# make

### Welcome

The year 2014 was an absolutely amazing one for Make as we celebrated our tenth anniversary. I would like to reiterate my thanks to everybody that has helped us to be such a phenomenal success over the past decade.

The excitement is continuing into 2015 as we gear up to move into our brand new studio! Work is well underway to transform the Cleveland Street car park into a fabulous bespoke office that will become Make's permanent home in May. Guests that attended our tenth birthday party were treated to a sneak preview of the space before construction started – although sadly the street art and Indian food stalls have now been removed!

This year saw us enter a significant stage in our evolution as we undertake an ever-increasing number of construction projects – we currently have an incredible total of 45 architects based in five site offices across London. This is an amazing indicator of how established Make has become and of the wealth of experience and expertise that we are now able to offer.

One of my proudest moments in 2014 was winning the AJ100 Practice of the Year award – the most coveted of all the AJ100 prizes. This is an incredible achievement, especially as we were up against some pretty stiff competition, and a fantastic accolade as we celebrated our tenth year.

I am delighted to announce that last year's very special Annual 10 won a prestigious Red Dot design award. I hope you enjoy reading our eleventh annual publication and learning about the projects, people and events that have shaped the year.

Of course 2014 has been completely overshadowed by the tragic death of our colleague and friend James Phillips, who died suddenly in September at the age of 27. This was Make's saddest day and James is much missed by us all.

Ver

Ken Shuttleworth

# **Projects**

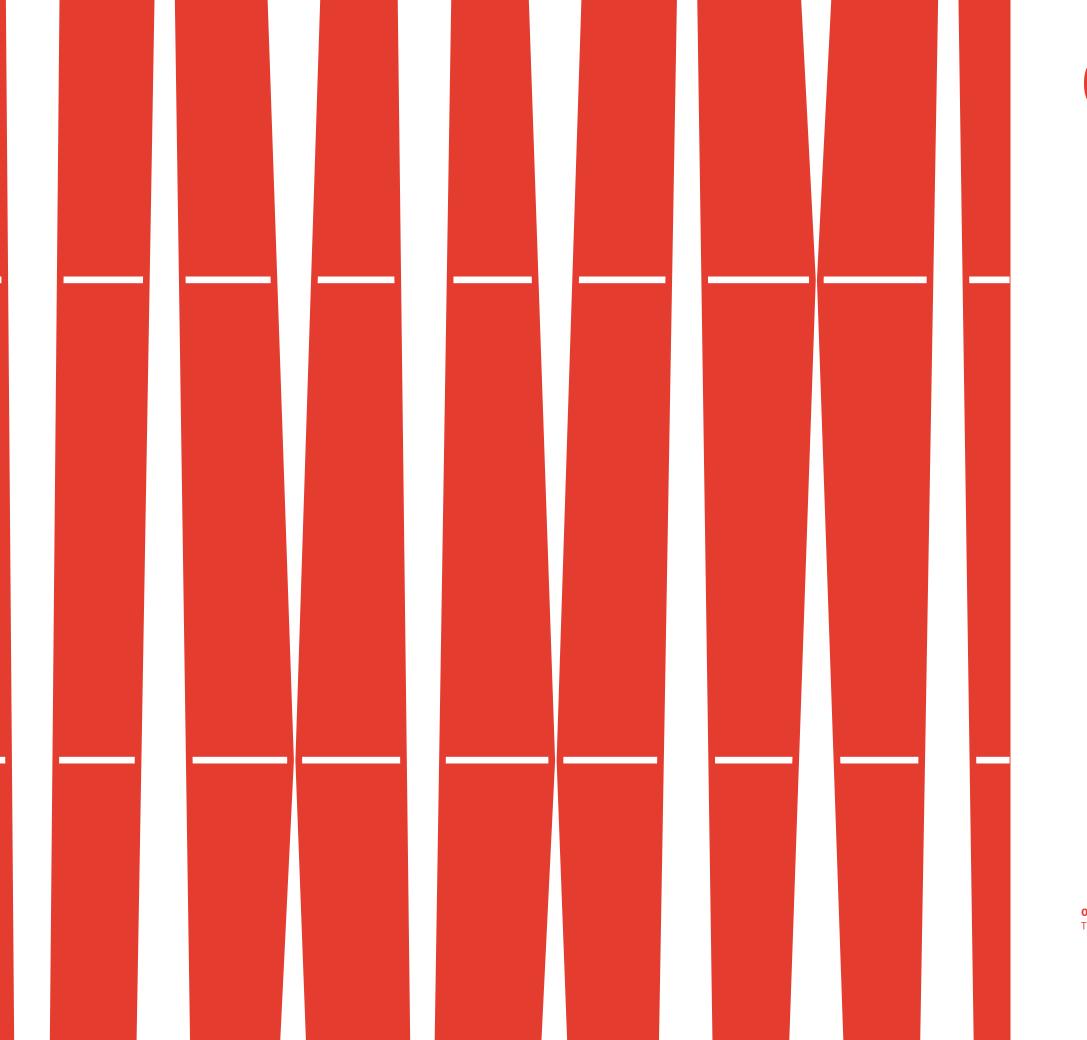
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# **Office**

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**Opposite** Facade detail, The Monument Building.

**Location** Geneva, Switzerland **Area** 16,300m<sup>2</sup>/175,500ft<sup>2</sup> **Client** HSBC Private Bank (Suisse) SA

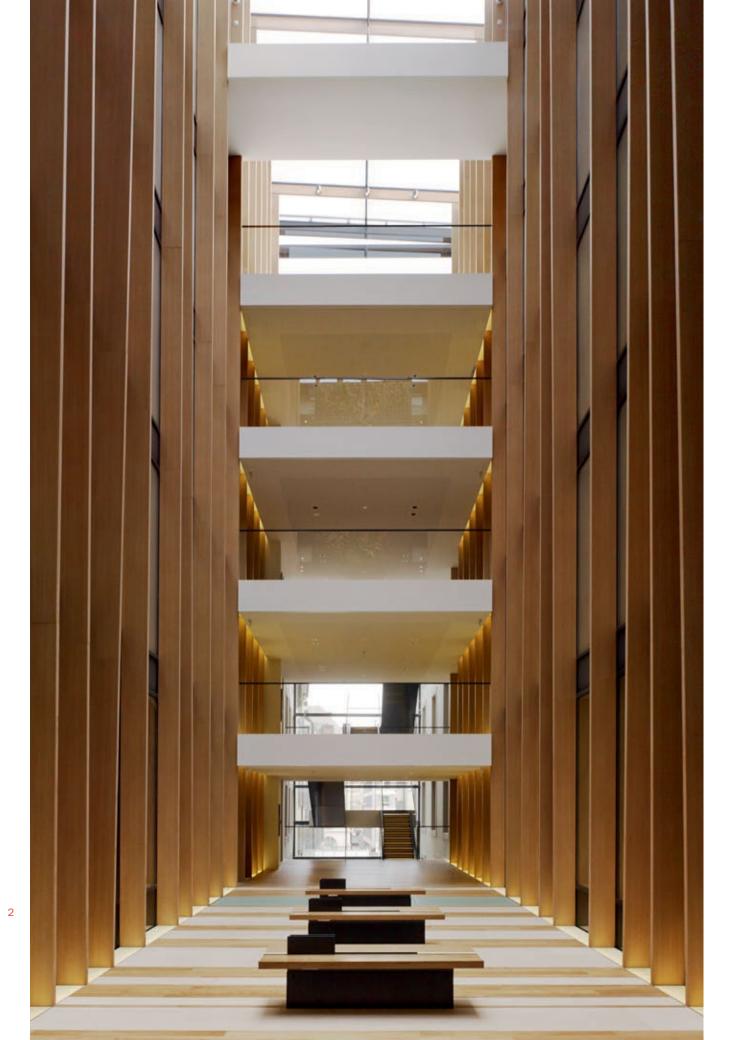
# Quai des Bergues

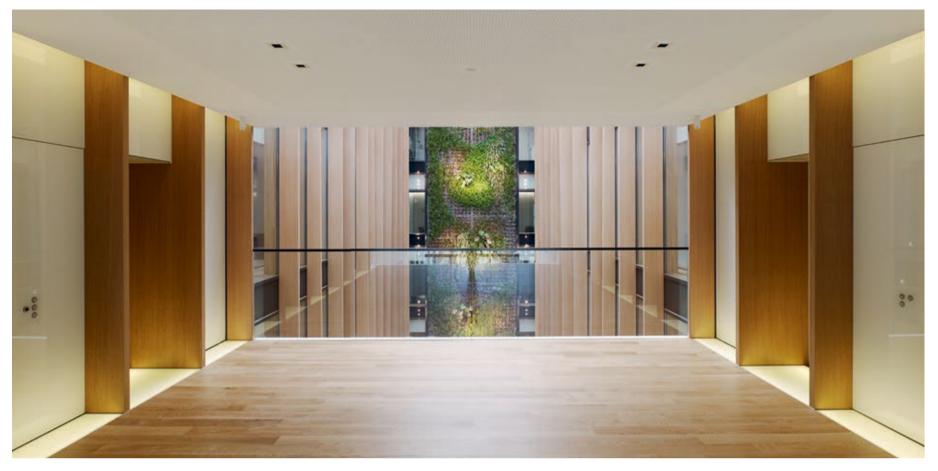
Our second scheme for the HSBC Private Bank in Geneva was completed in April and is now fully operational. Located in the heart of one of the city's most attractive areas overlooking Lake Geneva, the Quai des Bergues development involved the sensitive merging of seven structurally independent historic buildings to form a strategically important client-facing office for the bank. Make worked in collaboration with local architects IttenBrechbühl SA on the scheme, which won Global Project of the Year in the 2014 FX International Interior Design Awards.

1 (Opposite) The new headquarters houses 650 staff and has allowed the bank to consolidate five of their Geneva offices in one location. The comprehensive refurbishment has resulted in 40 per cent of the building's internal structure being rebuilt, to provide a spacious workplace with first-class client facilities and a trading floor. Further area has been gained through the rebuilding of the sixth and seventh floors, as well as the addition of new basement space.

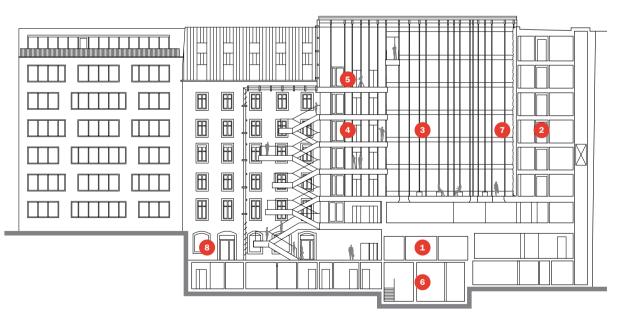


2 A new full-height atrium forms the heart of the development and joins the individual buildings together, giving them a consistent identity. The timber and glass construction enhances visual connectivity between floors and provides the workspaces with generous levels of natural light. 3 Timber 'blades' in the atrium serve a decorative purpose, as well as providing privacy to the office areas. Circulation has been optimised with the addition of five new lifts and a cantilevered staircase that connects the office floors. Spacious half-landings encourage communication and collaboration between staff members. 4 Section of the building.

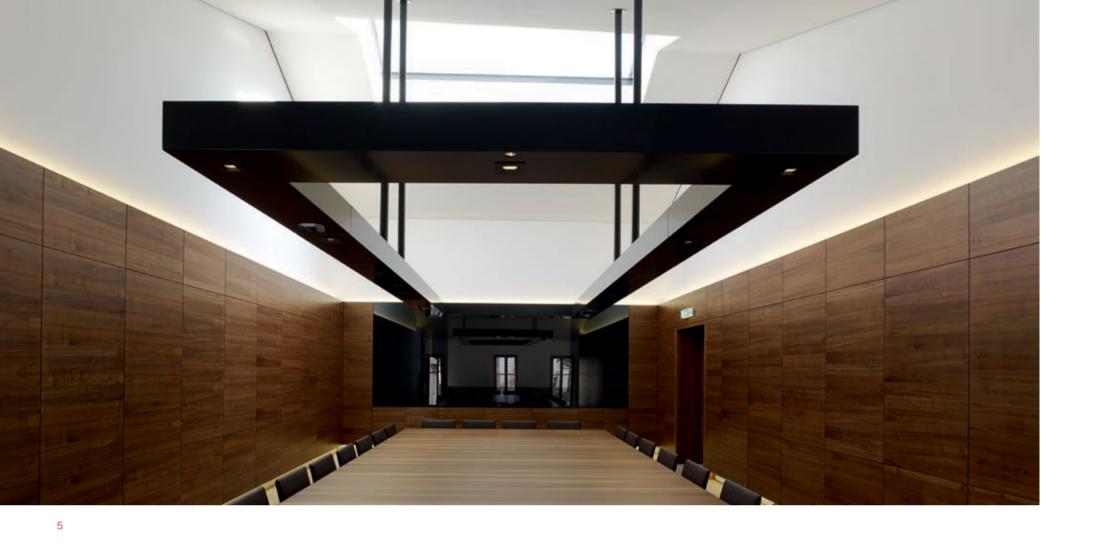




- Open plan office
   Meeting room
   Atrium
   Lift lobby
   Atrium bridge 6 Plant room 7 Green wall 8 Courtyard







**5** On the client floors, a fully integrated element of joinery containing AV functions as well as ventilation and cooling equipment wraps through the entire space. The newly constructed roof incorporates a doubleheight boardroom that receives generous levels of natural light via a rooflight. **6** Sixth floor plan. **7** The new ground floor facades link back to the history of the building and replace fully glazed vitrines from the 1960s. The window and door elements are finely detailed and include illuminated canopies that reference the facade's traditional character in a contemporary way. 8 The upper client reception overlooks Lake Geneva, the old town and Geneva Cathedral. Its curved form creates a gallery-like space in which the sculpted timber reception desk is exhibited like a piece of art. 9 Fully-glazed dormer windows maximise views and unify the building's roofline. Electro-chromatic

glass adjusts to the sunlight and can reduce

UV transmission to 5 per cent.



Meeting room
 Client reception

3 Atrium 4 Boardroom

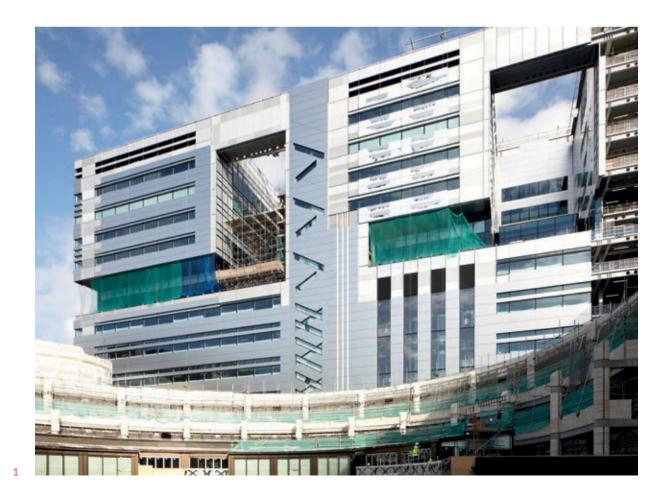
5 Lift lobby
6 Green wall
7 Kitchen
8 Dining room
9 Courtyard

Office – Quai des Bergues

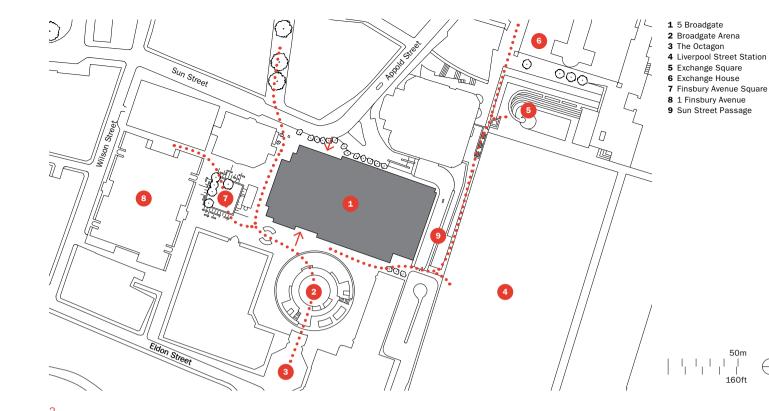
# **5** Broadgate

A client's perspective

Location London, UK **Area** 105,000m<sup>2</sup>/1,130,000ft<sup>2</sup> **Client** British Land Tenant UBS



5 Broadgate is due for completion in the spring of 2015. Guest interviewer Paul Finch conducted an exclusive interview with the building's client and tenant – Adrian Penfold and Nigel Webb from **British Land and Nigel Morley** of UBS. Here they discuss their involvement in the project.



British Land's Development Director, Nigel Webb, knew that UBS remaining at Broadgate was not a foregone conclusion: 'A key question was whether you could get the right type of building at Broadgate, with enough space for large trading floors.'

In order to combine the sites of 4 and 6 Broadgate, British Land needed to relocate tenants, including Henderson Global Investors and Bank of Tokyo. They were in the happy position of being able to offer space in other British Land buildings, on Bishopsgate and Ropemaker Place.

The first design proposed – by another architect – for 5 Broadgate was turned down by the Mayor, recalls Adrian Penfold, Head of Planning at British Land. Then in came Make, who managed to provide the same space horizontally.

Nigel Webb points out that British Land was at Foster & Partners, and had designed The Willis Building on Lime Street – another example of the developer combining with a pre-let institutional tenant to deliver a commercial block with bespoke aspects.

11

1 View of 5 Broadgate

from Broadgate Arena.

pedestrian routes and

public spaces. 3 View

Octagon.

of the building from the

2 Plan showing Broadgate's

'One secret of the project's success is the way the two architectural practices worked together.' You couldn't ask for a better endorsement of professional collaboration than this tribute from Nigel Morley, Programme Director at UBS. He has lived and breathed 5 Broadgate from inception to completion, working with Make on the building and TP Bennett on the fit-out.

For UBS, it began with an abortive prerecession plan to develop its own building on a nearby site. It would also have been possible to carry out a refurbishment of the bank's existing buildings, 'but that would have resulted in the business being divided across several buildings, and we would have needed to move out and back in again. Also we wanted to bring our three main activities closer together – investment banking, wealth management and global asset management - had worked with Ken Shuttleworth when he with corporate services providing the link.'

'UBS had always had a strong link to the City', says Morley, 'and we had been a tenant at Broadgate from the start, so British Land's 5 Broadgate proposal worked very well for us as it provided the necessary flexibility of design and function.'

Office - 5 Broadgate



'Make can take satisfaction in the fact that it has not only found the key to unlocking an urban blockage, but also produced a London financial building that has satisfied client and user, and simultaneously played a part in the next chapter of the Broadgate success story.'



By the time Make came on board, the UBS requirement had also changed. The desire was now to produce something 'world-class but not an icon', says Webb. That was partly the result of practical considerations. 'Because of security we couldn't leave a route between two buildings, we couldn't incorporate retail uses and we couldn't go underground.'

Though an element of permeability was being removed, Adrian Penfold is happy about the public route strategy devised by Make: 'The design enhances the new east–west route off the square into the train shed, and the north–south route through Sun Street Passage. This has improved what was very poor linkage between the two phases of the original scheme.'

Make's task was also to provide more flexibility than a tower design would permit, and to allow the possibility of sub-letting or even change of use in the future. The architecture needed to chime with the landlord-tenant relationship, as Nigel Morley points out: 'The lease structure has some flexibility built in, not least because it is difficult to second guess the future of the banking business and what will happen to trading over the next 30 years, or to the supporting technology.'

It is tempting to see 5 Broadgate as a technology-driven building with a cool architectural cloak. 'There is a 'tech' associated with trading which makes it more complex that a regular office,' says Morley. Large trading involves extensive technology, including multiple CPUs and screens: 'That means we need to cool the desks, which means deeper raised floors for cabling. There are 7m² for each trader, and at that density there are knock-on effects on toilets, exits and catering.'

UBS also had to ensure that all aspects of the building were designed to fit with their corporate strategy and environmental commitments, so it had detailed engagement at RIBA stages C, D and E, with regular meetings in Make's 'secret' room with the fit-out architects and other members of the design team.

As the building nears completion the client team are optimistic about what they have achieved, and the way that it will enhance the overall Broadgate Estate. 'You could think about UBS as an anchor tenant,' says Adrian Penfold. 'They make it attractive for other people such as lawyers to be nearby. We are, though, conscious of the need to diversify – there's Shoreditch nearby, and Broadgate Tower, where we can attract tenants who just want a single floor. And 199 Bishopsgate has some techie tenants.'

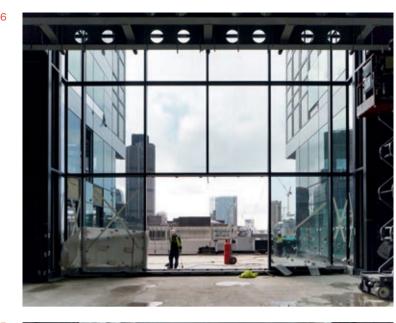
It could have been different, he says: 'The heritage discussions and attempts to get the original buildings listed didn't delay planning for very long, thankfully. We had a new Chief Executive, and if listing had taken place on the scale proposed it would have meant Broadgate becoming a gradually deteriorating asset. It would, over time, have made it very difficult to maintain Broadgate as prime City floorspace.'

For Nigel Webb, 5 Broadgate is 'a catalyst for much wider regeneration, which is re-energising a development stuck in aspic since the 1980s. It is the first big move for 20 years, providing a hub connecting Shoreditch, Spitalfields and the City.' And the space has let well, with index-linked rents taking account of the fact that one building has replaced two.

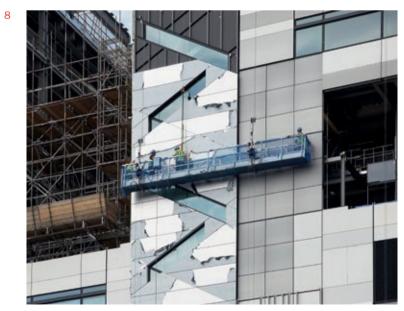
The design provides safe, well-serviced facilities that can withstand power interruptions, and up to four trading floorplates of 120 by 60m – an extraordinary scale of development. 'This is at the leading edge globally', says Nigel Morley. UBS will manage the building, which will become their primary building and new headquarters in London.

Make can take satisfaction in the fact that it has not only found the key to unlocking an urban blockage, but also produced a London financial building that has satisfied client and user, and simultaneously played a part in the next chapter of the Broadgate success story.

4 South-east courtyard.
5 West elevation overlooking Finsbury Avenue Square.
6 Glazing on level 7 of the south-east atrium. 7 Light pipe diffusers in the south atrium. 8 Cladding panels being installed on the south staircase.







12 Office – 5 Broadgate



Ken founded Make in 2004 and oversees the design of all the practice's projects. During the course of his career he has built up a remarkable portfolio, having worked on some of the world's most innovative and iconic buildings.

'For all its ability to improve energy performance and occupant comfort, smarter glass can only ever be part of the solution – we have to challenge the default preference for big glazing per se.' 1 5 Broadgate's south staircase cladding.2 The south-east courtyard. 3 Cladding and light pipes in the north atrium.

# Rethinking glass: 'throwing stones'

Ken Shuttleworth considers the increasingly vital role of glass in the drive to achieve more energy-efficient buildings. Make began campaigning years ago for 'the death of the glass box' in order to provoke debate about the need to design more energy-efficient buildings. Of course glass was only ever a footnote. Since then, our thinking has evolved into a more holistic approach to the environmental performance of every building we design.

Although glass manufacturers have made progress on this front, it has been slow; admittedly, the same goes for architects. But today, the scale and urgency of the carbon challenge is such that the most recent UK climate model predicts that our existing passive energy conservation strategies for buildings will land us with serious problems from mid-2030 onward.

By 2050, with an increasingly elderly population that will be unable to tolerate weather extremes, the data suggests that it will be impossible to maintain anything like the current comfort levels in most buildings without engineered cooling – and with a building replacement rate of 1 per cent at most, that means retro-fitting existing stock. By then, of course, energy-guzzling glass boxes will have become social pariahs, ruinous to run and impossible to let.

Part of the remedy is technological. Various types of electro-chromatic and suspended particle glass are steadily gaining ground over high-efficiency static glass. With automated controls integrated into the mechanical infrastructure, such products can help to reduce the heating, ventilation and air conditioning load, as well as eliminate the need to add external shading structures. So in new builds, at least, smart glass can play its part in green design, but as the main barriers to adoption are high initial cost and unknown long-term performance, the value for all stakeholders has to be as watertight as the glazing itself.

For all its ability to improve energy performance and occupant comfort, smarter glass can only ever be part of the solution – we have to challenge the default preference for big glazing per se. And that's tough, because our love affair with glass has roots in our cultural values that run way deeper than the Modernist canon. In the West, light has always been equated with truth, virtue, openness and knowledge; it's not called 'the Enlightenment' for nothing.

These are not universal human associations, though. The traditional Japanese aesthetic, for example, values the concept of *wabi-sabi*, which prizes the rough over the smooth and the ambiguous and many-layered over the clear and one-dimensional. And crucially, it rejoices in the subtleties of shade and shadow over the superficial attractions of bland, shiny brilliance.

In his book *In Praise of Shadows* (1933), the Japanese poet Tanizaki explains the Western desire to replace shadow with light as an expression of our constant quest to improve on nature, as opposed to the oriental inclination to go with it. An oversimplification maybe, but it contains a useful thought for our low-carbon future.

Ever since the Kyoto Protocol was negotiated in 1997, we have known that the best we can hope for is to slow the pace of the global warming we create. For as long as our population increases and we have societies based on economic growth, the warming will continue; and if we can't prevent, we have to adapt.

Respecting light and rediscovering the possibilities of shade – including shades of meaning – can be part of that adaptive response. It opens up new creative opportunities for an architecture that is more nuanced and enriching because it is less obvious and one-dimensional.

Take our 5 Broadgate scheme for UBS in the City of London. Treating the building as a solid form into which the glazing is 'cut in' has done more than simply reduce solar gain and energy consumption, important though these are; it has created powerful geometries that, counter-intuitively, lighten and humanise what would otherwise be a monolithically large edifice.

The environmental challenge is complex and demands a plural response that combines game-changing technologies, economy of means and respect for local factors with a fundamental mindset shift that frees us to develop a radical, truly sustainable, low-carbon design vocabulary that our children will thank us for.







14 Office – Rethinking glass: 'throwing stones'

This dynamic office building occupies a prime position in the heart of the City within the shadow of the Monument, one of London's most famous historic landmarks.

# The Monument Building

**Location** London, UK **Area** 13,600m<sup>2</sup>/146,400ft<sup>2</sup> **Client** Skanska Project Development Ltd



Our distinctive, high-quality building has been sensitively designed to respect its heritage-rich setting and the prominence of the Grade I listed Monument, making a positive contribution to this historic part of the City of London.

The site is bounded by Pudding Lane

to the east, Monument Street to the south and Fish Street Hill to the west, with the Monument located immediately to the south. Three outdated commercial buildings have been demolished and are being replaced by new office space provided over ten floors, with a roof terrace at level 9 overlooking the Monument and rear terraces at levels 4, 5 and 7. With its object being a BREEAM 'Excellent' rating, the scheme is setting new standards in terms of sustainable design within the Square Mile.

### Main facade

Due to its proximity to the Monument, the building's main facade required a highly sensitive design. Materials and detailing have been kept simple and restrained, with a palette of masonry, glazing and anodised aluminium providing a striking yet calm sculptural backdrop to the Monument, which also strengthens the definition of the enlarged public square.

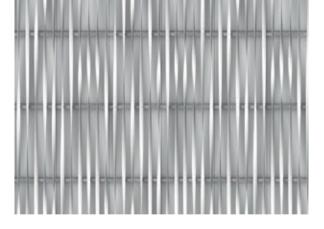
A 'curtain' of twisted, anodised aluminium fins covers the south facade's unitised cladding system of floor-to-ceiling glass panels, adding a sense of depth and visual interest to the building's frontage. Taking inspiration from the verticality of the Monument and the fluting on its stone column, this rippling veil of metal ribbons is suspended from the ninth-floor terrace and extends down to the second floor.

1 Photograph of the construction site. 2 Model of the building and the Monument. 3 Visualisation of the curtain of twisted anodised aluminium fins.

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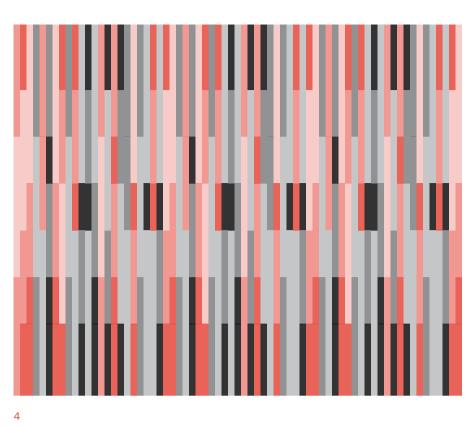


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.6 Office – The Monument Building



- Single-storey 360 degree
   twist clockwise
- Single-storey 360 degree
- twist anti-clockwise
- Double-storey 360 degree twist clockwise
- Double-storey 360 degree twist anti-clockwise
- Triple-storey 360 degree twist clockwise
- Triple-storey 360 degree twist anti-clockwise



5

# 4 Diagram illustrating the repeating pattern of twisting fins. 5 First sample of an anodised aluminium fin. 6 Early visualisation of the green roof and the ninth floor terrace, as seen from the top of the Monument. 7 The Monument's viewing platform.

### Fin

The twisting anodised aluminium fins have been developed through the use of parametric computer modelling tools, which allowed experimentation with multiple variations within a series of parameters. These include the distance between the fins, their profile and thickness, the depth of the curve, the number of twists along the length of the facade and the fixing requirements.

The curtain comprises a total of 69 fins, with six different types arranged across the facade in a repeating rhythmic pattern. Each fin is twisted 360 degrees, alternately clockwise and anticlockwise, and extends vertically across one, two or three storeys. The flat 240mm-wide fins are spaced at 500mm intervals, with a minimum gap of 260mm between each one. Each twist has been carefully configured to allow vistas out of and into the offices and draw maximum levels of natural light into the building, while also providing sufficient shading to reduce thermal heat gain.

The less prominent north, east and west elevations respond to the scale, massing and architectural language of the neighbouring buildings. Composed of alternating Jura stone and glazed panels offset on a floor-by-floor basis, these elevations create a calm and ordered appearance that provides an appropriate backdrop for the nearby eighteenth-century, Grade II listed building at 2a Eastcheap.

### Roof terrace and garden

The upper floor is set back to reduce the building's visual mass and create an outdoor terrace that overlooks Monument Square. A roof garden will be highly visible from the Monument's viewing platform and has been made into a unique contemporary sundial that is embedded into the landscaping. During the course of the day, the Monument will cast a shadow on the roof that moves as the position of the sun changes. The green roof is demarcated by five different types of sedum planting, which are used as markers to indicate the passage of time as the shadow gradually traverses from east to west.

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### The Monument

Designed by Sir Christopher Wren and Dr Robert Hooke, the Monument is the tallest isolated stone column in the world. Completed in 1677 to commemorate the Great Fire of London, it is 62m tall and positioned 62m from the location in Pudding Lane where the fire is believed to have started.

The fire began in a baker's shop on Sunday 2 September 1666 and continued for five days, destroying one-third of London and making around 100,000 people homeless. The only buildings to survive were built of stone, including St Paul's Cathedral and the Guildhall.

The Doric column is constructed from Portland stone and contains a 311-step cantilevered spiral staircase that leads up to a viewing platform. A moulded cylinder supporting a flaming bronze urn symbolises the Great Fire. The Monument is an extremely popular tourist destination, with more than 200,000 visitors climbing to the top every year to enjoy its panoramic views of London.

18 Office – The Monument Building

Planning approved

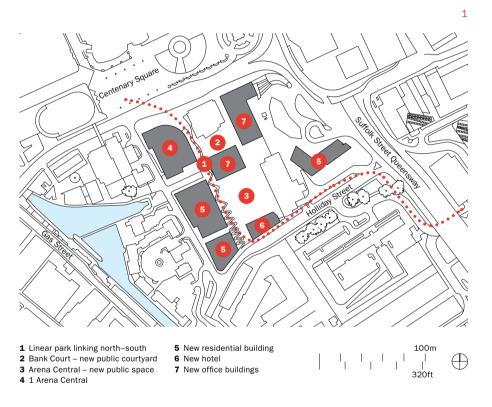
Arena Central is a 9.2 hectare regeneration site in the heart of Birmingham's city centre. This ambitious masterplan introduces a mix of uses and unique landscaping to establish new routes and places in the city.

# Arena Central Masterplan

Location Birmingham, UK

Area 9.2 hectares/22.7 acres

Client Arena Central Developments



Located on the site of the former Carlton Television studios, Arena Central is one of the largest and most prominent development sites in Birmingham. We have been appointed to deliver the masterplan for the £500-million scheme, as well as its first building.

The masterplan completes the southern side of Centenary Square facing the new Library of Birmingham, Memorial Hall and the Birmingham Repertory Theatre. A transition is created between the civic square to the north, the central office cluster and the softer residential and hotel elements to the south. Significant new public realm will result in enhanced connectivity to the wider area, improved pedestrian links, animated frontages and a vibrant street hierarchy.

1 Plan showing the buildings framing two new public squares, linked by a landscaped route that runs north—south through the site. 2 Plan of the landscape design, which creates a variety of character areas that flow down the south-facing hillside. 3 Visualisation of the serpentine path weaving through areas of attractive meadow-style planting. Decking and seating mark the points where the path crosses the water channels, encouraging playful interaction.





3

The two new squares sit at the heart of the plan and lead onto each other. Arena Central to the south is the larger of the two and is informal in character. Its landscaping is designed to encourage interaction and social gatherings and provide an appropriate setting for the new residential and hotel buildings to be constructed in this part of the site. By contrast, Bank Court is a more formal square and creates a suitable backdrop to the Grade II listed Birmingham Municipal Bank building and the surrounding new office developments.

Catering for a level change of 11.5m, the development is stitched together by a distinctive landscape spine providing a pedestrianised north—south route through the site. Conceived in collaboration with landscape architects, Gillespies, the landscaping breaks from the conventional design

found in many urban developments. A soft, informal planted character creates an interesting counterpoint to the bold geometry of the 1 Arena Central office building, with a serpentine path meandering gently down the site's sloping topography to create a natural, welcoming character. The terrain gradually evolves from hard granite paving near the commercial buildings to the north to a softer character as it moves south, with the stone giving way to a wild urban meadow and a stream.

During the first phase of the masterplan, some of the development plots will be landscaped as temporary wildflower meadows. This will allow public enjoyment of the wider site during construction and encourage engagement with this large urban space during its transformation.

20 Office – Arena Central Masterplan

1 Arena Central is spearheading the first phase of the Arena Central masterplan, with its striking design reflecting the civic importance of the adjacent Centenary Square and the building's role as a gateway into the new development.

### **1** Arena Central

**Location** Birmingham, UK **Area** 13,000m²/140,000ft² **Client** Arena Central Developments

As the first speculative office building to be awarded planning permission in Birmingham since the recession, 1 Arena Central is a significant milestone in the city's economic recovery. Construction is due to start on site in 2015.

The flagship eight-storey building includes flexible Grade A office space, as well as ground floor retail and restaurant units and basement parking. The distinctive curved building forms the missing corner of Centenary Square, with the north and east facades treated as one continuous elevation that diagonally addresses the centre of the square, while giving space to the handsome stone facade of the adjacent Grade II listed Birmingham Municipal Bank. An exciting juxtaposition is established between the formal Classical composition of the bank and the more abstract character of the new building.

A bold, contemporary chequerboard pattern reinforces the simple massing and height of the building and emphasises the curve of the corner, so it reads as a strong, anchoring presence. The colour and texture of the cladding materials were chosen to create continuity with the historic buildings on Centenary Square, with pale cream and grey solid panels evoking the Portland stone and silver granite of these structures. The number of horizontal joints has been minimised to preserve the simple, abstract quality of the chequerboard motif.

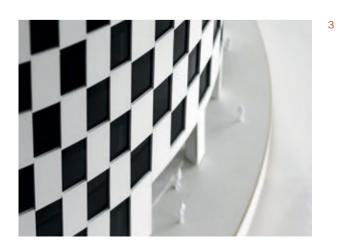
Gradations in the pattern further highlight the building's strong form. Around the north and east elevations, the width of the solid and glazed panels gradually increases, with the largest openings located at the centre of the curve above the main entrance. This configuration serves to visually draw pedestrians towards the entrance and further round to the landscaped linear park beyond. At the top of the building, the pattern of the cladding panels continues upwards, forming a 'screen' that wraps around the recessed rooftop terrace overlooking the square and emphasises the building's full height, ensuring that the overall form is clearly legible and creates an impact.



2

 Concept sketch of the cladding grid stretching around the curved corner.
 Visualisation of 1 Arena Central and the

Birmingham Municipal Bank building from Centenary Square. **3** Study model showing the contrast between the solid and glazed cladding panels.



23

22 Office – 1 Arena Central

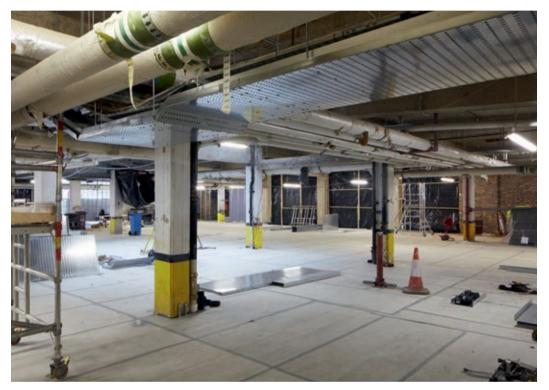
1 View of the studio floorplate looking towards the location of the new garden. 2 Visualisation of the refurbished space. The concrete frame and atrium under construction.
 Visualisation of the curved glass entrance facade next to the listed Black Swan Inn.

### **32 Cleveland Street**

Status On site
Location London, UK
Area 1,300m²/14,000ft²
Client Derwent London PLC

Construction is progressing fast on the conversion of a former NCP car park into a spectacular bespoke studio for Make that will be ready for occupation in May 2015. The unique underground space is located in Middlesex House – a five-storey Art Deco-style office building in Fitzrovia centred around a communal courtyard.

Our refurbishment is maintaining the industrial aesthetic of the car park, while creating a contemporary state-of-the-art office space. A glass block rooflight is being inserted into the floor of the building's ground-level courtyard, allowing natural light to flood the basement space below. The rear lightwell is being converted into new outside amenity space, including a garden.





Status On site Location York, UK Area 4,600m²/49,000ft² Client Hiscox

In July, building work commenced on our office building for insurance firm Hiscox in York. Located on the site of a former nineteenth-century wool market, just south of York Minster, the spectacular four-storey space will house up to 500 employees in an open, flexible working environment. The bespoke building has been sensitively designed to reflect the rich heritage of York and reintroduces a sense of place by redefining the streetscape and improving accessibility to the wider area.

An undulating 'woven' brickwork facade, inspired by the wool market, wraps around the gently rippling south and west–facing elevations. The north–east frontage comprises a stunning curved glass facade that overlooks new public space and forms a vibrant, open street frontage.



1





2

24 Office – 32 Cleveland Street and The Hiscox Building

1 Site photo of the London Wall and Moorgate junction, looking west. 2 Street-level visualisation of the scheme looking west towards London Wall Place.

1 The cores are pulled to either end of the building, creating open, light-filled floorplates offering spectacular views of Chengdu. The building's horizontality is further expressed with deep cuts in the core at both ends.

### **London Wall Place**

Status On site

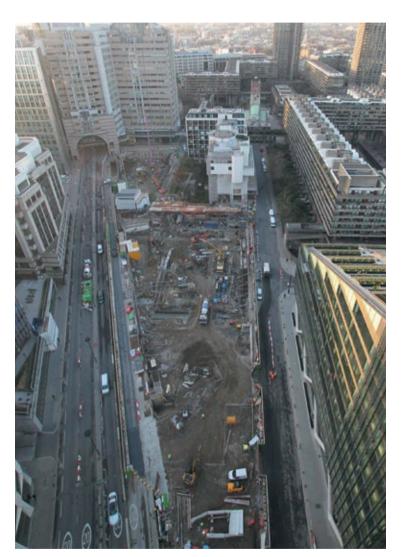
**Location** London, UK **Area** 75,000m<sup>2</sup>/800,000ft<sup>2</sup>

**Client** London Wall Place Partnership

Occupying a substantial site in the heart of the City next to the Barbican Estate, London Wall Place consists of two landmark buildings that will provide 75,000m² of state-of-the-art office space. A major new amenity is being created for the area, with 50 per cent of the site comprising attractive public realm. Beautifully landscaped gardens and new and improved cross-site pedestrian links will significantly enhance access into the site and integrate the development with its local neighbourhood.

Construction commenced in August, with the Make team now based on site. The visual mockup of the facade was completed in November – a project in its own right. No. 1 London Wall Place has been leased by global asset management company Schroders.





4

### Pinnacle One 睿东中心

Status On site

Location Chengdu, China

Area 121,000m<sup>2</sup>/1.30 million ft<sup>2</sup>

**Client** Chengdu Qianhao Real Estate Company Ltd (Jointly invested by Swire Properties Ltd and

Sino-Ocean Land Holdings Ltd)

Due for completion in late 2014, Pinnacle One is setting new standards for office architecture in Chengdu. Offering premium commercial accommodation on Dongda Street in the city's rapidly expanding business district, the simple yet elegant building is an impressive addition to the city's urban landscape.

This striking new landmark is Make's biggest building to date and one of the tallest towers in Chengdu. The 47-storey structure reads as a strong metallic block, with silver aluminium cladding accentuating the two end cores and expressed as solid elements framing the slender tower and emphasising its height. Deep slots cut into these cores further highlight the verticality and strength of the form.

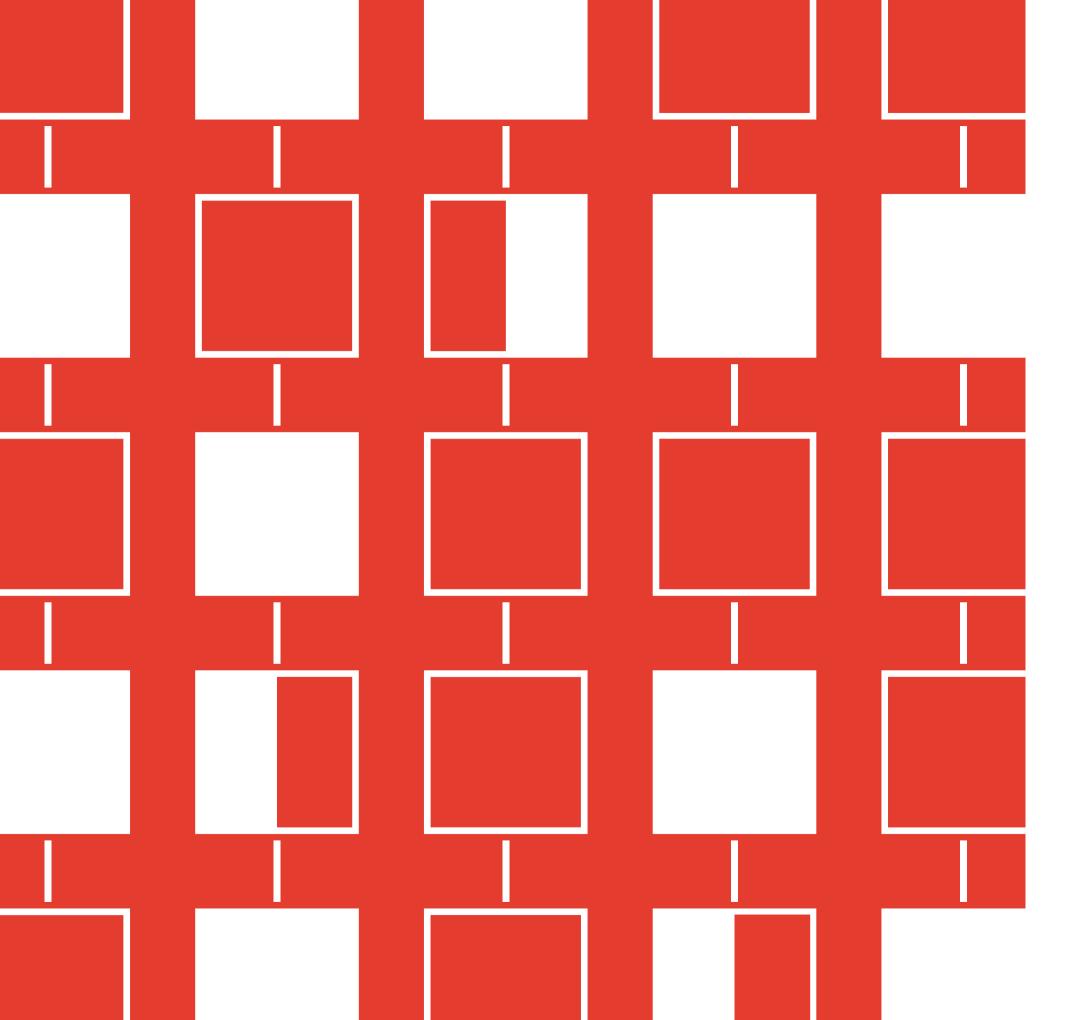
由于在2014年底的建设完成,睿东中心在成都树立了全新的办公建筑标准。并且在城市中快速发展的商务区东大街,提供了高档的办公设施,简单而又优雅的建筑不仅令人印象深刻,而且在城市景观中锦上添花。

睿东中心是Make有史以来最高的建设,并且也是成都最高的建筑之一。拥有着47层的塔楼是一座坚实的金属质感大厦。银色铝质覆层突出了位于建筑两端的核结构,核结构以实心体部分为形态修长的办公塔楼形成外框,同时突显出建筑的高度。核结构上设计的深凹槽更进一步突出了建筑外形的垂直感和力度感。



1

26 Office – London Wall Place and Pinnacle One



# Retail

The Podium 30
Vertical urbanism 36
Aldgate Square
Pavilion 40

**Opposite** Detail of the Podium's pixel wall.

**Location** London, UK **Area** 1,200m<sup>2</sup>/12,900ft<sup>2</sup>

**Client** London Legacy Development Corporation

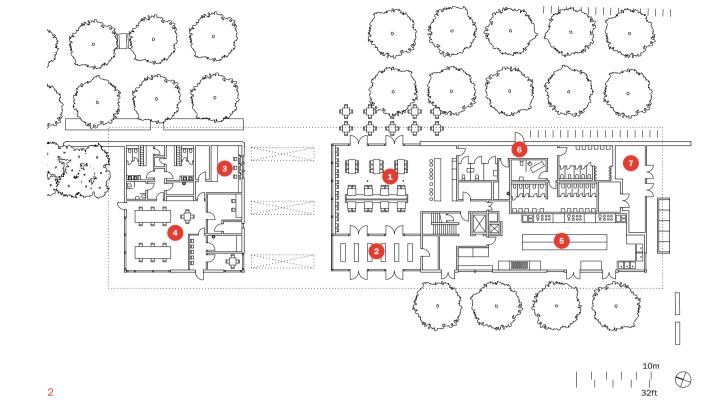
# The Podium

Opened to the public in April, the Podium is located immediately adjacent to the Orbit and has become an extremely popular destination for visitors to the Queen Elizabeth Olympic Park. The elegant, understated pavilion was designed to subtly respond to, rather than compete with, the park's bold architectural structures. It comprises flexible event space, a box office, management offices and a bar and restaurant with a generous roof terrace offering spectacular views.

1 (Opposite) The beautifully proportioned rectilinear building is formed from a series of horizontal and vertical planes that enclose the internal and external spaces. Two blocks are joined by a single roof which connects them so that they read as one linear form. A white metal roof with an overhang around the perimeter further emphasises the building's horizontality and provides shade. Dark timber cladding is arranged in horizontal strips to enhance the structure's linearity.



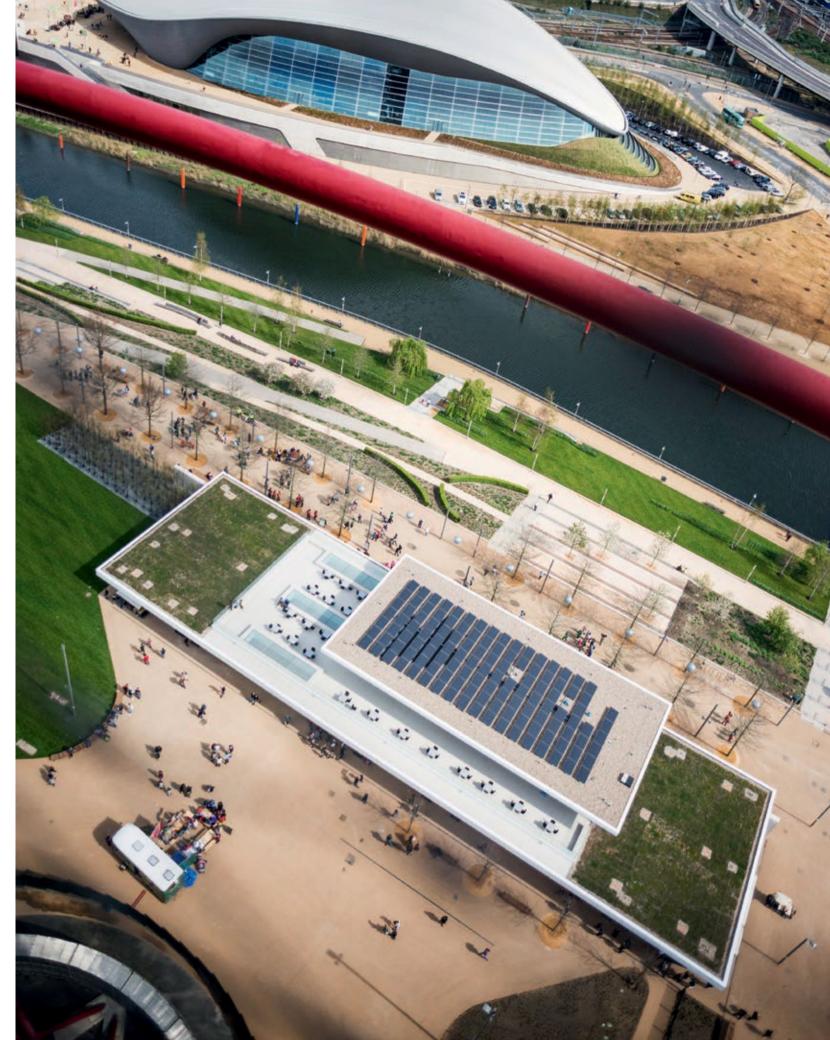
- 1 Café
  2 Retail
  3 Box office
  4 Office
  5 Kitchen
  6 Toilets
  7 Plant



2 Ground floor plan. 3 A range of black and white cladding materials – charred timber, concrete and cast metal – provides a deliberately subtle backdrop to the intense red of the Orbit. The ancient process of timber charring accentuates the natural grain of the wood, emphasising its textural quality to produce a distinctive, low-maintenance, durable finish. **4** Photograph of the Podium taken from the top of the Orbit. The building is carefully stitched into the landscape as part of a fully integrated park masterplan, designed in consultation with urban designers James Corner Field Operations.

Retail - The Podium







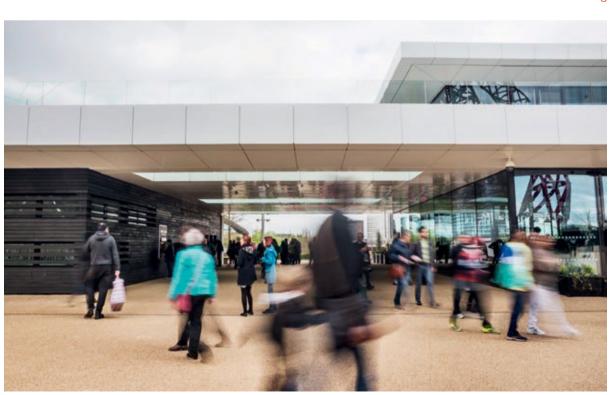
7 In addition to the Podium, Make designed four kiosks that are located at intervals along the eastern edge of the Queen Elizabeth Olympic Park promenade, in order to define the route and create a sense of continuity.

8 A wide pedestrian route flows through the middle of the Podium, breaking up the space and drawing people in and through the building.



An interactive 'pixel wall', designed by London-based design collective Tomato, animates the Podium. **6** More than 2,000 hand-crafted wooden cubes are threaded onto steel rods. Their light and dark surfaces can be rotated to create patterns, text or images, transforming the wall into a giant message board.





34 Retail – The Podium



Bill joined Make's London studio in 2009. He worked on 5 Broadgate and 40 Leadenhall Street before relocating to China to become General Manager of the Beijing office in 2013. He is currently leading the delivery of The Temple House hotel in Chengdu.

Bill自从2009年加入伦

Broadgate与40 Leadenhall

Street的项目上任职,于2013

年加入北京工作室并为现任

总经理。他目前担任成都博

舍项目的主要负责人。

1 Visualisation of a Make-designed tall building prototype. The curved profile creates a sculptural form on the skyline, the perception of which changes when viewed from different locations. 2 The receding facade line does not overwhelm at street level. 3 The curved edge allows diversity in size and typology and exceptional public realm at the tower's base.

### Vertical urbanism 垂直城市化

Bill Webb writes about the concept of vertical urbanism and how it can impact the world's rapidly growing cities.

Bill Webb 讨论了关于垂直城市 化的概念,以及对现今快速成长 的城市之影响。 One of the key issues of our time is how to best match the planet's limited resources with the needs of its growing population, with a net zero impact. This problem touches on many areas, from water and energy to geopolitics and wealth, and the opportunities we have to tackle it have never been more diverse or compelling.

Between 1960 and 2000, the earth's population doubled from 3 to 6 billion and continues to climb, resulting in a much more dense and urban world. The number of people living in urban areas was more than 50 per cent in 2007 as people migrated to the city for work and towns expanded to become cities, with China in particular becoming symbolic of this growth.

Making these cities happy, human and sustainable is a major challenge and fundamental to their success and longevity. Incremental unplanned urban growth can lead to the suburban sprawl of Los Angeles or the favelas of Rio de Janeiro, leaving people feeling isolated, disconnected and marginalised. Compact cities consume less energy and less time. In addition to the energy-saving benefits of successful integrated public transport systems, shorter commute times reduce stress, improve personal relations and have a positive impact on the many less tangible elements that create happy, healthy societies.

The technology to build tall is here, so the real challenge we face is creating genuine vertical urbanism that provides people with the nourishment and fulfilment that is traditionally found in horizontal urban environments. This will need a new political and financial model, as well as inventive urban and architectural design. The need to create public space and public services at height is fundamental if this new way of living is to succeed, and that will mean governments working with developers to enhance the offer, pay for services and fully embrace the fact that three-dimensional streetscapes are becoming part of cities.

Designers must consider the need for 'serendipitous space', where incidental events can happen that are inspiring and stimulating for both residents and visitors. Sky bridges feature heavily in science fiction but are key to connecting individual tall buildings laterally, so people can move easily through a city without the need to constantly transfer down. For those used to being ground dwellers, this lateral movement is one of the key ways to feel more at home in the sky. All parts of the city need to be transported up, not just the most dense or lucrative, and sky bridges and sky gardens are a solution.

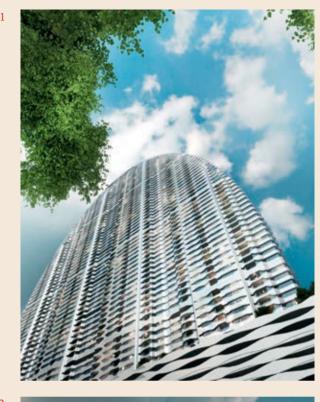
在我们这个时代,一个关键的问题是我们如何最好的与不断增长的人口的需求相配备有限的地球资源,并且争取零度影响。这个问题涉及到诸多领域,从水,能源到地缘政治以及金钱。然而解决这个问题的机会从未像今天这样的多样与紧迫。

在1960年与2000年之间,地球人口从30亿增长到60亿,并且继续攀升,导致了更加密集与城市化的世界。居住在城市和农村的人口在2007年跨越了50%的大关,随着越来越多的人来到城市中生活工作,城镇逐渐扩大并成为城市。尤其在中国,这种城市化现象成为了人口增长的一种标志。

为了这些城市的"幸福",人以及可持续性发展是为了达到这些城市的成功运作与"长寿"的一个重大的挑战,也是最基本的条件。例如,无计划的城市增长导致了洛杉矶的郊区蔓延与里约热内卢的平民区。留下的人感到孤立并与城市断开变得边缘化。紧凑型的城市能够消耗更少的能源,结合完善的公共交通系统,可以减少通勤时间,减轻压力,改善人际关系,对更多无形的元素造成积极影响,从而营造出一个积极,快乐,健康的社会。

现代技术可以把建筑建的很高,然而我们面临的的挑战是如何创造一个 真正的垂直化城市,从而为人们提供传统水平城市环境所有的丰富和满足感。 为达到这个目标,这将需要一个全新的政治和经济模式,以及创造性的城市和 建筑设计。如果想要这种新的生活方式成功,就需要政府与开发商合作,对提 供公共空间以及公共服务设施增加投资,支付这些服务并完全接受一个事实, 即三维的街景将成为城市的一部分。

作为设计师,必须考虑"偶然空间"的需要,这些偶然事件的发生对于居住者与造访者既是启发也是鼓舞。在科幻小说里的空中桥梁频繁出现。空中桥梁的最关键之处是可以把独立的高层建筑横向连接,使人们可以在城市中轻松移动而不需要转移到地面上。对于那些习惯了居住在地面上的人们,空中桥梁的作用则使得他们有种宾至如归之感。不仅仅是密集的或者是可获利的部分,城市中所有的部分都要转移到空中。而空中的桥梁与花园可以成为一个很好解决办法。







36 Retail – Vertical urbanism

'As the building typology of the future, these vertical cities and structures must be developed in a loose-fit and adaptive way, becoming as much a process as a product and allowing the demands of future generations to be met by a basic framework.'

4 A series of towers connected via intermediate sky bridges to create a linear, high-rise development. 5 A tower with clearly expressed vertical public space and an adaptable facade system.



The Council on Tall Buildings and Urban Habitat (CTBUH), which traditionally hosts its annual conference in cities famed for their skyscrapers, has held its conference in China for the second time in three years, indicating where the industry sees its focus. A key topic arising from the seminars in 2014 was the need for cities to retain their personalities and characters with the development of vertical urbanism. As well as responding to local climatic conditions, the sky cities of the Far East need to look and feel very different to those in Western Europe, which in turn differ from those in the Middle East. Each draws on a unique cultural heritage and the different requirements and lifestyles of its citizens. The need to reject the homogenisation of the tower was widely acknowledged at the conference, and cited as a key reason to be sceptical about the proliferation of vertical urbanism.

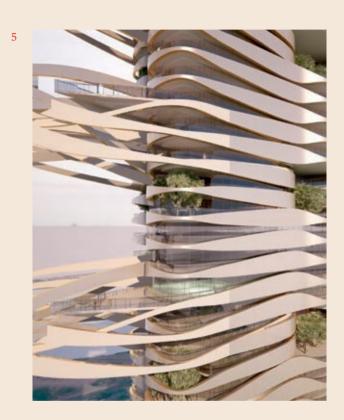
As the building typology of the future, these vertical cities and structures must be developed in a loose-fit and adaptive way, becoming as much a process as a product and allowing the demands of future generations to be met by a basic framework. This is comparable to the chassis of a car providing a strong frame around which systems can be added, developed and altered. The high-tech nature of building tall means we need to maximise layers of usage; one system to clad the building, collect rainwater and use it to cool the building. To further extend the car metaphor, technologies which are developed for Formula 1 vehicles often end up trickling down to the mass-produced market. The same can be true for building systems.

While China is a major focus for this debate due to the incredibly rapid rate of urbanisation, all global cities have the opportunity to engage with it, not just those in the developing world. Making links between the city and the citizen, as well as planning for change, will ensure successful vertical urbanism as well as the preservation of the rural environment.

CTBUH(高层建筑与都市居住委员会),于2014年再次在中国召开了年会,这是近三年中第二次把会议地点选在中国。会议中提到了各行业对超高层建筑的关注。并提出城市需要保留自己的个性与特点,尤其是在垂直化的城市发展当中,以及应对当地气候的条件。远东地区的空中城市与欧洲西部的截然不同,更不同于中东地区。每个都借鉴了其国家独有的文化底蕴以及对于居民的生活方式与需要。在这次会议上,大多数都赞同有需要排除塔楼的均质化,并且对垂直化城市的均质化扩散保持怀疑态度。

在未来的建筑类型学中,这些垂直城市的结构必须发展成一个宽松并且有适应能力的形式。就像一个产品的生产过程,通过提供一个基本框架来满足未来后代的需求。这相当于一个汽车的地盘提供了强有力的框架,以便以后系统的增加,开发和改变。满足高层建筑的科技性则是我们需要最大限度的延续使用的功能,例如一个外立面的系统,可以收集雨水,并用其冷却建筑。延伸汽车的比喻,比如F1的科技开发可以之后运用到大批量生产的汽车市场,同样的理论也可以适用于建筑领域。

由于快速的城市化发展,中国成为讨论的一大焦点,全球所有的城市都有机会参与,而不仅仅是发展中国家。在城市与居民中创造连接,并规划改变,不仅仅能保证垂直化城市的成功发展,更有利于农村环境的保护。



38 Retail – Vertical urbanism

### Planning submitted

Following the success of Make's award-winning visitor information centre at St Paul's, the City of London is creating a family of pavilions that will establish a 'brand' for the City. We have been commissioned to design a second pavilion that forms part of a wider masterplan to improve the public realm within Aldgate.

# Aldgate Square Pavilion

Location London, UK

Area 250m²/2,690ft²

Client The City of London

The Aldgate gyratory, located on the eastern boundary of the City of London, is currently being transformed into an attractive, high-quality public space to be known as Aldgate Square. Rationalisation of the existing road network is now underway to create a new community park that establishes improved links between two distinctive listed heritage buildings – the St Botolphwithout-Aldersgate church and Sir John Cass's Foundation Primary School. The design process involved close collaboration with a working party and local stakeholders; more than 100 meetings have been held with residents, businesses, the London Borough of Tower Hamlets, Transport for London and many others with a commitment to improving the area.

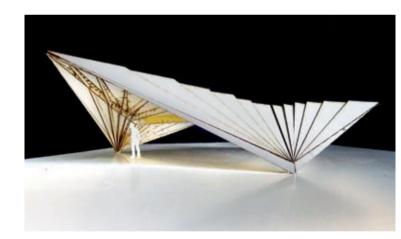
Our highly flexible pavilion will be run by a community enterprise as a café and recreational amenity that appeals to a wide range of users. Sited in the square's north-west corner to maximise the amount of open public space, the design forms an open and welcoming building on all sides, with clear views into and through the three-sided structure. During summer, large sliding windows can be opened at the front to provide a seamless transition between inside and outside. The form of the pavilion has been carefully designed with respect to key pedestrian approaches and ties in with the redeveloped garden space, which will feature new pathways, a cycle route, seating, planting, a lawn area and water features.



1







3

1 Visualisation of the pavilion and the new public space. 2 The Aldgate gyratory site.

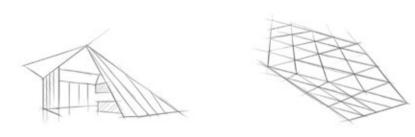
**3** Model of the open asymmetrical structure.

40 Retail – Aldgate Square Pavilion

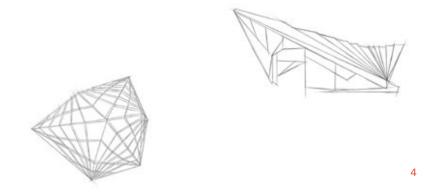


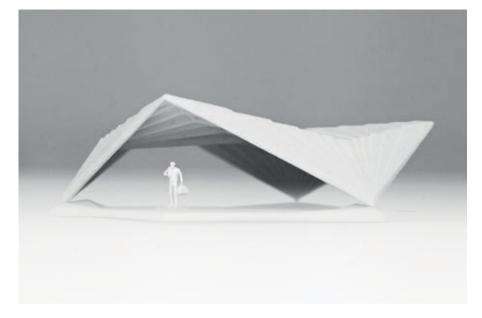












5

### Integrated structure

The pavilion's asymmetrical structure is formed from an all-in-one integrated steel skin that folds down to touch the ground at three triangular support points, with glazed openings between these points addressing pedestrian desire lines. Overlapping cladding panels form a rigid structural shell covering the skin and a facetted surface that serves to minimise the pavilion's profile. The internal faces incorporate spray-applied insulation, a vapour barrier and a slatted timber soffit with acoustic insulation.

The structure sits over an underground pedestrian subway that will be blocked as part of the gyratory system works. This below-ground space will be used for toilets and back-of-house facilities, further reducing the pavilion's footprint and maximising transparency and views. Stairs, a lift and a dumb waiter connect the pavilion to the existing walkways, which also supply fresh air to provide passive pre-heating and cooling.

- **4** Early design development sketches.
- **5** 3D-printed model of the pavilion.
- **6** Sketches showing the fully integrated steel skin and the glazed openings.

### Weathering steel

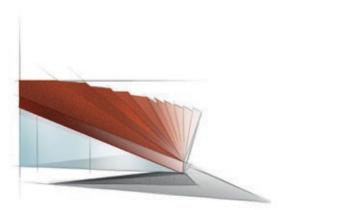
Weathering steel (COR-TEN) is proposed for both the structural skin and the cladding surface. This robust, corrosion-resistant steel oxidises naturally. A protective barrier is formed by controlling the rate at which oxygen in the atmosphere reacts with the surface of the metal. With time the patination process changes the colour of the surface; when the desired colour is achieved, a clear acrylic coating is applied to maintain it. The low-maintenance coating also reduces potential rust-staining due to water run-off and has antigraffiti properties.

The pavilion's rust-like colour and texture offer a contextual response, in particular to St Botolph's and the Foundation Primary School. The warm tones of these historic red brick buildings are beautifully complemented by the natural orange and brown of the weathered steel.



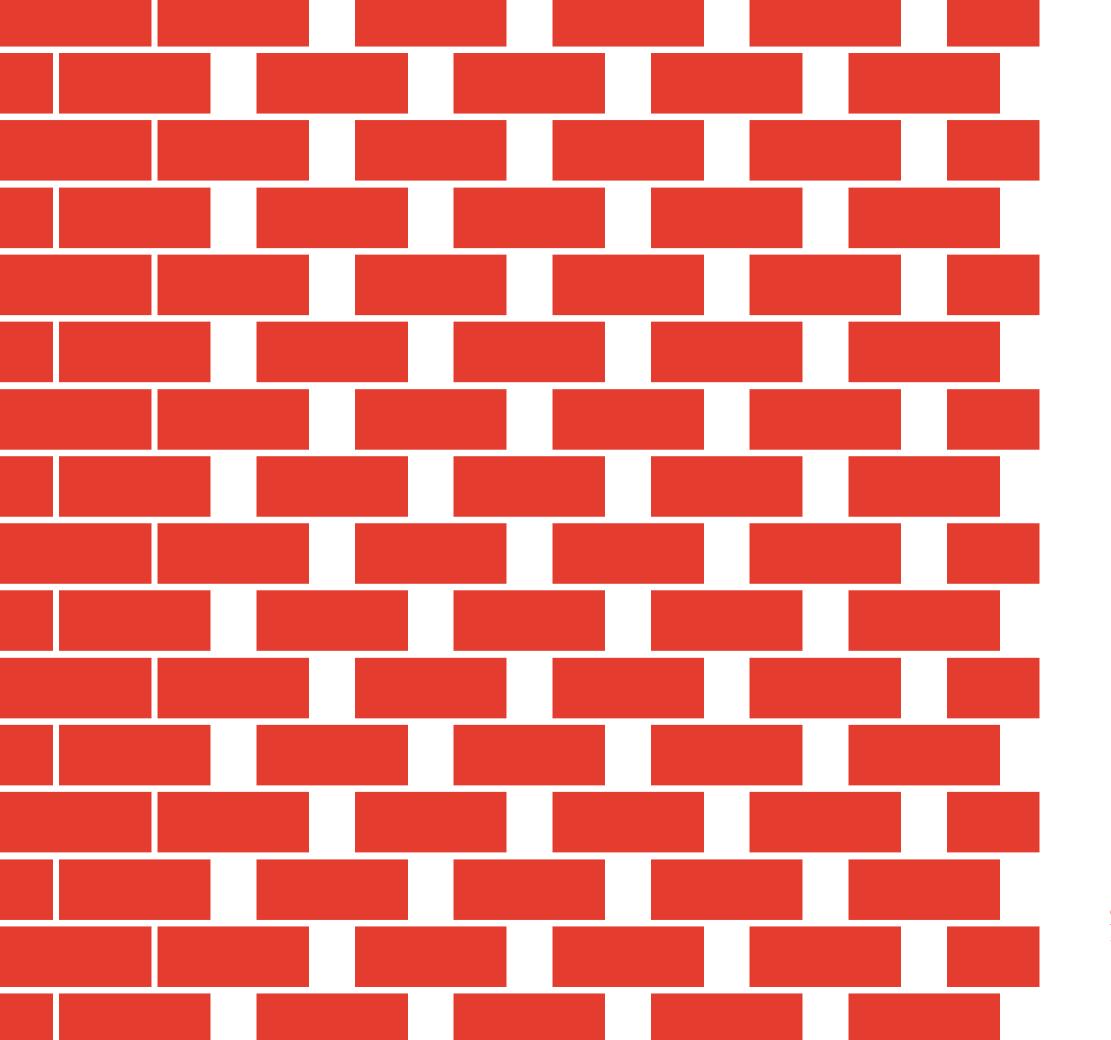












# **Education** and research

Amenities Building,
Sutton Bonington
Campus 46
Big Data Institute,
Old Road Campus 50
Outside-in 54
Amenities Building,
Old Road Campus 56

**Opposite** Brickwork detail, the Amenities Building, Sutton Bonington Campus.

# Amenities Building, Sutton Bonington Campus

**Location** Nottinghamshire, UK **Area** 4,200m<sup>2</sup>/45,200ft<sup>2</sup> **Client** The University of Nottingham



The Amenities Building is set to become the social and administrative heart of the University of Nottingham's agricultural campus. Project architect David Patterson describes how brick has been used to create a unique.

1 View of the dining hall looking north. 2 Colonnade linking the Amenities Building to the campus's Main Building. 3 View from the Lime Avenue.





2

The Amenities Building is Make's first brick building and the second scheme we have completed on the Sutton Bonington Campus. Complementing the university's first-class learning and research facilities, the simple, elegant, high-quality building provides a wide range of facilities for the use of all staff and students on the campus.

Located in a prime position at the heart of Sutton Bonington, the building was designed to capitalise on the unique strengths of the campus and create a positive relationship between the building and the wider environment. The vision is for these elements to be extended across the entire site in the future, helping to further unify the campus.

### How did brick inform the design of the building?

The brick feature walls are a key organising principle of the building's positioning, layout and form. Their design responds to the way in which people move around and across the campus and was driven by views out of the building into the surrounding landscape. The brick walls run north—south, parallel to the campus's key pedestrian movement routes.

### Why was brick chosen as the primary building material?

Brick was identified as a suitable material in the original campus masterplan that we designed in 2008. However, we also felt that brick was appropriate as it is used on almost all the buildings in the immediate vicinity, and we wanted to create a contemporary response to the local vernacular. Our reinterpretation of a familiar, traditional material was designed to establish strong links with the existing aesthetic of the Sutton Bonington campus and the local surroundings.

We deliberately chose a very concise, restrained materials palette to create an elegant, unique appearance and establish visual clarity throughout the whole building. As there are so many different functions, events and activities taking place inside the building, we were keen to create a simple, calm, uncluttered environment.

Brick is used on all faces of the feature walls – interior and exterior – to create continuity. It is also a very robust, hard-wearing, durable material, so if it gets knocked and chipped – which it will, particularly in the social areas such as the bar, the dining hall and the concourse – its appearance will be unaffected and even improved.

The brick has produced a fantastic, unique finish with which the end users are delighted, and that will look good throughout the life of the building.

### How did you go about choosing the brick?

We spent a lot of time researching brick with the client team, looking at numerous precedents and building several trial walls on site so we could evaluate the material in context.

Most of the buildings in the surrounding area are formed from two types of clay from two local seams. One produces a reddish brick and the other a light buff, yellowish brick and a combination of these colours is used across the campus. In collaboration with the client, we selected the lighter brick in order to create bright, warm, welcoming interiors, while also tying in with the campus's existing colour palette.

The interiors are further enhanced by generous levels of natural light that are carefully distributed throughout the building. In the dining hall the brickwork is top-lit to draw attention to its natural, irregular qualities and allow the constantly changing sky to play across the walls.

46 Education and research – Amenities Building, Sutton Bonington Campus 4

We undertook a research and development exercise to investigate different ways in which we could get the most out of brick. The feature walls serve many different purposes, for example the servicing is concealed within them. All the air handling and the power data is neatly hidden and the plans aren't cluttered by vertical risers.

We employed different bonds and bricklaying patterns and used 'hit-and-miss' brickwork, particularly in the dining hall, where the perforated walls provide an acoustic treatment. They act like sound absorbers, so the large space isn't too echoey or noisy.

### How has brick added to the building's sustainable credentials?

We thought very carefully about how to course the bricks and lay them out in plan, as we saw a real opportunity to minimise waste on site. The whole building is set out to brickwork dimensions.

Because of their thermal mass capabilities, bricks can contribute to creating a very comfortable internal environment. The Amenities Building's spaces will have large numbers of people arriving in them within very short periods of time. Thermal mass will temper the heat that suddenly accumulates, storing it and flattening out the peaks and troughs.

Also the building is naturally ventilated, so the colder night-time air is used to purge it and cool it down for the following day. That saves energy and ultimately reduces the building's carbon footprint. We identified early on that it would be better to have deep reveals rather than flush glazing on a number of elevations, so the windows are pushed quite far back from the brick walls to provide solar shading.

### What other materials were used?

Brick was the primary material but we also used timber in the panels within the bar and the dining hall. Douglas fir has a very warm, rich appearance that complements and enhances the brick. On the elevations spanning the north–south brick feature walls, we have either glazed or panelled elements. These are intentionally formed from a different material to reinforce the linear diagram of the brick walls that organise the building.





4 Glazed panels spanning the brick feature walls on the north elevation. 5 The dining hall's top-lit brick feature wall. 6 Rooflight detail. 7 View of the dining hall looking south.





4

7

Education and research – Amenities Building, Sutton Bonington Campus

# Big Data Institute, **Old Road Campus**

The £45-million Big Data Institute (BDI) for the University of Oxford – thought to be the first of its kind in the world will allow specialist researchers to collect, store, analyse and process vast amounts of highly complex biomedical information.

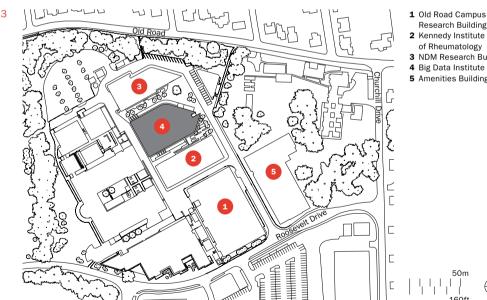
**1** Model showing the shape and form of the BDI. 2 Visualisation of the building and the new external landscaped space in front of the main entrance. 3 Plan of Old Road Campus showing the BDI in relation to the surrounding buildings – all of which were designed by Make.

Location Oxford, UK Area 7,400m<sup>2</sup>/79,600ft<sup>2</sup> **Client** Estates Services, The University of Oxford



Located between two of Make's recently completed laboratory buildings – the Kennedy Institute of Rheumatology and the NDM Research Building – the pioneering BDI is set within an overall masterplan for the campus conceived by LDA Design and is Make's fifth building on Old Road Campus. Housing 500 staff, including academics, students and technical and support personnel from several different research groups, the institute is being funded with a £20-million gift from the Li Ka Shing Foundation plus £10 million from the UK Government.

The building footprint consists of a linear strip of laboratory and office accommodation wrapped around a large central atrium. A 'prow' is formed to the east that reflects the chamfer of the adjacent NDM Research Building and is created by turning the northern strip of accommodation 45 degrees as it closes the atrium. This creates a generous external landscaped area in front of the main entrance. The southern part of the 'prow' is created by chamfering the wing to allow views from the Kennedy Institute of Rheumatology and create a more intimate, informal landscaped area.



Research Building

4 Big Data Institute

5 Amenities Building

Education and research - Big Data Institute, Old Road Campus

### Interior

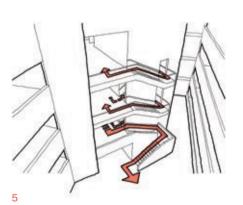
Offering an innovative approach to academic building design, the BDI's impressive internal spaces juxtapose the aesthetics of academia and science. We undertook extensive research into emerging workplaces, from which we produced a design incorporating the best of commercial workplace design that will also meet the very specific needs of academia. The result is a plan which feels 'academic' yet is highly interactive and efficient to operate.

The interior is predominantly open plan in character and contains cellular offices, flexible seminar and meeting rooms, a café, a range of shared interaction spaces – each with their own character and ambience – and one of the most advanced computing systems in UK academia.

The prominent horizontality of the building's exterior is carried through to the spectacular atrium, where ribbons of timber wrap around the space to define the different floors and add a richness that is reminiscent of Oxford's more traditional academic buildings. In contrast, white glass and metal are used for the main entrance, the data hall and the seminar rooms to express the technical, scientific elements of the facility.



4





6

A dramatic timber staircase forms the primary means of circulation within the building and becomes a prominent feature in the main atrium, allowing occupants to appreciate sweeping views of the BDI. The top-lit atrium draws natural light deep into the building and provides both visual and physical connections to the facilities, as well as functioning as a reading room – a calm, serene space designed as a modern interpretation of a traditional university quad, with bench tables and chairs allowing occupants to sit and read or work on their laptops.

Glazed white and opaque strips punctuate the area of roof above the reading room, allowing a soft, diffused light to filter down to the space below, while a vertical glazed slot extends from the top to the bottom of the atrium to further maximise levels of daylight. Planted linear lightwells are incorporated around the building's perimeter to ensure a light and attractive outlook for the lower ground floor spaces.

### Labyrinth

The facility will be naturally ventilated using a pioneering thermal mass storage system that mitigates the cumulative build-up of stored heat. An underground 'labyrinth' of air intake tunnels located beneath the basement will draw fresh air in through a lightwell and use the thermal mass of the ground to cool it, before circulating it to the rooftop plant room. It is then distributed via floor plenums and extracted via the glazed atrium using passive stack ventilation.

The heating system makes use of recovered heat from the stale air extracted from the building, as well as waste heat from IT processes. This minimises any additional heat that the building requires and reduces carbon emissions. The labyrinth inhabits around 50 per cent of the footprint of the building.

### Landscape

Complementing the long-term vision for the campus, the design of the BDI creates new external public areas in addition to enhancing the existing spaces outside the two neighbouring buildings. A blend of hard and soft landscaping provides a balance of formal and informal places in which people can socialise, meet and relax. A series of staggered linear strips forms attractive areas of seating surrounded by a range of different planted species.







4 Visualisation of the main atrium showing the horizontal timber panels. 5 Sketch of the primary circulation route via the main staircase. 6 Visualisation of the café.
7 The facade design ensures the building reads as a sibling to the adjacent NDM Research Building. 8, 9 The landscaping comprises a mixture of hard and soft elements to create dwell spaces and areas for quiet contemplation.

52 Education and research – Big Data Institute, Old Road Campus



Ian is a landscape architect with considerable experience of designing public realm, landscape and urban design projects of all scales. He joined Make to oversee the implementation of the practice's integrated landscape team.

Outside-in

Ian Wale describes the setting up of Make's new landscape team.

I started working at Make in January 2014 to establish an in-house landscape team, one that would sit alongside the architects and interior designers, broadening the professional services that the practice provides. Landscape had been on Make's agenda for a number of years and it so happened that the studio's tenth anniversary year coincided with the implementation of the new team.

Make appealed to me personally because of its studio environment and the company ethos, as well as its incredibly diverse portfolio of projects. Make's huge variety of clients and projects presents a fantastic opportunity to produce some great work as part of a truly integrated approach. There is always something exciting going on and it's amazing to be a part of the company, especially as it moves into its second decade.

Having been a member of the wider consultant team on the London Wall Place development for several years before joining Make, I knew that the practice truly valued landscape. I have come to see that this approach runs deeper than just being a project-driven requirement. I have found a genuine interest in landscape and public realm at all levels. This stems from a real understanding of the value that good-quality open space can bring to buildings and the wider built environment. Because of this it has been a relatively simple transition into the Make studio.

Joining the practice has been an incredible learning curve due to the close collaboration between myself and the architectural teams within the studio. I have found it very rewarding to pass on my knowledge in what has become a really effective exchange of information. Being integrated within the studio means this happens constantly, allowing us to assimilate ideas more quickly and efficiently.

One of the main attractions for me about Make is its lack of house style – each project is approached without preconceptions. This ensures that our design proposals are fully responsive to the context, intended uses and client wishes. A consequence of this creative freedom is a constant supply of energy and enthusiasm that drives the design process forward, as well as an eagerness to investigate new materials and methods for the good of the project and the environment.

Key to our design approach is a passion for nature and wildlife. It is vital that we enhance biodiversity within our developments, particularly on inner-city sites. The challenge of providing for social and cultural uses and requirements while achieving habitat creation, is one that we thoroughly embrace at Make.

'Considerable emphasis is placed on free-hand drawing and the benefits that it brings to the design process. We use sketching throughout the life of a project, not just at the initial concept stage, for idea development, detailing and presentations.'

Sketching is also key to our creativity. Considerable emphasis is placed on free-hand drawing and the benefits that it brings to the design process. We use sketching throughout the life of a project, not just at the initial concept stage, for idea development, detailing and presentation. We run drawing classes within the studio and also contribute to Sketchmob, a social sketching group that runs monthly events around London.

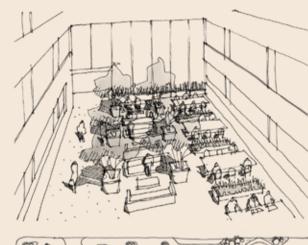
My first twelve months at Make have been incredibly exciting and I have been involved in a wide range of projects, taking us from Basildon to Hong Kong. As part of our ongoing work with the University of Oxford, the Big Data Institute (BDI) involves the creation of a wonderful landscaped setting that includes a new arrival plaza and a woodland garden. Forming part of a wider masterplan, these spaces will play a key role in the success of the Old Road Campus.

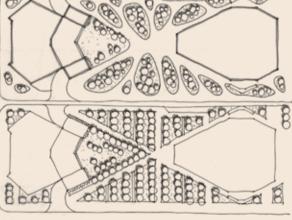
In the Isle of Dogs we are creating a series of new public garden spaces as part of the Meridian Gate development. Built over a new basement car park, the landscape involves the planting of a large number of semi-mature trees and the creation of dedicated play space and a boules area. Integrating sustainable urban drainage and substantial biodiversity benefits, the development will provide much-needed new open space in the heart of London's Docklands.

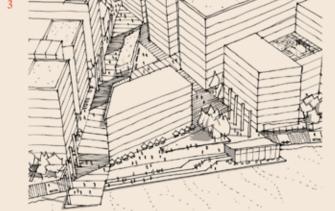
Currently under construction, London Wall Place is about to see the creation of a striking new inner-city park. Focused around the remarkable heritage remains of the Roman City Wall and St Alphage Church tower, the new public realm creates a series of gardens that will become a new destination within the City of London.

We are hugely excited about the future of Make's landscape architecture team. The first year has been great fun, seeing landscape become an integrated part of the studio and contributing to a fantastic portfolio of projects. We aim to continue this great work, and also look to follow the success of Make's interiors team by engaging with other architectural practices. By combining bold design with a balanced approach to social and cultural needs, biodiversity and the environment to create places in which we can all take pride, we hope to establish landscape architecture as a valued design service in its own right.

1 Internal landscaping in the Big Data Institute's atrium. 2 Meridian Gate landscape concept studies. 3 Riverside development.







55

54 Education and research – Outside-in

Design development

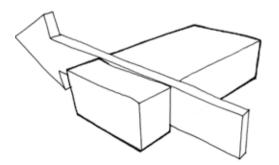
Planning is soon to be submitted for this distinctive building located at the entrance to Old Road Campus. The five-storey facility houses all amenities in two separate but adjoined buildings, creating a fitting entry to the campus and an inviting destination for staff, students and the local community.

# **Amenities Building, Old Road Campus**

Location Oxford, UK

Area 17,000m²/183,000ft²

Client Estates Services, The University of Oxford



Located opposite Make's Old Road Campus Research Building and positioned to present active edges to existing and new green spaces, this practical and efficient facility consists of a 461-space car park as well as a wide range of shared campus services. Meeting spaces, teaching areas, a reception, common room, gym, start-up laboratories, facilities management offices, a café/bar and a shop are all grouped together in a dynamic 'Campus Club'. Storage, distribution, waste management facilities and a loading bay are located in a single volume at ground level, ensuring operational efficiency and reducing the need for service and delivery vehicles to enter the campus.

The integration of the Amenities Building with the campus's existing mature landscape and new publically-accessible external spaces is fundamental to the vision for the site. High-quality, attractive, functional spaces with active street frontages and generous courtyards knit together the architecture and the existing environment and allow the character of the parkland to be drawn out.

A dramatic transition space with a ribbon staircase – the 'cut' – runs between the Campus Club and the car park to create a buffer between the two different sections of the building and facilitate circulation. As an extension of the existing east—west pedestrian route that runs across the site, the cut forms a key element of the campus masterplan by improving wayfinding and cross-site connectivity and linking with the green spaces on the nearby Park Hospital site.



building's two functions. 2 Model showing the car park's timber cladding system.

3 Aerial visualisation of the building.

1 Sketch of the 'cut' route that divides the

4 Visualisation of the vertical aluminium, stone and glass strips that form the Campus Club facade.

A harmonious composition of cladding materials highlights the two distinct elements of the building, creating an interesting interplay of translucency and opacity. Drawing inspiration from the surrounding campus trees, the open, fretted timber cladding of the car park elevation reads as part of the landscape and presents an abstract representation of a tree screen cleared to create the building plot. The interlocking design allows generous levels of natural light into the interior and maintains a visual link to the protected woodland to the east,

The natural, playful visual impact of the timber facade contrasts with the sleekness of the Campus Club side of the building, which is more solid and formal in character. A system of vertical aluminium and glass infill panelling gives the elevation a refined appearance that provides an interface with the 'cut' route.

creating a car park that is open, light and a pleasure to use.

### Oxford BioEscalator

Capitalising on its unique location close to the university's world-leading research base, the Oxford BioEscalator is a pioneering facility offering tailored laboratory and office space for new and emerging medical research companies. This centre of innovation will allow a mix of clinicians, researchers, entrepreneurs, funding organisations, patient groups and academics to come together to develop the commercialisation of the university's medical research, with the aim of identifying new treatments for diseases such as Alzheimer's, diabetes and cancer.

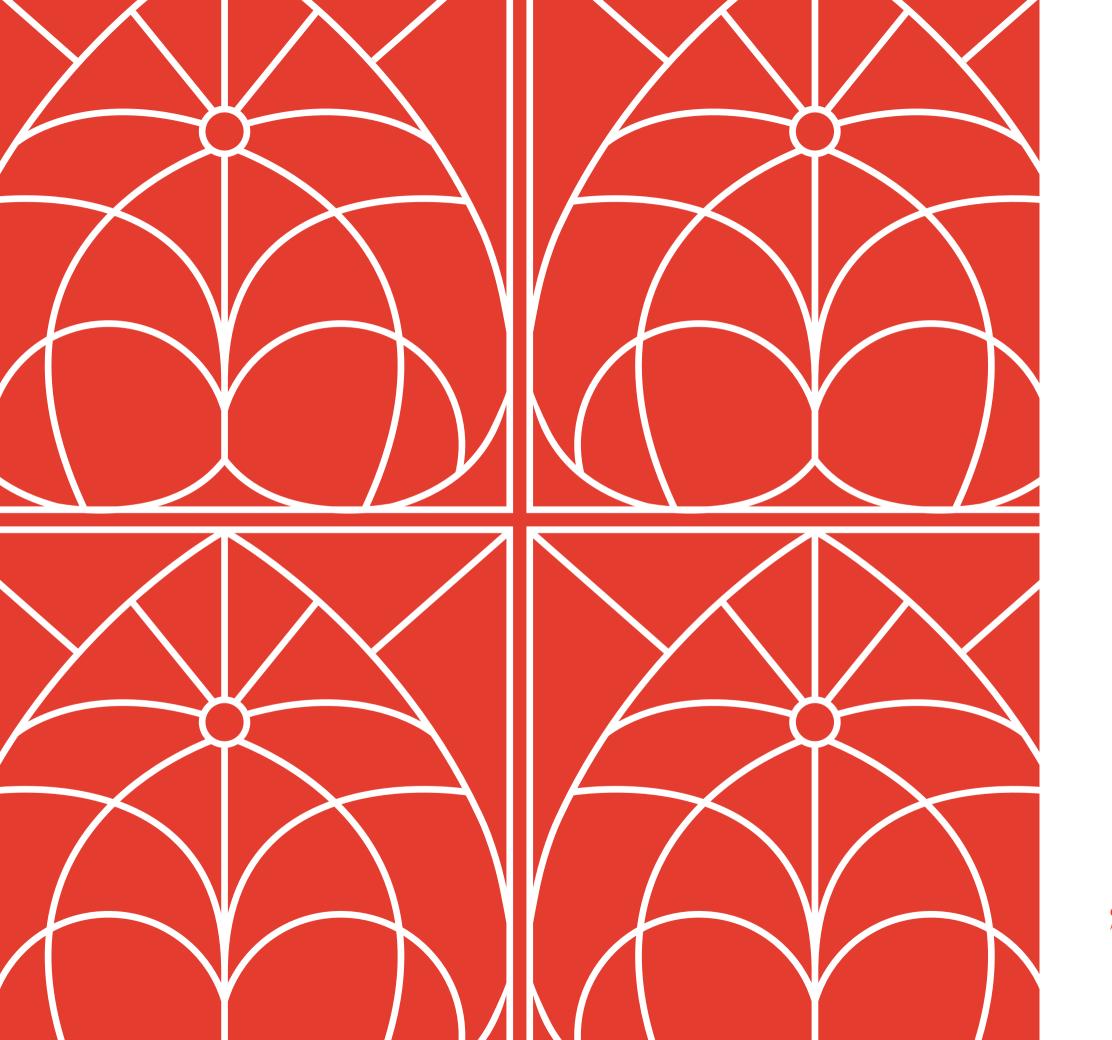


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Education and research – Amenities Building, Old Road Campus



# Residential

**Pure HammersmithCompleting the** architecture 66 **4–16 Artillery RowShadwell House**Aranya 74 **Century HouseChobham ManorGreenwich SquareMeridian GateWan Chai tower**

**Opposite** Detail of the Artillery Row balustrade

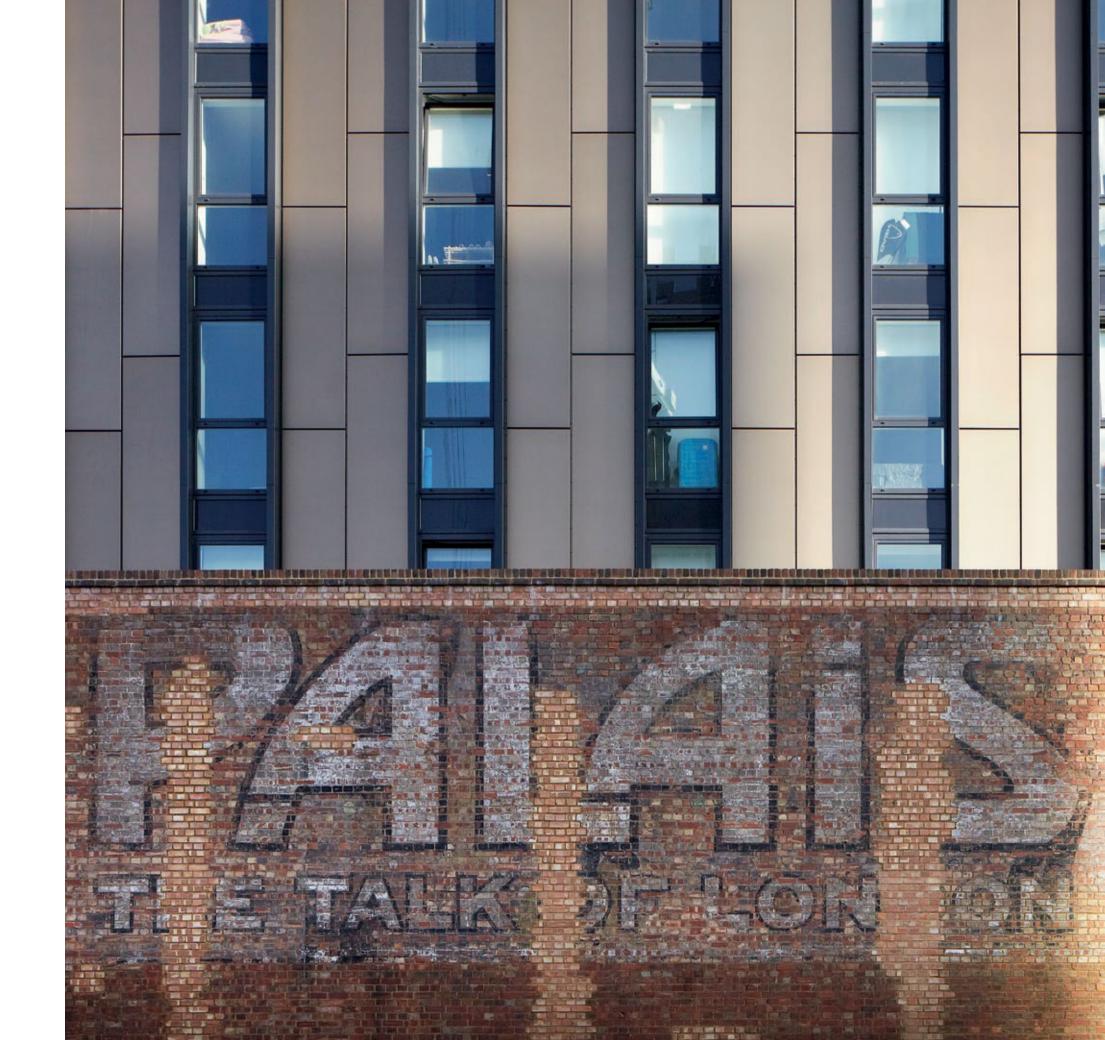
Location London, UK
Area 17,400m<sup>2</sup>/187,000ft<sup>2</sup>

**Client** UKSA Hammersmith Sarl, Generation Estates

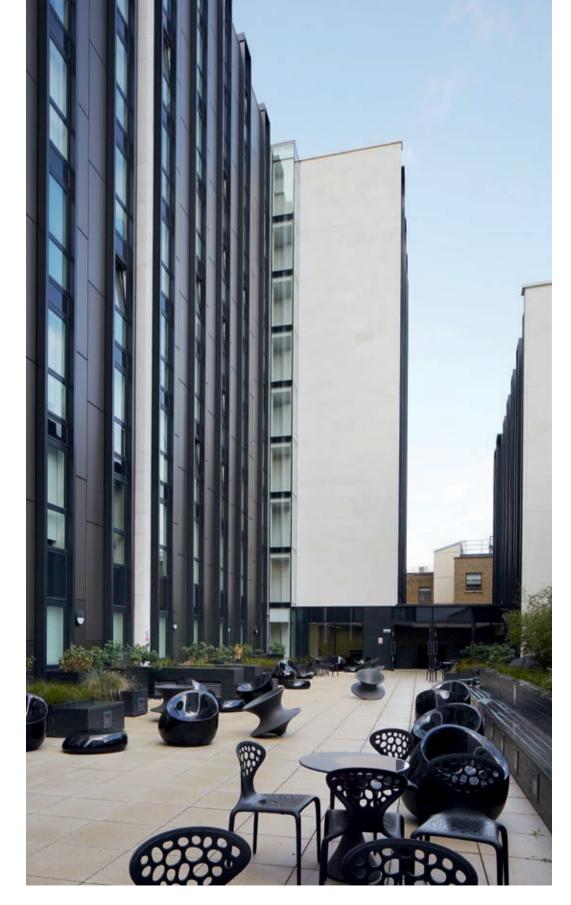
# Pure Hammersmith

The Pure Hammersmith scheme in Shepherd's Bush has set a new benchmark for student housing in the UK. Constructed on the site of the former Hammersmith Palais, the high-quality living and working environment provides 418 bespoke, self-contained studio apartments as well as generous communal areas, leisure and retail facilities, external amenity space and disabled and cycle parking. Our highly contextual design is carefully stitched into the Conservation Area and the streetscape and makes subtle reference to the materials, scale and character of the surrounding buildings, in particular two Grade II listed brick buildings located on either side of the site.

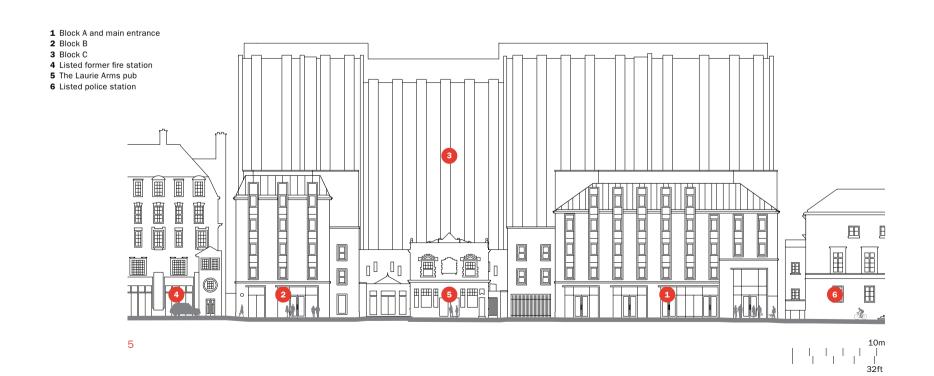
**1 (Opposite)** A wall displaying the original Art Deco lettering relating to the Hammersmith Palais' entertainment history has been retained.



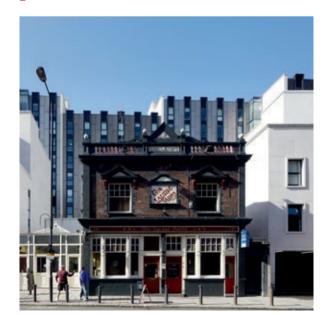
2, 3 The student accommodation is spread over three new buildings – one large block set back behind a spacious landscaped courtyard and two smaller blocks facing Shepherd's Bush Road. The trio of buildings shares a family likeness – a rhythmic sequence of brick and stone-trimmed facades and tall, slim vertical windows but each has its own character, informed by the neighbouring buildings. 4 The simple architectural expression generates a cohesive street frontage and gives the facades a clean, modern aesthetic. The two blocks situated near the road have a distinctly contextual style, whereas the expression of the rear building is more contemporary. Through a series of projecting windows and stone-clad 'fins', it presents a vertical dynamic while making reference to the design of the front blocks. **5** Elevation of the scheme.



4



63



62 Residential – Pure Hammersmith

**6, 7** A typical studio has an area of 17.5m<sup>2</sup> **8–10** The design of the triple-layer entrance and provides self-contained accommodation and amenity area was an integral part of with bathroom, kitchen, study and sleeping the architectural process and represents areas. This arrangement sectionalises each the heart of the building. The distinctive, room into distinctive zones, while retaining coherent spaces allow students to relax an airy, open-plan arrangement. The 418 accommodation 'pods' were prefabricated environment. Flowing transitions between off-site and delivered ready-to-use, complete intimate and public areas are created with furniture and fittings.

and socialise in a comfortable and secure through the use of lighting, detailing and colours. 11 First floor plan.



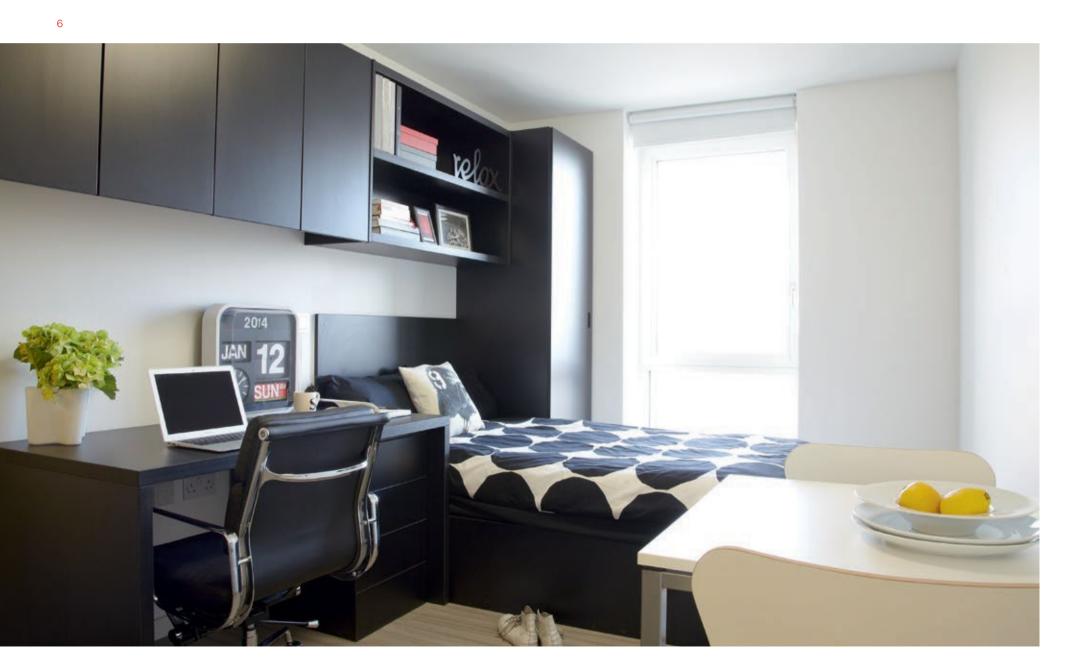


11





10



- 1 Entrance
- 2 Reception 3 Gym 4 Lounge
- **5** Vending
- 6 Courtyard 7 Screening room
- 8 Study 9 Office



Residential – Pure Hammersmith



Tracey leads Make's interiors team, having joined the practice in 2007. She has been instrumental in integrating interior design with the practice's architectural concepts and has overseen a broad range of high-end residential, hotel and office schemes.

'We especially relish the challenge of delivering "turnkey" projects, where we design, select and procure every aspect of a building. It is on these projects that the expertise and passion of Make's interiors team really makes an impact.'

1 Rathbone Square. 2 Private residence.

3 Harrods escalator hall.

# Completing the architecture

Tracey Wiles reflects on the design ethos of Make's successful and expanding interiors team. Make is not particularly well known for its interior design, but over the last ten years the team has had the privilege of delivering fully integrated interiors for many of our buildings. We now have a growing team and an amazing portfolio of exemplar interiors projects encompassing virtually every sector, with more exciting opportunities in the pipeline – including working collaboratively for the first time with other architectural practices. We have recently been commissioned to design the interiors for two large-scale residential buildings designed by Stanton Williams for the Canary Wharf Group, encompassing more than 300 apartments – an incredibly exciting opportunity for the team!

Many architects believe they can do both interiors and architecture. This can certainly be true, but the result is only exemplary if the architect has a focused passion for interior design. Our dedicated interiors team includes both formally trained architects and interior designers, and some who are a combination of both! What we all have in common is a love of detail and a passion for carrying an architectural concept from macro to micro so that it is seamlessly integrated into a design.

We especially relish the challenge of delivering 'turnkey' projects, where we design, select and procure every aspect of a building. It is on these all-encompassing projects that the expertise and passion of Make's interiors team really makes an impact. We are now working towards the possibility of realising every last detail of our buildings, both exterior and interior.

Our designs reflect our belief that the journey through a building starts as soon as it comes into view. Its context, its presence on the street, its facade and its threshold all feed directly into the interior – the hierarchy of spaces, their scale, proportions and detail. It is important to trace the steps of the end user, whether visitor, resident or employee, to fully understand their experience of transitioning through a space. We spend a great deal of time sketching, model making and mentally walking through our buildings to familiarise ourselves with the user's journey.

The interiors team does not sit in isolation in the Make studio – we are fully integrated and work alongside the project teams. Our approach is not to simply 'plug' interiors into buildings; instead we carefully consider scale, materials, detail, services, joinery, furniture, fittings and accessories, all under the umbrella of a strong overarching concept. We create interiors responsibly, addressing programme, servicing and maintenance, with a robust understanding of buildability. Our concepts are always unique to each individual project, addressing client, agent and market briefs and responding to a range of different budgets with solutions that range from off-the-shelf adaption to fully bespoke designs.

One of the most important crossovers between interiors and architecture is the maintainability and usability of services. We take great care to ensure that these are compatible with the intended user and that visual impact is minimised. Working as a fully integrated architecture and interiors team means we have the advantage of understanding the services from the perspective of the user, the installer and the maintenance staff.

We have become adept at using off-site modular prefabrication, which allows services to be integrated and components delivered to site fully finished. Every part of the fit-out is treated like a building component. This minimises wet trades on site, thus reducing construction programmes, the crossover of trades, wastage and defects.

Joinery is a particular passion of mine – not only its quality and craftsmanship but also its ability to define and form interior spaces and integrate services. We also consider furniture selection to be an integral part of the design process. This aspect is always of the utmost importance to the end user so we never treat it as an afterthought or a separate package, but rather as part of a holistic design ethos.

Make's Rathbone Square development is a fantastic example of a 'turnkey' project that fully embodies the interiors team's design philosophy. The detailing, materiality and expression have become a 'red thread' that is pulled through the scheme from beyond the site boundary into the heart of the buildings and all the way through to the apartments themselves.

The moment the user touches the bespoke entrance gate they experience a feeling of quality, permanence and longevity. The subsequent door uses a handle with a similar texture and feel and the bespoke lighting and signage are designed using the same material. These meticulously considered, high-quality details are entirely unique to the project and create an amazing journey that gives the user a sense of belonging and a strong connection to the buildings.







66 Residential – Completing the architecture

The refurbishment and extension of 4–16 Artillery Row is due for completion in the spring of 2015 and provides eight floors of high-end private residential accommodation and a retail unit.

The fabric of the 1980s commercial building in Victoria has been reconfigured, with three new floors and a setback penthouse level added. Forming a gateway to the Westminster Cathedral Conservation Area, the robust, simple form ties in sensitively with the local context.

The hand-crafted nature of the principal architectural elements draws explicitly from the fine historic buildings that populate the area, with proportions, materials and details directly referencing the Victorian era.

### Brickwork

The form and articulation of the new red and grey brick facade adds a layer of richness to the building. The Flemish bond brickwork is unique to the project and complements the masonry of many of the neighbouring buildings. Produced by Leicestershire-based manufacturers Charnwood using traditional production methods, the bricks have a special finish similar to the original Victorian pressed bricks used in the Westminster Cathedral Conservation Area.

Batches of bricks were fired at two different temperatures to produce a variance in tone, and a wood-flour release agent was used to create a subtle texture. A total of 65 brick 'specials' were designed specifically for the project.

### **Bronze**

The rich brickwork is accentuated by ornate metal detailing inspired by the flora and fauna motifs found in the surrounding urban fabric. At ground level, decorative cast bronze grilles form the base of each retail window along Artillery Row, while an intricate bronze screen is featured adjacent to the primary residential entrance. On the upper levels, bronze balustrades to the loggias take inspiration from the painted metal panels utilised in the area's buildings and mansion blocks.

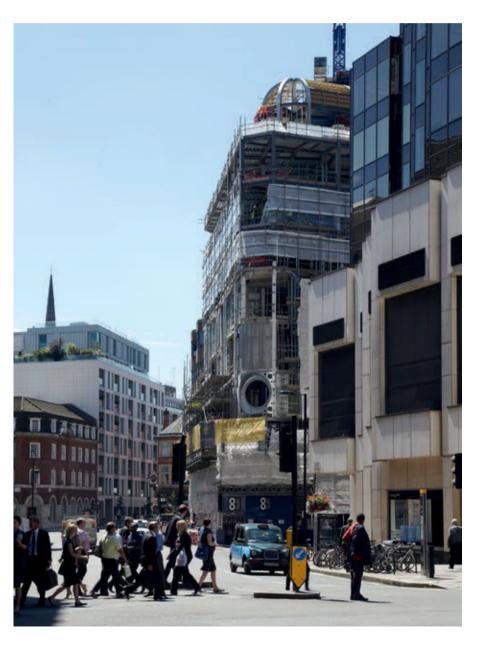
The bespoke designs have been developed in collaboration with UK-based specialists Millimetre, with meticulously hand-carved timber moulds used to cast the bronze. Bronze's robust nature will allow these sculptural elements to weather naturally, improving with age and requiring minimal maintenance.

# 4–16 Artillery Row

Location London, UK

Area 3,000m²/33,000ft²

Client Victoria Property Holdings and LBS Properties



View of the building under construction from the junction of Artillery Row and Victoria Street.
 Hand-made radiused brick specials.
 Tapered brick pier.
 Hand-carved timber formwork for the filigree bronze.
 A patinated bronze balustrade panel.









2

68 Residential – 4–16 Artillery Row

#### **Public art**

The reinstatement of the curved corner at the axis of Artillery Row and Howick Place has created an ideal canvas for a piece of public art. After conducting extensive research in collaboration with heritage experts Wessex Archaeology, we selected a quotation to be engraved into the grey brickwork that makes reference to the historic locality. The elegant typeface is set between the brick courses and complements the building's architectural expression, without competing with the other crafted elements.

After searching through the recently released Royal Archives, a quote was chosen from Prince Albert describing his marriage to Oueen Victoria on their twenty-first wedding anniversary (see below). Deliberately chosen to be open to interpretation, the words can be read as a reference to the cyclical nature of regeneration in Victoria.

In parallel with the development that took place during Queen Victoria's reign, the area is currently undergoing significant change. As the design of 4-16 Artillery Row makes a subtle, nonliteral reference to the area's period architecture, so the quote indirectly links the building to its historic context.

'How many a storm has swept over it and still it continues green and fresh, and throws out green shoots, from which I can acknowledge that much good will yet be engendered for this world.'

Quote by Prince Albert to be engraved into the curved corner brickwork

#### Clock

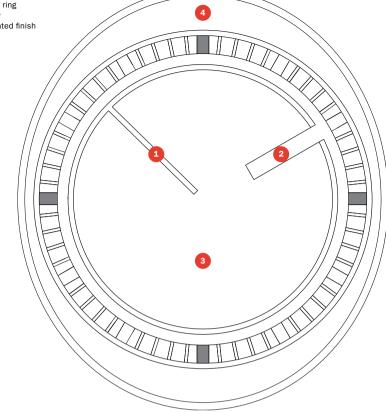
Designed in collaboration with Millimetre, the bespoke clock forms a unique contemporary timepiece that clearly identifies the new building and signifies an entry point into the Westminster Cathedral Conservation Area.

Installed on the curved corner of the second floor, the distinctive design reinforces the building's aesthetic. The hour and minute hands are attached to concentric bronze rings that rotate around the perimeter of the clock face, playfully inverting the reading of a traditional civic clock. Specialist hand-crafted mechanisms and internal workings have been fabricated to facilitate the external rotation and an anodised bronze finish complements the palette of the rest of the building. The 2m-diameter glass face of the clock doubles up as a unique window to the living room of the first floor apartment.



6 Night-time visualisation of the building's articulated facade and the residential entrance off Howick Place. 7 The steel clock being manufactured. 8 Elevation of the clock face. 9-11 Visualisations of the two-bed apartment's living room, the penthouse dining space and the penthouse master

- 1 Rotating minute ring 2 Rotating hour ring 3 Glass window
  - 4 Bronze patinated finish





Residential - 4-16 Artillery Row

#### Planning approved

This private house, located in a small English village, is surrounded by woodland. The clients are demolishing two 1950s bungalows, plus garages and outbuildings, in order to build a generously sized contemporary family home for their retirement.

### **Private residence**

Location UK Area 380m²/4,000ft² Client Confidential

The new two-storey property has been designed to maximise interaction with the surrounding natural habitat and make the most of the unique site, which is characterised by mature, dense vegetation. The client's brief was to create a 'daringly simple' modern house of outstanding architectural quality that offers high levels of comfort and durability and uses materials that relate to their surroundings. It was also important that the dwelling is able to adapt to the changing needs of the family over time.

#### Lower volume

Split to follow the topography of the site, the new house consists of a flat garden at the top of a long, steep slope to its western side. Its lower volume is sited in a similar position to the current dwellings at the top of the slope, but rotated counter-clockwise to benefit from easterly views towards the meadow and trees. The east side cantilevers over the edge of the slope, emphasising the natural topography of the site, while the west elevation is slightly dug-in, giving a sense of the structure being embedded in the landscape. This part of the house comprises the main entrance and hallway, five bedrooms, bathrooms, an open-plan dining and kitchen area and a terrace with direct access to the garden.

The western entrance facade enjoys views across the garden – the only flat part of the site – and maintains a feeling of privacy and enclosure. The garden is laid out comparatively formally, in keeping with the linear geometry of the house and contrasting with the wildness of the surroundings. The eastern elevation is primarily glazed and open to provide unrestricted views into the lush sloping landscape. Incorporating materials that enhance the sense of being 'grounded' in the landscape, the palette comprises a range of natural, earthy colours, with stone and timber reinforcing the connection with nature.



1

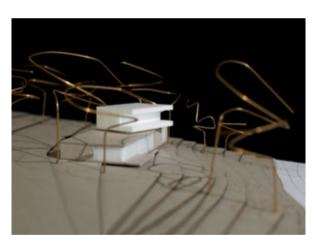
#### Jpper volume

The upper volume of the house has been kept small to prevent it from infringing on its surroundings. Containing the family living room, a reading corner and an outdoor terrace, the second storey is expressed as a lightweight metal box that 'hovers' above the lower volume. While the ground floor is deliberately positioned to engage with the garden, this smaller volume is conceived as a 'look-out' that offers a different perspective on the natural setting.

Slightly offset to ensure the best possible views over the trees of the adjacent woodland and distant views of the Thames Estuary, the 'box' sits lightly on its supporting base and cantilevers out, mirroring the lower volume. The reflective materials and refined, delicate finish contrast with the rougher, more tactile materiality of the lower floor and reflect sunlight and shadows from the trees so that the volume appears to merge with the sky. A terrace stretches along the length of the living room's glazed facade, with sliding glass doors connecting the indoor and outdoor space.

#### Consultation

Early consultation was undertaken with neighbours and local amenity groups to inform the design proposals, as befits the family's commitment to the village. Due to the clients' desire to create a highly sustainable home, consultant Dr Daniella Abreu has been involved from the beginning of the design process to ensure that sustainability is a fully integrated element.



2

**1** Visualisation of the property's west elevation. **2** Sketch model showing the offset upper volume and the sloping site.

72 Residential – Private residence

1 Visualisation of the two towers and the podium. The south tower is a rotated version of the north, ensuring that both benefit from views of the city. 2 The soffit in the reception resembles the underside of a tree canopy and is illuminated with dappled light.

1 View of the facade under construction, revealing the brick fins and coloured edge strips. 2 Visualisation of the building's main entrance looking south along Riley Road.

### Aranya

Status On site

74

Location South Mumbai, India

Area Confidential

**Client** Piramal Realty Pvt Ltd

Excavation is due to commence in early 2015 on Make's first scheme in India. The two slender 300m-high residential towers containing 200 apartments each, offering breath-taking views of Mumbai, are located immediately adjacent to the Victoria Botanical Gardens – one of the largest open green spaces in the city. The name Aranya means 'forest' in Sanskrit.

A cruciform plan ensures that each apartment has access to generous views on all sides, with half of the residences offering dual-aspect accommodation. The towers have been deliberately aligned with the axis of the gardens to allow three-quarters of the residences to have complete vistas of the trees and the zoo. The eastern aspect also provides fine views of Mumbai harbour and the surrounding hills.





### **Century House**

Status On site
Location London, UK
Area 4,400m²/47,300ft²
Client L&Q Housing Association

Century House is a balanced living and working community located on Tanner Street in Southwark. The ten-storey development is nearing completion and comprises 154 apartments, 37 per cent of which are affordable and the majority of which are dual-aspect. The upper floors provide fantastic views across London and access to generous roof terraces.

A south-facing communal garden sits at the heart of the development, offering an attractive, secluded space for both residents and employees. Ground floor office accommodation provides either studio workshop spaces or a single, larger office unit. The building is set back from the street to increase the size of the landscaped front area. An open glazed frontage, coupled with clearly defined entrances on all sides of the building, create a safe and inviting space.



1



Residential – Aranya and Century House

2

75

1 Visualisation showing the double-height stone expression of the balconies and the finely detailed dark brickwork. 2 Section of the courtyard and the integrated podium car park.

1 View of the dramatic form of Block 1's 'wave' revealed against the banded residential backdrop. 2 The silver-framed balconies and dark grey cladding of Block 2 enriched with timber panels.

### **Chobham Manor**

Status On site

**Location** London, UK **Area** 9,400m<sup>2</sup>/101,200ft<sup>2</sup>

**Client** Taylor Wimpey, London Legacy Development

Corporation, L&Q Housing Association

Chobham Manor is the first of five residential neighbourhoods to be constructed on the Queen Elizabeth Olympic Park. Phase 1 of Make's legacy masterplan has commenced, with the piling of the first affordable housing block now underway. Planning for Phase 2 of the development was granted in November, with the high-quality design receiving strong support from the committee.

Located opposite the former Athlete's Village, the first block to be built reflects the layered vertical and horizontal emphasis of traditional London mansion blocks, while reinterpreting these aesthetics in a modern way. A subtle materials palette provides a clean, uncluttered facade, applying modern variations of traditional materials and colours to establish a strong, contemporary London appearance.



1



### **Greenwich Square**

Status On site
Location London, UK
Area 89,000m²/958,000ft²
Client Hadley Mace

residential buildings.

Phase 1 of the Greenwich Square masterplan is nearing completion. Forming the heart of the development, Block 1 houses the Greenwich Centre and will become an important civic destination for the wider East Greenwich community, providing extensive amenities arranged over three floors. Defined by its distinctive curved form – 'the wave' – that runs the full length of the facade, the centre's undulating shape offers a striking counterpoint to the scheme's predominantly rectilinear

Block 2, the first block to be handed over, is a seven-storey mixed-use building containing a variety of community services to support local residents including a Sainsbury's, a dental surgery, a dry cleaners and a hairdresser's. The L-shaped building has been designed to relate to the scale and character of Woolwich Road, as well as echoing the articulation and facade treatment of the adjacent Block 1.



1



76 Residential – Chobham Manor and Greenwich Square

Project catchup

1 View of Wan Chai across terminates the view along
Hong Kong harbour.

terminates the view along Limeharbour. 2 Generous new landscaped public space is incorporated at the base of the tower.

### **Meridian Gate**

**Status** Planning approved **Location** London, UK **Area** 44,500m<sup>2</sup>/479,000ft<sup>2</sup> **Client** LBS Properties

Planning has been granted for this 53-storey residential tower located on the Isle of Dogs that forms part of the Marsh Wall Masterplan. Containing 423 dual-aspect private and affordable apartments, the tower has a clear, logical appearance that can be understood from all viewpoints and distances. An angled top, a slender silhouette and a skin composed of transparent, glossy materials bring a sense of lightness to the overall structure.

A dramatic 'cut' occurs approximately one third of the way up the building, breaking the form and dividing it into two parts. The upper portion complements the tall building cluster of Canary Wharf, while the lower section relates to the low-rise built environment surrounding the site. A significant benefit of the scheme is that approximately 70 per cent of the site is given over to attractive, publicly accessible gardens and a children's playground.





1

### Wan Chai tower 灣仔塔楼

Status General building plans submitted
Location Wan Chai, Hong Kong
Area 5,600m²/60,000ft²
Client Vanke Property (Hong Kong) Company Ltd

Vanke Property (Hong Kong) Company Ltd, a subsidiary of Vanke, has commissioned Make to design a 32-storey residential tower in Hong Kong. The prime site is situated on Lun Fat Street in Wan Chai and currently comprises a dilapidated eight-storey 1960s building.

The tower contains approximately 100 residential units as well as two levels of special units, a roof garden, a clubhouse and podium shops. The compact, elegantly proportioned tower is expressed as a sleek sculptural form that stands out from the predominantly concrete surroundings of Wan Chai. A unique arrangement of protruding balconies not only draws natural light into the balconies and apartments but also enhances the skyline and streetscape. The tower is positioned to maximise views and allow even the low-level apartments to enjoy vistas of the nearby garden.

万科香港,中国领先的房地产开发商万科集团的全资子公司,委托Make在香港设计一座三十二层的高层住宅。该住宅位于湾仔的聯發街,目前为一座八层高六十年代的建筑。

湾仔塔楼设计包含约一百个住宅单元,并且拥有两层的特色户,天台花园,一层住客会所和三层裙樓商鋪,紧凑、优雅宛如雕塑矗立在湾仔这片处处为混凝土的建筑群中。突出而交错的阳台设计不仅让更多的自然光线进入公寓并从视觉上提高了天际线,也为湾仔的街景增添了一道与众不同的风景。为了达到最大限度的观景需要,塔楼的坐向佈局巧妙地令较低层的公寓也能够欣赏到香港市区罕有的花园景色。



1

78 Residential – Meridian Gate and Wan Chai tower



# Mixed use

48 Leicester Square 82
Rathbone Square 86
BIM at Make 90
St James's Market 92
Wynyard Place 96

**Opposite** Passageway detail. Rathbone Square. On site

# 48 Leicester Square

Make's Frank Filskow talks to artist Kenny Hunter and art consultant Sam Wilkinson about the unique public artwork that will form part of 48 Leicester Square. The beautiful frieze of panels depicting a blackbird in flight is set within the retained stone facade and wraps around all four sides of the building.

1 Visualisation of 48 Leicester Square showing the frieze of artwork panels. 2 Visualisation of the building looking across Leicester Square. 3 Blackbird provided by the taxidermist.





2

Location London, UK

Area 17,500m²/186,400ft²

Client Linseed Assets, CORE



Frank Filskow It became clear right from the beginning of the project that art would be a big part of the building. With the facade retention, an opportunity arose to include art on a frieze of panels where some windows have been removed. We spoke to Sam Wilkinson about how she would approach the project and she observed that it was about understanding the aspirations for the building and the site, and choosing an artist that the team could work with, rather than selecting a piece or art or holding a competition.

**Sam Wilkinson** Identifying an artist based on their past work but also on how well they work with someone, how they respond to the opportunity discursively, was the best way of finding the right artist. The process of partnership working is iterative and other people's skills and experience can come into the pot. That was how I felt this project needed to be developed, because there were so many extraordinary research opportunities with this building.

**FF** There was a preconceived idea that the chosen artist would find a link between the building and cars, given its history as the former headquarters of the Automobile Association (AA).

**SW** Yes, but we didn't want something that was a literal representation of the building.

**FF** One of the most important things was that the client wanted to be part of the process. We wanted to be sure that the chosen artist was open to a collaborative approach, rather than going into a gallery, buying a piece of art and sticking it on the wall

**Kenny Hunter** It all comes down to trust. The 'buy it off the shelf' process takes away a lot of risk but the work doesn't come out of this moment in time, this building, this group of people. You don't get an artwork which is integrated or site-specific. This frieze isn't just any artwork, it's part of the building.

**SW** Kenny set himself apart because of his willingness to allow people to bring their own experiences to the work. He had an openness as to how we would develop the concept through dialogue with the client and the architects.

**FF** I don't think people fully understand the way public art functions – it's a multi-level approach that demands so much more than other types of art. Most artists have the freedom of a selective audience, whereas public art doesn't have that.

**SW** What we've got is something that's concept-led. It's about thinking and research.

**KH** Again we go back to that word trust. If you introduce an idea too quickly, you jettison the opportunity of proper dialogue in which something unique can emerge. There has been real involvement in this project from everybody.

**FF** A lot of the ideas we looked at were textural treatments of the panels. Interestingly, where we've ended up is the most distant from that. Can you talk about where the blackbird came from? That was quite a fun process.

KH Well there is a deficit of nature in Leicester Square so I wanted to work with it, or add a non-human presence. The art is not just responding to the building, it's about the context of Leicester Square. A blackbird in flight works in opposition to all the big, blown-up cinema advertising. It's a very humble, everyday bird, it's not exotic or exceptional.

82 Mixed use – 48 Leicester Square

**SW** I knew Kenny was right for the project because he was absolutely clear that he didn't see the former AA building to be about the car. He articulated it as a company who generated opportunities for people to travel, to escape, to spread their wings.

KH I also felt that the blackbird has a humility, but by making it big you're giving it top billing. It is a migratory species with super-adaptive qualities that allow it to thrive in both urban and rural settings. I knew I wanted to work with a monochromatic bird, not only for the readability of light against dark, but because I wanted the frieze to express the photographic origins of cinema.

**FF** You made an interesting connection with the Victorian film-maker Eadweard Muybridge and his pioneering work in photographic studies of motion.

**KH** The apertures that were presented as part of the template for the artwork suggested sequential movement. There was a nice overlaying of the tradition of the frieze and the film strip. To me the bird had to have the feel of black and white footage.

**SW** The blackbird is very distinctive. It's unique and easily recognisable – it's very British and often referred to in popular culture, in songs and rhymes.

**KH** It has a simple beauty to it as well, with that yellow ring around its eye and its yellow beak. There is a history of gold-leaf on small details in buildings of this type. So I felt it was appropriate to use aluminium and gold and a singular black dye – a very reduced palette that is graphically strong.

**FF** Kenny took us to see the statue of Eros on Piccadilly Circus, which was ground-breaking at the time because it's cast from aluminium that was made black by using Indian ink. It has a beautiful black-silver, especially under Eros's wing. There is a real synergy between the materials, the colour and the appearance.

**KH** The frieze of panels is part of the building as well as an artwork and it's been a genuinely collaborative process to end up with something which is a balance between the two. A lot of buildings have art, but it can become so integrated that it is almost a decorative embellishment to the architecture. This piece has its own narrative – it needs the building but it also has its own integrity.

**FF** When you do a permanent piece of public art, you need it to work in context, for different people, at different times. There is no control over who is going to see it, or when and how. In 50 years' time it's still going to be there.

**SW** People ask me if I am compromising myself when I work in the public realm, but if the idea isn't absolutely rigorous it will fall apart. You can put anything into a white gallery space, because people are making a decision to go there and look at something they might never see again.



Kenny Hunter lives and works in Glasgow. He has exhibited extensively abroad and in the UK, including solo exhibitions at the Scottish National Portrait Gallery in Edinburgh, the Centre for Contemporary Arts in Glasgow and the Yorkshire Sculpture Park in Wakefield. He has created a number of high-profile public art commissions, including Youth with Split Apple for King's College, Aberdeen and Citizen Firefighter outside Glasgow Central station.









4 The statue of Eros on Piccadilly Circus, cast in aluminium and stained with Indian ink. 5 The original artwork of the blackbird and an early mock-up. 6 Kenny Hunter at the Powderhall foundry inspecting the cast. 7 The latex cast used to make the bird. 8 Kenny adding the finishing touches.

**FF** Whereas an artist has to be at the top of their game to make the best public art. I know artists who can produce wonderful shows, but they couldn't step out into the public realm and deal with all those agendas and issues and still make great work.

**SW** One of the nice things about the team was that nobody wanted to go in the direction of anything that was too 'Leicester Square'. You can't compete with flashing cinema screens and that slightly brash '80s style.

FF Some people might not notice either the building or the art. It's not flashy or crazy. Interestingly, the building next door is all those things. It's a literally flashing piece of glass that shouts about how new it is.

KH And really loone before the building a work.

**KH** Well that's the thing that art can do. It can do drama and it can do intimacy. If you try to compete in a dramatic situation with more drama, it's hard to get noticed.

FF We are looking longer term, which is the difference between now and perhaps ten years ago when there was a lot of excitement about new for its own sake. Now there is more emphasis on longer-term values and integrity – and integrity is the word I would use to sum up Kenny's art.

**SW** There have certainly been no short cuts. We are at a point where it might evolve further, but it's entirely in Kenny's hands now. For me this has got to be a piece of work that the artist believes in. Seeing Kenny being as excited and passionate as everybody else makes it even more significant a work.

**KH** And it's not finished. It's still going. The thing I really love is the idea that every panel relies on the one before it. It wasn't a case of 'here's a space, let's fill it and move on to the next one'.

**FF** You specifically said you wanted to make the birds in sequence, because each one is affected by the one you have just finished, which is another example of the integrity that you show.

**KH** It's a hand-made artwork, but it's also modular. It's a multiple as well as a bespoke thing.

**FF** When we saw the mock-up, it really crystallised our understanding of what the bird would be like and how it is being made. Casting 42 birds is going to take about 60 weeks!

**SW** Every bird is hand-finished and treated by you, right down to the polishing of the black ink. The team at the Powderhall foundry in Edinburgh are partners with you, they are not just fabricators. They take your thoughts and ideas and help deliver them in a very creative way that directly feeds back to the work.

**KH** I've worked with that foundry for more than 25 years now, so it's a symbiotic relationship. We need each other!

**FF** Well it's going to be really exciting seeing the artwork evolve. We will all be voting on which is our favourite bird, I think.

**SW** When I saw the bird for the first time, I had one of those rare solar plexus moments, because it was so much more than I ever anticipated it would be.

5

84 Mixed use – 48 Leicester Square

# **Rathbone Square**

Rathbone Square is now under construction, with a team of 16 architects based on site. The development includes carefully considered improvements to the area's public realm that will play a significant role in the ongoing regeneration of Fitzrovia and the wider area.

Located at the southern edge of Fitzrovia, one block north of Oxford Street, the previously impermeable 2.3-acre plot was occupied until recently by the Royal Mail's imposing West End Delivery Office. With demolition complete, the site is now being transformed into a high-end mixed use development offering new publicly accessible open space in the form of a generous garden – one of the first public spaces to be created in Central London in 100 years.

The masterplan for Rathbone Square, designed in collaboration with Publica, has been sensitively considered to enhance Fitzrovia's urban fabric, reflect the local context and improve connectivity with the wider area. Since it was bombed during World War One, the site has been a 'gap in the city'. The Rathbone Square scheme seeks to address this by carefully knitting the

original terraced streets together again and repairing Rathbone Place and Newman Street.

The character of Fitzrovia's historic street patterns – originating as Roman roads and continually developed through to the eighteenth and nineteenth centuries – has informed the design.

A new neighbourhood amenity is being created with a generous, open and welcoming character that has a strong sense of place and forms part of a larger composition of interlocking public spaces.

 Panoramic view of the construction site.
 Aerial visualisation of the development showing its prime position in the West End. 3 Concept sketch.

Location London, UK

Area 38,300m²/412,200ft²

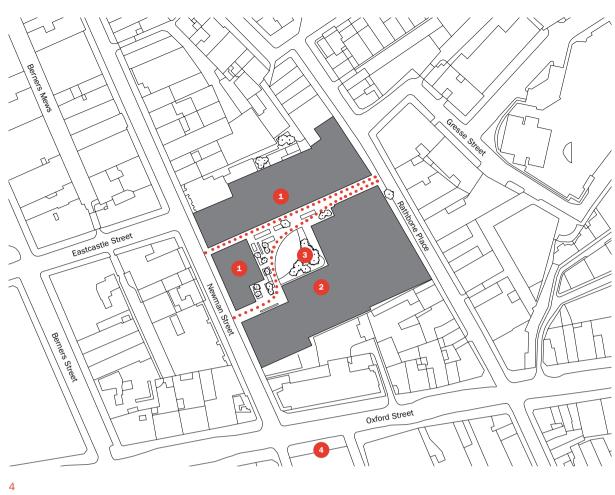
Client Great Portland Estates





- 1 Rathbone Square
- 2 Tottenham Court Road Crossrail station Dean Street entrance
- 3 Tottenham Court Road Crossrail station

Mixed use – Rathbone Square



- 1 Residential blocks
- 2 Commercial block
- 3 Public garden
- 4 Tottenham Court Road Crossrail Station – Dean Street entrance

4 Plan showing the scheme's uses, public garden and pedestrian routes. 5, 6 Examples of passageways in Fitzrovia that have inspired the design of the public routes. **7** Visualisation of the proposed public garden. 8 Visualisation looking north along Rathbone Place, showing the passageways' coloured glazed ceramic tiles and bronze detailing. 9 Full-scale mock-up of the covered passageways.





#### New public routes and passageways

The street-level spaces will be public for the majority of the day, with all routes and the central garden open and accessible. We have taken the opportunity to create a new pedestrian route between Newman Street and Rathbone Place that responds to desire lines and the important east—west route one block parallel to Oxford Street. Continuous street edges are established with a rhythm of ground floor frontages, uses and entrances of different scales that respond to the local context. New materials and public space upgrades complement the positive characters of these streets, rather than dominating them.

Rathbone Square's central garden is intended to be an area of calm away from the bustle of Oxford Street and provides amenity for local residents. It will be accessed via three new public routes that are integrated with the local pedestrian network and provide east—west connectivity across the site. These routes are clearly identified by signature passageways – two of which are covered archways and one which is open to the sky.

Rathbone Passage, Newman Passage and Rathbone Court are inspired by the array of historic alleyways and mews courtyards that form part of Fitzrovia's character, establishing a secondary level of pedestrian movement across the neighbourhood. These existing ad-hoc transition spaces predominantly pass beneath buildings and create shortcuts between the area's dense streets and glimpses of the spaces beyond.

We have continued this street pattern and sense of enclosure and discovery. The thresholds to the passages create a sequence of visual connections from the street to the inner garden that invite people in. Linking the main thoroughfares of Charlotte Street, Rathbone Street, Newman Street and Mortimer Street and providing direct access to the Dean Street entrance of the Tottenham Court Road Crossrail station, these public cutthroughs have been carefully designed to blend in to the streetscape and the newly established building frontages.

The design of the passageways is simple and contemporary, conveying a sense of solidity and longevity. Complementing the architectural integrity of the new buildings, the double-height passages act as markers of the quality of the development as a whole and create interesting transition spaces between the street and the garden.



9

*'* 





88 Mixed use – Rathbone Square



Johannes heads Make's BIM team. He is a qualified architect as well as a CAD and BIM software expert and has extensive experience of managing and delivering BIM strategy in architectural practices. He joined Make in 2013.

### BIM at Make

Johannes Renner, Make's Project Technology Manager, discusses the practice's approach to BIM and its increasingly important role in the design and delivery of projects. With the advent of Building Information Modelling (BIM) and the move away from traditional two-dimensional drafting methods, we are fully aware of the implications this has for the future of architecture. The UK Government is heavily promoting and mandating the use of BIM on all its projects by 2016 and because of this, our clients are increasingly asking for BIM and, to some extent, simply expecting it! To meet and exceed client expectations, Make has been implementing BIM on new projects at the very early stages, because the provision of a BIM model gives certainty to the client and creates confidence in the final outcome.

However, at Make we are not just adopting BIM to fulfil what is required; we want to go further and leverage the power of this amazing new technology. By utilising the full spectrum that is available through the use of BIM, we can improve our efficiency and the ability to adjust quickly to changing demands. Using the model not just for drawing documentation and production but also to harvest building information to populate and create detailed schedules, is a huge benefit of this process.

We are currently using BIM on four large-scale projects, ranging from residential to mixed use and commercial buildings – including our state-of-the-art 5 Broadgate scheme, where we implemented BIM before other companies were even considering it, putting us way ahead of the competition.

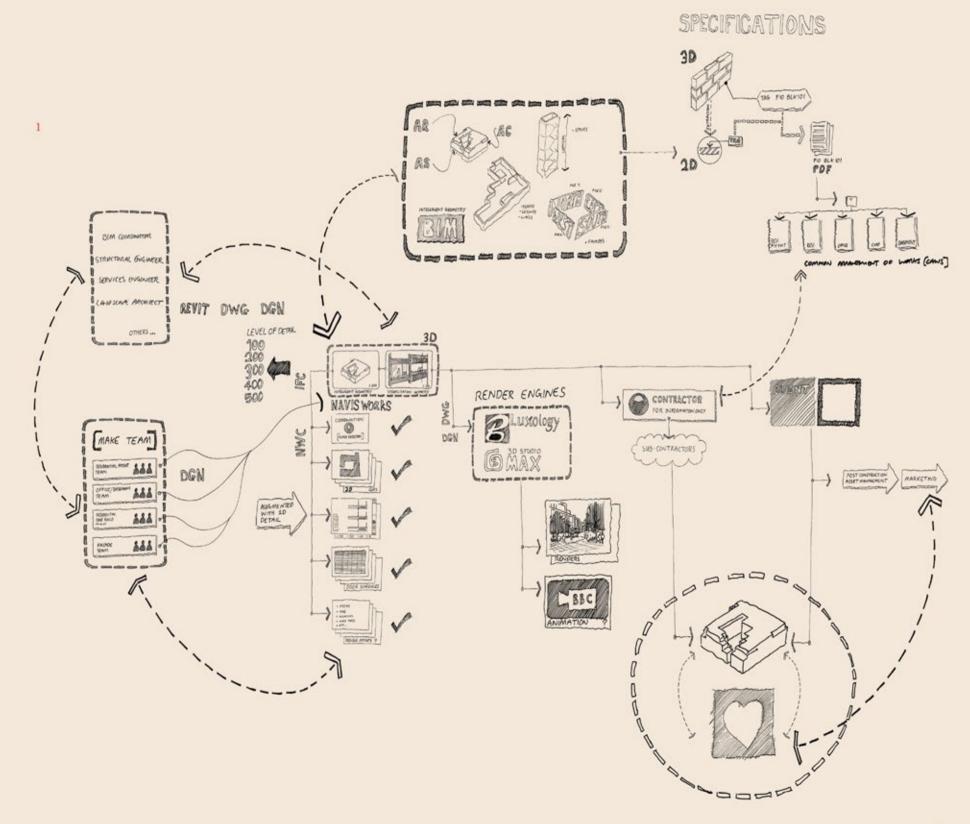
By not restricting ourselves to just one BIM authoring software, we will always have access to the latest trends and innovations available from the building software industry. This gives us incredible flexibility to respond to different design challenges and client requirements, enabling us to improve collaboration and coordination with engineers, consultants and co-architects. Ultimately this means we always get the best available design solution for our clients.

We have established a core BIM group at Make, bringing together a wide range of expertise and experience. Having this team on hand provides valuable support to our design teams throughout the project lifecycle: from commencement through to design, construction and the hand-over of a datarich model to the client at the end of the project.

Make's BIM team gives ad-hoc advice to the architects to guide them through the process, as well as providing practical training and knowledge-sharing throughout the studio. This long-term approach gives us a competitive advantage and is helping us to get ready for the future, where BIM will be fully embedded in our daily work as a fundamental part of the design process. Additionally we always research how to connect new and different technologies developed across other industries, to further enhance the use of BIM models. We are now ready to take BIM to the next level.

'At Make we are not just adopting BIM to fulfil what is required; we want to go further and leverage the power of this amazing new technology.'

1 Illustration of Make's BIM process showing three-dimensional coordination, automated drawing extraction, information exchange and asset management.



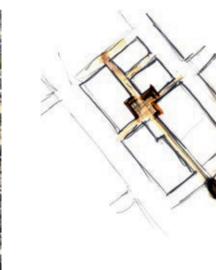
90 Mixed use – BIM at Make

St James's is about to see its largest building project in a century. Justin Nicholls talks to The Correspondent newspaper about the resurrection of a lost market.

# St James's Market

Location London, UK Area 34.000m<sup>2</sup>/366.000ft<sup>2</sup> **Client** The Crown Estate and Oxford Properties





**1** Site photo of the retained facade of No. 1 St James's Market, 2 Aerial visualisation of the proposed development. 3 Concept sketch showing the creation of a new destination between Regent Street, St James's and Havmarket.

1 No. 1 St James's Market

2 No. 2 St James's Market 3 Piccadilly Circus

4 St James's Square

5 St James's Church

We are all familiar with the idea of markets: places of trade, vitality and community that have been the focal point of settlements across the globe. London's size and diversity of tastes has produced a number of specialist markets: Smithfield for meat; Billingsgate for fish; Borough for artisan foodstuffs. The growth and history of London's markets says a great deal about the story of the city.

Today, St James's Market is a small street off Haymarket. It is the sole reminder of a complex of roads that centred around a thriving market constructed in 1665 to serve the wealthy new neighbourhood of St James's. However, in 1818, architect John Nash was commissioned to construct a route that joined with the newly created Regent's Park. The design of Regent Street was elegant and bold but had its victims, including the original timbered market. Though the diminished area continued as a provisions market until the end of World War One, these blocks were eventually subsumed by a growing demand for offices.

#### Place-making

Make won the St James's Market contract four years ago and their approach – and reason for their success – was to identify that this was not simply the design of two new buildings, but an opportunity to create a 'place'.

The brief included the need for a better link from Haymarket and Theatreland to Regent Street and St James's. The finesse in Make's design was in refuting the idea that a straight street with a direct line of sight was the best way to achieve this. The clue came in understanding its history. As Justin explains. 'it was a provisions market. It was about servicing the local community. So this is not for the tour group, but for local people'.

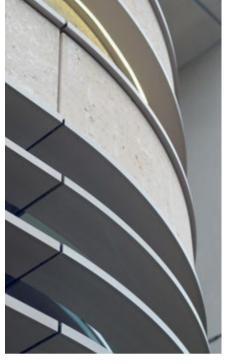
London's richness comes from these smaller undiscovered places. By retaining the street structure, Make's scheme gives clues as to the market's existence from Haymarket and Regent Street. Moments of discovery come from architectural details that serve as teasers. An eight-storey metallic and glass 'fin' anchors the market and dramatically expresses one side of the Regent Street block (No. 1 St James's Market). With woven Polymer encapsulated in glass, it is a beacon and at its most powerful from the south, where new paving will connect with the Grade I listed Royal Opera Arcade – a beautiful row of shops and galleries adjoining Pall Mall.

The Grade II listed facade on Regent Street will be repaired, but the interior and back – the side that makes up one half of the market - will be reconstructed. The new building will provide shops and restaurants that open onto the pedestrianised market, with the 'fin' marking the reception to the

The Haymarket block - No. 2 St James's Market – will be completely replaced. With encircling bands of Portland stone, anodised aluminium and glass, seven floors of offices sit above restaurants with outdoor dining in a new market place. This area of public realm will be paved in stone and furnished with new seating, planting and lighting.

Mixed use - St James's Market









#### Materials

The materials give the whole scheme cohesion and mark out the differences and elements of interest. 'We have weekly meetings and go through the implications of every building material', Justin explains. Dark grey porcelain flooring will be used for the cycle stores, limestone walls with inbuilt lighting for the reception and grey-green Westmoreland slatefor the listed roof.

Zinc will delineate the new from the old, for example, running along the edge of the glazed fin wall and the neighbouring listed facade. The grain in the aluminium matches across the site, and the complexity of the anodising process will give it a caramel hue that disrupts the large amounts of Portland stone – the stone that gives London its signature soft, diffused grey.

The use of Portland stone is to be expected, but its application here is playful. Make has chosen the layer between the dense matt white bedrock and the fossil-rich Bowers Roach of the top layer, as used in the new BBC building. The middle, conversely, has a variation of fossil types and sizes and will be subjected to a range of processes, from hard-brushing that removes the finest material and creates a coarse, pitted surface to infilling that smoothes any imperfections. The resultant palette breaks up any heavy expanses, creating a ripple of texture that ranges from fresh porridge to royal icing.

3 Mock-up of the No. 2 St James's Market facade. 4 Light bronze-coloured anodised aluminium detailing with Portland stone. 5 Mock-up of the glazed fin wall for No. 1 St James's Market. 6 Double-glazed unit with fine fabric mesh to the fin wall.

7 Model of No. 2 St James's Market showing the ground floor cut-back forming the main entrance. 8 Sketch showing the relationship between the historic building fabric and the new elements.

#### Location

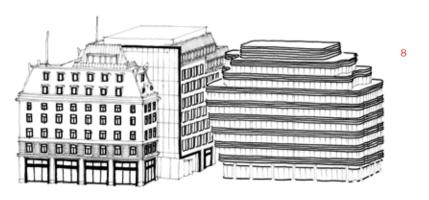
Justin talks about architecture that is 'embedded', for he believes that by understanding a location Make can add value and longevity: 'It's what differentiates us from everyone else who has the same computers, the same software. But this is a challenge to architects working today, who are often educated internationally, work internationally and build for international audiences'. It is clear Make's design consciously balances the need to be cohesively 'St James's' with creating a destination suited to worldly-wise business and retail clientele.

The open dialogue extends to working with English Heritage, the St James's Conservation Trust, the Westminster Society and Westminster City Council: 'It was great to share an understanding of what we do. Although you risk the possibility that they prefer an earlier iteration!' Make is unusual in working with a heritage consultant, who has helped them to be better informed about what defines St James's, visually and culturally. Justin is also a trustee of the Westminster Society, so has empathy not associated with the willful architect stereotype.

Half way through the design process, The Crown Estate was able to include the last piece of the puzzle: No. 22 Regent Street, which they believe is the last remaining building from the original Regent Street and completes the development block. This has created opportunities to repair its crude 1980s facelift and integrate the site as a whole.

Justin mentions that the woven fin material was originally inspired by the intricate metalwork of the Art Deco-style Wolseley restaurant. Applying the same attention to detail that St James's has been trading in for centuries, his respect for the area's unique heritage will not only provide some great contemporary architecture but also revive an underappreciated area, reinstate a forgotten market and mould a part of London with distinction and personality.





95

94 Mixed use – St James's Market

Located in the heart of Sydney's central business district, this flagship development consists of a 27-storey premium grade office tower, two heritage buildings, retail space and a world-class transit hall for Wynyard Station.

## **Wynyard Place**

**Location** Sydney, Australia **Area** 74,000m<sup>2</sup>/796,000ft<sup>2</sup> **Client** Brookfield

Won through an international design competition, Wynyard Place is Make's first scheme in Australia. The project aims to re-establish Carrington Street as one of Sydney's prime commercial addresses, raising aspirations for this section of the city and leading the way for the area to become a vibrant hub. Make is working in collaboration with a Sydney-based team of consultants to deliver the project, including local architectural firm Architectus.

#### 10 Carrington

The landmark 58,000m² commercial tower was designed in response to the complex constraints of the site and the scale, language and rhythm of the buildings and streetscape surrounding it. Formed from a composition of simple interlocking rectangular blocks that become less dense and visually lighter as they gain height, the building's layered appearance can be read from many angles and vantage points. Each elevation is different to complement and enhance the city's skyline and sculpted to optimise views to and from the building. The prime office space offers large, efficient floorplates of up to 2,500m² and outstanding environmental credentials.

At ground level the tower is deliberately built to restate the urban grid and activate the street edge; comprehensive improvements to the public domain and new connections with the nearby Wynyard Park serve to integrate the development with its immediate urban context. The design provides a respectful setting for the surrounding heritage structures and streetscapes.

#### **Shell House and Beneficial House**

Two historically significant buildings that flank the new tower will be preserved and restored as part of the Wynyard Place scheme.

The former Shell House, built in the 1930s and currently operating as a hotel, will be sensitively restored and reconverted into high-end offices. The listed 11-storey Palazzo-style building was originally constructed as a headquarters for the Shell Oil Company but became an extension of the Menzies Hotel in 1979. This elegantly proportioned Sydney landmark is a distinguished addition to the townscape around Wynyard Park and will be refurbished to offer 8,000m² of office space and new retail outlets at street level. The building's rare ochre-coloured glazed terracotta tile facade will be restored and the clock tower will be renovated and strengthened in prominence to visually anchor the corner site.

Beneficial House is a fine example of Georgian revival architecture and functioned as the famous Peapes Menswear store from 1923 to 1970. The seven-storey building will be maintained and conserved to become a flagship retail outlet. The brick facade's original detailing and decorative features – including stone arches on the ground floor, semi-circular fanlights and multipaned timber-framed windows – will be carefully preserved and enhanced.

Carrington Street





George Street

























**1, 2** Diagrams and model illustrating the office tower's composition of interlocking rectangular blocks.



2

96 Mixed use – Wynyard Place

#### Station concourse

Wynyard Place is uniquely positioned to become fully integrated with the redevelopment of one of Sydney's major transport hubs. The modernisation and revitalisation of Wynyard Station and its shopping precinct will create a spectacular transport interchange. Operating at capacity, the main entry portal for Sydney's commuters currently presents a congested space and an unwelcoming arrival point.

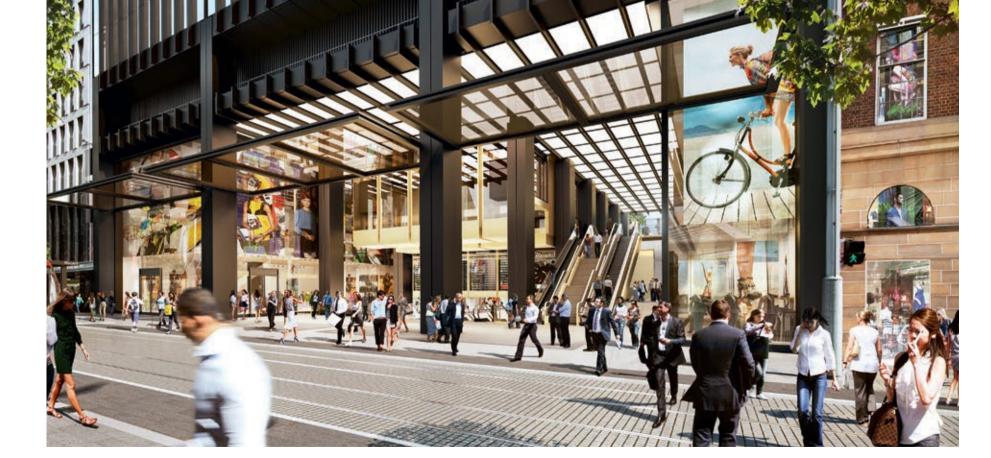
Beneath the new tower, a generous multi-level transit hall with grand entrances, open and legible pedestrian concourses and flagship retail stores all with clear sightlines, street views and generous levels of daylight – will give the station an exciting new identity. The vision is for the hall to become a new 'urban room' with a sense of civic grandeur that will become a destination in its own right. Escalators, stairs and lift cores are used as sculptural devices to assist wayfinding and animate the impressive space.

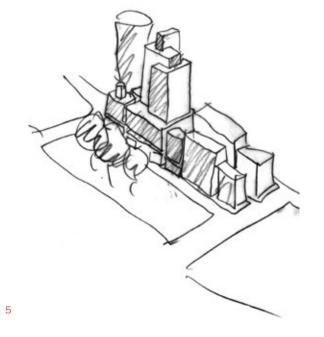




**3, 4** Section and street-level view of the new transit hall linking George Street with Carrington Street and Wynyard Station. **5** Sketch of the development overlooking Wynyard Park. 6 Visualisation of the tower and the restored Beneficial House.







Mixed use – Wynyard Place



# Arts and installations

Kite Bar 102
Banana Republic
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Ecobuild cinema 106
Inside the modelshop 108
Spectrum 110
Chromorotation 112

**Opposite** Lettering detail, Banana Republic window display

# Kite Bar 风筝吧

Location Beijing, China Area 20m<sup>2</sup>/215ft<sup>2</sup> **Client** Beijing Design Week

1 The Kite Bar outside Beijing's Great Leap Brewing pub. 2 Model of the intricate lattice structure.

For Beijing Design Week 2014, we took inspiration from the Chinese craft of kite-making to create a pop-up bar for the Great Leap Brewing pub.

在今年北京国际设计周上, 我们 以北京的传统风筝制作工艺为设 计灵感,在大跃啤酒打造了一个 临时的艺术装置。

the structure illuminated it at night and projected patterns and shadows through the folds of the intricate timber latticework.

Installed on the pub's external pavement terrace

in Beijing's Sanlitun district, our custom-designed

interactive furniture that became a lively focal point

for customers to gather, drink and socialise. Our

delicate but sturdy 5m-long installation offered

a twenty-first century reinterpretation of a hand-

sequence involves four stages – *Zha* (framing),

Hu (binding), Hui (painting) and Fang (flying). We

reinterpreted these processes using contemporary

construction methods and materials. Hand-curled

bamboo was replaced with parametric design and

CNC timber ply; traditional wicker binders became

The trapezium-shaped truss structure

an interlocking plywood structure; and painted

silk was re-imagined as a digital print on the

comprised three triangular elements whose

ends were connected at 15 nodes at the top to

bottom touching the ground. LED lighting inside

support the bar counter, and 11 nodes at the

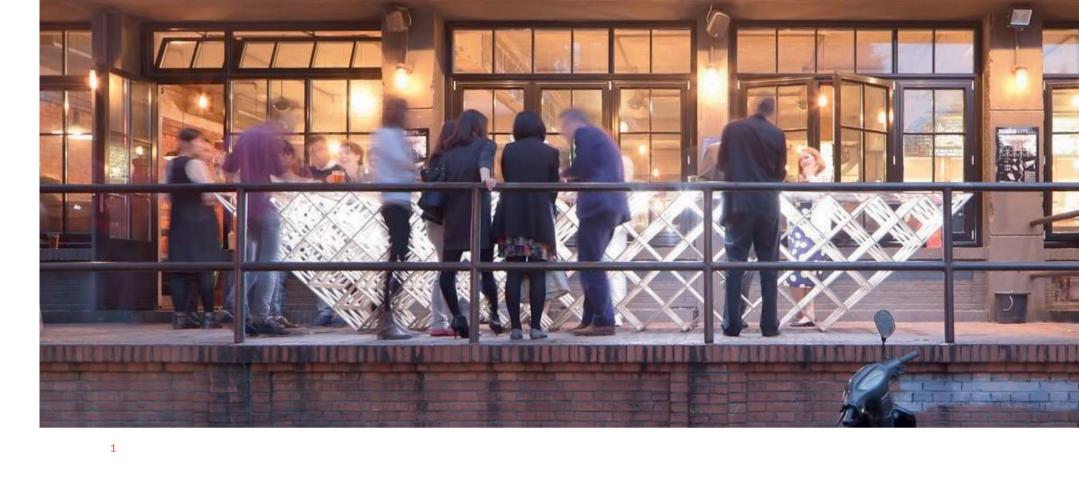
The traditional Chinese kite-making

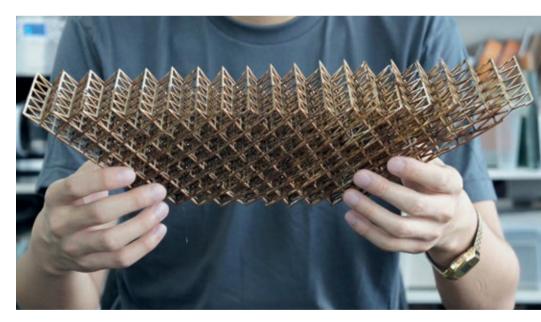
crafted wooden box kite.

bar's surface.

Kite Bar took the form of a piece of playful,

Great Leap Brewing is Beijing's first craft brewery. Founded in 2010, the small-scale independent operation brews beer on site using locally grown ingredients and is the pioneer of a rapidly growing market in the city. The brewery was the ideal choice of partner for our Kite Bar project since their ethos embodies our design concept for the installation – traditional craftsmanship with a unique, contemporary twist.





装置位于北京三里屯大跃啤酒外部阳台的地面上,我 们自制并设计的风筝吧台从一个充满趣味与互动的家 具成为人们可以聚会,畅饮,社交的聚点。看似精巧但 结实的5米长装置,在21世纪诠释了新的手工风筝框 架结构的概念。

中国传统风筝的制作过程分为四个步骤-扎, 糊,绘,放。我们重新诠释了这个过程并转化为现代的 建造手法然后运用了不同的材质。把手工扎竹架子转 化为参数化设计与CNC木材以及相互交错的胶合板结 构; 把糊面纸转化为通过吧台表面的数码打印与图像 再生成的工艺。梯形的桁架结构由三组三角形结构组 成,并且其连接端点形成了15组节点同时成为了吧台 面的支撑结构。梯形的桁架结构底部有11组节点并支 撑在地面上。风筝吧的结构里布置了LED灯带, 夜晚来 临时, 灯光把吧台交错复杂的结构框架与其台面再生 成的图像相互映射,形成了交织如网的阴影。

大跃啤酒是北京第一家手工精酿。于2010年成 立,虽然作为小规模独立运作的酿酒工程却拥有着丰 富的啤酒类品种,并且采用了当地生长的原材料成为了 城市中的先驱并是一个快速发展的市场。大跃啤酒是 我们风筝吧项目理想的合作伙伴, 因为他们的精神体 现了我们装置的设计理念-从传统手工艺入手并打造出 全新,独特与现代的诠释。

103 102 Arts and installations - Kite Bar

Built

RIBA's 2014 Regent Street Windows Project created an exciting exhibition of architectural installations in the shops and cafés on and around Regent Street.

# Banana Republic window display

Location London, UK Area 10m<sup>2</sup>/107ft<sup>2</sup> **Client** Banana Republic

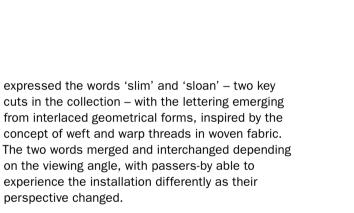
**1–3** The installation in Banana Republic's window, seen from three different angles. 4 Drawing detailing the viewing positions of the words 'sloan' and 'slim'.

This year fifteen leading architecture practices collaborated with fifteen of London's most prestigious retailers to create a series of highly original window displays that demonstrated the architects' creativity, as well as the retailers' commitment to quality design. The installations both enhanced the shopping experience for customers and increased footfall for the retailers, while giving the architects an opportunity to showcase their work to a new audience.

Managed by RIBA, the project was run in partnership with the Crown Estate and the Regent Street Association. The installations were on display for three weeks in September to coincide with London Fashion Week and the London Design Festival. The architectural practices gave their time and expertise pro-bono, while the retailers paid for the production of the displays.

Make's engaging and dynamic installation for Banana Republic's flagship Regent Street store represented key themes behind the brand's 'Shape of Things to Come' 2014 Autumn/Winter campaign. A three-dimensional optical illusion

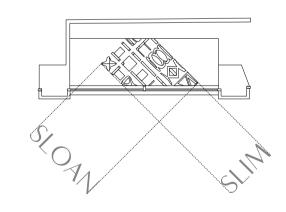
cuts in the collection – with the lettering emerging from interlaced geometrical forms, inspired by the concept of weft and warp threads in woven fabric. The two words merged and interchanged depending on the viewing angle, with passers-by able to experience the installation differently as their perspective changed.





THINGS TO COME





The SHAPE OF THINGS TO COME

105 104 Arts and installations – Banana Republic window display

Make was invited to design and construct this unique, sustainable pop-up cinema that became a popular feature at Ecobuild 2014.

# **Ecobuild cinema**

**Location** London, UK **Area** Approx 20m²/215ft² **Client** Henrietta Lynch and the Regeneration Film Festival



The distinctive temporary structure was used to screen the Regeneration Film Festival – an annual international short-film and animation competition based on the theme of sustainable construction in the built environment. Our ingenious igloo-like cinema embodies the principles of sustainable design in its form, materiality and construction.

The self-supporting modular structure was made entirely from recycled cardboard, held in place by tubular columns and a frame of criss-crossing tent poles. A total of 1,271 hexagonal pieces of cardboard – each one slightly different in size and shape – were linked together with plastic cable ties to form a honeycomb-like configuration. Small holes cut into the centre of each cardboard element allowed thin shafts of light to filter into the intimate screening space, projecting multiple dots of light around the inner dome.

The efficient, lightweight design allowed for ease of transportation, assembly and dismantling and resulted in low wastage and minimal use of materials. The cinema's curvilinear geometry created a strong visual impact within the relative formality of Excel London's exhibition space and became a fitting embodiment of Ecobuild's sustainability agenda. The innovative structure was shortlisted for a UK Green Building Council award for the most eco-friendly exhibition stand at the event.

1 The temporary cinema at Excel London. 2 The cinema's cosy interior. 3 The underside of the honeycomb tile matrix.







Paul joined Make in 2012, having previously worked at Foster & Partners and Wilkinson Eyre. He is responsible for the running of Make's modelshop and has overseen the design and fabrication of models for numerous key projects.

# Inside the modelshop

Make's modelshop manager, Paul Miles, describes his role and the benefits of having an on-site workshop. My role as Make's modelshop manager is to advise and assist the architects in the construction of their models. This results in a really exciting and varied job, which can include experimenting with laser cutting, making casts from resin or coordinating the construction of high-tech models with fully integrated lighting controlled by tablets. Each day is completely different!

Model making is at the heart of the Make studio and everyone, from directors to students, gets involved in designing and building models. They are an essential part of the design process and we use models at every stage, from early concept and massing options to 1:1 details. Model-making has always been embedded within the studio, progressing from spray-painting on a cramped stairwell in Make's early days to the bespoke, state-of-the-art modelshop we have today. We now have a large, open-plan facility, which includes a sketch model zone and a machine shop. As well as offering all the traditional model-making facilities, the modelshop has become a creative hub for the studio – an informal environment where we get to share ideas and see what everyone is up to.

Physical models are a very direct way of understanding a design; they can reveal issues that may be hidden on two-dimensional drawings and computer screens. They are a great tool for formal and informal design reviews, stimulating discussion and generating innovative solutions. Many new and unexpected ideas evolve through experimenting in the modelshop. Model-making gives our partners hands-on experience and a chance to play with forms and shapes and try out different ideas. There is no better way to get to know your site and your building than through crafting it by hand; it allows you to see your scheme within its surroundings and get a clear idea of how it works three-dimensionally.

Creating models as our designs develop is also of huge benefit when it comes to communicating to clients and the wider design team. Models bring buildings to life like no other medium. Not only are they aesthetically pleasing objects that can be understood intuitively – they really capture people's imaginations, much more than drawings or visuals. It's always great to hear that our clients have spent an entire meeting playing and interacting with the models!

'Models bring buildings to life like no other medium. Not only are they aesthetically pleasing objects that can be understood intuitively – they really capture people's imaginations, much more than drawings or visuals.'

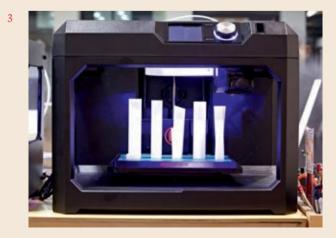
The past five years have seen an exciting evolution in model-making with the incorporation of digital design tools and techniques. The ability to quickly convert digital files into physical objects with laser cutters and 3D printers has enabled complex and organic models to be created with incredible accuracy and speed. Make's 3D printers are running almost 24 hours a day! They really come into their own when producing massing studies, where multiple options can be printed almost as quickly as they are drawn on the computer.

I really like to push our machines to their limit and use them in new ways. This year we've had some great projects to get our teeth into; one of the most interesting was our pop-up cinema for Ecobuild, constructed entirely from recycled cardboard boxes. It involved laser cutting more than 1,000 individually shaped panels and cable-tying them together to produce a working structure.

People are always asking me if 3D printers will ever take over the model-making process. The answer is no – at the moment they allow us to work much faster, but the models are limited in terms of material and strength and they need finishing by hand. It's a very exciting time as the technology is continually developing, but even as 3D printers become more powerful they will never replace the benefits of hands-on model-making.







1 Make's modelshop in use. 2 Paul working on a sketch model of the Aranya project.

108 Arts and installations – Inside the modelshop

**<sup>3</sup>** 3D printing in progress.

#### Planning approved

The implementation of 5 Broadgate and its associated public realm represents the latest step in Broadgate's evolving identity. Make's *Spectrum* feature wall creates an improved, high-quality environment for pedestrians.

# **Spectrum** at 5 Broadgate

Location London, UK
Length Feature walls
60m/197ft and 35m/115ft
Client British Land

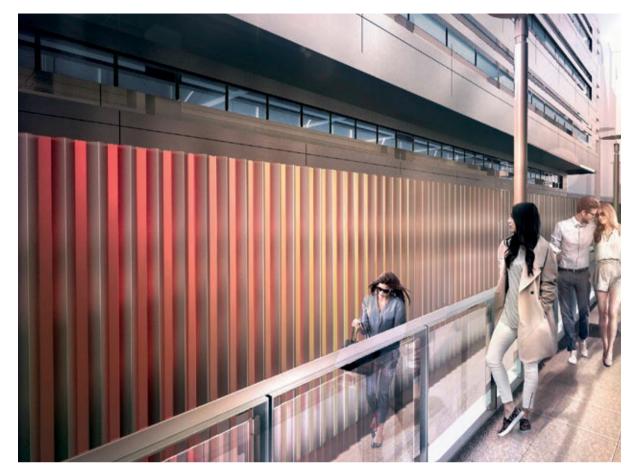
Since the construction of 5 Broadgate, greater emphasis has been placed on Sun Street Passage – a partially covered pedestrian route which links north Broadgate to Liverpool Street station, with a peak footfall of more than 1,700 people per hour.

In order to enhance the north—south route and improve integration with the City of London and Shoreditch, we are upgrading the passage with new surfacing, materials, lighting and a unique feature wall. This will create a more open, attractive and safe route for pedestrians at all times of the day. Our aim is to create a unified, high-quality environment that builds on the highly successful wayfinding that has been implemented throughout the Broadgate area.

The striking, three-dimensional feature wall has been designed so that colour, light and reflection interplay to create a stimulating visual experience for the pedestrians travelling along Sun Street Passage. Composed of a sequence of vertical metal fins interspersed with vibrantly coloured infills, *Spectrum* serves to enliven the passageway and give it a strong new identity.

As pedestrians move along the passage the entire sequence of rainbow colours is revealed through colour panels, with hues of red, orange, yellow, green, blue and violet spanning a 60m length of wall. The panels are set back between metal profiles, allowing the colours to reveal themselves gradually as people progress through the passageway. Integrated LED lighting further illuminates the feature wall and heightens the vibrancy of the colours.

The Spectrum concept is extended to the covered walkway to the north of Sun Street Passage, creating a sense of continuity along the route and enlivening the pedestrian experience. Here the colours are displayed across a 35m stretch of passageway.



Elevation of Spectrum showing the sequence of rainbow colours.
 Visualisation of the feature wall in Sun Street Passage.
 Sketch of the fin arrangement.
 Material and finish sampling.

2

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110 Arts and installations – Spectrum

Planning approved

A commissioned artwork by the artist
David Batchelor creates a striking focal
point for Make's 5 Broadgate development,
expressing British Land's commitment
to public art on the Broadgate Estate.

### **Chromorotation**

at 5 Broadgate

Location London, UK Height 20m/65ft Client British Land

112



#### Artist biography

David Batchelor was born in Dundee and lives and works in London. His portfolio includes a number of significant public artworks, including a 10m-high light installation at Archway underground station and a major commission for St Pancras International station entitled *Chromolocomotion*. He is the author of a number of books on colour, including *Chromophobia* (2000) and *The Luminous and the Grey* (2014). David is currently undertaking a major installation for the Whitechapel Gallery titled *Monochrome Archive*, which will be exhibited in 2015.

5 BROADGATE TOWER APPROX OVERALL PROPORTIONS

A prominent new gateway to the north-west of 5 Broadgate, known as Sun Street Square, denotes Broadgate's interface with the City of London and provides an important arrival and entrance point. This key space has been chosen as the location for David Batchelor's artwork.

Broadgate is already home to an impressive collection of art that forms an integral part of the area's public realm, helping to define its character. Existing well-known pieces include Richard Serra's *Fulcrum*, which occupies the centre of the Octagon, and *Broadgate Venus* by Fernando Botero, located in Exchange Square. David Batchelor's site-specific installation, entitled *Chromorotation*, will be an inspirational addition to these works and a dramatic focal point for the new 5 Broadgate building.

The 20m-tall totemic structure comprises 40 stainless-steel-framed light boxes formed from toughened coloured glass that are illuminated from behind by low-energy LED lighting. Each box is the same size and rotated by about 40 degrees anti-clockwise in relation to the one below it, with the resulting sculpture appearing irregular but with a balanced overall composition.

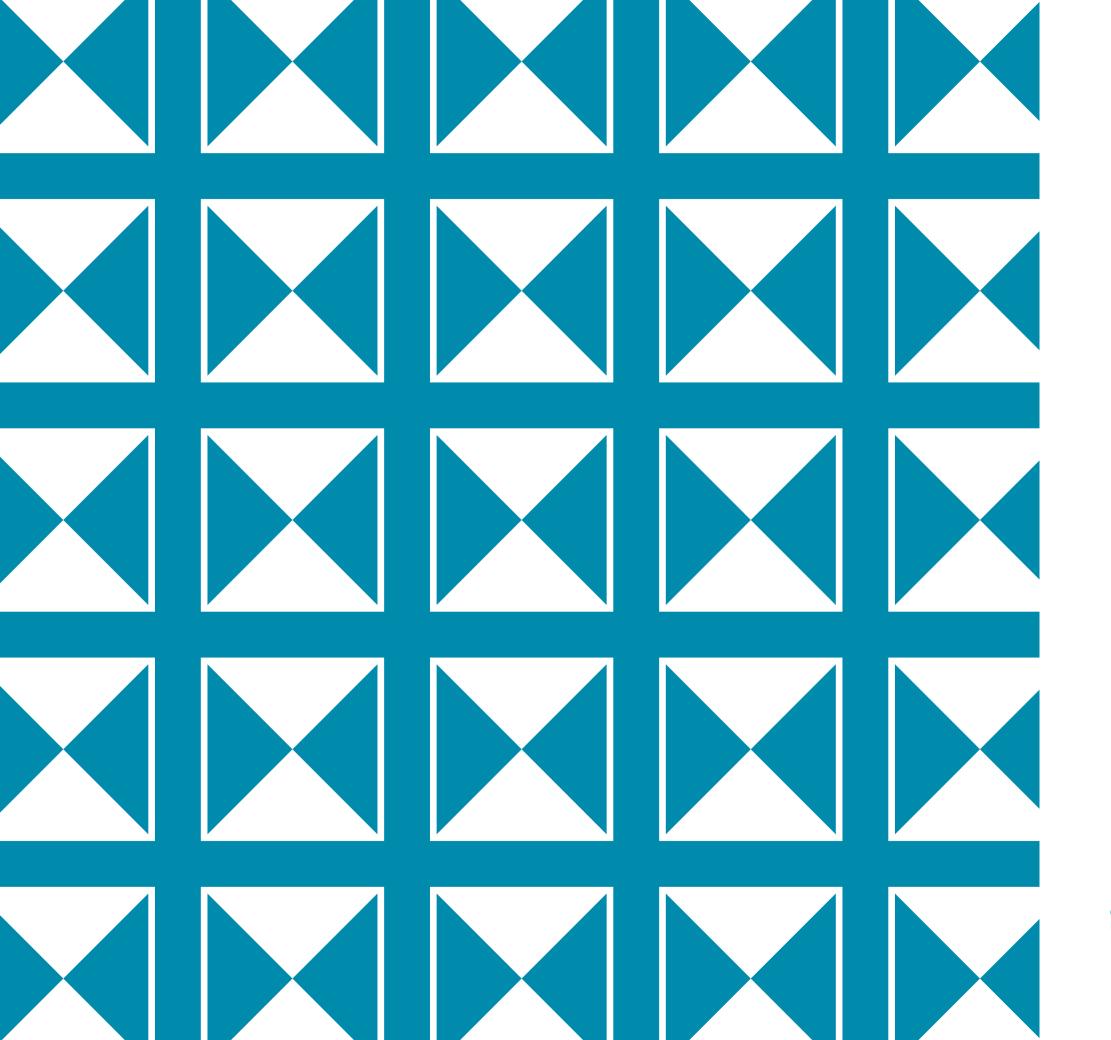
Chromorotation will be visible from many different vistas and emanates a soft, diffused glow, with each element of fluorescent colour able to adapt as ambient lighting conditions change from day to night. The footprint of the work is 1.5m in diameter and the lowest cube sits 2.5m above the ground, on a crafted granite plinth.





 Visualisation of Chromorotation next to the 5 Broadgate building.
 Sketch of Chromorotation. 3 Light box sample. 4 David Batchelor's London studio.

Arts and installations – Chromorotation



# **Studio**

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The Future Spaces
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People 2014 124
James Phillips tribute 128

Ian Wale's artwork for 10 x 10 Drawing the City.

### **News and events**

Celebrating ten years, fishing in the River Test, cycle racing at Brands Hatch, sampling wine and aivar in Macedonia, winning the AJ100 Practice of the Year award, abseiling Broadgate Tower.

Just a few of the things we got up to in 2014.



Our tenth anniversary party was held at the 32 Cleveland Street underground car park in May, just before work started to convert the space into a brand new studio for Make.







In November, a group of 'Makers' visited Skopje in Macedonia to explore the city's new and Modernist architecture. The field trip was organised by Make's Dragan Krstevski, who is from Skopje and regularly runs architectural tours of the city.





Matthew Bugg, Robert Lunn, Ben Stuart and Ian Wale took part in the 2014 Allsop Festival of Cycling in September, in support of LandAid. The event was held at the Brands Hatch circuit in Kent, where the team gained second place overall in races against industry colleagues.





Jason Parker, Paul Scott and Bill Webb hosted a client fishing trip on the River Test at Newton Stacey in September. The food and wine was abundant – which is more than can be said of the fish!



Ben Stuart (second from front) joined Mace's 5 Broadgate team to row across the English Channel, raising money for the AHOY Centre charity. A BBC film crew documented the rowers' epic five-hour non-stop trip.

116 Studio – News and events



Make's 2014 summer party was held on the Podium's rooftop terrace in the Queen Elizabeth Olympic Park.







George Guest (left) was winner of the studio's thrilling table tennis tournament in December, pictured with event organiser Chinmay Potbhare (centre) and fellow finalist Sangkil Park (right).





Employee Ownership Day was celebrated in the Make studio in July with an array of cakes made by Oliver Sprague.



In October, the graphics team went to Berlin to receive a Red Dot Award in Communication Design for the tenth edition of the Make Annual.



Make was ranked 50th in the 2014 Sunday Times 100 Best Small Companies to Work For awards.



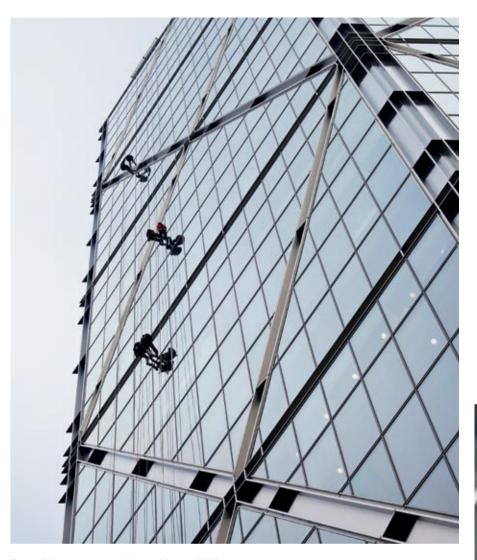
Make was the extremely proud winner of the coveted AJ100 Practice of the Year award in May.



Our Quai des Bergues project for HSBC won Global Project of the Year at the FX International Interior Design Awards in December.

Practice of the Year

118 Studio – News and events



Seven Make teams participated in LandAid's 'TowerAthlon' fundraiser in September. The volunteers competed in abseiling, stair running and static cycling challenges at Broadgate Tower. A total of 200 people took part in the event, which raised over £30,000.



Architecture student Sahar Pathan completed a six-week summer work placement at Make. Organised by the Stephen Lawrence Charitable Trust to support students local to the Olympic Park, Sahar joined the Chobham Manor team. She is pictured with Belinda Moreau-Jones from the L&Q Housing Association.







For the second year running, Make took part in Open City's 'Accelerate into University' mentoring programme, supporting 'hard to reach' secondary school pupils who want to study architecture. Eighteen students were mentored by architects in one-to-one sessions in the Make studio.



In October, a team of 15 took part in a hands-on volunteering day in support of community engagement charity Groundwork London. The volunteers worked on improving the indoor and outdoor environment of the Roundchapel community centre in Hackney.



Artworks by Ken Shuttleworth (above) and Ian Wale (right) produced for 10 x 10 Drawing the City were sold to raise money for architectural aid charity Article 25. A record sum of £119,500 was raised at the auction in November.





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120 Studio – News and events

# The Future Spaces Foundation

In late 2013, Make set up the Future Spaces Foundation – a research forum that undertakes new thinking to inform the future of the spaces in which we live and work.

The foundation provides a platform to gain insight beyond Make's own field of expertise and debate key issues that affect the built environment. Consisting of a panel of experts from a diverse range of backgrounds – economics, psychology, transport, sociology and education – the foundation's ultimate aim is to influence the way in which spaces and places are designed to enable communities to thrive.

#### The future of the high street

Our first panel discussion focused on safeguarding the future of the UK high street. The inaugural report looked at how the decline of high streets across the country could be reversed.

The report argues that, in order to guarantee the vitality of our public spaces, communities and policy makers need to work together to re-examine the function, look and purpose of their own high streets. Rather than trying to revive the high street through increased retail offerings, town centres need to focus on ways to attract people through better transport provision, increased employment opportunities, the provision of key services and leisure facilities, and better housing. Three key recommendations were proposed:

- 1. Effective community and youth engagement policies the days of heavy public sector investment may be over, but local communities should play a much bigger part in developing creative solutions for improving their high streets and need to be empowered in order to do so.
- 2. Using learning and education as drivers for change tertiary education in particular can provide a virtuous circle of learning, research and employment opportunities.
- 3. Flexible and effective planning current planning guidance is overly complex and the conversion of void retail spaces to leisure, office or residential use should be easier for property owners.

#### Garden cities

The next Future Spaces Foundation report is due to be published in March 2015 and concerns garden cities. In the midst of a housing crisis and with a general election on the horizon, homebuilding has been a top priority for all political parties in the UK.

The term 'garden city' has been bandied about as a cure-all for the housing challenges we are facing today. It evokes visions of semi-detached houses with private gardens and lush, green open spaces, but is this actually the case? Will garden cities indeed solve the housing crisis? Or is there a better solution that is greener, more economically viable and socially sustainable?





inaugural report, another diverse group of expert panellists convened to debate whether garden cities are the answer to the UK's housing crisis. 2 Trudi Elliott from the Royal Town Planning Institute discusses the importance of employment opportunities when creating large-scale housing developments.
3 Paul Swinney of Centre for Cities debates the environmental issues that face new towns.
4, 5 The Future High Street: Perspectives on Living, Learning and Livelihoods in our Communities can be downloaded from www.futurespacesfoundation.org

1 After the success of the foundation's

Email: info@futurespacesfoundation.org
Twitter: @FutureSpaces



2 3





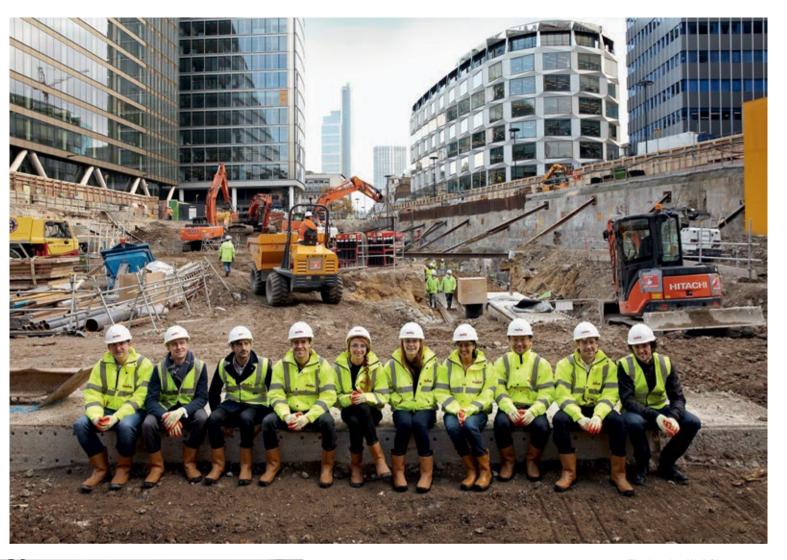
122 Studio – The Future Spaces Foundation

# **People 2014**

We are currently working on an unprecedented number of construction projects, with teams based in five site offices across London.



The London studio team on the ramp of 32 Cleveland Street – soon to be Make's new office.



The London Wall Place team.



The Greenwich Square team.

124 Studio – People 2014



The Rathbone Square team.



The Wynyard Place team.





The Hong Kong studio team.



The 5 Broadgate team.







The Beijing studio team.

127 Studio – People 2014

## James Phillips tribute

1987-2014

Ken Shuttleworth remembers James Phillips, who died in September. I have known James since he was young and watched him grow from a very bright boy into an exceptional young man who was fascinated by architecture.

James was very keen to join Make and started working here in September 2013. He was a diligent, committed colleague and a talented architect who was a joy to work with. He contributed towards many of Make's projects, including the Taberner House development in Croydon and the Amenities Building for the University of Nottingham. More recently he had started working on one of our largest projects, Rathbone Square, and quickly became an integral member of the design team. He had just signed up to take his Part III at the University of Westminster – the final stage of his education – and was due to attend his first session the day after he died.

He was a constant presence at all social and charity events, becoming a member of the Make Social team that organises our extra-curricular activities. He took part in the Taberner House charity abseil and played in football tournaments for the Construction Cup and the Architects' Football League. He played in our popular Girl v Boy netball matches and in softball games against other architects' offices. He participated in the 'Beat the sunset' 5km run, where 'team Make' won the prize for the fastest mixed team and raised more than £3,500 for The Prince's Trust. Also he joined myself and 20 colleagues in LandAid's 'TowerAthalon' challenge at Broadgate Tower.

James was the core of many social occasions and went out of his way to make sure people had a good time. He was extremely approachable and always made an effort to get everyone involved. He was a fabulous person to know, with lots of entertaining stories to tell from his travels and interesting opinions to share on architecture. He was an incredibly positive person, always up for any challenge and delighted to get stuck in.

When I announced his death to the office – the most difficult speech I have ever had to give – we were all in a state of shock and continue to be devastated that someone so bright and so young should be taken from us in such a tragic way. The fact that he died at a charity event is a fitting testament to a young man who was one of the good guys. He leaves a large hole at Make which will be impossible to fill. My father always said to me 'only the good die young'. Never is this more true than in the case of James Phillips.







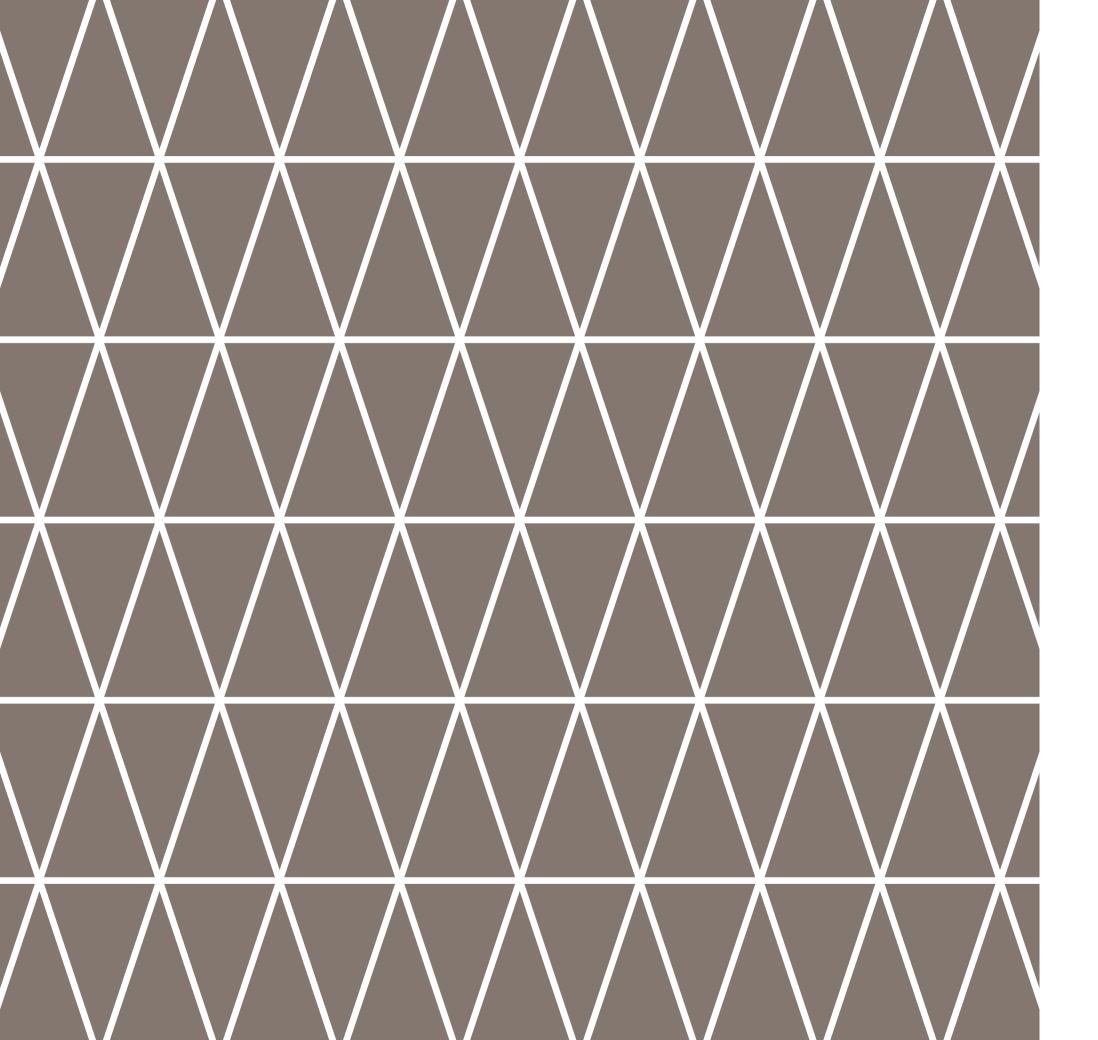








128 Studio – James Phillips tribute



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**Opposite** Timber panel detail, Kite Bar.

# **Project key facts**

#### Α

#### **Aldgate Square Pavilion**

Status Planning submitted
Sector Retail
Location London, UK
Area 250m²/2,690ft²
Client The City of London
Consultants Baily Garner, BoydThorpe Associates, English Heritage,
EQ2, Fluid Structures, Pick Everard,
Skelly and Couch, Sweett Group
Contractor Kier Facilities Services Ltd
Make team Sean Affleck,
Charley Lacey, Matthew Seabrook,
Ken Shuttleworth

#### Amenities Building, Old Road Campus

Justin Nicholls, Liza Rudyk,

Tomas Sharp, Ken Shuttleworth

Status Design development
Sector Education and research
Location Oxford, UK
Area 17,000m²/183,000ft²
Client Estates Services,
The University of Oxford
Consultants EC Harris, Hoare Lea,
Peter Brett Associates, Turner and
Townsend
Contractor Mace
Make team Mojdeh Moasser,

#### Amenities Building, Sutton Bonington Campus

Status On site
Sector Education and research
Location Nottingham, UK
Area 4,200m²/45,200ft²
Client The University of Nottingham
Consultants AKT II, Arup, Atelier 10
Contractor Willmott Dixon
Make team Eva-Katharina Barile,
James Flynn, Wandrille Madelain,
David Patterson, James Phillips,
Joanna Pilsniak, John Prevc,
Ken Shuttleworth, Luke Smith

#### Aranya

Status On site
Sector Residential
Location South Mumbai, India
Area Confidential
Client Piramal Realty Pvt Ltd
Collaborating architects SSA
Architects
Consultants Buro Happold, Lerch
Bates, MVA Systra India, SpaceAge
Make team James Flynn, Yuting
Jiang, Dragon Krstevski, Paul Scott,
Sanaa Shaikh, Ken Shuttleworth,
Greg Willis, William Yam, Yiping Zhu

#### **Arena Central Masterplan**

Status Planning approved
Sector Masterplanning
Location Birmingham, UK
Area 9.2 hectares/22.7 acres
Client Arena Central Developments
Consultants Acivico, BWB, EC Harris,
Gillespies, Hannan Associates
Make team Hannelore Christiaens,
Frances Gannon, Sanaa Shaikh,
Ken Shuttleworth, Greg Willis

#### 1 Arena Central

Status Planning approved
Sector Office
Location Birmingham, UK
Area 13,000m²/140,000ft²
Client Arena Central Developments
Consultants Acivico, BWB, EC Harris,
Gillespies, Hannan Associates
Make team Hannelore Christiaens,
Frances Gannon, Sanaa Shaikh,
Ken Shuttleworth, Greg Willis

#### 4-16 Artillery Row

Status On site

Sector Residential
Location London, UK
Area 3,000m²/33,000ft²
Client Victoria Property Holdings and LBS Properties
Consultants Cityscape, Hoare Lea, Turley Associates, URS Corporation
Contractor 8build
Make team Timothy Davies,
Adam Grice, Ian Lomas,
Richard Meddings, Ken Shuttleworth,
Tracey Wiles

#### В

#### **Banana Republic window display**

Status Built
Sector Arts and installations
Location London, UK
Area 10m²/107ft²
Client Banana Republic
Contractor Millington Associates
Make team Alice Bosc,
Justin Nicholls, James Roberts,
Ken Shuttleworth

#### Big Data Institute, Old Road Campus

Status On site Sector Education and research Location Oxford, UK Area 7.400m<sup>2</sup>/79.600ft<sup>2</sup> **Client** Estates Services. The University of Oxford Consultants AECOM, D2E, HCD Group, Hoare Lea, Long and Partners. Pell Frischmann. Peter Brett Associates. Peter Connell **Contractor** Mace Make team Tia Kharrat. Peter Matcham, Una Mollin, Justin Nicholls, Ken Shuttleworth. Nicholas Stamford

#### 5 Broadgate

Status On site **Sector** Office Location London, UK **Area** 105,000m<sup>2</sup>/1,130,000ft<sup>2</sup> **Client** British Land Consultants Arup, Ashurst, Buro Happold, City of London, DP9. FEDRA, Gordon Ingram Associates, Hilson Moran, Hyland Edgar Driver, Jefferson Communications, Mace Cost Consulting, Miller Hare, M3 Consulting, NDY Light, Steer Davies Gleave, Watkins Payne Partnership **Construction manager** Mace Make team Matthew Bugg, James Goodfellow, Myoungjae Kim, Craig Mundle, Jason Parker, Joanna Pilsniak, Ken Shuttleworth, Ben Stuart

C

#### **Century House**

Status On site
Sector Residential
Location London, UK
Area 4,400m²/47,300ft²
Client L&Q Housing Association
Consultant Hunters
Contractor Higgins Construction PLC
Make team Frank Filskow,
Ken Shuttleworth

#### **Chobham Manor**

Status On site

Sector Residential
Location London, UK
Area 9,400m²/101,200ft²
Client Taylor Wimpey, London Legacy
Development Corporation, L&Q Housing
Association
Consultants PRP Architects
Contractor Taylor Wimpey
Make team Aisyah Ajib, Frank Filskow,
James Freeman, Simon Robins,
Ken Shuttleworth, Rebecca Tudehope,
Simon Whitehead

#### Chromorotation

Status Planning approved

Sector Arts and installations
Location London, UK
Height 20m/65ft
Client British Land
Consultants Buro Happold, Constant
Structure Design, DP9, Mace, M3
Consulting, setWorks, Watkins Payne
Partnership
Artist David Batchelor
Contractor setWorks
Make team Matthew Bugg,
Myoungjae Kim, Ken Shuttleworth,
Ben Stuart

#### 32 Cleveland Street

Status On site

Sector Office
Location London, UK
Area 1,300m²/14,000ft²
Client Derwent London PLC
Consultants Akera Engineers, Exigere
LLP, GDM Partnership Ltd, MLM Building
Control Ltd, Rougemont Property
Consultants Ltd
Contractor The Thornton Partnership Ltd
Make team Sean Affleck, Charley Lacey,
Ken Shuttleworth

#### Ε

#### **Ecobuild cinema**

Status Built
Sector Arts and installations
Location London, UK
Area Approx 20m²/215ft²
Client Henrietta Lynch and the
Regeneration Film Festival
Make team Aisyah Ajib, Jacob Alsop,
Hannelore Christiaens, Chris Claydon,
Stephanie Ehrlich, Katy Ghahremani,
Peter Greaves, Tia Kharrat, Paul Miles,
Sanaa Shaikh, Ken Shuttleworth,
Rebecca Tudehope

#### G

#### **Greenwich Square**

Status On site

Sector Residential
Location London, UK
Area 89,000m²/958,000ft²
Client Hadley Mace
Consultants Chapman BDSP,
Meinhardt Group, Outerspace
Contractor Mace
Make team Frank Filskow,
Rebecca Harral, John Man,
Balveer Mankia, Mojdeh Moasser,
Chinmay Potbhare, Justin Randle,
Ken Shuttleworth, Andrew Taylor

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#### Н

#### The Hiscox Building

Status On site
Sector Office
Location York, UK
Area 4,600m²/49,000ft²
Client Hiscox
Consultants Access=Design, Arup,
The Brand Experience Consultancy,
CBRE, Chapman BDSP, Charles Funke
Associates, Facades and Material
Design Consultants, Gerald Eve LLP,
Gleeds, KKS Strategy LLP, Schumann

**Contractor** BAM Construction **Make team** Matthew Critchley, Robin Gill, George Guest, Jason Parker, Ken Shuttleworth

### K

Consult

#### **Kite Bar**

Status Built
Sector Arts and installations
Location Beijing, China
Area 20m²/215ft²
Client Beijing Design Week
Consultant Buro Happold
Make team Kun Bi, Kunkun Chen,
De He, Jana Rock, Ken Shuttleworth,
Jianling Wang, Bill Webb,
Su Xiaomeng, Qianqian Xu

#### L

#### **48 Leicester Square**

Status On site
Sector Mixed use
Location London, UK
Area 17,500m²/186,400ft²
Client Linseed Assets, CORE
Consultants EQ2, Hilson Moran,
InSite Arts, JMP, RBA Mueller Ltd,
Waterman Structures Ltd
Artist Kenny Hunter
Contractor Brookfield Multiplex
Make team Stuart Blower,
Frank Filskow, George Guest,
Robert Lunn, Daniel Murray,
Chinmay Potbhare, Amanda Sexton,
Ken Shuttleworth, Andrew Taylor

#### **London Wall Place**

Status On site Sector Office Location London, UK Area 75.000m<sup>2</sup>/800.000ft<sup>2</sup> **Client** London Wall Place Partnership **Consultants** Arup Facades, BB7. David Bonnett Associates, DP9. Gardiner and Theobald LLP, Gardiner and Theobald Management Services, Hurley Palmer Flatt, Reef Associates Ltd, Spacehub Design Ltd, Studio Fractal, The Vertical Transportation Studio. WSP Group **Contractor** Brookfield Multiplex Make team Emily Anderson, Eleanor Brooke, Chris Claydon,

Noam Hazan, Chris Jones, Regine

Kandan, Yianni Kattirtzis, Ian Lomas,

Rashmeeta Matharu. Sebastian Nau.

Aleiandro Nieto, Lara Orska, Sangkil

Park, Sam Potter, Ken Shuttleworth.

Natasha Telford, Ian Wale

#### M

#### **Meridian Gate**

Status Planning approved
Sector Residential
Location London, UK
Area 44,500m²/479,000ft²
Client LBS Properties
Consultants Core 5, DP9, Hoare Lea,
Waterman Group, WSP
Make team Frank Filskow,
Zachary Fluker, Gavin Mullan,
Simon Robins, Amanda Sexton,
Ken Shuttleworth, Ian Wale,
Simon Whitehead

#### The Monument Building

Status On site
Sector Office
Location London, UK
Area 13,600m²/146,400ft²
Client Skanska Project
Development Ltd
Consultants Arup, Gordon Ingram
Associates, GVA, Savills, Second London
Wall Project Management Ltd
Contractor Skanska Project
Development Ltd
Make team Ade Awoye, Cara Bamford,
Gary Rawlings, Ken Shuttleworth,
Rahul Vishwakarma, Suyang Xu

#### Р

#### Pinnacle One

Status On site **Sector** Office Location Chengdu, China **Area** 121,000m<sup>2</sup>/1.30 million ft<sup>2</sup> Client Chengdu Qianhao Real Estate Company Ltd (Jointly invested by Swire Properties Ltd and Sino-Ocean Land Holdings Ltd) Consultants Arup, CABR, CSL. Graphia Brands, Hugh Dutton Associates, IID, LPA, Urbis **Contractors** Shenzhen Kevuan Construction Group Co Ltd. Sino-Ocean Decor Engineering Co Ltd Make team Jet Chu. Frances Gannon. Robin Gill. John Puttick. Ken Shuttleworth, Jianling Wang, Bill Webb, Qiangian Xu

#### The Podium

Status Built
Sector Retail
Location London, UK
Area 1,200m²/12,900ft²
Client London Legacy Development
Corporation
Consultants Arup, Deloitte,
James Corner Field Operations,
Speirs and Major, Tomato
Contractor ISG
Make team Stuart Fraser,
Ken Shuttleworth, Luke Smith,
Boris Zuber

#### Private residence

**Sector** Residential

**Status** Planning approved

Location UK
Area 380m²/4,000ft²
Client Confidential
Collaborating architect Nick Willson
Architects
Consultants Charles Funke
Associates, Dr Daniella Abreu,
Eurobuild, Michael Alexander
Engineers, Terence O'Rourke,
The Waterman Group
Make team Caya Busch,
Harry Godfrey, Oliver James,
Justin Nicholls, Ken Shuttleworth

#### Pure Hammersmith

Status Built **Sector** Residential Location London, UK Area 17.400m<sup>2</sup>/187.000ft<sup>2</sup> Client UKSA Hammersmith Sarl. **Generation Estates Consultants** Approved Inspector Services Ltd, Beadmans, DP9, Exova, Generation Estates, Heyne Tillett Steel, MTT, Turner and Townsend Contractor Morgan Sindall Make team Alice Cadogan. Kathryn Edwards, Oliver James, Elizabeth Johnson, Jonathan Mitchell. Justin Nicholls, James Roberts, Ken Shuttleworth, Paul Simms, Barry Wark

#### Q

#### **Quai des Bergues**

Status Built
Sector Office
Location Geneva, Switzerland
Area 16,300m²/175,500ft²
Client HSBC Private Bank (Suisse) SA
Collaborating architects Itten
Brechbühl SA
Consultants BCS SA, Gartenmann
Engineering, Ingeni SA, Protectas,
Rigot + Rieben SA, SEAM Design
Contractors CMA, DWH, Induni
Make team Eva-Katharina Barile,
Kathryn Edwards, Michelle Evans,
Florian Frotscher, Christina Leung,
Ken Shuttleworth

#### R

#### Rathbone Square

Status On site
Sector Mixed use
Location London, UK
Area 38,300m²/412,200ft²
Client Great Portland Estates
Consultants Access=Design, AKT
II, Approved Inspector Services
Ltd, Arup, BIM Technologies, Buro
Four, Buro Happold, Colliers,
Devin Consulting, EC Harris, Four
Communications, Gerald Eve, Gordon
Ingram Associates, Gustafson Porter,
Heavenly, Hilson Moran Partnership

Ltd, Jeremy Gardner Associates Ltd, Jones Lang LaSalle, Knight Frank LLP, Miller Hare, Museum of London Archaeology Service, Pipers, Plowman Craven, Publica, Savills, Soiltechnics Ltd, Sound Ideas UK Ltd, Space Syntax, Speirs and Major Associates, Steer Davies Gleave, URS Corporation Ltd, Wordsearch

Make team Michael Bailey,
Arnd Baumgärtner, Mike Bell,
James Chase, Mark Cooney,
Stephanie Ehrlich, Kalliopi Kousouri,
Eve Leung, Sophie Lewis,
Graham Longman, Sebastian Nau,
Suzanne O'Donovan, Alysia Panther,
Jason Parker, James Phillips,
Ryan Safa, Ken Shuttleworth,
Paul Simms, Oliver Sprague,
Esha Thapar, Tracey Wiles

#### S

#### **Spectrum**

Status Planning approved
Sector Arts and installations
Location London, UK
Length Feature walls
60m/197ft and 35m/115ft
Client British Land
Consultants Buro Happold, DP9,
Mace, M3 Consulting, NDY Light,
Watkins Payne Partnership
Contractor Emtec Group
Make team Matthew Bugg,
Myoungjae Kim, Ken Shuttleworth,
Georgina Walker

#### St James's Market

Status On site
Sector Mixed use
Location London, UK
Area 34,000m²/366,000ft²
Client The Crown Estate, Oxford
Properties
Consultants AECOM, Atkins, Clarke
Saunders Associates Acoustics,
Gardiner and Theobald, Hanover Cube,
Ramboll Fire, Waterman Structures Ltd
Contractor Balfour Beatty

Make team Harry Godfrey, Tia Kharrat, Jonathan Mitchell, Justin Nicholls, Vicky Patsalis, James Roberts, Ken Shuttleworth, Luke Smith

#### W

#### **Wan Chai tower**

Status General building

plans submitted

Sector Residential
Location Hong Kong
Area 5,600m²/60,000ft²
Client Vanke Property (Hong Kong)
Company Ltd
Consultants P&T Architects and
Engineers Ltd, Rider Levett Bucknall,
Wong & Cheng Consulting Engineers Ltd
Make team Sean Affleck, Eli Lui,
Ken Shuttleworth, Roderick Tong,
Mark Tynan, Ian Wale, Jianling Wang,
Tracey Wiles, Boris Zuber

#### **Wynyard Place**

Status Planning submitted
Sector Mixed used
Location Sydney, Australia
Area 74,000m²/796,500ft²
Client Brookfield
Collaborating architects Architectus
Consultants AECOM, Airsafe, Altitude,
Arup, CPP, Douglas Partners, GML
Heritage, Group DLA, GTA, JBA, The
Mack Group, MGAC, Oculus, Renzo Tonin
and Associates, Rider Levett Bucknall,
Robert Bird Group
Contractor Brookfield Multiplex
Australasia

Make team Jason Chan, James Flynn, Robin Gill, Adam Grice, Regine Kandan, Justin Lau, Ian Lomas, Wandrille Madelain, Mehrnoush Rad, James Redman, Jack Sargent, Paul Scott, Ken Shuttleworth, Luke Smith, Lam Nguyen Tran

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