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ACCEPTING THE CONSTRAINTS OF PUBLIC PROJECTS CAN BE A KIND OF HEROISM

By Ruth Slavid

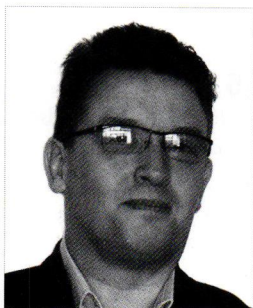
It took me an embarrassingly long time to realise that staff at London's Old Street underground station are not just being surprisingly helpful when they announce 'alight here for Moorfields Eye Hospital' – a level of information not offered at other stations. They are, of course, doing it because a significant proportion of the people wishing to get off at Old Street may be blind or partially sighted.

Once they have navigated their way through one of London's most confusing stations, followed by one of London's most confusing roundabouts, patients find themselves at a hospital that is second to none in clinical reputation, but with little to recommend it as a building. This is the building to which Penoyre & Prasad has made a special addition, reviewed by Alan Dunlop in our Building Study (see pages 23-35). It is a department used by children, the group most likely to be intimidated by depressing facilities, and nervous parents.

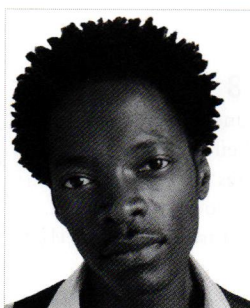
With the unpromising surroundings, the need to connect to existing operating theatres, a Byzantine procurement process, and pressures from planners, it is not surprising that the result is imperfect. Dunlop, while applauding the level of ambition and the vast improvement over anything that went before, wonders what might have happened if the architects had been less compliant. Further improvement? Loss of the job? Or a delay which would have deprived hundreds of patients a year of the improved facilities? Was it a risk worth taking?

In a week that sees Herzog & de Meuron given another opportunity to show off what it can do, thanks to Portsmouth Football Club, we should not forget that there is another kind of heroism in architecture – accepting the constraints of public projects and doing the best that one can. It calls for a clarity of vision that, sadly, may not be shared by many of the patients who are benefiting from the new eye centre.

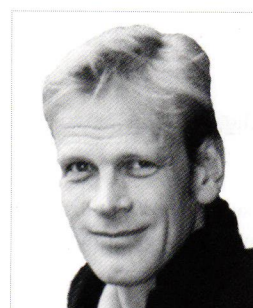
CONTRIBUTORS



Alan Dunlop, who writes about the children's eye centre at Moorfields for the Building Study on pages 23-35, is a partner in Gordon Murray and Alan Dunlop Architects



Lyndon Douglas, who photographs Moorfields for the Building Study, has photographed architecture for seven years, with clients including David Adjaye and Richard Rogers



Alex Wright, who reviews Building: 3,000 Years of Design, Engineering and Construction on page 47, is a teaching fellow in architecture at the University of Bath

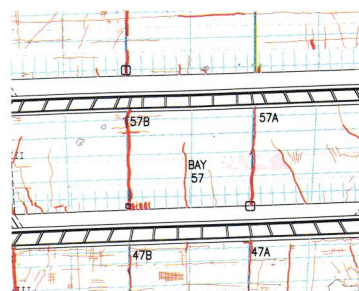
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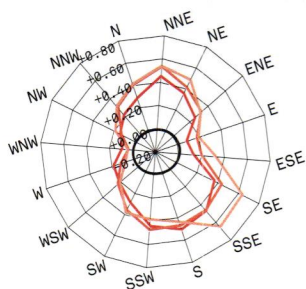
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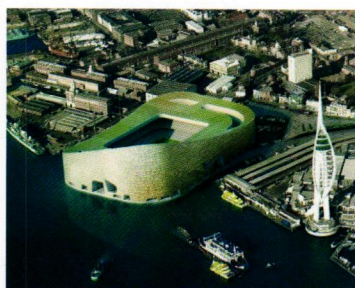
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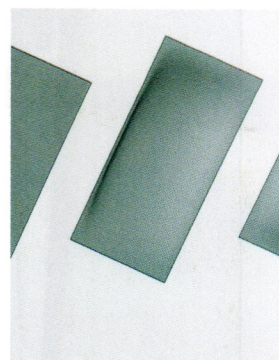
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THURSDAY 19 APRIL

- BDP plans one of UK's largest shopping centres in Glasgow
- Shortlisted Landmark Wales designs shown off for first time
- Lifschutz Davidson Sandilands scoops new Jewish Community Centre contest
- English Heritage and London Assembly lock horns over publicly managed listed buildings



FRIDAY 20 APRIL

- Rogers forced to redesign Cambridge railway scheme
- Government misses green targets on almost all of its own buildings
- Capita Percy Thomas school to become 'eco-schools' exemplar
- Rare Scottish Art Deco pool given category A-listing (left)

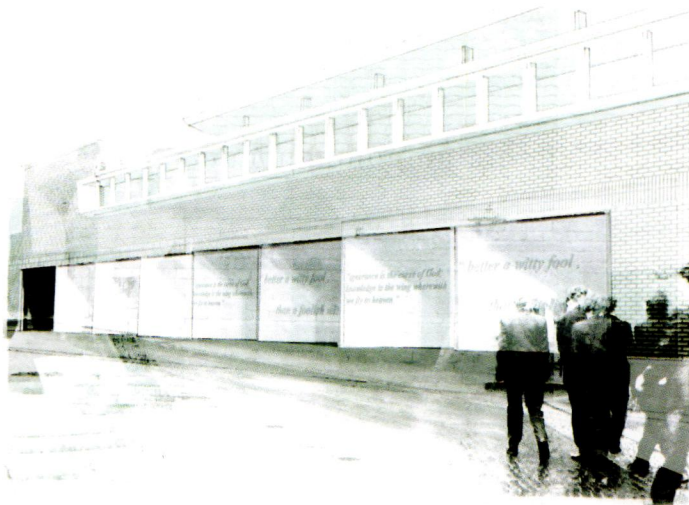
MONDAY 23 APRIL

- Wilkinson Eyre's vast BBC Media City comes under fire (below)
- Liverpool's Victorian villas survive Pathfinder but are hit by arsonists
- Bennetts wins planning for Royal Shakespeare Theatre overhaul
- Cost of Gillespies' Bradford City Park leaps by £7 million



TUESDAY 24 APRIL

- Foster saves Commonwealth Institute... and turns it into flats
- Make bags £250 million Brighton Centre replacement project
- A+DS pans Austin-Smith:Lord's Scottish National Park scheme
- Glenn Howells' Bradford tower goes up by 18 storeys



WEDNESDAY 25 APRIL

- Stanton Williams booted off controversial Sloane Square revamp scheme
- Stratford school design competition scooped by Wright & Wright (left)
- Falconer Chester Hall wins go-ahead for redesigned Liverpool Lime Street scheme
- Ian McChesney lands RIBA competition for A66 landscape project



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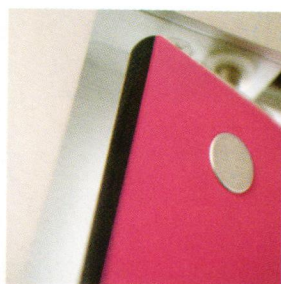
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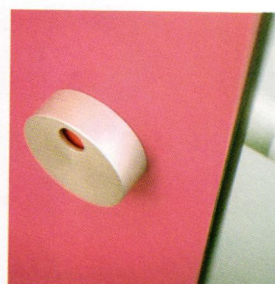
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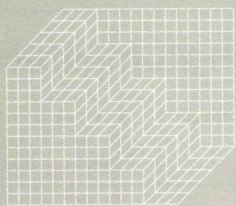
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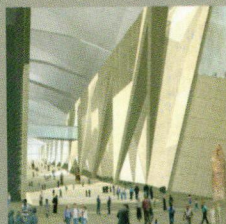
- ☐ Acoustics
- ☐ Alternative technologies
- ☐ Asset management
- ☐ Audio visual
- ☐ Building controls
- ☐ Communications
- ☐ Dynamics and comfort
- ☐ Energy and regulation
- ☐ Environmental performance
- ☐ Facade engineering
- ☐ Fire engineering
- ☐ Health and safety
- ☐ Inclusive design
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- ☐ Sustainability
- ☐ Whole life value
- ☐ Wind engineering

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Cairo

Architect:
Heneghan Peng Architects

Safe and secure

Ensuring the safety and security of people and assets

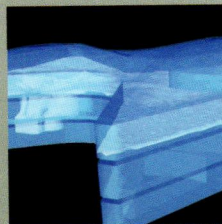


Arsenal's Emirates Stadium
London

Architect:
HOK Sport Architecture

Whole life value

Achieving long term value through sustainable design

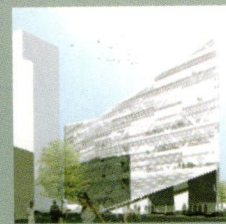


Thomas Deacon Academy
Peterborough

Architect:
Foster + Partners

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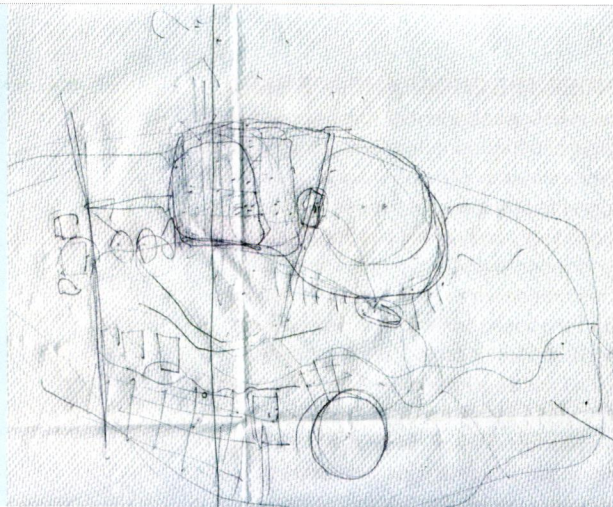
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EIGHT SHORTLISTED FOR 2012 OLYMPIC VELOPARK

David Chipperfield Architects, Flacq and Wilkinson Eyre are among eight European practices shortlisted in the competition to design the velopark for the London 2012 Olympics. Joining them on the shortlist are David Morley Architects, Dominique Perrault Architecture, FaulknerBrowns with Heatherwick Studio, Foreign Office Architects and Hopkins Architects with Sanda Douma Associates. The eight teams will now be asked to put forward design concepts for the velodrome and a temporary BMX circuit, and will be judged by a panel including Ricky Burdett (whose rough sketch of the 2012 Olympic site, including the velopark, is pictured on the right) and 2004 Olympic-gold-medal-winning cyclist Chris Hoy. The winner will be announced in the summer.

By Richard Vaughan



COPYRIGHT ROW – CALL FOR CLARITY

By Max Thompson

A West Yorkshire-based architecture practice has settled out of court with a renowned furniture designer following allegations that it copied one of the firm's designs.

In a case that has led to calls for the RIBA to ramp up its guidance to architects on the issue of copyright, Saltaire-based Rance Booth & Smith (RBS) settled with Mark Wilkinson Furniture (MWF) after MWF claimed its Mai range of kitchen suites had been copied during the refurbishment of Blubberhouse Hall, Harrogate.

RBS was one of three parties that, between them, agreed to pay Wiltshire-based MWF £26,000 after being accused of breaching the firm's design rights.

Steven Hirst, the then boss of contractor Thirteen Twenty

which carried out the refurbishment work, and the owners of Blubberhouse Hall – Mark Nelson and Jenny Garforth – were the other parties who chose to settle early last month.

Following the deal, lobby group Anti Copying in Design (ACID) called on the RIBA to clarify guidelines to architects which it said were not clear enough on the issue of design rights.

ACID director Dids MacDonald said she had written to the RIBA because 'it currently appears that there are codes of conduct for architects to adhere to, but there are not many rules or guidelines'.

'It is important that people know there are lines that they shouldn't cross,' added MacDonald.

MacDonald also suggested that ACID and the RIBA should work together on what she saw as a common goal:

'ACID has produced guidelines which concentrate on giving advice on how not to infringe the rights of originators... [I recommended] that these be adapted for use.'

But the RIBA, which said it was in the process of penning a reply to MacDonald, said its Code of Professional Conduct, the first principle of which is that 'its members shall act with honesty and at all times', has already addressed the matter.

A spokesman for the RIBA said: 'The code is not designed to duplicate the law – breach of copyright is a legal issue. The code is designed to address ethical issues pertaining to the profession that are not covered by UK law.'

Although RBS director Allan Booth refused to disclose how much his firm had paid to MWF, he said he was disappointed by the settlement and felt 'hard done by'. He also added that the situation had been 'much more complicated' than a simple case of plagiarism.

He said: 'This is a serious issue but it is very debatable as to when one is copying something and when one is not. We all get influences from different sources.'

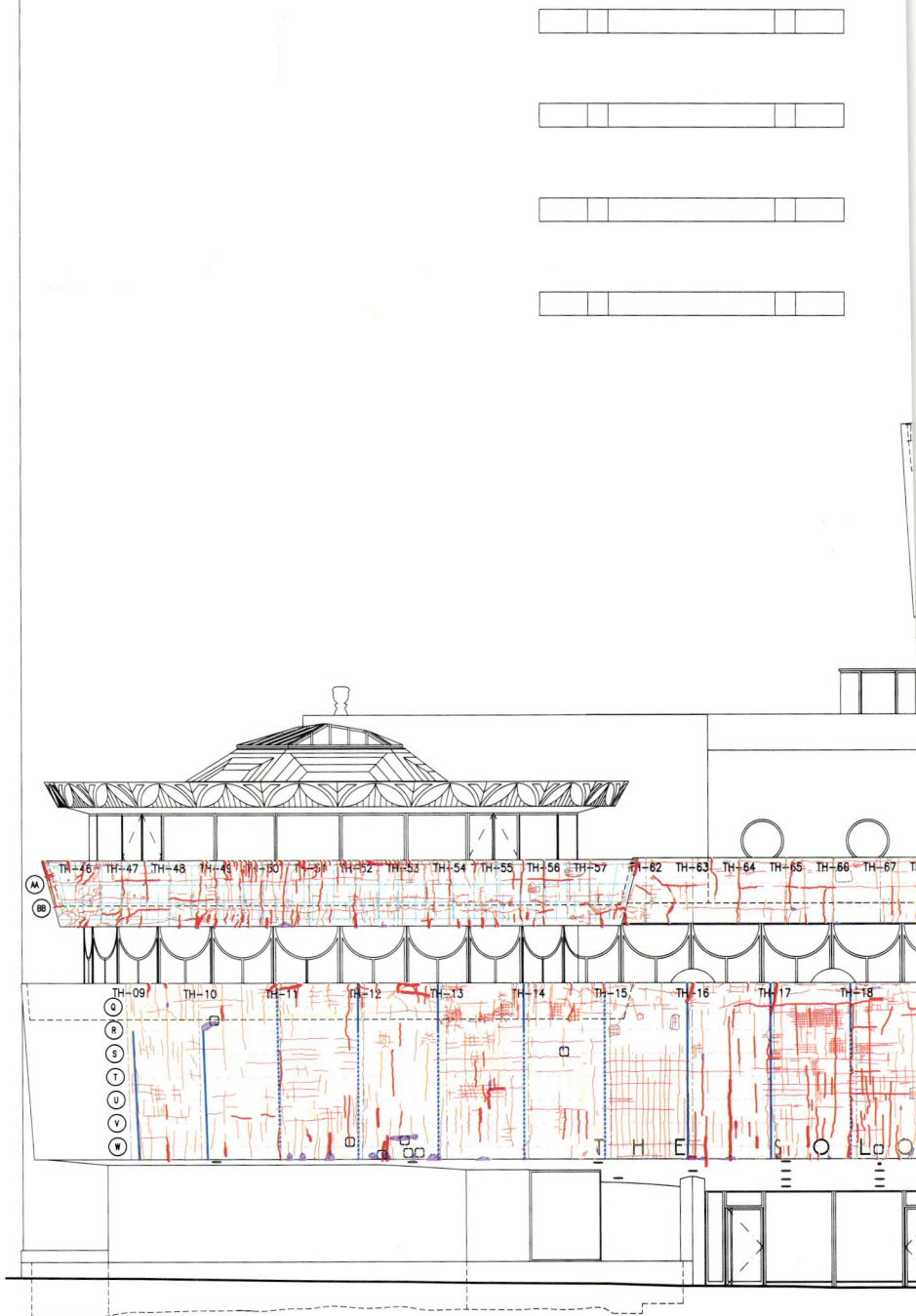
But MWF commercial director Gordon Munro, who instigated legal proceedings after stumbling across pictures of Blubberhouse Hall's new kitchen while leafing through a copy of *Yorkshire Life*, said: 'There was never any attempt to deny it was anything but a copy.'

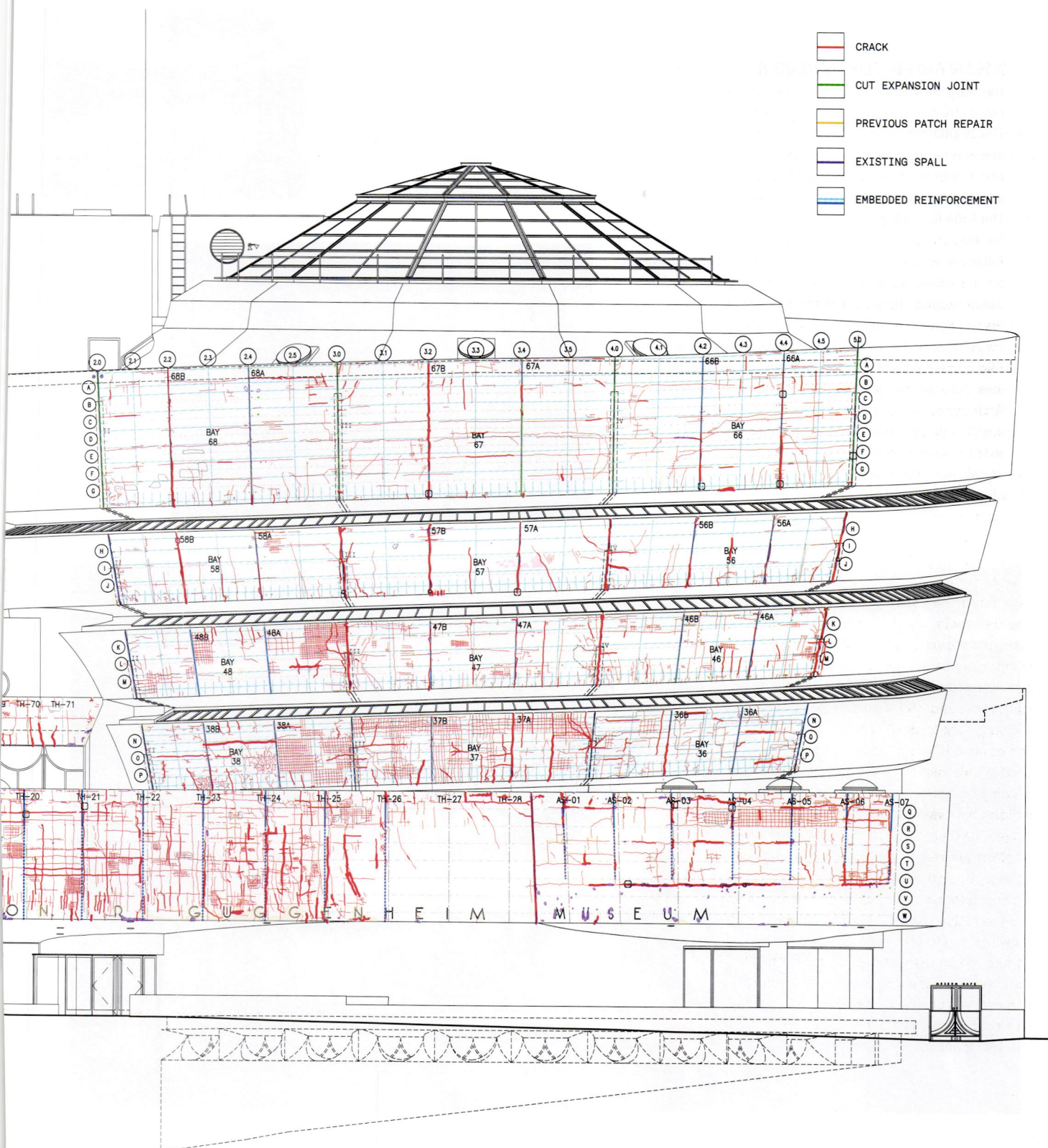
AGENDA

UNDER THE GUGGENHEIM'S SKIN

This startling image reveals the huge number of cracks and fissures currently riddling the Fifth Avenue elevation of Frank Lloyd Wright's 1959 Guggenheim Museum in New York. With the painstaking survey of the building complete, the museum is now entering the next phase of restoration works – patching up the cracks. New York-based architect and preservation specialist Wank Adams Slavin Associates (WASA) was appointed to lead the restoration in 2004. WASA associate Angel Ayon says the first task was to peel back the building's cracked layer of paint to determine if the cracks were mirrored in the building's iconic concrete contours. Ayon says: 'It was the first time since 1959 that the building had been without a coating. We had to take a snapshot of the concrete to see if cracks matched the failure in the paintwork.' On the whole, the two sets of cracks married up, but the problem, says Ayon, 'was that we had a whole bunch of cracks, but not all of them were moving the same way'. Monica Ramirez-Montagut, assistant curator of architecture and design at the Guggenheim, says determining the nature of the movement was the team's biggest headache. 'We used radar, ultrasound, lasers, crack monitors, tilt monitors, rotation monitors and potentiometers... It was the most in-depth survey ever undertaken on a building,' she says. Building work on the Guggenheim began in 1956 and several different types of concrete were used in its construction. WASA is currently treating replicas of samples taken from the building with various filling compounds, and subjecting them to 'accelerated weathering' in an effort to determine which compound to use. Work to repair the cracks will begin this spring, with completion expected in the late autumn. Ayon says that handling Wright's original drawings and letters has confirmed his admiration for the architect, who died in 1959. But, Ayon says, the longevity of the repaired museum will ultimately 'come down to a man, on a scaffold, with a trowel'.

By Max Thompson





A NEW ARENA FOR HERZOG & DE MEURON

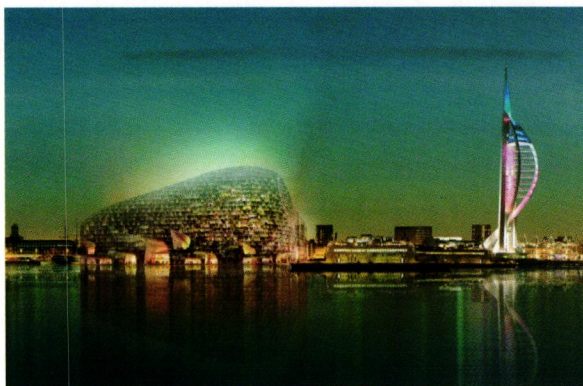
Herzog & de Meuron has unveiled these designs for a new £600 million stadium for Portsmouth Football Club. The 36,000-seat arena is part of the Swiss firm's wider 5ha regeneration scheme in Portsmouth's docklands, and will sit inside an outer ring providing 750 apartments, new public space, restaurants and cafés. The RIBA Gold Medal-winning practice has built a name for itself in stadium design, and is responsible for the Allianz Arena in Munich and the outlandish centrepiece for the 2008 Beijing Olympics. The scheme is backed by Sellar Property Group – the developer behind Renzo Piano's London Bridge Tower – and is located a stone's throw from HGP Architects' Spinnaker Tower. Portsmouth FC's current ground, Fratton Park, will be redeveloped into 750 low-rise apartment blocks designed by Make Architects. Work is set to start on site by summer 2008, and it is thought that the Premiership side will be playing in the new ground by 2011.

By Richard Vaughan

1, 2 & 3. The scheme's outer ring will provide 750 flats, while the inner ring will house Portsmouth FC's new 36,000-seat stadium



3.



2.



1.

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SNOWDON CAFÉ TO BE BUILT AT LAST

Work has finally started on the replacement for the demolished visitor centre at the top of Mount Snowdon, North Wales – more than a decade after the project was first mooted (AJ 04.04.96). Designed by RH Architects, the long-awaited £7 million scheme, on the 1,085m peak in Snowdonia National Park, will house a 200-seat café, shop and toilets. The practice won the competition to design the centre back in 2001 (AJ 08.09.01), under former name Furneaux Stewart, and initially proposed to adapt the rundown 1920s bunker-like café designed by Clough Williams-Ellis. However, the firm now intends to build a new, mainly pre-fabricated steel, glass and granite structure on the tricky windswept site. Working with contractor Carillion, the practice has already carried out a 'dry run' of the construction process, assembling the steel frame in a warehouse in Liverpool. The scheme must be completed by September 2007.

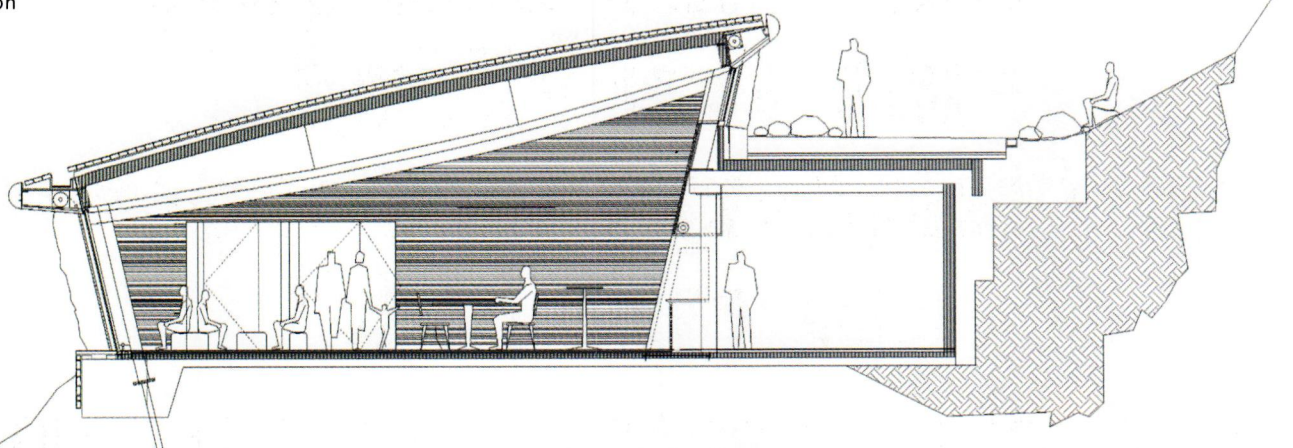
By Richard Waite



1.

1. The long-awaited replacement for Clough Williams-Ellis' bunker-like café on Mount Snowdon will be a pre-fabricated steel, glass and granite visitor centre

2. Section



2.



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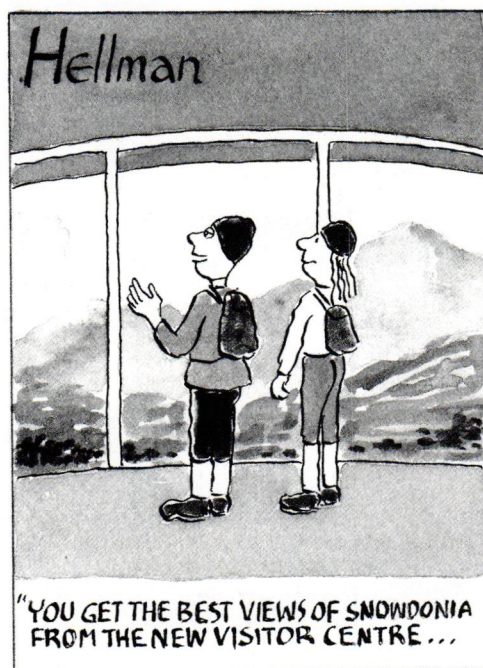
Waldemar Januszczak.
Sunday Times, 22.04.07

'What used to be a symmetry based on a personal relationship is now an asymmetry. It's kind of a couple and a gay guy'

Liz Diller on Diller + Scofidio becoming Diller Scofidio + Renfro. *New York Times*, 22.04.07

'Whatever I play now in my advanced age with my friends cannot be described as Total Football'

Jacques Herzog. *www.kultureflash.net*, 19.04.07



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PLANTING SUSPICIONS

Astragal has a stalker. Actually, more just a stalk. Over the last few months, wherever architecture's favourite *bon viveur* has been stumbling the streets, **Laurie Chetwood's** unmissable Urban Oasis has been spotted too. From the architect-choked streets of Clerkenwell, to the politician-clogged squares of Manchester and the sun-drenched boulevards of Cannes, the sprouting, purple eco-flower thing hasn't been far behind. At least the 12m-high sculpture has had the decency to let Astragal know of its next move – it'll be a 'highlight' at next month's Chelsea Flower Show. Enjoy yourself **Alan Titchmarsh**.

SPELL CHECK

RIBA president-to-be **Sunand Prasad** has proposed a radical

change to the school curriculum. Handing out the prizes at Open House's awards for designs by schoolchildren, he proposed that a fourth 'R' should be added to the original three, and that it should be either 'aRchitecture' or 'enviRonmental design'. Before we accuse him of the architect's curse of dyslexia, let's remember how those original three 'Rs' are spelled – Reading, wRiting and aRithmetic.

DANCING QUEEN

Hell hath no fury like a woman scorned, and it seems recently dumped **Kate Middleton** has worked out a novel way of getting back at former beau **Prince William**. Knowing the Royal Family's antipathy towards architecture, Kate must have touched a few nerves when she was spotted,

according to the gutter press, flirting outrageously with architect **Alex Shirley-Smith** at favoured Royal haunt Mahiki. Shirley-Smith, 30, revealed to the *Mail on Sunday* that he had clocked Middleton, 25, on the dancefloor. He told slaving hacks that Middleton, who 'had fantastic legs' and 'smelled sweet and fresh like spring', indulged in 'some very sexy moves' with him to the **James Brown** classic *Sex Machine*. The pair then continued their clumsy courtship to EMF's seminal *Unbelievable*. But this story isn't just of interest to Fleet Street's finest. The ARB will no doubt be following events keenly. It appears 'architect' Shirley-Smith is, you guessed it, not on the ARB register. If it's a real architect you're after, Kate, Astragal is prepared to work like fury towards that Part 3.

[Between us, ideas become reality.]

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The newly designed Armstrong Ceilings website is the fastest way to take your design from vision to creation. The interface and navigation tools are more user-friendly than ever before. It is a constant source of inspiration, giving you instant access to photo and video case studies with useful presentations. Product information is intelligently organised and searchable in just three clicks, making it much easier to find the best ceiling solutions. Recommendations for the installation and maintenance of suspended ceilings are available as downloadable PDF files. You can locate our partners and download technical documents in an instant. All from the comfort of your own office.

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THE PROFESSION MUST CONSIDER ARB REPLACEMENTS

Expat Peter Arnold (Letters, AJ 12.04.07) seems to share with his American hosts the quaint belief that anything that happened before Abraham Lincoln was assassinated can be disregarded. In fact, the rules in *Vaughn v Taff Valley Railway* (1860), referred to in my earlier letter (AJ 15.03.07), and its sister case, *Ashbury Railway v Riche* (1875), form the foundation of British law on controlling statutory bodies. The relevance is that the ARB's sanctioning use of its logo on letterheads is unlawful.

Although the ARB cannot prevent use of the letters ARB by unregistered persons if they refer to one of many other legitimate meanings, it can sanction registered architects for using the letters as an affix when fraudulently purporting to signify a professional qualification or membership. This is the opposite of what those wishing to avoid use of the term 'chartered architect' or affix 'RIBA' would like.

The real issue for the profession is what to do if the Conservatives honour their pledge to abolish the ARB. Some 9,000 practising architects choose not to belong to the RIBA and thus cannot promote themselves as a 'chartered architect'. This must be due to the subscription. In my view the RIBA should endeavour to halve subscription costs in real terms over the next three years, but this ambitious target would require radical change.

I would like to see a 'design champion' elected as RIBA president for life, to act as a figurehead and spokesman for the profession, removed from organisational politics. The council should be abolished and replaced by a nationally elected board of trustees comprising 12 members, none of whom are staff. All member involvement should be at branch level, with funding dependent on activities such as explaining the profession to schools.

The profession could also lobby for the legislative changes required by the EU's Unfair Commercial Practices Directive – which must come into force no later than 12 December 2007 – to make it an offence to lay claim to professional skills without justifying qualifications. This simple measure would provide effective protection of title, protecting the profession from what it fears most – false claims by surveyors and others.

Maurice McCarthy, Chorleywood, Hertfordshire

SHOWCASE YOUR WORK IN SKETCHBOOK

The AJ is seeking submissions for its Sketchbook page. Submissions may be in any media and should capture a moment in the design process. If you would like your work to feature please email eriko.shimazaki@emap.com or write to the usual AJ address.

METHANE IS A MINOR CULPRIT OF CLIMATE CHANGE

Without wishing to unnecessarily prolong the correspondence arising from Channel 4's *The Great Global Warming Swindle*, Peter Kellow's 'incontrovertible' observation (Letters, AJ 19.04.07) with regard to the impact of methane produced by livestock on global warming requires correction.

Although all greenhouse gases have different strengths and lifetimes, meteorologists from the BBC weather centre have estimated that carbon dioxide and methane contribute approximately 60 per cent and 20 per cent respectively of the 'enhanced greenhouse effect'.

More than half of the latter is attributed to human activity, notably farming – a proportion of which is, of course, produced by livestock. Thus, the reality of methane's impact on global warming is rather different to Kellow's 80 per cent figure. It is still of significance, especially when related to the removal of rainforest to make way for livestock, but the real impact is only in single percentage figures.

Professor Colin Porteous, Glasgow, Scotland

CORRECTION

In AJ 19.04.07 the Sketchbook was drawn by Ken Rorrison after a meeting with the late Laurie Baker. The sketch includes a comment from Baker and was submitted by Rorrison as 'a simple memory of a great man'.

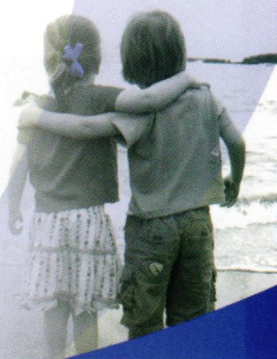
Please address letters to: The Editor, *The Architects' Journal*, 151 Rosebery Avenue, London EC1R 4GB, fax 020 7505 6701, or email angela.newton@emap.com to arrive by 10am on the Monday before publication. *The Architects' Journal* reserves the right to edit letters.

WORKING TOWARDS A BETTER FUTURE



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LET'S FACE IT...

BARBADOS IS BOWLED OVER!

EDM Spanwall Facades new Rainscreen Cladding System installed on the feature stand for the Cricket World Cup at the Kensington Oval, Barbados.

Image © Arup Associates



The Arup Associates design concept brought together Spanwall's design and manufacturing teams to design a Rainscreen system for the many unique design challenges required with this project.

Spanwall's in-house 3D CAD and free-form surface modelling software enabled both the design and manufacture of the complex spherical segment corners and also the curved conical geometry of the East & West elevation.

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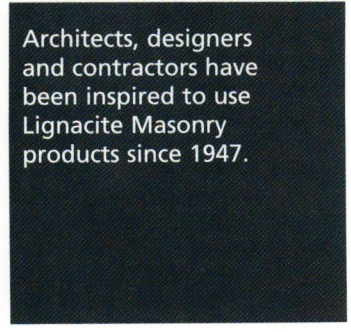
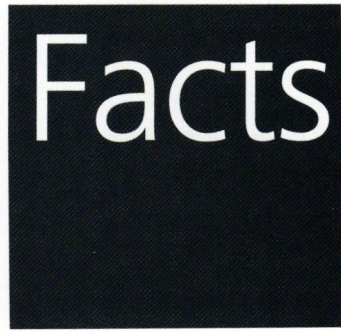
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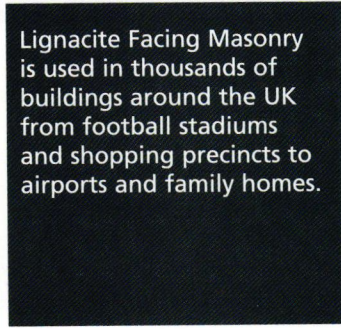
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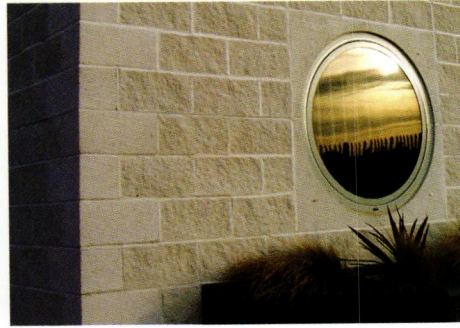
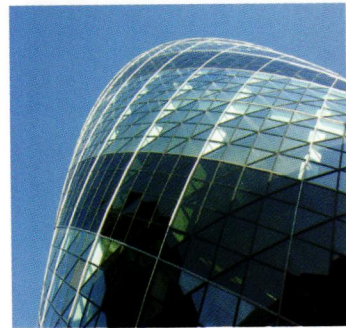




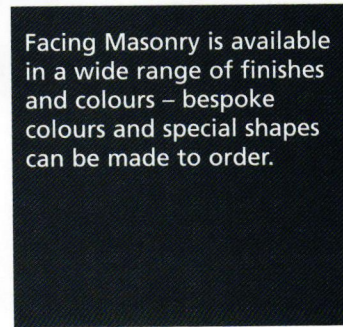
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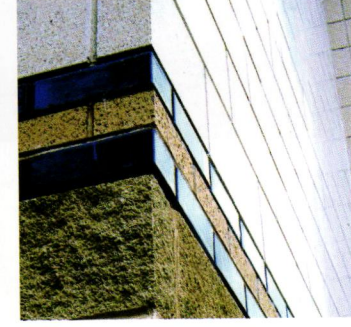
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Facing Masonry is available in a wide range of finishes and colours – bespoke colours and special shapes can be made to order.



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Facing Masonry and Commodity Ranges from Lignacite

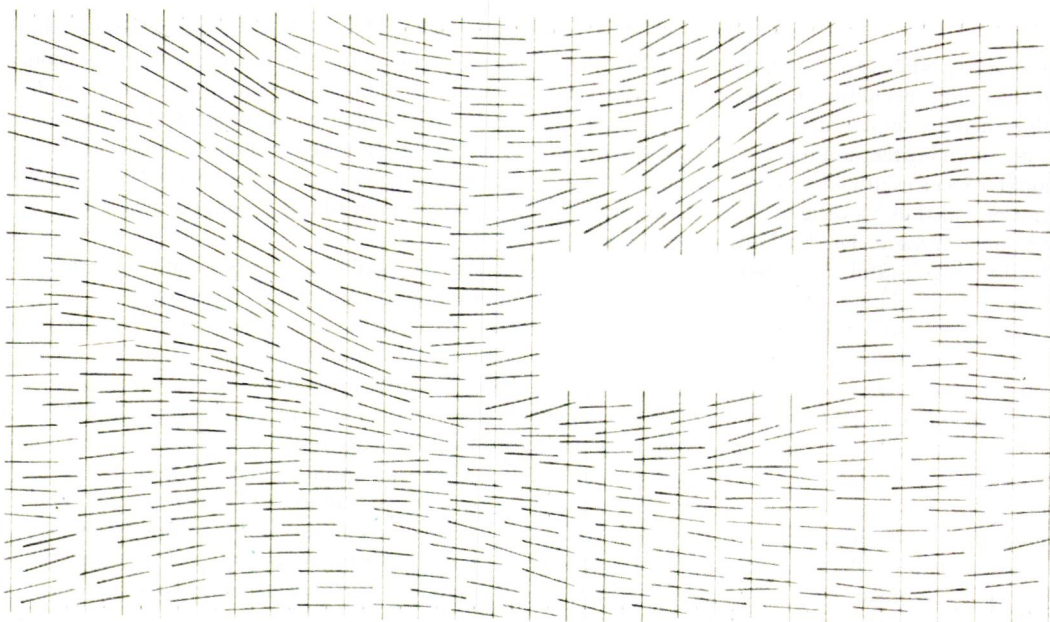
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PENOYRE & PRASAD/ MOORFIELDS



1. Drawing showing arrangement of louvres on the south facade

THE COLOURS ARE CHEERY BUT THE MATERIALS ARE HARD

By Alan Dunlop. Photography by Lyndon Douglas

Penoyre & Prasad was set up in 1988 by Greg Penoyre and Sunand Prasad. Since then the practice has had a strong involvement in culture, education and healthcare projects. Sunand Prasad is currently RIBA president-elect and will take up his post in September 2007 when current president Jack Pringle steps down.

There are many reasons to be grateful for the NHS. My youngest child has a neurological condition that requires specialist eye care. My experience of NHS hospitals is that they are soulless and depressing. Outpatients' departments are often barren and run-down. The clinical treatment my daughter receives in Glasgow is, however, exemplary and similar to that provided at Moorfields, which now has a new building by Penoyre & Prasad. The Richard Desmond Children's Eye Centre (RDCEC) is colourful, lively and filled with light. It is leagues above other NHS buildings I know.

Creating supportive environments for children with sight problems is a challenge we have met in our practice (gm + ad). Our Hazelwood School project in Glasgow, for children with dual sensory impairment, is almost complete, following an 18-month period of design development and consultation and a two-year build programme. In this respect, it is similar to the briefing and construction period for Moorfields.

We discovered how important it is to make the route through the school clear and the spaces well defined. We also came to recognise that colour and contrast could be a means by which partially sighted children could orient themselves – they provide a

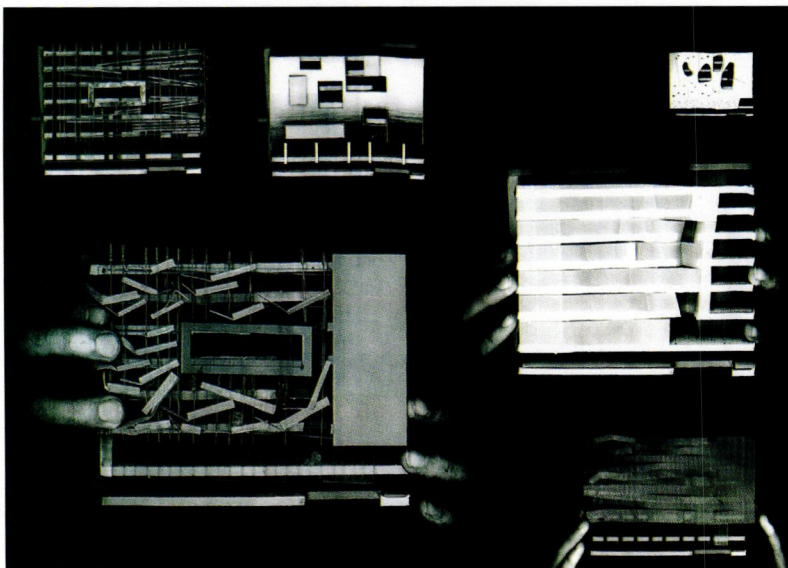
visual cue. Our design process required only a light touch, and the architecture grew from understanding the needs of the children and their carers. The form was dictated by the control of light coming into the building and the site and not from any wish to impose an architectural style straight off.

Hazelwood is for the education of children who are blind or have severe sight impairment. It sits in its own parkland setting, separate from surrounding buildings, so identity was not an issue. In contrast, the children who will attend Penoyre & Prasad's Children's Eye Centre have sight problems but are not blind. The architect has designed an extension to a complex hospital building sited in a dense urban location in Islington, and has given it a distinct character.

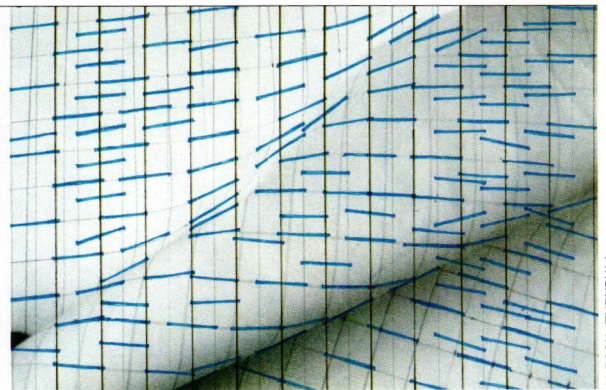
Moorfields Eye Hospital is an imposing late-Victorian hospital with an international reputation. It cares for over a quarter of a million patients each year and attends to over 180,000 outpatients. Some 10 per cent of outpatients are 16 or younger and there are 1,300 NHS paediatric admissions a year. The hospital is the largest paediatric ophthalmic unit in London and has grown organically over the last 110 years. Inside, it is a warren, and nigh on impossible to find your way around. Glimpses inside the wards indicate an environment which is functional in the extreme. The NHS Foundation Trust recognised that although Moorfields was internationally respected for treatment and research, the hospital itself was unwelcoming and impersonal, particularly for children and their families.



2. The southern elevation has a balcony and window which define the outpatient-clinic waiting area

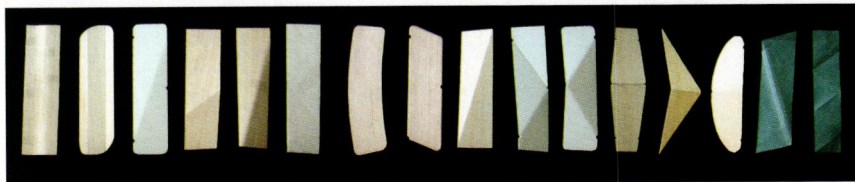


3.



ALISON TURNBULL

4.



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In 2002, the trust approved the creation of the RDCEC to provide a separate accident and emergency paediatric unit, primary-care clinic, and short-stay accommodation for day-surgery patients. It was important that the building had a dedicated recovery area next to the operating theatres in the main hospital, and space for research teams. The new building was to connect to the main hospital but be distinct. Penoyre & Prasad responded to an OJEU notice and was appointed in 2003.

From the outside, the RDCEC has a surprisingly corporate feel. The south elevation is ordered by slick glass curtain walling which covers almost the whole front. The curtain walling is visible underneath a veil of sculpted aluminium louvres, representing the flight of a flock of birds, which acts as a brise soleil. The glass elevation and sculpture are abruptly punctured by a balcony and bay window in red, which defines the waiting area of the outpatient clinic on the third and fourth floors. The balcony also acts as a marker for the extension, making it visible from the junction of Peerless Street and City Road.

The colour may be cheery, but the materials chosen to express the balcony are hard, and similar to those found in speculative office developments. As are the granite panels that form the gable wall that visually separates the extension from the adjoining hospital. The panels chosen are dull, but for the splashes of primary colour in the form of circular windows that extend in a random pattern like bubbles. Unfortunately, they look like an afterthought.

Internally, despite a more subtle use of colour, the architect has been spartan in its treatment and there is little softness in the surfaces, particularly the polished-concrete columns and the plate-glass balustrades. There is lots of natural light in the public spaces but the overall effect is still clinical – but then cleanliness is a real issue.

The glass wall of the facade is directly south-facing and fronts onto an open, tree-lined park, which is the courtyard of an adjoining social housing scheme. This provides a pleasant aspect and good views for those inside the RDCEC. Nevertheless, the sun is obviously a problem, and even on a dull spring day many of the cellular treatment rooms and offices behind the brise soleil had their blinds fully closed.

The waiting rooms on the third and fourth floors are welcoming. The children inside didn't seem troubled by the strong shadows and were running around happily. At street level, the reception is defined by a continuous glass screen which brightens up the arrival point, and the use of colour makes for a cheerful space inside. Within the very pleasant reception area, there is a shop and an optician and, once a contract is set up with a service provider, it will have a café with chairs and tables running along the frontage.

The circulation appears awkward and the accommodation seems rather strangely positioned throughout. To be fair, this came about after extensive consultation with user groups and is a necessary response to the request to have direct



6.

7.

3. Facade-development models

4. Louvre-layout development sketch by Alison Turnbull

5. Development of louvre forms

6 & 7. Night lighting design was by Light Projects Group

connections through to the existing hospital at specific levels. So, for example, the pre-operation area is housed on the ground floor behind the reception. When ready, the children move up an internal stair or lift to the first floor and the day surgery units. The location of the day-surgery units next to the existing operating theatres was, it seems, fundamental. Also, you might expect the outpatients' clinical accommodation and waiting room to be behind the reception, but instead it is on the third and fourth floors.

Penoyre & Prasad tried to mitigate the difficult circulation by planning an open sequence of doors leading from reception to waiting rooms and the outpatients' accommodation above, but security measures imposed by the hospital make that transition difficult.

The building has six storeys above the ground floor. Research departments are contained on the second floor and the short-stay hostel accommodation is on the fifth. The sixth floor has the plant rooms, which is a pity as there are great views from the top. Patients' records and offices are housed in the basement and light reaches there from a continuous 1,200mm slit in the pavement along the front of the glass reception screen. Again, that seems an opportunity lost, for it limits the potential of the café area and entrance to open up more directly to the street.

The Moorfields Eye Hospital is on the edge of a conservation area and seemingly local planners could accept the six storeys of accommodation for the new children's eye centre only if the top floor could be classified as plant room, was set back

after five storeys, and was not defined as usable space. This is patently absurd, given the poor design quality of adjoining hospital buildings and the 20-storey housing blocks sited immediately across the road.

After it won the commission, Penoyre & Prasad developed the project with clinicians and key user groups until the internal and external form was agreed and signed off and the Stage 2 design report produced. The extension was then tendered using the Procurement 21 process. Balfour Beatty won the contract and was appointed as principal supply chain partner. Penoyre & Prasad was then novated as its architect. Given that the user group/architect connection was reduced, the building has retained a high standard throughout.

I was impressed by the quality of finish and the depth of thought applied by the architect. The NHS Foundation Trust and Penoyre & Prasad should be pleased with the outcome. I hope it sets a design level for future NHS buildings, and it may well become an exemplar project.

As I left, I wondered what would have happened if the architect had been less polite and not so obviously 'architectural'. If it had questioned the brief and pushed the clinicians and the planners more. RDCEC is not cutting-edge architecture – but then I suppose it doesn't need to be.



8.



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8. Approached along Peerless Street, the building has a distinct presence in the urban mix

9. An open tree-lined park provides a pleasant view – when it is not necessary to close the blinds



10.



11.

- 10 & 11. Third-floor reception
 12. Main entrance space
 13. The first-floor has day-surgery facilities
 14 & 15. Fourth-floor reception and waiting areas



12.



13.



14.

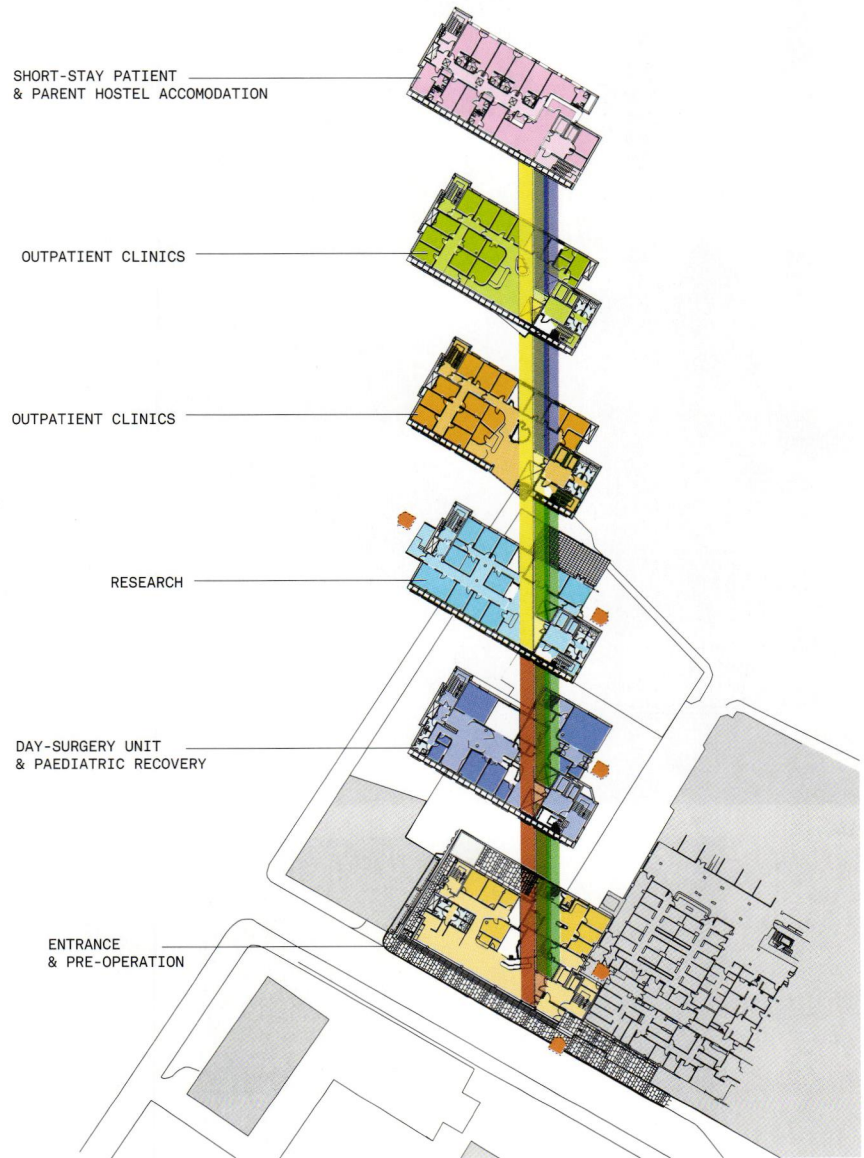


15.

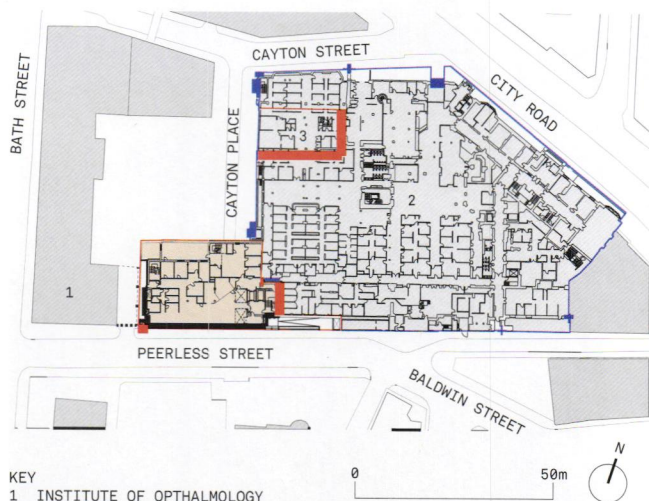
STRUCTURE

At the early stages of the project, various forms of steel framing and precast construction were discarded in favour of a reinforced-concrete frame using flat-slab construction. This provided flexibility in responding to irregular apertures, projecting features, the shape of the site and the interface with existing buildings. It gave a flat soffit to the floor slabs which could be expressed in combination with a regular grid of exposed circular reinforced-concrete columns. For the basement construction, we used a driven sheet pile solution with reinforced-concrete raft foundation and lining walls. The basement is protected from water ingress by a drained cavity system. The adjacent hospital building contained a series of functioning operating theatres in close proximity to the site. The demolition of the existing buildings had to be done within very tight time constraints defined by the use of these operating theatres. In addition, the new building could not take support from the existing building. This resulted in some complicated cantilevered foundations with mini-piling designed to clear the foundations of the existing building. The roof was constructed with a lightweight steel frame with metal deck above the sixth-floor plantroom. Following the relocation there of the water tank, the sixth-floor concrete flat slab had to bear a much heavier load than anticipated. This was resolved by altering our analysis parameters for the existing reinforcement bars. Similar structural reconsiderations were prompted when the east facade panels' pre-agreed opening positions were altered significantly. Complicated structural problems did arise – particularly with the structures between the new and existing hospital – but these were minimised by having a fully coordinated design team and by having access to detailed structural information on the Institute of Ophthalmology Building. This proved invaluable while we developed the design of the steel link bridge between the two buildings.

Phil Hudson, Price & Myers

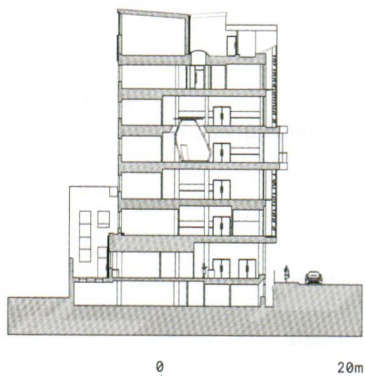


16. Axonometric showing colour-coding of floors

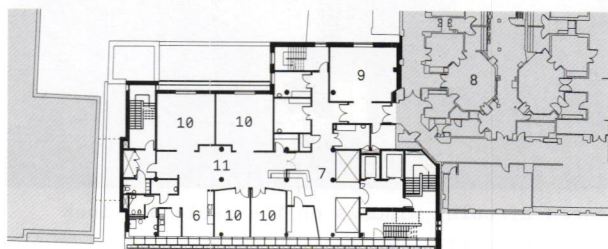


- KEY
- 1 INSTITUTE OF OPHTHALMOLOGY
 - 2 MOORFIELDS EYE HOSPITAL
 - 3 CENTRAL STERILE SERVICES DEPT

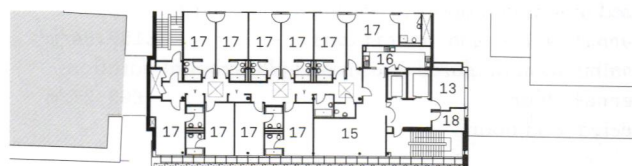
Site plan



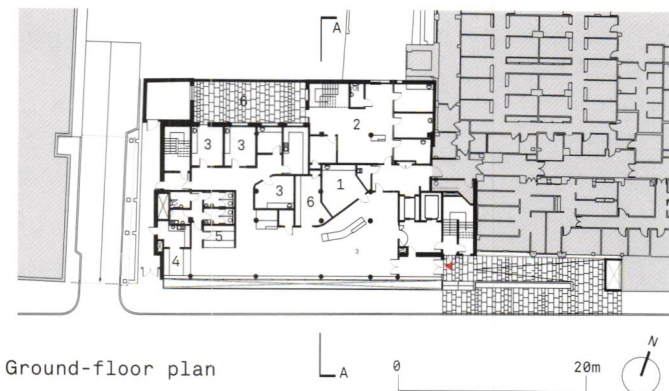
Section



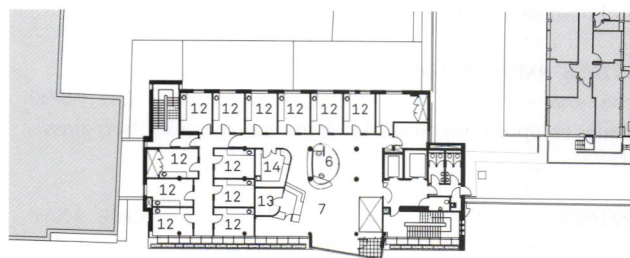
First-floor plan



Fifth-floor plan



Ground-floor plan



Third-floor plan

- KEY
- 1 OPTICIANS
 - 2 DAYCARE RECEPTION LOUNGE
 - 3 PRIVATE PATIENT CLINIC
 - 4 CAFÉ
 - 5 SHOP
 - 6 PLAY
 - 7 RECEPTION
 - 8 OPERATING THEATRES
 - 9 FIRST-STAGE RECOVERY
 - 10 SECOND-STAGE RECOVERY
 - 11 PARENT LOUNGE
 - 12 CONSULTING/CLINIC
 - 13 OFFICE/MEETING
 - 14 PHARMACY
 - 15 LOUNGE
 - 16 KITCHEN
 - 17 BEDROOMS WITH EN SUITE
 - 18 QUIET ROOM

Costs

SUBSTRUCTURE

Foundations/slabs	£268.80/m ²
Includes demolition of existing building, and basement with piled foundations	

SUPERSTRUCTURE

Frame	£88.81/m ²
In-situ reinforced concrete columns	
Upper floors	£95.74/m ²
In-situ reinforced concrete flat slab	
Roof	£30.15/m ²
Waterproofing to flat slab	
Staircases	£74.59/m ²
Precast-concrete staircase with aluminium balustrading	
External walls	£304.22/m ²
Glazed curtain walling with customised sunscreen to main elevation, with the remainder finished with a mixture of faced brick walls and Sto render	
External doors	£6.89/m ²
Glazed aluminium doors to entrance and external areas	
Internal walls and partitions	£155.84/m ²
A combination of glazed screens and plasterboard partitions	
Internal doors	£92.27/m ²
Veneered solid doors	

INTERNAL FINISHES

Wall finishes	£29.21/m ²
Painted surfaces generally with tiles to wet areas	
Floor finishes	£74.87/m ²
Wooden floors to the main entrance areas with rubber-tiled floors to the remaining	
Ceiling finishes	£37.27/m ²
Metal acoustic ceiling tiles and paint	

FITTINGS AND FURNISHINGS

Furniture	£82.75/m ²
Includes reception furniture, kitchens and specialist fibreglass pod	

SERVICES	£886.92/m ²
----------	------------------------

EXTERNAL WORKS

Landscaping, ancillary buildings	£45.27/m ²
Includes for hard landscaping only	

PRELIMINARIES AND INSURANCES

Preliminaries, overheads and profit	£814.70/m ²
-------------------------------------	------------------------



17. Coloured circular windows on the gable end look like an afterthought

Cost summary

	Cost per m ² (£)	Percentage of total
SUBSTRUCTURE	268.80	8.70
SUPERSTRUCTURE		
Frame	88.81	2.88
Upper floors	95.74	3.10
Roof	30.15	0.98
Staircases	74.59	2.42
External walls	304.22	9.85
External doors	6.89	0.22
Internal walls and partitions	155.84	5.05
Internal doors	92.27	2.99
GROUP ELEMENT TOTAL	848.51	27.48
INTERNAL FINISHES		
Wall finishes	29.21	0.95
Floor finishes	74.87	2.42
Ceiling finishes	37.27	1.21
GROUP ELEMENT TOTAL	141.35	4.58
FITTINGS AND FURNITURE	82.75	2.68
SERVICES	886.92	28.72
EXTERNAL WORKS	45.27	1.47
PRELIMINARIES AND INSURANCE	814.70	26.38
TOTAL	3,088.30	100

Credits

Tender date

ProCure 21 Partner appointed April 2004;
GMP agreed September 2004

Start on site date

Enabling works including demolition Oct 2004;
construction February 2005

Contract duration

26 months

Gross internal floor area

3,850m²

Form of contract

Contract – NEC;
procurement – NHS ProCure 21

Total cost

£11.9 million

Client

Moorfields Eye Hospital Foundation Trust

Architect

Penoyre & Prasad: Neil Allfrey, John Ceclich, Adam Cole,
Tanja Eichenauer, Wayne Head, Steven van der Heijden,
Gillian Horn, Mark Lemanski, Ian Oppenheim, Stephanie
Schultze-Westrum, Leonard Sequeira

Structural engineer

Price & Myers

Quantity surveyor

Turner and Townsend Cost Management

Planning supervisor

Currie & Brown

Project manager

Hunter and Partners

Main contractor

Balfour Beatty Construction

Services consultant

Arup

Acoustic consultant

Arup Acoustics

Fire engineer

FEDRA

Health strategist

SECTA

Artist

ArtOffice

Building inspector

Approved Inspector Services

Selected subcontractors and suppliers

Facades (rainscreen) James & Taylor; *facades (curtain walling)*

Pluswall Facades; *facades (windows)* Schüco; *facades (louvres)*

Pluswall Facades; *M&E* Balfour Kilpatrick; *internal partitions*

Astins, Knauf, Armstrong; *metalwork* Delta Fabrications; *flooring*

Loughton Contracts, Junckers, Forbo Nairn; *fixtures and fittings*

ESA Healthcare; *lifts* Kone; *play-pod* Diespeker (GRP); *joinery*

JMS Specialist Joinery; *roof* Mars Construction; *RC frame* AJ

Morrisroe; *glazed screens* Fire Zone; *signage* MG Signs; *joinery /*

doors Raphael Contracting; *render* Sto

see clearly...

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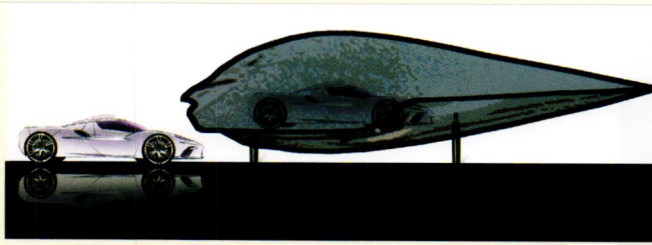
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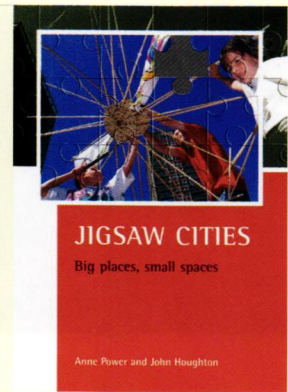


1.



2.

1. Reclaimed building materials (News)
2. Greg Bowler's winning car-marketing design for Stubbs Rich Architects (News)
3. Problems and solutions in modern cities (Books)



3.

TECHNICAL NEWS

• Environmental charity BioRegional has launched a new website for reclaimed materials which provides advice, case studies and sourcing information with a focus on high-volume materials such as bricks and steel. BioRegional Reclaimed offers consultancy and has access to funding through Defra's Business Reuse Fund. www.bioregional-reclaimed.com

• Bath practice Stubbs Rich Architects turned its long association with the car industry (BMW and Audi showrooms) into an office-wide competition when client Arash Sports Cars asked for an innovative marketing device for its latest car. The UFO-like winning design by year-out student Greg Bowler is a streamlined metallic shell, resembling a 'winged oyster', whose fluid form echoes the car's design.

TECHNICAL EVENTS

Designing in Timber
26 April, 1:30-5:00pm
 Repertory Theatre, Birmingham
riba.westmidlands@inst.riba.org

Hemp and Lime Conference
28 April 9:00am-5:45pm
 Centre for Alternative Technology, Wales
www.cat.org.uk/courses

RIBA Trust Annual Lecture
1 May, 2:00-5:00pm
 Herbert Girardet, One Planet Living
www.architecture.com

Health and Safety Update
1 May, 2:00-5:00pm
 Exeter Racecourse, Exeter
mail@ribawessex.com

Part L Building Regulations
2 May, half day
 Manchester
www.greenregister.org

Innovative Construction Techniques and Materials
3 May, 6:30-9:30pm
 Westbourne Studios
 242 Acklan Rd, London W10
riba.london@inst.riba.org

CDM Regulations
3 May 2:00-4:00pm
 Bradfield College,
 Bradfield, Berkshire
amanda.hockley@inst.riba.org

The Repair of Old Buildings
14-19 May
 SPAB, 27 Spital Square, London E1
www.spab.org.uk

21st-Century Timber Windows
16 May 2007, 10:00am-4:00pm
 LSO St.Luke's, London
www.bwf.org.uk/events

Offsite 2007
11-14 June
 BRE, Watford
 This celebration of everything off-site will include exemplar buildings, currently under construction, plus a conference programme and exhibition.
www.offsite2007.com

BOOKS

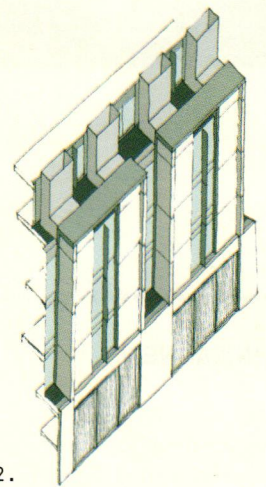
Jigsaw Cities: Big Places, Small Spaces
 Anne Power and John Houghton
 The Policy Press, 2007, £23.99
 With a focus on Birmingham but still encompassing a broader view of British cities, the authors look both backwards and forwards to explain the reasons for today's acute urban problems and suggest a way forward based on local solutions for local problems. Difficult but important reading for architects working in the inner city.



1.

EVEN WITHOUT RENEWABLES IT IS STILL SUSTAINABLE

By Hattie Hartman



2.

Bennetts Associates is relying on designed-in sustainability, rather than renewables, for its refurbishment of Ashburton Court in Winchester.

Britain's cities are strewn with soulless 1960s office blocks perched atop podiums of car parking and divorced from the surrounding streetscape. Ashburton Court, one such ensemble which forms part of Hampshire County Council's (HCC) central campus in Winchester's historic city centre, is undergoing a radical makeover by Bennetts Associates, setting a precedent for how this building type can be updated. Early feasibility studies examined a new-build option on another site and concluded that refurbishment of the existing buildings – a monolithic horizontal block and a second L-shaped block connected by upper-level bridges with car parking in the interior courtyard of the site – would be less expensive and preferable due to proximity to other HCC departments.

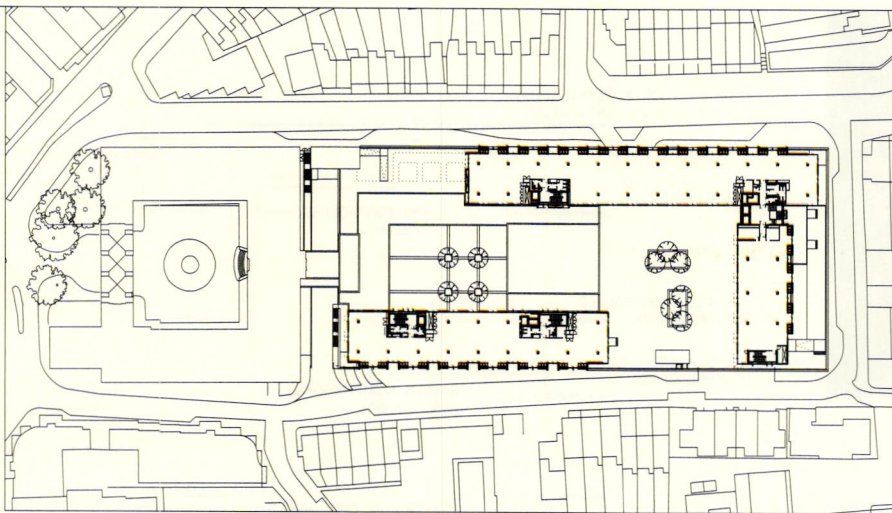
The public face of the building was critical because the brief, says Bennetts' Peter Fisher, 'was essentially for a town hall without a debating chamber'. A key challenge was balancing the desire for transparency with the need for security. To free up the site, Bennetts proposed moving part of the parking outside the city centre and infilling the released space with office accommodation. The top floor of the buildings will be cut back, pedestrian bridges removed, and new one-storey buildings built at the centre of the block along a new internal street to house a reception area, a restaurant and café, an auditorium and meeting rooms. The buildings are being stripped back to their concrete frame; services

and cladding are being renewed. Analysis of the building's concrete frame, slabs and foundations using Envest, the BRE's Whole Lifecycle Environmental Impact Analysis software, showed that they comprise about half of the building's embodied energy – another compelling argument for refurbishment.

Both client and architect saw sustainability as integral to the project from the outset. Bennetts director Julian Lipscombe explains that planning permission was relatively straightforward because there was a unanimous feeling that anything done to the building would be an improvement. Interestingly, renewables were a major discussion point with the planners, who were keen to understand how a building could be sustainable without renewables. Winchester has not adopted a mandatory 10 per cent, but rather a suggestion of renewables. After extensive analysis, Bennetts was able to demonstrate that the real issue was overall energy consumption, not the percentage of on-site generation.

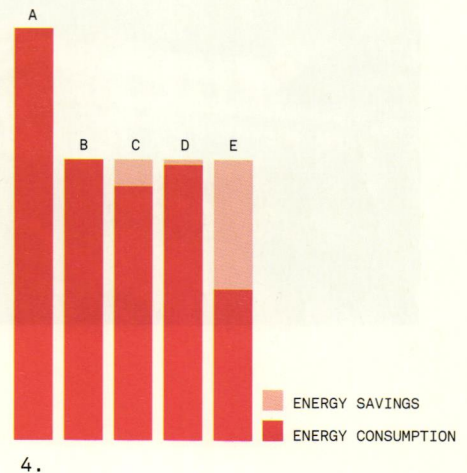
Ashburton Court, a 90m-long horizontal linear building, is oriented east-west – the worst possible solar orientation for controlling heat gains – and acoustic studies by Arup Acoustics determined that noise levels in the streets on three sides of the building were such that having operable windows for natural ventilation was impractical. Restrictive ceiling heights limited the feasibility of horizontal runs of new services.

The architect, with the input of services engineer Ernest Griffiths, maintained that natural ventilation, which would take advantage of the thermal mass of the concrete slab, could be



3.

1. View of Ashburton Court, prior to refurbishment
2. New street elevation
3. Site plan
4. Approximate energy consumption in $\text{kgCO}_2/\text{m}^2/\text{year}$ for various servicing options at Ashburton Court



4.

- A EXISTING BUILDING PRIOR TO REFURBISHMENT
- B REFURBISHED BUILDING WITH STANDARD MECHANICAL VENTILATION
- C REFURBISHED BUILDING WITH MECHANICAL VENTILATION AND 10 PER CENT RENEWABLES (NOT FEASIBLE DUE TO SITE CONSTRAINTS)
- D REFURBISHED BUILDING WITH MECHANICAL VENTILATION AND 2 PER CENT RENEWABLES (FEASIBLE)
- E REFURBISHED BUILDING WITH NATURAL VENTILATION

achieved without relying on windows on the street facades. Clean air is drawn from internal courtyards across the office floor-plates and up ventilation ducts on the building exterior. While the ventilation strategy looks like stack-effect, it is in fact a form of cross-ventilation driven by wind troughs at roof level. Fisher explains that wind-driven cross-ventilation is more reliable in office buildings because it relies on wind movement rather than, as stack does, on temperature differences, which during summer days can be very small. Wind blowing over the building generates negative pressure inside open-topped 'wind-troughs' irrespective of wind direction. The fine-tuning was determined by iterative thermal and daylighting computer modelling and physical wind-tunnel modelling, which confirmed the pressure differentials between each duct and corresponding courtyard facades for wind directions on 16 compass points. These were fed back into the thermal model, using weather data, to predict hourly annual temperature profiles.

New vertical elements on the street elevations were consistent with the intention to break up the buildings' massive horizontal facades, and took the form of 1.5m-deep brick-clad projections which also provide solar shading to the adjacent windows, so that the building will be partially 'self-shading'. Another challenge in the design of the new facades was to maintain a glazing ratio below the maximum desirable 40 per cent. Functions that require mechanical ventilation were located in the liberated podium level. In winter, excess heat is recovered and circulated to the offices through an air plenum.

Bennetts' analysis showed that wind turbines would have cost an extra £400,000 in order to save approximately $2\text{kgCO}_2/\text{m}^2/\text{year}$, while the use of natural rather than mechanical ventilation reduces CO_2 consumption from around 55 to $30\text{kgCO}_2/\text{m}^2/\text{year}$. When HCC planners saw the magnitude of the CO_2 reductions, they were convinced despite the fact that the project now includes no glamorous renewables.

Fisher acknowledges that it was a 'mammoth challenge' to unravel the complexities of this building and to define a 'clear sensible strategy' for its renewal. The solution is elegant and simple and not particularly high-tech, though it would have been impossible without the computer simulation and wind studies available today. Fisher is gratified that the architecture – rather than mechanical systems – is 'doing the work': the new vertical ducts provide natural ventilation, give a rhythm to the facade and contribute to solar shading. Wind, through innovative cross-ventilation, is used in its raw state, rather than being converted to another type of energy. 'It's more primal', Fisher observes.

Ashburton Court is being stripped out and the first phase will complete in winter 2007. The impact of the transformation will then be assessed to see if this is a way forward. It is heartening to learn that evaluation of comfort and energy consumption in this landmark project, too rare in these days of preoccupation with all things green, will be undertaken by the Carbon Trust.

See overleaf for more diagrams.



5.

FOURTH-FLOOR ACCOMMODATION:
NATURAL CROSS-VENTILATION

BMS-CONTROLLED
TOP LIGHTS

MANUALLY CONTROLLED
BOTTOM LIGHTS

ALL GLAZING SOLAR-
CONTROL GLASS

WIND

BMS CONTROLLED
DAMPER

NEGATIVE PRESSURE
DEVELOPED IN 'CHIMNEY'
DRIVES NATURAL
VENTILATION

OFFICE AIR DRAWN
INTO RISER DUCTS
(ONE DUCT PER
FLOOR)

WAFFLE SLAB ABSORBS
HEAT BY DAY

WINDOWS TO BE
MANUALLY OPENABLE

ROAD SIDE (NOISY)

GRILLES IN DUCT WALLS

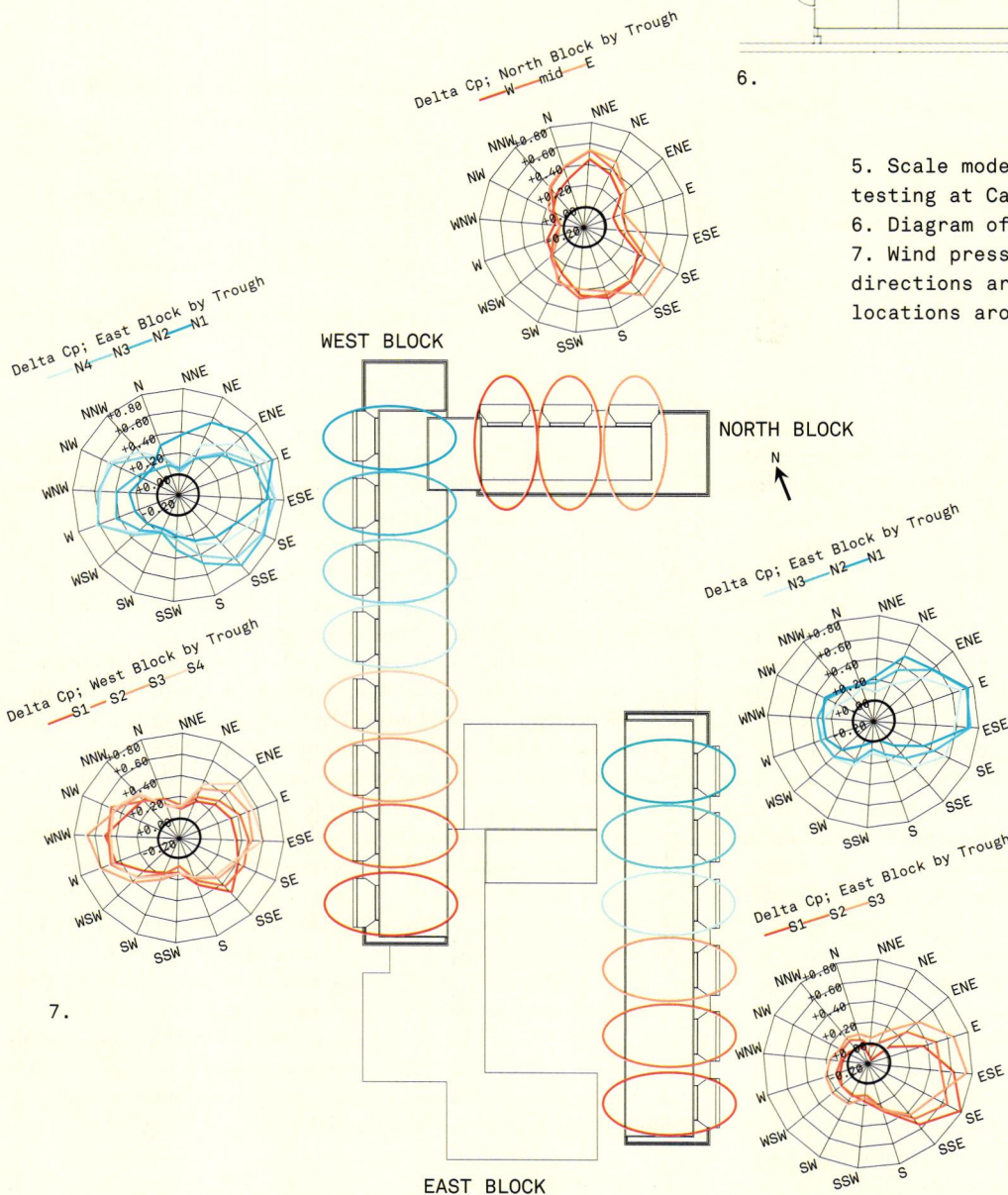
DUCTS SERVE TO
SHADE GLAZING

6.

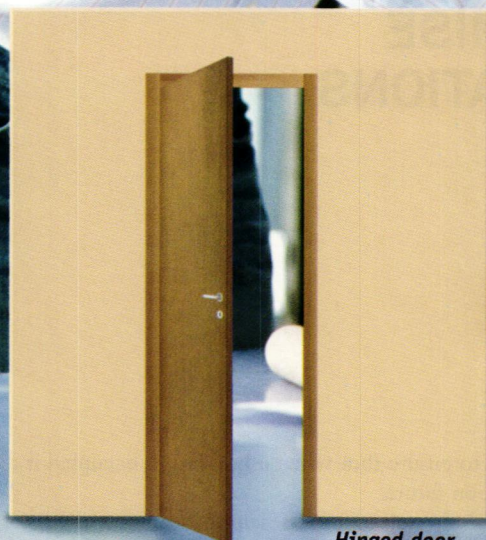
5. Scale model (1:200) used for wind-tunnel testing at Cardiff University

6. Diagram of ventilation strategy

7. Wind pressure was measured for 16 wind directions around the compass at different locations around the building



7.



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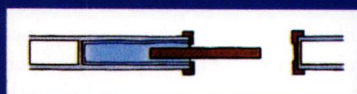
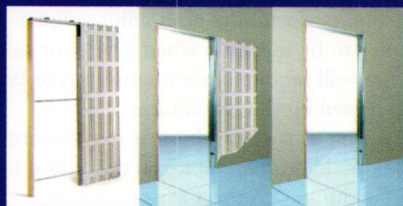
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USERS DO NOT ALWAYS MAXIMISE DESIGN ASPIRATIONS

By Mike Beaven

New research, to be presented at the BCO conference in New York on 2 May, shows that it is often not a lack of innovation which stands in the way of reduced carbon emissions in office buildings, but a lack of occupier feedback and little involvement from the architect after occupation.

New research by the British Council for Offices (BCO) with Arup shows that the biggest obstacle in reducing carbon emissions in office buildings is the process by which these buildings are briefed, designed and operated, rather than lack of 'technical' innovation. The research focuses on how to gain detailed feedback from occupiers that can be incorporated into the briefing and design stages of building in order to create buildings that are intrinsically frugal in their energy consumption. The BCO's environmental sustainability group and technical affairs committee will release these findings at the BCO annual conference on 2-4 May in New York, in an interim report entitled 'Towards a Zero-Carbon Office'.

Research by one of the UK's largest office providers, Land Securities, showed that energy use in its buildings could be cut by as much as 40 per cent simply by working with sustainability teams and occupiers to manage consumption more effectively. There is often a gap between the design aspirations of buildings and the ability of occupiers to maximise a building's capability to reduce carbon emissions. This may be because a designer's involvement with a building usually ends on completion and does not extend to occupation. 'Towards a Zero-Carbon Office' is about strengthening links in the process of briefing, designing and

building to ensure that when a building is occupied it delivers a low-carbon future.

Although architects help to formulate the brief for a building it is rare for an architect to be involved in the handover to an occupier and the use of the building, despite the important part that they could play in bringing the building to its full potential.

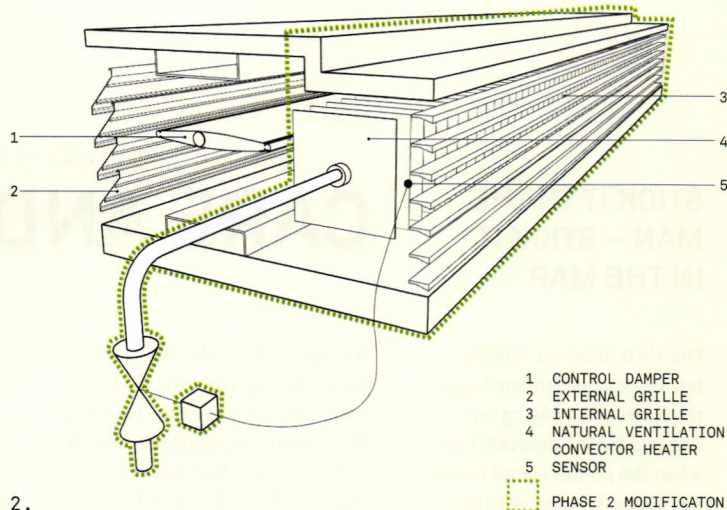
The BCO is looking at how to generate better 'post-occupancy evaluation and feedback', perhaps building on the PROBE research that building-services engineers have been using for some time. Many well-meaning design ideas are greeted enthusiastically, but an idea used ineffectively can be worse than nothing at all. This is one of the weakest links in the chain.

It is imperative that the industry tackles this problem, particularly since implementation of the new European Directive on the Energy Performance of Buildings is due within the next two months. Some property companies are already commissioning assessments of their buildings on the basis of the directive's requirements. The directive is designed to establish comparative grades for use in the market to discriminate between buildings on the basis of their environmental performance, and will require a building's energy performance to be specified when it is let or sold. The top band of performance will require carbon emissions to be 60 per cent below those permitted by the regulations.

The EU directive is seen as perhaps the first step towards establishing a basis on which buildings can be taxed according to their energy performance – a chilling prospect for developers,



1.



2.

1. Arup campus, Solihull, by Arup Associates
2. Heater retrofitted at the Arup campus to warm cool air from outside air inlet after occupant feedback

investors and designers. The architect's role in meeting this challenge has never been more important and cannot be delegated to the environmental engineer because of the user's involvement in optimising performance and engaging with the building. A design solution must be holistic, resolving issues 'upstream' and 'downstream' from the design and building parts of the process.

It is no longer enough to simply consider the improvement in the energy performance of office buildings as a series of 'green' features. The crux of the matter lies in modifying client and design team behaviour during the briefing, design and occupation process. It is essential that architects enhance their leadership role in this area. The following two case studies demonstrate this.

ARUP CAMPUS, SOLIHULL

Arup's own 10,000m² regional office campus at the Blythe Valley Office Park in Solihull, designed by Arup Associates and first occupied five years ago, demonstrates the sort of benefits that can be achieved using occupier feedback. A third party, Building Use Studies, was employed to investigate the two buildings and to interview their occupants, asking them specifically about comfort.

The buildings are deep-plan, high-performance, naturally ventilated offices. The depth of the plan meant that heating and cooling was always going to be problematic without air-conditioning. Localised drafts, it transpired, were a problem. They were caused by the outside air inlet, which has now been evolved to include a heater battery that heats incoming air automatically

to offset the draft – a change that significantly improves the experience of the natural ventilation for occupants.

ROPEMAKER PLACE, CITY OF LONDON

The role of technology in reducing carbon emissions must be tested each time. Ropemaker Place in the City of London is a 46,500m² British Land office development by Arup Associates which has been granted planning permission. A Combined Heat and Power (CHP) system with an additional cooling cycle for chilling was considered for Ropemaker Place because of its size, but was rejected after detailed analysis.

Gas-fired CHP systems, particularly with an additional cooling cycle, do not necessarily reduce a project's carbon footprint. Projections for Ropemaker Place forecast increased energy consumption with a CHP system when compared to conventional power supplies, because low-energy features incorporated in the design, such as solar water heating, meant very little heat from the CHP system was actually needed. And where cooling was required, the conversion process driven by excess heat in a CHP system, when compared to efficient modern electrical chillers connected to mains power, was much less efficient.

Mike Beaven is a principal of Arup Associates and chair of the BCO's Environmental Sustainability Group. The BCO would like to hear any feedback or experience AJ readers may have on these matters. Please email Ian Selby on mail@bco.org.uk. www.bco.org.uk



STICK IT TO THE MAN – STICK IT IN THE MAP

There's that oh-so-familiar business model which dupes the punter into paying lots and lots for the product. Then, when the punter wants to use the product, it charges them again. You might think I'm referring to Microsoft, but no – this time it's the Ordnance Survey. As you'll discover if you haven't paid a royalty for that map on your website, it's now owned by a company with ambitions to become 'content provider of choice for location-based information in the new information economy.' PR-speak of such poor quality is customarily the prelude to flogging off a national resource at a sub-market price to a company which will eventually employ the Whitehall jobsworth who arranged the sale.

But all is not lost. Every weekend groups of Ordnance Survey cloners go out armed with Global Positioning System (GPS) handsets. They map their local streets using the GPS' residual trail, adding reviews of pubs, loos and the like. Then they feed the data in at www.openstreetmap.org. So here's the thing. Send your entire office out to localities where you've built your latest magnum opuses. And just by chance their feeds into the national Open Street Map will include rave reviews of your buildings. sutherland.lyall@btinternet.com

CARE AND SKILL

Are you sitting down? I am going to say something you won't like, writes *Kim Franklin*. Professional negligence. No, it's not very nice, but what does it mean? The concept is bandied about with alacrity, especially in times of trouble, but many accusers, accused and even some tribunals would be hard pushed to come up with a definition. And when you explore what is behind this well-worn phrase it is easy to see why.

Let's start with 'professional'. The courts have consistently fought shy of providing a comprehensive definition of this word. While they agree that a professional must have some special skill or qualification, they recognise that many occupations which require training and experience can't be described as professions. What's more, times change – the work of a surgeon used to be carried out by a barber! The profession of management consultant has developed relatively recently and other vocations may yet acquire the status. One of the leading texts on professional negligence adopts a pragmatic approach and classifies a profession with reference to the amount of litigation it has generated.

'Negligence' is another tricky word. For many people it indicates neglect or dereliction of duty. But this ignores the fact that you can be as diligent and

attentive as you are capable of, yet still be utterly incompetent.

Others believe that negligence is synonymous with error or mistake. But no. A professional is required to exercise skill and care. The standard of care to be expected is determined by the members of the profession concerned. An architect, for example, is required to demonstrate the standard of skill and care to be expected of an ordinarily competent architect. In matters of judgment and complexity, no human can be right every time. Viewed in that light, it is easy to see how a competent person may still be completely wrong.

Nor can negligence be equated to a failure to deliver, since success or failure may depend upon factors beyond the professional's control. Professionals do not guarantee a result – for example, a doctor does not promise a cure. This highlights an important distinction between professionals and contractors. Contractors who fail to comply with the contract are liable for breach, but a professional is only liable if they have failed to exercise reasonable skill and care.

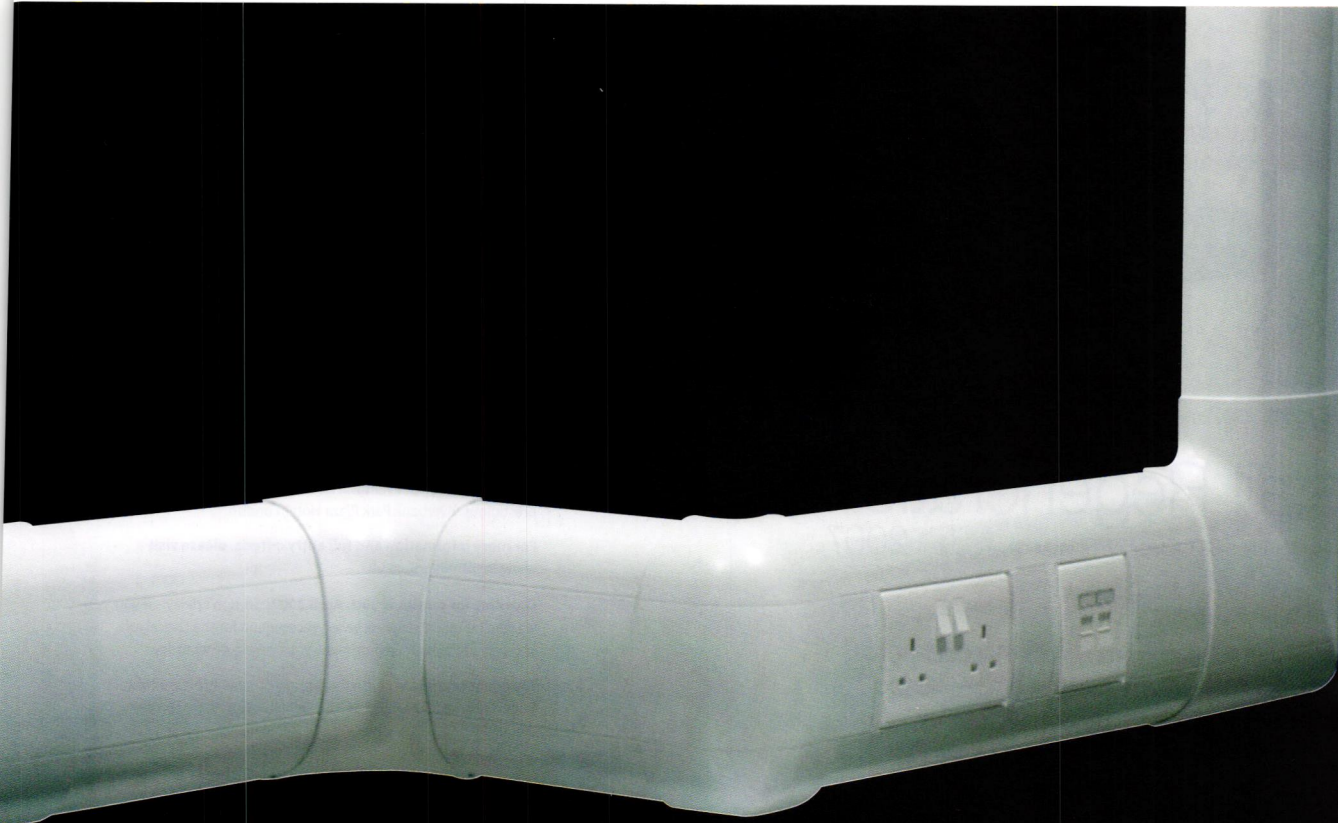
Even this requirement comprises two separate components, as was explored in *Lillywhite v UCH* (Judgment 07.12.05). An antenatal radiologist failed to notice a serious abnormality of the

brain. The claimant alleged that the relevant structures for normality were just not there to be seen, but the consultant sought to demonstrate that he had carried out the task with great care. The court held that a professional is required to display not just care, but care *and skill*. The consultant had failed to demonstrate that the necessary skill or judgment was exercised in assessing the actual condition.

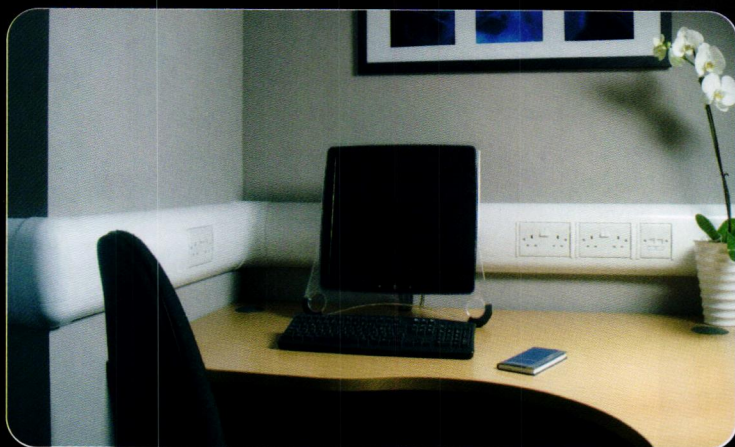
All in all, while it is easy to bandy the allegation of professional negligence about, it is much harder to prove.

Are you still sitting down? You can get up now.

Kim Franklin is a barrister and chartered arbitrator at Crown Office Chambers in London. Visit www.crownofficechambers.com



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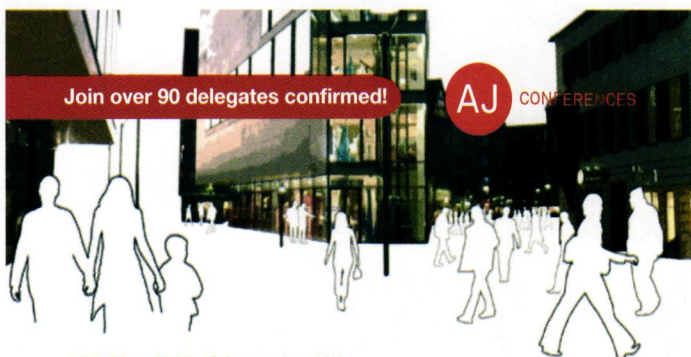
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BOOK

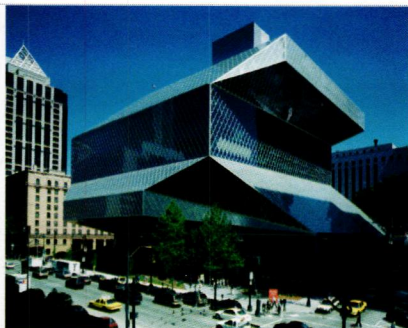
By Alex Wright

Building: 3,000 Years of Design, Engineering and Construction

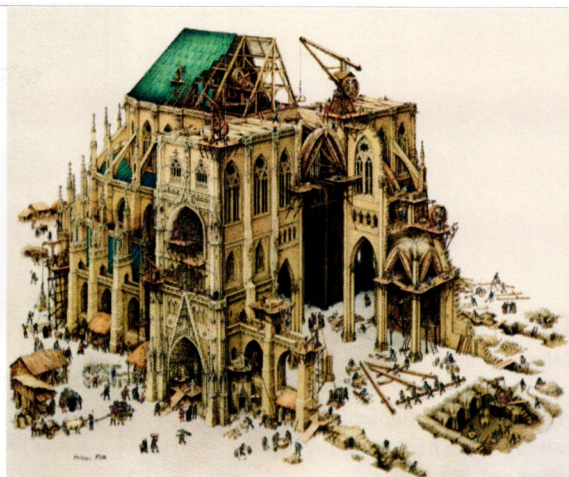
By Bill Addis.

Phaidon, 2007.

640pp. £45.00



1.



2.

1. Koolhaas' Seattle Library

2. Cathedral construction

There are certain books on my shelves whose presence alone I find oddly reassuring. Some I may not have read for years, and others I may only have dipped into for reference, but they all impart a degree of scholarly confidence simply by being there. Typically these are books that contain such breadth, depth or sheer weight of knowledge that you cannot but be humbled by the fact that someone was able to write them. And although such books only really reveal their true stature over a period of years, Bill Addis' *Building: 3,000 Years of Design, Engineering and Construction* promises to be one.

To even attempt to write a book covering 3,000 years of anything is a fabulously ambitious undertaking. In nine chronologically arranged sections, Addis provides an

all-embracing catalogue of the history of building design and construction which seems almost Victorian in its scope and detail. It is beautifully augmented by 750 illustrations, with many of the rarer drawings being objects of fascination in their own right.

This is not a book that you are likely to devour cover to cover, but each section provides a pleasantly readable account of a few centuries. Given the subject area, a degree of simplification and summary is obviously inevitable, but the book does not feel overly abridged at any point.

On the contrary, in several areas it revels in the sort of meticulous, engaging and somewhat obscure storytelling detail which would not seem out of place in a Stephen Fry delivery on *QI*.

Perhaps I have become conditioned by today's typical publishing, where even the seemingly sturdiest of tomes proves to be long on illustration and short on gravitas. Maybe it's the insidious influence of the never-ending cycle of research-assessment exercises, which means that many new books are content-lite or even partially recycled. Many seem to be loosely themed collections of essays, or segue into a niche topic, seeking to gain a little more financial security by appealing somehow to the new style-conscious devotees of *Grand Designs*.

In contrast, this is a truly heavyweight publication which every student of engineering and architecture should have highlighted on their first-year reading list. It should also help to solve the birthday-present

dilemma for any spouse of a building designer (apparently we're notoriously difficult to buy for). The fact that such a worthy book is inexplicably wrapped in the least prepossessing brown paper bag of a jacket you could ever see, is conclusive proof of the old adage about books and covers. So, in deciding whether to invest your £45 in this excellent compendium, please don't be put off by its appearance, or the fact that the sequel will be a while in coming.

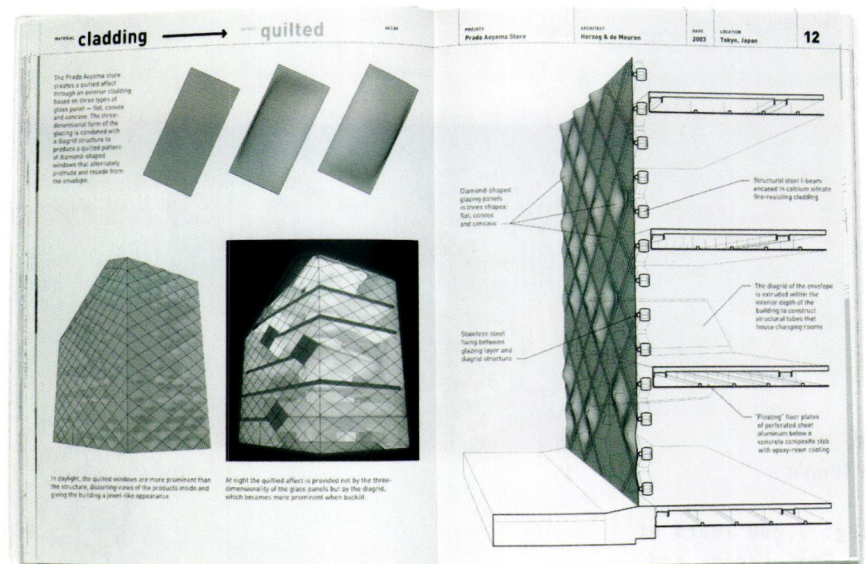
Alex Wright is an architect in Bath

BOOK

By Robert Harbison

The Function of Ornament
Edited by Farshid Moussavi
and Michael Kubo.

Actar, 2007.
189pp. £17.50



1.

This is a strange artefact, a book about architectural ornament, all in silvery grey without a trace of colour anywhere, which communicates almost entirely through drawings; there are very few words. It consists of 42 four-page spreads, each devoted to a 20th-century building and each following a standard sequence.

First comes the close-up: a detail of the building's surface which fills the whole two pages without border or explanation except for the label strip along the top. Deprived of coordinates, you are pushed up against a complex surface that you cannot place. After a while you begin to ask questions about the technique, but it is undeniably powerful. Next come two pages on a different scale, with multiple explanatory drawings showing the cladding

system that produces the powerful effect sprung on you by the preceding pages.

This is the moment to say that the authors call all these effects 'affects'. In fact the word 'affect' is the bugbear of this book, taken from that master of confusion Gilles Deleuze and worked for all it is worth to refer to just about anything anyone detects in a building. There are fluted affects, quilted affects, textured affects, rusticated affects, luminous affects, scaleless affects and many, many more. I've always thought affects were internal events, and these are certainly not, to begin with. This loose use of language allows us to make categories out of extremely indefinite quantities, and the result is conceptual confusion about as complete as I've ever come across.

The close-up drawings are wonderful, and uncertainties about how to group the examples actually enhance the exciting immediacy of the material, which includes lots of Herzog & de Meuron and Toyo Ito and a modest amount of Foreign Office Architects, covering in this way the current revival of architectural ornament. The buildings are shown as fragments not wholes; you had better know most of them already if you want to know how the detail forms part of anything larger than a cladding bay.

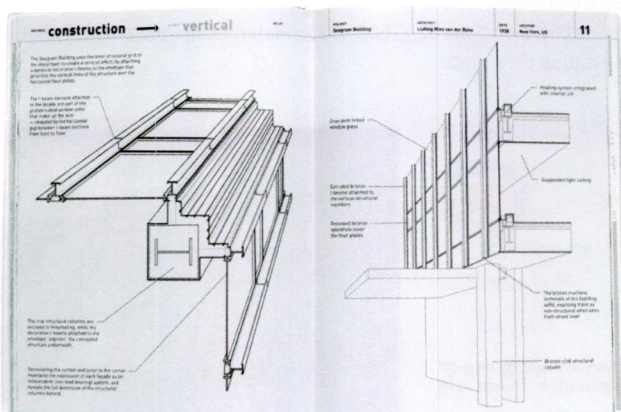
By this means the book is making a powerful statement about how it sees ornament: here ornament means surface featuring which tends to obliterate the building as a solid mass and to focus the spectator on sensation that is strangely

self contained, like an affect enjoyed privately.

The historical or cultural perspective of the book is equally strange. The very first sentence is: 'Architecture needs mechanisms that allow it to become connected to culture.' So ornament is the name for the imagery that architecture finds somewhere outside itself, which includes (in the authors' view) the vertical ridges on Mies' Seagram building.

That is perhaps the outer edge of what they will allow as ornament, but it's clear that the concept can thus embrace just about any form of differentiation of exterior surface; an interesting but drastic widening of the term.

One of the older examples is Wright's Johnson Wax tower, whose ornament consists of bands of brick and bands of



2.

1. Herzog and de Meuron's Prada store, Tokyo
2. Mies' Seagram building

glass tubes, window alternating with wall. Perhaps the tubes by themselves also count as ornament because they are more variegated than normal glazing. These arguments are not mounted in any detail; the drawings provide most of the detailed comment in the individual sections. Even the short captions can be so confusing that I was sometimes tempted to give up on them entirely.

Here, for example, is how Kurokawa's Capsule Hotel is introduced: 'The Capsule Hotel uses the programmatic units of the hotel to create an aggregated affect. Rooms are designed as capsules dimensioned to fit within a regulating module that allows for different configurations of capsules around the central core, generating a three-

dimensional composition of elements that contributes to the dynamic aggregation of the whole.'

Throughout the book there's no consciousness of anything before Modernism, seen rather unsympathetically as fixated on transparency. The authors discuss the proportion of historical to contemporary examples in various sections; by this they mean pre- and post-1990. But the book's narrowness is also its strength. It came straight out of a seminar at Harvard, without much time for reflection, and has its nose pressed against the glass of the present in charming oblivion of practically anything else.

Robert Harbison is a professor at London Metropolitan University



GAGOSIAN GALLERY/HÉLÈNE BINET

CRITIC'S CHOICE

By Andrew Mead

If the facade of Winchester Cathedral is anodyne, its interior certainly is not, with its long views, spatial intricacy and rich detail. Contemporary sculpture could seem quite superfluous here, but as part of Winchester's Year of Sculpture 2007, *John Gibbons*, himself a sculptor, is installing works by some well-known names, including *David Batchelor* and *Rachel Whiteread*, for an exhibition called *Light* (3 May to 31 July). Given the funereal associations of some of Whiteread's pieces, her contribution will probably look perfectly at home among the tombs and chantry chapels. Some years ago the cathedral acquired one of *Antony Gormley's* lead figures and, though they've become ubiquitous since then, this one is still effective, positioned as it is in the usually flooded crypt.

Already open and continuing until 5 June is *Rummage* – a complementary exhibition at the Winchester Gallery. It features drawings by an impressive line-up of sculptors at work today, from *Anthony Caro* to *Richard Long* – a cast-list which suggests how broadly the term sculpture can now be interpreted (www.yearofsculpture.com).

One artist in *Rummage* is *David Nash*, whose studio is near the slate tips of Blaenau Ffestiniog. From 5 May–10 June he's showing in Lewes in the more benign landscape of the South Downs. Since the 1960s Nash has explored the sculptural possibilities of wood, from the native species around Blaenau to rarities encountered on his travels. Some works are semi-functional (ladders, bridges, tables, boxes); others more ornamental or abstract (cubes, cylinders, spheres). Many are collaborations with nature, rather than Nash dominating his material (www.sculptureexhibitions.com).

Installing diverse works by a single artist is one thing, by several artists quite another, but at *Caruso St John's* Gagosian Gallery near London's King's Cross there's a lesson in how that can be achieved (*pictured above*). *Living, Looking, Making* counterpoints the weight of *Richard Serra's* precarious propped Cor-ten pieces with the eroded figures of *Giacometti*, and *Lucio Fontana's* rough dark bronze spheres (scattered on the floor like meteorites), with *Cy Twombly's* attenuated forms – bronze too, but almost ethereal (www.gagosian.com).

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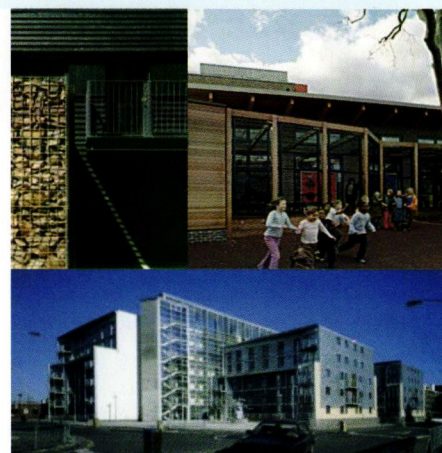
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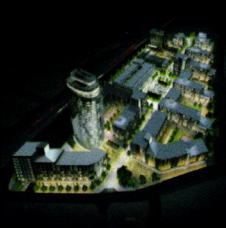
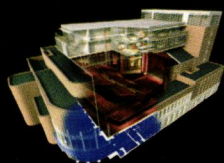
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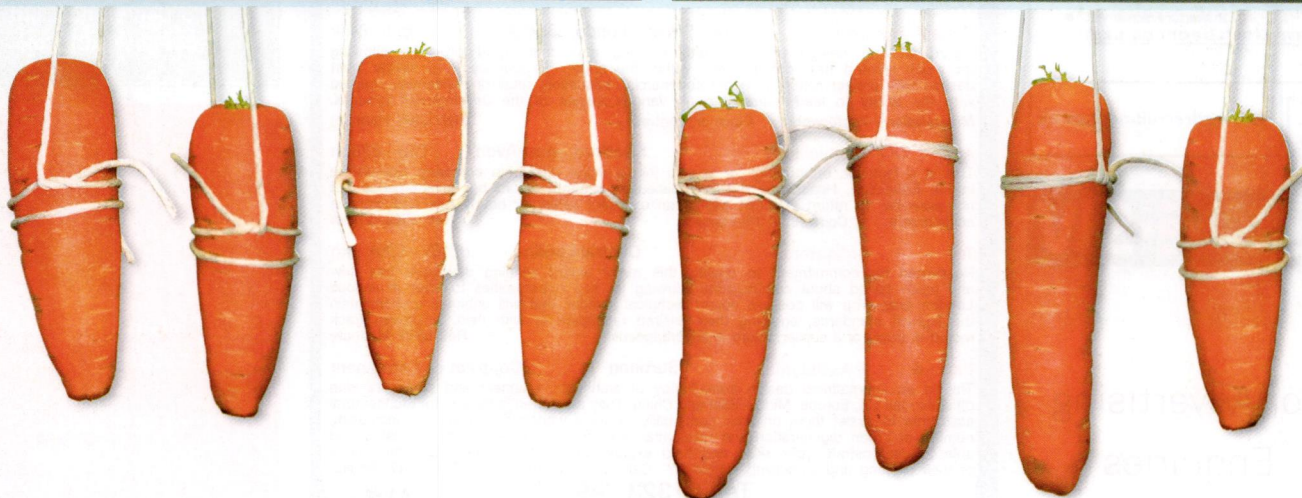
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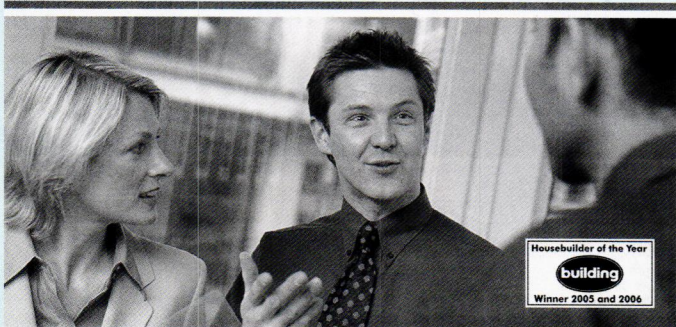
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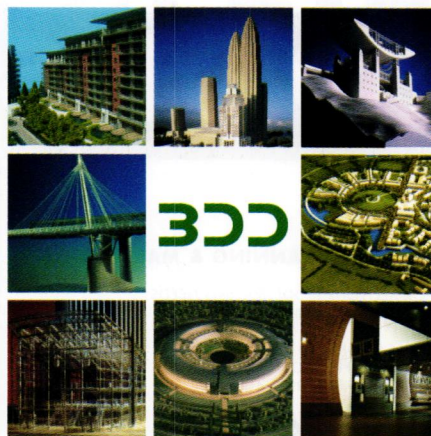


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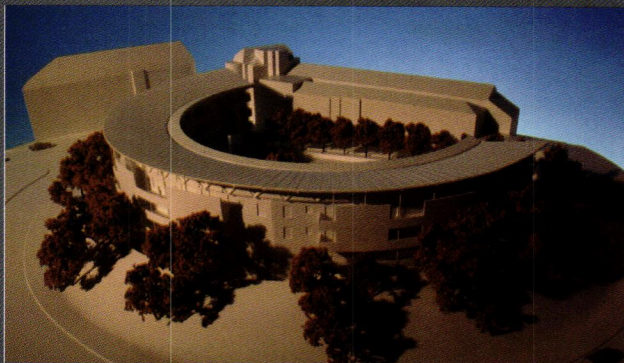
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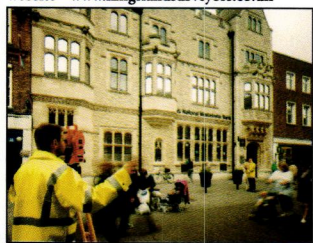
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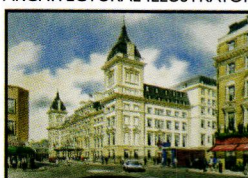
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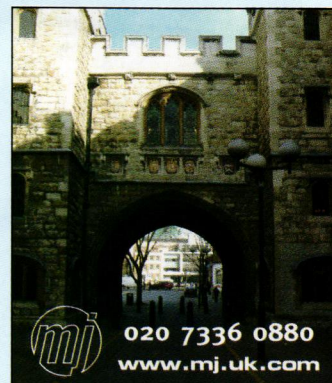
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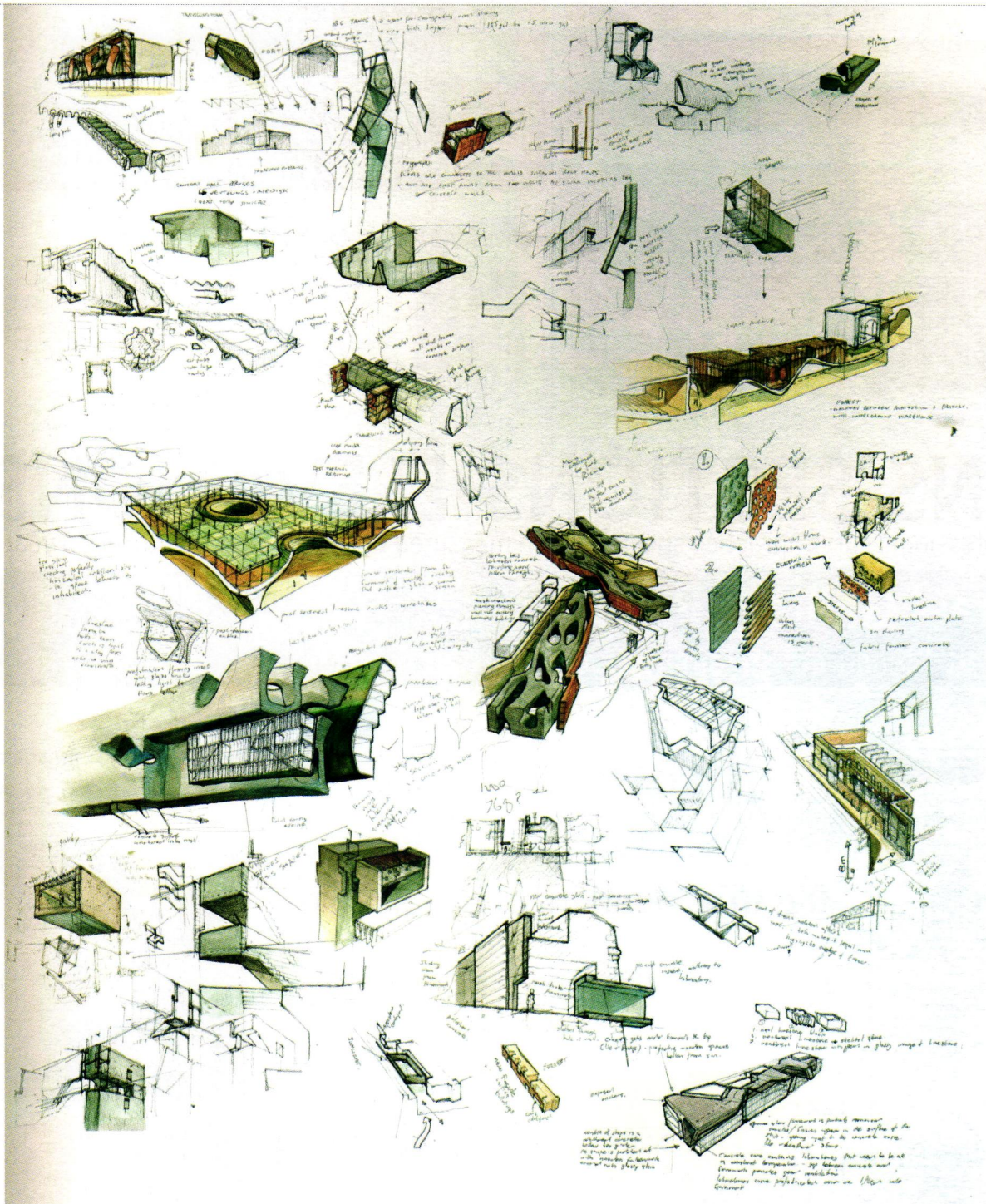
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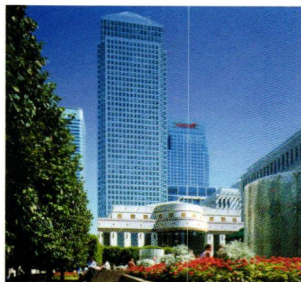


Sketches for the design of a pharmaceutical-research facility, exploring the reuse of formwork to create elements of the building. By David Eland of Voluntary Design and Build

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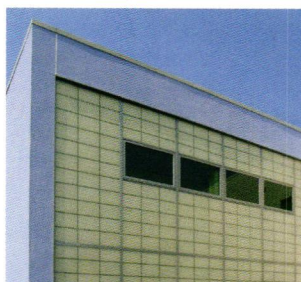
CLAXTON BLINDS



AJ ENQUIRY 201

Claxton Blinds is one of the leading commercial window-blind companies in the UK, specialising in interior window projects for any requirement. Notable projects include Tower 42, the Canary Wharf Tower and the Citigroup Tower. For more information visit www.claxton-blinds.com

STOAKES SYSTEMS



AJ ENQUIRY 202

Waterloo Primary School in Pudsey, Yorkshire, is the latest school to use highly insulating Kalwall to diffuse daylight, creating stunning interiors without shadows, glare or hotspots. 'Kalwall for Schools' and 'Kalwall for Pools and Sports Halls' are two project-based brochures now available.

ASH & LACY



AJ ENQUIRY 203

4,000m² of a new standing-seam roofing system from Ash & Lacy Building Systems has been installed on the new-build areas of this school in Derbyshire. Standing-seam roofing systems offer a low-risk roofing solution and are renowned for their durability and outstanding performance characteristics.

CORUS



AJ ENQUIRY 204

Europe's largest car showroom, on the River Clyde in Glasgow, has used Corus Colorcoat Prisma prefinished steel as part of its wall cladding. Opfer Logan Architects specified the product, part of the Eurobond composite wall-cladding system, because of its excellent aesthetics and durability.

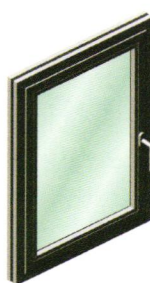
GLEDHILL



AJ ENQUIRY 205

Gledhill integrates alternative energies such as solar panels, ground-source heat pumps and micro combined heat and power as part of a total system, in conjunction with an intelligent thermal store which enables homeowners to maximise the energy efficiency of their heating and hot-water system.

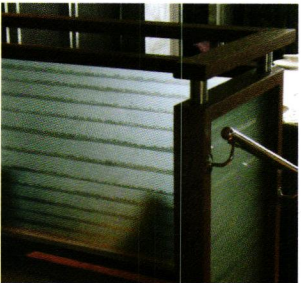
SCHÜCO



AJ ENQUIRY 206

Schüco Jansen, Europe's leading steel-systems specialist, has launched a range of high-strength concealed fittings. Designed for tilt/turn and inward-opening side-hung and double-leaf windows, the fittings mean that the clean lines of a window with seamless joints need not be compromised.

DAEDALIAN GLASS



AJ ENQUIRY 207

Daedalian Glass has launched its designer range of glazing, which features 12 sandblasted designs etched on to both surfaces of the glass to create multi-tonal, three-dimensional effects. The range lends itself to a variety of products from shower screens to room dividers and door glazing.

FULLFLOW



AJ ENQUIRY 208

Syphonic-drainage specialist Fullflow recently designed, manufactured and installed a syphonic-drainage system for the Qube, London. The syphonic action enables rainwater to be drained at high velocity and volume, requiring up to 80 per cent fewer downpipes than a traditional gravity system.



MOVEO® - A revolution in space management.

Constructed from an innovative and unique lightweight material, the DORMA MOVEO® system is up to 50% lighter than other conventional systems available, providing a number of benefits. Lighter means:

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