

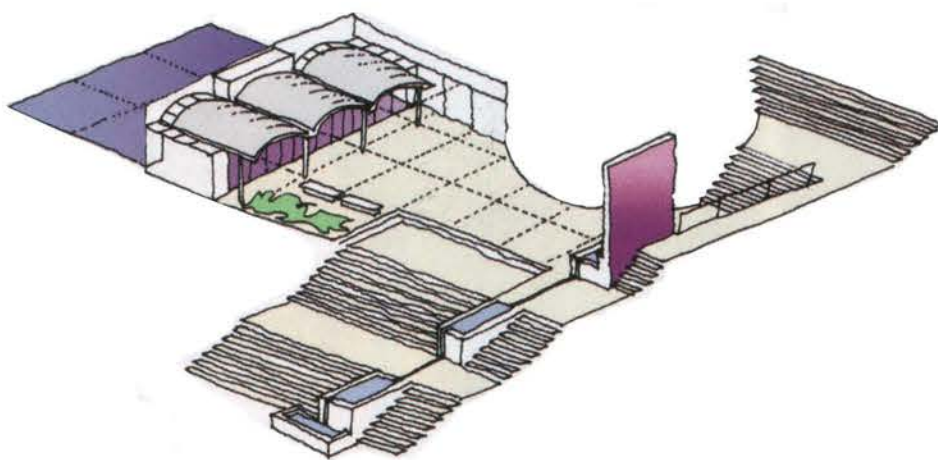


MAKING AN ENTRANCE

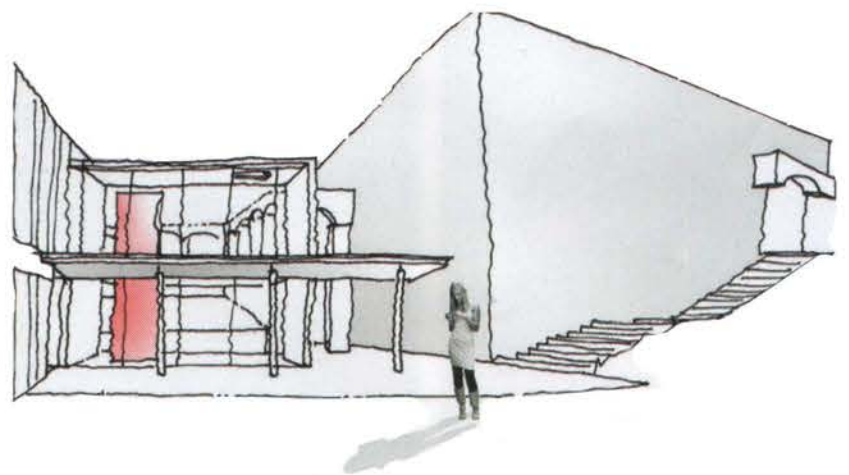
Sussex University is to be condensed into five schools, and each will be given a new entrance by John Pardey Architects

By Barrie Evans. Photographs by James Morris.

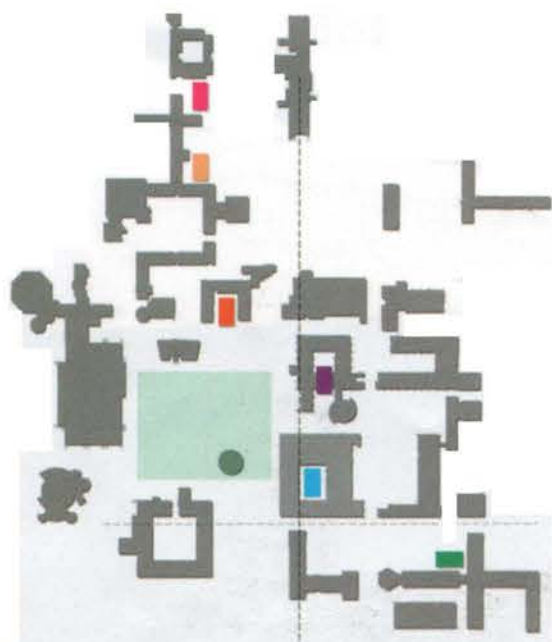




SCIENCE AND TECHNOLOGY



HUMANITIES



KEY

■ Sussex Institute	■ Science and technology
■ Social sciences and cultural studies	■ Pevensey building
■ Humanities	■ Life sciences

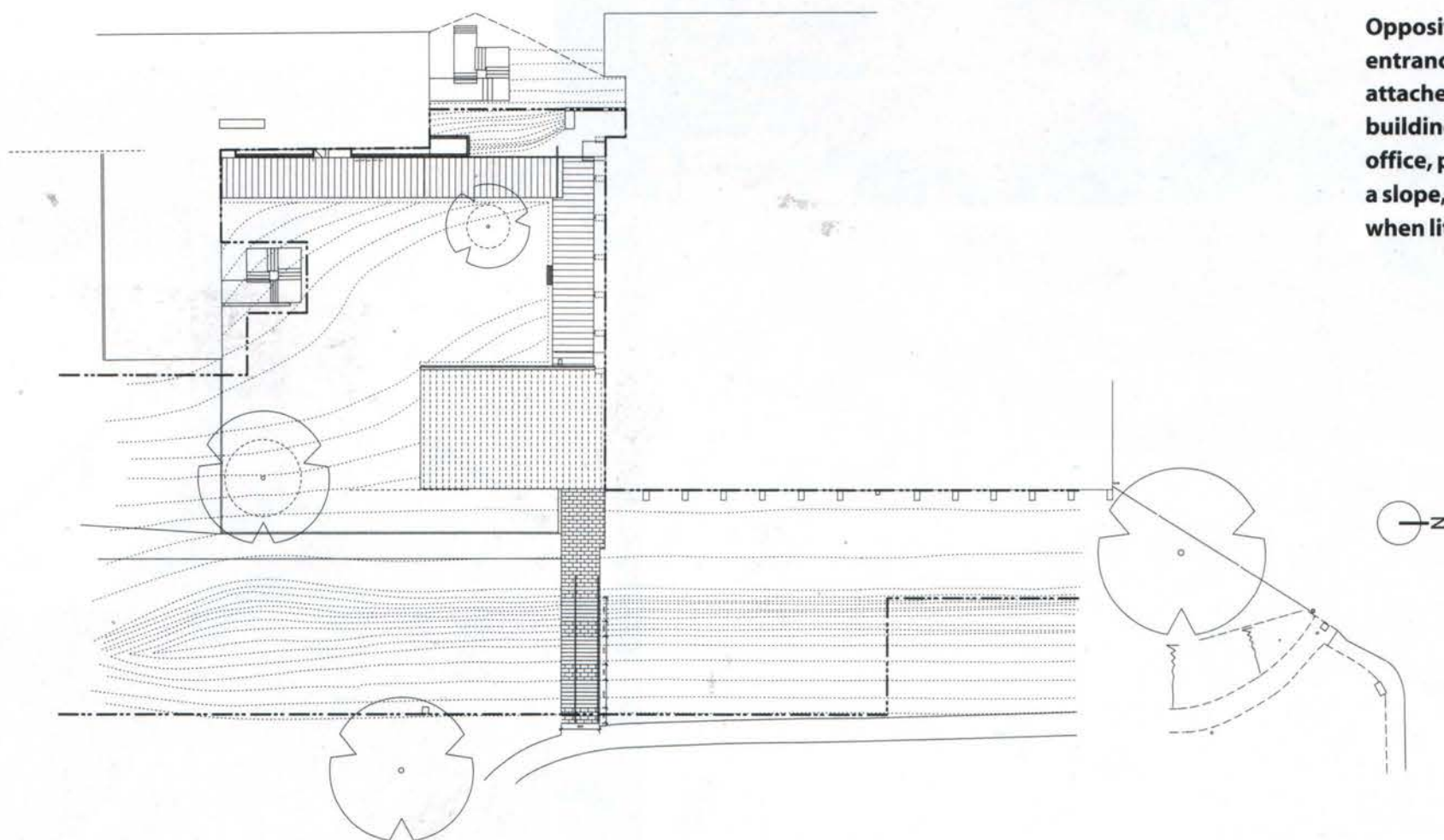
As a student, John Pardey was sent to Coventry, in both senses of the term. He discovered Coventry Cathedral, which became a favourite building. He confessed to tutors this heresy and for some of them he became an outcast, beyond the accepted Modernist canon of the time. Later, having left working as an architect in cities and set up a practice in his beloved New Forest, he was to renovate and extend Basil Spence's home of 1961 at Beaulieu (AJ 28.9.00). A response to site and existing building, a formality of symmetry and contradiction, and a quiet but intense expression of materials are all continuing themes of this and later Pardey houses, such as Sellers House (AJ 28.8.03) and Duckett House (AJ 22.7.04).

The project for the University of Sussex, at Falmer, above Brighton, continues several

of these threads, and is centred on the campus laid out by Spence in the 1960s, one of the most Ivy League of British campuses. Pardey's project involves a set of domestic-scale pavilions that must complement Spence yet be architecturally distinct.

The campus has the largest collection of listed Modern buildings in Britain, all by Spence; this was a high point and the post-Spence buildings do not share the original strength of character, though many are by Spence's office. Some are more disappointing than others.

In taking on this project in 2002, John Pardey Architects stepped into an education world where agendas were changing, where the recently appointed estates manager came from a background of cost-minimising D&B, whereas the academic leadership was coming



Opposite: the new entrance pavilion attached to the building by Spence's office, prominent on a slope, especially when lit at night

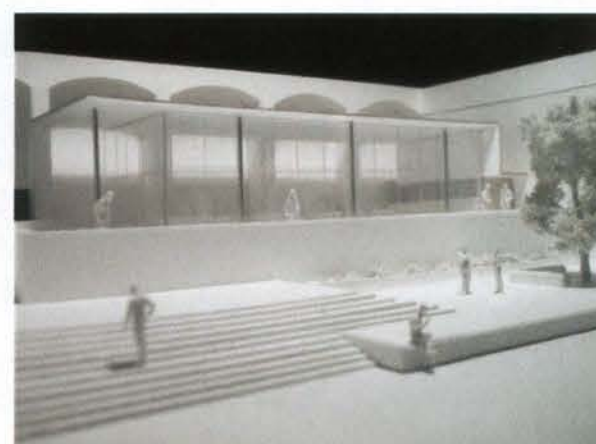
Sussex Institute site plan



LIFE SCIENCES



SOCIAL SCIENCES AND CULTURAL STUDIES



PEVENSEY BUILDING

to value the campus' built form and to see it as an important way of attracting staff and students. After some falling out, the architect has been dealing directly with the dean of the first building school, the Sussex Institute.

The bigger picture, part of the university's repositioning itself on the world stage, has been to consolidate from 22 departments into five schools and, as part of that, to provide each with a new entrance on this dispersed campus; a focus for visitors, students, potential students and other information-seekers. Rationalising the campus' proliferation of cafés is a related ambition. Currently, most departments have their own receptions, often ad hoc and unsympathetic insertions of desks or pods with an accumulated clutter of signage, notice boards, vending machines and oddments of furniture.

Pardey won the commission to design the five school entrances plus a café/social/exhibition space in the courtyard of the Pevensey building. This latter and two of the buildings that are to have new entrances are Spence's own, listed Grade II*. The programme of constructing the six buildings has slowed for financial reasons; the Sussex Institute is now completed, others are expected to be restarted later in this financial year.

Here, Pardey sees Spence as being very much influenced by Corbusier's *Maisons Jaoul* and by Kahn in the massing and solidity of concrete-framed masonry and the vaulted ceilings. The architect has developed a language for the new entrances, respectful yet distinct from Spence, that will be able to be read also as a set of nodes across the campus in its own right, part of the university's

emerging 'brand'. The architect's formality produces a rhythmic continuity, yet contrasts lightness with what Pardey describes as Spence's 'heavy, monumental, earthbound language'. Indeed, one of CABE's reactions to these floating interventions was their potential reversibility, something that neither the client nor architect had considered. The architect's language of lightness is of metal and glass, with roofs folding into walls, in part floating, supported by detached slender steel columns, accompanied in some cases by canopied entrances and routes, and sheer glazed walls with solid ventilation panels.

For the Sussex Institute (a postgraduate school), the entrance pavilion sits at one end of a Spence office building, at an existing end-entrance that has itself been opened up to improve connection. An aluminium-



clad folded plane wraps the roof and wall, stopping short of the ground with a band of glazing, preserving lightness (see *Working Detail*, p36-37). Very slender columns to an overhang on the main approach side create a portico effect to the glazed wall behind, where the symmetry is then broken with a two-storey entrance to the right (with a first-floor bridge), and to the left an opaque wall with sculptural cantilevered stair to the first-floor offices of the dean and his PA. This wall is lit pink at night; each school has its own colour, which extends to stationery and other 'corporate' items. Night-time appearance was a key design issue, as the entrances are open 24 hours a day. This entrance in particular has an elevated position, making it a beacon on the campus.

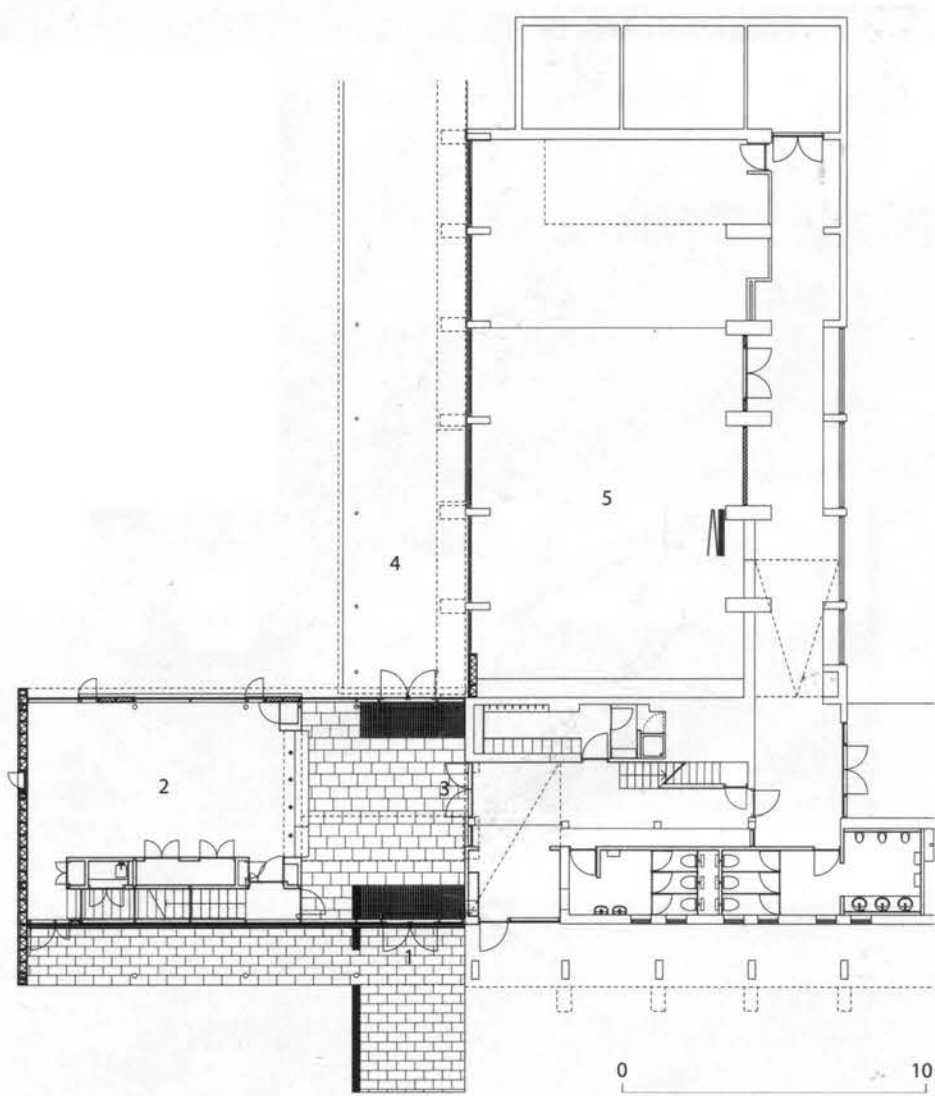
The new pavilion ties into the Spence language, particularly with the slatted timber to the soffit and end-wall lining, the exposing of the end wall of the existing building within the entrance and a fin wall of appropriately boardmarked concrete slicing through the glazed facade. (Cedar has become common today; the cedar precedent here is the listed buildings and indeed Spence's own 1961 house.) Detailing is simple but refined; after arguments, money was spent on a stone floor – a small area but an element that helps set the tone of quality.

On the other side of the entrance pavilion is a softer, boarded facade. From this a new covered way fronts two existing buildings at right angles, which combine with the entrance building to create a courtyard. Immediately

inside the nearer of these two existing buildings, opening onto the courtyard, is a refurbished and enlarged café, helping to make this location a focus for the school.

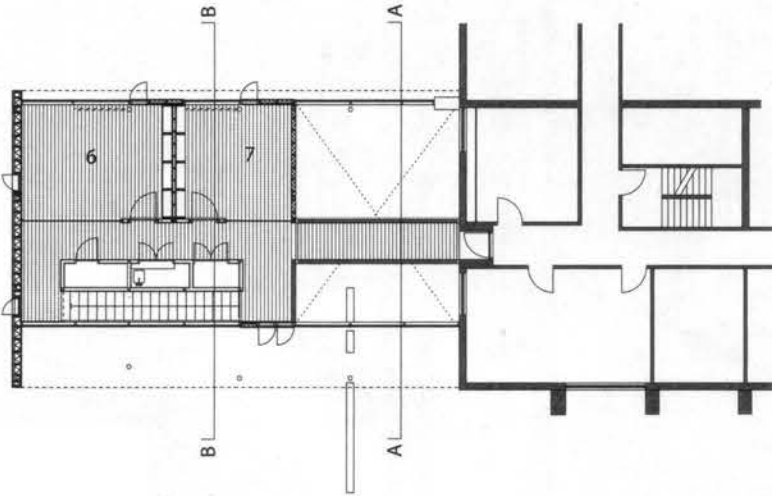
Pardey is not totally seduced by Spence; certainly appreciative of Spence's poetic approach, Pardey's Modernist education goes deep enough for him to draw attention to Spence's massive brick piers as we walk around the campus, pointing out that the monumental aesthetic statement is, structurally, only a cover to a concrete frame. Spence's monumentality is not oppressive, scattered as it is across the open parkland setting, but nor is it particularly welcoming. That is something Pardey has achieved for the Sussex Institute and looks set to do for the other university schools.

Far left: reception desk and admin office. Top left: from the existing building, looking across the bridge to offices on the right. Bottom left: the dean's office

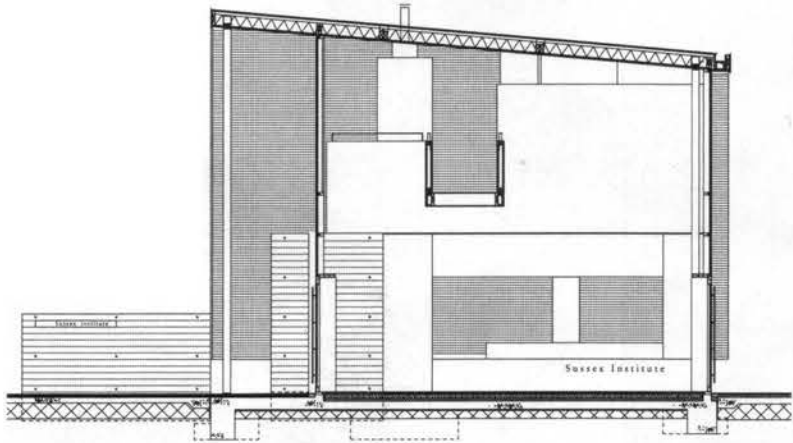


ground-floor plan

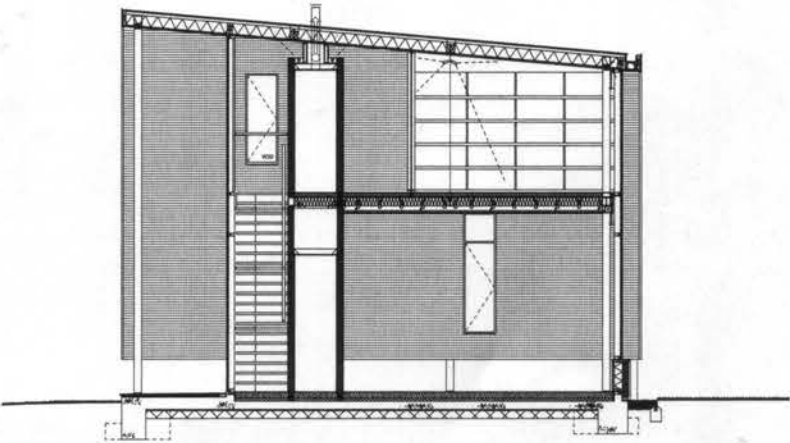
- KEY**
- 1 entrance
 - 2 reception office
 - 3 entrance to existing building
 - 4 new walkway
 - 5 refurbished café
 - 6 dean's office
 - 7 PA's office



first-floor plan



section aa



section bb

Below: the view from the new courtyard.
Bottom left: stair for the dean and PA.
Bottom middle: the concrete fin echoes Spence. Bottom right: the wrapping roof/ wall stops short of the ground





STRUCTURE

The driving principle for the design of the structure has always been lightness and slenderness, to contrast with the mass of the original Spence buildings and to help define the new interventions. Each school's entrance building has its own arrangement and programme, requiring different structural layouts. To achieve an economy of means, and to develop a common language for the project, a kit of parts has been devised; slender columns pulled away from walls, free-spanning curtain walls, flat metal-clad roofs folding into walls, and free-standing canopies.

The primary structural material used throughout is steel, with infill timber joists forming the secondary structures within floors, walls, and roofs. Detailing of the frames has been kept deliberately simple, allowing fabrication and erection to proceed economically within the tight programmes imposed by university terms. Given the proximity of the new entrances to the existing teaching buildings, site access and noise were major constraints on the design.

The pavilion structures are simple braced boxes, constructed of simple steel 'sticks', and partially supported by and integrated within the existing concrete framed buildings. The walkway structures are supported by fixed-base columns, to ease erection; the columns acting to resist lateral forces like blades of grass in unison. All external steelwork is galvanised and then painted to minimise future maintenance costs for the university.

Other than foundations, which are simple mass concrete pads on the chalk, the only 'wet' structural elements are the horizontally boardmarked in-situ concrete monoliths that form part of the identity of each school.

The theme of lightness is also expressed in the staircase within the first completed building, much to the consternation of the Estates Department. A folded steel plate with timber treads mimics the structural principles of the Georgian stone staircase.

Bob Barton, Barton Engineers

COST SUMMARY

	Cost per m ² (£)	Percentage of total
SUBSTRUCTURE	61.98	2.30
SUPERSTRUCTURE		
Frame	70.73	2.63
Upper floors	33.97	1.26
Roof, rooflights	85.77	3.19
Staircases	56.61	2.10
External walls	59.82	2.22
Windows and external doors	327.65	12.18
Internal walls and partitions	61.30	2.28
Internal doors	66.82	2.48
Group element total	762.68	28.34
INTERNAL FINISHES		
Wall finishes	78.62	2.92
Floor finishes	77.52	2.88
Ceiling finishes	67.34	2.50
Group element total	223.49	8.30
FITTINGS AND FURNITURE	104.00	3.86
SERVICES		
Sanitary appliances	23.28	0.87
Services equipment	120.82	4.49
Disposal installations	9.90	0.36
Water installations, heating, air treatment	69.00	2.55
Electrical services	175.03	6.50
Protective installations	9.29	0.35
Communication installation	9.29	0.35
Builders' work in connection	11.49	0.43
Group element total	428.10	15.91
EXTERNAL WORKS	442.17	16.44
PRELIMINARIES AND INSURANCE	668.83	24.86
TOTAL	2,691.23	100

Cost data provided by DT Foy, Robinson Low Francis

CREDITS

START ON SITE DATE

March 2004

CONTRACT DURATION

25 weeks

GROSS INTERNAL AREA

269m²

FORM OF CONTRACT

JCT98 with Quantities

TOTAL COST

£723,947

CLIENT

University of Sussex

ARCHITECT

John Pardey Architects: John Pardey, Magnus Ström, Kristian Hyde, Kay Burman

STRUCTURAL ENGINEER

Barton Engineers

SERVICES ENGINEER

GTA Consulting

QUANTITY SURVEYOR

Robinson Low Francis

MAIN CONTRACTOR

Mansell Construction Services

SUBCONTRACTORS AND SUPPLIERS

Curtain walling Schuco; aluminium cladding/roof Pace Roofing; steelwork Hillcrest

WEBLINKS

University of Sussex

www.sussex.ac.uk

John Pardey Architects

www.johnpardeyarchitects.com

Barton Engineers

www.bartonengineers.co.uk

GTA Consulting

www.gtagroup.co.uk

Robinson Low Francis

www.rlf.co.uk

A light and delicate new school centre

The 'school centre' creates a new main entrance and reception to the Sussex Institute, Sussex University, and houses an administration area with workstations for eight staff on the ground floor, and offices for the dean and the school administration manager on the first floor. The building is one of five new school centres attached to the original '60s university buildings on the campus, many of which are now Grade II*-listed.

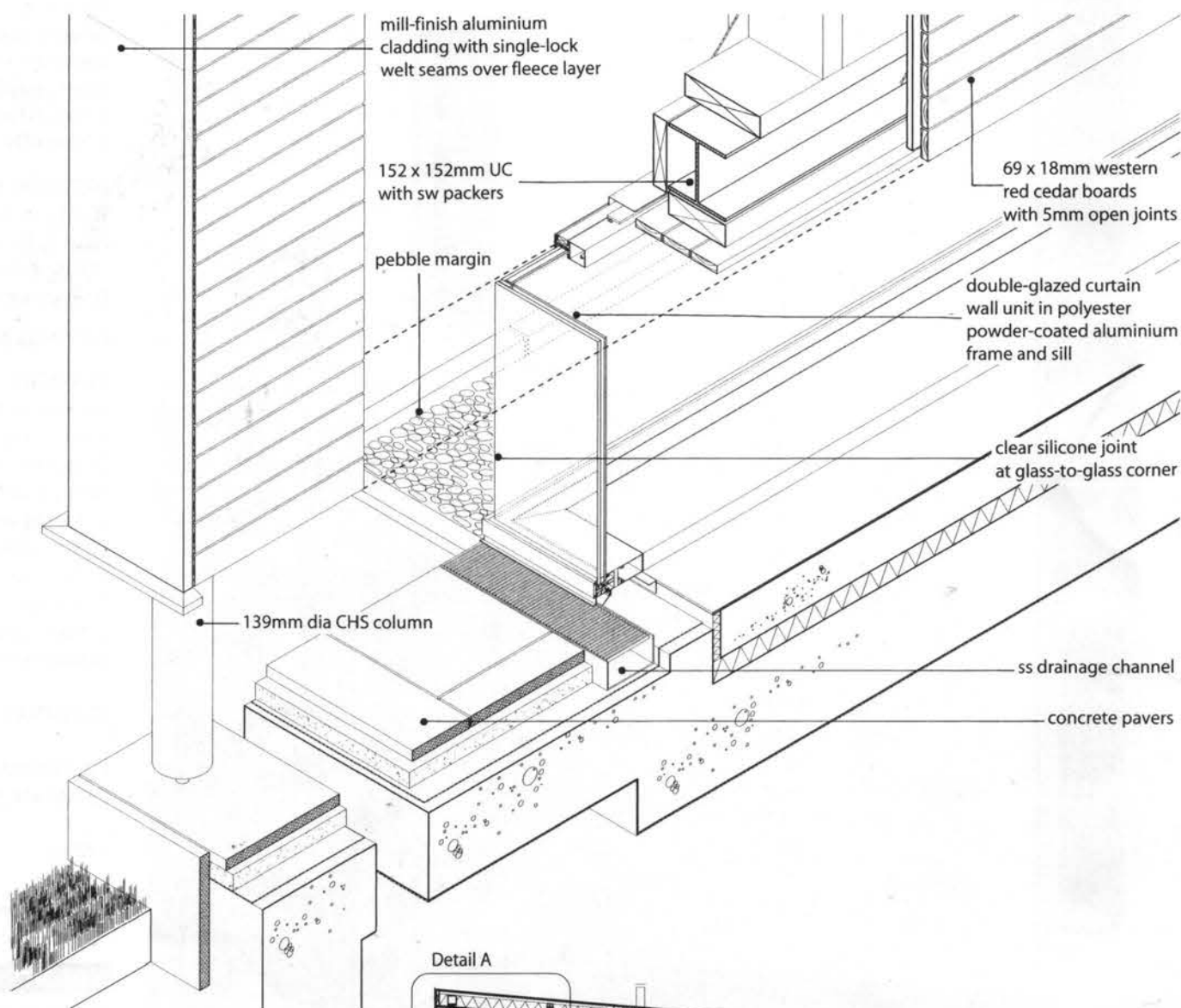
The original buildings were built of brick and concrete and have a robust solidity. In contrast, the new centre is light and delicate, with a steel frame clad with a palette of lightweight materials – glass, mill-finish aluminium and western red cedar boards – laid horizontally.

Steps lead up to the main entrance in the east wall, which is a glazed curtain wall through which the double-height reception and first-floor walkway bridge can be seen clearly.

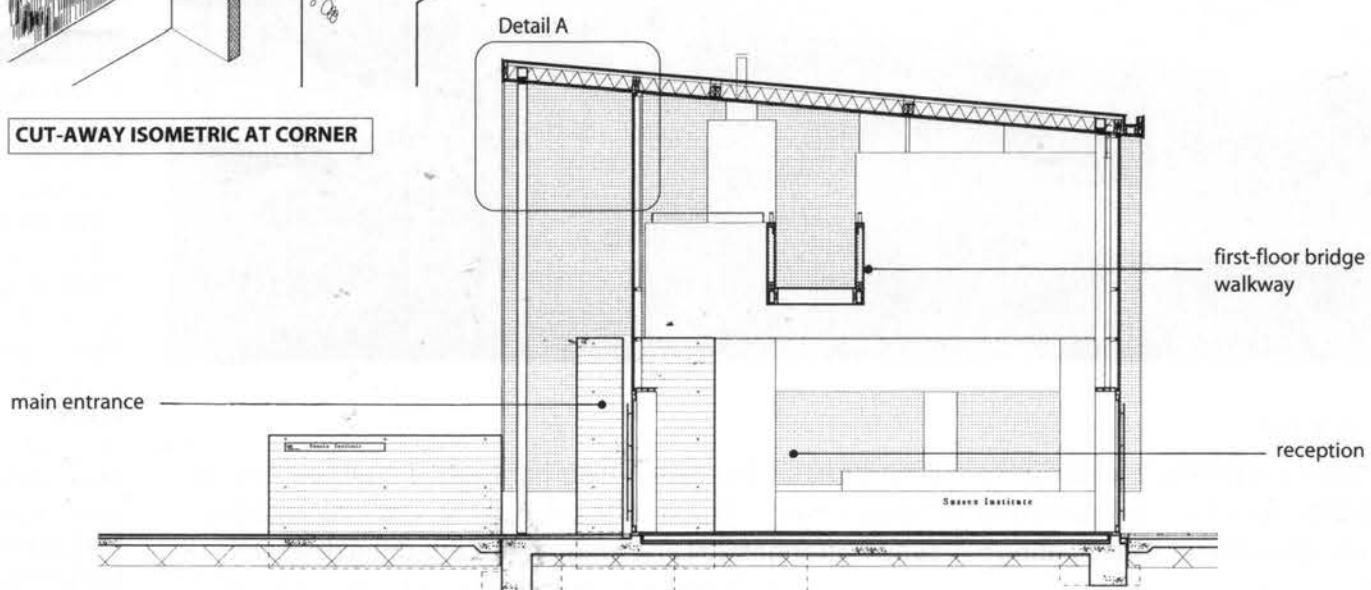
The roof and the south wall are clad with mill-finish aluminium; they extend 2m beyond the glazed curtain wall, sheltering it with what appears as an L-shaped 'folded plane'. To enhance the folded shape, the south wall terminates just above the ground with low-level glazing. The inner planes of the south wall and roof are lined with western red cedar boards on both the outer and inner sides of the glazed curtain wall.

The extension of the roof over the curtain wall rests on a series of 139mm-diameter steel columns, which are connected to 150 x 150mm SHS roof beams. At the south-east corner, the edge of the aluminium/cedar-clad wall is supported on a similar column, and the low-level clerestory returns to connect to the adjacent glazing with a frameless, structural, clear silicone joint.

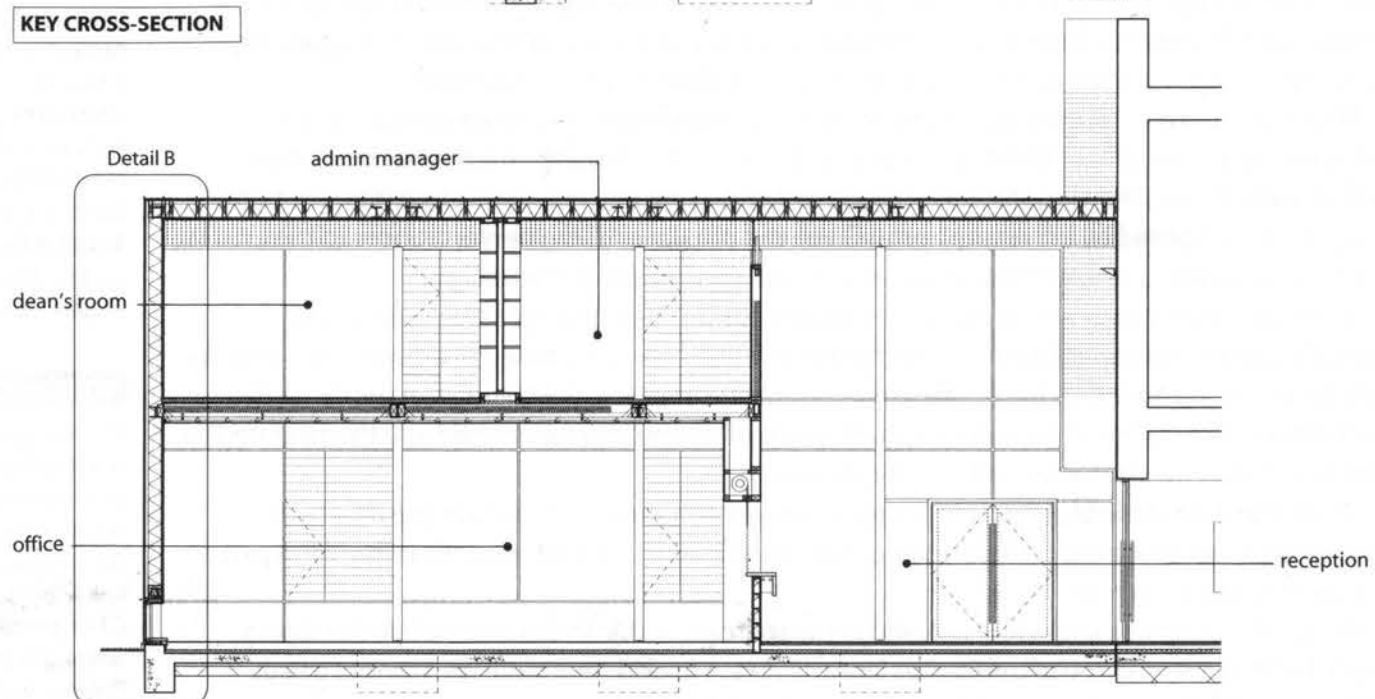
Susan Dawson



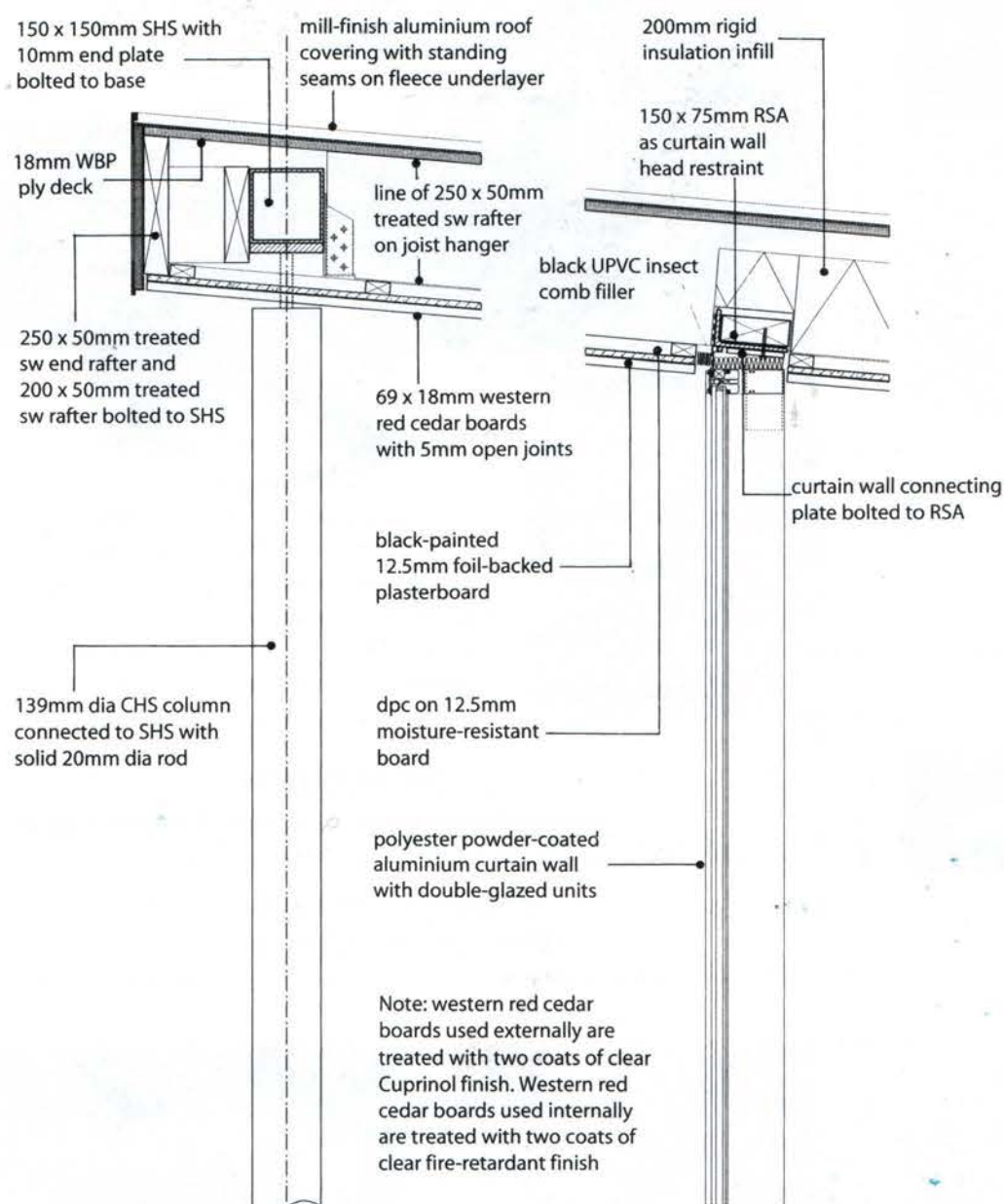
CUT-AWAY ISOMETRIC AT CORNER



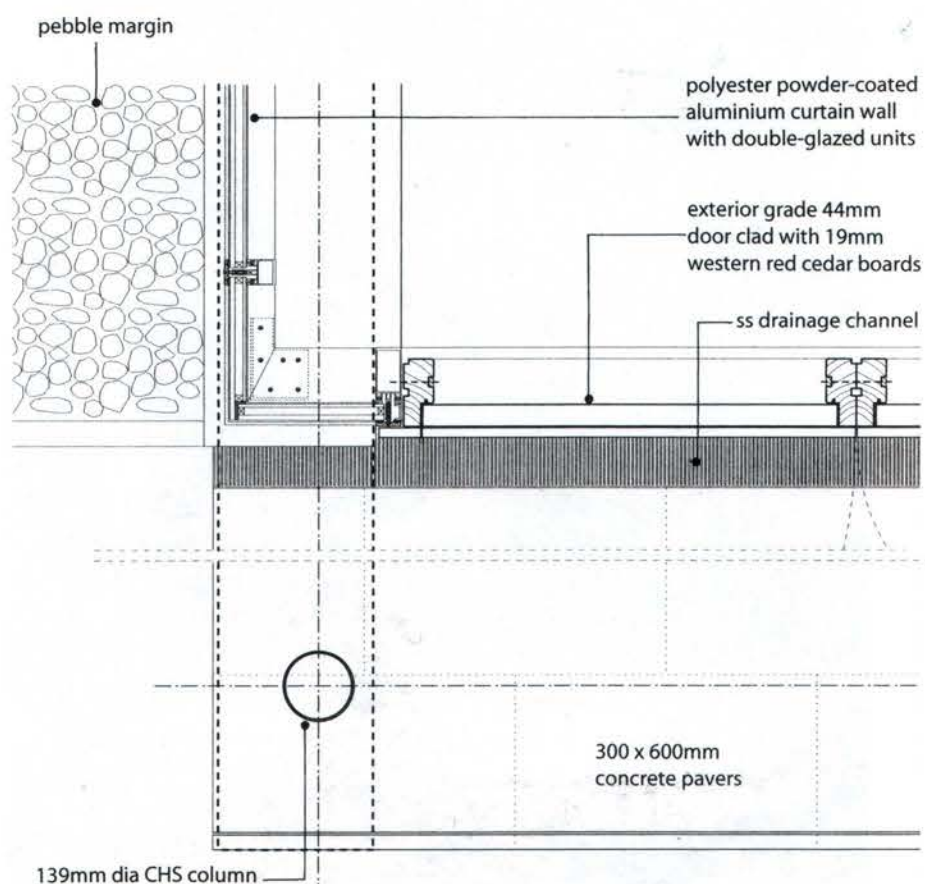
KEY CROSS-SECTION



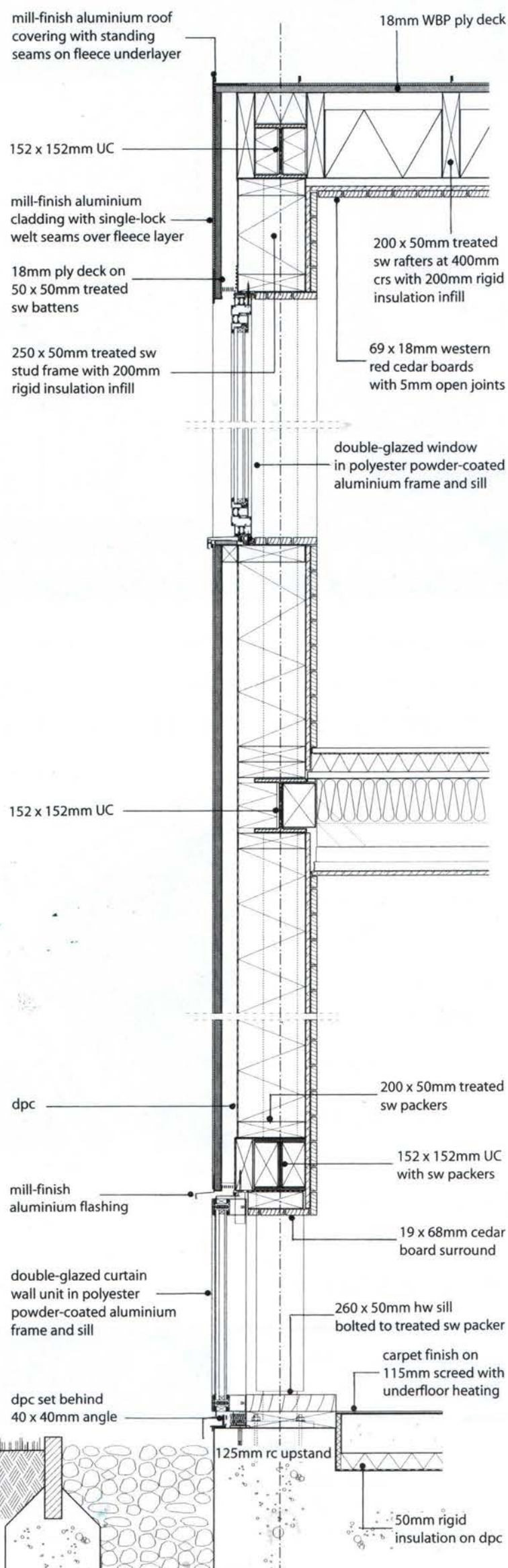
KEY LONG SECTION



DETAIL SECTION A AT EAVES



DETAIL PLAN AT CORNER



DETAIL SECTION B THROUGH WALL