

# Works



## The written world

Architecture Research Unit's scheme for centralising the South Korean publishing industry is emerging from the wetlands near Seoul. Ellis Woodman reports

Last year a monograph was published on the work of Florian Beigel and the Architecture Research Unit, based at London Metropolitan University. Gathering together 25 years of production, it presents projects of vastly divergent scale, conceived for sites peppered across the world. Its title is clearly chosen to highlight the one theme that most readily connects ARU's plans for the development of an abandoned military base outside Berlin, an apartment in Hampstead and an advertising agency in Seoul: Time Architecture.

In all these projects, ARU has grappled with the question of how its work might be appropriated or adapted over time. Whether working at a domestic or an urban scale, the unit has pursued an architecture that is spatially specific but makes provision for the widest possible range of occupations. Over the past 10 years the main focus of its work has been the planning of developments on extremely large sites at the urban periphery. Here, the use of strategies that accommodate a level of uncertainty has gelled with the needs of councils and developers to respond to market changes over the course of long construction periods. Major commissions have followed: the Berlin scheme; the development of two post-industrial sites near Leipzig; and a plan for an estate of 300 publishing and multimedia companies near Seoul.

The first phase of this last project is nearing completion.

Sited a half-hour drive northwest of the South Korean capital, Paju Book City is set to revolutionise the country's publishing culture. The development of the 1.5 million sq m site is the initiative of the national association of publishers. Its aim is to bring together the whole, previously dispersed, industry in a single location. Publishing, bookbinding, design, papermaking, copyright negotiations and printing will all be conducted at Paju. Most crucially, a shared distribution facility has been built, allowing the publishers to abandon the army of small distributors that previously made the business of getting books on shelves a tortuous process.

When ARU first looked at the site in 1999, a masterplan had already been drawn up by a local architect. The drawings of this scheme suggest an urbanism redolent of fin-de-siècle Vienna, complete with squares, boulevards and even a dome fit to outdo the "golden cabbage" of Olbrich's Secession Building.

Yi Ki-Ung, the chairman of the association of publishers, had doubts about whether this very exacting vision was realisable given the number of different companies involved in the project. He was introduced to Beigel through Kim Jong Kyu, one of South Korea's leading architects and a one-time ARU associate. Impressed by Beigel's take on masterplanning as the art of "designing the rug not the picnic", he invited ARU to draw up an alternative scheme that might better accommodate the contributions of different architects.

As with all ARU's framework plans — Beigel doesn't like the connotation of fixity carried by the word "masterplan" — the Paju plan is derived from a close reading of site conditions. The 3km-long plot lies at the base of Paju mountain and follows the line of the embanked Freedom ▶

**The distinctive frontages resemble the pictograms that form the building blocks of the Korean language**



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Highway which connects to nearby North Korea. On the other side of the highway is the broad Han River. A military installation on the mountain monitors river traffic – a fact that put a restriction on the height of any new development and required that significant lines of fire across the site were maintained.

Until the construction of the highway embankment, the Han used to regularly flood the site, and despite this intervention, the ground remained very wet. A large quantity of water flows down from the mountain creating a reeded wetland environment. At the time of the construction of the road embankment, a

meandering stream was therefore cut through the site to draw off water and drain it to the river by way of an underground channel.

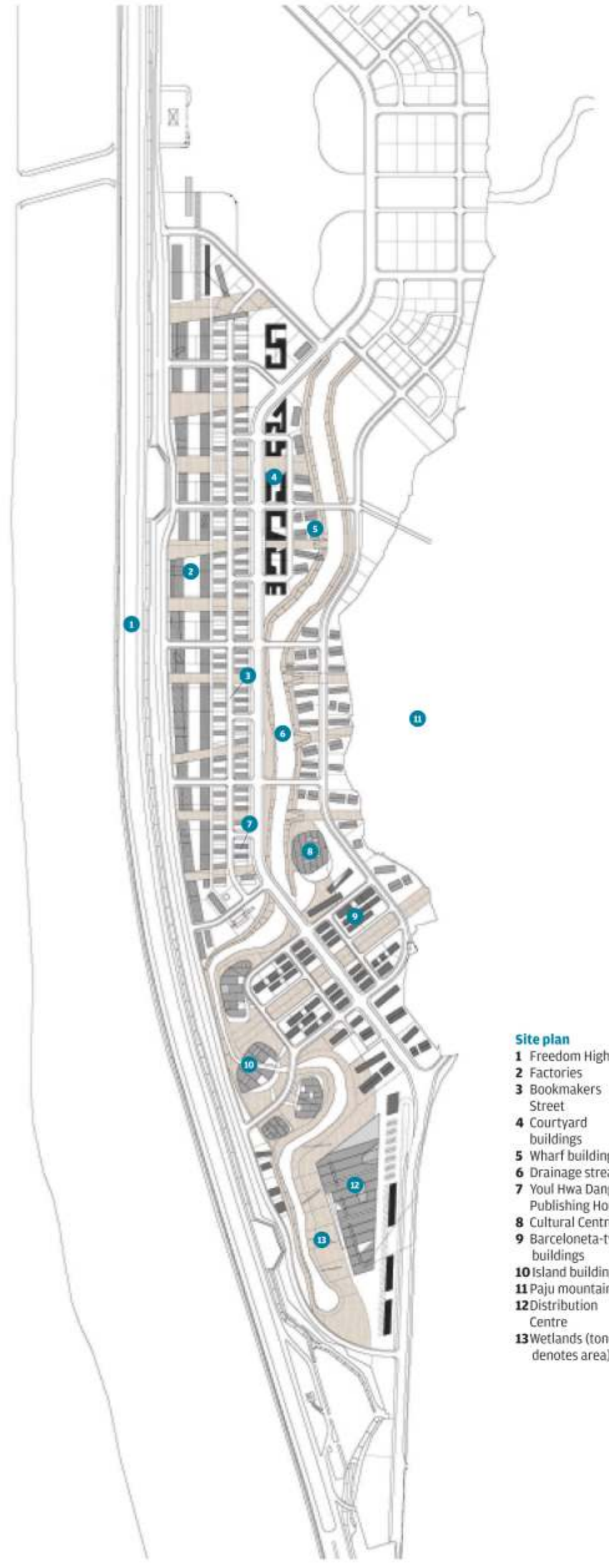
The earlier Paju plan was predicated on raising the land across the entire site and dealing with the drainage problem below ground. The ARU project is much more selective about where the ground is raised. Beigel describes the key aim as the creation of an “urban wetland” where an understanding of the existing conditions is preserved. Much of the land is raised by a uniform 1.5m but the stream is maintained and a series of wetland corridors is established at the lower level, cutting across the

site between the motorway and the mountain. The creation of these two levels creates a distinct topography – or to use a favourite ARU term “a landscape infrastructure” – within which the work of many different architects can be distributed.

Although the framework plan allows the designers of individual buildings a good deal of licence, it includes rules that govern the siting and massing of projects. ARU has identified a number of different building types and organised them as distinct fields which are equivalent in scale to some of the existing features of the landscape. Running parallel to the highway a long row



Previous page: The east elevation of the Youl Hwa Dang Publishing House. Above: View across courtyard from one of the studio houses. Left: The subtle palette in the interiors is taken from a painting by Giorgio Morandi. Right: View of the building with the Freedom Highway and Han River beyond.



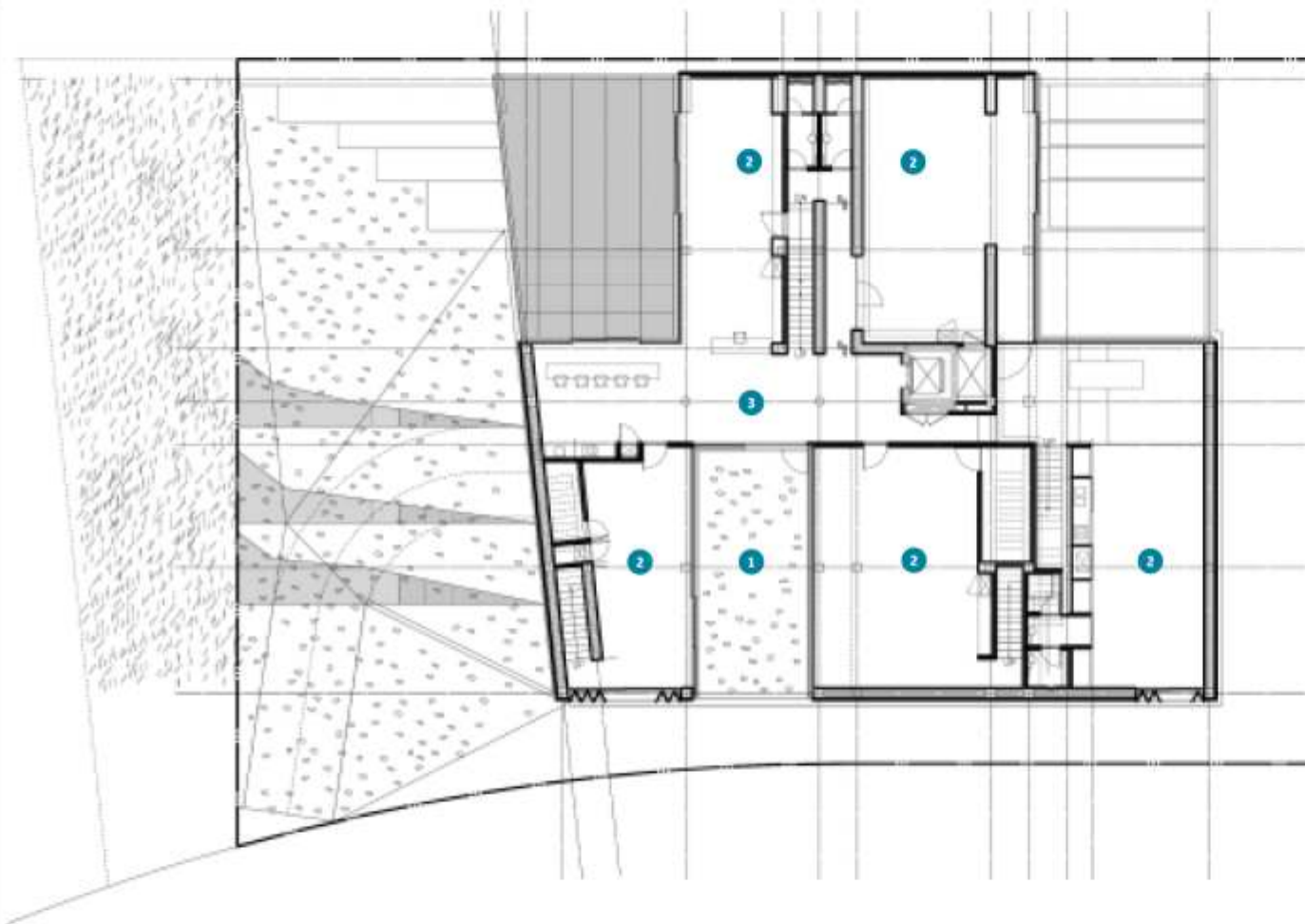
- Site plan**
- 1 Freedom Highway
  - 2 Factories
  - 3 Bookmakers Street
  - 4 Courtyard buildings
  - 5 Wharf buildings
  - 6 Drainage stream
  - 7 Youl Hwa Dang Publishing House
  - 8 Cultural Centre
  - 9 Barceloneta-type buildings
  - 10 Island buildings
  - 11 Paju mountain
  - 12 Distribution Centre
  - 13 Wetlands (tone denotes area)



## Works

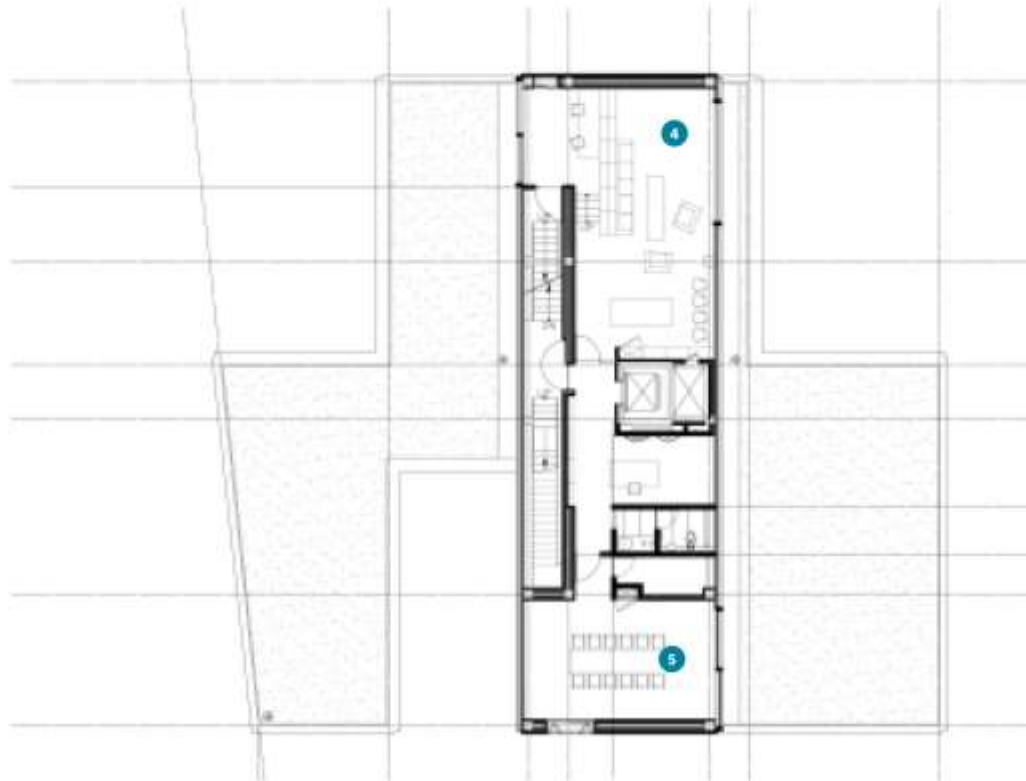
**Youl Hwa Dang Publishing House**  
**Architect** Beigel Christou with Architecture Research Unit, London; Kim Jong Kyu and Choi Jong Hun with Metropolitan Architecture Research Unit, Seoul  
**Client** Youl Hwa Dang Publishing Company

**Concept design of Paju Book City**  
**Architect** Florian Beigel Architects with ARU  
**Core team for design guide**  
 ARU, Seung Hchih Sang, Kim Jong Kyu, Kim Young Joon, Min Hyun Sik  
**Client** Paju Book City Culture Foundation & Cooperative



### Ground floor and third floor plans

- 1 Entrance courtyard
- 2 Studio houses
- 3 Reception
- 4 Library
- 5 Meeting room



of factories is emerging. The level of the highway sets a key datum to which the heights of many of the new buildings are directly related. The factories are permitted to rise no higher than the height of the road. Parallel to this strip lies Bookmakers Street, which will be lined on each side by publishing houses. These buildings are conceived in two parts: a base building rising to the height of the highway; and a two-storey rooftop pavilion. To ensure that everyone gets a view of both the river and the mountain, the pavilions have been shuffled in plan to prevent views being blocked by the building on the opposite side of the street.

To the south, a greater quantity of wetland is preserved, allowing the development sites to take on an island-like character. This area is dominated by the monopitched roof of the huge distribution centre. ARU originally conceived the roof as a publicly accessible space from which the rest of the site could be surveyed. That ambition has not been realised, but the building still has something of the presence of an artificial hill, marking the entrance to the development.

Following the adoption of the framework plan, Yi Ki-Ung invited ARU to collaborate with Kim Jong Kyu's firm, the Metropolitan Architecture Research Unit (MARU), on the design of the new headquarters for his own company, the Youl Hwa Dang Publishing House. The building is one of the first to be constructed on Bookmakers Street and is intended as a model development, demonstrating how the rules of the framework might be fruitfully interpreted.

As with many of the publishing houses, the Youl Hwa Dang building incorporates both office space and accommodation for staff and writers in residence. Five two-storey studio houses occupy the base building along with a reception area which gives onto the offices housed in the rooftop pavilion above. A series of small courtyards is cut into the lower block – a strategy that echoes the way the elevations appear to have been formed through a process of extraction.

Beigel likens the distinctively profiled frontages of the publish-

ing houses to the pictograms that form the building blocks of the Korean language. At Youl Hwa Dang this graphic expression is reinforced through the suppression of window openings by means of shutters which match the black stained timber rain-screen cladding. Only a few of the neighbouring buildings are in place but the early signs are that ARU's vision for the street – somewhere between script and landscape – should prove strong enough to survive the range of expressions brought by different architects.

In contrast to the black perimeter elevations, the courtyard facades have been conceived of as "walls of light". These are of a double-skin construction, comprising an internal polycarbonate layer and an outer face in cast glass. The treatment develops a language that ARU has explored in a number of projects including the Half Moon Theatre, east London, and the refurbishment of the Bishopfield housing estate in Harlow.

The modestly proportioned glass panels are stacked at a slight angle on steel shelves, communicating an ease of assembly and a distinctly human scale. As the facade rises, the height of the panels increases "correcting" the effect of perspective: a refinement as subtle but significant as the use of entasis in the design of a classical column. (See *Detail* page 18.)

These glass-lined courtyards are purposefully devoid of visual distraction. (Beigel talks admiringly of the fact that the Korean word for "space" is the same as that for "emptiness".) It's an approach that accords with ARU's wider strategy for the site.

The scheme has been assembled of elements both new and found, natural and manmade, on the site and beyond. Each decision has been made with the aim of cultivating a topography wherein the multiple histories sedimented in the landscape are preserved and validated. Within this setting day-to-day life takes on new weight.

What ARU has designed is a precisely appointed stage on which new histories might be played out with a vivid sense of situation.

## Future chapters for Korea's Book City

The majority of the buildings at Paju will be designed by local architects but a number of international practices have also been asked to contribute designs. These include Stan Allen, Kazuyo Sejima, Xaveer de Geyter and Foreign Office Architects. These last two practices have designed buildings on nearby sites within the area of the framework plan designated for "wharf buildings".

### Foreign Office Architects

The project (right) is a commission from the Dulnyouk Publishing House. The framework plan regulations enforce the orientation of the built mass on an east-west axis in order to avoid the blockage of the airflow between



the hill and the drainage stream, which runs through the centre of the site. The building is designed as a structural folding screen, positioned between a south-facing green garden and a north-facing mineral garden. One face of the screen is clad in timber, the other in

wood. The screen is arranged in such a way that every floor is alternately oriented towards either of the two gardens, producing a constant alternation of landscapes and finishes as one moves across the section of the building.

### Xaveer de Geyter Architects

The building (far right) will be the headquarters of the Chungmoongak Publishing Company. The free-standing volume, covered by a steel honeycomb structure accommodates a number of outdoor spaces: an underground patio; a ground level which continues under the building, a light well which cuts through the core of the volume; and a roof terrace. By placing the



structure on the outside of the building, it becomes an iconographic skin behind which the actual facade can allow for

variations. The traditional core which gives rigidity to the structure is replaced by a light well around which offices can be

organised. Vertical circulation and sanitary installations are located outside the main volume as closed appendixes.



# Solutions

IN DETAIL

10

## Youl Hwa Dang Publishing House Architect: ARU in partnership with MARU, Seoul

The four-storey concrete-framed publishing house headquarters sits on a concrete basement undercroft used as a car park. Piled foundations support the building at an artificial ground level in a reclaimed wetland site. The perimeter elevations are clad in a timber rain screen while the elevations inside the site boundary are translucent.

The translucent facades have a secondary structure of steel angles spanning between the concrete

columns. A lattice of 60 x 60mm square hollow sections provides intermediate support. All steel connections have been site welded to give fine tolerances. Externally the facade appears as a series of thin metal shelves supporting the glazing. Purpose-made powder-coated aluminium angles cover the steel angle and hold the glazing in place. The outer glazing is 8mm toughened cast glass with a ripple pattern making it slightly opaque. Setting the glass at a three to four degree angle breaks down the idea of the facade as a plane and emphasises the shelf angles.

An inner skin of three-wall polycarbonate is held in aluminium frames fixed back to the steel. The aluminium glazing angles are set on 6mm rubber spacers. Both the

spacers and the rear glazing locators have intermittent gaps to allow air to circulate in the cavity, removing heat built up behind the glass.

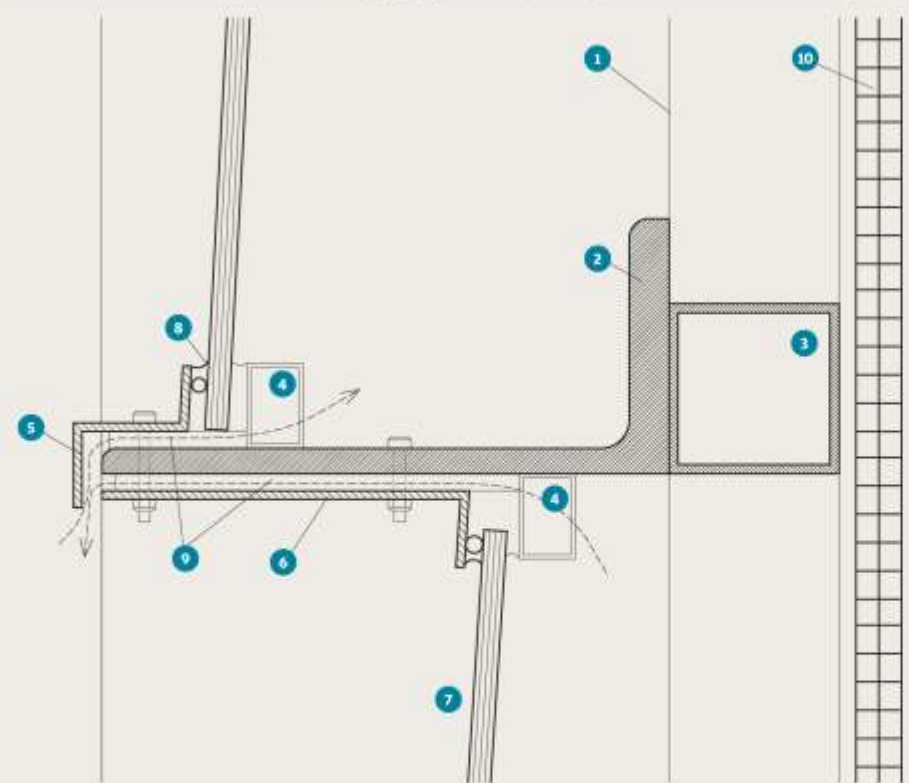
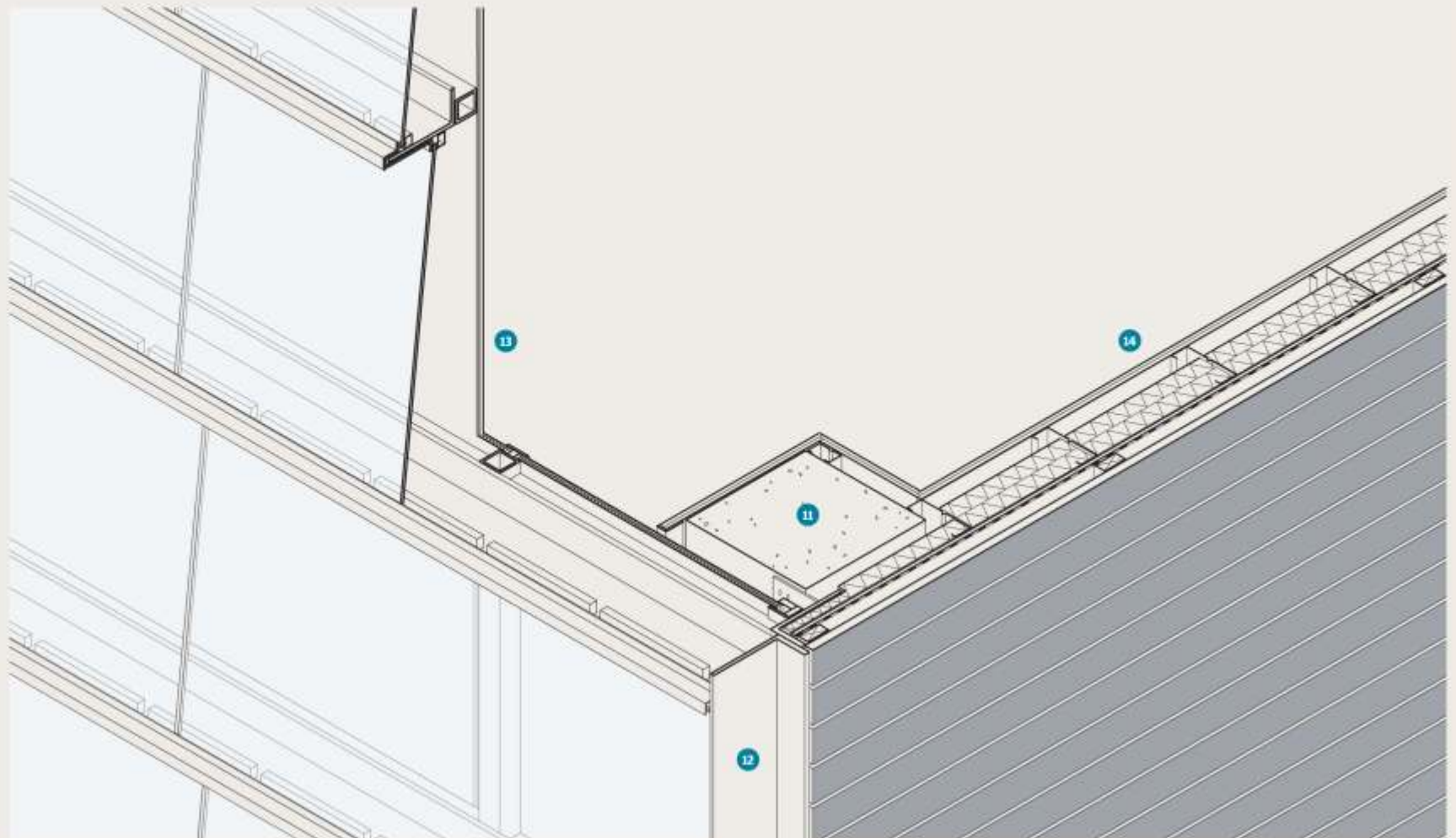
The timber rain screen facades have E-section galvanised steel studs spanning from floor to ceiling, dry-lined with plasterboard internally. The 12mm plywood sheathing is fixed to the outer face of the studs with 100mm of foil-backed rigid insulation. Black-stained cedar boards are fixed to timber battens over a breather membrane to form the rain screen. Thick insulation compensates for the lower thermal performance of the translucent facades.

**Text and drawings by Graham Bizley**



The facade appears as a series of thin metal shelves supporting the glazing.

PHOTO: JONATHAN LOVREN



### Detail section through glazing support shelf (left)

1. Line of 100 x 100 x 6 x 8mm structural steel I-section column beyond.
2. 200 x 90 x 9 x 14mm unequal steel shelf angle spanning horizontally between concrete columns.
3. 60 x 60 x 3.2mm horizontal steel square hollow section welded to steel angle as stiffener. Vertical 60 x 60 x 3.2mm steel square hollow sections at 1,120mm centres as secondary supports to angle.
4. 30 x 20 x 1.5mm steel square hollow section welded to steel angle in 300mm lengths with 20mm gaps between to allow ventilation.
5. 20 x 37 x 20 x 3mm polyester powder-coated aluminium glazing angle bolted to steel shelf angle.
6. 130 x 27 x 3mm polyester powder-coated aluminium glazing angle bolted to steel shelf angle.
7. 8mm-thick toughened cast glass with ripple pattern. Height varies from 876mm at bottom of facade to 1,852mm at top.
8. Continuous silicon seal with backing support.
9. 6mm-thick rubber spacer pads 300mm long with 20mm gaps between to allow ventilation.
10. 16mm-thick three-layer polycarbonate inner skin held on four sides in aluminium channel fixed to steel frame.

### Detailed section through corner of building (above)

11. **Primary structure**  
350 x 350mm reinforced concrete column.
12. **Corner steelwork**  
200 x 90 x 9 x 14mm continuous unequal steel angle bracket bolted to concrete column via 140mm-long x 6mm-thick steel cleats. 200 x 90 x 9 x 14mm unequal steel angle vertical corner trim welded to angle bracket.
13. **External wall – translucent wall**  
See section through glazing support shelf.
14. **External wall – rain screen cladding**  
80 x 24mm dark-stained cedar boards screwed to battens. 60 x 36mm preservative treated softwood battens at 900mm centres approx. Building paper breather membrane. 12mm sheathing plywood. 150 x 50mm E-profile galvanised steel studs. 100mm foil-backed rigid insulation. Two layers 12.5mm plasterboard dry lining with aluminium angle shadow-gap edge trims where dry lining meets polycarbonate.