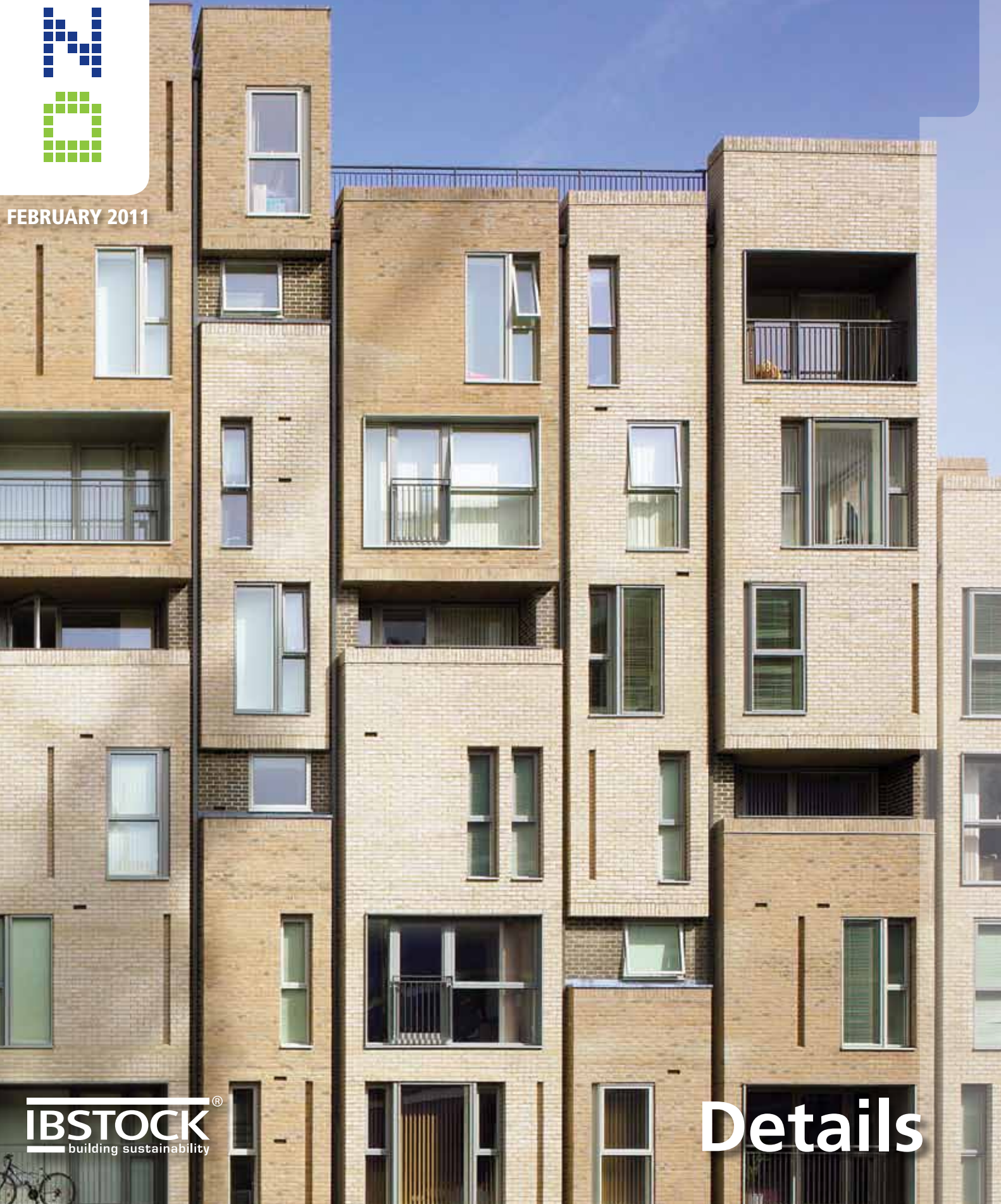




FEBRUARY 2011



# News from the Editor

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IBSTOCK DZINE MAGAZINE

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Editor: Anne Grose

Tel: 01530 261999 Email: marketing@ibstock.co.uk

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### Volume Housebuilding Award

**Taylor Wimpey - East Midlands**

**Project:** Ascot Priory

**Brick:** Leicester Autumn Multi

**Project:** Broad Lane

**Brick:** Welbeck Village Blend, Minster Cream, Leicester Autumn Multi & Melton Antique

**Project:** Campbell Square

**Brick:** Leicester Multi Yellow Stock

Taylor Wimpey showed a flexible approach to house building, which has been prompted by the variety of the sites they are developing. The formal geometry of Campbell Square in Milton Keynes contrasts with the contextual vernacular of Ascot Priory in Leicester and the more conventional layout of Broad Lane in Bracknell. The judges appreciated this variety of approach and the quality of the workmanship.



### Best International Project

**Rathmines Square, Dublin**

**Architect:** Donnelly-Turpin

**Specialist Brickwork Contractor:** John Paul Construction

**Brick:** West Hoathly Medium Multi Stock

The judges considered this to be a handsome civic building with elegant well-proportioned facades. The judges also felt that the project achieved its aim of creating a mixed use building that would consolidate the centre of Rathmines, making it a more complete and effective part of the town.

## 2010 Brick Awards Winners Announced

This year's Brick Awards winners were announced on 3rd November and for the second year running a project using Ibstock bricks won the Supreme Award. Here is what the judges said about all of the winning Ibstock projects.

### Supreme Winner & Best Public Building

**Olympic Substation**

**Architect:** NORD Architecture

**Specialist Brickwork Contractor:** Winchmore Brickwork

**Brick:** Aldridge Himley Ebony Black

This remarkable building demonstrates many ways in which brick can be used. The precision and clarity of the expression persuaded the judges that it deserved the 'best of the best' award. Close co-operation between the architect and client produced a building that is two-thirds the size of a standard unit and is within the cost limits. It will provide an enduring legacy on the Olympic site.



### Best Housing Development - 26 Units Or More

**St Andrews Block A (Phase One)**

**Architect:** Allies and Morrison

**Specialist Brickwork Contractor:** Rapid Brickwork Ltd

**Brick:** Staffordshire Slate Blue Smooth & Hardwicke Minster Cream Blend

The judges described this as an outstanding building. The limited palette of materials is skilfully exploited to produce elegant elevations that surround a variety of external spaces. The workmanship is excellent. It sets a benchmark for this type of housing.



### Specialist Brickwork Contractor

**Irvine Whitlock**

**Project:** Cabot Circus, Bristol

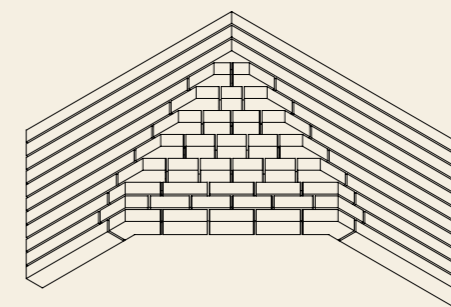
**Brick:** Mercia Orange & Staffordshire Blue Brindle Smooth

All the entrants showed an impressive portfolio of schemes and presented convincing business cases. The judges chose Irvine Whitlock because they tackled a range of projects - commercial, bespoke and historic with consistent skill.

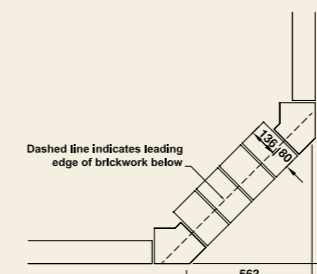
## FAQ

Our series continues with Richard Holton, who has been part of the Design Advisory Service for the past 28 years and is also involved with the CAD Department at Ibstock.

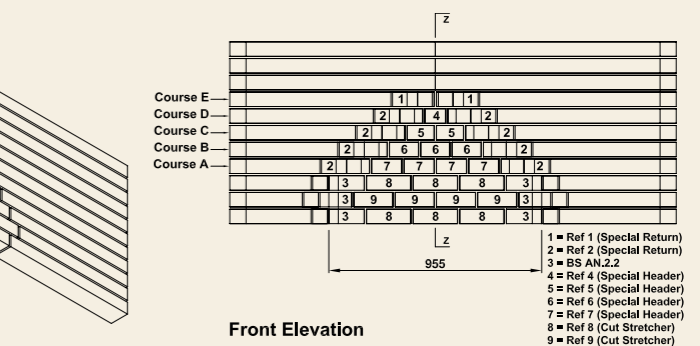
I am often asked about corbel details; particularly trying to corbel off the external leaf of a cavity wall. Traditionally, prior to the introduction of cavity wall construction, corbel details were more easily constructed from much thicker brickwork. BS5628-3:2005, Clause 5.3.6, is quite specific with regard to the extent of corbelling that should not be exceeded. This simply equates to a maximum one third projection from the bearing brickwork, and rather restricts any corbel off a half brick wall to 34mm without any restraint fixings.



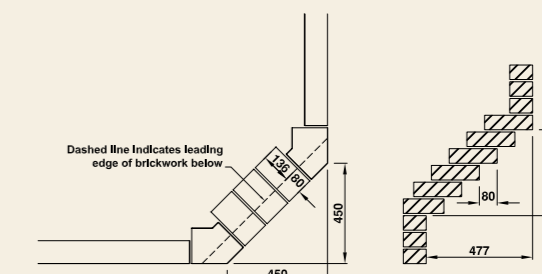
ISO View from Below



Plan on Course A



Front Elevation



Plan on Course B

Section Z - Z

From left to right: Richard Holton, Kev Tormey, Joe Brassington, Pete Gregory (front), Royce Towers (back)



# Ordnance Survey Building, Adanac Park, Southampton

**Architect:** Broadway Malyan  
**Brick Type:** Priory Red  
**Main Contractor:** Kier Southern/Kier Moss  
**Brickwork Contractor:** Clark & Fradgley



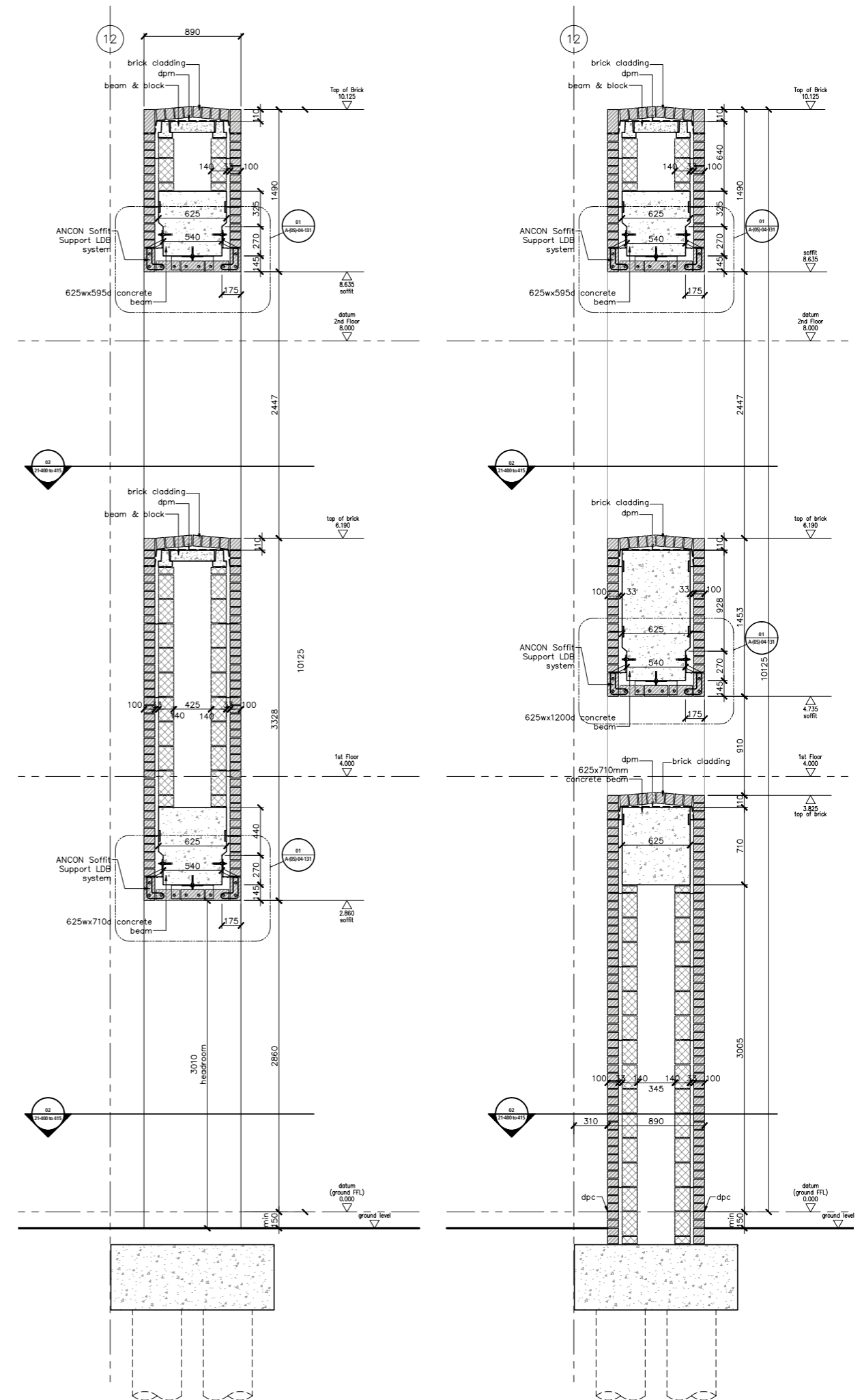
When Broadway Malyan was asked to design an innovative HQ building for Ordnance Survey in Southampton, they faced a significant environmental challenge – a six lane motorway, some 130 metres from the building, called the M271.

To mitigate the sound from the motorway and prevent noise from entering the openable windows of the offices beyond, Broadway Malyan devised a simple and effective solution – an acoustic wall flanking a curved Business Centre housing the commercial and public functions of the end user organisation. This wall was designed to provide an acoustic “shadow” cloaking the offices and allowing building users the benefits of a naturally ventilated building. Because of its height, some 11.25m at the southern end, the wall is built using a reinforced concrete frame founded on piles at least as deep as those under the building. This concrete frame is essentially a large cantilever with a free end, completely encased in Ibstock’s Priory Red brick.

The apparent complexity of the wall hides a simple truth; all the various textures covering its surface are derived from

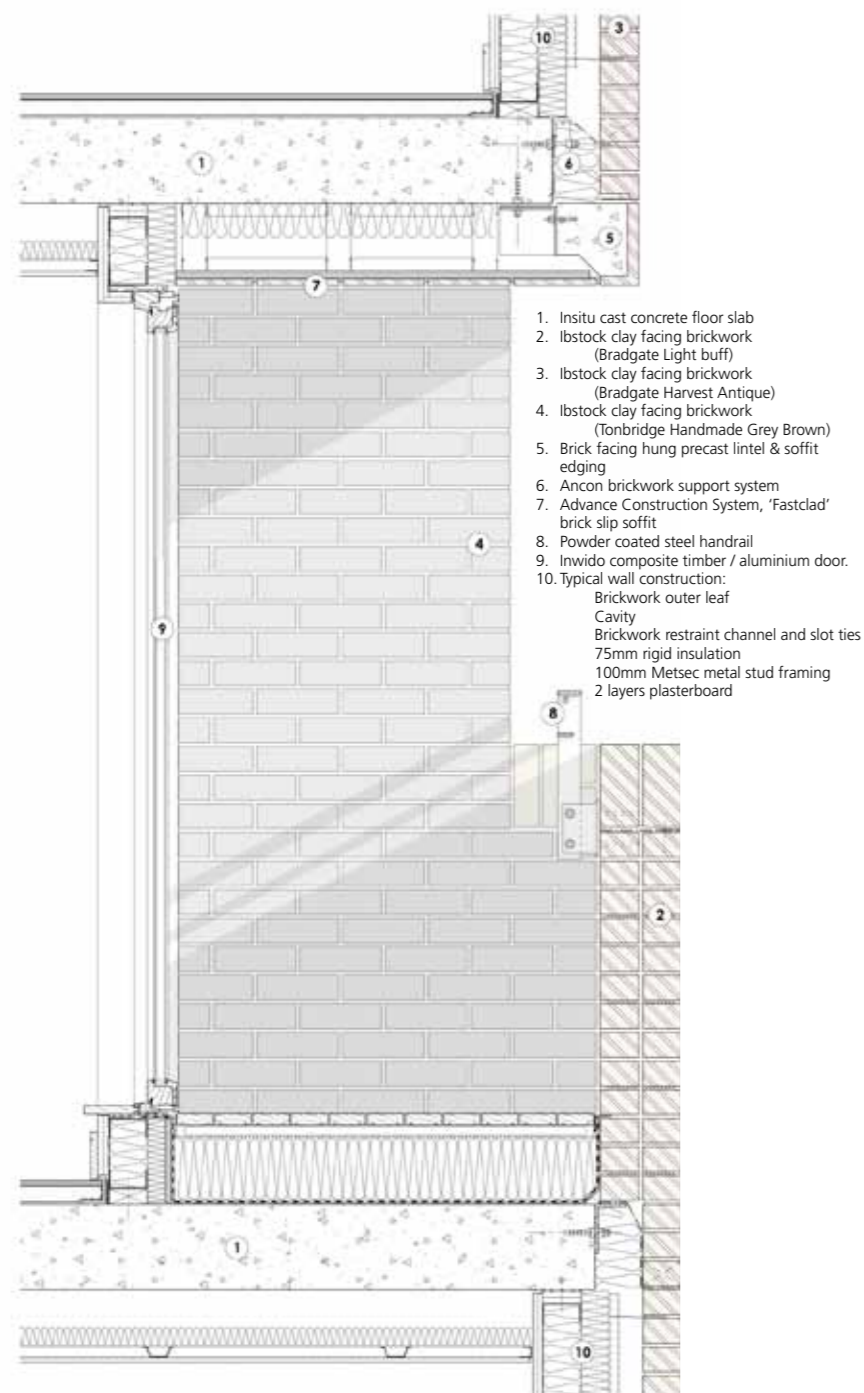
only one brick. The brick is cut, orientated and set in a variety of ways to keep the effect subtle and economical, Ibstock supplying the brick without any serial numbers or logos to enhance the effect. Matching mortar means that from a distance the wall is presented as a plain terracotta surface and only gives up its secret as the observer gets closer to the wall.

The brickwork panel should be considered a canvas rather than a traditional piece of brickwork as some of the textures are a little at odds with conventional brickwork detailing, the artistic medium on the canvas being the brick. A considerable amount of drawings were produced to make sure the desired brick texturing was achieved, and Ibstock’s Design Advisory Service was consulted within this process so that the end effect was consistent with the original concept drawings.



# Bear Lane, Great Suffolk Street, Southwark, London, SE1

**Architect:** Panter Hudspith Architects  
**Brick Type:** Bradgate Light Buff, Bradgate Harvest Antique & Tonbridge Handmade Grey Brown  
**Contractor:** Galliard Construction  
**Brickwork Contractor:** Landmark Brickwork



1. In situ cast concrete floor slab
2. 1bstock clay facing brickwork (Bradgate Light buff)
3. 1bstock clay facing brickwork (Bradgate Harvest Antique)
4. 1bstock clay facing brickwork (Tonbridge Handmade Grey Brown)
5. Brick facing hung precast lintel & soffit edging
6. Ancon brickwork support system
7. Advance Construction System, 'Fastclad' brick slip soffit
8. Powder coated steel handrail
9. Inwido composite timber / aluminium door.
10. Typical wall construction:  
 Brickwork outer leaf  
 Cavity  
 Brickwork restraint channel and slot ties  
 75mm rigid insulation  
 100mm Metsec metal stud framing  
 2 layers plasterboard

Panter Hudspith was commissioned in 2005 with a brief to maximize the residential density on this tight urban site.

The idea of expressing verticality in the design was inspired by the tall and slim 13th century Merchant towers of San Gimignano. To challenge the stereotypical apartment block, the architects looked to the interlocking basalt columns of Giant's Causeway in Northern Ireland, which form literal 'stepping stones' due to their varied heights, which informed the massing of the scheme.

The mass of the building is broken down through the use of stacked brick 'boxes' so the scheme is perceived as something other than a typical apartment building. The massing of these smaller stacked volumes has given rise to a number of features that characterise the scheme, including private balconies which are created by the vertical separation between the brick 'boxes' and private roof terraces which are provided where the roof levels vary as a result of stepping the blocks.

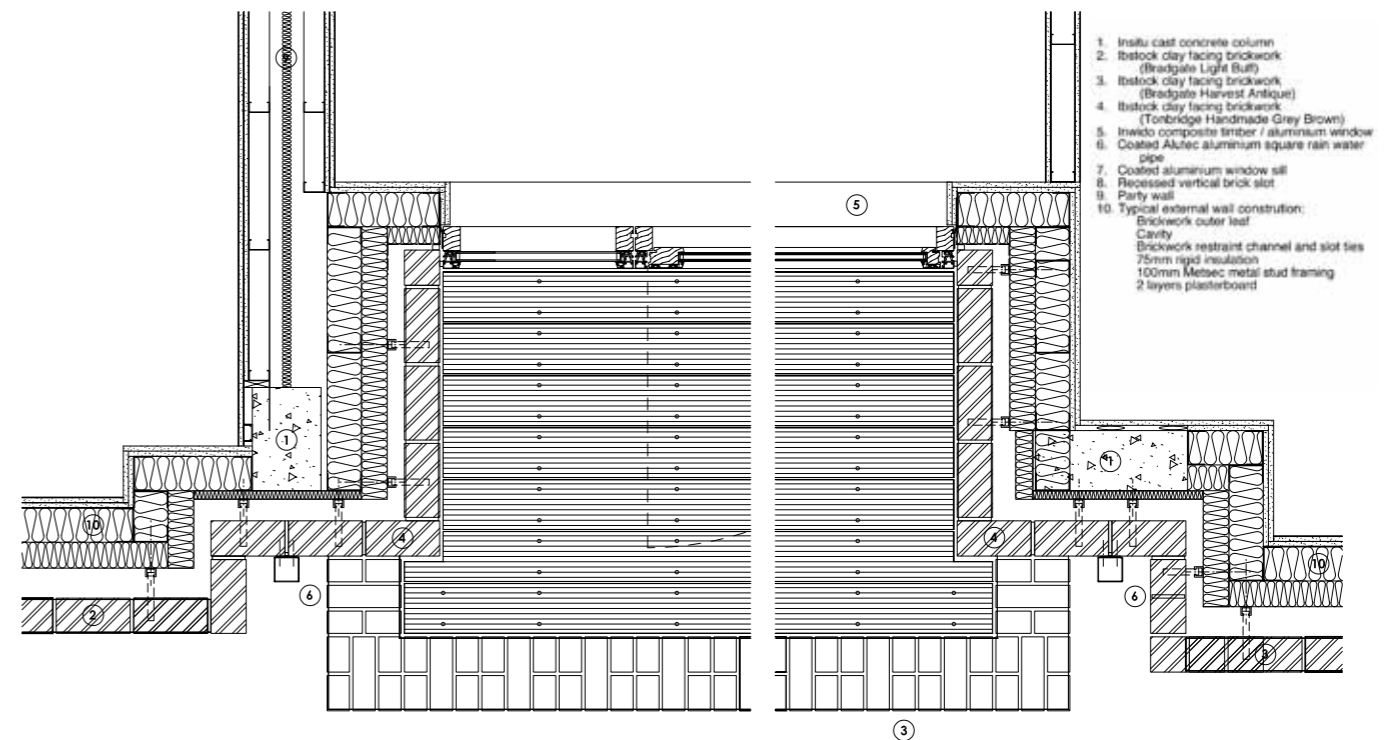
Brick was the most appropriate material for integrating with the industrial urban fabric of the area. In selecting the facing brick, two criteria were considered. First, they were to echo the stocks used in the nineteenth century warehouses that once dominated the area. Second, it was felt that the use of two main different, yet related, brick types would emphasise the notion of the building being created from separate brick 'boxes'.

Precast brick lintels are used not only to separate the brick 'boxes' with the starting and stopping of the two main types of contrasting facing brickwork, but also to create single-brick-depth window reveals where required. These allow the windows to be located either flush with the facades or recessed a full brick, further emphasising the movement within the massing.

To complete the illusion, it was essential that the exposed soffits of the balconies, formed by the contrasting facing brickwork being 'pulled apart', were constructed of brick since this would allow the brickwork to feel like it was a volume and not merely a 'skin'. Engineered brick slip soffit panels formed part of the carpentry package, with the brickwork sub-contractor neatly pointing up the slips after they were installed, to match the facing brickwork.



Photographs by Keith Collie



1. In situ cast concrete column
2. 1bstock clay facing brickwork (Bradgate Light Buff)
3. 1bstock clay facing brickwork (Bradgate Harvest Antique)
4. 1bstock clay facing brickwork (Tonbridge Handmade Grey Brown)
5. Inwido composite timber / aluminium window
6. Coated Alutec aluminium square rain water pipe
7. Coated aluminium window sill
8. Recessed vertical brick slot
9. Party wall
10. Typical external wall construction:  
 Brickwork outer leaf  
 Cavity  
 Brickwork restraint channel and slot ties  
 75mm rigid insulation  
 100mm Metsec metal stud framing  
 2 layers plasterboard

# Christ's College School, Guildford, Surrey



**Architect:** DSDHA  
**Brick Type:** Cottbus 290 x 52 x 90  
**Main Contractor:** Wates Construction

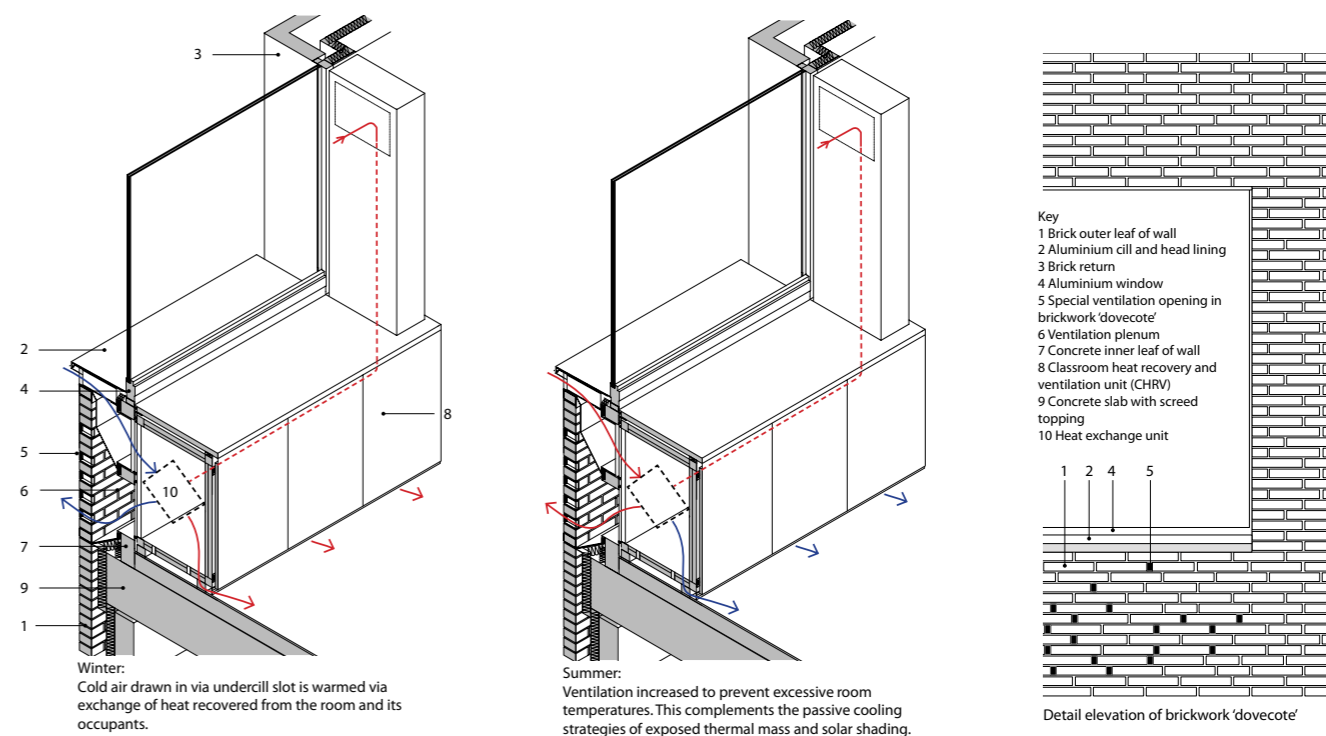
Christ's College School is a 700-place Church of England Secondary School and 6th Form College. The new campus has been designed and conceived as a single project. The two new buildings are laid out around a new public open space, with a generous new public route through the site which terminates at the entrance of Christ's College.

The College responds to the context and materiality of the local red brick housing and is wrapped in a high-quality semi-glazed brickwork skin with intricate detailing, which emphasizes its status as a civic building. The walls are recessed deeply at the windows, creating a carved form, and are inflected with dramatically scaled full-height windows, placed to frame key views to the landscape and towards local landmarks such as the Cathedral. Beneath classroom windows are "contemporary dovescotes" creating ventilation for the Combined Heat Recovery Units.

Christ's College is the first public building in the UK to utilise a Combined Heat Recovery and Ventilation (CHRV) system integrated into the façade construction. Using heat transfer

to keep the classrooms cool in summer and warm in winter, it creates a well-ventilated learning environment that both promotes student concentration and dramatically reduces energy consumption. The highly insulated brickwork façade is punctured with an intricate pattern of incoming and outgoing air vents to serve ventilation units integrated into the inner leaf of the wall. DSDHA recently received the Building Design Education Architect of the Year Award.

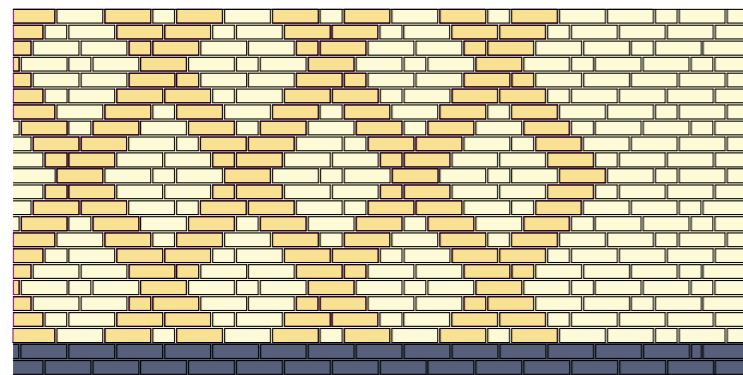
“The walls are recessed deeply at the windows, creating a carved form, and are inflected with dramatically scaled full-height windows...”



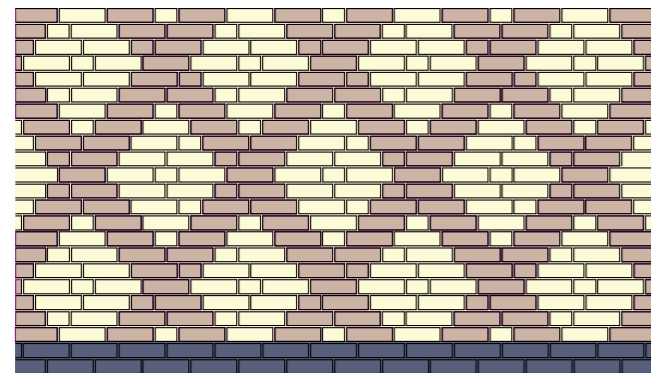


# Thurleston High School/ Thomas Wolsey Special School, Ipswich

**Architect:** Suffolk County Council  
**Brick Type:** Throckley Smooth Buff, Himley Crown Buff, Himley Ash Grey, Atlas Smooth Blue  
**Contractor:** Barnes Construction  
**Brickwork Contractor:** Cottrell Brickwork



**PANEL ONE**  
Throckley Smooth Buff as background brick with Himley Crown Buff as contrasting diagonal bricks. Atlas Smooth Blue plinth brick in stretcher bond and matching black mortar.



**PANEL TWO**  
Throckley Smooth Buff as background brick with Himley Ash Grey as contrasting diagonal bricks. Atlas Smooth Blue plinth brick in stretcher bond and matching black mortar.

The brief for this project was to relocate Thomas Wolsey Special School onto the Thurleston High School site, and for the pupils and staff to enjoy fully inclusive, shared facilities.

From the outset there was an aspiration from the client and the design team to incorporate a degree of sustainability into the building design and the team was required to achieve a 'very good' BREEAM rating. The choice of materials was influenced by the green guide and, where possible, materials having an A+ rating were selected.

An option appraisal was carried out and the favoured option, a two storey extension, which combines the two schools to create a coherent building and site, was developed into the final design.

Thomas Wolsey School is a special school for children with complex physical and educational needs, with pupils ranging in age from Nursery to Sixth Form. For this reason it was decided that they would occupy a large refurbished part of the existing building and the ground floor of the two storey classroom extension. The design successfully brought Thomas Wolsey School into the heart of Thurleston High School, fulfilling the ambition of the stakeholders to fully integrate the two schools.

Although the schools are fully integrated, an element of natural segregation is achieved by the use of separate entrances for the pupils of both schools. Thurleston High School pupils use the old main entrance which benefits from a large internal lobby. This is viewed as being the main social space within the High School. The entrance for Thomas Wolsey pupils is located next to the car park which has been designed so that an organised drop off and pick up point can be safely managed for the pupils. The main visitor entrance to both sides of the school has been centrally located and is viewed as being ideally placed for circulating around the school.

As required by the brief, a therapy suite, including hydrotherapy pool, is located at the front of the school with community access. This accommodation is housed within a separate single storey extension.

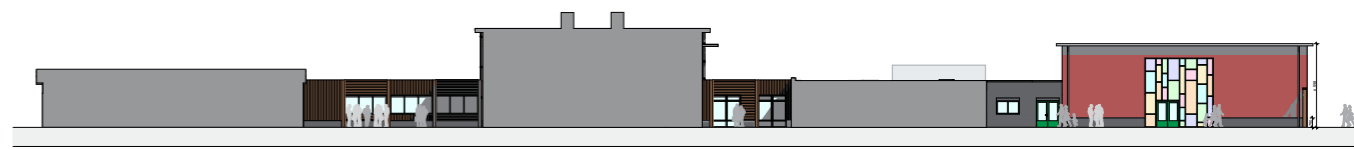


The extension was designed to create an entrance courtyard which is enclosed on three sides and presents a pleasant approach to the new public main entrance to the school.

Various studies of forms, types of construction and external façade materials were researched and considered. With reference to the Green Guide and working within budget constraints, a combination of brickwork, render and timber boarding was selected.

The two storey extension is largely constructed of cavity wall between a steel frame with a brick outer skin. During the design stage a number of brick patterns were considered together with brick types, the final choice being Flemish Garden wall bond with contrasting buff coloured bricks over a plinth of blue smooth bricks.

“The design successfully brought Thomas Wolsey School into the heart of Thurleston High School, fulfilling the ambition of the stakeholders to fully integrate the two schools.”



Elevation 7 West (Sectional) 1 : 200



## Lady Margaret Hall, Oxford

**Architect:** John Simpson & Partners  
**Brick Type:** Grosvenor Light Red  
**Brickwork Contractor:** Beard Oxford

Oxford City Council planning authority granted permission for a new master plan in 2006 that involved the formation of three new quadrangles by inserting three new buildings into the Lady Margaret Hall site.

The college began on a site which has developed from a single Victorian brick villa in 1878 to encompass a collection of early and mid-twentieth century classical buildings by architects such as Sir Reginald Blomfield, Sir Giles Gilbert Scott and Raymond Erith. All these architects pick up on the red brick tradition of the Victorian brick villas of the North Oxford suburb and carry it through using different types of red brick. JSP's design builds upon this, using an appropriate matching brick on external elevations. The combination of this choice, together with the design's introduction of new quadrangles, serves to augment the work of these earlier architects.



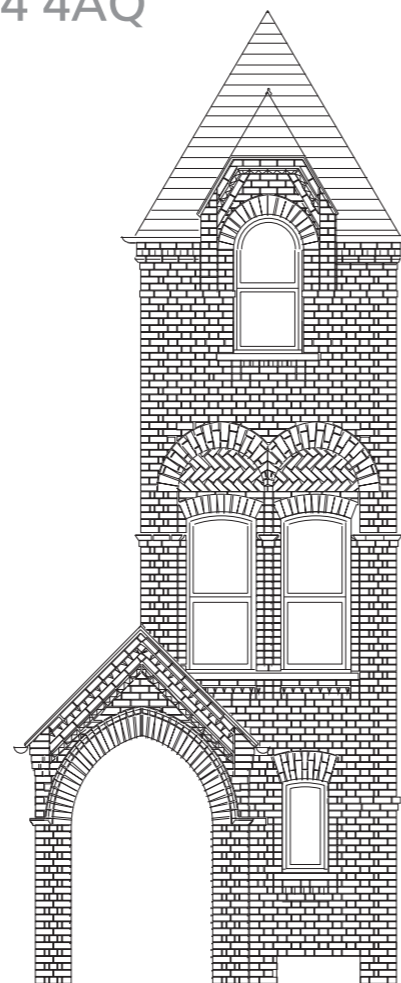
## Eversley, Dunham Road, Bowdon, WA24 4AQ

**Architect:** SW Foulkes  
**Brick Type:** Bespoke Albany Cream Imperial  
**Brickwork Contractor:** Strand Properties

Eversley is a refurbishment and sympathetic extension of an existing residential property to form three duplexes and three apartments with associated parking and garaging.

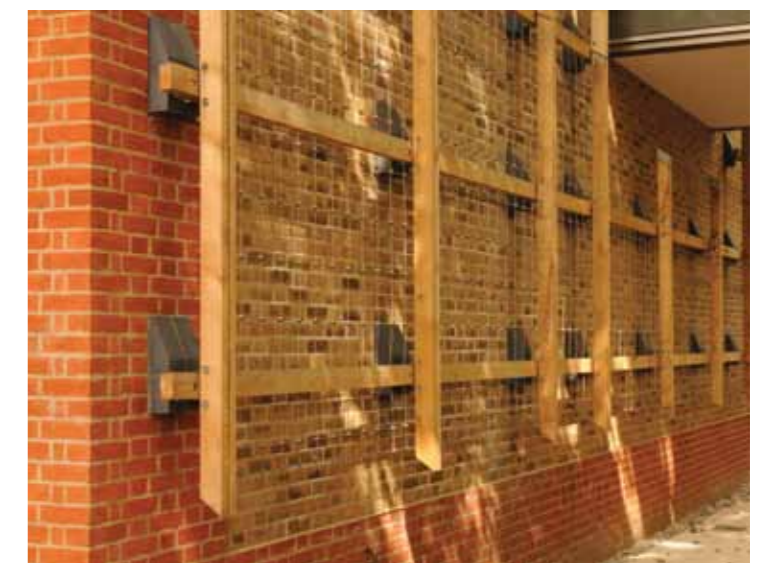
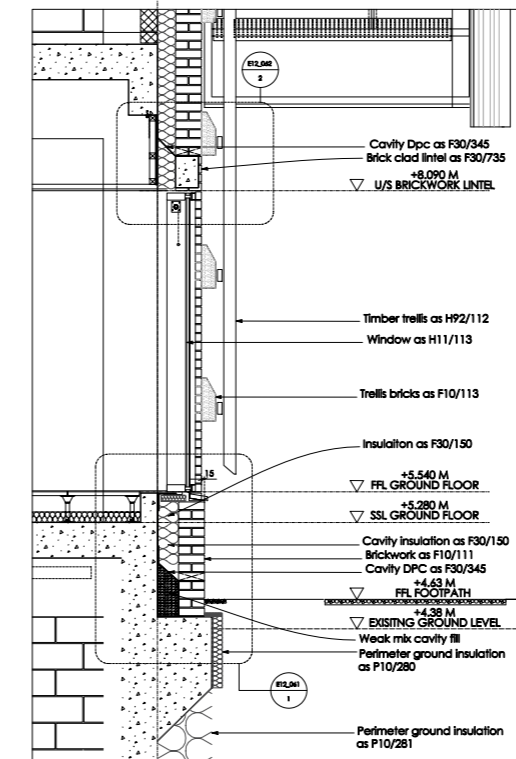
The extension has been designed to complement the existing villa. The point of connection was carefully chosen to minimise the disruption to the original facades. Materials and design features were carried over into the new extension to ensure continuity.

Careful consideration was taken when deciding the nature of materials to be used on the project to greatly improve the quality and lifetime of a design. In the case of this project, it was imperative that the materials match those of the existing building; the slates match as does the brickwork's colour, size and bonding.



## New Herbarium, Library, Art and Archives Wing at Royal Botanic Gardens, Kew

**Architect:** Edward Cullinan Architects  
**Brick Type:** Swanage Fine Textured Light Red, Laybrook Arundel Yellow Multi, Fireborn Freedom Natural Blue (special shapes for trellis detail)  
**Main Contractor:** Willmott Dixon  
**Subcontractor:** Lee Marley Brickwork



Kew appointed Edward Cullinan Architects in 2004 to design a new 5000m<sup>2</sup> extension to the old Herbarium to provide a modern archive for the most vulnerable pieces of the existing collections and to allow for future acquisitions. The need for a new building was deemed vital for Kew if it is to retain its internationally pre-eminent position as the world's leading centre for the study of plant diversity.

A palette of materials was selected to complement the old buildings in a harmonious way, but also to meet the functional requirements of the highly controlled environment for storing the collections.

A fiery red brick was chosen to clad the vaults, its colour being inspired both by Kew Palace and by the rubbed red bricks of the old Herbarium wing's lintels and quoins. The brick walls are 9 inches deep with cavity construction behind them; this has allowed a Flemish bond to be used with a natural colour mortar and flush joints like the old Herbarium. An important concept of the design was that the brick cladding to the archive continue on the interior of the buildings so one is always aware of the importance of the vaults. The red brick provides the only colour of the interior palette, acting as a foil to the cool concrete and white plastered walls.

## Housing, Killin Drive, Shettleston, Glasgow

**Architect:** Collective Architecture  
**Brick Type:** Grainger Purple Multi  
**Brickwork Contractor:** J B Bennett

Killin Drive is a new build housing development in the east end of Glasgow commissioned by Shettleston Housing Association. The project remit, to provide large family homes to meet local demands and enhance a new street community, led to the design of terraced townhouses. All house types are tied together with a wrapping brick envelope wall to accentuate the red zinc projecting dormers and 2 storey mansard roof.

The Grainger Purple Multi brick was selected for its distinctive red & purple pattern imprinted onto the brick to tie in with the surrounding sandstone and red ash field finishes. The facade includes a stepped brick pattern on the North elevation to accentuate the repetition of terraced windows and provide facade relief in a cost effective manner without introducing additional material types. The use of a single brick throughout helps maintain complete building form through various house types on the terrace and the brick detailing adds an additional level of interest to the rear facade.





ALDRIDGE SMOOTH RED/CHESTERTON SMOOTH RED | APARTMENTS, LONDON E1



GLAZED BRICK | APARTMENTS, CENTURY WHARF, CARDIFF



MINSTER RAINWORTH BLEND | INFANT SCHOOL, ROTHERHAM, SOUTH YORKSHIRE



BRUNSWICK RED | SCHOOL, PORTSMOUTH, HAMPSHIRE



TAP SMOOTH CREAM | EDUCATIONAL BUILDING, NOTTINGHAM





COLONSAY RED WIRECUT/COLONSAY RED RUSTIC/COLONSAY RED SMOOTH /GRAMPIAN RED | FLATS, ROTHESAY, ISLE OF BUTE



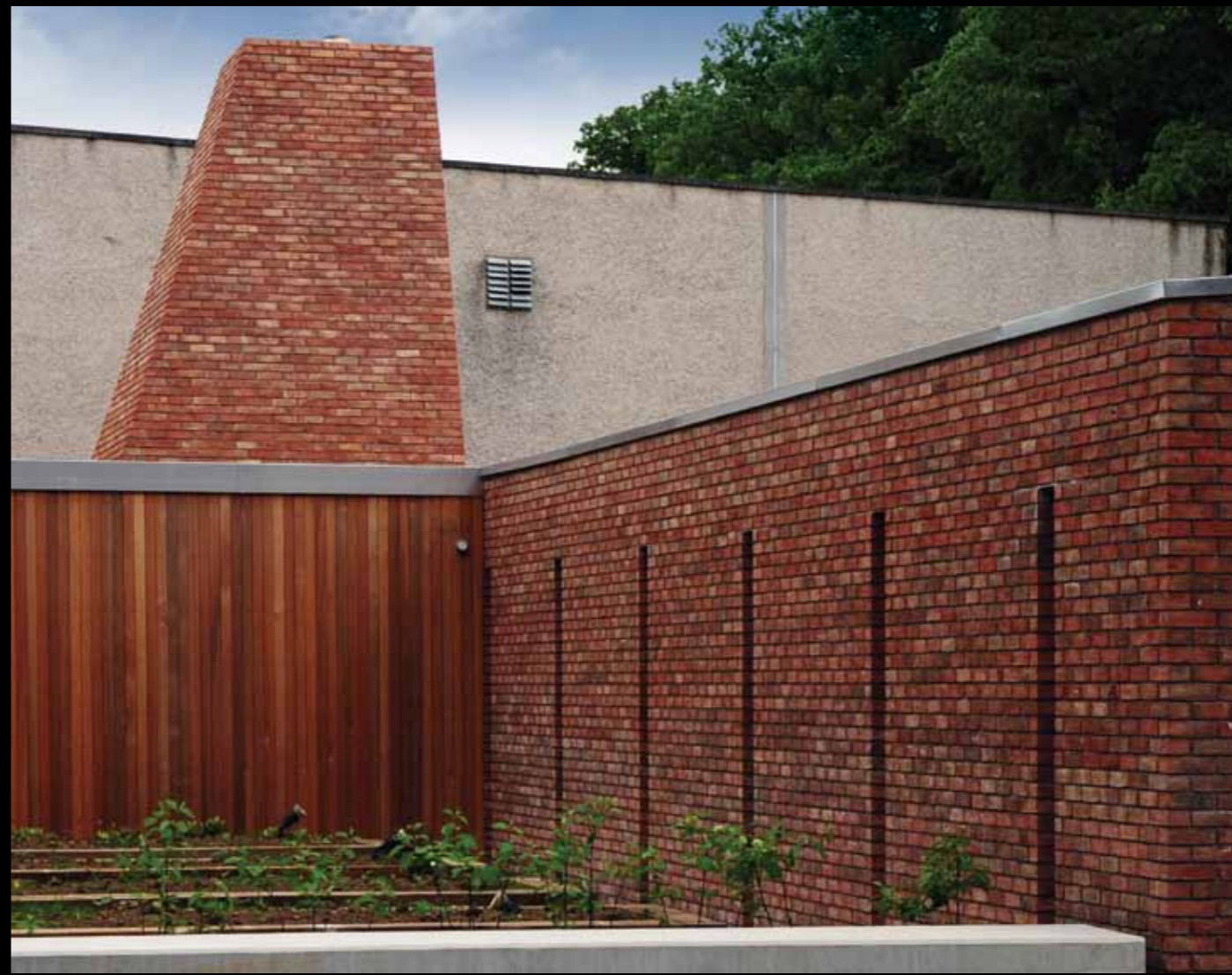
BEXHILL RED & ARDEN RED DETAILING  
RETIREMENT HOME, HALEBARNES, GREATER MANCHESTER



TAP RED & TAP CREAM  
PRIVATE HOUSE (EXTENSION & REFURBISHMENT), BALLSBRIDGE, DUBLIN



CHESTERTON RED SMOOTH & STAFFS SLATE BLUE SMOOTH (EASYANGLE)  
CREMATORIUM, KEELE, STAFFORDSHIRE



BIRTLEY OLDE ENGLISH | NUNNERY, LIMERICK, EIRE



MELTON ANTIQUE BLEND | SCHOOL, UPTON, NORTHAMPTONSHIRE

# Back to Basics

## Durability

The inherent durability of masonry has long since been established, as evidenced by the number of 16th century buildings and structures still standing or being used today. Three of the potentially destructive agents affecting masonry are;

- Water
- Frost
- Temperature Change

Brickwork absorbs water falling as wind driven rain washing over the surface. Some areas will absorb more water than others, notably horizontal and inclined surfaces and parts in contact with the soil, and these may be potentially at risk from frost attack.



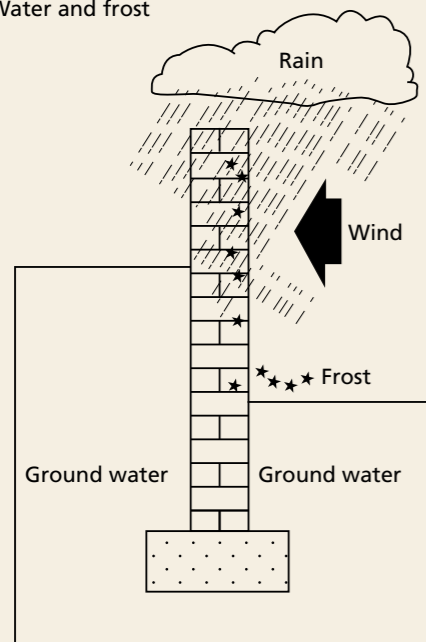
It is important to understand that it is not the coldest winters which lead to frost failure but recurring freeze/thaw cycles, whilst brickwork is saturated, which do the damage.

Brick surfaces may flake or spall and mortar joints crumble when frost failure occurs.

The degree of wetting is therefore important and this will depend on the degree of exposure to the weather and the frequency of such exposure.

All areas within 8km of the coast and major river estuaries should be considered as being one 'grade' of exposure higher than that indicated on the map (shown below). The same applies to high buildings or buildings on high ground. The degrees of exposure will also depend on the position of the brickwork in the building or structure and the way in which the detail has been designed. Generally external works such as retaining walls, garden walls and copings, and building features such as sloping areas, parapets, sills and areas between ground level and DPC are subject to more severe exposure than the rest of the building.

Water and frost



### Clay Brick Types

**Facing** - Sold for appearance; available in a wide range of facing brick types, colours and textures. Some may not be suitable in positions of extreme exposure. Some have engineering properties.

**Engineering** - Suitable for ground works, manholes and sewers, as ground level DPC to free-standing walls and situations where high strength and low water absorption are the most important factors. They are not sold for appearance.

**Commons/Rejects** - These are only suitable for internal use or under protective claddings or in footings. They do not have a durability warranty. In areas prone to high driving rain, architectural features which minimise saturation should be adopted. As a guide refer to the map shown.

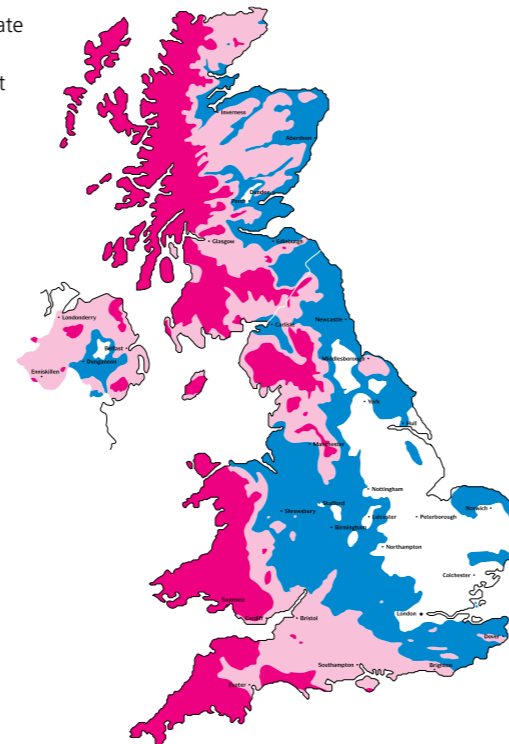
### Frost Attack

The repeated action of rain - water freezing and subsequently thawing in saturated brickwork can cause spalling of the brick surface.

### Sulphate Attack

In saturated brickwork, active soluble salts from certain types of brickwork (categorised S0 or S1) may cause a chemical reaction with a constituent of the Portland cement in the mortar. The surface of the mortar joint will crack, and the inside crumble and expand, disrupting the brickwork. In areas of high saturation, sulphate resisting cement should be used in mortar with bricks of S1 salt content.

As the availability of sulphate resistant mortar declines a stronger Portland cement mortar mix should be substituted to combat the potential effects of sulphate attack.



- Exposure Zones**  
**Wind Driven Rain**
- 1 Sheltered
  - 2 Moderate
  - 3 Severe
  - 4 Very Severe

### Use the Right Brick for the Job

All clay bricks have a Durability Designation rating and it is important to know which bricks to use and where.

Bricks fall into three categories.

**F2** – Frost resistant – can be used in all normal building situations and degrees of exposure.

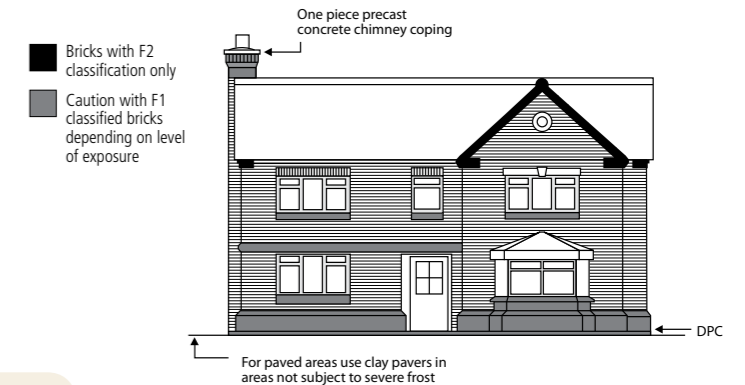
**F1** - Moderately frost resistant; are also durable except where they may remain saturated and are subjected to repeated freezing and thawing. Generally they can be used between DPC and eaves although caution should be exercised on sites in elevated, exposed locations. F1 rated products should not be used:

- Below ground level DPC.
- For sills.
- For coping/cappings.
- Beneath cappings.
- In projecting details (plinths).
- In exposed site locations.
- In landscaping.

**F0** – Not frost resistant – should not be used externally.

Note: Bricks with different durability ratings do not look different, so ask your supplier for the rating. If bricks are not rated, they should be assumed to be 'F0': not frost resistant. The product guarantee may be invalidated if the correct design details are not applied.

The use of bricks for treads and risers for external steps or in garden paths in areas of severe exposure is not recommended.

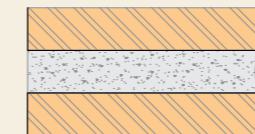


### Mortar Joint Profiles

The long-term performance of the brickwork is highly dependant on the correct mortar joint profile for the efficient shedding of rainwater. Brickwork that remains saturated is more susceptible to frost damage. The choice of joint profile should therefore be based on performance criteria as well as aesthetic considerations. These are the four most commonly used profiles:

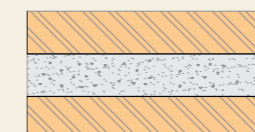
#### Curved recessed (bucket handle)

An efficient joint with a softer appearance.



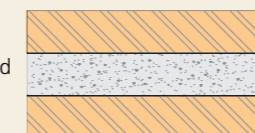
#### Weather Struck

An efficient and attractive joint giving the shadow effect of a recessed profile but better weathering properties.



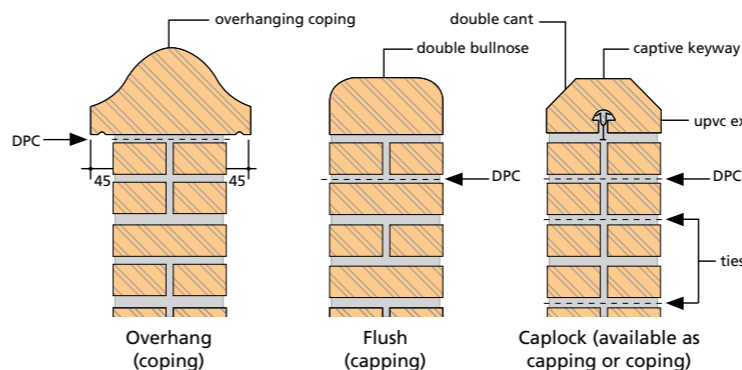
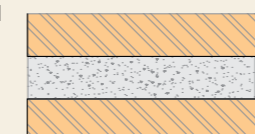
#### Flush

A common profile that is efficient in terms of shedding water if tooled, but will alter dramatically the overall colour of the brickwork.



#### Square recessed

An attractive profile - but it should only be used in a sheltered location. It is not recommended for free-standing walls or any exposed situations. The depth of recess should be kept to a minimum necessary to achieve the desired appearance, but should not be greater than 4-5mm. Recessed joints should not be used where there is danger of saturation occurring.



### Mortars

Mortar joints are vulnerable. Mortar is an essential ingredient of brickwork and is subject to the same exposure as the brick, generally mortar mix (iii) will be sufficient for the majority of brickwork cladding around a building. For free-standing walls, brickwork below ground level DPC and chimneys, mortar mix (ii) will be stronger and more durable in the wetter locations. Consider mortar mix (i) near and below ground level, chimneys, sills and plinths in very wet locations. However, the mortar should not be stronger than the bricks used.

Mix (i)	Mix (ii)	Mix (iii)
1 part Portland Cement	1 part Portland Cement	1 part Portland Cement
1/4 part Lime	1/2 part Lime	1 part Lime
3 parts Sand	4 1/2 parts Sand	5 or 6 parts Sand

### Vulnerable Brickwork

#### Sills and Plinths

Sills to window openings and projecting plinth brickwork are subject to greater exposure from rainfall than vertical walling and will become saturated.

#### Sills

Use only special shapes made from F2 rated bricks i.e. a single cant, plinth or sill brick to construct a sill, which will shed the water run off from the glazing, protecting the brickwork below. Sills should ideally project to give the necessary protection to the bricks below.

#### Plinths

Any projecting plinth brickwork must also be F2 rated. Because of its position it is more exposed and in addition will receive water run-off.

#### Copings and Cappings

Use a coping or capping to protect the brickwork beneath. A coping to the top of a wall is the preferred finish; they include an overhang with drip groove that will help direct the water to fall clear of the brickwork below. Copings are available in a variety of standard profiles and can also be manufactured to bespoke profiles. Cappings are generally flush with the walling. In all instances cappings & copings must be used in conjunction with a high bond DPC which will help protect the walling below from saturation.

For more information contact one of the Ibstock Design Advisors on 0844 800 4576.



PROJECT: *Olympic Substation*  
ARCHITECTS: *Nord Architecture*  
BRICKS: *Aldridge Himley Ebony Black*



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