety of bonding patterns, such as English and Flemish bonds, or as a feature to create a particular effect, such as the diamond pattern featured at College House, Shiplake College, Henley-on-Thames, by Nichols Brown Webber. Swanage grey glazed headers are also often used to match adjacent brickwork for conservation or planning reasons.



SWANAGE HANDMADE BRICKS

Right

Swanage bricks have been specified for many prestigious projects, from Douai Abbey library and archive in Reading (David Richmond & Partners), to (bottom, left to right) Shiplake College, Henley-on-Thames (Nichols Brown Webber), the Fulton Building, Sussex University (ADP Architects), Cane End House Orangery, Reading (Plan Architects), and the Fitzjames Teaching & Learning Centre at Hazlegrove School, Yeovil (Feilden Fowles).

Swanage bricks feature in many projects at Sussex University. For the Fulton Building, the Falmer blend, a 60:40 ratio of fine-sanded brown and light multi Swanage handmade bricks, was chosen to match the adjacent listed 'Boiler House'. At Yeovil, Feilden Fowles worked with Ibstock's Swanage factory to develop handmade red bricks and glazed black headers to add depth to the Flemish bond (ph: David Grandorge).

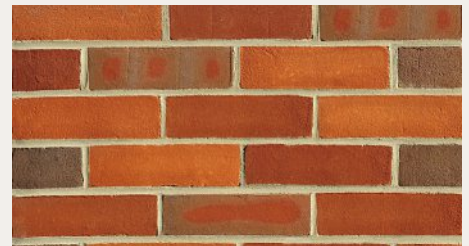
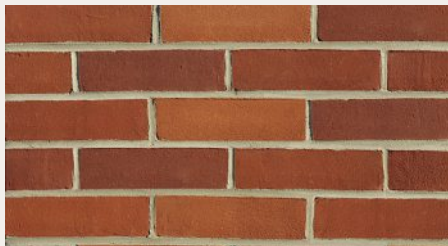




Left
Swanage Brickworks in the 1980s; special shapes from the factory today.

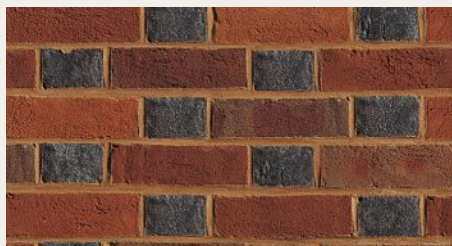
Right
The Swanage factory specialises in creating bespoke or purpose-made blends for specific projects or to meet a particular colour, texture or size requirement. The Pavilion Portico at the Oval, designed by Adam Architecture, features a blend of handmade Swanage Light and Restoration Red imperial bricks laid in English garden wall bond (ph: Morley von Sternberg).

Below
Brickwork panels illustrating some samples of the unlimited blend options available from Swanage Brickworks. Left to right: Swanage Blend A, D, E, F (with glazed headers), G and C.





SWANAGE HANDMADE BRICKS



Ages of Brick

So you think you know your bricks?

Test your knowledge by answering the questions below and email them to: design@ibstock.co.uk
A £250 prize will be awarded to the entrant with the most correct answers. Closing date: 3rd June.
In the event of a draw, a winner will be picked at random from the highest scoring entries.
The winner's name, and the answers, will be published in the next issue of Ibstock Design.



1 In which city is this bay window?



2 Hadrian built it, but what is this rotunda called?



3 Built for a Baker, but which Scandinavian architect?



4 A church in Berlin, but who is its architect?



5 And who was the architect of this chapel in a park?



6 Which Russian-born architect designed this wall?



7 Who designed this office for a Basingstoke brickmaker?



8 In which city is this expressionist church?



9 Where in France is this brick cathedral?



10 In which city is this prototype shopping centre?

The Curzon Building, Birmingham City University, by Associated Architects (photo: Martine Hamilton Knight)



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The Lawns Courtyard Housing, Barking, by Patel Taylor (photo: Peter Cook)

Laurieston 1, Edinburgh, by Elder & Cannon and Page/Park (photo: Andrew Lee)

