



KX200 is a redevelopment of a pair of disused 14 storey office towers on Pentonville Road in the London Borough of Islington. The new building provides 840 student flats with shared amenity areas and additional market and social housing.

The development adds a four-storey podium to the site to re-establish a traditional building, and adds two storeys to each of the towers.

The redeveloped site provides a landmark scheme that acts as a catalyst for the rejuvenation of Pentonville Road and a link to the wider regeneration of King's Cross.

Sector: Housing Location: London, UK

Address : Pentonville Road, Islington, London N1 9JP

Client : First Base Ltd & The Blackstone Group

 Value :
 £35m

 Start :
 June 2005

 Completion :
 September 2007

Contract Type : Bespoke form of Contract

Management

Key Dates

June 2005 : Design Team appointed

August 2005 : Stage A/B report shows all options available on the site

November 2005 : Stage D report produced for pricing and valuation

November 2005 : Planning application submitted

December 2005 : Demolition work commences on site

December 2006 : AHMM progress to Stage F on key packages. Tower facades are

tendered

January 2006 : Tower cladding contract let to Schmidlin UK. Schmidlin go into

receivership

February 2006 : Planning permission granted

April 2006: New-build works commence on site

Areas

Gross Internal : 377,650 ft² | 35,084 m²

Office : 17,448 ft² | 1,621 m²

Private Housing : 18,320 ft² | 1,702 m²

Affordable Housing : 3,035 ft² | 282 m²

Student Housing: 317,029 ft² | 9,453 m²

Retail 13,777 ft² | 1280 m²

7,125 ft² | 662 m²

Accommodation

844 single and double occupancy student units

14 social rental apartments48 market rental apartments

Ground floor retail

Outreach community use Cat A office space

Brief Planning History

The design proposal for KX200 replaced a scheme for which planning permission was granted in 2005. The primary objective of the new proposal was to enhance the consented scheme by increasing its efficiency and net saleable space whilst at the same time increasing the amount of amenity space.

The development was configured to compliment the different characters of the surrounding streets. The retail units, student entrance and hotel-like reception area are located on the busy Pentonville Road. Marked with a huge double height portal and semi-private entrance courtyard, this collection of programmes creates an animated streetscape that discourages anti-social behaviour and increases the sense of community. Less busy private and social housing entrances, positioned on the quieter side streets, share a residential character and scale.

Project Team

Client: First Base Ltd & The Blackstone Group

Building Owner: Blackstone

Architect: Allford Hall Monaghan Morris

Quantity Surveyor :Faithful + GouldStructural/Civil Engineer :Adams Kara Taylor

Services Engineer: Watermans Building Services

Landscape Architect: EDCO

Fire Consultant : Warrington Fire

Accessibility Consultant: David Bonnett Associates

Highways Consultant : Arup Transport

Acoustic Consultant : Sandy Brown Associates

Planning Consultant: DP9

Approved Inspector :Butler and YoungMain Contractor :Bovis Lend Lease

Allford Hall Monaghan Morris Team Members

Simon Allford, Sarah Baccarini, Jon Brent, Ming Chung, Rachel Freeman, Jonathan Hall, Sam Harvey, Gareth Jones, Paul Monaghan, Peter Morris, Timothy Neville-Lee, Andrew O'Donnell, Alexa Ratcliffe, Maria Reinehr, Marian Ripoll, Gesa Schenk, Nick Searle, Philip Turner & Piercy Conner Architects.

For further information and images please contact

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T: +44 (0)20 7251 5261 E: press@ahmm.co.uk KX200 has transformed three existing buildings on Pentonville Road, Kings Cross into a vibrant mix of student accommodation, private and social housing, retail and office space. The reclad towers animate the Kings Cross skyline, whilst the lower podium does its part to regenerate Pentonville Road by reconnecting the site with the street.

Client's Brief

Allford Hall Monaghan Morris (AHMM) was brought onto the project by the developer First Base. Our role, as architect, was to improve both architectural quality and financial value of the scheme, which alread deplanning consent. A previous planning application had ested hed the principle of a change of use to private residential/student residential accommodation, but this required rethinking. The brief was to reinvent the scheme as a clear architectural diagram of a new mixed-use proposal. Adding value at all times, the various components of the brief were manipulated until each one was positioned as advantageously as possible.

Materials

Driving the design was the desire to create different architecture for the two elements of the project — distinguishing podium from towers through materiality. The re-used concrete frames of the office towers were re-clad in lightweight glazed unitised curtain walling, re-inventing the traditional sober suit of corporate architecture with a variegated, playful pattern of blue shades. The façade has helped to establish the project as a memorable component of the King's Cross skyline.

The podium, clad with pre-cast concrete panels of varying sizes, responds directly to its context. Large panel modules, stacked four storeys tall create a civic scale to Pentonville Road, whereas smaller modules create a more domestic face for the social housing on Killick Street. Upper panels are acid-etched to expose Mica aggregate, while the black Basalt aggregate panels at ground level are polished to lend a more opulent tactile quality akin to terrazzo.

Method of Construction

Prefabrication of both the façade and interior elements was utilised advantageously to speed the construction process and simplify site works. Both the unitised blue curtain walling and the pre-cast concrete were mass-produced off-site in the UK. Repetitive internal elements such as the student's bathrooms and kitchen were also mass-manufactured and delivered full finished, ready to be plugged in and used.

Summary of Timetable

The Design Team was appointed in June 2005, and demolition works began on site just six months after that. In April 2006, the new-build works commenced on site, which were completed in September 2007. The project's rapid timeframe was the result of the rethinking of the typical design and construction sequence, allowing for completion just over 24 months.

Programme and Budget Constraints and Opportunities

The building, as it stood prior to AHMM works, was no longer attractive to corporate tenants, as it was designed to 1970s standards: shallow plan, no raised floors, and with bronze glass curtain walling. With a new skin, however, the towers were well suited to residential re-use, with relatively generous floor to ceiling heights. KX200 now contains a mix of student residences, private apartments, social housing, community-use office space and retail. The different uses are overlayed and configured like a giant city sandwich, arranged around the site to compliment the character of the surrounding streets.

Re-thinking and re-modelling the existing buildings and the existing planning proposal was a speedy and cost-effective process: pre-construction design time was limited to six months, and the construction programme was for an eighteenmonth build.

Sustainability

The project exemplifies good environmental practice; the reuse of the existing, worn-out office building frame has resulted in significantly less demolition spoil, and enormous savings in embodied energy.

Conclusion

KX200 embodies a much-vaunted but little-realised concept - that of the 'mixed use' building. Here the residential accommodation including private apartments, social housing, student halls of residence are located above, below and around offices, shops and restaurants to create a vibrant city block with a range of benefits for residents and the surrounding community. The project has taken an unloved building and transformed it into a positive presence that greatly enhances the local area.

History

Pentonville, one of London's earliest planned suburbs, was laid out in 1773 on land owned by Capt. Henry Penton MP. The 'New Road' that bounded the south side of the area predates the suburb though, constructed in 1756 to avoid the built-up area between the City and the West End; it was renamed Pentonville Road in 1857.

Pentonville was a fashionable spot to take tea up until the 1840s when continued urban growth had consumed all the open space. The tightly-grained residential character of the area remained largely unchanged for 100 years until destroyed by extensive German bombing.

The vacuum left was hurriedly filled by dense modernist social housing schemes (many by Berthold Lubetkin and Tecton), although the vacant plots on Pentonville Road were given over to industrial use that gradually made way to office developments in the 1960s and '70s.

The existing buildings at 200 Pentonville Road were designed by Chapman Taylor Architects as offices for Natwest bank.

At ground level, the entrance to the two towers was positioned away from the street in a raised courtyard designed for vehicle drop-off. This out-moded planning concept disconnected the buildings from the street.

The pedestrian route into the site was under a modernist sculpture, which has been retained, refurbished and repositioned in a new private student courtyard.



Phase I of Kings Cross House, before construction of the second tower



1960s Aerial Photograph



Original Chapman Taylor drawing (1972) showing William Pye sculpture

Architectural Inheritance

The first (south) tower was built in 1974 and was one of the last 'hollow pot' designs with a concrete frame and clay pot infill. The second (north) tower followed in the late '70's, with all slabs constructed from pre-cast concrete planks. The work was carried out by contractors Robert McAlpine, and an incongrous 2-storey gatehouse was added, in identical curtain walling, in the mid-1980's.

Office demands change, and the existing accommodation was outdated and disused.

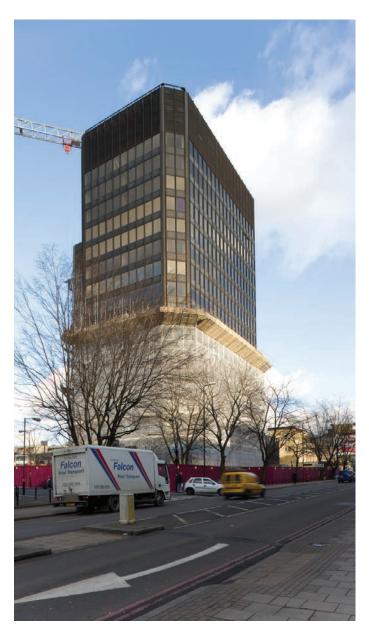
Shallow floorplates with floor-to-floor heights of 3.15m were no longer suitable for offices, but offered beneficial conversion to residential use. At upper levels the previous staff canteen and executive floors provide even more generous 3.85m floor-to-floor heights.

Development management

The project was introduced to AHMM by Elliot Lipton of First Base: a key client for the practice, with whom AHMM have developed London Wide Initiative housing at Adelaide Wharf and other sites in East London.

KX200 was a project with an existing planning consent and a 'parent' developer, Generation Estates, who had previously established the financial deal that has driven the project. The towers were purchased from the Royal Bank of Scotland (owners of NatWest) by the American investment company, the Blackstone Group.

First Base and AHMM were invited to investigate where both the architectural quality and the financial value of the existing deal might be improved. First Base and Bovis LendLease have also provided the 'delivery mechanism' - acting together in the role of Construction Manager.



Architectural Inheritance - exterior



Architectural Inheritance - interior

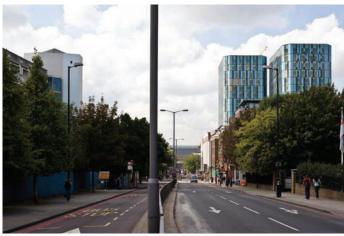


Previous planning consent for the site

Re-invent / Re-use



The brown-and-bronze clad towers attracted limited street activity



Newly clad towers nearing completion



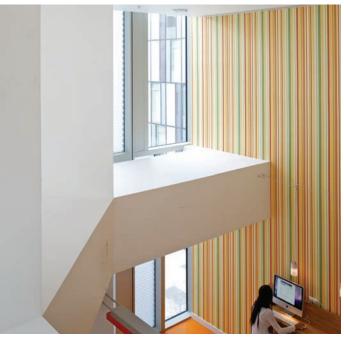
Existing 3.1m office floor-plate



The floor to ceiling height is much better suited to residential use



Top floor canteen wallpaper - possible survivor of the original fit-out



The colours and bold patterns of the new fit-out reference the original

Re-invention: the benefits of an existing building

Allford Hall Monaghan Morris were briefed to re-invent the scheme as a clear architectural diagram of a new mixed-use proposal. Adding value at all times, the various components of the brief were manipulated until each one was positioned as advantageously as possible.

The dimensions of old-fashioned, shallow floorplate offices were well suited to residential refurbishment. A previous planning application had established the principle of change of use to private residential/student residential accommodation, but required re-thinking. An aspect of this 'rethinking', that of the 'add, subtract, multiply concept' is illustrated diagrammatically below.

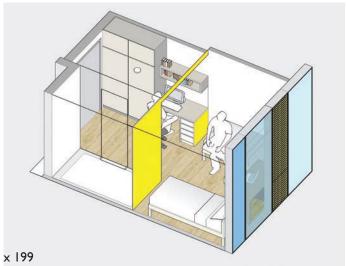
In addition to the internal advantages of the re-use, there is a marvellous extra benefit: the view. The majority of KX200's 16 floors have a view to the hills on the edge of London on a clear day - plus all the buildings in between. This is an advantage not readily available in today's planning system.

The new 'private halls' student residence concept has been branded 'Nido' and will be extended across Europe and beyond, to become a global brand. KX200 is the first project to open its doors.



View of the City of London from the South Tower

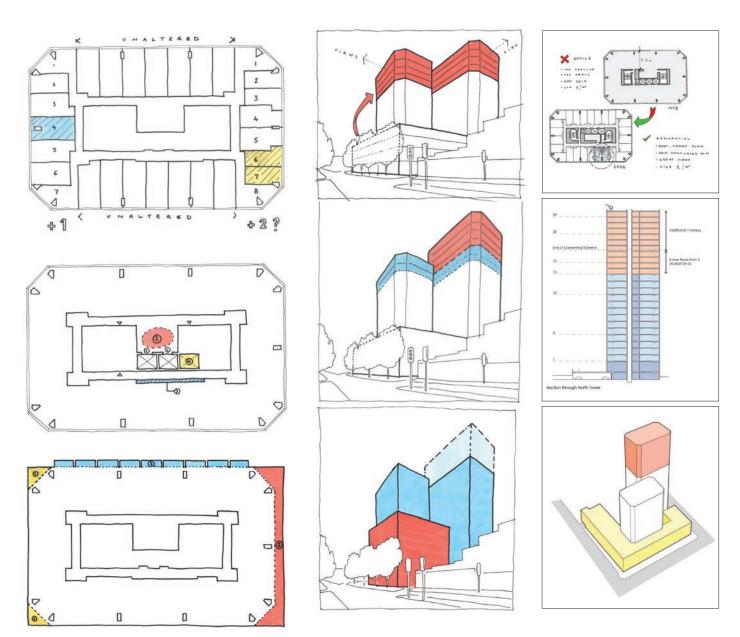




Re-thinking the brief

The re-use of the frame was environmentally most advisable - less demolition spoil, and no materials or energy used to construct a replacement. It was also economically beneficial for the client to re-use the frame they have bought, rather than pay for a new one.

Many 'environmental design' strategies are more overt, but the re-use of KX200's frame, groundworks and significant substructure has saved more energy than the use of the greenest materials if the buildings had been demolished and replaced. Double height plant rooms were demolished on top of both towers and replaced with two new floors of residential accommodation.



Initial ideas for improvement/extension of owner's previous planning consent.

Mixed use in theory:

It seems that large building projects in central London rarely manage to replicate the diversity and juxtaposition of use that the city has accommodated historically. Too often developers are wary of stacking different uses, for fear of an impact on values. Offices-above-retail are common enough, but private residential-above-student halls-above-offices-above-restaurants is a more complicated proposition.

AHMM believe in the need for some complexity in the urban fabric of city centres, rather than block-by-block segregation of uses. It is a challenge to work with developers to ensure that large buildings projects secure top value, as well maximum diversity of use.

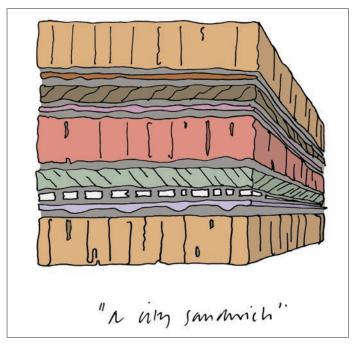
KX200 embodies the much-vaunted but little-realised concept of a mixed-use building.

Mixed use in practice:

KX200 contains a large student residence (with more than 1000 students), private apartments (48no), social housing, community-use office space (over two levels) and retail (split into 3 units).

The different uses are overlayed one on another, rather than splitting different types of accommodation with party walls. This 'sandwich' provides a variety of uses at street level, with different uses arranged around the site to compliment the different characters of Pentonville Road and the two side streets.

The architecture of the scheme brings all the different uses together, and differentiates towers and podium, with subtle inflections for different uses within: grander glazing to the offices, more domestic scale cladding to the social housing, and the student facades somewhere between the two.



Mixed use in theory



Mixed use on street



Ground floor plan



Mixed use on street

Differentiate / Standardise:

The two towers have been gutted, de-clad and stripped back to the structural frame. Originally ground + 14 floors, the towers have now been extended to ground + 16, with further extension only limited by planning considerations.

The new 'podium' extends the area of the towers by 50%, and re-connects the inherited buildings with the street. The architectural articulation of towers and base is complimentary but different. The towers have a lightweight, glassy, reflective, colourful expression, while the four-storey base speaks London street language: masonry, shades of black and grey, big shop windows and signage, plane trees, canopies and articulated entrances.

Re-thinking and re-modelling was a speedy process: preconstruction design time was limited to six months, and the construction programme was for an eighteen-month build. Curtain walling modules, pre-cast concrete panels, student room types and bathroom pods were all standardised, allowing off-site fabrication of key elements and condensing the construction programme.



View from Pentonville Road



View from Amwell Street









Re-cladding process

Articulation of the skin

Key to the negotiation with the planners was the architectural expression of the podium's various functions, and the comparison of the horizontal 'city sandwich' (AHMM) and the vertical 'townhouse terrace' (LB Islington). This resulted in the articulation of the horizontal separation between different uses through the use of different tones of textured concrete panel (black, dark grey, mid-grey, light-grey).

In addition to the use of different tones and horizontal banding, the different frontages at ground level (a shop, an office entrance, a restaurant, the student courtyard) were used to generate vertical subdivisions that are articulated upwards across the podium elevation. The lines of difference are marked with full-height polished black 'pilasters': black cement and black aggregate combined to provide a finish akin to terrazzo.

The shiny polished concrete contrasts with the matt appearance of the panels generally, although the matt panels have been acid-etched to expose the glint of a mica aggregate and add a sparkle to an otherwise restrained facade.



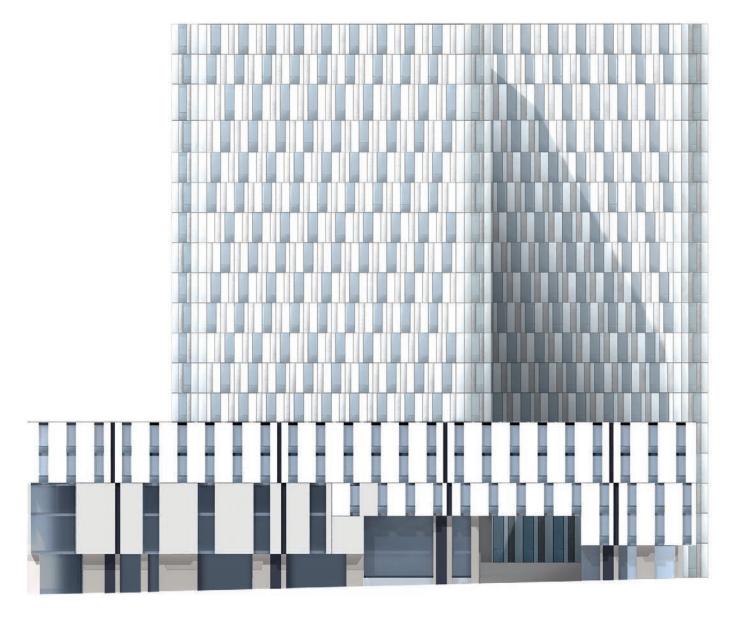


Articulation, scale and function: horizontal vs. vertical, sandwich vs. townhouse terrace, module and tone related to brief

Heavyweight vs. Lightweight: Podium vs. Towers

The towers were re-clad in 'lightweight' glazed unitised curtain walling, to ensure the fastest route to a water-tight building. This blue cladding was erected quickly, and has helped to establish the project as a new part of the King's Cross skyline. This was achieved despite initial delays following the demise of Schmidlin UK (trade contractor initially selected for the job) and subsequent problems with glass supply (hence the notorious plywood infills at one point so numerous and regular that they appeared to be part of the architecture). The light blue/mid-blue pattern shows both a Part L limit on 'vision' glass (windows), and also the desire to change the facade from commercial office to a more suitable, playful character.

The base of the building is clad with 'Techcrete' pre-fabricated re-inforced concrete panels. This more solid, massive masonry material relates to the facades of adjacent buildings. The panel modules (as large as 7.2m high x 2.9m wide and weighing up to 8 tonnes) provide a civic scale to Pentonville Road where they are stacked four floors tall, and a more domestic face to the social housing on Killick St, where the panels are limited to single-storey modules. The Techcrete panels have three colours, related to function: light grey for residential facades, mid-grey for community facilities, and black at ground floor at retail areas. Upper panels are acid-etched to expose Mica aggregate, while the black Basalt aggregate panels at ground level are polished to lend a more opulent tactile quality akin to terrazzo.



Pattern: scale and proportion

The two inherited office towers provided a base massing that is undeniably bulky when seen from the south (or north). The proportion of the elevation is hardly that of a slender 'pencil' tower, and the elevation pattern has been designed to accommodate (or even accentuate) that inheritance. In addition, early-stage structural / cost investigation suggested that the chamfered corners, so fashionable in the 1970's, were also here to stay.

Initial design studies (left) investigated the vertical stacking of panels within the grid across different levels, with consequent effect on the proportion of the tower facades. Eventually, we chose to stack east and west elevations into a double-height pattern accentuating the narrower, more elegant proportion of these sides. The north and south facades pattern shifts a position each floor, providing a more uniform 'carpet' on these wider elevations, and acknowledging their wider, shorter proportions.

The basic cladding grid for the towers is set by the pragmatic requirements of the unitised curtain walling system. Each prefabricated panel is a single storey tall (3.15m), with widths set by internal room dimensions. Vertical junctions are on 'party wall' lines between student studio rooms: 3m centres on north and south tower facades, 3.6m on east and west.

We have included variety within this grid through the disposition of windows, ventilation casements and 'spandrel' (insulated painted) glazing. These elements are staggered from one floor to the next within an ordered pattern. This is not the hit-and-miss random pattern of many recent buildings. Instead, this is a re-invention of a regular Miesian office facade, with a character more suited to the residential re-use of the buildings.

The tower pattern is related to the proportions of solid & glazed panels in the podium facades, and it is also echoed in the grid of granite paving around the scheme.







Shared Spaces: Entrance courtyard, student foyer, landscaped courtyard to rear.







Pattern, scale and proportion in finished building

Accommodation

The primary users of the development are students. The 'Nido' tenant provides private 'halls' accommodation to university students studying in central London. Strong rental rates reflect market demand for smart, secure student accommodation, often block-booked by north-American institutions. Although some of the student rooms reflect the American demand for twin rooms, the quality of design and finish is far above the usual student standard.



Student Studio (cut-away).







Student Studio, finished project

1972: William Pye and Stuart Lipton

In 1972, young artist William Pye was commissioned to produce a piece for the office development at 200 Pentonville Road. In keeping with the bold modern architecture of King's Cross House, William Pye proposed a large polished stainless steel structure, supported by a tracery of stainless steel wires, and positioned over the building's primary pedestrian approach, on the corner of Pentonville Road and Killick Street.

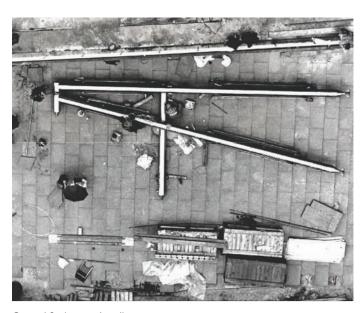
The original commission for the piece ("Untitled 2") came from a group of young property developers that included Geoffrey Wilson and Stuart Lipton.

2008 William Pye and Elliot Lipton

The original sculpture lost its site as part of the redevelopment, and so Pye was consulted regarding possible alterations and resiting. Working with the architectural team, a new place in the courtyard was proposed and alterations to the piece agreed upon.

Replacement tension wires and stainless supports were fabricated, allowing for the sculpture to be reinstated at KX200 in March 2008.

The artistic collaboration neatly reflects the architectural ethos behind the project: Retain/re-use wherever beneficial, rather than discard and begin again. Inherited conditions are enhanced rather than replaced.



Original Sculpture - Installation



Original Sculpture - on site

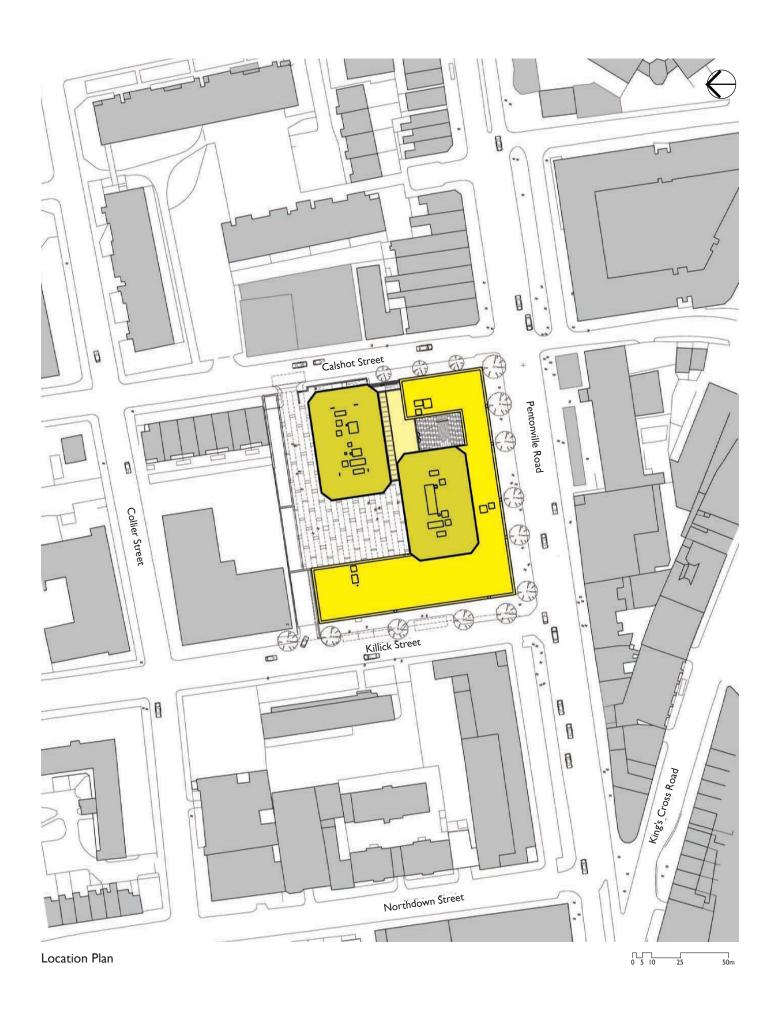


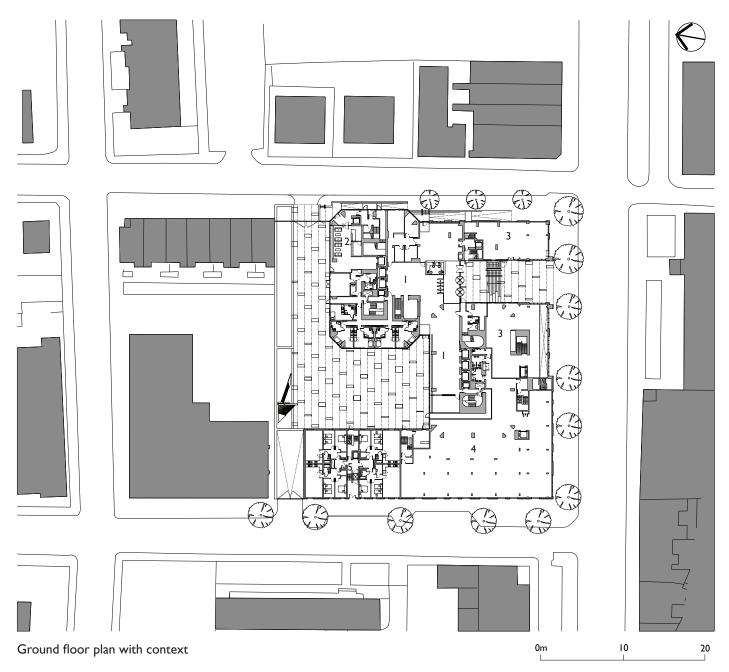


Sculpture re-sited and re-installed

De-installation 2008

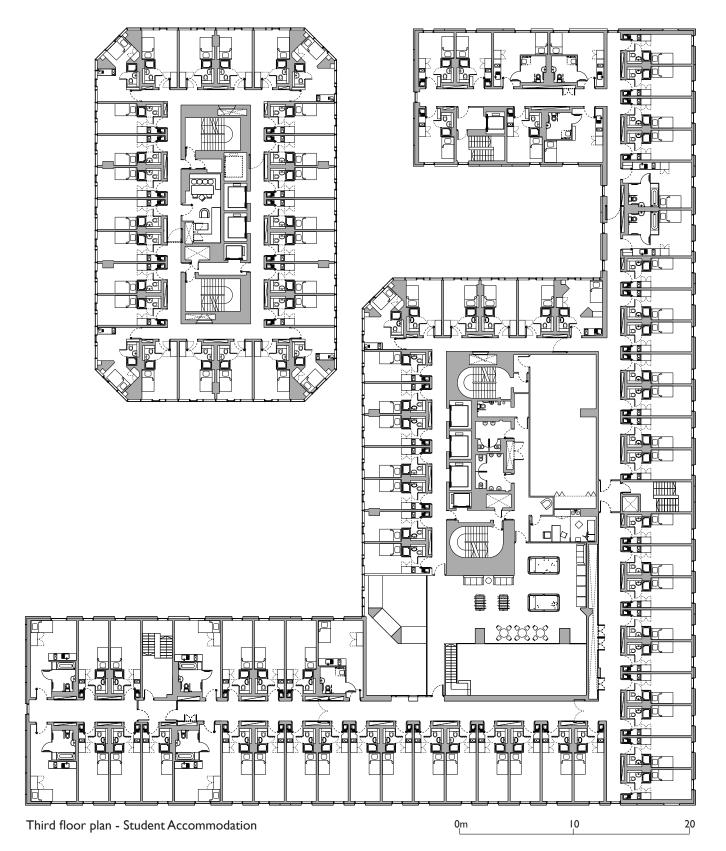
Drawings



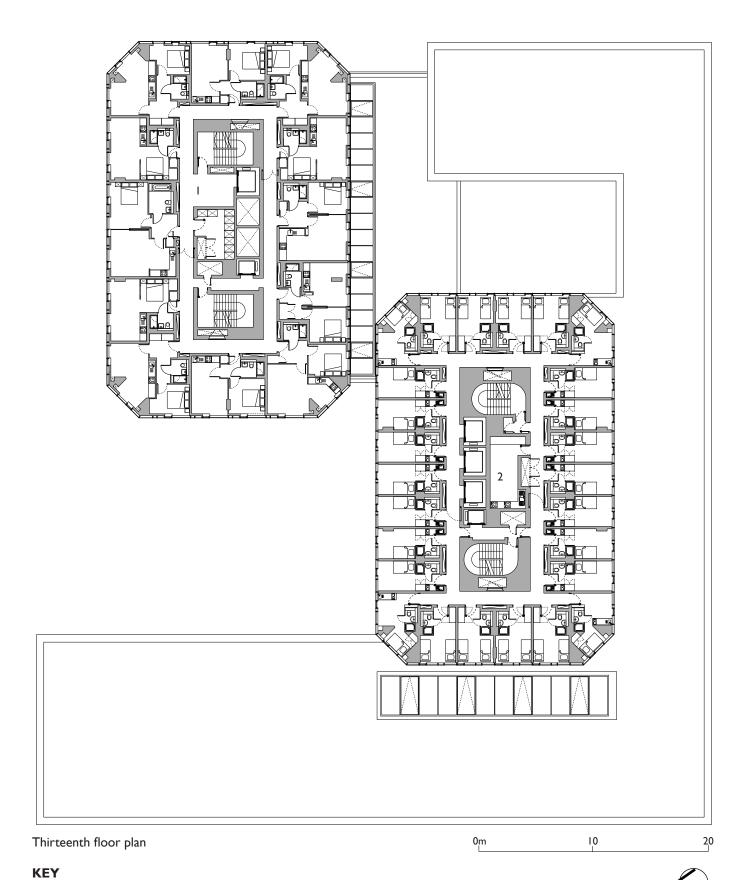


KEY

- I Student Accommodation
- 2 Market Residential
- 3 Commercial Units
- 4 Community outreach
- 5 Social Residential







I Student Accommodation2 Market Residential



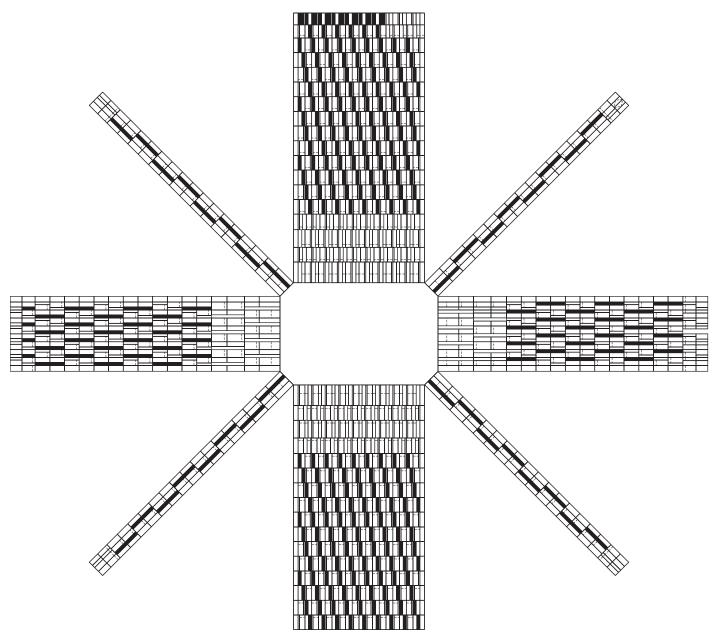
Section through North tower looking West



South Elevation 0m 10 20



West Elevation 0m 10 20



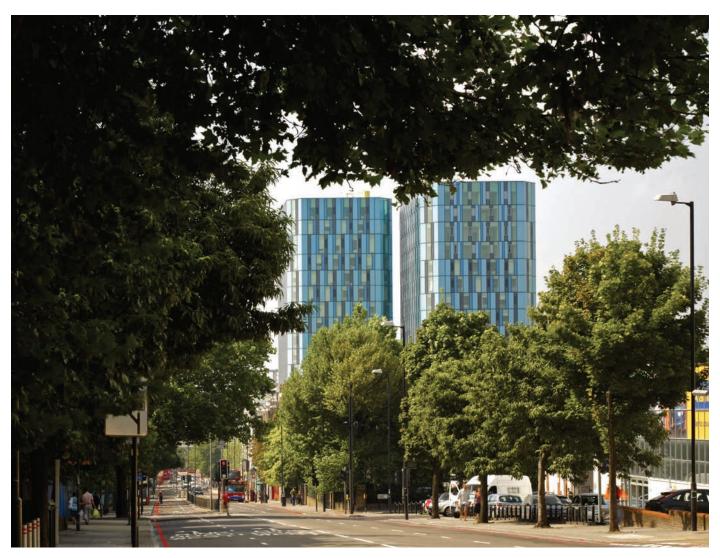
Tower Elevation

Final Photos



London skyline and St Paul's Cathedral with KX200 towers in the distance

A635_263 © Timothy Soar



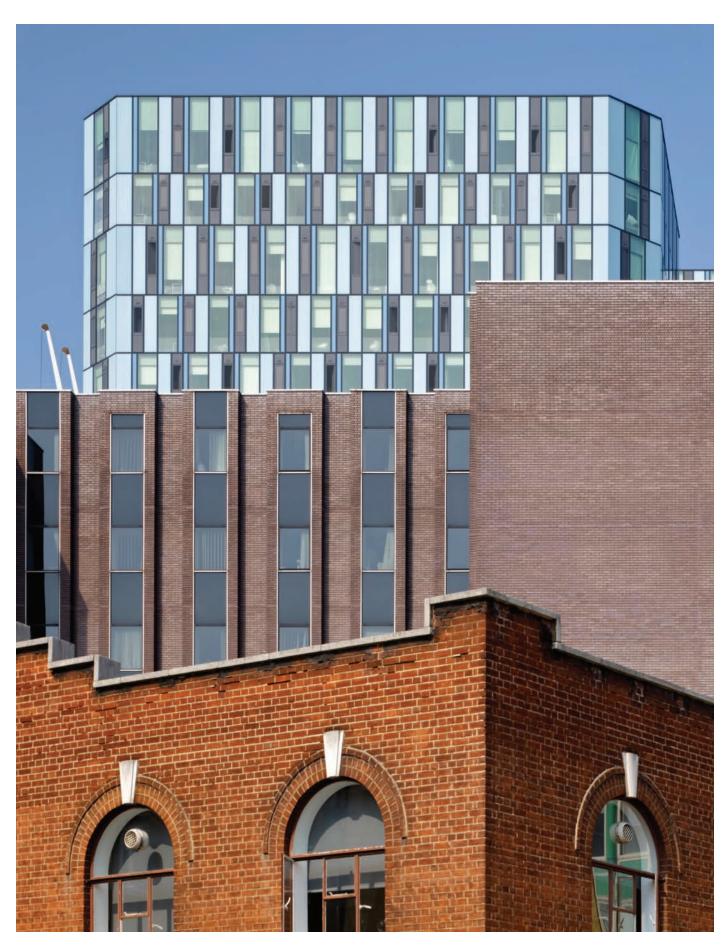
View from Pentonville Road

A635_297 © Timothy Soar











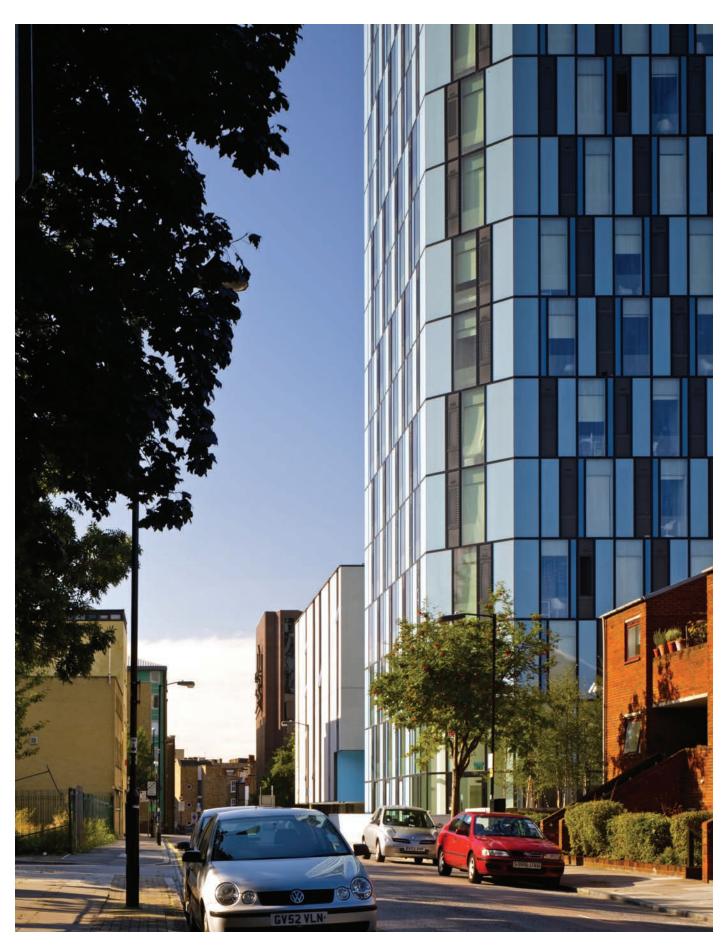


View from the top of Pentonville Road of KX200 in its surrounding context

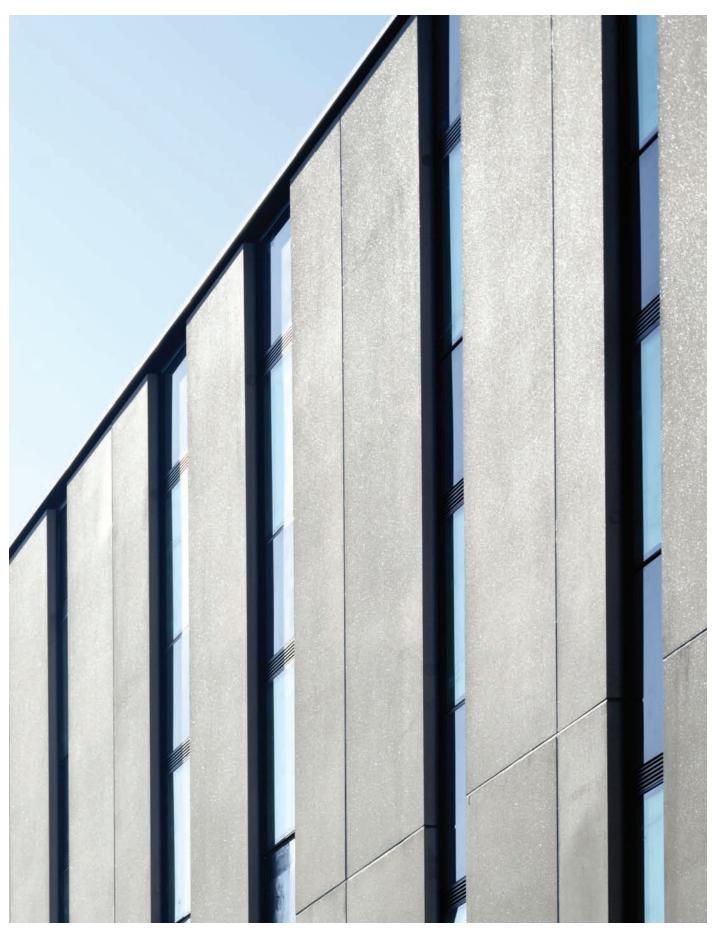


Detail of tower concrete cladding, linking the passing street to the building

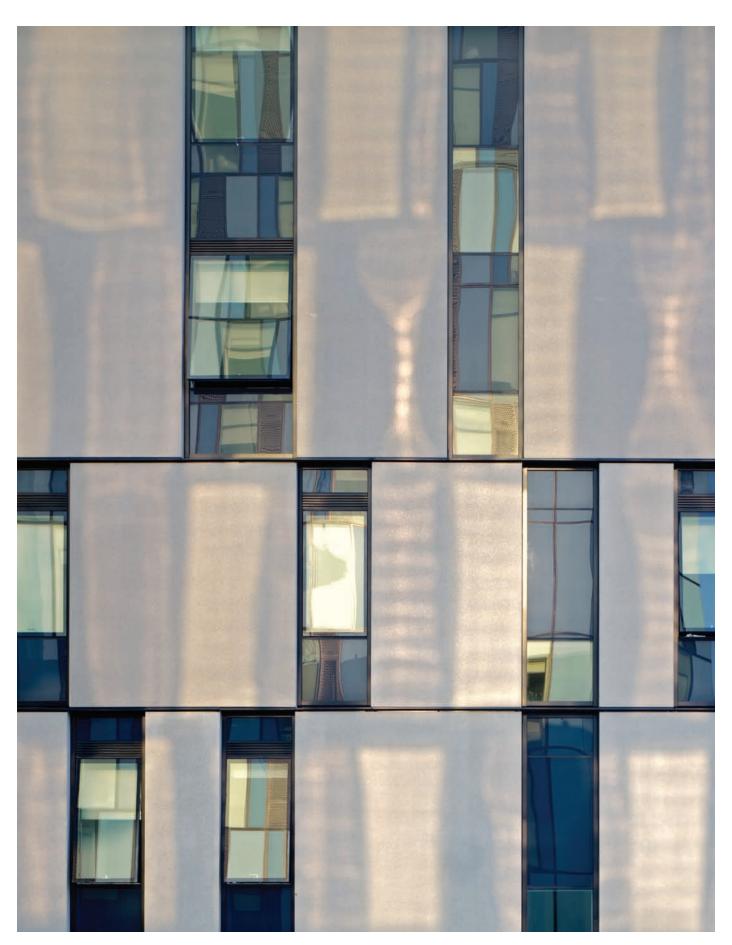




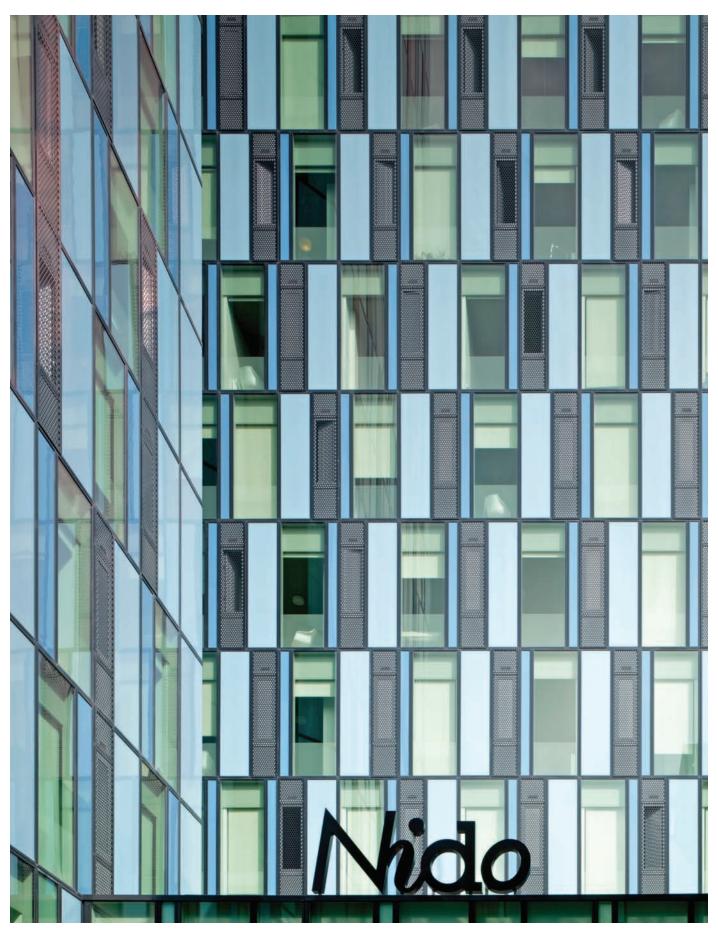




Detail of tower cladding A635_189 © Timothy Soar

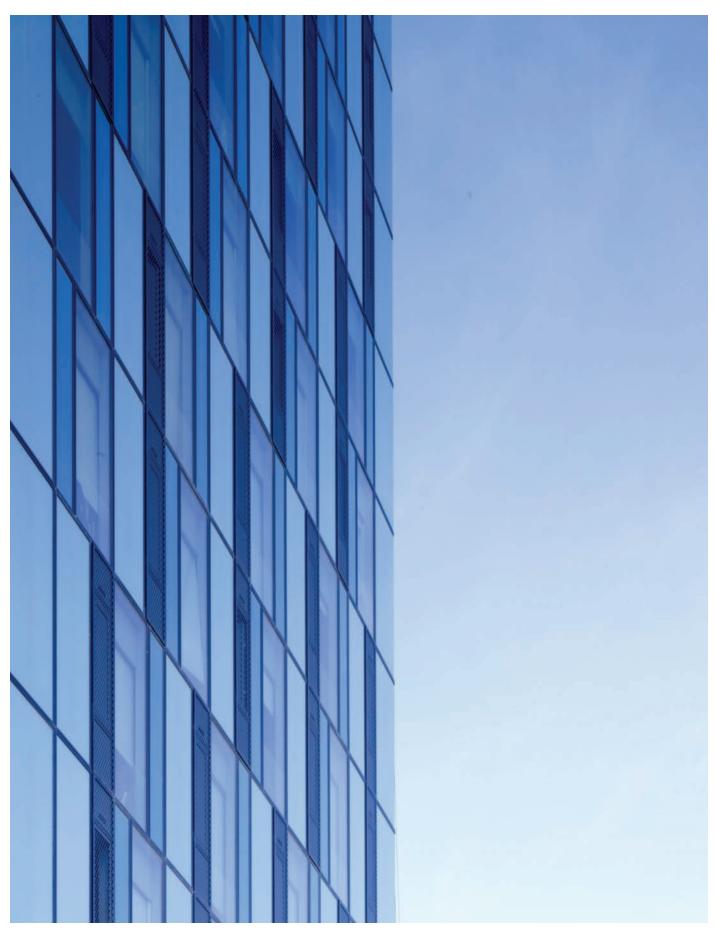




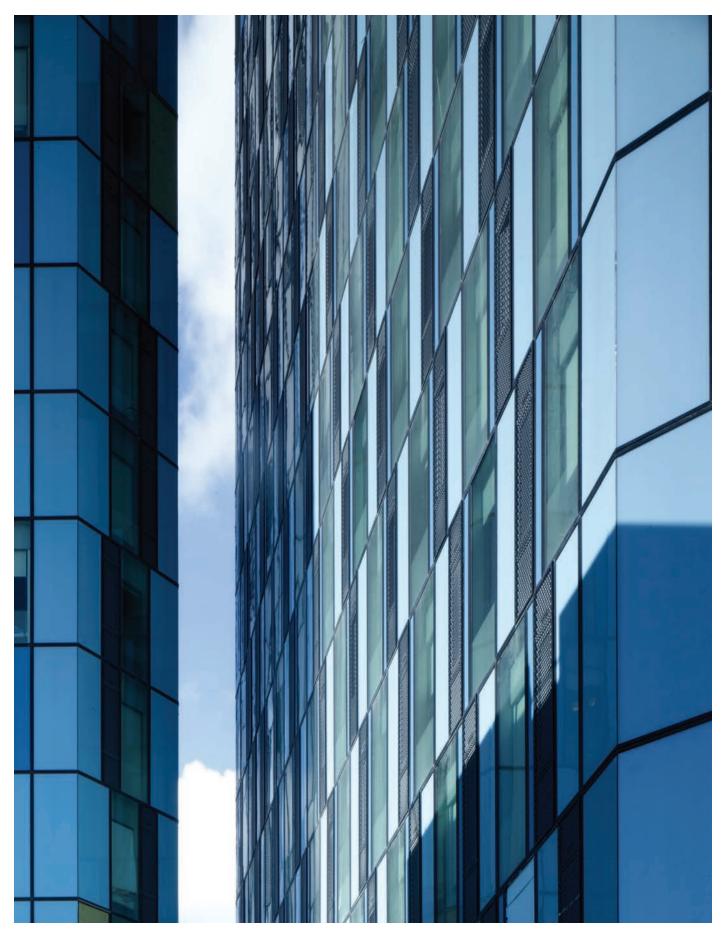




Nido Student Living A635_280 © Matt Chisnall

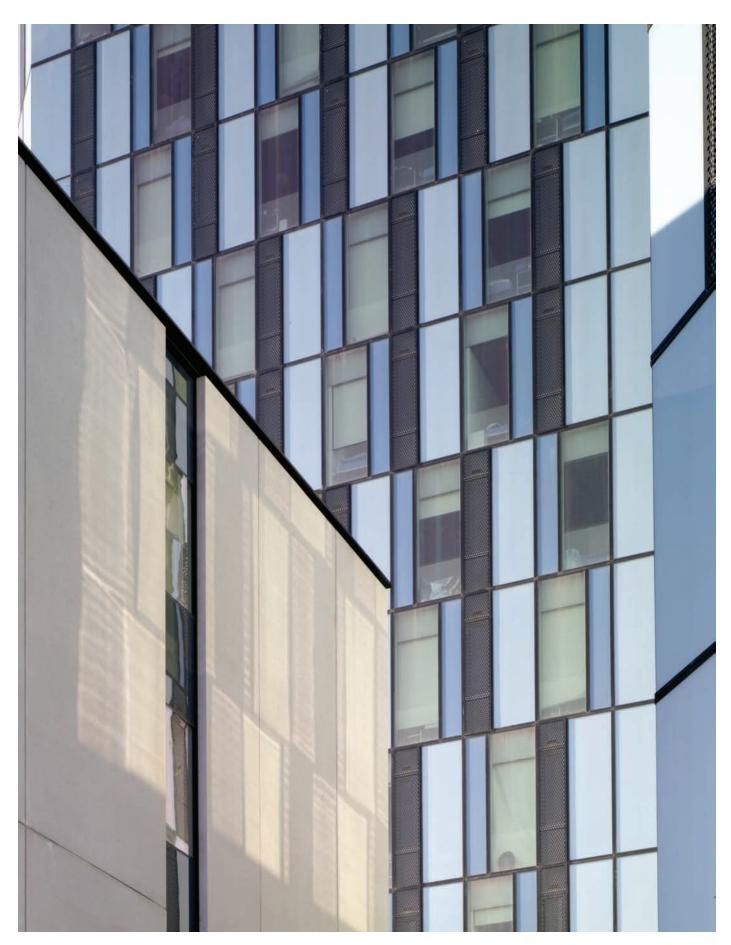


Detail shot of the glass skin cladding, establishing a new part of the Kings Cross skyline.

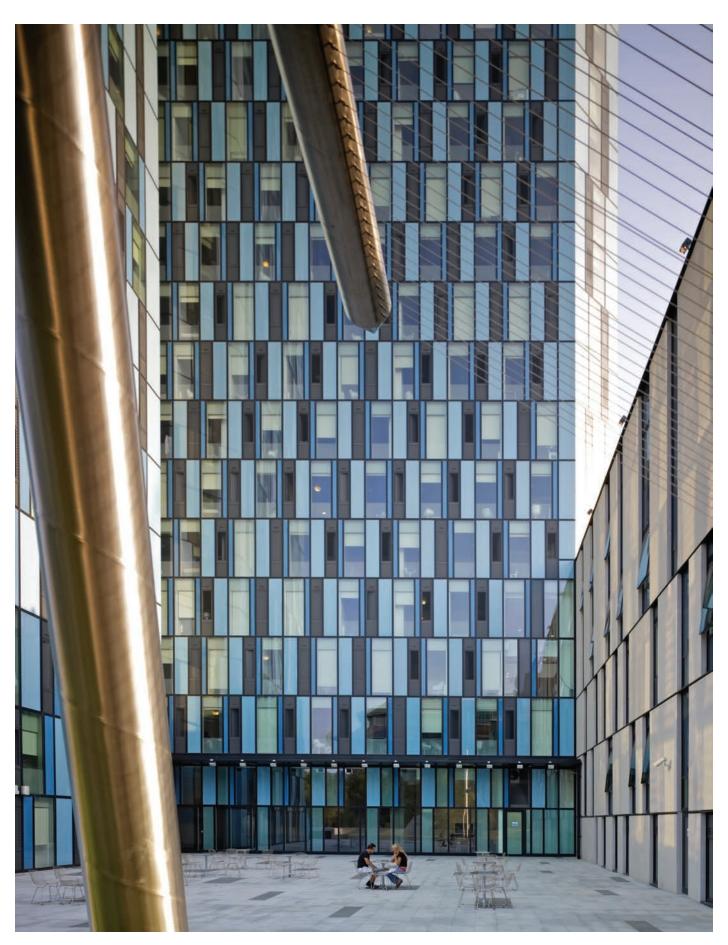


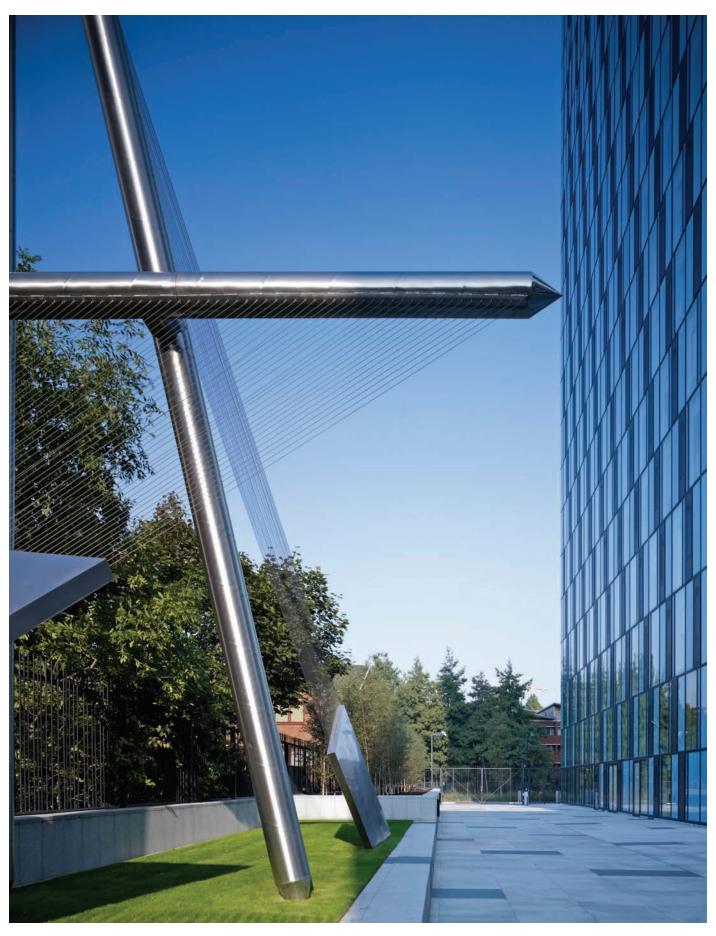
Detail shot of the glass skin cladding, establishing a new part of the Kings Cross skyline

A635_162 © Timothy Soar

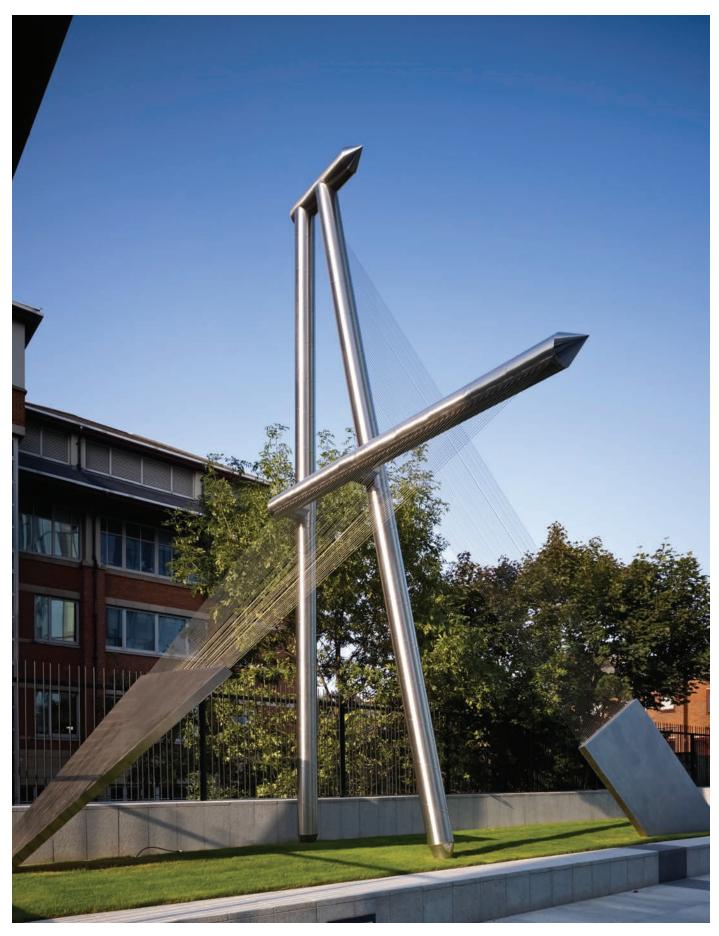


Concrete skin, links to rising glass towers in background





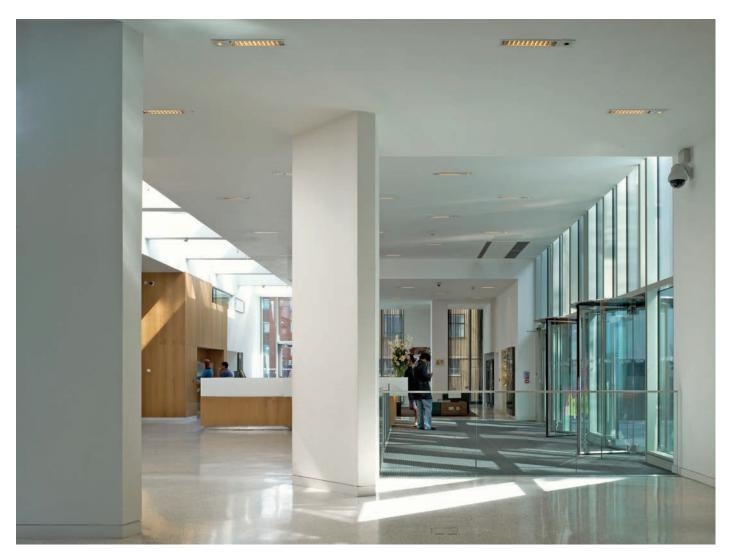
William Pye Sculpture set into landscaped Student courtyard



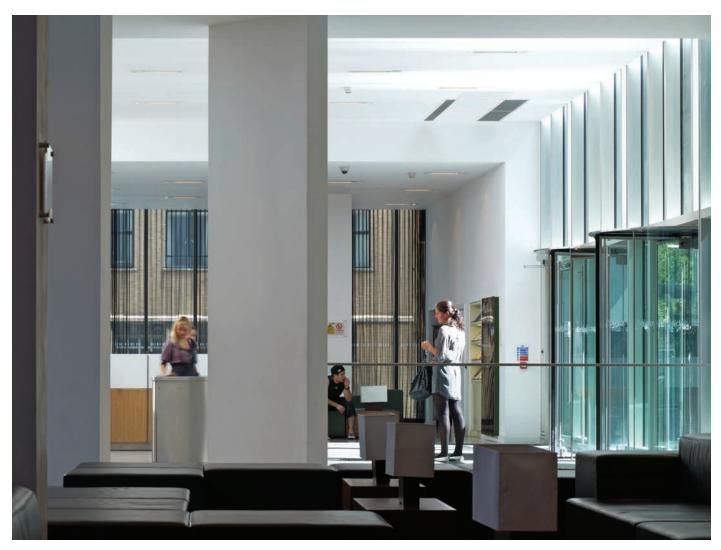
Artistic collaboration from William Pye sculpture set in landscaped Student courtyard area

A635_334 © Timothy Soar





Student entrance foyer A635_311 © Timothy Soar

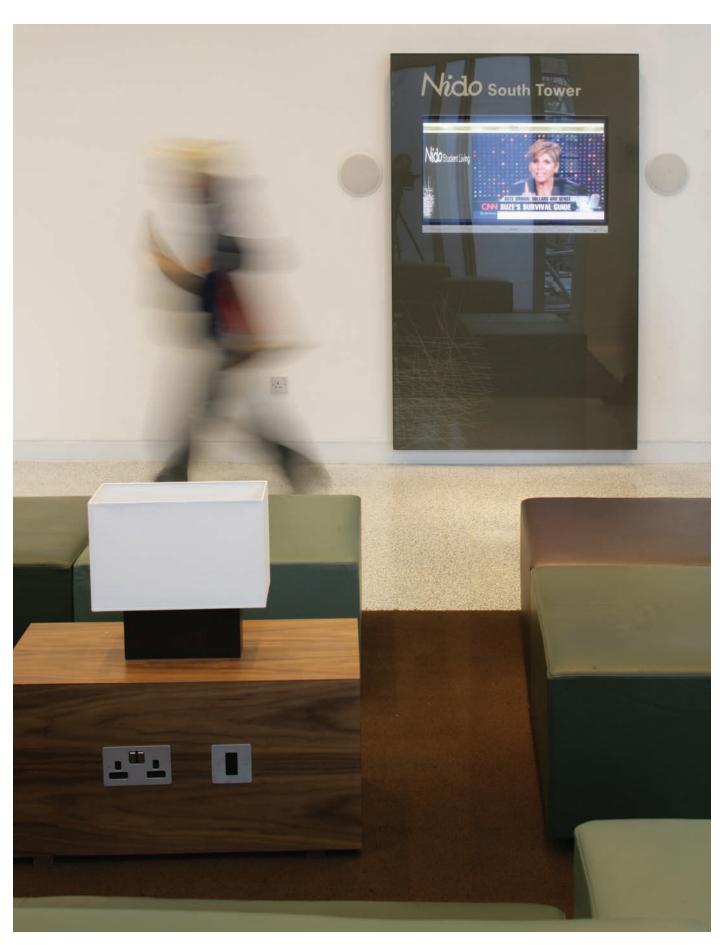


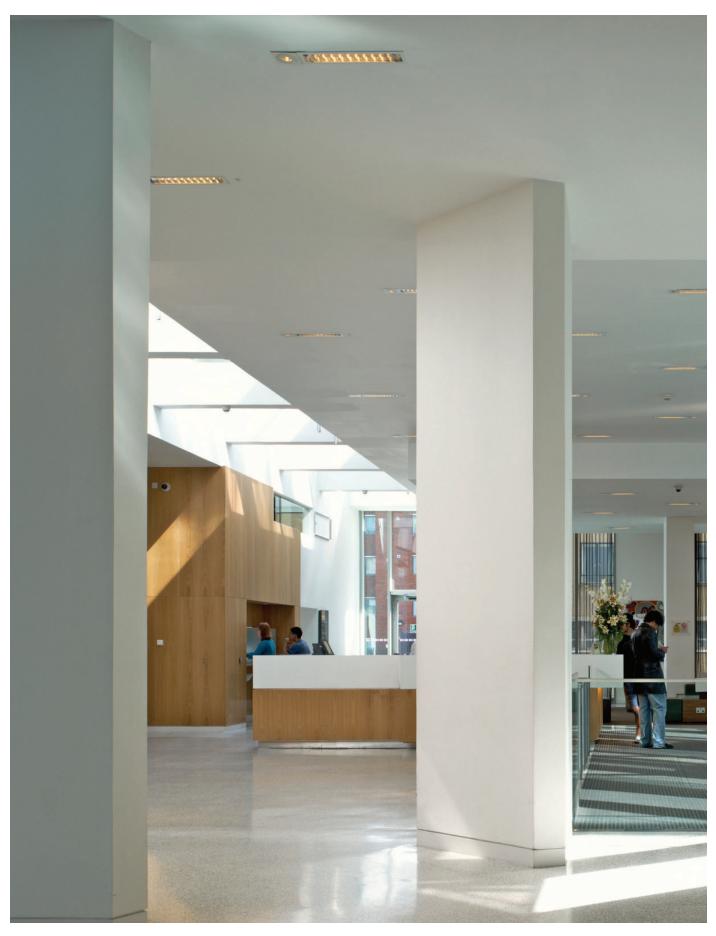
Student entrance foyer A635_314 © Timothy Soar



Reception, waiting area and entrance into the South tower of $\ensuremath{\mathsf{KX200}}$

A635_I70 © Rob Parrish

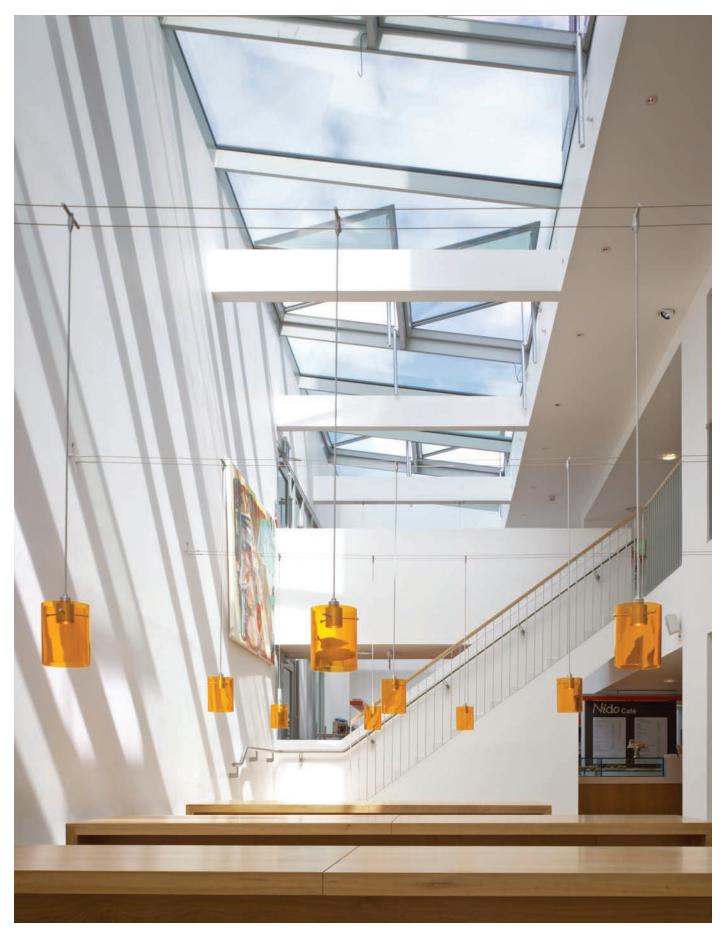




Student entrance foyer A635_311 © Timothy Soar



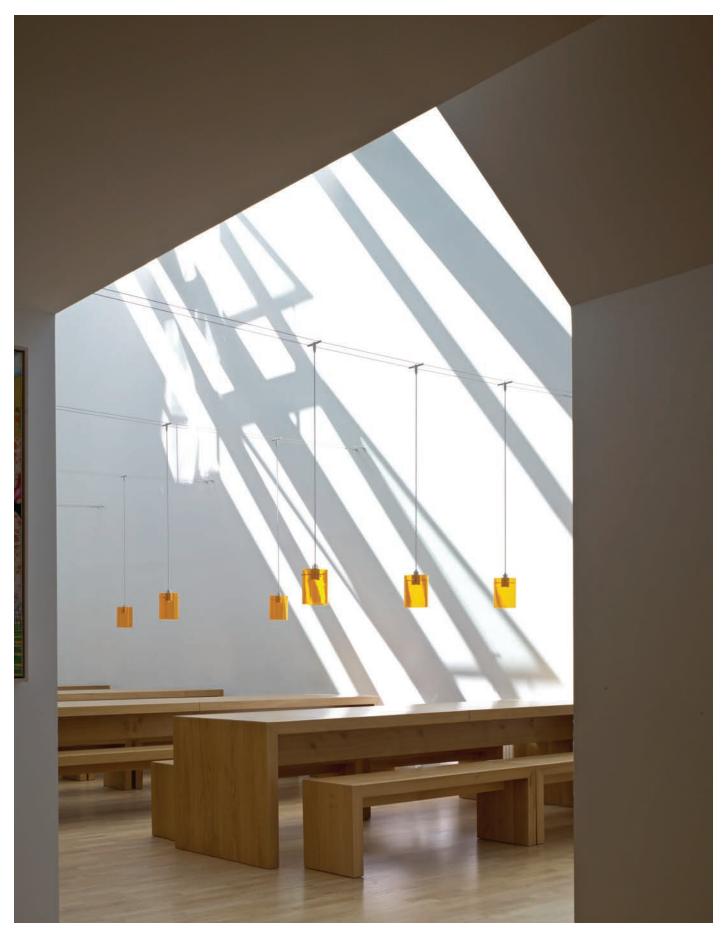
Nido student café with pendant lighting suspended from ceiling



Nido student café area with pendant lighting suspended from the ceiling



Student common area A635_292 © Matt Chisnall



Student café A635_318 © Timothy Soar



Student living space, overlooking Kings Cross with view to city beyond $% \left\{ \left(1\right) \right\} =\left\{ \left(1\right) \right$

