The judges

Hugh Pearman is editor of the RIBA Journal. He also writes for a broad range of other media ranging from Architectural Record in the United States to UK titles including The Sunday Times, Royal Academy magazine and the Spectator. He teaches, lectures and occasionally writes books.

Louise Cotter is co-founder of the Cork-based practice Carr Cotter Naessens. The practice's work includes the dlrLexicon public library and cultural centre in Dún Laoghaire, which won the overall prize in the 2015 Schueco Excellence Awards.

Paul Monaghan is a director of Allford Hall Monaghan Morris, winner of the 2015 Stirling Prize for the Burntwood School in south London. A former chair of the RIBA Awards panel, he currently sits on the CABE National Design Review Panel and is a RIBA Client Design Advisor.

Steve Mudie is a partner specialising in facades at London-based cost consultant alinea. His role is to provide high-level strategic facade advice, supported by close relationships with the diverse supply chain. He joined alinea in 2014 after 20 years' experience in the curtain walling industry.

Greg Sinclair is a director and lead consultant of facade engineering consultancy Wintech, which he joined in 1999. He has worked in the window industry since he was 18, spending nine years with Schueco and gaining a Master's Degree in Facade Engineering from the University of Bath.
Joy is in the details

There’s a lot of adaptability on show in this year’s Schueco awards. The idea is that the architecture comes first, the system second, and it shows. What, after all, connects the ultimate one-off project – Sir Peter Cook and CRAB Studio's fluid drawing studio for the Arts University in Bournemouth (p94) – with the beautiful rationality of Hopkins Architects/Colorminium's new overcladding for Guy’s and St Thomas’ Hospital (p90–91) in London? Nothing whatsoever beyond the fact that the Schueco systems involved in each were developed in close collaboration with the architects to achieve the award-winning result.

Those projects were winners in two of our ten categories this year. There were meant to be nine but we added a Judges’ Special Award to recognise the unique Bournemouth drawing studio. We also show Schueco systems being used fruitfully across cultural, commercial, education, refurbishment, residential, individual houses and steel sectors and in the specialist contractor category.

When it comes to translating the architect’s concept into reality, it is vital to ensure that the fineness of detail comes through in the finished building. All of the examples you see here demonstrate this joy in the fine detail, none more so than our overall winner, which offsets very precisely handled glazing against a new concrete structure, all while echoing the civilised brutalism of the original building.

It would be tempting and only partly true to regard the Schueco systems as a kit of parts for architects, because that would suggest that the parts are all the same out of the box. They are a lot more clever than that, as the partnerships with the Schueco specialist contractors here demonstrate. You want to know how the best buildings are made? Our winners and commendations show you how.

Hugh Pearman
Chair of judging panel
Winner

Albert Sloman Library and Silberrad Student Centre, University of Essex

Entrant: Patel Taylor

Patel Taylor’s assured extension of the 1963 brutalist library at the University of Essex and new-build student centre scooped both the education category and the overall prize in the 2016 Schueco Excellence Awards.

‘An intervention that can extend older buildings while picking up on their architectural language is something to be treasured,’ said chair of the judges Hugh Pearman.

‘The new building echoes the original by offsetting very precisely handled glazing against a new concrete structure. Playing the old architectural game of solid against void, it is both respectful and imaginative, making a new heart for the university.’

Both buildings make extensive and varied use of Schueco’s FW 50+SG curtain walling.

‘The right system with the most flexibility was crucial to the delivery of the project,’ said Patel Taylor associate Roger Meyer.

The student centre is a three-storey lakeside pavilion that sandwiches limestone piers and bronze anodised aluminium glazing between bold, cantilevered concrete slabs. The design intent was for over-glazed curtain walling sections with medium level solar control glass that would emphasise the relationship of solid and void and complement the concrete and limestone facade elements.

Windows were designed with deep curtain walling sections recessed into the facade but flush internally. At ground and first floor level the glazing is typically fixed, while on the second floor large over-glazed Schueco ADS 75 door sections keep the external appearance the same as the ground floor. On the second floor, actuators are concealed by dummy mullions where Schueco ADS 65+SG opening vents are used alongside FW 50+SG curtain walling.

The six-storey library extension employs the same over-glazed curtain walling. On the main facade, this is supported from vertical steel columns to avoid lateral bracing of any continuous horizontal elements. Mullion joints are capped to break up the facade. The facade incorporates staggered, top-hung actuated Schueco AWS 102 vents.

Schueco FW 50+SG was also used to frame the large projecting bay windows at first and second floor level. Here, the system was used with fully supported mullions and transoms on a steel substructure, incorporating 2m x 4m flush fixed glazed panels.

Where the library extension meets the old core, curtain walling was used past the slab to create the flush appearance of a single sheet of glass over four storeys to emphasise the transition from old to new. In order to meet two-hour fire separation between the old library and the addition, the architect specified Schueco Jansen VISS framing and steel doors with a bronze PPC finish.

The RIBA Journal July 2016
Below left The new Silberrad Student Centre sits between the lake and the library – the library extension is on the right.
Left Projecting bay library windows.
Below View from the Student Centre reception over the lake.

Client
University of Essex
Architect Patel Taylor
Structural engineer Techniker
Main contractor Kier Eastern
Specialist contractor HW Architectural

Student Centre second floor opening window detail
1 Stone cladding, tied back to the metal framing support structure
2 Schueco ADS 65+ SG opening vents
3 Balustrade fixed to mullion
4 Balustrade anodised to match window frames
5 Dummy mullion to form cover for actuators
6 Chain actuators mounted behind dummy mullion
7 Metal stud
Commended
Nottingham Trent University Heart of the Campus Pavilion, Clifton, Nottingham

Entrant: MB Glass

The Pavilion provides spaces for social interaction and collaborative learning as part of the Heart of the Campus development for Nottingham Trent University (NTU), designed by Evans Vettori Architects.

Creating the building’s 10m high glazed facade provided considerable challenges for specialist contractor MB Glass. The 90m wide screen had to negotiate projecting brick study pods and incorporate arched heads beneath a vaulted concrete canopy.

‘The main challenge was to make the design of the screen work together as one screen across the full length of the building while stepping up and over the brickwork pods and under the concrete arches,’ said MB Glass commercial manager Richard Evans.

The facade combines Schueco FW 50+ FW 50+ SG structural glazing with Schueco AWS windows and ADS sliding doors, the latter opening up between the pods on to a raised terrace. Glass louvres are incorporated on either side of the pods.

The capped glazing system helped achieve the architect’s aspiration of dematerialising the facade beneath the imposing canopy, and provided a more cost-effective alternative to frameless glazing.

‘It creates the impression of a film of glass stretched across the facade and over the pods,’ said Robert Evans of Evans Vettori.

The interface between the canopy and the arched screen heads was particularly intricate, requiring bespoke, individually bent curved profiles and glass to fit the curvature of the canopy as well as accommodation of the different tolerances of the various facade elements.

The presence of the canopy also created logistical difficulties for the installation of the glazing for the screen.

Judges appreciated the quirky nature of the building and the prowess of the glazing solution.

The Pavilion is intended to provide a sense of arrival and gravitas on NTU’s Clifton Campus.

Below An arched curtain wall rises up to 10m at the entrance to the pavilion.
Glazing panels up to 5m tall form a new infill structure at the grade II listed Radcliffe Primary Care Building in Oxford. The addition is part of Niall McLaughlin Architects’ transformation of the building into office accommodation for the University of Oxford’s Department of Primary Care Health Sciences.

The infill replaces a single-storey waiting hall and is constructed with ashlar limestone to match the flanking 1911 wings at ground floor level, punctuated by Schueco ADS 65 HD doors. Above is the two-storey, toggle-glazed screen behind which the vertical fins of the concrete structure within are visible.

After initially considering the Schueco FW 50’ system, LSC Special Works specified the Schueco AOC 50 SG system as the best solution for handling the weighty 5m x 2.5m panes because of its built-in glass carrier, which avoided any potential problems with slippage. Installation was achieved using a sucker frame and crane, with a second, lighter atrium screen incorporated within.

Ventilation is enabled by the use of Schueco AWS 114 integrated top-hung vents with opening actuators at the top of the infill. Aluminium framing was coloured to complement the stonework.

‘It was a very difficult installation for us due to the size of the glass and the limited tolerance required to fit them into the system,’ said LSC Group chief operating officer Andy McKechnie. ‘We worked with Schueco’s engineer to achieve the wow factor the architect was looking for.’

In daytime, the glass screen reflects the Radcliffe Infirmary opposite, while at night the internal concrete fins are backlit and the key internal spaces of the building revealed.

Judge Hugh Pearman praised the project as an elegant infill that enhances the classical symmetry of the original building.

Commended
Radcliffe Primary Care Building, University of Oxford

Entrant: LSC Special Works

Above Glazed panels up to 5m high create a new infill extension to the former Radcliffe Primary Care Building.
Left View along toggle-glazed facade.
Winner
The Whitworth, Manchester

Entrant: MUMA

Schueco systems were integral to MUMA’s impressive extension of The Whitworth art gallery, helping realise the architect’s key intents of dematerialising the gallery into the landscape from the inside, and opening it up to the park externally.

The resulting sequence of vistas celebrates the setting and transforms what had previously been a primarily internalised visitor experience.

‘It’s astonishingly good. All these effects have been achieved through phenomenally thoughtful and well crafted use of the products,’ said judge Hugh Pearman.

According to MUMA partner Stuart McKnight, the Schueco range enabled the practice to create bespoke glazing that responded to each specific circumstance while meeting its overall vision for the project.

‘We were looking for a range of high performance systems – not just curtain-walling but also framed windows, openings with concealed frames, plus door systems. The Schueco range provided these and fitted with our architectural intent,’ he said.

Judges particularly appreciated the elegant use of Schueco systems in the Promenade Gallery that forms a new glazed frontage to the park along the formerly blank west end.

Here, MUMA controlled light, glare and solar gain through the use of Schueco FW 50+ SG curtain walling with a delicate brise soleil of 5mm thick stainless steel fins to cast shade...
The new Promenade Gallery on the west elevation.

Above The café, which includes delicate, polished stainless steel structural mullions.

Left The study centre features a 13.5m wide panoramic window over the Art Garden.

Above left The new Promenade Gallery on the west elevation.

Above The café, which includes delicate, polished stainless steel structural mullions.

Left The study centre features a 13.5m wide panoramic window over the Art Garden.

while maintaining views. At the upper level a ceramic frit in a fringed pattern provides further control.

The same system was also used to great effect in a new café wing extending south into the landscape. Here delicate structural stainless steel mullions support both the curtain wall glazing and the roof.

‘The structural mullions were designed to reflect the trees into the café and at the same time conceal the glazing system,’ said McKnight, adding that mirror frits were used externally to help control solar gain and conceal the back of the structural mullions.

Further uses of Schueco systems include an AWS 65 panoramic window stretching 13.5m along the Study Centre on the north side of a new garden court, and Schueco Janisol glazed internal and external steel doors and openable facade elements.

‘It really is very well done,’ said judge Paul Monaghan, adding that the project was ‘in a different league’ to all other Cultural category contenders.
Winner

C-Space, Shoreditch, London

Entrant: BuckleyGrayYeoman

Extensive use of Schueco systems has helped transform a carpet factory-turned-server-facility into desirable offices near Old Street.

Now known as C-Space, the 1960s building has been remodelled and extended by BuckleyGrayYeoman. As well as adding a fourth floor, the architect stepped back one of the front bays to improve views of neighbour John Wesley’s House and provided public access through the site via a new entrance courtyard.

Schueco systems have been key to the success of the 62,000ft² retrofit. On the previously opaque ground floor, the architect introduced Schueco FW 50+ curtain walling and cut back the front of the floor slab to introduce light into the basement. On the next three floors, new windows incorporating openable Schueco AWS 60 side panels were introduced into existing window openings above retained brick spandrels, which were painted black.

On the new top floor, BuckleyGrayYeoman again used Schueco FW 50+ curtain walling, but this time with 200mm deep caps externally and narrowly (750mm) spaced mullions.

‘The caps and spacing give a bit more depth and solidity to finish the building off properly. It’s a bit like a top hat against the sky,’ said associate director Oliver Bayliss. The decision to reconfigure the end bay, he added, ended up improving the overall proportions of C-Space as well as benefiting its neighbour.

‘It’s like a little temple,’ approved Louise Cotter, while fellow judge Paul Monaghan appreciated the ‘crisp and well done’ transformation.

‘There are loads of these 60s office buildings around and often developers knock them down rather than refurbish them. But this project shows that they can be successfully reinvented,’ he said.

Client: Helical Bar
Architect: BuckleyGrayYeoman
Structural engineer: Alan Baxter Associates
Main contractor: Willmott Dixon
Specialist contractor: Drayton Windows
Left BuckleyGrayYeoman added an extra floor and introduced generous ground floor glazing as part of the refurbishment.

Above top Interior of the new 4th floor. The curtain walling has external caps to create a strong vertical rhythm.

Above New entrance pavilion with shallow fin external caps.

Section through typical bay
1  Schueco FW 50+ curtain walling on ground floor and new fourth floor
2  200mm external caps to curtain wall
3  Schueco AWS 70.HI in existing openings
4  Painted brick spandrel panel
5  Cutaway ground floor slab
Half a century of exposure to the marine climate had taken its toll on the facade of Eastbourne’s grade II* listed Congress Theatre.

As well as repairing the severely corroding concrete, Eastbourne Borough Council opted to replace the original 1963 glazing on the front and east facades to improve thermal performance and reduce maintenance costs. Structura UK was the specialist contractor faced with the challenge of creating upgraded glazing that conserved the aesthetic appearance of the original.

Structura designed a solution using the Schueco Jansen Janisol Arte system. Janisol Arte’s steel frame was capable of unobtrusively supporting the extra weight of the new double glazed units and was encased in a bespoke, aluminium extrusion of anodised blue-grey to mimic the original mullions, which had degraded. The 26mm thick units replace original 6mm float glass. The new glazing was treated to ensure its colour and appearance was similar to the original, with opening horizontal pivot windows incorporated to aid ventilation.

‘We felt the Janisol profile was the best to use because it had the slimmest sightlines and offered the right solution for the replacement windows on a historic building from the last century,’ said managing director Manny Patel. He added that Structura tested the
solution with mock-ups of the stone and glass facade ensemble and worked closely with building restoration contractor Triton Restoration, which replaced the concrete fascia.

Patel said the main challenges were the logistics of handling such large panes of glass and the complications of dealing with the condition of the facade once the old glazing had been removed.

He is pleased that many theatregoers have no idea of the extent of the intervention.

‘We wanted to bring the building back to its original appearance. If you went there now you wouldn’t know that it had been refurbished, but the work has made a huge difference to the energy performance and will ensure it can last another 50 years,’ he said.

Judges approved of the accomplished way the team worked with the listed fabric of the 1,600 seater theatre.

‘It’s a good example of the post-war cultural estate being refurbished to enable continued use,’ said Paul Monaghan.

The theatre was originally designed by Bryan & Norman Westwood & Partners and engineered by Ove Arup.

Client Eastbourne Borough Council
Design & project lead Faithful + Gould
Building restoration Triton Building Restoration
Specialist contractor Structura UK

Far left Schueco Jansen Janisol Arte steel system was used to upgrade the facade of the grade II* listed Congress Theatre while respecting the aesthetic of the original building.

Below left The restored facade unobtrusively incorporates new double glazing.

Cill detail
1 Schueco Jansen Janisol Arte profile
2 Steel support
3 High performance 34mm double glazed unit
4 Precast concrete panel
Winner
Kings Gate, Victoria, London

Entrant: Dane Architectural Systems

Designed by Lynch Architects, Kings Gate is a 14-storey residential tower on Victoria Street in central London. Clad in Jura limestone, it contains 100 apartments, from studios to four bedroom family flats and penthouses.

The 10,090m² building was initially conceived with a bespoke unitised facade but this proved impractical and uneconomical, according to Dane. The specialist contractor instead devised a traditionally built solution using Schueco systems throughout.

To the south, the glazing is set back behind long terraces and stone piers to enhance privacy and present an ordered frontage to busy Victoria Street. The north elevation overlooking the Royal Parks is a more open ‘garden elevation’ with large opening windows and metal balconies. Both use Schueco’s ASS 70.HI lift & slide door system for the balcony doors with Schueco AWS 75.SI fixed windows and, to the north, Schueco AWS 70.HI side hung windows.

At penthouse level, views are maximised with the use of a bespoke build-up of Schueco FW 60° double height curtain wall screens with a double mullion design and a run of Schueco ASS 70.HI sliding doors.

On the east and west elevations, the architect incorporated large fixed windows with narrow, full height opening panels to the side. On those facades these are used in combination with projecting oriel windows that provide daylight into the deep plan and offer views south over the Thames or north-west towards the parks.

Dane and Lynch Architects collaborated closely on the detailing of the oriel windows, which were designed opening inwards from Juliet balconies, and on the double height curtain wall facade of the penthouse.

‘We did a lot of design development with Dane to ensure that all the systems line up together nicely, and were happy with the outcome,’ said Lynch Architects director Claudia Lynch of the penthouse facade.

According to Dane director Billy Field, the project’s procurement during the recession made its realisation all the more demanding, with close co-ordination required with those installing the stone, SIPS panels, M&E and internal finishes. A particular challenge was balancing acoustic performance with the risk of ‘roller wave’ ripples in the toughened glazing.

Frames are a rich bronze anodised aluminium finish – a shade darker than the adjacent Zig Zag office building – with matching finishes on the door furniture. Judge Paul Monaghan praised the project as being head and shoulders above everything else in the category, and a ‘massive achievement’ for the young architectural practice that designed it.

Client Land Securities
Architect Lynch Architects
Structural engineer Pell Frischmann
Main contractor Lendlease
Specialist contractor Dane Architectural Systems
Designed by 5plus Architects, this mews development of seven houses and one duplex is on a brownfield site in Teddington.

At the rear the architect explored a more contemporary expression of a terrace than at the front, where the new houses relate more closely to their Victorian neighbours.

The three rear properties make the most of natural light through the use of sliding and folding doors at the back and 2m wide by 2.6m high glazed screens at the front. These are set back in the brick cavity with full height vents to the side behind vertical timber louvres.

Specialist contractor Alumen fabricated the glazing using Schueco’s highly insulated AWS 75 for the tilt & turn front windows and Schueco ASS 70.HI aluminium lift & slide patio doorsets to the rear. At the front of the site, the houses have Schueco ASS 70 FD bi-fold doorsets on the ground floor. All share slim sightlines and a metallic pearl/beige finish.

‘The height made it that much more challenging,’ said Alumen managing director Alan Robinson. ‘Every single window had a different configuration of how it fitted in the cavity – some were forward, others pushed back. There wasn’t a standard way.’

Judges appreciated the modesty of the development and its use of a variety of sliding and folded systems. ‘It’s nicely restrained,’ said Louise Cotter, while Hugh Pearman commented: ‘This is a good example of a young practice revisiting the terrace typology.’

Entrant: Alumen

Client/contractor Q Developments
Architect 5plus Architects
Structural engineer JA Gorman Consulting Engineers
Specialist contractor Alumen

Below Front elevation of the terrace, with full height vents behind vertical louvres.

Left Projecting oriel windows were incorporated into the east and west elevation.
Above On the south elevation of Kings Gate, the glazing is set back behind stone piers and long terraces.
With such an exposed location, Hudson Architects needed a robust glazing solution to achieve its ambitions for opening up the house to the courtyard and the seascape where appropriate.

‘We went for Schueco because we thought they were best for an extreme marine environment,’ said associate Philip Durban. ‘There’s nothing between that bit of the beach and America.

‘There’s also a strange micro-climate effect and a lot of funnelling of wind into the angles of the building, so we had to be particularly confident that the rain wouldn’t get in.’

Le Petit Fort is arranged with two wings radiating from a three-storey granite entrance block. Together these frame a landscaped pool terrace, sheltered garden and entrance forecourt within the enclosure.

The house is built in a combination of Corten panels, polished micro-cement render and Jersey granite, including stone recycled from the farmstead buildings that previously occupied the site.

The materials palette deliberately
references the muted natural tones of that part of the island and contrasts with the extensive screen of Schueco glazing.

On the ground floor, Schueco AWS 75 full height tilt & turn aluminium windows fulfil the architect’s aspiration for the courtyard and house to merge into one space when required.

Schueco ASS 70 sliding doors are used on the first floor where the two wings meet, with Schueco ASS 80 FD bi-folding doors on the first floor balcony facing west and Schueco AWS 70 windows on the second floor.

According to Durban, the ambition was for the building to make a statement, but do so discreetly. Its unusual nature certainly caught the attention of the judges.

‘Set within the perimeter wall, it really is such an astonishing thing,’ said Hugh Pearman. ●

Client Private
Architect Hudson Architects
Structural engineer Ross Gower Associates
Main contractor Mitchell Construction Group
Specialist contractor Bonam & Berry and Style Windows

West elevation detail
1 Weathered steel
2 Granite capstone
3 Granite
4 Powder coated aluminium
5 Schueco AWS 70
6 Granite cill
7 Weathered steel solar shade
8 Powder coated aluminium
9 Schueco ASS 70
10 Polished concrete
11 Powder coated aluminium
12 Schueco AWS 75

Above left Le Petit Fort is built within a sheltering granite retaining wall, which also encloses a pool courtyard.
Far left Beach view of the house, with the granite ‘keep’ rising above the two wings.
Left Generous windows maximise the seaside views.
Winner
Berry Bros & Rudd Wine Merchants, 62/63 Pall Mall, London

Entrant: Propak Architectural Glazing

This quirky redevelopment of a Mayfair office building utilised many systems within the Schueco Jansen steel range.

Designed by MJP Architects and Short & Associates for Berry Bros & Rudd Wine Merchants on the corner of Pall Mall and St James's Street, the project retained the front facade but introduced a more adventurous rear composition incorporating arched, curved and circular screens.

As well as negotiating the strict planning and heritage requirements of the surrounding grade II* listed buildings, specialist contractor Propak dealt with high fire ratings and acoustic insulation requirements.

‘During design it quickly became obvious that steel was the only option,’ said managing director Lloyd Bennett. ‘No other material was capable of offering the optimal combination of high fire ratings, larger panes and minimal, “heritage window” type sightlines. Using the same Schueco Jansen family of systems throughout helped provide a seamless integration of profiles, systems and finishes.’

At the front, the original intention had been to refurbish the windows and add secondary glazing. Propak instead suggested Schueco Jansen Janisol Arte to mimic the existing sightlines as well as provide improved thermal and acoustic properties.

To the rear, the same system was used in combination with a Schueco Jansen VISS curved curtain wall to create the array of window shapes. This required a large amount of bespoke design and particularly close collaboration with the brickwork specialists to achieve the recessed Schueco Jansen Janisol Arte profiles. Propak provided them with templates so that the brick apertures matched the Jansen system within the 1mm tolerances. It then used its own templates to manufacture the system to fit.
To complement the window finishes, Propak manufactured matching window reveal flashings. This, along with the concealed fixings, gives ‘a really nice crisp finish’, Bennett said. Propak also made roof parapet flashings to match the louvred Schuco Jansen steel systems doors on the rooftop and insulated spandrel panels for the fire-rated curtain wall. The project included internal fire-rated doors and curtain walls and a walk-on glass roof.

The tight site made this project particularly challenging logistically – larger units had to be lifted over the building by tower crane for installation at the rear.

Judges admired both the novelty of the rear elevation and the technical achievement of realising it, especially the use of curved fire-rated systems. ‘There’s no doubt that it’s a complex and good use of the systems,’ commented Louise Cotter.

The key component is a glazed insertion beneath the original timber fascia, which had to be retained. Extensive structural work was needed to prop the elevation up while a new steel frame was positioned.

The 5.1 m x 3.5m glazing is framed in Schuco Jansen VISS TV steel and set between brick clad piers. These are flanked by two new entrances, created with Schuco Jansen Janisol steel doors to meet BREEAM security standards.

The architects wanted the shopfront’s

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Client
Berry Bros & Rudd Wine Merchants
Architects MJP Architects, Short & Associates
Structural engineer Civic Engineers
Main contractor Galliford Try
Specialist contractor Propak Architectural Glazing

Entrant: Roz Barr Architects

This renovation of a 19th century former warehouse drew inspiration from the site’s jewellery quarter location within the Hatton Garden Conservation Area in central London.

Completed for a speculative developer, the project refurbished and extended the restaurant and residential building, adding a storey and reconfiguring the lower levels. This entailed the overhaul of the tired front elevation and better organised access.

‘The street front of the building was fragmented as it had been adapted over time,’ said Ana Monrabal-Cook, associate director of Roz Barr Architects. ‘We felt it was important to finesse the shopfront to fit the context of the area.’

The key component is a glazed insertion beneath the original timber fascia, which had to be retained. Extensive structural work was needed to prop the elevation up while a new steel frame was positioned.

The 5.1 m x 3.5m glazing is framed in Schuco Jansen VISS TV steel and set between brick clad piers. These are flanked by two new entrances, created with Schuco Jansen Janisol steel doors to meet BREEAM security standards.

The architects wanted the shopfront's

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Above The bronze finish of the steel frame references the area’s jewellery quarter heritage.

new steel frame to emulate a fine bronze insertion into a brick surround. They specified a textured bronze finish which they felt was in keeping with the character of the conservation area. The Janisol steel doors were powder coated to match and were customised with decorative steel fins.

“We’d worked with Schuco before and we liked the very slender steel profiles of the Schuco Jansen VISS system,” said Monrabal-Cook. “The specification of a standard system with the ability to adapt the product to create a bespoke solution suited both the architectural ambition and budget requirements of the project.”

Judge Hugh Pearman admired the elegant and interesting use of a steel system for a conservation area project.

Client PRP Estates
Architect Roz Barr Architects
Structural engineer Cambell Brown Engineers
Main contractor ACS Professionals in Construction
Specialist contractor Apex Security Engineering
Winner
East Wing, Guy’s & St Thomas’ Hospital, London

Entrant: Colorminium
Daily testing of radiation levels was one of the more unusual conditions that Colorminium took in its stride when working on the overcladding of the East Wing of Guy’s & St Thomas’ Hospital in central London. Its skilful realisation of Hopkins Architects’ design was the runaway winner of both the specialist contractor and health categories.

Judges were impressed not only with the technical virtuosity that went into the detailing and installation of the secondary facade, but the delicate and elegant result – and the hospital remained fully operational throughout.

The 13-storey project entailed overcladding the poorly performing 1960s building to create a thermally efficient double-skin facade. This was achieved using 4 x 4.5m unitised panels set 1.2m away from the old facade. Structural limitations of the building meant these had to be fixed to external tie-rods hung off rooftop cantilevered steelwork.

The Schueco USC 65 installation utilised a specially designed connection that accommodated expansion and contraction of the rods and the steel beam deflections and included integral louvres and brise soleil, the latter with a pivot detail for easy cleaning.

Fire-rated walkways at each level provide access for cleaning and maintenance.

‘It’s phenomenal from an engineering aspect, and unusual that the double facade was installed from the top down,’ said judge Greg Sinclair. The overcladding took 20 weeks on site, with Colorminium facing challenges at every stage, from initial investigations into the state of the original facade to the logistics of getting the panels to the site.

‘Because of the height of the units we were very restricted with transport routes and because we could only store two days’ worth of panels on site, we had to organise a daily drip-feed of deliveries,’ said construction director Kieran Mallinson.

Installation was further complicated by the need to keep the ground floor clear for ambulances, leading to the construction of a large first floor gantry. Installers worked from the top down to fix the rods and walkways before working their way back up as they installed the Schueco system. Those working close to the x-ray department were checked daily for radiation levels as a precaution.

Judge Steve Mudie was impressed with the skilfully engineered use of Schueco systems to realise the architect’s ambition for a high performing secondary facade that improved the appearance of the building.

‘They’ve taken functionality and created the architecture out of that. When you see the end result, it’s quite beautiful.’

Opposite The poorly performing original elevation was repaired and overclad to create a thermally efficient double-skin facade.
Below left The new utilised facade is hung off cantilevered rooftop steelwork.
Below right Stainless steel support arms accommodate building movement and allow the facade to move independently of the existing building.
**Commended**

**Queens, Queensway, Bayswater, London**

**Entrants: Propak Architectural Glazing; Structura UK**

**When Derwent** London redeveloped the former Queens Cinema for residential use, it was keen to retain the art deco character of the original 1930s design.

This was a particular priority for specialist glazing contractor Propak, which created highly polished steel and stainless steel systems for the ground floor, and Structura UK, which was responsible for aluminium windows, casement doors and lift and slide doors for the rest of the redevelopment.

Throughout, the new windows complement the period style of the retained main facade with its distinctive curved canopies, while providing improved thermal and acoustic performance.

Propak took particular care with the detailing of the entrance. This incorporates the development’s diamond-shaped branding through the use of interlayered stainless steel latticework laminated into Schueco Jansen Janisol glazed side screens.

The finish and aesthetic of this thermally broken entrance system is matched by the Schueco Jansen Economy 50 profile rather than a 100% stainless steel profile, achieving the same finish as the stainless steel canopies by overcladding it to match.

‘Making sure the overcladding of the shopfront was incredibly accurate was crucial in order to match the high quality finish throughout the rest of the building,’ said managing director Lloyd Bennett. ‘It had to be tight and true.’

For the upper residential levels, Structura worked with Schueco’s technical team to develop a solution using the Schueco AWS 70.HI Soft Line aluminium window and door system, chosen for its high level of thermal insulation, narrow face widths, attractive vent contours and concealed classic fittings. The thermal performance helped the building achieve Level 4 Code for Sustainable Homes compliance.

‘Judges were unanimous in their appreciation of the art deco cinema’s conversion to new use, which won a RIBA Award in 2015. ‘It’s really beautifully done,’ said Paul Monaghan.

The five-storey, 2,000m² building contains 16 residential apartments plus the ground floor shop.

- Client: Derwent London
- Architect: Stiff & Trevillion
- Facade consultant: Net Project Management & Consultancy
- Structural engineer: AKT II
- Contractor: McLaren Construction
- Specialist contractor (steel systems): Propak Architectural Glazing
- Specialist contractor (aluminium systems): Structura UK

**Left** The cinema’s art deco facade was retained, with new glazing and canopies. **Below** Steel latticework in glazed panels either side of the residential entrance.
Commended
Ulster University Belfast Campus Block BB

Entrant: Frameworks Facades (a division of McLaughlin & Harvey)

Judges were impressed with the complex facade detailing of Block BB, the first of three new buildings in Belfast city centre that will form the relocated Ulster University main campus. The 8,500m² building, which provides more space for the College of Art and Design, consists of a six-storey brick plinth topped by a dramatic cantilevered planar glass lantern.

Schueco curtain walling makes up 60% of the 6,000m² facade. For the 0-5 plinth levels, the vertical glazed slots had to be isolated from the surrounding brick cladding cavities, necessitating a continuous aluminium perimeter flashing to be integrated with the Schueco FW 60+ SG curtain wall. A Schueco toggle system and slotted fixings to the substrate were used to allow the frame and box flashing to move independently of each other. The screens are broken into two-storey sections, separated along brick cladding movement joints with a system of membranes and flashings to allow flexibility of movement while maintaining an effective weather seal.

The three-storey lantern contains open plan studio space and is enclosed on all four sides by 14m high suspended Schueco FW 60+ SG curtain wall screens.

‘The entire facade of the lantern is suspended from the roof trusses,’ said Frameworks facade designer Mark Burns. ‘There’s a huge amount of engineering involved, especially given the large cantilever and the different stresses and movements.’

The engineering of these screens was particularly complex at the cantilevered section of the box where high slab deflection values were anticipated and individual glass panel weights of up to 500kg had to be supported. Input from Framework’s structural engineer, assisted by Schueco, led to the design of a complex arrangement of rigid mullion joints and slotted bracketry to accommodate structural and thermal movement at floor level.

Throughout, high performance mechanical acoustic vents are incorporated within the curtain walling. These are fronted by anodised perforated panels, held in place by an adapted Schueco toggle arrangement. The project also features 12 Schueco ADS 75.SI doorsets at street level. These have various glazed-in and bonded panels including glass, anodised perforated sheets and louvres.

Judges admired the creation of such a challenging elevation, in particular the flush arrangement with the brick. •
Winners

Drawing Studio, Arts University Bournemouth

Entrant: CRAB

Judges conferred a special award for a 140m² drawing studio designed by Peter Cook and Gavin Robotham’s CRAB studio.

“We’re minded to give it a judges’ special award because it’s such a lovely thing, and shows how a standard product can be used in an extraordinary way,” said judge Hugh Pearman.

The studio forms a distinctively shaped blue marker on the north end of the Arts University Bournemouth campus. Designed to celebrate the phenomenon of natural light, the studio is dominated by a 30m² oval north light window tilted up to frame a clump of pine trees while preventing distracting views of ground level.

This window provides the main illumination in the wholly white-painted room, its effect boosted by a clerestory window at the rear and the glass entry wall, while a low window under a long bench provides a mysterious glow.

The architect specified Schueco FW 50 + SG structural glazing with Schueco AWS 102 vent frames.

“We wanted to have a facade with vents that didn’t have an obtrusively visible framing and that was still within budget,” said Peter Cook. “With the glazing contractor and Schueco, we developed a detail that allowed us to have structural glazing with opening windows with a blue square (matching the building colour) framing each window externally. We kept it very simple, which is sometimes difficult to do.”

He added that they had been fascinated by the large circular or part-circular windows in Belgian art nouveau and some London studios of the late 19th/early 20th century.

Internally, the window jambs are concealed within the internally lined surface to emphasise the view of the pines outside, with a recessed LED light between the interior lining and glazing creating an illuminated ‘eyeliner’ effect.

Schueco ADS 65 HD is used for the entrance door.

“As a studio space it looks fabulous,” said judge Greg Sinclair.

Above The oval north light studio window tilts upwards to provide views of nearby pines. Below Window frames match the distinctive blue of the exterior.

Client Arts University Bournemouth
Architect CRAB (Cook Robotham Architectural Bureau)
Structural engineer AKT II
Main contractor Morgan Sindall
Metal shell subcontractor CIG Architecture
Glazing subcontractor Glass Box Facades

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