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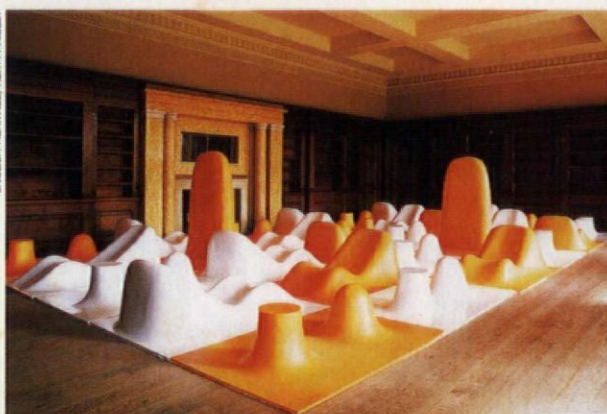
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ENGLISH HERITAGE/KEITH PARLEY



English Heritage is to open the doors on 'Sitting Pretty' – an 'interactive seating exhibition' at its 19th-century Greek revival pile in rural Northumberland, Belsay Hall. The show, which opens on 30 May and runs until 28 August, features works from innovative designers such as Karim Rashid, Eley Kishimoto, Claudio Silvestrin and David Linley, and blurs furniture with sculpture. Rashid's 'Pleasurescape' (above left), a fibreglass multi-seating block that looks like a futuristic landscape, will be on show for the first time outside the US. Silvestrin returns following his exhibit from the similarly contemporary art Sitooteries exhibition at Belsay in 2000 with an ebony seat called 'g.a Chair'. Langlands and Bell will be showing its 'Eclipse' elliptical bench and Totem Design's 'Boo!' – multi-functional sensory coloured pod stools that light up when sat upon (left). Show admission is included in the entrance price (£4 for adults, £3 for concessions, £2 for children).

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**'We know how to actually make large-scale projects happen. Do you imagine there is ever going to be a national stadium in Wembley? Well, there's a fantastic stadium here.'**

Writer Phil Griffin on the renaissance of Manchester. *Observer*, 19.5.02

**'Most people that are dealing with the so-called environmental issues are often forgetting about space, about light, about all the things that make architecture.'**

Pritzker prize-winner Glenn Murcutt  
*Architectural Record*, May 2002

## aj news

### MOORE'S FOUNDATION

*Evening Standard* architecture critic Rowan Moore is tipped to become the new director of the Architecture Foundation. Moore would follow the departed Lucy Musgrave and work under chairman Will Alsop.

### NEW ANFIELD FOR LIVERPOOL

Atherden Fuller Leng has secured a remarkable double to win a new design for Liverpool FC after doing likewise for rivals Manchester United. The architect aims to submit a detailed planning application for the £70 million, 55,000-seater home in the summer on Stanley Park, near the original Anfield stadium. See [ajplus.co.uk](http://ajplus.co.uk) ➤



Building work on this resource centre (above) by architects from London's Lambeth Council has been completed. The £1.2 million two-storey block on Waterloo Road has a glazed rotunda and will include education facilities.

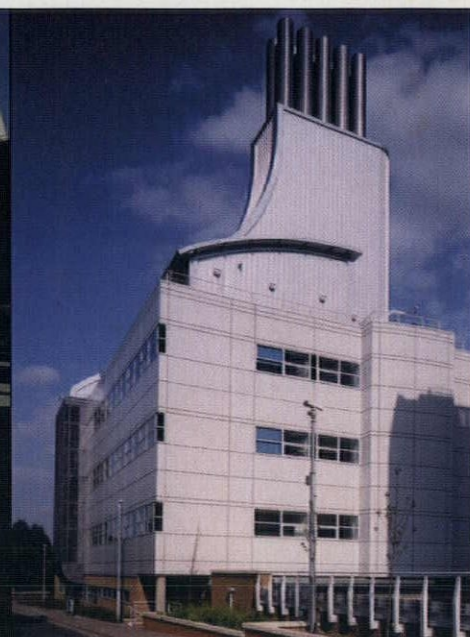
### 'OUTSTANDING' ENTRIES

2002 has proved to be a vintage year for the British Construction Industry Awards, with more than 150 entries received. The closing date is past but organisers said entries represented 'a whole spectrum of outstanding projects'. *AJ* will be publishing the first selection for the finals in mid-June.

**For the best jobs in architecture turn to page 50 or visit [www.careersinconstruction.com](http://www.careersinconstruction.com)**



Feilden+Mawson's four-storey cancer research centre with a 'ski-slope roof' topped with stainless-steel flues for gas and foul air emissions opened last week at Addenbrooke's Hospital, Cambridge. The 3,400m<sup>2</sup> Hutchison/Medical Research Council research centre cost £9 million to build. The firm also completed the £2 million Max Perutz lecture theatre (above), which straddles the front of the hospital.



## Hyett slams ARB in conduct case

An architect struck off the register for two years last week has received one of the most bruising verbal attacks ever from a RIBA president after Paul Hyett said he should have been banned for life.

The Architects Registration Board found John Horsman guilty of unacceptable professional conduct after working on a Grade II-listed thatched cottage and misleading the Legal Aid Board (LAB), for which he has to repay around £40,000. Horsman lives near the cottage in Tingewick, Buckinghamshire.

He denied three conduct allegations at the ARB hearing on 16 May, but was found guilty of two of them. Paul Hyett criticised the leniency of the decision after the hearing.

Richard and Alexandra King-Evans used Horsman for a loft extension to the 'house of their dreams' in 1993. Work involved redesigning a bathroom and kitchen and other details, said Richard King-Evans. Legal fees and building work had cost him around £80,000, he added.

'The reason we used him was because he was a member of RIBA and a qualified architect. We put our faith and cash on this man and it has all gone up in smoke.' His wife said they suspended Horsman after around six weeks. Horsman then resigned and started legal action for fees of about £6,000. The King-Evanses counter-claimed but the case ended without payment on either side.

Paul Hyett said: 'This is one of the worst cases I

have ever come across. It is essential to the interests of our profession that we deal effectively with this sort of incompetence, misconduct and negligence and I'm glad the ARB has taken firm steps.

'But I had hoped and expected Horsman would have been removed from the register completely as opposed to suspended. There is no place in the profession for this kind of person.'

Horsman, who is a partner at Oxford's MGB Architects, said he was 'quite shocked' by the case, was taking legal advice and considering an appeal to the High Court. He did not know whether he would continue as an architect after the suspension.

He dismissed the comments of Hyett, an expert witness for the King-Evanses, as hearsay. 'It is not an impartial view. He has been paid by King-Evans to put forward a view.' He denied he ruined the cottage after only six weeks of work.

The three allegations included giving Aylesbury Vale District Council papers and plans that misrepresented the existing structure to avoid complying with building regulations. The second involved allowing work to start without winning listed building consent. The third allegation was of misleading the LAB to obtain financial help in the case against the King-Evanses.

The ARB dismissed the charge over the documents and plans. Read the judgement and Horsman's statement in full at [ajplus.co.uk](http://ajplus.co.uk) ➤

Jez Abbott



'Alsop is positioning himself to become the new "Big Jim" Stirling. He thinks his Peckham Library "looks better than the Parthenon" and it goes without saying that he is a great genius.'

'Piloti'. *Private Eye*, 17.5.02

'The louder Mr Livingstone shouts, the more he demonstrates the need for English Heritage to speak out for the historic environment.'

EH London regional director Philip Davies. *Guardian*, 20.5.02

'... austere and uninviting, like a monument.'

Annette Fisher chooses Richard Seifert's Centre Point as her 'blunder' in the *Guardian's* 'Wonders and Blunders' column, 20.5.02

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## All bets are on as SMC wins £30m Windsor racing job

The SMC Group has pipped HOK at the post to win a £30 million redevelopment project at Royal Windsor Racecourse which may also bring gambling halls and casinos to the Royal Borough, the AJ can reveal.

The group, headed by Stewart McColl, beat its rivals in a limited competition play-off and will create a new stand and 200-bed hotel for the venue for Arena Leisure, along with 'very broad-based leisure facilities'.

McColl said the project includes the creation of a 'betting arena' and the replacement of an existing stand as well as improvements to a stand built around six years ago, which will be integrated into the new.

But Client Arena – the UK's largest racecourse operator and leading gaming technology provider – is already looking at adding casinos, gaming halls and hotels to its five other courses in anticipation of the government's liberalisation of gaming laws. The scheme for the Thames-side site may also include health clubs.

As with another new proposal for Chester Racecourse by Pentagram (see page 8-9), and some football stadia, the facilities will be built to allow for flexible use away from racedays, since such clubs and courses only operate their primary function for seven per cent of the year. 'The obvious use is for conferences, conventions,

promotions, and launches,' said McColl. 'Our new proposals for the Royal Windsor Racecourse must give a commercial perspective to the total redevelopment plans.'

David Taylor

## Biennale to put emphasis on 'the real and the physical'

This year's Venice Architecture Biennale, entitled 'Next', will focus on 'the real, the physical, and the material', according to director Deyan Sudjic. Featured projects will be under construction rather than speculative, and they will be shown primarily in large-scale models, not virtual images or architects' renderings.

Speaking at London's Italian Cultural Institute on Monday, Sudjic outlined a basic two-part structure to the event. At the Giardini di Castello, each of the national pavilions will mount its own interpretation of the theme, and alongside well-known names – Jean Nouvel, Cesar Pelli, Eric Owen Moss – will be many architects yet to make a mark outside their own country.

Sudjic's hand will be more in evidence at the Arsenale, where the voluminous Corderie (the former rope-sheds) and Artigliere will be filled with more than 100 projects, grouped under 10 headings including housing, museums and shopping. The featured architects are almost all high profile. They include Herzog and de Meuron, Peter Zumthor, Renzo Piano and Alvaro Siza, plus the ubiquitous Frank Gehry, Daniel Libeskind and Zaha Hadid. John Pawson has been asked to design all 10 sections, to make the overall display more cohesive than is usually the case.

A highlight here promises to be the City of Towers. Ten architects, including David Chipperfield and Future Systems, have been commissioned by the Biennale (with Alessi) to design a 100-storey tower and present it as a 1:100 model; these models will be more than 4m high. Sudjic, mindful that the Biennale opens almost exactly a year after 11 September, hopes this will 'demonstrate the continuing relevance of the tower'.

The commissioner for the British Pavilion, Andrea Rose of the British Council, was coy about Foreign Office Architects' design for it, beyond saying that it will be 'site-specific' rather than a portfolio of past and future projects. She said: 'We are delighted to represent Britain through such an internationalist practice.'

The 8th Venice Architecture Biennale runs from 8 September to 3 November. More details are at [www.labiennale.org](http://www.labiennale.org)



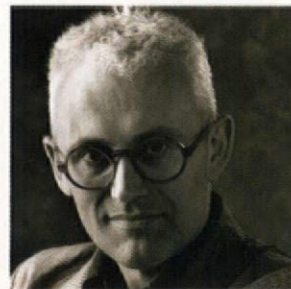
David Richmond + Partners has won a RIBA-approved competition to build a 10-storey hotel, houses and a grass-roofed car park near Portsmouth Dockyard. The London firm beat McDowell + Benedetti, Niall McLaughlin Architects and Snell Associates with its design for the 1.7ha Historic Ships car park on Queen Street.

### 2 WEEKS TO GO

interbuild

9-13 June 2002,  
NEC, Birmingham, UK

Richard Murphy is one of the speakers at RIBA Conference on 11-12 June at Interbuild, at Birmingham's NEC. Murphy will discuss his education buildings including Harmeny School, The Jack Kilby Computer Centre at Napier University and the Adult Learning Centre at Kirkintilloch. The conference is free to RIBA members. See pages 48-49 for booking details and a full list of events.



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### Q&A

# 88%

... of voters in a poll on the AJ's website think that the national stadium should be built in Birmingham, not Wembley, or 'taken on the road'.

Respondents: 816

We are continuing our poll this week as more reports emerge about Wembley.

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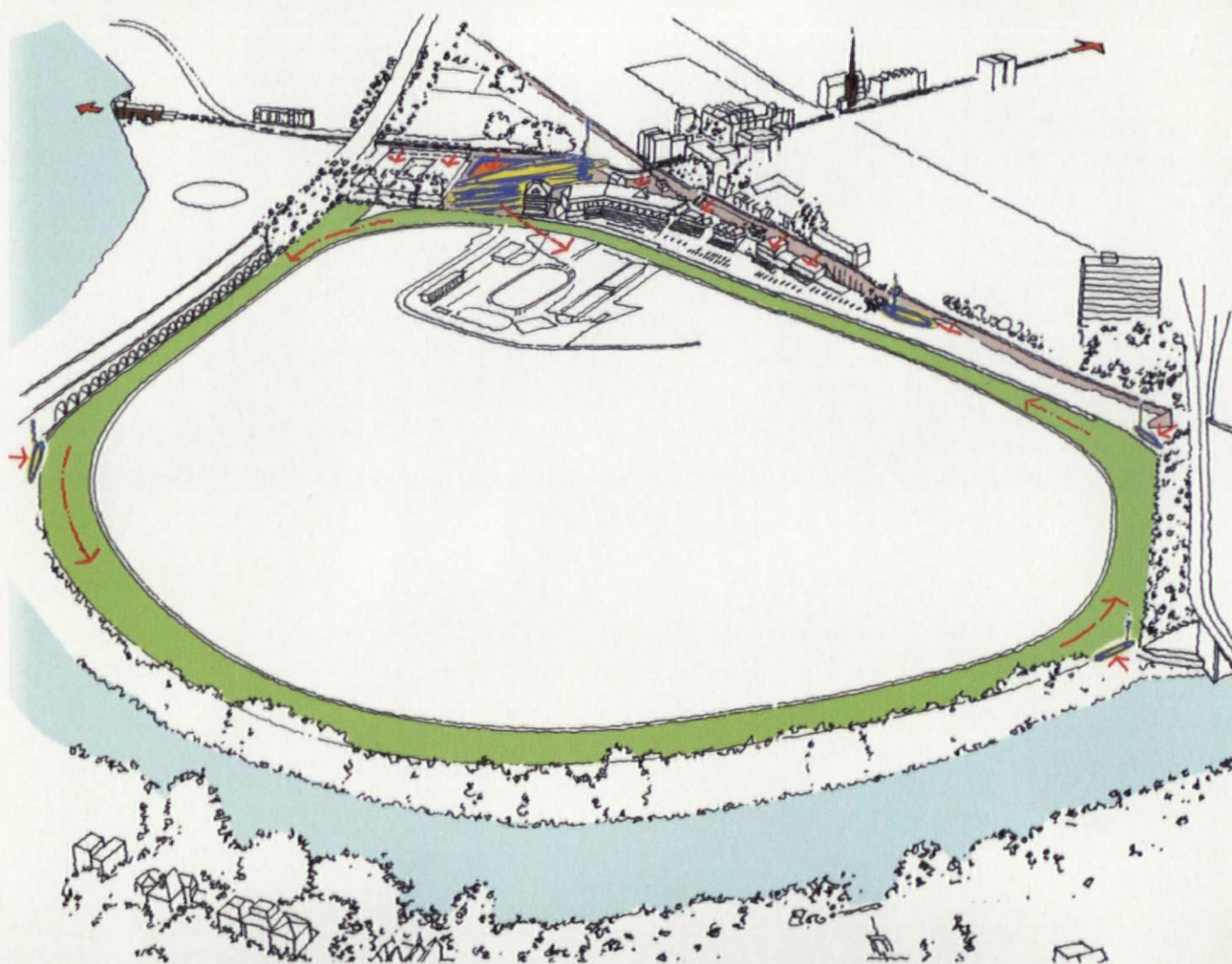
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## Pentagram delivers Chester Racecourse plan

Lorenzo Apicella's team at Pentagram has submitted the first phase of a £25-30 million masterplan for the development of Chester Racecourse. The project, being carried out with Donald Insall Associates as executive architect, will extend the existing necklace of racecourse buildings westward, creating a strong relationship with Chester's old port, and southwards from the terraces, connecting the racecourse to the city.

Phase 1 includes a 92-bed budget hotel, stable block and archaeology pavilion. The hotel will be used by jockeys and stable boys on race days. On non-race days, the hotel will be used by the public and the stables will serve as parking space with an open market on the top floor. The stable building replaces off-site stabling, and means that the process of leading

horses from the stables to the track can become part of the race-day pageantry. The relationship between the hotel and stables building will be reinforced by a winter garden designed by landscape architect Jennie Coe. The archaeology building will be used by the Chester Archeological Society to communicate the history of this part of Chester to the public.

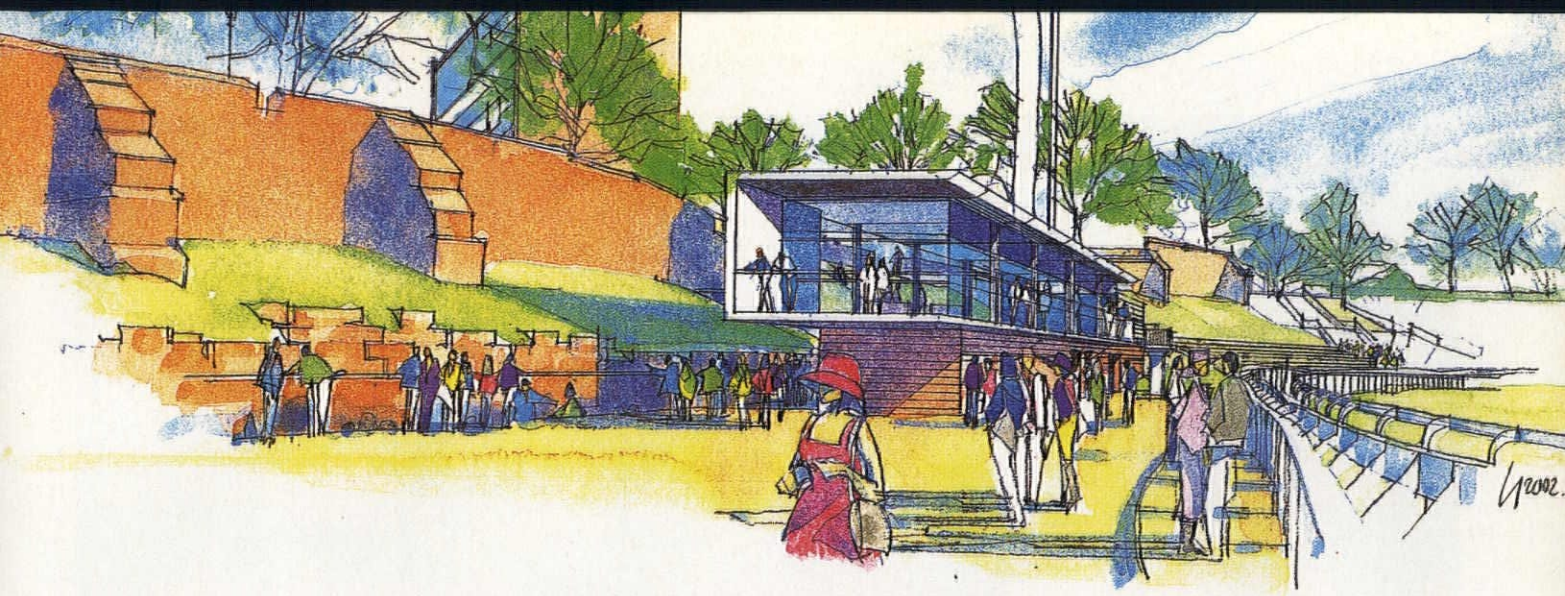
Phase 2 will include an extension to the existing grandstand, along with a five-star hotel and conference centre with a rooftop restaurant, and balconies offering views of the track.

Todd + Ledson is the quantity surveyor and Gifford and Partners is the highways, M&E and structural engineer.

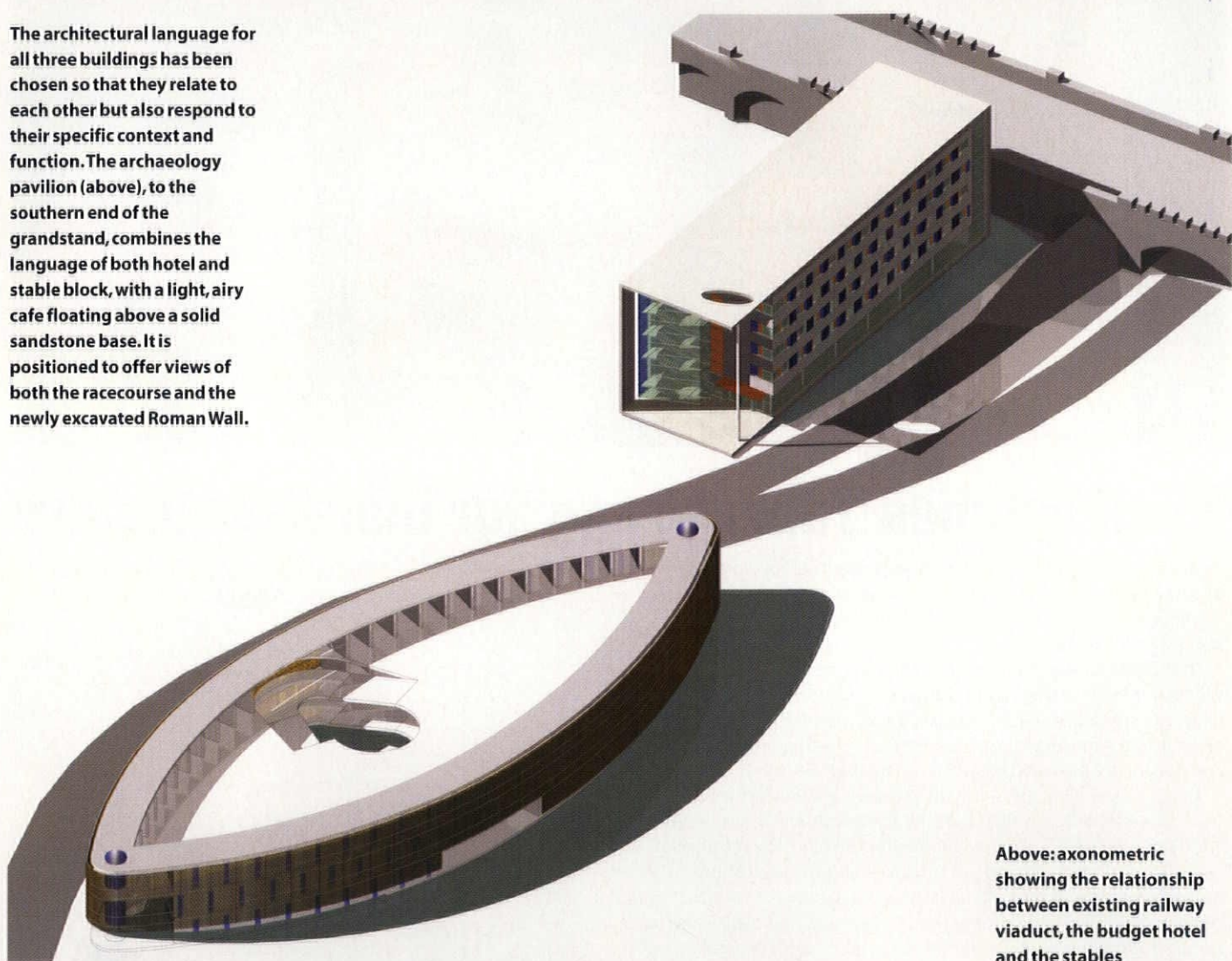
Isabel Allen

23 May 2002

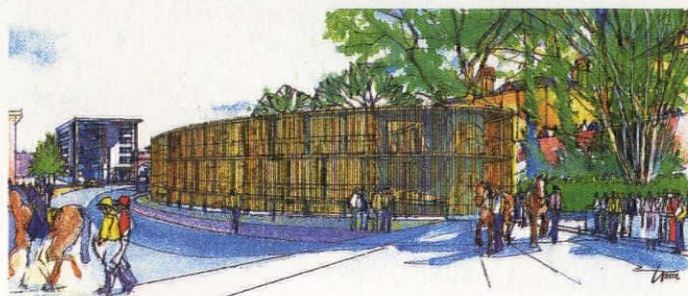




The architectural language for all three buildings has been chosen so that they relate to each other but also respond to their specific context and function. The archaeology pavilion (above), to the southern end of the grandstand, combines the language of both hotel and stable block, with a light, airy cafe floating above a solid sandstone base. It is positioned to offer views of both the racecourse and the newly excavated Roman Wall.



Above: axonometric showing the relationship between existing railway viaduct, the budget hotel and the stables

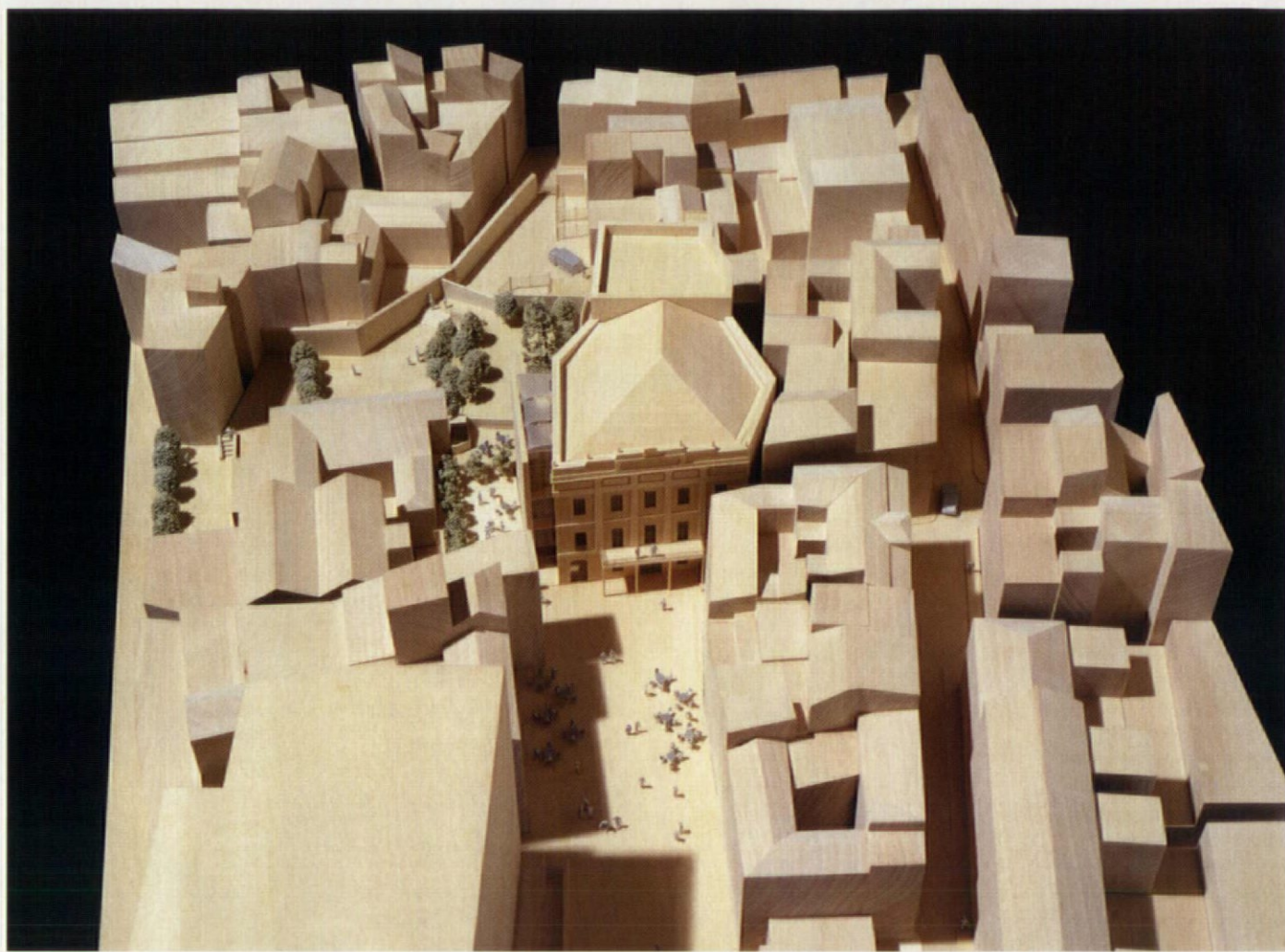


The stables are clad in timber louvres which echo the surrounding trees. Semi-open stair towers provide through views, while glass block windows give views into the stables. Plants will grow up the trellis walls



The hotel establishes a contemporary entrance portico to act as a visual marker for visitors entering the city, and recalls the white architecture of the hillside villas overlooking the racecourse from Curzon Park





## Snell hatches 'Fabergé egg' for Gibraltar theatre

Snell Associates is hoping that a major redevelopment of Gibraltar's dilapidated Theatre Royal will send out a powerful message about the need for the politically sensitive island community to regenerate its other impressive buildings.

The scheme provides a unique opportunity for the government of Gibraltar to lead the way in redeveloping its architectural heritage, believes the practice's Robin Snell. It will also, he added, enable a rebirth of a cultural centre for all the community, which will figure as a key component of Gibraltar's UNESCO bid as a World Heritage Site.

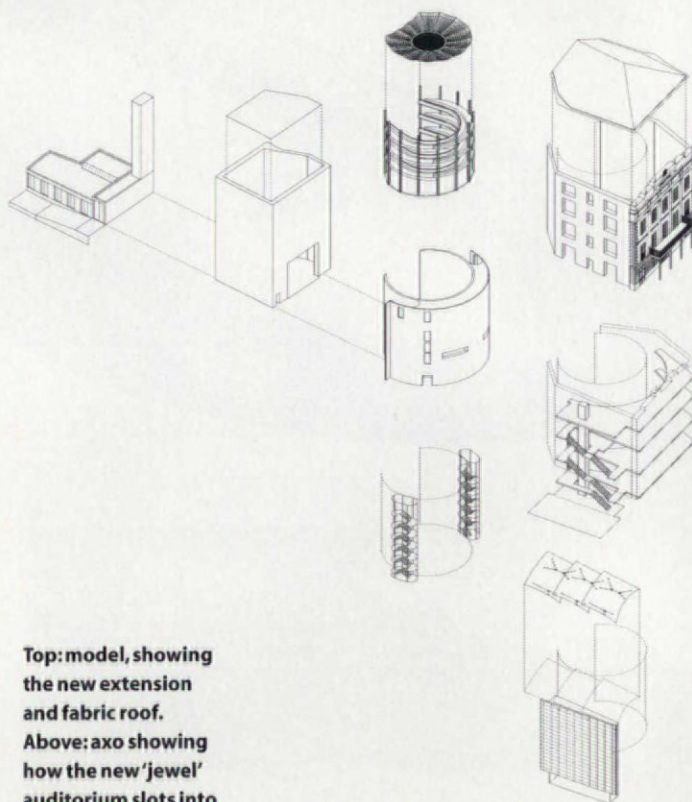
The original theatre, located in the heart of Gibraltar's historic old town, was established in 1820, but fell into disrepair and finally closed in 1963. The government acquired the lease in 1999 and now the theatre will be redeveloped and modernised as a 'receiving house to host touring companies, dance, drama, musical productions, orchestral performances, Zarzuela (operetta) and conferences. 'The client wants to restore it as the 'centre of cultural life' on the rock – rendering it 'alive and vibrant and accessible to everyone'.

Snell's concept for the design is of a Fabergé Egg. The architects will take out the existing – and not original – auditorium and intermediate floors, leaving the shell, which will be restored. Then, a new 'jewel-like', horseshoe-shaped auditorium – contemporarily designed but in the form of the traditional mediterranean opera house – will be inserted inside the original walls.

The auditorium contains stalls and three balcony levels with 520 seats. All levels are connected by a new front of house grand staircase, located in a new extension to the west elevation. That new space contains a glass lift and open terrace at roof level and is shaded by a fabric roof which also acts as a beacon and sign for the theatre when viewed from the street.

The scheme starts on site in June and should mean that the theatre can open in April 2004.

David Taylor

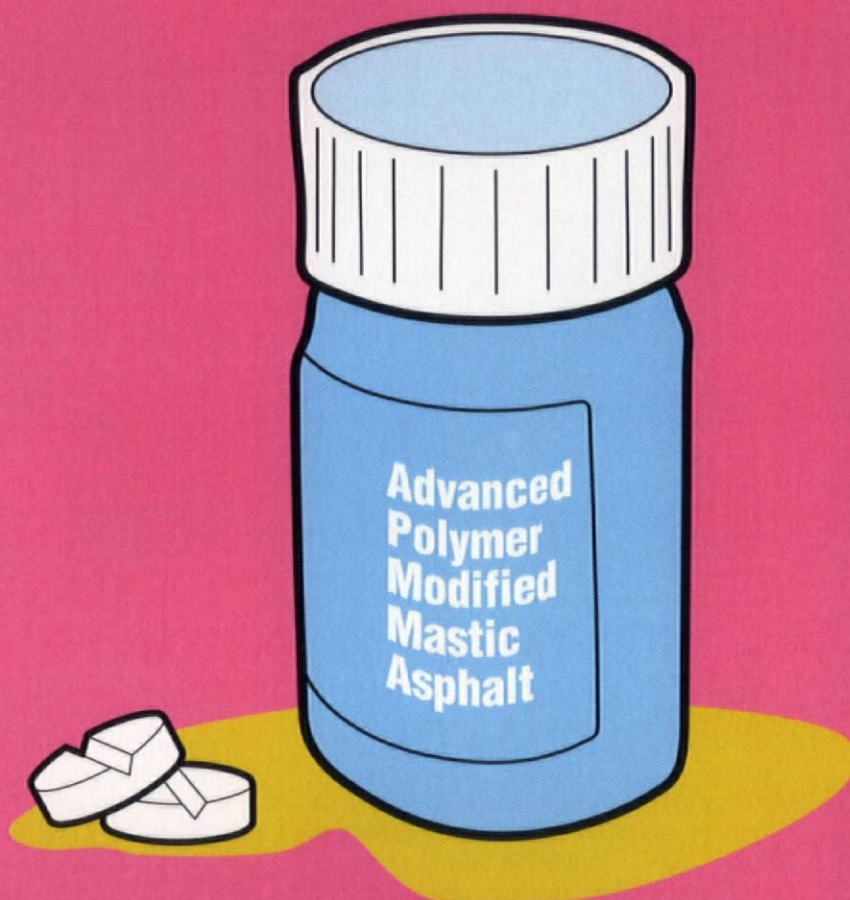


**Top: model, showing the new extension and fabric roof.**

**Above: axo showing how the new 'jewel' auditorium slots into its acoustic envelope**



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# 50 50

CHRIS WILKINSON

Architect

## What is the best building of the past 50 years?

The Barcelona pavilion is a decade too old, so for similar and yet slightly different reasons, it's the Farnsworth House because of the way its interior connects with the outside. It's a powerful intervention in a wonderful natural setting. And also because of the clarity of its layout. It's just a truly modern space. I visited it the same afternoon that I went to see a Bruce Goff house, circular steel frame, rope and a coal wall with coloured glass windows cast into it.

## What is the most significant innovation of the past 50 years?

Double curvature cladding. Computer design and manufacture has given us the freedom to produce more interesting building shapes. We are getting close to it but there's still far too much craftsmanship involved. It's still closer to, say, boat building. Although we can do it, it's still too expensive. So, more precisely, it's affordable double curvature cladding.

## What is the best building product of the past 50 years?

I've had difficulty with this but I'd say glass. It has gone through a number of developments over the years although it's not there yet. What I'm interested in is intelligent glass and the possibility of such things as zero U-value glass. And then you think of photovoltaic cells which are bound up with the idea of glazing and then the way buildings could be powered.

## What innovation do you hope to see in the next 50 years?

I would like to see buildings which respond not only to our physical needs but our moods. Physically responsive buildings are almost within our grasp but there's still a way to go to achieving any qualities of uplift or calming down – all available in the one building.

These interviews by Sutherland Lyall will form the basis of the 50/50 exhibition at Interbuild 2002.

## 'Make Blair RIBA president', institute's ruling council told

The RIBA has side-stepped a controversial debate on whether the post of president should be paid – and heard prime minister Tony Blair touted as a possible future chief.

Would-be president Annette Fisher criticised the institute after it buried the media-grabbing issue of payment at last week's council meeting until the day's end. Instead, members tackled the grinding minutiae of council bylaws, so delaying the highly charged topic of payment. Fisher complained that many members who hold strong views had left by late afternoon and there was too little time to debate. 'This issue has been very publicly addressed and has implications on the winner. There's a lot of interest and a lot of the council is not here.' However, the institute managed to squeeze in a vote that presidents should not be paid.

Earlier, Richard Murphy had wondered how president Paul Hyett coped with the workload and said presidents needed to have generous business partners.

He asked: 'For a man interested in sustainability, how do you sustain yourself?'

Hyett, who works three-and-a-half days a week at the RIBA, replied with a sustainability quip about a colleague's design for a huge holiday home with swimming pool for a senior Labour party figure. 'Having told the client they didn't need air conditioning, the client insisted he did because of global warming.' Hyett is to attend a Johannesburg conference in September on global sustainability.

Ex-director general Alex Reid said non-architects should be able to become presidents after talk of a rule change banning this. He suggested Tony Blair or the AJ's Paul Finch, an honorary fellow of the RIBA, as future presidents.

'Finch would make a good president, and using non-architects may allow the post to carry more force in public. Tony Blair may retire and maybe he could do a good job. If we are trying to be more open and inclusive it seems odd to narrow our choice.'

In parallel with Fisher's campaign to be president, Botswana architect Femi Majekodunmi, an overseas RIBA committee member, said the

African Union of Architects was meeting in Tunis this week to elect its first white president. 'Africa is coming of age in terms of race relations,' she said.

Jez Abbott

## Small practices warned over financial perils of PFI deals

Leading Scottish architect Richard Murphy has warned small and medium-sized firms to steer clear of PFI projects despite his practice winning awards for buildings including schools and health centres.

Murphy said 40 per cent of construction was commissioned through PFI, and medium-sized as well as small firms could become mired in red tape.

He urged: 'Do not apply for any schools or health buildings. They are chosen by the builders and then the architect's bank managers become involved because getting to the preferred-bidder stage is a colossal risk.' His firm had 'had a brush' with PFI, but the selection committee consisted of no one with architectural qualifications. 'This is deeply depressing,' he told last week's council meeting. 'PFI problems must be top of the RIBA agenda.'

Elsbeth Clements, due to stand down shortly as vice-president of small practice, said framework agreements and 'bundling' several projects into one contract were the *bête noire* of small practices.

PFI could kill off vast sectors of business, and many sub-contractors could go to the wall, she said. Her committee, with Reading University, is to carry out research into best practice in procurement with an award of £66,000 from the DTI, she added.

Meanwhile, the National Federation of Builders has won £200,000 of DTI funds to look at the impact of the Egan report, 'Rethinking Construction', and best value. 'As a result of framework agreements, government policy is pushing everything into the hands of the big boys,' said Clements.

Rod Hackney said of PFI: 'There is no way of stopping this or any other government. They are advised by banks, and architects are thinkers who relate to clients. We must make it clear we are against mass production of thought and product.'

However, president Paul Hyett said many contractors in PFI paid their architects handsomely. Relationship-building was important but in the product-versus-process debate, the latter was often 'dumbed down'.



Skidmore Owings & Merrill has unveiled £300 million plans for an overhaul of the 2.74ha London Arena site at Crossharbour including six new towers. The project for Ballymore Properties was submitted for detailed planning permission on Monday. It features 61,700m<sup>2</sup> of office accommodation, partly in a 33-storey, 157m-tall tower, a 400-room, four-star hotel plus conference centre, 1,062 apartments, 13,000m<sup>2</sup> of shops, cafes and restaurants, DLR upgrade and 1,760m<sup>2</sup> of leisure. The project goes on show to locals from 4-6 July at the London Arena.



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## vital statistics

- More than half the 1,500 free bicycles provided by Vienna's city council to combat traffic congestion have been stolen. The bikes, made available at stands around the city, cost £1.3 million. Users inserted two euros (£1.25) into a slot machine and the money was refunded on the bike's return.
- Police have built a 10ft-high fence around Birmingham's Yardley Crematorium after teenagers smashed windows, vandalised gravestones and caused £20,000 of damage. CCTV cameras recorded them daubing 'we will be back' on walls, said the *Birmingham Post*.
- Hot desking and remote working could save British businesses £6.5 billion a year and help boost profits by up to 13 per cent, says a report for the Royal Institution of Chartered Surveyors. 'Waste of Space' adds that British businesses could save £300 million by appealing against rates bills.

## Andrea Wulf reviews... Will Alsop on 'the works of Gordon Bennett'

At some point most lecture audiences have to endure the hardship of utter boredom or intellectual diarrhoea. Not so with Will Alsop's AJ/Spectrum lecture, entitled 'the collected works of Gordon Bennett', at Spectrum 2002. This was a truly enjoyable, entertaining and thought-provoking occasion, Alsop proving again that he is as playful and visionary with thoughts as with his buildings.

Alsop took his audience on a journey to dour Barnsley and it turned out to be exciting. Asked to prepare a proposal for the regeneration of the 'Tuscan hill village' in Yorkshire, he turned to the people of Barnsley, their dreams and aspirations. Instead of compiling another lengthy report nobody would read, Alsop made a film about this collective dreaming.

Full of little gems, the film is amusing, revealing and stimulating. He lets the northern folk fantasise and somehow managed to bring the grey and empty town alive. Although not on the must-see lists of most tourists, I now want to visit Barnsley.

What Alsop shows is that he believes in people and their visions – he dares them to be extravagant and special. The people of Barnsley know that they do not have the pyramids, but they dream of Thai foot massages, Kenneth Branagh playing Richard III and mass execution of pigeons. They envisage the regeneration of their once-famous market as a

theatre of trade during the day and a theatre of culture during the evening. They want to get rid of the privet hedges and would love to have a Centre Pompidou.

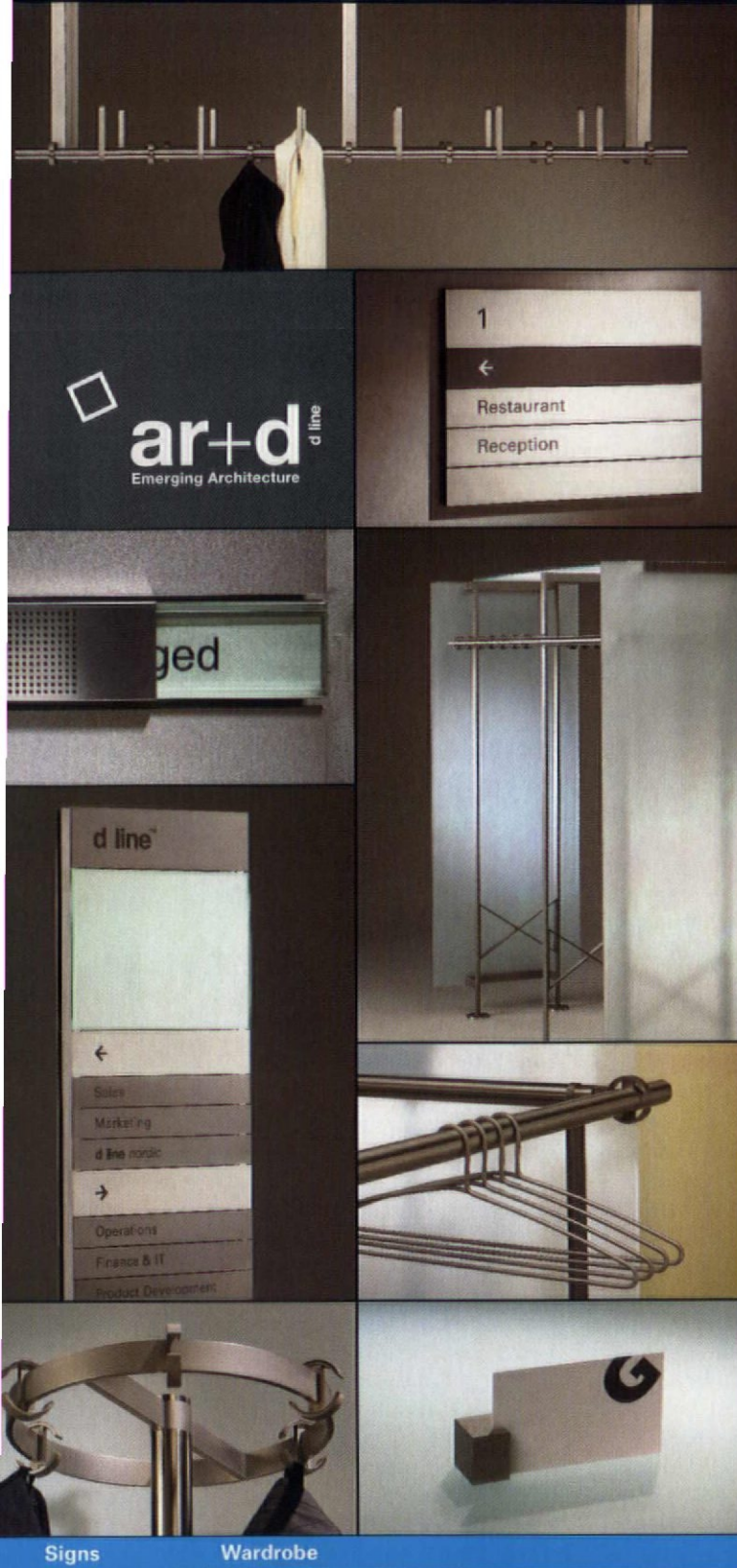
Yeats' quote that 'in dreams begin responsibility' is taken seriously by Alsop and the people of Barnsley and becomes the slogan for the discussions and drawing sessions. But there is a twinkle in Alsop's eye when two kids try to explain what architects do. One of them just scratches his head and the other says in his best posh accent: 'Oh, let's have it tall and let's have lots of windows.'

Alsop has big visions, for his profession and for the rebuilding of Britain. His proposal for Barnsley could be a model for the regeneration of many other deprived British towns. His way of working with the community and the process of sharing thoughts should become part of every architect's brief.

Alsop asked the people in Barnsley how they would spend £150 million on their town and 80 per cent wanted free parking. That must have been a bit of a blow, but maybe this triggered his idea for the 'Honey, I shrank the town' proposal – Alsop suggests that Barnsley's 100,000 suburban inhabitants could live in the town centre, instead of today's 2,400.

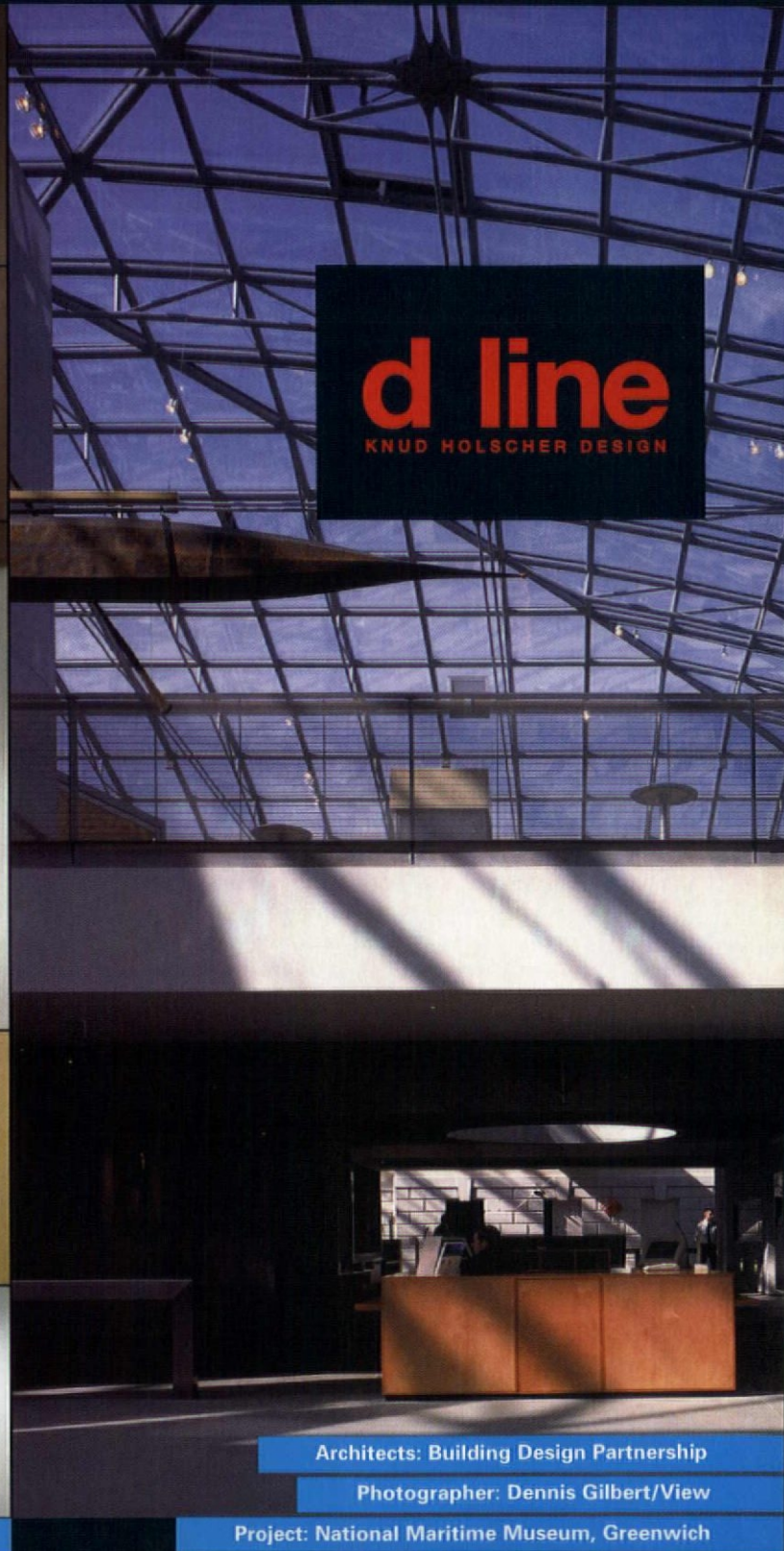
A wall around it would mark the literal and metaphorical boundaries of the town and could leave former suburbia as fields, forests and parks. A shimmering halo above the centre will be the first step and symbol for a town which has the vision to be special and unique. Gordon Bennett! Will Alsop's AJ lecture took place at Spectrum 2002 at the Commonwealth Galleries, London, on 15 May





Signs

Wardrobe



Architects: Building Design Partnership

Photographer: Dennis Gilbert/View

Project: National Maritime Museum, Greenwich

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# competitions

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## PAVILION, PLYMOUTH

Competition involving redevelopment of Armada Way to include a unique 'pavilion' development to provide a high-quality food and drink facility as well as remodelling of the existing landscape. Expressions of interest are sought from teams capable of producing designs that demonstrate contemporary innovation and high design standards, while providing market-tested evidence of commercial viability. Deadline for expressions of interest 11.6.02.

## BLACKPOOL WIND SHELTERS

Open competition for the design of three swivelling wind shelters on Blackpool seafront. The new shelters will sit among a series of artworks along the South Shore seafront. The competition seeks exciting and innovative design solutions. Open to registered architects. Deadline for submission of designs 4.6.02.

## MERTON COLLEGE AND SIXTH FORM CENTRE

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## BM scoops competitions for Lisbon Expo '98 legacy site

Broadway Malayan has won a series of competitions in Lisbon, Portugal, including one to build a new hotel and two new office buildings on the city's Expo '98 site.

The firm hopes that the hotel will be built in time for 2004, when Portugal is set to hold the European football championships – although Spain is clamouring to take over the event because Portugal is struggling to meet stadia requirements.

Stuart Rough, director of BM's Lisbon and Madrid offices, said the hotel for the 300ha Expo site was won in competition on 6 May, along with two office buildings totalling 22,000m<sup>2</sup>. The city is developing the area as a legacy based on a master-plan stretching to 2010. The hotel will be a four-star-plus 200-bed scheme, and will join other BM projects on the swiftly regenerating site including an award-winning centre for Sony.

But the European football championships, for which the hotel would help accommodate some supporters, is under threat because Portugal is behind in providing the 10 required stadia – six new build and four refurbishments.

The Expo site, which includes buildings such as SOM's 17,500-seat, £35 million indoor arena and Alvaro Siza's Portuguese Pavilion, is being updated with residential blocks, including one BDP tower with another to come above its award-winning Vasco da Gama shopping centre. 'It's a stand-alone town,' said Rough. Like Barcelona after the 1992 Olympic Games, the city is looking to capitalise on a high-profile event with a new urban zone.

BM's Lisbon office has also won a prestigious redevelopment of the city's Rossio railway station, a £6 million job that will attempt to rectify an interior 'butchered by two mezzanine floors'. The practice is looking at improving retail facilities and ticket offices and is investigating cladding elements of the interior with railway sleepers.

And on a site on the western edge of Lisbon, BM has scooped a competition to design a new headquarters for Swiss pharmaceuticals giant Roche. The scheme involves a series of 'fingers' of accommodation linked by a curving spine and an 'interface building' at its end. This will have lecture facilities for 300, while the entire site will be extensively landscaped, along with the provision of restaurants, shops and health clubs. Broadway Malayan submitted a planning report last week and is also looking at sites for Roche in the UK.

The office has also just completed Vyrus, a youth-orientated mixed-use building in the centre



Interior of the new Vyrus store by BM and US Designers

of Lisbon for Vodafone. The scheme includes a restaurant, music venue and fashion outlets. BM fellow director Margarida de Ordaz Caldeira said Vodafone had already increased sales through this 'subliminal' advertising through property. The mobile phone giant is now looking at a 'roll-out' of this type of development across Europe.

David Taylor

## Rouse and Cossons hail the 'best' office schemes

CABE chief executive Jon Rouse has revealed new evidence for clients: good design can win you higher rents.

Speaking to the 'Property in the City' conference last week, at which London mayor Ken Livingstone again attacked English Heritage over the Bishopsgate Goodyard saga, Rouse quoted research undertaken by the Property Council of Australia. In a study of 16 developments, there was evidence of a design dividend of higher rentals in well-designed buildings, he said. And, as examples of excellent office design in the UK, Rouse pointed to ORMS's Capital HQ in Nottingham, DEGW's Boots office, also in Nottingham, and BA Water-side by Niels Torp.

Rouse's exemplars were followed by EH chief Sir Neil Cossons, who also listed his favourite offices. Cossons praised KPF's Thames Court groundscraper, which had entailed the demolition of a Grade II-listed building, and he described the Richard Rogers Partnership's Lloyd's Register of Shipping as 'outstanding'.

He also praised the venue of the conference, the new headquarters for Merrill Lynch by Swanke Hayden Connell, where 50,000m<sup>2</sup> of offices and Europe's largest dealing floors have been fitted into a site containing Grade I- and II\*-listed buildings, four scheduled ancient monuments and an operating post office rail delivery system, all within the restrictions of St Paul's Heights (AJ 24.1.02).

The conference also heard from City planner Peter Rees, who suggested Cossons was trying to recreate with the Bishopsgate Goodyard site the kind of 'theme park' he had as director of the Ironbridge museum. Cossons said he was in 'constructive' discussions with EH and that the proposed East London Line could be built over the top of the Braithwaite Viaduct.



BM on track: Lisbon's Rossio railway station



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# Letter from America

RIBA president Paul Hyett travelled to the 2002 AIA convention last week in Charlotte, USA. He reports back from this regenerated venue with a sense of optimism for the future



From left to right: Michael Graves, FAIA; Richard Meier, FAIA; Arthur Erickson, Hon FAIA; Jerry Hirshberg, and 2002 AIA president Gordon H Chong, FAIA

Some might think the view from my 18th-floor hotel room was an urban disaster. Acres of the old city, right out across east 3rd and 4th streets and way off towards 6th and 7th, have been flattened leaving only the faintest traces – like some vast and ancient archaeological site – of what were once bustling streets.

And some might think that listening to Hugh McColl – ex-chief executive of the Bank of America – talk of the city's regeneration is to hear nothing more than a well-heeled magnate 'banging on' about commercially successful architecture. McColl is especially proud of the Cesar Pelli tower, built through association with my firm Ryder's American partner: HKS.

But such interpretation of an insensitive commercial development celebrated through an irresponsible developer's hyperbole would be cynical and misplaced. The 'renewal' of Charlotte represents a complex and highly sophisticated regeneration process and Hugh McColl's role in its success has been pivotal.

McColl gave a keynote address to the AIA's 2002 convention last week. He is also a local hero. Ask André Gallman, the knowledgeable young taxi driver who gave Australia's Graham Jahn and me a tour of the city's four main districts, or restaurant worker Clinton Allen. Both endorse McColl's story, and both acknowledge his popularity to be justified.

A little delving reveals an extraordinary story, for back in 1979 even the city's centre was dangerous. 'Folks were getting robbed between the shop and their cars,' said Gallman. The town had become an urban jungle, and city life a nightmare.

And then McColl offered a vision, and the financial structure for its realisation. He began by shifting all retail out to new suburban shopping malls with mega parking facilities, secure from the adverse effects of both weather and crime. OK, that is a 'bland' and 'sanitised' solution, and it is bad news in ecological terms, but it has been an effective and popular initiative.

Next, the then almost derelict city centre was largely demolished and a major new commercial district was constructed out of the ashes – as anywhere, we could talk long about the architecture and in terms of culture, leisure and entertainment. It is a bit of a desert, but at street level, the urban design is working well. Plenty of good hard landscaping, planting, small parks, street art and well-designed

But McColl and his team did not stop there. They embarked on a programme of social engineering. Slums were cleared, new housing was built and run-down districts were favourably 'worked-over'. A new-found confidence created a migration of dwellers back to the inner city. Most controversially, poor children were bussed to middle- and upper-class district schools, and vice versa in order to break down ghettoisation and improve opportunity and understanding. Brave stuff...

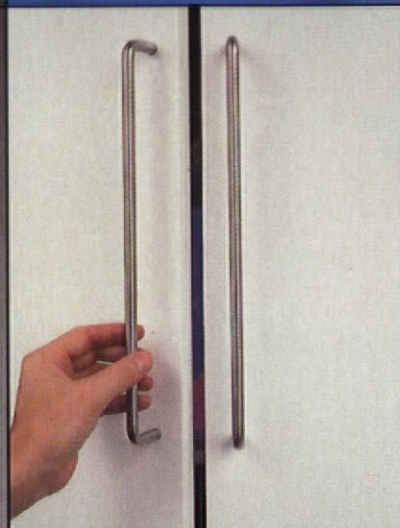
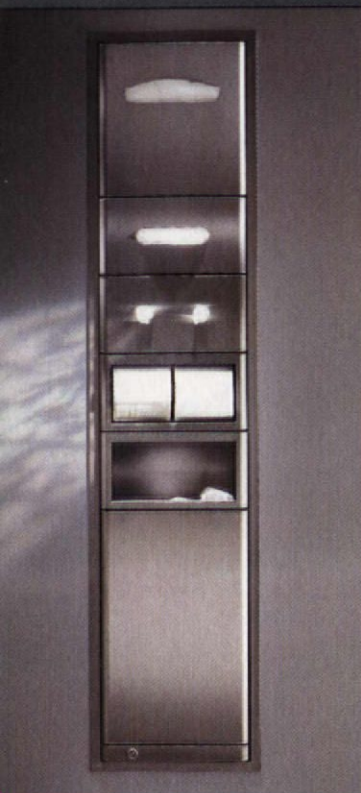
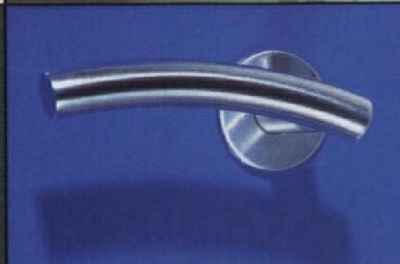
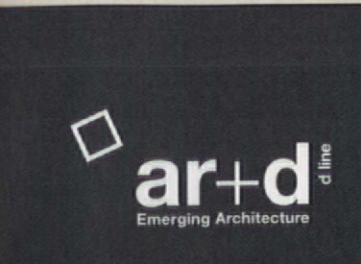
It was this Charlotte that formed the venue for the 2002 AIA convention, and president Gordon H Chong can be well pleased with the outcome. Local boy and president elect Thompson E Penney should also be congratulated for his resolute support of Charlotte and the Carolinas as a venue when others wavered.

And those of us who travelled far to this event can take many good lessons away, both from the city and from the abundance of seminars and workshops that were again on offer. Best of all we can take away hope, because American architects are addressing issues of social renaissance and the city's 'liveability' with an enthusiasm and optimism that is infectious. Yes, there is a long way to go, the challenges are awesome, and in many ways, the Americans start from way back in the field with an appallingly inefficient urban fabric in terms of both building design and masterplanning. But the AIA is at last facing up to the ecological sustainability agenda, and, while the signs of progress in this field might remain as yet slight, I have no doubt that they will achieve much here as well. They cannot, of course, afford to fail. The future credibility of America's architects in their own backyard is becoming increasingly dependent on their ability to solve today's problems.

Happily, using architect William McDonough, McColl has now commissioned a major new learning centre that will be a model in sustainable design. The next step is for such design principles to inform the remaining commercial build-out of Charlotte. I doubt if that point has missed Hugh McColl's attention. He will also recognise the need for a downtown cinema, theatre, and even an opera house.

Next month, it is our turn to review the issues that our own profession must address, here at home. Join us for 'Facing the Future', the RIBA/EMAP conference at Interbuild in Birmingham on 11 and 12 June. Our discussions should be much informed by the American

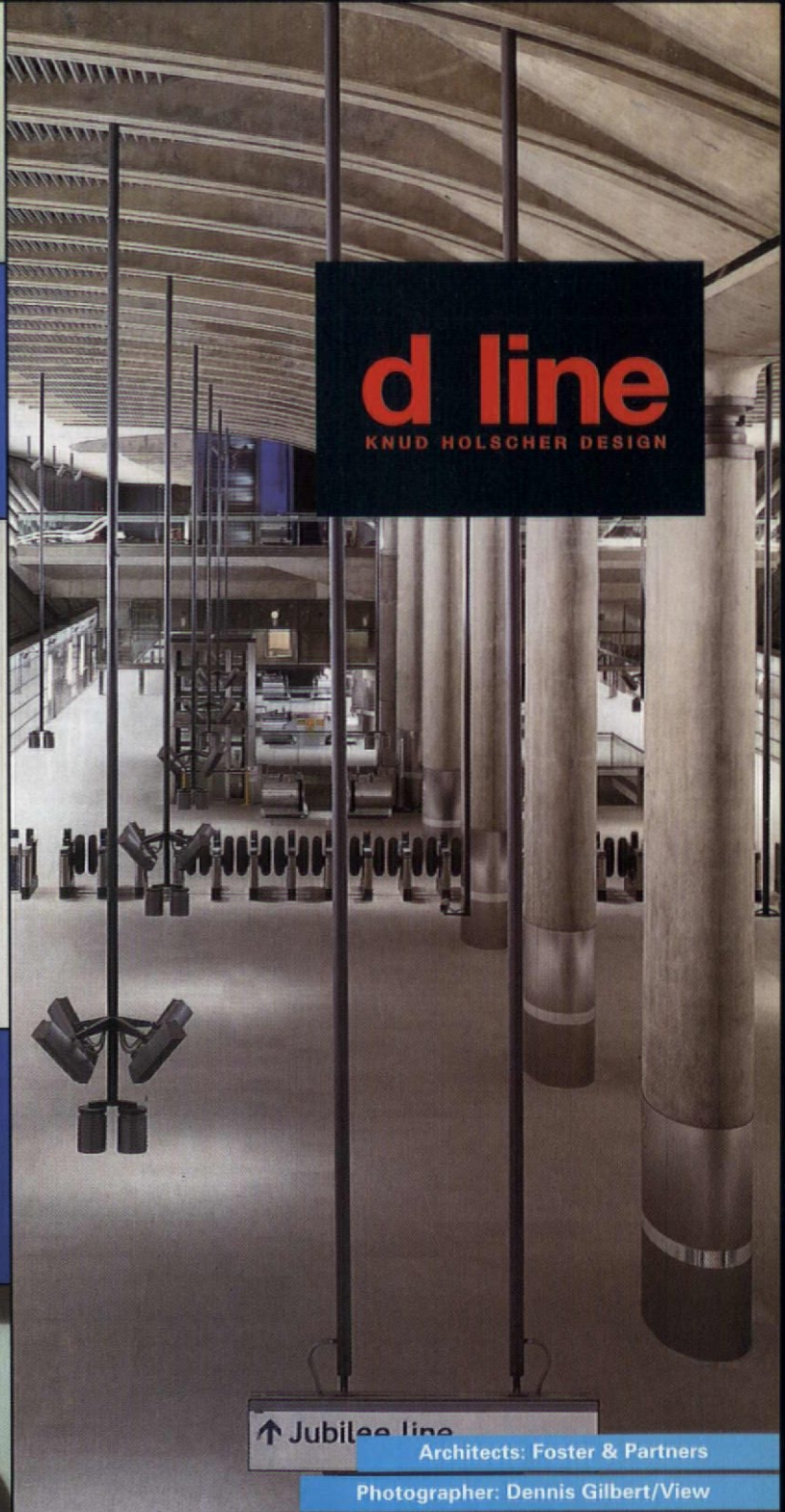




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# Shopping for true regeneration

The real value of retail for effective urban regeneration came under the microscope at the AJ-backed 'Cities Fight Back' conference at the RIBA last week. Jez Abbott reports

Regeneration has carved up communities and encouraged decay, a leading architectural academic told last week's 'Cities Fight Back' conference, in a debate on how vital shopping centres have become to communities.

Hedley Smyth, senior lecturer at UCL's Bartlett School of Architecture, said regeneration had built walls that were effectively barriers to neighbouring areas that had not been so lucky. 'Walls keep people in but they also keep them out and it is people who make a city, so we want them in,' he told delegates.

Smyth spoke of doughnuts – prosperous areas surrounding deprived pockets. He said: 'Walls are being built, decay has been encouraged.' He singled out Birmingham's International Convention Centre as a success for carefully linking into surrounding areas. However, nearby Brindleyplace had created a wall between itself and marginalised areas behind it.

'Developers have embraced regeneration to maximise asset values and appease planners. More attention is needed to encourage diversity of public space in private management and open up development to make it less introverted,' said Smyth.

CABE chief executive John Rouse insisted Brindleyplace was a success on any level and would bring benefits to the city for years to come. Five keys to retail-led regeneration include leadership, management and ease of movement. 'We must make love to highway engineers,' he quipped. 'Since the 1950s, we have thrown brickbats and we must bring them into the camp.'

Retail's regeneration achievement was extraordinary and had become vital for the image of the city, said Tony Travers, an LSE urban expert. 'Harvey Nicholls is more important for a city than the arrival of a new factory or manufacturing plant,' he said.

But Jenefer Greenwood, president of the British Council of Shopping Centres, admitted retail design from the 1980s 'deserved the rejoinders of being monolithic, lacking in character or even destroying of character. We had to wake up and get real to unfix the fixed positions'.

## Tuning in to design

The BBC, meanwhile, told delegates of its aim to become the most creative organisation

in the world – and how it would use some of the finest architects to achieve that goal.

'We need a shop window to exhibit our products,' said John Smith, director of finance, property and business affairs. 'We want to become the world's most creative organisation and our buildings must reflect that aim and enable our 24,000 employees to exhibit their creativity in everything they do.'

He told the conference the BBC used to see its buildings as 'commodities rather than strategic assets'. Smith said he cringed at BBC blunders, including an extension to 'iconic gem' Broadcasting House.

Its building at White City was the most

shopping arcades which echo existing black-and-white Tudor-style shopping areas nearby.

There will also be 112 flats with roof gardens, a new library, a multi-storey car park, offices and 40,000m<sup>2</sup> of shops. An existing Grade II-listed building on the 4.6ha site around Crook Street will be refurbished for the London & Amsterdam scheme. Building could start late in 2003 and end in 2007.

'The arcades will be made of traditional materials such as oak timber frames but in a modern way,' said David Selby, a partner at Hopkins. 'The project will have the domestic scale and character of Chester and achieve permeability, sustainability and accessibility.'

Rodney Carran, a director of Chapman Taylor, said: 'Retail-led regeneration does not feature in recent urban design documents, even though it is the financial driver and determines the vitality.'



Michael Hopkins and Partners and Chapman Taylor's Chester arcades

## Shifting Sheffield

Sheffield is also getting the treatment. A £200 million retail quarter in Sheffield is due to go for planning approval this autumn, said masterplanner BDP. The 100,000m<sup>2</sup> project will include designs by Penoyre & Prasad and Allies and Morrison, focusing on housing, a swimming pool, a gateway station, a hotel,

e-campus and 2,000 car parking spaces. The project is being driven by Hammerson and Sheffield One, an urban regeneration company, which complained of confusion caused by ever-changing policies on cars.

Shopping in the city, England's fifth largest with 540,000 people, has been destroyed by out-of-town retailers and a fragmented centre. A major part of the scheme will be a new store for John Lewis, which enjoyed a 72 per cent rise in sales after another recent relocation in Southampton.

But shop relocation was risky, and Anne Humphries, a John Lewis director, laid down '10 commandments', including the need for an adjacent car park but no large bus stations nearby.

Paul Finch, of CABE and the AJ, said the Americans made a feature of car parks. 'Unlike our NCP tenth-rate apologies, their luxury buildings are palaces for parking with public facilities like shops at the ground floor,' said Finch.

hated of all the BBC's 522 properties, totalling 750,000m<sup>2</sup>, said Smith. 'It's completely grey and tin except for the wooden fire doors.' Smith was unhappy that a scheme by Foster and Partners for the site was scuppered a few years ago, but he looked forward to an alternative scheme on the site by Allies and Morrison, which is half-built and will house 6,000 staff, shops and streets. Meanwhile, MacCormac Jamieson Prichard is working on an extension to Broadcasting House with a theatre, cafe and courtyard, 146 studios and 130km of cabling.

## Changing Chester

The conference also heard how plans for a £90 million network of raised shopping arcades in historic Chester by Michael Hopkins and Partners and Chapman Taylor went for detailed planning consent last Friday.

The ultra-modern Northgate masterplan includes a new square, overlooked by a glass-fronted theatre with a barrel vault. Its raised balconies will link up with two-level



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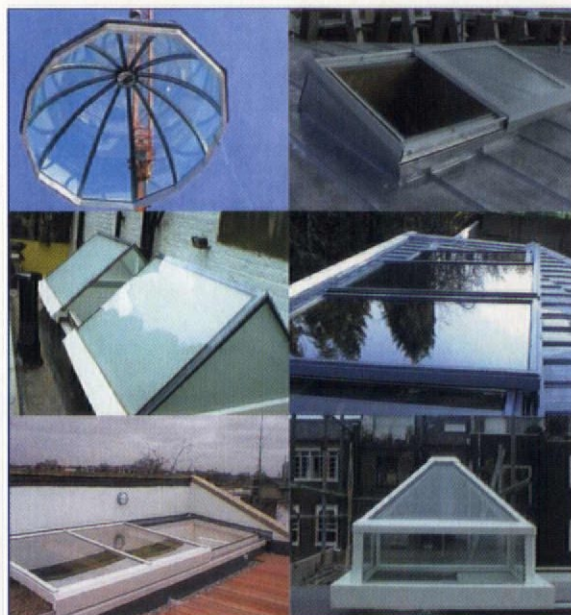
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## editorial

One of the more concrete proposals to emerge from the battle for the RIBA presidency was George Ferguson's suggestion that not all architects ought to be let loose on conservation projects. On one hand, the assumption that only those with relevant experience should be allowed to tackle any particular project is inherently conservative, and likely to mitigate against innovation and change. On the other, as Sarah Jackson argues in her review of the English Heritage publication *Informed Conservation* (page 43), there is an increasing need to monitor the quality of conservation-based work. Whereas such projects were traditionally the preserve of specialist clients (EH, the National Trust, the Church), the advent of Lottery-funding has upped the number of projects led by 'conservationally naïve' champions and 'ordinary' architects.

The conservation of Newhailes near Edinburgh (pages 28-35) suggests a strategy whereby architects who are not specialists in conservation, but who are nevertheless highly skilled, could make a significant contribution to conservation work. Having taken the basic decision to reflect all stages of the house's history rather than restore it to a specific point in time, the team adopted a strategy of intervening 'as much as necessary but as little as possible'. Alterations were limited to those required for health and safety or for visitor and staff accommodation with the result that the project soaked up £4.5 million (and counting) with very little outward sign of change.

Carried out by LDN Architects for the National Trust for Scotland, the Newhailes project enjoyed the benefit of an expert architect and client. But in emphasising technical and project management skills as well as specialised historic research, it exemplifies a methodology which could be successfully appropriated by the highly skilled but 'conservationally naïve' design team. Such a strategy, does, however, require additional qualities which may be even harder to come by than conservation expertise. Both architect and client need to be sufficiently self-effacing to resist the urge to 'make a mark' on the project in question. And, perhaps harder still, sufficiently persuasive to convince funders to cough up money without the expectation of visible results.

Isabel Allen

## letters

### Political impotence of RIBA is frustrating

I write on the eve of the announcement of the new president of the RIBA – a non-event to many Part 3 students such as myself. The outcome is irrelevant, because inevitably the future president will spout the same rhetoric as the last one.

Within the next few months, I will have to decide whether or not I wish to become a member of an organisation from which I feel disenfranchised.

It seems there is little need for the RIBA, which is not even endorsed by the government, unlike the ARB. The often contradictory and confusing division of administrative roles between these two organisations is pointless.

The RIBA is seemingly inadequate in fulfilling its role as a professional body, as shown by the reception of its proposals for education two years ago. The profession's administrative needs could easily be filled by the ARB. Surely we would be better served by an institution that actually carries some political weight and lobbies for our interests as a profession, rather than one which is politically impotent.

During the tenure of the present Labour government, architecture and the built environment have gained a high profile politically. As a result, our profession is fortunate enough to have Lord Rogers, one of its most respected members, in a position that is arguably more politically potent than that of our own president, whoever that might be.

Sadly, Lord Rogers has received a paltry amount of support from the RIBA – it has simply stood back and watched as the proposals of his Urban Task Force have been slowly thrown out of the window by the government.

This is scandalous – we should be up in arms, but we are not. To imagine the BMA doing such a thing is inconceivable. That Paul Hyett celebrates Lord Rogers' achievements when he has done little or nothing to publicly support him, sickens me.

Hyett and many other senior RIBA members may scoff when Will Alsop postulates the idea that the Architecture Foundation could become an organisation to rival the RIBA, but this is not so unimaginable.

The apolitical nature of the RIBA frustrates me, and its needless clinging to the administrative fragments of its professional role continually holds it back.

I would relish the opportunity to become part of a professional body that is not afraid of political dialogue and fearlessly fights for the needs of its members.

Greg Lomas, student

### Media heat loses sight of true election issues

Elections seem to have the unfortunate habit of producing more heat than light, and the media understandably enjoys stoking the fire. Whatever is said in such circumstances, I bear no grudges and hope that, whoever wins, we can all bury our differences, real or invented, and work together to advance the cause of architecture and the status of the profession.

Thankfully, Paul Hyett will remain in office for a further year and the president-elect has that preparatory period working alongside him – an enormous advantage over previous presidents. Whether that should be Annette, David or me, I am certain that the profession is best served by drawing up clear rules of engagement for the future, or we shall all suffer the fallout.

George Ferguson, Acanthus  
Ferguson Mann



See who's made it as president of the RIBA after votes are counted this week. The result will be made public today, after the AJ went to press. Will it be Annette Fisher, George Ferguson, or David Thorp?

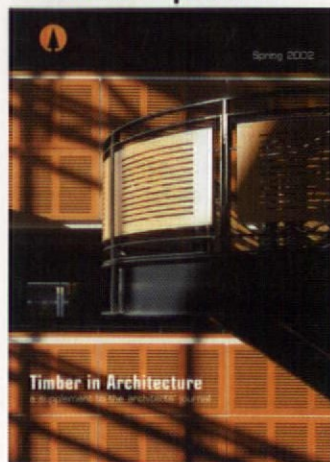
Check out the latest news stories and images, such as this scheme (right) by Rick Mather for a new architecture school at the University of Lincoln. Council planners last week gave the go-ahead to the £10.5 million, five-storey project, which will be constructed south of the railway line behind the university's main academic building. Mather is also masterplanning the development of the rest of the Lincoln campus, to include a new university square.



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## Lack of timber expertise is a modern problem



I agree with Ruth Slavid's comments lamenting the lack of knowledge of the behaviour of timber so frequently exhibited in contemporary architectural detailing ('Timber in Architecture' AJ 16.5.02).

True, architectural training was always rather superficial in this respect, but in former times, when it came to the detailing of complex joinery or the selection of timbers appropriate to the task, the architect in practice could rely on the expertise of high-class joinery firms.

The 1960s became something of a watershed for the specialist firms, brought about by social as well as economic factors. The completion of war-damage restoration work brought fine joinery back into the shops after the Second World War; ocean liners were decommissioned under competition from air travel; churches were becoming redundant; banks and breweries were no longer commissioning high-quality refurbishments; and the cost of maintaining the Cold War determined the cessation of expensive capital projects by the government.

Although the specialist firms were usually rich in assets such as land, buildings and timber stocks, they were increasingly vulnerable when trade slumped,

due to the high costs of keeping an irreplaceable workforce they were reluctant to disperse.

By the end of the 1960s, most of the firms were facing underpricing of work, and failure to modernise brought about inevitable liquidity crises. Those able to survive underwent the usual stripping of assets and reduction in specialist skills. The stewardship of four centuries of woodworking knowledge began to slip into the past.

Another problem we have today is the faulty conversion of timber at source, particularly tropical hardwoods, often from immature trees and using branches. Previously, this timber would have been rejected because of its instability or used for handles in the cutlery trade. Now it is all too often used for substandard joinery in 'signature' buildings. Nobody seems to care or, more alarmingly, to know the difference.

Timber used to be selected at the merchants' premises by an experienced buyer who would imprint the company's stamp on the ends of boards to prevent the possibility of substitution. Today's practice of buying timber over the telephone would not have been considered.

The timber industries are in urgent need of re-skilling.

**Alan Beardmore, Reading**

## Take a risk by all means but it could add to cost

I am entirely with Will Alsop in his belief that caution can lack sparkle (AJ 2.5.02), but he oversimplifies the issue.

He implies we are isolated individuals, out to please ourselves by our own dexterity. This can only be true for one-off cases. Even then, we have to ensure the client sees our point of view, which often requires a high degree of persuasiveness.

In the town or city where buildings must contribute to the

overall environment, where height, width, relationship, dynamic contrasts, focal points and delayed vistas might each have to be considered along with the client's preferences, taking risks to add sparkle may add to the complexity, and the cost.

First and foremost, town or city streets, squares and special buildings, quite subconsciously, must be a delight – not simply each individual unrelated little or large gem.

Such a building has its place, and where better than as a 'highlight' amid relative mediocrity? So, take the right risk in the right places.

Alsop's article was written in Venice – what better place to prove a point?

**Richard Brown, Poole, Dorset**

## Aesthetics can add to the journey experience



Austin Williams asked 'whether users find that aesthetics play any significant part in the experience of their journey' ('Wear getting there' AJ 2.5.02).

My answer is a resounding yes. And I find support three pages further on in Kate Trant's article 'Crossed lines', where she writes, 'clearly the focus has [also] been on... the quality of the experience'.

The biggest challenge for architects and engineers is to make stations and bus stops a pleasurable experience, even when it is raining and at night when there are not many people about, and buses and trains are few and far between.

It is not just about aesthetics. It is about comfort and warmth, feeling safe, being able to read the timetables and knowing

when the next train is coming. But aesthetics are an important part of the experience, especially where they make waiting interesting. They can provide beauty and detail to delight the eye.

Yes, it is a challenge, to do all that and also make it vandal-proof. I hope architects will rise to that challenge.

**Peter Eyres, Lowestoft**

## RSA willing to reinvent itself as relevant body

I write in response to Will Alsop's astute piece on the Royal Society of Arts and its future role (AJ 9.5.02). As he says, there are fantastic opportunities for the RSA, not least to defy the bureaucracy that entangles us and fight for better lives, better environments and more depth and breadth of thinking.

He is right, the field is crowded. The RSA needs to bring a distinctive voice to be heard today above the clamour of think-tanks churning out reports and the vested interest groups vying for notice.

The RSA is in a unique position, through the breadth of its interests and its independence, to take the long view. It has proved able, over the last 248 years, to reinvent itself as a relevant body – it must do so again to emerge fit for the 21st century. We are currently listening to the ideas from our 22,000 fellows and Alsop's contribution is most welcome.

**Penny Egan, director, RSA**

## Corrections

● Michael Hadi Associates was the engineer for the de Rijke Marsh Morgan house featured in 'Timber in Architecture' (AJ 16.5.02).

● The construction costs for Buschow Henley Architects' hall for Caldicott School were £1.6 million and not the £4 million quoted in our report as total budgets (AJ 9.5.02).





will alsop

## Architecture and urbanism are soft targets for any politician

I am not usually paranoid, but I am beginning to think that whenever I spend time in other places, the politics swing to the right. My first brush with groups that make Mrs Thatcher look like the sister of Karl Marx was in Marseilles.

I became aware that in some quarters I was not welcome – both as an architect and an Englishman. I had discovered the Xenophobic attitudes of the Front Nationale and Jean-Marie Le Pen. These people resented my presence and would have gladly replaced me with a suitable right-wing architect. My feelings were of disgust, as this was the first time I could get anywhere near the idea of being a refugee or a black person in a white society. Obviously the comparison is not exactly accurate as I did not have to be in Marseilles and I did have a home to go to. But nevertheless the thought that someone would rather you didn't exist bears some, however small, comparison.

The project was complete, French politics shifted to the right and the economy went down. I am now branded a left-wing architect in France, which makes new projects difficult. I well remember Henri Ciriani, who was branded a right-wing architect, having no projects in the left-wing period of domination. Today he has many.

In 1995 I accepted a professorship in Vienna. Within two years, Austria saw the rise of Joerg Haider. He used the argument of foreigners taking away jobs and homes. This argument was extended to pulling Austria out of the European Union and promoting a type of localisation, which if restricted to an architectural argument, could be very interesting. His message is not dissimilar to Le Pen, which is to make smaller ponds in which to personally swim. For a while, I could detect a response within the university with regard to the employment of foreign professors.

Fortunately Haider's power subsided and the Austrian people realised that isolation and external criticism was not a desirable option.

More recently, Alsop Architects has opened an office in Rotterdam where we enjoy a range of projects which generate open and lively debate. In the last two months, Pim Fortuyn has risen to power in the local council on a ticket that promises to re-evaluate social benefit payments, put a stop to all immigration and to stop my Central Station project. If you can believe the local press, he has said that my plan should start again and be re-done by a Dutchman. Yet again I am cast in the role of the foreign interloper. This will not happen, although he is expected to do quite well in the forthcoming elections. I find his words strange as my plan was accepted by the local people some seven to eight months ago. He feels obviously, that whatever he thinks must also be representative of the people who elected him. Not so.

All over Europe we see a drift to the right and very often in places that have usually been left. There is, I believe, a very thin wall dividing the left from the extreme right which comes down when individuals feel their own sense of well-being threatened, or perceive an injustice. This leads to an overreaction, which, as in my experience in Austria, very quickly subsides.

Architecture and urbanism are soft targets for any politician and we accept these vagaries in behaviour. Sadly, though, it impairs the proper process of public consultation and the emergence of a collective consciousness. Ironically the Far Right wishes to give identity by exclusion not by inclusion and celebration of the individual.

*From seat 6A, BA flight No 701, Vienna to London*

● Since writing this article, Dutch democracy has been served a severe blow with the assassination of Pim Fortuyn

people

Jane Kennedy, partner in the Ely office of Purcell Miller Tritton (PMT), is an increasingly powerful figure in the field of building conservation. She has been surveyor to the fabric of Ely Cathedral since 1994, when she took over a £14 million repair programme, and is also in charge of conserving two of the six English buildings recently given World Monument status – Stowe School and Selby Abbey.

The looming presence of Ely Cathedral is visible both from Kennedy's office desk and her home nearby. A slim figure in her late 40s, Kennedy is tougher than she looks and one imagines that, in the Trollopian round of diocesan meetings, old-school clerics quickly learn not to mistake her calm self-possession for reticence. 'I have strong views and I'm prepared to stick my neck out,' she says.

When appointed assistant surveyor in 1990 she was expecting to be treated as 'a chit of a girl' by the 'grand old men' of the Cathedral Architects Association, but they immediately welcomed her into the fold and she is now secretary.

Kennedy's approach to conservation is characterised by a strong sense of history, an interest she shares with her husband, John Maddison, author of a recently published history of Ely Cathedral. They married while studying in Manchester, where she fought pioneering battles with the Victorian Society to save places like Liverpool Road Station.

Exhaustive historical research is the starting point for all Kennedy's projects, to the extent that PMT architect Cathy Fisher is currently trawling the Huntington archive in Los Angeles to track down the original stone and sand quarries used at Stowe. Kennedy also commissions archaeological investigations – including photogrammetry – and she routinely undertakes a thorough analysis of mortars. 'You have to understand the building's history, when it's been altered and why,' she says. 'Then you can decide what to do now.'

In the case of Stowe, it was comparatively easy to fix the timeline for repairs to the 18th century, whereas at Ely, which had significant alterations by Gilbert Scott in the 19th century and Stephen Dykes Bower in the 20th, timelines for repairs have varied in different parts of the cathedral. 'Repair work at Ely can't be held to an essential point of time and it's more about balancing.'

In the case of some pinnacles on the choir, she says that she upset her masons by electing to stick with the 'rather bastardised details'

'There is a thin wall dividing the left from the right which comes down when individuals feel their own sense of well-being threatened'



**Purcell Miller Tritton's Jane Kennedy is a force to be reckoned with in the world of building conservation. Working within a historic context, Kennedy is not afraid to 'stick her neck out' in order to follow a project through**

by belinda bamber. photograph by terry howe

## historical know-how



introduced in an 18th-century repair rather than copy the medieval ones next door. 'My masons could see that the 18th-century workers didn't understand what they were doing,' she says, 'but we put back what we found so that history was retained.' Her rule of thumb is 'if in doubt, keep to what is there.'

Kennedy's ability to steer a clear path through this kind of problem means she is increasingly in demand as an independent consultant for writing conservation plans. These, she says, 'should be concise, readable and enjoyable documents', but all too often end up as 'huge, dull and very expensive tomes with vast numbers of checklists which nobody's ever going to read.'

In Durham, where PMT is repairing a tiny 18th-century parsonage house built with mud rather than mortar in the joints, she is impatient with local conservation officers' insistence on replacing the mud, even though the exterior will eventually be concealed by harling.

Unlike the growing band of historic building specialists who have taken postgraduate conservation courses, her expertise comes from the long route of

varied jobs and 'luck in the people I've come across'. The latter include Donald Buttress, Andrew Anderson, architect for St Alban's Cathedral, and David Jeffcoate, the late SPAB technical adviser from whom she learned about lime.

Her career began auspiciously in the first European Architectural Heritage Year in 1975, when she spent her year out designating conservation areas for the now defunct Greater Manchester Council, but she has also done time as a freelance with small children in Norfolk in the early 1980s. This included doing cottage conversions for friends, in one case for £50 and a turkey. ('Norfolk is good for barter'). Before joining PMT in 1988, she worked for Norwich City Council as a historic buildings architect.

Although working within a historic context is Kennedy's natural métier, she dislikes the idea of a 'battle of styles' between old and new. Architecture 'is to do with enjoying and understanding buildings and how they're put together,' she says, 'and that applies to the Modern Movement as well as to repairing a medieval building.'

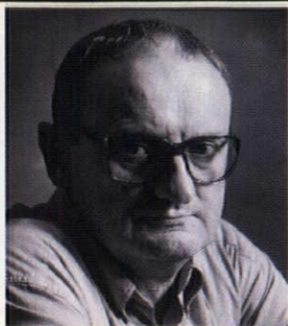
She has built two new buildings for

King's School, Ely, and recently completed a new processional way at Ely Cathedral. Thanks to generous gift donations, there was a surplus for the job of constructing much-needed lavatories, so these are now housed in a new single-storey link between the choir and the Lady Chapel. It was inspired by the discovery that there had once been a medieval two-storey passage designed to separate the clergy from the temptations of women among the laity.

Kennedy has had a lot of experience in managing teams of specialists, but it is the craftsmen from whom she claims to have learned most. 'We are very fortunate that in East Anglia there are lots of excellent trades who have never stopped using lime.'

The introduction of the English Heritage funding programme for cathedrals has made a great difference to long-term planning, and Kennedy backs the call for a second tier of national funding for large churches. 'There is a world of difference between a Tewkesbury Abbey and a parish church. Selby is jointly funded by English Heritage and the Heritage Lottery Fund, which is working well – with a big building you really need to plan ahead.'





**martin pawley**

## Architectural salvage appears to be answer for desperate NASA

News that NASA has been trawling the Internet in search of old computer parts to keep its ageing fleet of space shuttles operational must come as a bit of a shock to the generation that grew up thinking they were the be all and end all of advanced technology.

But computer development has been so swift that NASA, the quango that enabled America to win the 1960s space race, has fallen so far behind that its ageing fleet of space shuttles are going to have to keep on flying into their 40s and 50s – provided online auction houses such as Yahoo and eBay can unearth enough electronic bits from circa 1981, when the space shuttle's old-fashioned Intel 8086 microchips were hot stuff in the first generation of IBM PCs.

At the root of the problem is not so much the speed of technology, as the massive increase in aerospace complexity and cost. Inflation since the late 1970s and early 1980s when the four original shuttles Columbia, Challenger, Discovery and Atlantis were built, has ensured that to design and build an improved, state-of-the-art fleet

of new space shuttles would cost more than the Mercury, Gemini and Apollo programmes put together.

If this story seems vaguely reminiscent of something nearer home, you are not mistaken. Although its two airline operators, as far as we know, have not sunk to the level of surfing the Internet for replacement electromagnetic instruments and Sinclair ZX80 era computers – Concorde faces the same fate. It too will be kept in service long after it should have been replaced by something bigger and better. Of course, the 33-year-old Concorde was earlier on the scene than the space shuttle, but thanks to the lengthy legal battles over its alleged noise pollution, not by very much. The first flight of Columbia took place in the spring of 1981, five years after the

first commercial Concorde flight in 1976. The ageing pair also have one more thing in common on the debit side that should be mentioned; a total disaster that nearly had both grounded permanently. In the case of Challenger, a failing neoprene gasket shortly after launch on 28 January 1986 cost the lives of the crew. In the case of Concorde, the loss of an Air France plane by fire on take-off from Paris on 25 July 2000 cost the lives of 113 passengers, crew and victims on the ground.

Following each of their disasters there were moves to abandon both these aircraft. After Challenger, there was a movement in the US to quit manned space travel altogether, with many commentators and politicians contrasting the successes of NASA's unmanned probes with the lumbering, dangerous and prone-to-delay shuttle fleet.

In the case of Concorde, the Air France crash triggered a resumption of all the passionate environmentalist arguments against supersonic flight.

In the event, neither craft succumbed to this criticism and both remain in service to this

day, but there is little doubt that the disasters and the continuing Green opposition played their real part in discouraging any further talk of an updated replacement like the long range 'Super Concorde', proposed as recently as 1990 by Aerospatiale and British Aerospace. Originally built for a 10-year lifespan, both civilian vessels were purchased without contractual provision for routine upgrades and improvements, a precaution that is normal for military aircraft, but both too, despite their futuristic nature have been left behind.

This is a fate more common in architecture – where every building is a prototype with no production run – than in aviation where 200 or 300 examples of an airliner would be normal. A far cry from 12 Concordes and four shuttles.

## a life in architecture

**dr thomas cocke**

Dr Thomas Cocke is chief executive of the National Association of Decorative & Fine Arts Societies (NADFAS), a post he has held for only a few months. Part of his manifesto is 'to open NADFAS much more to the outside world; to try and attract younger new members to NADFAS while retaining existing older ones, and to expand the organisation's educational role. A NADFAS website is due to be launched this year.



Dr Cocke's favourite building is the Fenland cathedral of Ely (see picture). 'I have studied it for years,' he says, 'so I can appreciate the complexity of its history. I also know it as a traveller across the Fens. It rises in unlikely and lopsided splendour over the endless plain.'

His second choice is the Palazzo Farnese in Rome. 'So proud but not overbearing.' Three storeys tall and 13 bays wide, the palazzo was designed in the 1530s by Antonio da Sangallo, though its cornice was substantially enlarged by Michelangelo, who made other modifications as well. In his *History of Architecture*, Banister Fletcher calls it 'the most imposing Italian palace of the 16th century'. Two enormous 17th-century fountains outside the building were assembled from bathtubs found in the ruins of the Baths of Caracalla, and are decorated with lilies, the Farnese family crest.

In contrast to these two fine buildings, Dr Cocke describes the Churchill Hotel in London's Portman Square as 'an expensive mediocrity'.

Eleanor Allen

23 May 2002



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# Invisible menders

**In its conservation of Newhailes near Edinburgh for the National Trust of Scotland, LDN Architects has minimised disruption to the building fabric in a quest to preserve the distinctive 'mellowness' of the house and reflect all stages of its history**

By Julian Holder. Photographs courtesy of National Trust for Scotland

From the moment you enter the grounds of Newhailes, it is apparent that this is a land that time forgot. Precisely when it was forgotten – just when the key to the secret garden that engulfs it was thrown away – is hard to determine. This detail would be important in a more conventional conservation project, where the aim was to restore the house and grounds back to a specific point in the past; but that has not been the intention here.

Situated on the outskirts of Edinburgh, Newhailes was built in the late 17th century, and enlarged in the early 18th to become one of the most important houses of the Scottish Enlightenment. Owned from the early 18th century by the Dalrymple family, it has remained largely unaltered, both inside and out, since the late-19th century. And that is the way its new owners, the National Trust for Scotland, want it to stay.

One might have expected the Trust to repair the fabric and return the house to its full 18th-century glory. But this is that rare thing – a conservation project done by the book, or in this case the international conservation charters.

If it is hard to tell what period Newhailes is being restored to, because it is not playing that game, it is harder still to know what to make of a conservation project which has so far cost £4.5 million and yet still leaves work to be done on the garden buildings and grounds. On the face of it, it is hard to see where the money has gone, as the house and grounds still look in such a sorry state, or as the Trust prefers to call it, 'mellow'.

Perhaps that is the tactic – your heart goes out to this sad, yet still grand, house which has clearly seen better days. As its first property manager, Piers de Salis, says: 'People will come here and wonder where on earth we managed to spend all that money. But if they have to ask that question, we will know that we have done a good job.'

Key elements in the work of Edinburgh-based LDN Architects (previously Law & Dunbar-Nasmith) have been security, fire suppression and environmental controls. Given the importance of the fabric, when it came to the careful upgrading of services, only floorboards that had previously been lifted were allowed to be lifted again.

Deliberately presenting the house in such a fashion is obviously a risky strategy. But make no mistake, whether the public likes it or not, this is an exemplary conservation project, and one that reduces the gap between theory and practice to an almost imperceptible chink. But that, to some in the conservation fraternity, is rather too close.

It is a chink made all the harder to detect because the Trust's conservation philosophy at Newhailes even extends to the layers of dirt, and signs of wear, left on this Marie Celeste of a building. Free from the creative tension that is born out of the gap between theory and practice, Newhailes has been untouched by the ego of today and left for future generations essentially as it was.

Whitehill, as it was originally called, was designed in 1686 as a modest seven-bay, neo-Palladian villa by James Smith for himself. By

1702 the architect had become bankrupt, and the house was then owned briefly by Lord Bellenden before being acquired by Sir David Dalrymple in 1707. It remained in his family's hands for almost three centuries, and was transformed by them into the house we see today. Seven bays became 15, the main stair was extended, and the intimacy of Smith's original rooms was complemented by larger, grander spaces.

Chief among these new spaces was the large double-height library completed in 1720. Allegedly described by no less a person than Dr Johnson as 'the most learned room in Europe', it was unique in Scotland and had few serious rivals outside.

The library is currently empty of its books, and has been since 1976, when the collection was given to the National Library of Scotland in lieu of tax. It has always been hoped that these books would return, but the National Library of Scotland demands strict assurances from the Trust concerning their future security. Following LDN's interventions, a fire suppression system, environmental controls and security measures are in place to facilitate future discussions with the library.

We still do not know who designed the extensions built in the early 18th century. The mason and wright for the library were James Crichton and John Young respectively, who may well have supplied the design, though some suggest it is the work of William Adam (the father of Robert and James), while others see the hand of another great Scottish architect, James Gibbs. Whoever was responsible,





Opposite page, top left:  
south front of Newhailes  
after conservation.  
Opposite page, top right:  
the south front before  
work commenced.  
This page: detail of  
mantle in the library



the most radical transformation during Sir David's time was to balance the library wing with a new wing to the west, and to reorientate the entire house to the south.

Originally Smith's villa had been entered from the north, where it enjoyed uninterrupted views across parkland out to the sea. Sir David reversed the orientation and created a new entrance hall in Smith's villa, now reached via the enclosed garden front.

This building history also results in an interior which plays tricks of size and scale: it is almost a Venturi-like aesthetic of complexity and contradiction, as visitors move from large to small and back again. The 18th-century painted and gilded surfaces encourage a hushed respect. Given the fairy tale analogy that the Trust is so fond of invoking at Newhailes, you might wonder if the briar roses will shrink back at any moment to reveal Sleeping Beauty.

The house and its contents were first

offered to the Trust by the trustees of Sir Mark Dalrymple in 1995, and acquired with the aid of an endowment from the Heritage Lottery Fund and an appeal for the purchase of the collections. LDN made the initial conservation proposals, which had five principal aims: to conserve the existing buildings and garden structures; upgrade the estate infrastructure; upgrade environmental, plumbing, lighting, electrical, fire, and security systems in the house; provide visitor reception, presentation, and tour facilities; and finally, provide essential support and management accommodation for Trust staff.

The practice has a history of involvement in the house, dating from the 1970s when it refurbished the entrance hall – which ironically now seems garish compared to the other rooms, but must be seen as part of the property's history. The Trust appreciated that Newhailes' importance lay not only in its history and architecture but in its mellow

condition, its silent testimony to the fortunes of the family.

'An all-pervasive mellowness' is how the Trust categorises it, and this is the impression that it has tried to maintain – the sense of a house which has settled into its character over 300 years. This approach has been carried out selectively before: the interiors at Brodsworth Hall in Yorkshire by English Heritage, for instance, and most notably the treatment of Chastleton in Oxfordshire by the National Trust, where, once again, a single family had maintained the original building over many generations.

Chastleton, then, is Newhailes' closest relative. It makes you wonder if there is some kind of Campaign for Real Conservation, begun by the National Trusts north and south of the border, to distance themselves from the state-funded urge towards restoration, as seen at the Great Hall of Stirling Castle (AJ 8.6.00) and the King's Chambers at Edinburgh.

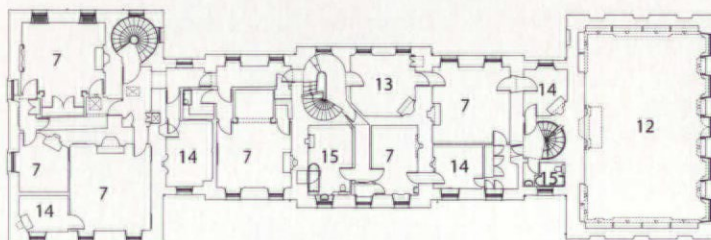
The library. It is hoped that the Dalrymples' collection of books, currently housed at the National Library of Scotland, may one day return. Above right: plasterwork by Thomas Clayton, 1742, in the hall



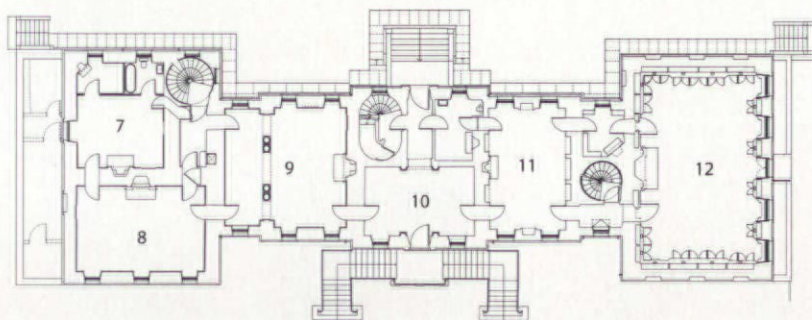


Having determined that the significance of the building lay in its mellowness, the resulting philosophy of repair ensured that what should be done was 'as much as necessary but as little as possible' – that the only interventions which were justifiable were those which were required for health and safety or visitor and staff accommodation.

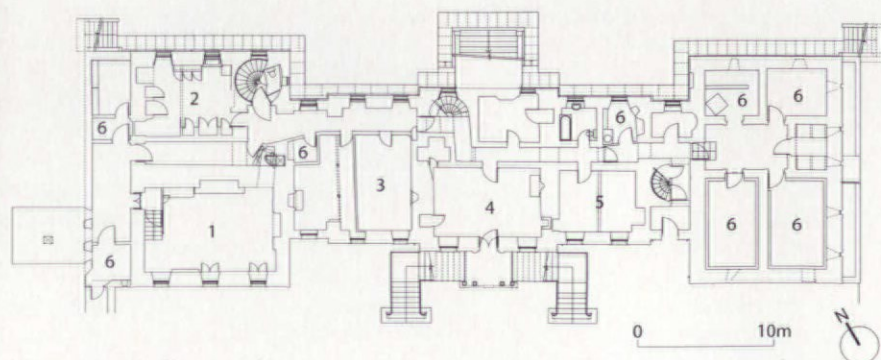
What was necessary were repairs to remedy structural defects (the 18th-century extensions had turned non-load bearing walls above the dining room into load-bearing ones, and primary beams were bending under pressure from floor joists); prevent water ingress (there was a serious problem in the abandoned basement kitchen); and arrest any further decay of the fabric (areas of external harling were loose and had been patched up with cement based mortars). Structural engineer Elliot and Co felt that some of the work in the roof must have been inspired by Heath Robinson.



first floor plan



ground floor plan



basement floor plan

- |                                     |                      |                         |                       |            |
|-------------------------------------|----------------------|-------------------------|-----------------------|------------|
| <b>KEY</b>                          | 1 old kitchen        | 4 lower hall            | 8 winter sitting room | 12 library |
| 2 servants' hall/<br>modern kitchen | 5 staff sitting room | 9 dining room           | 13 sitting room       |            |
| 3 staff kitchen                     | 6 store              | 10 front hall           | 14 dressing room      |            |
|                                     | 7 bedroom            | 11 chinese sitting room | 15 bathroom           |            |





Above: new carving on the gate piers of the forecourt, being carried out by Duncan Strachan. Above right: Alex Hyland repairing plasterwork on the south elevation. Right: plasterwork on completion of repairs (white areas either side of the lichens). Opposite page: the main staircase on the south front of the house in the process of being stabilised and repaired. Only structural, not decorative, elements were replaced, and the balustrades have not been repainted



## Structure

Research work and analysis demonstrated that Newhailes derives its unique cultural significance from a complex interaction of different elements, rather than the initial assumption that it was 'untouched'. Together they create a rich sense of place – an all-pervasive mellowness – in which no one element dominates. For this reason, the conservation policy for the project was 'to carry out as much work as necessary, and as little as possible'. It was vital that this approach was followed through for all decisions – conservation work to the building fabric, interiors and collections had to all reflect the same philosophy.

External repairs to the house included overhauling the roof coverings and chimneys, improving the rainwater drainage and lightning protection, replacing structurally unsound external stonework, and patching the external render. Research indicated that elements of the render dated back to early 18th century, and the Trust tried to retain as much of the original as possible, only patching where it was missing or damaged. To renew the limewash coating (which was last done more than 150 years ago) would be one step further than was required – the mellowness would certainly be lost. However, the Trust accepts that limewashing is likely to be necessary in future to prolong the life of the render and repairs.

The windows on the principal floor were replaced as part of improvements in 1873. Although all of these were in varying degrees of decay, it was felt that the Victorian sashes, glazing bars, and internal alterations consistent with the Aesthetic Movement, should be left, with repairs and outside decoration to ensure their continued survival. All existing glass, including cracked panes, was retained wherever possible.

Works to the outside of the house also included stabilisation and repair to the main staircase, replacing missing structural elements only. Over the years, some decorative elements in the balusters have been lost, but

these were only replaced where structurally necessary. We have not repainted the balustrades, because to do so in their present condition would exacerbate the deterioration of the ironwork, nor did we wish to strip off the historic paint layers.

The roof over the kitchen court to the west of the house was missing when the Trust took over the estate and there was no evidence of what it looked like. A simple glazed structure, preventing further deterioration of the area, has been inserted until new evidence emerges.

In the interior of the house, the majority of the work was to the services. However, in addition to limited structural strengthening, alterations were necessary to provide accommodation in the attic floor for the house steward, an internal lift for disabled access, a disabled WC, and staff work areas and offices in the basement.

The rare survival of its early decoration is so significant to the history of the house that the Trust has striven to protect the existing surface textures throughout all the interior work. When installing the services, only the floorboards could be disturbed. Complete rewiring of the house had to be done by using existing wiring as draw wires; where sockets could not be wired without disturbing surface textures, they were left blank.

The Trust has installed 'conservation heating' throughout the house, not for human comfort but for the benefit of the building and its collections. Each room is monitored by radio telemetry, which records and controls the relative humidity by means of heating.

A full fire and security detection system was installed – again, the only routes for cabling being within the floor voids. And, in addition, for the first time in a Trust property, a fire suppression system has been installed, which will ensure that any fire outbreak should be confined to the room of ignition, preserving the rest of the house and collection. The sprinkler heads are virtually invisible.

*Una Richards, senior buildings adviser, National Trust for Scotland*









Where this minimal philosophy has demanded the greatest amount of work has been in the 18th-century entrance front. Sir David Dalrymple created the new entrance with a porch sheltering the basement door, which in turn supported a double stair to the new principal door by opening up the central window.

New steelwork has replaced the corroded iron, and new stone introduced where necessary – and the whole thing repeated until it was good enough. As Una Richards, the Trust's senior buildings adviser says: 'This is the public's first point of contact with the house, so it's vitally important to get it right.'

Originally designed with numerous water traps in it, the ironwork was in a poor state of repair and potentially dangerous. Although the local authority was prepared to consider a relaxation of normal building regulations in support of the Trust's vision, it was not prepared to compromise on safety where the public were concerned. However, as Newhailes will remain a house for the purpose of Use Classes, and visitors will be accompanied and their numbers limited, fire exits and escape routes have not been required to more conventional standards.

Additionally, by taking the philosophy of doing 'as much as is necessary but as little as possible', the Trust employed craftsman Chris Topp to repair sufficient sections of

the iron balustrade to comply with safety, but did not repair, or even repaint, areas of rust. 'I've lost more sleep over this part of the project than any other,' admits Richards on looking at the deftly repaired sections.

Though it may seem like a carefully considered response to a specific situation, 'as much as necessary but as little as possible' is actually chapter and verse from the current version of the ICOMOS Burra charter (1999), which states: 'Conservation is based on a respect for the existing fabric, use, associations, and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.'

If not much can be seen for £4.5 million, much can be questioned. If this really is best practice, why is the Trust only taking this approach at Newhailes and not elsewhere? Clearly something of an experiment, the reversibility of so much that has been done at Newhailes allows different measures in the future, when decay can no longer be arrested, and certain elements of the fabric do fail. How often can the balustrade be repaired before nothing is left of the original?

Throughout the project, the Trust used a conservation planning process which was grant aided by the Heritage Lottery Fund and European Regional Development Fund, and which followed a rather unusual (for the Trust) course of commissioning experts to

assess and advise, which included a watching brief while work was undertaken. But the clear intention from the beginning was to retain the essence of Newhailes, initially thought to be 'untouched' but, of course, not so in reality.

Given the care and attention necessary to safeguard the building during the project, the procurement method was identified as crucial from the outset by Mark Hopton at LDN. He argued that 'the conservation work at Newhailes requires to be carried out with exceptional care if we are not to destroy all that we are trying to preserve'. Early on, he told the Trust that 'value for money and quality must be demonstrated', and the management contractor employed at Chastleton – Linford Bridgeman of Lichfield – was duly appointed.

When the first small groups of visitors tour the house next month, they will have to wait in James Craig's substantial stable block of c. 1819. Only here, and only slightly, does the determination to maintain the mellowness of the estate fall down in favour of providing a tea room, shop, toilets, and staff accommodation on the upper floors. But while it might have been consistent for the Trust to commission a new building for these purposes, that was no doubt difficult to justify, given this existing, available space.

*Newhailes opens to the public on 1 June. To book a ticket, telephone 0131 653 5599*





Opposite page, top: the Chinese Drawing Room. This page, top: the Red Drawing Room. Both are, in essence, just as they were left by the Dalrymples. Above: detail of dining room entablature

## Costs

The acquisition of the property and development of the project could not have been possible without funding from the following:

- Heritage Lottery Fund – an endowment grant of £5 million and grant towards the project
- European Regional Development Fund – a grant for project works
- Historic Scotland – a grant for project works

The total of £12.7 million is broken down as follows:

- £5 million endowment
- £3.2 million purchase of collections and contents
- £4.5 million conservation project costs (over three phases of work)

## CREDITS

### CLIENT

National Trust for Scotland

### ARCHITECT

LDN Architects

### QUANTITY SURVEYOR

John Dansken & Purdie

### MECHANICAL AND ELECTRICAL ENGINEER

Irons Foulner

Partnership

### STRUCTURAL ENGINEER

Elliot & Co

### FIRE SUPPRESSION

CONSULTANT

Forbes Leslie Network

### LANDSCAPE ARCHITECT

Peter McGowan

### MANAGEMENT

CONTRACTOR

Linford Bridgeman

### CONSERVATORS, CONSULTANTS AND CONTRACTORS

*architectural paint research Papers and Paints; architect for historic buildings survey* John Renshaw; *archaeologists* Addyman & Kay; *specialist joinerywork* Woodwork & Design; *specialist ironwork* Chris Topp & Co Wrought Ironworks; *joinery and ongoing builder/joinerywork* HM Raitt; *masonry* Ian Cumming; *plasterer* Plaster Restoration Company



## Architectural clean sweep

The Commonwealth Institute's 40-year-old leaking roof has been refurbished to something like its former glory

BY AUSTIN WILLIAMS

In contrast to T E Colcott's Imperial Institute in South Kensington, founded as a result of the Colonial Exhibition of 1886, the Commonwealth Institute, designed by Robert Matthews, Johnson-Marshall & Partners, was meant to represent a new spirit of the commonwealth of nations. By the time the building was completed, there were 16 member states. Today there are 55 member countries.

Planned since 1958, commenced in 1960 and completed in 1962, the building is deemed by English Heritage to be the most important public building in London after the Festival Hall, which was also designed, in part, by Matthews. The architect, later rebranded as RMJM, was founded in 1956 and today ranks 17th largest in the world.

### Material benefits

According to Cherry and Pesvner's *Buildings of England*, the Commonwealth Institute was 'full of post-war optimism' and its purpose was to reflect the new mood in Britain after

'The form reflects the search at the time for alternatives to the rectangularity of the modern tradition'

**Cherry and Pesvner**

the collapse of empire, the independence of many former colonies and the experiences of war.

That sense of new community was emphasised through the materials and form of the building. Constructed with timber and copper – 'gifted' from Nigeria and Zambia respectively – the complexity of the roof form was intended to symbolise the simplicity of tent-like structures.

Cherry and Pesvner say: 'The form reflects the search at the time for alternatives to the rectangularity of the modern tradition, influenced especially by Candela's experiments with parabolic roofs in Mexico and by Hugh Stubbins's Kongresshalle in Berlin, but externally it lacks their confidence, and is not helped by the indifferent opaque glazing used for the walls.'

Indeed, the principal feature of the building is the dramatic sweep of the roof; a vast hyperbolic-paraboloid spanning 55m (the largest concrete shell span in the UK), which projects the elevations high into the air. A geometric feat achieved without the aid

of a computer and constructed without the aid of a net.

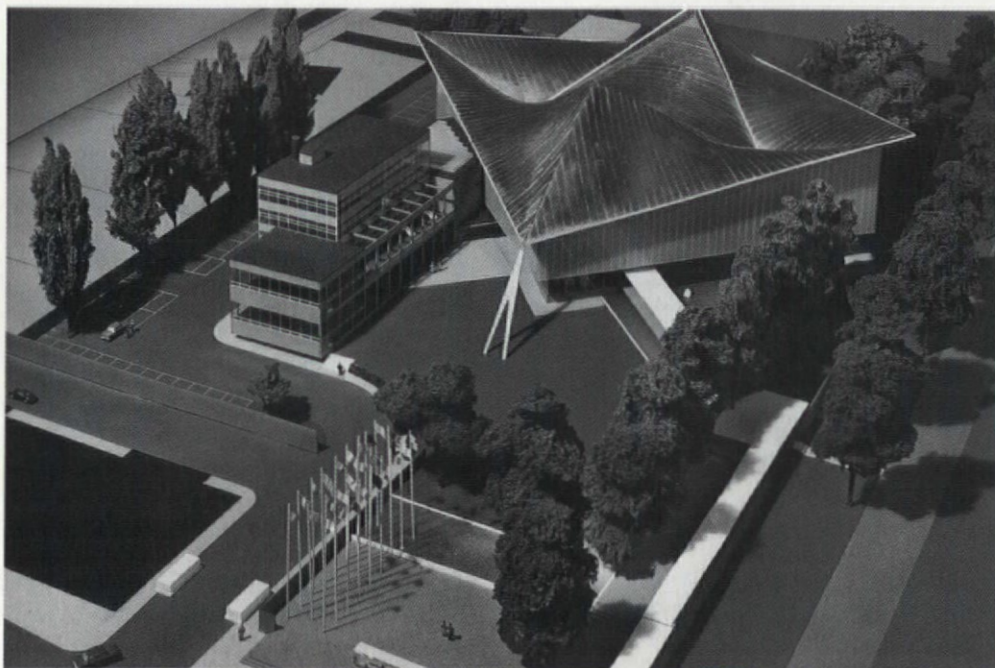
### Grounds for divorce

Situated in the south-east corner of Holland Park, the grounds of the Commonwealth Institute were designed by Dame Sylvia Crowe (1960-62), developing a strong unity between the architecture and the designed landscape.

The park, which came into public ownership after the Second World War, was handed over from Foreign Office control on 1 January 2000. At this point, the government formally announced that the Commonwealth Institute had become an independent agency and the site was transferred over to its ownership. With the 'severance' payment, the Commonwealth Institute had the funds to start the much-needed reparations. It set up an open architectural competition to upgrade a building that had been leaking for 30 years.

Avery Associates began by undertaking an investigation of the building: from original records, maintenance reports and intrusive surveys. Because of the events scheduled by the institute, all works had to be programmed with the aim of minimising the visual impact of scaffolding, noise and ensuring safe public access.

The building comprises a pre-



Original model for the structure, showing the complex geometry of the copper roof. Right: felt patch repairs had taken their toll





stressed concrete roof supported in the corners. Blockwork walls around the perimeter support a fully glazed cladding system of blue glass with an opaque white enamel backing. The gap between the blockwork and glazing acts as a vast ventilation duct, taking air from the central air handling plant and distributing it to the interior through high-level vents.

The consequent thermal shock on the rigid glazing, together with vandalism, has meant that many of the original glass panels have been replaced over the years. However, these repairs have been poorly carried out and have included inappropriate painted glass panels or, in the worst instances, unpainted plywood panels, resulting in a patchwork of colours and reflections. The solution was to replace the entire cladding layer with new, retaining the original fixing brackets and framing.



**Above: the listed Commonwealth Institute with its patched-up glazing. Top: the entire cladding layer has been replaced with a new, improved reflective surface**

New aluminium secondary framing, cappings and heat-soaked toughened glass panels were installed to recreate a level reflective surface.

Given that this is a Grade II\*-listed building, negotiations on all matters pertaining to the appearance were critical; and apparently amicably resolved. Although the proposed glazing colour did not match the original

building (given that the building was listed when it had a patchwork finish), English Heritage was more than happy to agree to a better specification.

### Treating the leaks

The work to the roof was more complicated. The leaks were the result of two factors. First, because the original roof had been created as a three-dimensional form, the upstand seams in the short-strip copper, laid parallel, were bound, at some point, to lie such as to trap water. Even if the seams followed the falls at the top, for example, by the time they reached the bottom the planes had twisted so that the seams ran perpendicular to the fall.

Second, by forming the roof covering in 1,500 x 525mm copper short strips, movement became significant. The number of original joints increased the opportunity for water ingress.

At the high points, the wind turbu-



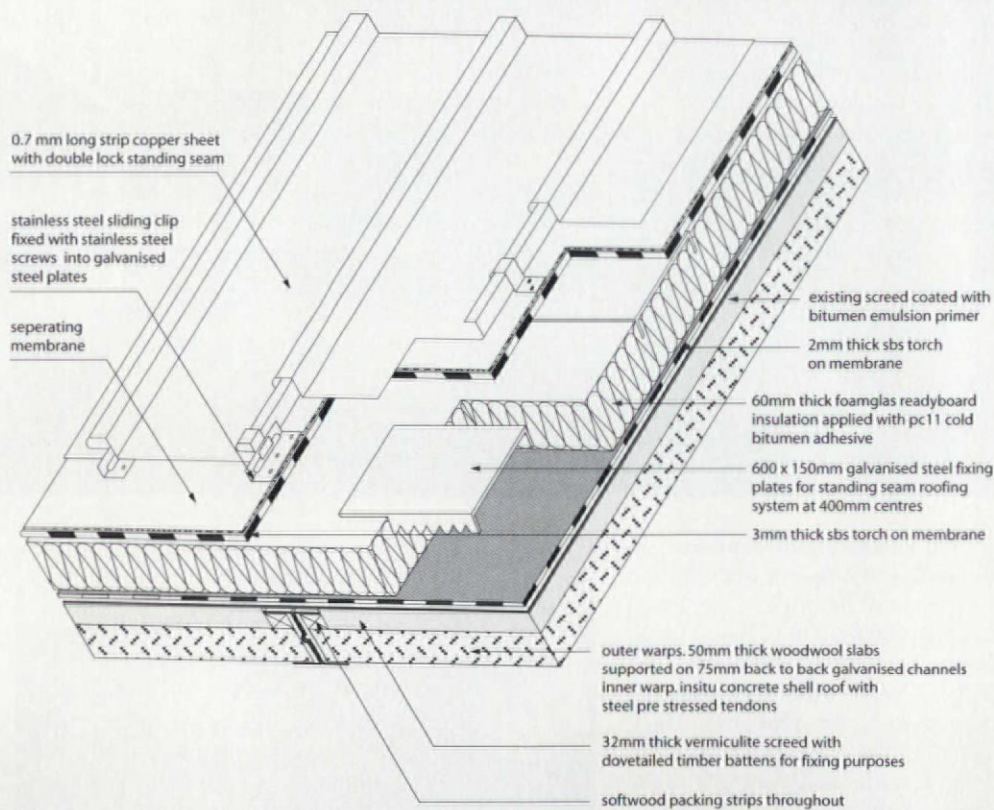
lence had forced open the clips holding the copper sheets and panels had become dislodged at the joints. The remedy that had been used by the building owners was as ingenious as it was comical; a Heath Robinson repair that involved drilling holes through the roof on either side of the dislodged copper sheets, lying a scaffold pole across the face of the sheet and feeding tie wires through the holes into the building. These were tensioned and tied off on weights inside the building, to keep the scaffold poles tight up against the roof slope. An ingenious solution, but one guaranteed to leak.

Once again, the argument that to replace the existing materials to match the original design would only replicate the inherently poor detailing convinced English Heritage to accept a modification to the specification; substituting long strip copper and allowing the joints to follow the roof line. The new copper has been laid in three distinct areas, separated by a batten roll; each area fixed either at the head, middle or bottom to accommodate differential expansion.

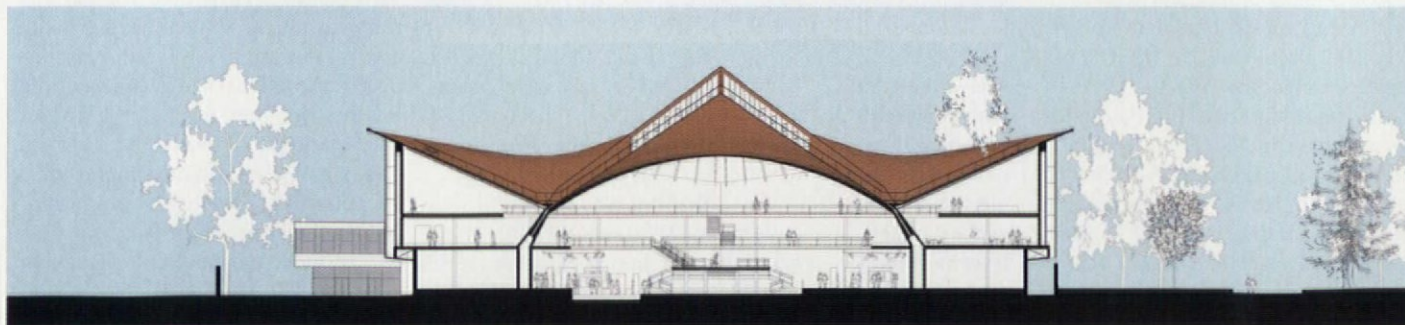
The original roof structure has been retained throughout and comprises a central area of pre-stressed concrete which tapers to a mere 50mm in the centre. Even during the inspections, it was deemed advisable that only a few people should congregate in one place at any one time, as the concrete would flex underfoot. A 2m-wide gantry scaffold was constructed around the perimeter of the building during the works to ensure that no materials were stored on the roof to overload the delicate structure.

The perimeter areas of the roof comprise pre-stressed concrete beams, fanning out to the outer edge with steel channels supporting wood-wool slabs and topped with 32mm

**Right: the original roof was effectively held in place by scaffold poles tied through to the inside. Below: the roof build-up retains as much of the original as possible**



copper detail



east west section



## Broad brush strokes

We were selected to work with the Institute through a competition process more than two years ago.

At that stage we knew the scope of the work would be very broad, ranging from masterplanning studies to the restoration of the Grade II\*-listed building. Obviously, the range of skills needed are quite different, but there is at least one common denominator to all the work – understand the problem, then look for appropriate or achievable solutions.

Undoubtedly, the most difficult part of the building restoration was the new roof. The challenge was to detail a new copper roof that would:

- properly deal with the large-scale expansion and contraction (the existing roof did not);
- provide a decent level of insulation (the existing roof had none);
- not overstress the existing structure (there was very little spare load capacity);
- provide a degree of weather protection during installation without the use of temporary structures (a temporary structure was ruled out because the roof is so big).

Finding the right people and right products to achieve a lasting solution and demonstrating the same to the Kensington and Chelsea conservation officer and English Heritage was indeed a challenge, but one that the design team relished and enjoyed.

*John Dawson, director, Avery Associates*

vermiculite as an insulation layer. On both sections of roof, timber battens were inlaid within the roof build up to take the copper roof fixings. The concrete beams can be clearly seen on the inside of the building, creating wave-formation ceiling supports for the untreated woodwool slab soffit.

On inspection, the woodwool was found not to be saturated. Water seeping through the copper covering over the years had been running down the trowelled finish of the vermiculite/concrete, penetrating only through weak joints and shrinkage cracks. The architect resolved to retain as much of the structure as possible, but because of the severe loading constraints, this limited the options for replacement build up.

## Snow worries

Fortunately, the snow loads criteria that had been used in the 1960s were greater than those required today, giving slightly more leeway for adding more weight. Similarly, the copper, because of the reduced number of joints, was lighter than the

original roof. In consultation with KME UK and Foamglas (the copper and insulation suppliers respectively), the roof build-up increased the insulation, weather tightness and run-off capabilities, while reducing the condensation risk and load; but with slightly greater thickness. The new roof has been thoroughly tested for leaks and because there is nowhere for an overflow to discharge safely, an electronic warning device sounds if the gullies block and cause rainwater to back up.

The roof has now been completed and is finally weathertight. It will take about 10 years to develop the green patina of the original. Currently, work is beginning on Phase II; the refurbishment of the west wing, including lift installation, new accommodation, offices and general upgrade.

Even though we tend not to live in an era of post-war optimism, at the end of the building's 40th year, the Commonwealth Institute should at least be restored to something of its original architectural glory.

## COSTS

Preliminaries	£231,766	£57/m <sup>2</sup>
Copper roof	£887,703	£217/m <sup>2</sup>
Glazed facades	£405,614	£99/m <sup>2</sup>
Scaffolding	£256,870	£63/m <sup>2</sup>
Electrical	£63,067	£15/m <sup>2</sup>
Latchway systems	£53,363	£13/m <sup>2</sup>
Total	£1,898,383	£463/m <sup>2</sup>

## PROJECT TEAM

### CLIENT

Commonwealth Institute, High Street  
Kensington [www.comw.org](http://www.comw.org)

### ARCHITECT

Avery Associates, tel 020 7233 6262: John Dawson, Joanna Podmore, Julien Odile, Andrew Brown

### QUANTITY SURVEYOR/ PLANNING SUPERVISOR

Munro White Hilton, tel 020 7383 8181:  
Richard Hilton, Roger Duncombe, Roy Barber

### STRUCTURAL ENGINEER

Buro Happold, tel 020 7927 9700: Mike Cook, George Keliris, Tom Hay, Caroline Collier

### SERVICES ENGINEER

John Brady Associates, tel 020 7939 7800:  
Peter Hammond, Matt Phillips, Roy Russell

### ADVISORY BODY

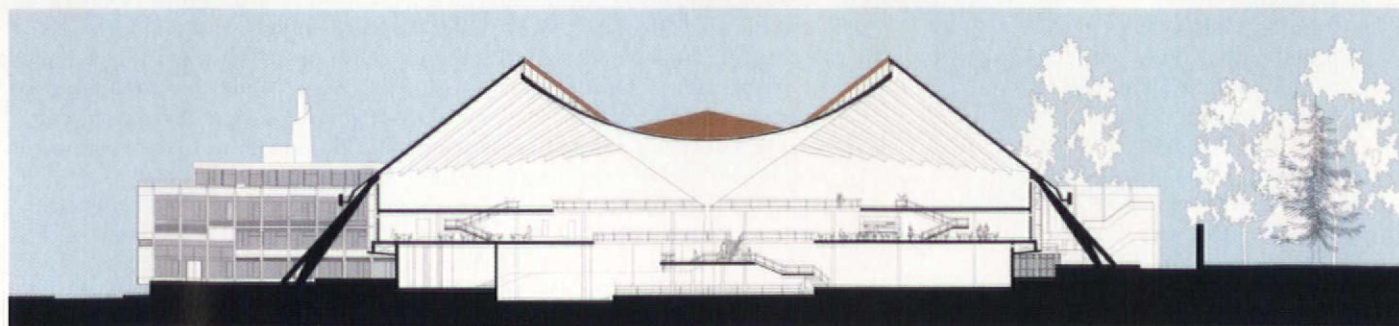
Copper Development Association,  
tel 01727 731 205 (Kian Power)

### CONTRACTORS

Management contractor Wallis; roof works NDM; glazed facades Glazing Vision; scaffolding Coventry Scaffolding; concrete repairs and cleaning PAYE Stonework; drainage Dyno-Rod (J&L Services); asbestos removal Crips; lightning protection RC Cutting; trace heating Trace Heating Installation Services; latchway system HCL Safety; electrical installation Nightglade; general carpentry GS Construction; hoists GB Access; rainwater goods PW Goddard Plumbing; decorations D&L Decorating Contractors; roof access equipment Online Safety; access works Scanmoor; glazing repairs Codu Glass

### SUPPLIERS

Long strip copper KME UK; roofing insulation Foamglas; glass to cladding Hansen Glass



south north section

23 May 2002



# Moulding a future

Traditional fibrous plasterworks company Butcher Plasterworks is looking to expand into contemporary architectural work

BY RUTH SLAVID

Hidden away in Primrose Hill, a smart residential area of north London, is a workshop producing one of the most traditional, skillfully made and yet simple building components.

Butcher Plasterworks, now under new ownership, is a fibrous plaster works producing some of the intricate finishes that are still so important in the restoration of 18th- and 19th-century houses.

New owner Robin Ellis, while keen to continue this craft tradition, also sees potential for its use in some of the sophisticated contemporary architectural work for which his eponymous construction company is becoming renowned.

For example, on a residential project at Courtfield Gardens in London, designed by rising star Niall McLaughlin, there are timber beams encased in fibrous plasterwork. A million miles away from the intricacy of Victorian ceiling roses, these simple, slightly curved shapes are pure and straight and bright and white – ‘a quality of finish you could not get in any other way,’ says Ellis.

Step into Chalcot Yard, where Butcher is based, and you feel that you have moved back in time. There is a three-tier store with a vast collection of mouldings, and a workshop where the fibrous plasterwork is produced. But although the skills are traditional, the approach is very much in keeping with today’s ethos of off-site fabrication. The quality that can be achieved off site is far better than anything that can be done on site.

Describing a prefabricated circular rooflight, Ellis said: ‘As a building contractor I know how often we have been asked to provide a pure form from somebody’s drawings in plaster. You can’t get anywhere near the perfection of form that we can get with fibrous plaster. It is cheaper than doing it on site and infinitely better.’

Ellis is a relatively new owner of Butcher, and this could seem like the enthusiasm of the neophyte. But



**Fibrous provider:** Butcher Plasterworks combines traditional skills with modern off-site fabrication techniques at its north London workshop

manager Brian Cowell concurs: ‘In a workshop,’ he says, ‘we can run an elliptical arch out so that it is true. I have seen them freehanded on a site – it is never right.’

But whether following the demands of a contemporary obsession with pure form, or recreating the decorative complexity of the past, the process of fibrous plasterwork is the same. Plaster and hessian are cast in moulds and cured before being taken to site for fixing. The process, fundamentally simple, is one that takes years of training to get just right. One reassuring aspect of Butcher Plasterworks is that there is a range of ages among those in the workshop – this is certainly not a dying skill.

Making the moulds is a crucial part of the work. There are standard moulds for simple cornices but special rubber moulds are made for many of the jobs. For a lot of conservation

work, the moulds will be made from the existing features. These may have been covered in layers of paint so that the definition is almost lost, but it is usually fairly easy to boil off the paint and get back to the original.

Sometimes, however, the ignorance of builders can make the task more complex. The skilled people at Butcher can rebuild a whole moulding from parts that have been retained, but there must be something there. Sometimes a builder will knock everything down before the Butcher people can stop them. In another case, the builder kept the wrong part of the moulding – a copy that had been made to match the heavily painted original. Since it did not have the underlying structure, there was no way to get back to it and Butcher had to start from scratch. This involves employing a highly skilled and expensive clay modeller to create the moulding.

There are extraordinary and complex moulds in the workshop and stacked up in the storage area. In the past, the only way that a potential customer could choose a moulding was to come to the works and clamber up to the store to see what was available – a charming pastime, but not the best way for a modern business to run. Ellis has now started the process of casting from each of the existing moulds, photographing the result and placing it on the firm’s website at [www.butcherplasterworks.com](http://www.butcherplasterworks.com) to form a library. This will, he believes, ‘allow Butcher Plasterworks to become a point of reference.’

Ellis is a hardheaded businessman and will be determined to ensure that his new enterprise makes a profit. But in a sense this is a labour of love; he has moved his own offices into the space beside the plasterworks. With soaring London property prices, he could doubtless make more by selling the entire lot for redevelopment. But he understands the importance of having a quality team based in central London, close to the architects and clients with which they work.

And he is confident that the combination of traditional skills and the new applications for fibrous plasterwork will allow this new undertaking to be a successful, if separate, complement to his existing business.



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## Professionals can breathe a sigh of relief over issue of time limits

The law has its aberrations. Some would say that *Anns v Merton* (1978) was one, deciding as it did that the cost of repairing defects was recoverable in actions based in tort.

Over the following decade or so, thousands of claims were brought by owners of defective buildings against those involved in their design and construction, irrespective of any contractual relationship between them. Eventually, in *Murphy v Brentwood* (1991), the House of Lords, decided that *Anns v Merton* had been wrongly decided and that if you wanted to recover the cost of repairing latent defects, you needed a contract with the wrongdoer.

Similarly in *Northern Regional Health Authority v Crouch* (1984), the Court of Appeal decided that if your dispute concerned the correctness or otherwise of an architect's certificate, and the certificate had been issued under a building contract with an arbitration clause, the court had no power to override the certificate – only an arbitrator could do so. For 15 years those seeking to challenge architects' decisions were constrained to do so in arbitration, like it or not.

Ultimately, the House of Lords decided, in *Beaufort Developments v Gilbert Ash* (1999), that this could not be right. Now parties to the JCT standard form can opt for litigation, should they want to, unconstrained by the vagaries of *Crouch*. These decisions may have been aberrations but they had profound and long-lasting consequences for the industry.

The House of Lords has recently righted another aberration and this time cured a shorter-lived hiccup in the development of the law. The involuntary spasm was *Brocklesby v Armitage & Guest* decided last year; the cure, the case of *Cave v Robinson Jarvis & Rolf* (judgment 25.4.02).

The point in issue related to the time limits for bringing negligence claims. Limitation of actions – that is, the imposition of a time limit within which to bring a claim – is governed by statute law. The underlying policy is to spare a defendant the injustice of facing a stale claim.

It is in the public interest that a good cause of action should be pursued promptly. But the

claimant needs to know that they have a claim and it would be unfair if their action was time-barred before they even knew about it. Consequently, section 32 of the Limitation Act provides that time does not start to run if the claimant's cause of action has been deliberately concealed by the defendant. The rationale is that if the defendant is not sued earlier, they have only themselves to blame.

In *Brocklesby*, the Court of Appeal took this common-sense approach one stage further and decided that a breach of duty, such as a negligent act, amounted to an act of deliberate concealment, even if, and here is the scary bit, the defendant did not know at the time that it was wrong.

Instead it was sufficient that the act was deliberate in the sense of being intentional, and that it amounted to a breach whether or not the actor appreciated the consequences.

Thus, those involved in giving advice in circumstances where it may be some time before it is discovered that their advice is wrong – in the design of a building, for example – provided they gave the advice deliberately, would have no protection against stale claims. They could be sued following

the discovery that they were negligent, however long after the event.

In *Cave v Robinson*, the court decided that there is no rational justification for depriving a defendant of a limitation defence where neither the original wrongdoing nor the failure to disclose it to the claimant was deliberate.

Instead, section 32 should only apply when defendants take deliberate steps to conceal their breaches after they become aware of them, or where they are guilty of deliberate wrongdoing, and conceal it in circumstances where it is unlikely to be discovered for some time. It does not deprive a defendant of a limitation defence against a charge of negligence, where the defendant is unaware of a failure to take proper care. Professionals can breathe a sign of relief that the *Brocklesby* hiccup received a prompt dose of cold water.

Kim Franklin

## An appeal from out of Africa, but strictly by e-mail

Every three or four months I get an e-mail from somewhere in Africa. The most recent was from Dr Kadri Sadiq, Federal Housing Estate, Road 18, Special Unit, Mbandaka, Democratic Republic of Congo. It was addressed to me personally at an old e-mail address and headed 'Urgent Business Proposal/Investment Assistance'.

Kadri Sadiq, the text claims, is a former 'Special Assistance on Internal Security to the late President Kabila who was assassinated on the 16 January 2001'. The e-mail goes on with uncanny prescience: 'You may be surprised to receive my letter on the grounds that we have not met before. But never mind, you will get to understand the situation and my reason of contacting you as you read further. Before the assassination of President Kabila, I... moved the sum of Twenty Five Million United States Dollars out of the Democratic Republic of Congo for safekeeping in Africa. With his death and our inability to inform his business partner in Europe of this last arrangement, there is no other person who knows about this money, except me.'

Sadiq goes on to ask 'for your urgent assistance to help me move this money to your account... There is no risk involved in this and I assure you of a smooth and 100 per cent risk free transaction. You are please to maintain absolute confidentiality in this matter'.

Oh, sorry Sadiq, I forgot that bit. And here is the lure: 'Apart from the joint business participation, I will be very willing to give you a 25 per cent share of the total money I got. NB: Please all communication strictly by e-mail.'

This is, of course, not a business proposal but a well-known con. It is an appeal to engage in criminality which is justifiable because the country in question is black, backward and probably lawless. Oh, and because the profit is several million dollars. Lots of otherwise sensible, professional people have given details of their bank account ... and found it emptied the next day.

sutherland.lyall@btinternet.com



# BRUFMA CONFERENCE 2002

Energy efficiency – Part L1 and Part L2 – Sustainable solutions

Spring 2002





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# BRUFMA conference hits the right note

The British Rigid Urethane Foam Manufacturers Association's well-attended annual conference was a refreshing change from many construction-industry events that are often marred by poor attendance or visitor apathy.

The anticipatory din of the pre-conference exhibition seemed to promise the launch of an ultra economic, hi-tech insulant with zero ODP and no embodied energy. Although, alas, no such product was unveiled, the conference was notable for both the enthusiasm of the delegates and the erudition of the speakers.

The optimism pervading the proceedings was, thinks BRUFMA chief executive Wilf Ball, symptomatic of an industry facing a bright future as a result of its high-performance polyurethane (PUR) and polyisocyanurate (PIR) foams. These can satisfy increasingly stringent thermal and fire-performance requirements

and – with further tightening up of standards likely in the not-too-distant future – the demand for these products can only increase. 'With such a great variety and diversity of products,' adds Ball, 'the industry has the right product.'

In his brief opening address, BRUFMA president Tom McGuinness confirmed that legislation was driving performance developments in the rigid-foam insulation industry. One of the main purposes of the conference, he added, was to see how the industry was responding to the recent challenge of implementing the new Parts L1 and L2 of the Approved Document. Clearly, given the high thermal efficiency of the products, they are ideally suited to implement the new higher requirements.

This supplement summarises papers from the conference and includes exhibition highlights.

George Demetri

## Strategy behind the revised Building Regulations Parts L1 and L2

By Ted King

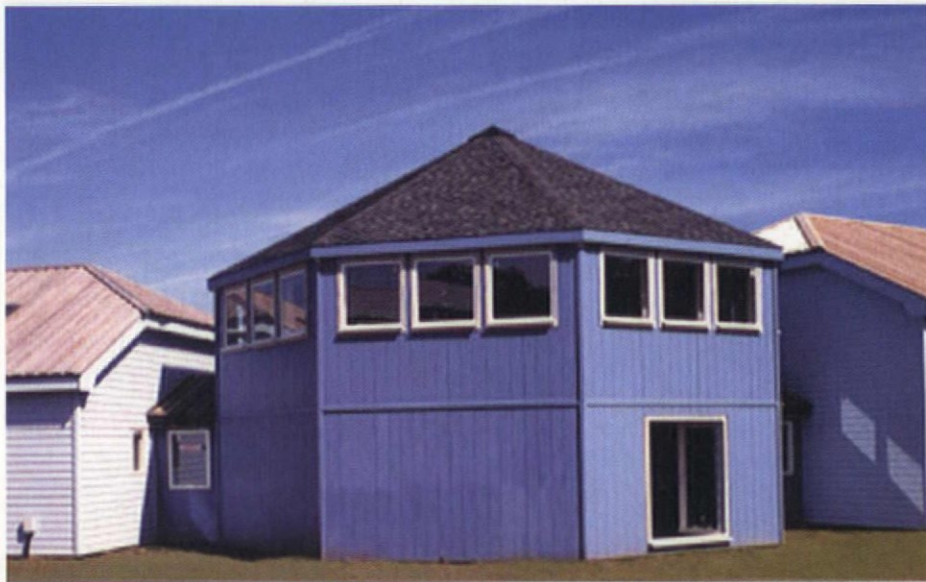
When the then construction minister Nick Raynsford launched a review of Part L in February 1998, his aim was to obtain the best possible contribution from the Building Regulations towards achieving our emissions targets for carbon dioxide. However, he cautioned that the contribution would be limited by the constraints of: conforming with our Better Regulation Policy; continuing to provide sufficient flexibility for designers; and, avoiding unacceptable risks.

The Building Regulations review is only one element in our overall Climate Change Programme – now administered by the Department for Environment, Food and Rural Affairs (DEFRA) – which sets out how the UK will meet its targets under the Kyoto Protocol for reducing greenhouse gas emissions, and for achieving the domestic goal to cut carbon-dioxide emissions by 20 per cent by 2010, a New Labour pledge in its 1997 election manifesto.

Since then, government has begun procedures to ratify the protocol, meaning that the UK will be legally bound to deliver the target of a 12.5 per cent reduction in emissions of the basket of six greenhouse gases by 2008-12. European Union member states are aiming to bring the protocol into force in time for the World Summit on Sustainable Development in Johannesburg in August.

Carbon dioxide makes up 80 per cent of the UK's greenhouse gas emissions and half of this comes from buildings – 30 per cent from dwellings and 20 per cent from other buildings. It is easy to see why improving performance standards is a prime goal.

Our Climate Change Programme was published in November 2000 following wide



The Zethus Centre in Dartford has rigid polyurethane insulation installed between the rafters in the pitched roof, and also in the floor

consultation. Within this programme, the changes to the Building Regulations are expected to deliver a saving of around 1.4 million tonnes of carbon per year in 2010 – about 8 per cent of the total called for.

There are also other important objectives. The changes to Part L are also contributing to our policies of sustainable construction – administered by the Department of Trade and Industry (DTI) since changes in the machinery of government last year. We want to make buildings more effective at providing accommodation with economical use of energy but not at the expense of delivering satisfactory living and working environments.

The government also wants to encourage those responsible for the procurement and construction of buildings to take more

responsibility for self-certifying compliance with the Building Regulations. We have consulted twice on proposals for Competent Persons schemes and this work bore its first fruit in the amendments made in March.

The government has been encouraging the construction industry, its clients and energy activists, to participate at every stage of the review process. Part of this participation aim is to encourage construction interests to prepare for future changes that pursuit of the Climate Change and Sustainable Construction policies will inevitably demand. To this end we published ideas in the June 2000 consultation on what minimum energy performance standards might be introduced around 2008. It is our intention to update this forecast from time to time.



### The main changes

Firstly, the definition of building work has been widened to reach more types of renovation and refurbishment of existing stock. Replacement of windows and building-services systems is now covered, within certain limits, regardless of whether conventional building work affecting structural stability, resistance to fire and means of escape and access for the disabled is being undertaken.

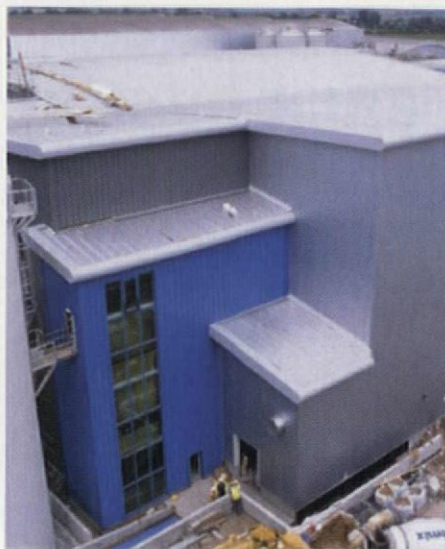
Secondly, there is now guidance on testing buildings to confirm that 'as-built' performance reasonably matches the approved designs and hence that compliance has been achieved.

Thirdly, the scope of the technical requirements has been extended to address the provision of information that shows how the building and its building services can be operated and maintained effectively for the purposes of conserving fuel and power.

Fourthly, the basis in the Approved Document of showing compliance with Part L has been changed from achieving energy efficiency to controlling carbon emissions. The main reason for this is to tie in with other government initiatives within the overall Climate Change Programme. The annual carbon accounting methods now offered enable the benefits of combined heat and power, district heating, photo-voltaic generation and other low-carbon and no-carbon energy sourcing to be taken into account. These new methods go hand-in-hand with the government's other policies of encouraging the take-up of alternative lower-carbon and renewable energy supplies.

### The wider agenda

Last year, DEFRA consulted on the draft European Directive on improving the energy performance of building energy performance. As a result, we pushed for a number of revisions which were agreed upon in the



The roof of the Muller Dairy in Market Drayton has rigid polyurethane insulated composite roof panels

text accepted by the Energy Council on 4 December 2001. The European Parliament made suggestions for more than 30 amendments. These are presently being negotiated but the aim of the Commission and the current presidency is for the new directive to be adopted by the end of June 2002. Member states will have three years to implement the majority of the Articles, with the exception of the three main ones, for which implementation dates are still being negotiated.

The main purpose of the proposed directive is to promote improvement in the energy performance of buildings across European Union countries. It covers requirements regarding the setting of minimum standards for new and existing buildings, the use of energy-performance certificates whenever buildings are constructed, sold or rented, and regular inspections of boilers and air-conditioning units. It should also give a boost to renewables and CHP as well as to energy auditing.

It seems unlikely that the energy performance standards for building work in Part L will need to be revised in the short term as a result. But the Directive will introduce performance standards for energy use in buildings that are new for us.

It is unclear how the Building Regulations might need to change to promulgate these new usage requirements. But, in the next few years, we will need to consider what further improvements in fabric and engineering-services insulation are justifiable, and what alternatives to thermographic testing are, or could be, available for checking as-built condition.

More recently, we have seen the No 10 Policy Innovation Unit's Energy Review to government, which looks to Building Regulations having new roles to play in encouraging take-up of low-carbon and no-carbon technologies, and generally improving the performance of new and existing buildings.

Economists are developing a consensus on what price must be paid for emitting carbon (perhaps up to £140 per tonne per annum) and hence what is considered to be economic investment in energy-saving measures for buildings.

### Acceptable costs

In our Regulatory Impact Assessment we estimated that the changes would cause first costs to rise by up to £1,600 for dwellings (dependent upon type and size), about £5 per m<sup>2</sup> for air-conditioned buildings and about £10 per m<sup>2</sup> for naturally ventilated buildings. That represents something less than 2 per cent for most buildings.

The government, supported by most of those consulted, believes these extra costs are an acceptable consequence of seeking to achieve our carbon dioxide emissions targets.

Ted King has been responsible at the Department of Transport, Local Government and Regions (DTLR) for both the 1995 and 2002 Building Regulations, Part L concerning fuel and power

## Building Regulations 2000 amendments to Part L – simple insulation solutions

### By Stuart Borland

Meeting requirements of the new Parts L1 and L2 of the Building Regulations means not only specifying products that can meet the thermal performance requirements in theory, but also that can be applied effectively. Workmanship and design errors lead to gaps and discontinuities in insulation that can represent up to 6 per cent of the overall envelope area, resulting in more than 33 per cent additional heat loss. The new regulations require that air leakage be limited, and that all buildings over 1,000m<sup>2</sup> can show compliance with the maximum acceptable leakage rate of 10m<sup>3</sup>/hr/m<sup>2</sup> at 50Pa.

There are a number of different insulation solutions. For roofs, there is traditional joist-

level insulation which requires 100 + 125mm rock-fibre insulation or 100 + 140mm glass-fibre insulation to reach a U-value of 0.16 W/m<sup>2</sup>K for the loft. Downsides are that the attic space is no longer easily usable and that, without ventilation of the roof void, there can be problems with interstitial condensation. Rafter level insulation can typically achieve a U value of 0.2 W/m<sup>2</sup>K, with insulation varying from 70mm of phenolic foam (PF) to 210mm of glass mineral fibre. This method keeps the roof space usable and there is no need for ventilation.

Other options at rafter level include the use of closed-cell insulants to provide an 'air barrier' line within the roof assembly, and 'new' concepts such as 1400mm spray-applied polyurethane (PUR).

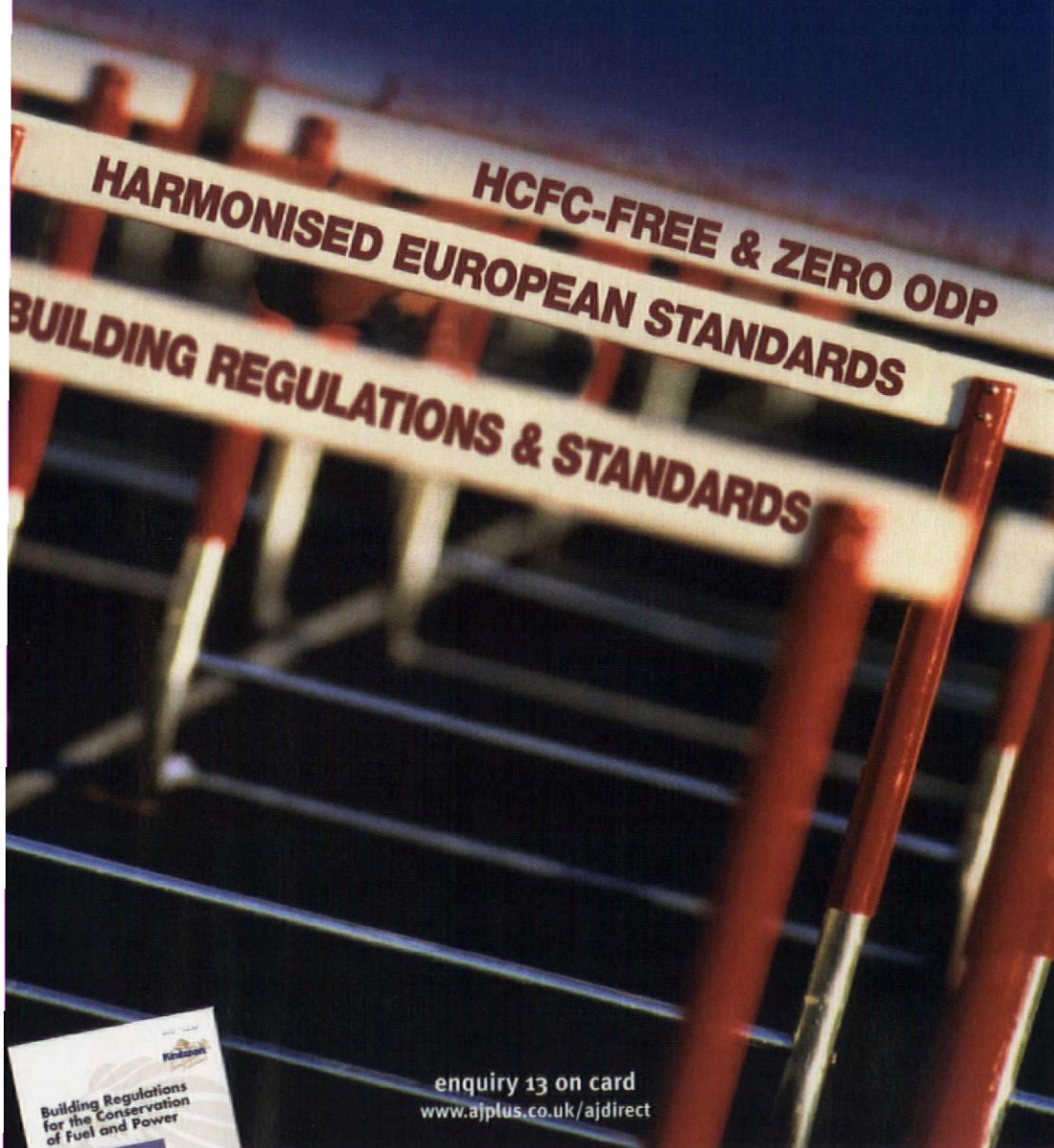
Both these systems should achieve a U-value of 0.2 W/m<sup>2</sup>K and have important advantages: continuity of insulation can be guaranteed and air leakage is inherently low.

Another option is to use profiled metal cladding with a system thickness typically 80mm for polyisocyanurate (PIR) insulated panel, 150mm for a site-assembled system with a rock mineral fibre insulant, or 160mm for a site-assembled system with a glass mineral-fibre insulant.

In addition to their low thermal conductivity, another advantage of PUR/PIR insulated panels is that they have inherently low air leakage and, as with other panel systems, continuity of insulation can be guaranteed. In contrast, site-assembled panels can be subject to defects of workman-



# Take **3** hurdles in 1!



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The new Building Regulations (England & Wales) and Building Standards (Scotland) came into force on April 1, 2002 and March 4, 2002 respectively.

Insulation manufacturers will be obliged to quote thermal performance to the new Harmonised European Standard by March 2003.

The building insulation industry has agreed to fully phase out the use of HCFC blowing agents by January 1, 2004.

**All three of these changes will mean a modification to the buildings you design or build. All taking time and money.**

Kingspan Insulation has announced that as from April 1, 2002, and over a year and a half ahead of the deadline, all of its Therma Range of rigid urethane products will be HCFC-free as standard. The Kingspan Styrozone Range of rigid extruded polystyrene (XPS) insulation products became HCFC-free as standard as of January 1, 2002.

Kingspan Insulation will also be the industry standard setter, by quoting the thermal performance of these products to the new Harmonised European Standard by the same dates.

Specifiers will, from April 2002, be able move up to a new generation of insulation products that will take these three necessary hurdles in one.

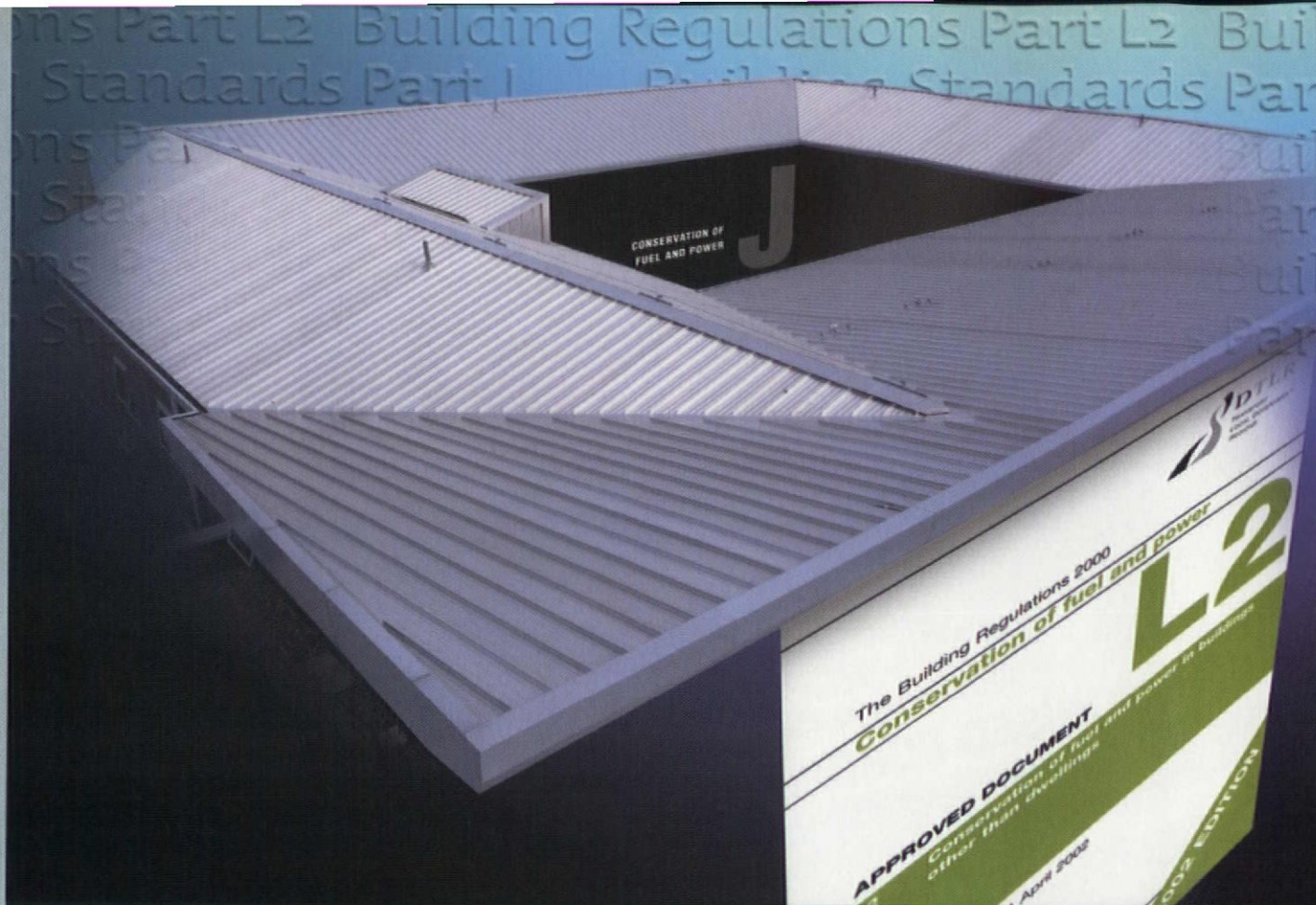
**Far better to change once than be forced to change three times in successive years.**



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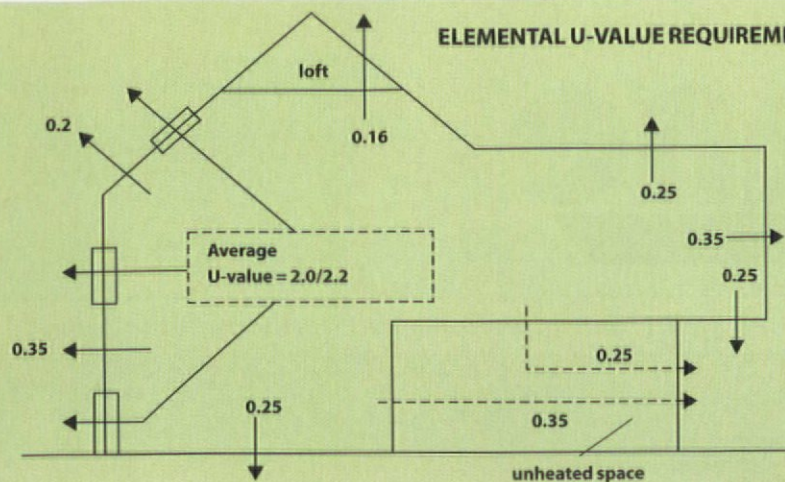
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## ELEMENTAL U-VALUE REQUIREMENTS



ship. Without these, however, all those systems should achieve U values of  $0.25 \text{ W/m}^2\text{K}$ .

For those new to this technology, there is now substantial guidance available on the design and use of closed-cell foam insulation panels, in a publication produced in association with Huntsman Polyurethanes. This covers panel manufacture, building physics and design examples.

On flat roofs, typical insulation thicknesses for a U-value of  $0.25 \text{ W/m}^2\text{K}$  vary from 85mm for PUR/PIR to 150mm for rock mineral-fibre. The weight advantages of PUR/PIR may have implications for the building structure. Newer systems include membrane-faced insulated panels with profiled metal liners which provide simply installed prefabricated units.

### Back to the wall

As with roofs, there is an array of options for walls to achieve a U-value of  $0.35 \text{ W/m}^2\text{K}$ :

- Full-fill cavity batts typically comprise 80mm-thick glass mineral fibre. It is impor-

tant during installation to eliminate defects that could lead to ingress of moisture.

- Full-fill injected insulant is typically 55mm PUR, 85mm of rock mineral fibre or 90mm for glass mineral fibre. There can be problems ensuring full insulation continuity, particularly with blown mineral fibre.
- Partial cavity fill can vary from 35mm for phenolic to 75mm of glass mineral fibre.
- Internally insulated dry lining can vary from 40mm for phenolic to 70mm of glass/rock mineral fibre.
- External insulation can be used to ensure that the structure is warm and hence to take advantage of the thermal mass of the building fabric to regulate the temperature of the building. Insulant is generally phenolic, rock mineral fibre, expanded polystyrene (EPS) or extruded polystyrene (XPS).

With framed walls, the insulant is generally installed between the frames. Thickness varies between 50mm of phenolic and 115mm of glass mineral wool. Newer systems include 90mm of spray-applied rigid

## The new parts L1 and L2 of the Building Regulations set more stringent requirements for thermal performance

polyurethane (PUR). The new regulations will encourage greater use of prefabricated foam insulated panel systems. These have the added benefits of reducing time on site, ensuring continuity of insulation, and providing inherently airtight assemblies. Stressed-skin panel systems vary in thickness from 208mm-thick OSB-faced panels to 261mm-thick cementitious-faced panels.

As far as air leakage is concerned, mineral-fibre insulants offer little resistance and as such will not provide effective continuity of air barriers. Rigid board insulants are impermeable to air and can provide an envelope 'air barrier'. Spray-applied and canister-applied PUR insulants are effective gap sealing products for air barriers. From this survey we can draw a number of conclusions:

- Theoretical thermal standards have not traditionally been achieved on site because of a combination of poor workmanship and/or inadequate design/specification.
- The amendments to Parts L1 and L2 will address this issue through amended U-value calculation procedures and the introduction of testing, including thermographic testing for continuity of the installation.
- There is a wide variety of insulation solutions that satisfy the regulation requirements, each with its own advantages and disadvantages.
- Rigid closed-cell foam insulants are significantly thinner than glass or rock mineral wool insulants for any specific thermal resistance requirements.
- Prefabrication of envelope assemblies removes the site potential for defects which cause poor thermal performance.

Stuart Borland works for Building Sciences

## The impact of new harmonised European standards on insulation products

### By Robert Walter

Harmonisation of product standards for buildings products enables buildings to satisfy the European Construction Products Directive CPD (1). This established six 'essential requirements' each with its own interpretative documents (2):

- No. 1 Mechanical resistance and stability
- No. 2 Safety in case of fire
- No. 3 Hygiene, health and the environment
- No. 4 Safety in use
- No. 5 Protection against noise
- No. 6 Energy economy and heat retention

Interpretative document No. 1 (for metal-faced sandwich panels), No. 2 and No. 6 are of greatest importance for thermal-insulation products. The interpretative documents form the basis for the 'mandates' requirements needed to draft harmonised standards. The European Commission awards these mandates to bodies such as the

European Committee for Standardisation (CEN) or the European Organisation for Technical Approvals (EOTA) which then draft the standards.

### European standardisation of thermal insulation products

CEN/TC 88 'Thermal insulating materials and products' was created in 1988 and individual product working groups (WG) were established. All products used today for insulation in buildings are included in the scope of CEN/TC 88. Rigid polyurethane foams (PUR and PIR types) are dealt with in:

- WG 6 'Thermal insulation products for buildings - Factory made rigid polyurethane foam products'.

Together with the other factory-made insulation product standards, EN 13165 for factory-made rigid polyurethane foams was finished and approved in 2001.

- WG 10 'Thermal insulation factory made products for building equipment and industrial installations' - with PUR/PIR task group for products made from PUR/PIR slabstock foam

● Draft standard 'prEN 14308 for the PUR/PIR products' has been presented now for a six-month CEN enquiry. The final formal vote may be taken at the start of 2003.

- WG 15 in situ formed products as thermal insulation for buildings and for industrial installations with PUR task group for in situ rigid polyurethane (sprayed foam for roofs/walls/etc, dispensed foam for cavity walls, dispensed and sprayed foam for industrial installation).

For the PUR in situ products, a package of draft standards has been prepared now for the CEN enquiry (prEN 14315/14318/14319/14320). A final formal vote is expected for 2003.

CEN/TC 88 deals with all properties of





*Manufacturers of in-situ applied spray and injection grade polyurethane foams*



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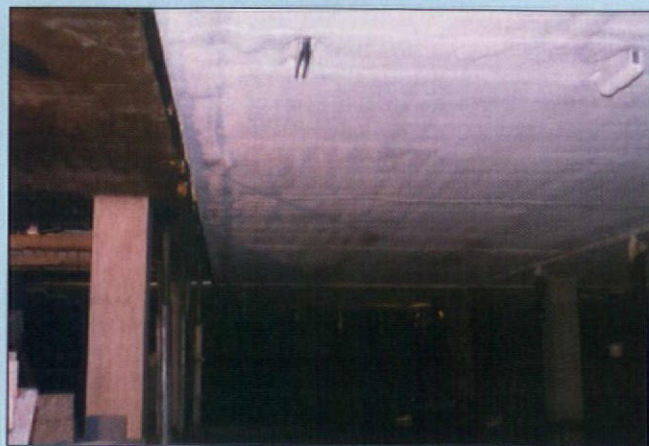
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  - ◆ Combats nail sickness
- ◆ Ideal for room-in-the-roof conversions
  - ◆ Class 1 to BS 476 Part 7
  - ◆ Reduces air leakage.



### **PIRTHANE**

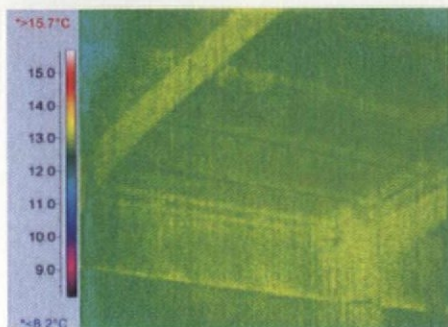
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# ESTIMATED DECLARED VALUES OF THERMAL CONDUCTIVITY WITH AGEING

Facings	Diffusion open				Diffusion tight	
	Fixed increment mW/m x k			Declared value mW/m x k	Fixed increment mW/m x k	Declared value mW/m x k
Thickness	<80mm	80<d<120	>120mm	Depending on thickness	Same for all thickness	
Pentane	5.8	4.8	3.8	26-30	1.5	23-25
HCFC 141b	6.7	5.7	4.7	25-28	2.0	22-24
HFC 134a					2.5	25-27
CO <sub>2</sub> only	10.0	10.0	10.0	32-35	6.0	30-32



**Above: installation of rigid polyurethane floor insulation. Left: thermal image showing continuity of insulation on a rigid polyurethane insulated composite wall panel**

building products relevant to their use as thermal insulating products. But the load-bearing capacity of products, such as metal-faced sandwich panels with insulation core for curtain walls and roofs, is not included.

## EN 13165 for factory made rigid polyurethane foam products

Standard EN 13165 for factory-made rigid polyurethane foams (WG6) was agreed in 2001. It covers:

- Thermal conductivity (thermal resistance)
- Length, width, thickness, squareness, flatness of boards and associated tolerances
- Dimensional stability
- Behaviour under compressive stress and compressive creep
- Tensile strength perpendicular to faces (adhesion of faces)
- Flatness after one-sided wetting
- Water absorption and water vapour transmission
- Sound absorption (only if relevant)
- Reaction-to-fire classification
- Release of dangerous substances (not yet harmonised and still national requirements relevant)

## Thermal conductivity

The most important property of a thermal insulating product is its thermal conductivity. The manufacturer has to specify a long-term 'time averaged' value for its product which can realistically be expected over a reasonable economic life. An economic life of 25-50 years is assumed for thermal insulating products.

## Fire classification (reaction to fire)

As fire behaviour is generally considered to be very important, the CE mark can only be used if harmonised CEN standards also

exist for testing and classification of the fire behaviour. This is dealt with in another paper.

## Evaluation of conformity and marking and labelling

The standard requires the manufacturer's proof of the declared properties of the rigid polyurethane foam product, obtained by internal monitoring (factory production control in accordance with annex B of the standard). The manufacturer is fully responsible for the correct declaration.

Different systems (levels) of attestation of conformity and different involvement of the approved body have been defined by the EU Commission:

- System 1: Factory production control by the manufacturer plus initial type testing with following continuous surveillance by the approved body.
- System 3: Factory production control by the manufacturer plus initial type testing by the approved body.
- System 4: Factory production control by the manufacturer only.

System 4 is sufficient for most of the properties. System 3 is only required for:

- Reaction to fire class
- Thermal resistance
- Compressive strength
- Water permeability
- Release of dangerous substances

For the reaction to fire classification, the manufacturer may elect to use the higher level of System 1 if the classification result is influenced by various production factors.

If the manufacturer has monitored his product according to the testing methods specified in the CEN standard, and has labelled the product according to the terms of the standard, they can provide this product with the European CE mark.

At present, there are still conflicting opinions on the attestation of conformity system in the different European countries, as the existing low involvement of an approved external body is felt in some countries not to be sufficient.

In an attempt to improve this situation, there is a European 'Key Mark' Scheme for a certification procedure that manufacturers can undergo voluntarily and that includes continuous external monitoring by an approved body for all declared properties. Existing national quality-control groups may also offer a voluntary monitoring system with their specific quality mark.

In the UK, products need not be CE marked if a manufacturer does not intend to export them to a EU member state, where CE marking is mandatory.

## CEN standard for metal-faced sandwich panels

Metal-faced sandwich panels with thermal insulating cores are used as self-supporting elements for curtain walls and roofs in industrial buildings. They are statically stressed by their own weight, wind, snow and changes in temperature. The following evidence should be provided:

- Determination of the permitted span of the sandwich panel (by testing or calculation).
- Determination of the fastening according to type and number of fasteners (screws).

In 1996, the industry started to draw up a harmonised European standard for metal-faced sandwich panels; besides the commonly used cores of rigid polyurethane or polyisocyanurate foams, this standard will also cover cores of polystyrene, phenolic foam or mineral wool.

Standardisation work is being carried out by a subcommittee (SC 11) within the existing CEN/TC 128 'Overlapping roofing products and products for external wall cladding'.

## Conclusion

The CEN time schedule allows countries to adapt their national standards and regulations within 2002. Theoretically CE marking of insulation products was possible from March 2002 onwards.

EU member states must allow for CE marking at the latest by March 2003. Conflicting national standards must be withdrawn, but a longer transition period of old and new standards in parallel may occur. It may also be within the hands of industry how quickly the change to CE marking will happen.

But in some countries CE marking may still not be required for those insulation products that are not exported to another EU member state.

More time is needed to complete the work on harmonisation of insulation products for industrial installation, in situ formed insulation products and metal-faced sandwich panels. CE marking according to these standards may be in place in 2004/2005.

Dr Robert Walter works for Bayer



By Robert Webb

## Why insulate?

We all know the basic statistics about the role of the built environment in global warming and carbon dioxide emissions. Buildings are responsible for 50 per cent of energy use in the European Union. Housing is responsible for 60 per cent of this and heating energy typically accounts for up to 60 per cent of building energy use. Energy efficiency and renewable energy improvements to buildings, particularly housing, can bring great dividends in cutting CO<sub>2</sub>, and can also help us deal with fuel poverty and raise living standards – a classic win-win situation.

## How to insulate?

Modern buildings built to the best of current knowledge can achieve extremely low energy demands. How? Well, once you get into the detail, you realise that there are three principal aspects of building fabric design that have to be optimised to reduce energy use: thermal insulation; ventilation heat loss; and glazing heat loss.

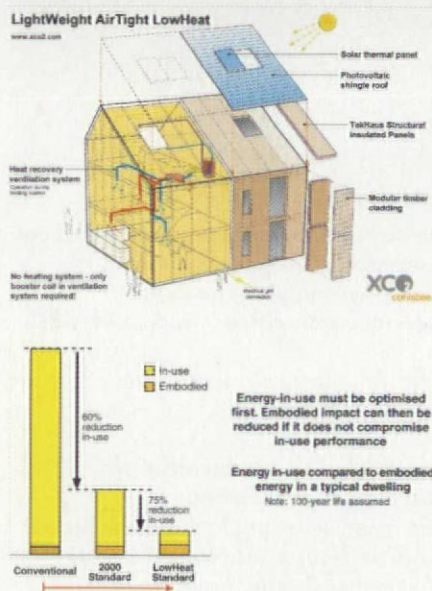
Our energy modelling study (for a typical terraced house) shows this – illustrating the effects of gradually improving specification. At what we call the 2000 Standard (actually the same as 2002 Part L1, but we think at least two years late), the heat loss is 50 per cent in ventilation, 30 per cent through glazing and 20 per cent through the opaque surfaces. In going further it is obvious that we need to increase airtightness, consider heat-recovery ventilation and improve the glazing specification, and the modelling shows how the energy use is gradually reduced by a series of improvements in these areas.

But what is an optimum level of insulation? Clearly a balance has to be achieved between whole-system performance, capital cost and buildability. We think a reasonable balance is offered in our 'LowHeat Standard', which reduces heating energy use by around 75 per cent compared to 2002 regulations, and 93-98 per cent compared to a typical existing UK dwelling.

This standard can, we believe, be achieved at low cost and without compromising living quality. And if it was to be applied at a large scale, perhaps replacing inefficient and poorly performing existing housing, then we could reduce total heating demand by 15-50 per cent (and cut fuel poverty and increase living standards).

## Which insulation material?

It is a common reaction, when designing 'green' buildings, to think about the materials first. We can touch materials, they are in front of us, whereas energy is invisible (and, for some, incomprehensible). For example, embodied energy is a common criterion for



Top and centre: model and diagram showing the LightWeight AirTight LowHeat house design. Above: energy in use is far more important than embodied energy

rating materials on environmental impact. It is a factor, but there are two problems with focusing on it. First is that most of a building's energy use in its life will be energy-in-use, namely heating, lighting, cooking, etc. Of course, the figures will vary considerably, but on average for a 2002 standard building and a 70-year life, the embodied energy is about 15 per cent of the total. Increase the life to a more realistic 100 years, and the embodied percentage is closer to 10 per cent. Now it is clear that to reduce energy use you start by worrying about the 90 per cent, not the 10 per cent. Once you've made the 90 per cent nearly disappear, you can start worrying about the materials again, although don't make a materials switch if it will affect in-use performance!

The second issue with embodied energy is that it is particularly misleading in relation to energy-efficiency materials. The embodied energy of an insulation material is about 2-5 per cent of the energy it saves over its lifetime. More importantly, if you look at the total building embodied energy, keeping all other assumptions constant, changing the insulation material makes very little difference.

There are two key issues in choosing insulation material. The obvious factor is achieving the required thermal performance, but achieving longevity of performance is also important. A house or other building may last 50-150 years, and the insulation will probably not be upgraded in that time. If the insulation does not perform, then the heat loss will increase – in some cases by up to 100 per cent.

There is little knowledge in this area and more research is required (the widespread use of insulation is relatively recent). However, it is clear that the 'risk factors' affecting potential failure are something that designers must increasingly consider, and something the industry should research and report on.

## Case Study – LightWeight AirTight LowHeat

Finally, let's discuss a case study example which shows one route to achieving the LowHeat Standard within normal (indeed social-housing) budgets. It may be fair to say that the most innovative approaches to low-emissions housing in the past few years have tended to follow a thermally heavyweight, wet construction approach. But it's not the only approach. In our LightWeight AirTight LowHeat project we are building social housing to standard budgets, while optimising the building and the energy systems.

Working with Longhurst Group, a residential social landlord in Nottinghamshire, and contractor Robert Woodhead, we are building two houses using the TekHaus system of structural insulated panels (SIPs) by Kingspan, which achieves very good U-values (0.21 W/m<sup>2</sup>K) and excellent airtightness. Predictive energy modelling using dynamic thermal analysis has been used to predict the energy performance under a range of different occupancy conditions, and for different specifications, and allowed us to consider different servicing options to look at the best for energy use and carbon-dioxide emissions.

We found that the building is so airtight that you can eliminate the radiator system and replace it with a heat-recovery ventilation system with a heating coil in the air-supply duct – and eliminating one pays for the other. The result is a house with heating energy use of 16-32 kWh/m<sup>2</sup>yr (compared with 40-71 kWh/m<sup>2</sup>yr for a 2002 regulations building, and 150-241 kWh/m<sup>2</sup>yr for an existing building to the same dimensions and orientation), and gas costs of around £30 a year (compared with £90 and £340 respectively).

And by the way, this house can easily become carbon-neutral through the addition of biomass heating, small wind turbines, or photovoltaics in a number of different combinations – the lowest cost option is achievable at about £7,500.

Robert Webb is managing director of XCO2 Conisbee





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# The impact of changes to approved Document B to accommodate the new Euroclass reaction to fire classification systems

By Peter Briggs

The adoption of a harmonised system of reaction to fire tests across the EU means that Approved Document B (2000 Edition) of the Building Regulations 1991 will require further revision. It is proposed to do this by publication of European supplements for use with Approved Document B. Currently, the classification of building products according to their reaction-to-fire performance is achieved by the BS 476 series of fire tests.

The CEN test methodology developed for Euroclassification of products (excluding floorings) is different from the BS 476 tests. The field of application of the Euroclassification is identical to the field of application resulting from the CEN tests where the test conditions are determined in relation to the end-use application of the product. If different end-use applications are envisaged for a particular product (eg use of different substrates), this may result in different classifications. The Euroclassification of a product is based on its reaction to fire performance assessed as its contribution to the generation and spread of fire and smoke within and beyond a small room of origin. The ISO 9705 small room test18 was used as a reference scenario for validation of the small and intermediate scale EN tests specified for Euroclassification.

Research projects under the name RADAR were initiated to assist the DETR (now DTLR) to prepare the European supplement for Approved Document B and to bring together the wide experience of UK Official Fire Testing Laboratories with the experience of the building industry. The objective was to ensure that no significant change to the regulatory status quo would occur due to the introduction of the new reaction to fire tests and to the new Euroclass systems.

The essential objective of the experimental programmes was to test a representative range of building and roofing products to both the UK and European reaction to fire test methods. This back-to-back testing was necessary so that differences between the methods could be determined accurately.

Industry partners had to define carefully how their products were installed in buildings and the testing laboratories then performed the tests under similar end-use conditions. This requirement ensured that end-use variables such as type of substrate, presence or not of an air-gap, type and application of adhesive, type and position of joints, etc. were addressed by both the industry partner and the testing laboratory.

Analysis of the RADAR results obtained for cellular plastics shows that there is no overall correlation between the Euroclass system and the UK system. For plasterboard and steel faced products, there was a good correlation with Euroclass B corresponding with UK Class 0. This correlation between Euroclass B

Product	Thickness mm	Density kg/m <sup>3</sup>	Euroclass	UK class
LD – glass wool	50	16	A1	N/C
HD – glass wool	50	48	A1	L/C
XPS	50	29	D-s3,d1	Unclassifiable
FR-EPS (Type A)	50	15	D-s3,d0	Unclassifiable
NFR-EPS (Type N)	50	15	F	4
PF foam	25	40	B-s2,d0	2
PIR block foam	25	32	C-s2,d0	1
Flexible melamine foam	5	10	B-s1,d0	0

**Table 1: Comparison of Euroclasses and British classes for typical unfaced insulation products**

Product	Thickness mm	Core density kg/m <sup>3</sup>	Euroclass	UK class
9mm plasterboard faced XPS	32	32	B-s1,d0	0
0.4mm steel faced PUR foam	40	35	B-s3,d0	0
0.4mm steel faced PIR foam	40	35	B-s2,d0	0
0.55mm steel faced PF foam	100	120	B-s1,d0	0
Al foil faced PUR foam	30	32	E	1
Al foil faced PIR foam	40	32	D-s3,d0	0
Al foil faced PF foam	25	45	C-s1,d0	0
Al foil faced MD glasswool slab	50	32	A2-s1,d0	0
Al foil faced HD mineral wool	50	167	A1	1
A1 1 glass tissue facing HD mineral wool	50	175	A1	0

**Table 2: Comparison of Euroclasses and British classes for typical faced insulation products reflecting their end-use condition**

British class	Euroclass
Non-combustible	A1
Limited combustibility	A2
0	B
1	C
3	D
Unclassifiable or no performance determined	F

**Table 3: DTLR proposed transposition for reaction to fire performance**

and Class 0 was confirmed also for a variety of non-insulation products. There were some significant discrepancies; e.g. aluminium foil faced PIR and PF foams give Class 0 in the UK system but they only gave Euroclasses D and C respectively due to early penetration of the Al foil by the 30kW flame in the SBI test and resulting high FIGRA values. Some thermoplastic products (such as XPS) are unclassifiable in the BS 476 Part 7 test due to their melting behaviour during the first minute of the test.

Moreover, the fire performance of some unfaced cellular plastics (especially thermoplastic types) can be dependent on the thickness of the product. Hence, the results shown in Tables 1 and 2 should not be assumed to apply across a wide thickness

range for all insulation products. The fire performance of char-forming polymers is less dependent on thickness; for example, PIR block foam retained its Euroclass C-s2, d0 classification over a thickness range of 12.5mm to 60mm.

As a result, based on further research, the DTLR has now proposed a transposition table for reaction to fire performance. It should be noted that the Euroclasses in Table 3 only refer to fire growth. When the new Euroclass system is introduced, manufacturers will also have to declare the smoke and flaming drop classifications, even though there are no requirements for these parameters in the UK Building Regulations. But even this transposition process is not simple for all building products since the classifications depend on certain key factors; for example:

- There is a fundamental difference in the UK and EC testing systems, especially the use of overall flame spread for UK classification compared to rate of heat release during the early stages of flame attack in the SBI test for Euroclassification.
- Mounting and fixing arrangements, especially the presence or not of air-gaps, position and type of joints, substrate, etc.
- Efficiency of protective facings and coatings to limit the thermal contribution of the core material.

Peter Briggs is at Warrington Fire Research Centre

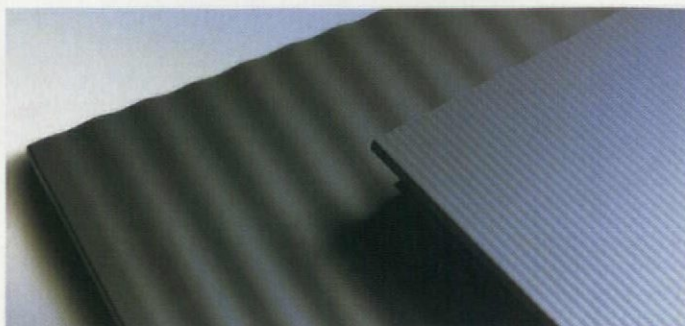


## Exhibitors use BRUFMA conference to showcase products

There has been lively debate in recent years on the relative fire performances of foam-filled composite panels versus mineral-wool built-up systems.

Composite-panel manufacturer Kingspan feels that when it comes to insulated roof and wall systems, the tougher line taken by insurers regarding industrial and commercial property

business risk is based on misconceptions. The company points out that, of 149 fires in the 10 years to 2002, PUR/PIR insulated roof and wall systems were present in only two buildings, while in the same period, 124 fires occurred in traditionally constructed buildings and a further 22 in those with polystyrene sandwich composite systems.



Clockwise from top left: Dow has a new adhesive for fixing its insulation to roofs; Kingspan's Architectural Wall System; Huntsman Polyurethanes has produced a guide to sandwich-panel construction; Isothane makes a variety of insulation foams

**Kingspan's Architectural Wall Systems** offer the crisp, modular look currently in vogue for commercial and retail applications. These can be enhanced by roof panels curved to a 150mm minimum radius. The prefabricated panels minimise the potential for thermal defects, while the closed-cell insulants, being thinner than their mineral-wool counterparts, result in thinner constructions.

Fire resistance is a topical issue and it was a theme many exhibitors were keen to discuss. This included Isothane, manufacturer of Pithan 0, which not only allows fast-track upgrades to Part L requirements, but is also Class 0 fire-rated and suited to a host of building interiors.

**Isothane** manufactures a variety of urethane systems, including Technitherm, a structural PUR foam that can be injected into cavities both to insulate and to strengthen a wall with failing wall ties. The product is claimed to make a property three times stronger in gale-force winds than when wall ties have been used. This is broadly similar to Isofoam CRF, a PUR cavity-reinforcement foam exhibited by **Baxenden Chemicals**. Used to treat wall-tie failure, Isofoam CRF bonds together the inner and outer cavity leaves over their whole surface area. Such systems are particularly useful where the masonry or mortar joints of either leaf are in poor condition. A typical U-value of 0.3W/m<sup>2</sup>°C can be obtained with a 60mm cavity.

Exhibitions can provide the ideal oppor-

tunity to launch new products, although this was not the case at BRUFMA. However, a relatively innovative roof adhesive, called Insta-Stik, was exhibited by the **Dow Chemical Company**. Dispensed from a pressurised container, the single-component, polyurethane roof adhesive is used to fix compatible roof insulation boards to a variety of substrates, including other insulation boards. This eliminates metal fasteners, which is useful where the integrity of wood decks needs to be maintained, or on metal decks, where thermal bridging through fasteners is eradicated. Pre-drilling of concrete decks for fasteners is also eliminated.

Also present was **Eurobond Laminates**, a company that specialises in the design and manufacture of insulated panels, particularly for food-processing facilities, cold stores and distribution centres. Eurobond recently announced that its new Eurofoam PIR panel has passed Loss Prevention Council Standard Test LPS 1181 (Reaction to Fire). The polyisocyanurate core is deemed to offer better fire performance than modified polyurethanes.

Furthermore, because the panel requires no intermediate fixings, it is quicker and easier to install than conventional LPS 1181 panels, the company claims.

Recent years have seen healthy growth in the use of foam-filled composite panels, particularly as an initiative-obsessed construction industry shifts the focus onto prefabrication, time/cost savings and better site quality. However, detailed generic infor-

mation on composite panels has been sparse. Redressing the balance, **Huntsman Polyurethanes** exhibited a new publication called *Sandwich Panel Construction* (ISBN 3-433-01617-8). Written by Rolf Koschade, the well-illustrated, 400-page book forms a complete reference source to planning and installing composite panels and should be of interest to the entire building team, including building owners.

**Steadmans** is a company that has experienced phenomenal growth since its early beginnings as an agricultural blacksmith. Today, it supplies cladding materials throughout the UK and Ireland. In addition to profiled metal sheets, purlins and flashings for roofing and cladding, the company manufactures the AS composite panel system. Faced with a Plastisol- or polyester-coated alu-zinc sheet, the rigid PUR foam-filled panels come in various colours and thicknesses and are available in any length compatible with transport constraints.

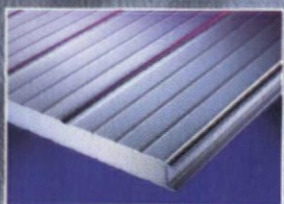
No tangible products were displayed by **BOC Gases**, although its blowing agents are used in the manufacture of PUR insulation. The company is developing more environmentally acceptable alternatives to HCFCs which, due to their significant ODP, are to be phased out under the Montreal Protocol. In contrast, the zero ODP of pentanes and pentane blends – such as Cyclo-plus and Iso-plus launched recently by BOC – makes them suitable alternatives to satisfy the growing demand for polyurethane foam blowing agents.



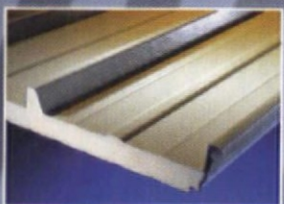


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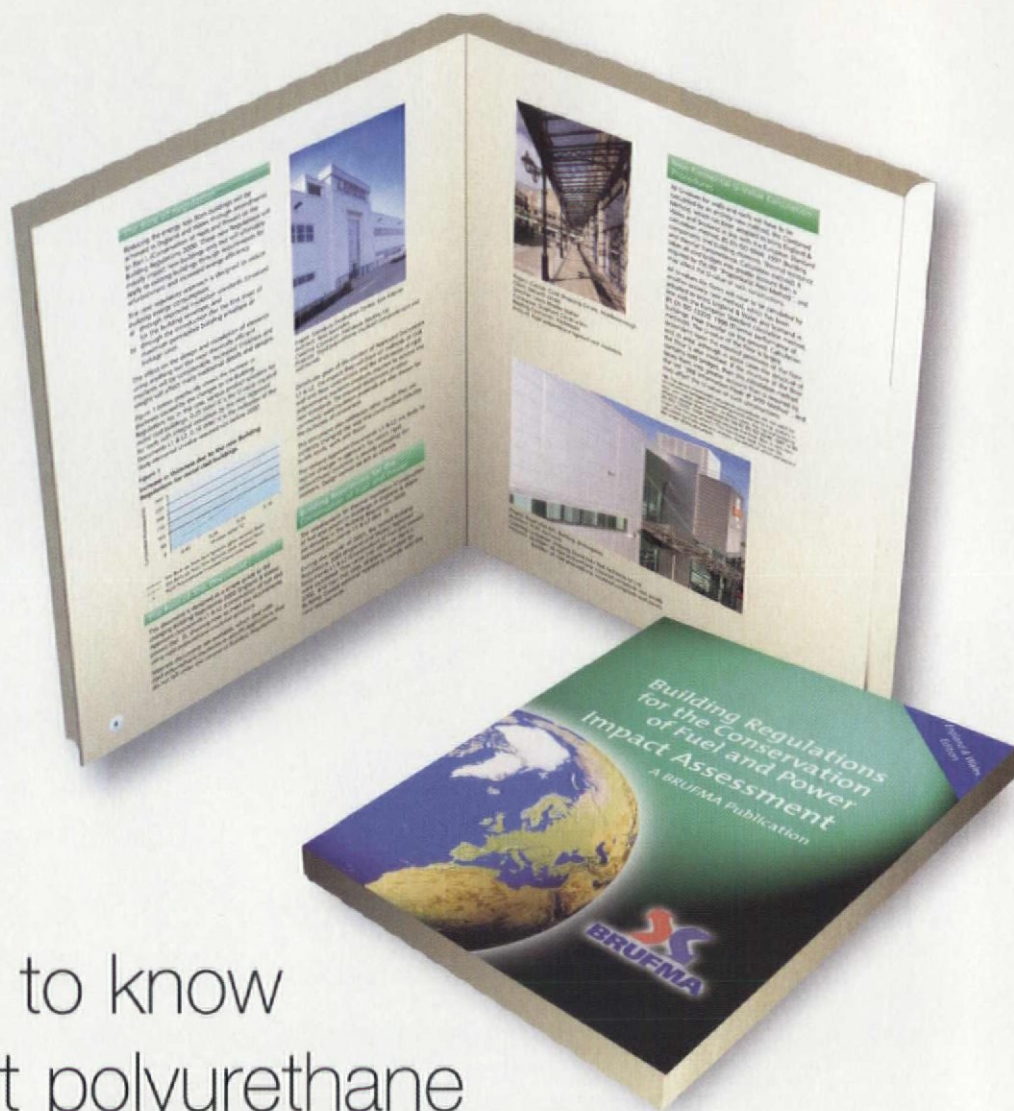


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# Acting on analysis

SARAH JACKSON

## Informed Conservation

By Kate Clark. English Heritage, 2001. £10. (Available from 01761 452 966)



The library of Sir Robert Taylor's Danson Park, Bexley, in the early stages of its recent restoration

Heritage publications are, by their very nature, not known for dealing with contemporary issues and, for the most part, *Informed Conservation* is no exception. This English Heritage document says nothing that is new, but it is astute as it collates and names a procedure that is usually either ignored or blindly absorbed into the design process.

The DOE/DNH 1994 Planning Policy Guidance: Planning and the Historic Environment (PPG 15) states that, when applying for planning permission, applicants 'should provide the local planning authority with full information, to enable them to assess the likely impact of their proposals on the special architectural or historic interest of the building and on its setting'. *Informed Conservation* is a much-needed attempt to summarise what this 'full information' might be and how one goes about getting it.

Conservation is the most one-off type of building project; there are rarely standard approaches, let alone standard solutions, so defining 'full information' is near impossible. For Kate Clark (and for Clark we can read EH), it is directly linked to a com-

plete understanding of the historic building or landscape – a complex operation that draws on a range of skills and procedures, from interpreting oral history to dendrochronology.

This collective operation, which Clark calls Conservation-Based Research and Analysis, or CoBRA, is defined as 'the research, analysis, survey and investigation necessary to understand the significance of a building and its landscape, and thus inform decisions about repair, alteration, use and management.' Its physical result is documentation, such as historic reports, paint analysis, conservation plans, and visual impact assessment studies. These documents are used in two ways – as the basis of the full information that the planners require, and also to define and refine the design, development and management briefs.

*Informed Conservation* covers the whole process of working in sensitive environments, by separating the procedures into five clear stages – assessment, survey, investigation, analysis, and reporting. Although the acronym CoBRA is awkward, its definition has major ramifications. Once defined, the

procedure can be valued and made accountable – the fee and programme implications are obvious.

The document is timely, as Lottery funding has enlarged our view of what conservation-based projects might be. Traditionally they have been in the domain of specialist clients (EH, the National Trust, the Church) and specialist conservation architects, but now it is not unusual for them to be led by conservationally naive champions and 'ordinary' architects, and for buildings to incorporate major extensions and changes of use. The potential of these projects is extraordinary, but the widening scope demands a more intelligent statutory attitude.

There are, however, some key difficulties in the practical implementation of CoBRA. For example, conservation plans are often carried out simultaneously with scheme development and cannot be the objective overview that EH demands. All too often they are used to secure the statutory 'tick' and do not loop back into the development process. They are expensive documents to produce – we must question their role.

Moreover, the statutory procedure is sluggish, and dependent on personnel whose qualities vary. The current system favours mediocrity – we must be able to balance conservation requirements with dynamic vision, not accept the lowest common denominator.

It is outside the remit of *Informed Conservation* to resolve these issues, but it does bring them to the surface and instigate debate. Three points occur to me. First, CoBRA should be linked into the well-established RIBA Plan of Works and Architects' Appointment. Second, consistent inefficiencies of the CoBRA process could be pinpointed by rigorous case studies on completed projects, carried out by a body with the power to make and implement recommendations (a role for CABE?).

And lastly, integration. A common understanding throughout the process, the integrated approach, is the document's most obvious aim. Except, that is, in the work itself. EH's basic premise revolves around the idea of reversibility – all work should be 'capable of being inserted and removed without lasting impact on the significance of the site'. While this does prevent the worst of pastiche, it favours the shadow-gap approach of polite Modernism. It is a nervous, separatist approach which will never allow great architecture. This is the crucial issue that informs all conservation; this is what we should debate.

Sarah Jackson is an architect in London





Left: the hall of St Catherine's College, Oxford. Above: it's a jungle out there – Manhattan as imagined by the Danish artist Pia Rönnicke

## Scandinavian grace

DAVID WILD

How to be Modern: Arne Jacobsen in the 21st Century

Concrete Garden

At the Museum of Modern Art, 30 Pembroke Street, Oxford until 23 June

'How to be Modern' and 'Concrete Garden' are linked exhibitions that give a glimpse of that particular Danish slant on architecture and design. This year being the centenary of Arne Jacobsen's birth, his own work takes precedence; and, naturally enough, particular attention is given to St Catherine's College, Oxford (completed in 1963). A small accompanying publication includes an essay, 'Extending the Humanist Tradition', by Stephen Hodder, architect for the recent extension there.

The English version of those narrow yellow bricks, which Jacobsen had to settle for at the time, have not worn as well as their Danish prototypes. Otherwise, everything at St Catherine's is as he designed, from the now-mature fine landscape to the furniture, cutlery and carpet. The last he wanted woven with spots to mark where the chair-legs should go, but the Fellows drew the line at this. (The concept of 'total design' or the ambition of a control freak – the superhumanist tradition, perhaps?)

With the impossibility of replacing the single-glazed, full-height, room-width windows, thanks to the college's Grade I-listing, residents 40 years on either sweat or shiver

during seasonal extremes. And how does privacy rate in the 'humanist tradition'?

Certainly the earlier work – the seaside terrace houses at Bellevue from the 1930s, the superb Munkegaard School (1956) which shares the same section – are fine examples of a humane approach, as well as the masterpiece of this period, the Aarhus Town Hall. This was completed during the Nazi occupation in 1942; soon afterwards, Jacobsen, no radical but a Jew, was forced to flee to Sweden. An excellent biographical film, *The Ant, The Egg and The Swan*, the highlight of the exhibition, includes construction footage of this groundbreaking, open approach to civic government.

During a discussion in this film led by Karsten Thau, co-author of the recent Jacobsen monograph (AJ 20.12.01), there is a sense that style took precedence in his later work; with his final building, the Danish National Bank, a 'monumental endgame'. But there is nothing monumental about St Catherine's – the scale is just right – and as a model of clarity in intention and execution, it remains a unique example of 'Scandinavian grace' in this traditional context.

While that was a one-off, showing the

influence of Mies van der Rohe, Jacobsen's economic designs for stacking chairs (following the Eames) are almost commonplace – the Ant, especially. All the chair designs are on show here, and after leaving the sepulchral room where the slightly precious industrial designs are displayed, you can sit in one of the Egg swivel chairs (as seen in Kubrick's 2001 – *A Space Odyssey*) and handle the Jacobsen cutlery.

Though an extremely modest affair in the ground floor gallery, *Concrete Garden* nonetheless raises some fundamental issues. The darker side of the quest for order is examined by Jakob Kolding's posters and questionnaires that look at spatial design as an instrument of social control. Pia Rönnicke's video, *Outside the Living Room*, starts with the garden as a substitute for lost nature, moving on to the utopian vision of urbanism in nature with the memorable image of the Rockefeller Center in a literal Manhattan jungle (echoes of J G Ballard's fiction).

Three garden installations by Jonas Maria Schul complete this section, appropriately in plain rectangular concrete planters. 'Modest Garden' has tough survivors that could even thrive in pavement cracks; 'Protest Garden' has prolific spreading varieties that will quickly colonise. The projects of 'street farmers' Crump and Haggart at the Architectural Association in the 1970s re-emerge in Danish artists born just then.

David Wild is an architect in London. Stephen Hodder will lead a tour of St Catherine's on 15 June, 2pm (tickets 01865 813802)



# Singular solutions

STEVEN SPIER

## Eric Parry Architects, Volume 1

By Wilfried Wang and Dalibor Vesely. Black Dog Publishing, 2002. 208pp. £24.95

London-based Eric Parry, who is esteemed as a teacher, respected by other architects, and generally liked as a person, has assembled his work from 1986 into a monograph. If the title alone, *Eric Parry Architects, Volume 1*, does not alert us to the office's ambitions, then having an introduction by Dalibor Vesely, lecturer and phenomenological eminence grise in the Department of Architecture at the University of Cambridge, and an essay by Wilfried Wang, recently director of the German Architecture Museum in Frankfurt, certainly makes the point.

The book focuses on 15 projects of the past 15 years, with 44 others given short descriptions in a 'projects summary' at the end. Each of the 15 is comprehensively

described through photographs, drawings, sketches, and a descriptive and critical text. The projects, mostly in and around London, range from residential renovations (including a chateau in the south of France) to office buildings and the Southwark Information Centre. It is nicely designed and well produced.

The projects are presented chronologically, though that fact is obscured, suggesting that we should consider this a body of consistent work or of continual themes rather than a catalogue raisonnée that would show us what the office has left behind. Such an assured position from a relatively young firm is remarkable, given the considerable vacillations in architecture

over the period that the book covers; from historicism to Neo-Modernism has been a lot of ground to cover. And that quiet sense of purpose and consistency seems closely tied to Parry's long association with the Department of Architecture at Cambridge, where he taught from 1982-1997.

As the two essays claim, Cambridge's lineage follows from the Le Corbusier of *béton brut* through Aalto, Lewerentz, Martin and St John Wilson, searching for the poetic and humane face of Modern architecture. Although the authors do not quite admit it, this has become a true school, treading a path indefatigably if often singly. It divides the world into adherents and the other. If there is a British architecture, it is coming out of Cambridge. You would recognise the soft pencil renderings.

As Wang says in his essay, an architecture interested in a phenomenological hermeneutics 'immerses itself in the messiness of praxis, its conflicts and accommodations. It is an insight which runs counter to the proclivity for totalising theoretical generalisations.' While that sounds reasonable enough, and explains how every project in the book can be admirably singular, it also suggests the shortcomings in the work.

This is an office that can be bold at 30 Finsbury Square, hackneyed at Stockley Park, precise at Pembroke College, competent in Malaysia, stylish at the Mandarin Oriental Hotel (see picture), and misguided at Southwark Tourist Information Centre. It is well and good not to be in thrall to manifestations of technology or the repackaging of Modernist motifs, as Wang blithely dismisses the current situation, but what exactly are the issues that drive what is obviously an ambitious office?

It seems to be a situational poetics (or poesis as they say), a response to the specific character of place and material which will speak to us from our everyday reality. But unlike the younger generation that has rediscovered the Smithsons, the everyday, and even Butterfield's 'glory of ugliness', Parry's understanding of context and the response to it is less histrionic, less didactic, but also less engaged.

Parry's work usually does avoid the romanticism and nostalgia that the rearguard position of a situational poetics can invite, the office is clearly talented, and the best work is very good indeed. But the monograph fails to leave us eagerly anticipating volume two. It will, however, no doubt be welcomed by those already in thrall.

Steven Spier is professor at the University of Strathclyde





# diary

## London

**Zaha Hadid** *Sunday 26 May, 15.30.* A lecture at the V&A. Tickets (£7) 020 7942 2211.

**Hélène Binet** *Until 1 June.*

Architectural photographs at the Shine Gallery, 3 Jubilee Place, SW3. Details 020 7352 4499.

**Stephen Hughes** *Until 1 June.*

Marginal urban sites in photographs at Photofusion, 17A Electric Lane, SW9. Details 020 7738 5774.

**Will Alsop: Beauty, Joy and the Real** *Until 8 June.* An exhibition at the Sir John Soane Museum, 13 Lincoln's Inn Fields, WC2. Details 020 7405 2107.

**Practice Structure, Management and Growth** *Thursday 13 June.* A Colander course at the Building Centre, WC1. Details 020 8771 6445.

**Nigel Henderson: Parallel of Life and Art** *Until 14 June.* An exhibition at the AA, 36 Bedford Sq, WC1. Details 020 7887 4000.

**Neighbourhoods by Design** *Until 15 June.* An exhibition at the RIBA, 66 Portland Place, W1 (020 7307 3681).

**Art of the Model Maker** *Until 15 June.* An exhibition at the Building Centre, 26 Store St, WC1 (020 7692 6209).

**Atelier van Lieshout** *Until 16 June.* An exhibition at Camden Arts Centre, Arkwright Rd, NW3. Details 020 7435 2643.

**With Design in Mind: Building for Mental Healthcare** *Wednesday 19 June.* A conference at the RIBA, 66 Portland Place, W1. Details Gurinder Whall 020 7274 4438.

**Design Skills for the New Urban Agenda** *25-28 June.* A residential course at the Prince's Foundation, EC2. Details 020 7613 8500.

**Gio Ponti** *Until 6 October.* An exhibition at the Design Museum, Shad Thames, SE1 (020 7940 8790).

## Eastern

**Introduction to Shading Design** *Monday 10 June.* A course at the BRE, Garston, Watford. Details John Kempster 01923 664800.

**Enrico Castellani** *Until 23 June.* An exhibition of monochrome reliefs at Kettle's Yard, Castle St, Cambridge. Details 01223 352124.

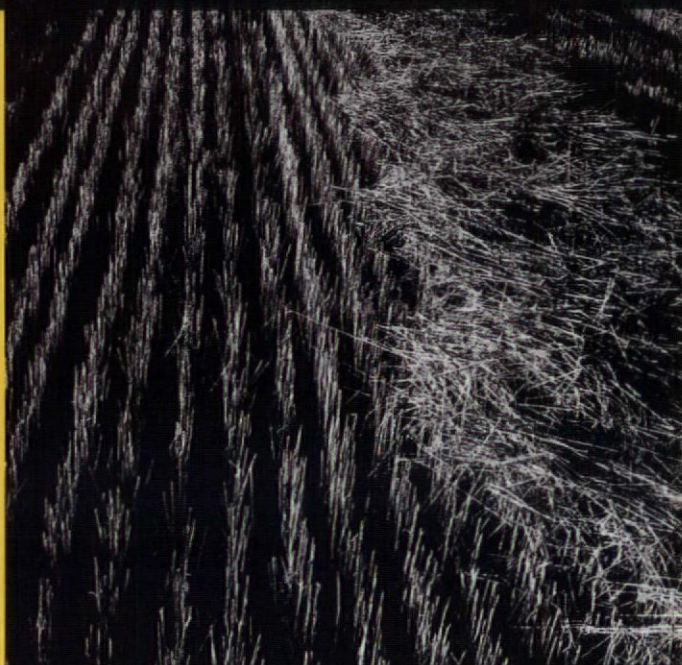
## East Midlands

**RIBA CPD Event: Party Wall Act** *Wednesday 26 June, 16.00.* Details of venue 0121 233 2321.

## Northern

**Are You Sitting Comfortably?**

*30 May-28 August.* An 'interactive seating exhibition' at Belsay Hall, Northumberland (01661 881 636).



## FIELDWORK TRIP

The subjects of Frauke Eigen's previous photographs include construction scenes at Potsdamer Platz in Berlin and the post-industrial landscape of the Ruhr. Her latest images stem from a residency at a contemporary arts centre in Brittany, the Domaine de Kerguéhennec, and are at the Goethe Institut, 50 Princes Gate, London SW7 until 7 September (020 7596 4000).

## North West

**Rendering the Unseen: Art & Architecture in Japan** *Until 31 May.* An exhibition at the Holden Gallery, Manchester Metropolitan University. Details 0161 247 1911.

**A Matter of Art: Contemporary Architecture in Switzerland** *Until 31 May.* An exhibition at CUBE, 113 Portland St, Manchester. Details 0161 237 5525.

**To Refurbish or Redevelop: Is There a Sustainable Option** *Tuesday 18 June, 16.00.* A CIEF seminar at Manchester. Details 020 7222 8891.

## South Eastern

**Building the Homes of Tomorrow** *Tuesday 28 May.* A CIEF conference at the County Hall, Maidstone, Kent. Details fax 020 7222 0445.

**Tim Macfarlane** *Thursday 30 May, 18.00.* A lecture at Canterbury School of Architecture. Details Keith Bothwell 01227 817 532.

**RIBA CPD Event: Fire Safety** *Thursday 13 June, 16.00.* A seminar at Gatwick Le Meridien Hotel. Details 01892 515878.

**Conservation and Repair of Timber** *18-21 June.* A conservation masterclass at West Dean College, West Dean, nr Chichester. Details 01243 811301.

**Colour White** *Until 7 July.* An exhibition at the De La Warr

Pavilion, Bexhill-on-Sea. Details 01424 787900.

## Southern

**Arne Jacobsen** *Until 23 June.*

An exhibition at the Museum of Modern Art, Pembroke St, Oxford. Details 01865 813830.

**Classic White Houses** *Wednesday 26 June, 18.00.* A talk by Kenneth Powell and Nick Dawe at the De La Warr Pavilion, Bexhill on Sea. Details 01424 787900.

**Time for Timber** *Thursday 27 June.* A conference in the new Downland Gridshell at the Weald & Downland Open Air Museum, nr Chichester. Details 01989 762470.

## South West

**Challenges of Climate Change for Architects** *Wednesday 26 June.* An exhibition and seminar at the Sherwell Centre, Plymouth University. Details 01752 265921.

## Wessex

**Regeneration Through Conservation: Reviving Our Urban Communities** *Friday 24 May.* A conference at The Watershed, Bristol. Details Charlie Bisnar 01732 220151.

**The Rough and the Smooth** *Until 31 May.* An exhibition on earth as a building material. At the

Information for inclusion should be sent to Andrew Mead at The Architects' Journal at least two weeks before publication.

Architecture Centre, Narrow Quay, Bristol. Details 0117 922 1540.

**Richard Long** *Until 22 September.* An exhibition at the New Art Centre Sculpture Park, Roche Court, East Winterslow, Salisbury. Details 01980 862447.

## West Midlands

**John Creed: Metal Transformed**

*Monday 10 June, 19.30.* A lecture at St Leonard's First School, Brookfield Rd, Ipstones, Staffs. Details Chris Hesketh 01538 373497.

**Facing the Future** *11-12 June.* The RIBA/AJ conference at Interbuild, the NEC, Birmingham. Details Martin Davies, fax 020 7505 6650.

**RIBA CPD Event: Adjudication - How It Affects You** *Thursday 20 June, 16.00.* A seminar at Birmingham. Details 0121 233 2321.

**RIBA CPD Event: The Party Wall Act 1996** *Thursday 4 July, 16.00.* Details of venue 0121 233 2321.

## Yorkshire

**Richard Wilson** *Until 1 June.* A retrospective exhibition of Wilson's installations at Leeds Metropolitan University Gallery, Leeds. Details 020 8858 2379.

**Maintaining Safe and Secure Housing** *Thursday 11 July.* A one-day BRE seminar at Leeds. Details 01923 664766.

## Scotland

**India of Inchinnan** *Until 26 May.* An exhibition at The Lighthouse, Mitchell Lane, Glasgow. Details 0141 225 8414.

**Isi Metzstein** *Wednesday 29 May, 14.30.* A lecture at Theatre 5018, University of Dundee. Details scottmcnindsay@bopenworld.com  
**To Refurbish or Redevelop: Is There a Sustainable Option?** *Thursday 20 June, 16.00.* A CIEF workshop at Glasgow. Details 020 7222 8891.

## Wales

**RSAP Design Forum 2002** *Tuesday 28 May, 18.00.* At the Old Library, The Hayes, Cardiff. Cost £3. Details 029 2087 4753.

**Piranesi's Sublime Dreams** *Until 4 June.* An exhibition at the National Museum & Gallery of Wales, Cathays Park, Cardiff. Details 02920 397951.

## International

**UN Studio: Ben van Berkel/Caroline Bos 1987-2002** *26 May-15 September.* An exhibition at the Netherlands Architecture Institute, Museumpark 25, Rotterdam. Details 003110 4401200.



# BRE FOCUS ON PART L

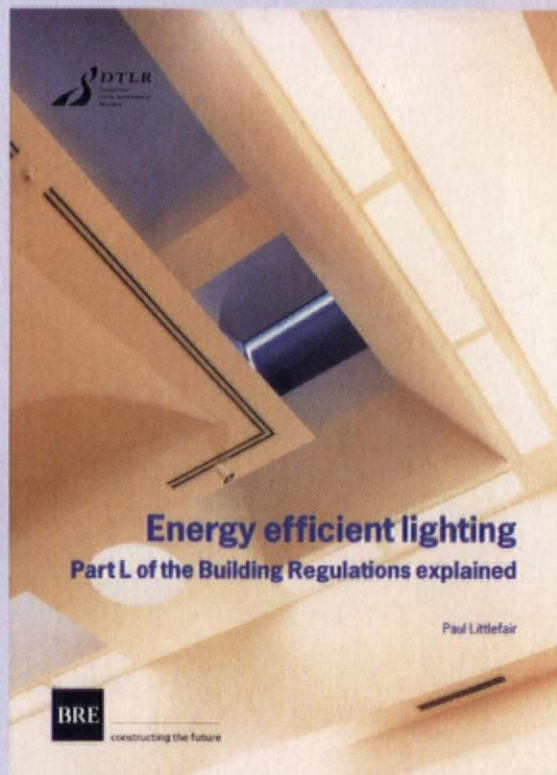
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
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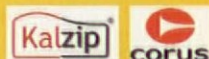


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Royal Institute  
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## Facing the future

RIBA National Conference 2002

11-12 June at the National Exhibition Centre, Birmingham

In association with the Architects' Journal

This two-day conference will address issues of concern to the profession, to practice and to individual architects

The conference is FREE to RIBA members  
(£50 refundable booking fee for each day booked), and £250 per day for others

### Day 1: Tuesday 11 June

#### Morning

**Paul Hyett**, RIBA president - welcome

**James Woudhuysen** - the Social Context of Architecture

Hot shot **Ted Cullinan** - Drawing on Inspiration

Ministerial address - **Brian Wilson**, Construction Minister *What architecture can do for UK plc*

**Sunand Prasad** - Architecture and Process

#### CPD event (1a)

##### Post-occupancy evaluation

Alastair Blyth, Denice Jaunzens BRE

#### CPD event (1b)

##### Rewarding Innovation

Robin Nicholson

##### Value framework for remuneration

Roger Zogolovitch

##### Insurance

Ashley Brewer, RIBA Insurance Bureau

##### Appointment documents

Ian Salisbury

Break and the opportunity to visit the Interbuild exhibition

#### Afternoon

#### Panel session - Living

Chair: Simon Allford, Allford Hall Monaghan Morris

Tony Pidgley, Berkeley Homes

Rob Joiner, Molendinar Housing Association

Hot slot - Glen Howells, Glen Howells Architects

#### CPD event (2a)

##### Government, regeneration and planning policies

Speakers will include Jon Rouse, CABE

#### CPD event (2b)

**Housing Densities** Peter Stewart

##### The Pastiche Problem:

**Design Assessment and Taste** Robert Adam

#### Panel session - Working

Chair: Ken Giannini, DEGW

Roger Madelin, Argent plc

Richard Saxon, BDP

Evening event - RIBA AWARDS DINNER, to be held at the International Convention Centre, Birmingham. Details to be announced separately.





## CONFERENCE FEE

Non-RIBA members £250 + VAT (£293.75) per day (indicate 11/6, 12/6 or both)

RIBA members £50 + VAT (£58.75) REFUNDABLE booking fee per day (indicate 11/6, 12/6 or both)

Please return the booking form promptly as places are limited

OR BOOK YOUR TICKET ON THE WEB: [www.ajplus.co.uk/promotion/riba](http://www.ajplus.co.uk/promotion/riba)

### Day 2 Wednesday 12 June

#### Morning

Richard Hastilow - Introduction

Paul Hyett - presidential address

Richard Murphy

#### CPD event (1a)

Educating tomorrow's architects

Ruth Morrow, Judi Farren-Bradley, Murray Fraser

#### Co-operative design in other industries (1b)

Professor Steve Evans, Cranfield University

#### CPD event (2a)

A new agenda for education

Helen Mallinson

The schools response

Malcolm Parry

Architects for change

Sumita Sinha

Break and the opportunity to visit  
the Interbuild exhibition

#### Afternoon

#### Panel session - Learning

Chair: Malcolm Parry

Frances Sorrell (honorary fellow)

Elia Zenghelis (teacher and Annie Spink Award  
winner)

Hot shot - Guy Battle, Battle McCarthy

Keynote speech: Architecture, Art and  
Accountability, Sir Richard MacCormac

#### CPD Event (2a)

Design quality indicators

Sunand Prasad, Robin Nicholson

#### CPD event (2b)

Improving your practice

Key performance indicators - Guy Russell

Benchmarking - Caroline Cole

Using the web - Eric Winterkorn

Marketing your practice - Sue Wadsworth

#### Panel session - Healing

Chair: Richard Burton

John Cole, NHS Estates Northern Ireland

Guy Greenfield

Ann Noble



## Booking form

PLEASE COMPLETE ONE BOOKING FORM PER DELEGATE (photocopy if necessary).

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\* Booking conditions: the programme is correct at the time of going to press, however we reserve the right to alter or cancel the programme due to circumstances beyond our control.

RIBA Members: Your payment will not be processed if you attend the conference on the day(s) selected. However, if you book a place at the conference and do not attend without giving 14 days written notice we will process your payment.

Non-RIBA Members: Payment is required in full prior to the event. All cancellations must be made in writing to the above address and made no later than 21 days prior to the conference date. Cancellations are subject

☐ Day(s) attending ☐ 11th ☐ 12th ☐ both ☐

☐ I am a RIBA member ☐ Non-RIBA member

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to a handling and administration charge of 26% of the booking fee. Cancellations within 20 days of the conference will not be accepted, though substitute delegates can be nominated.

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#### MIDLANDS:

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#### Deadlines:

bookings: 5pm monday  
copy: 5pm monday  
artwork: 12 noon tuesday  
cancellations: 12pm monday

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You may also e-mail us at:  
[pins8.support@pins.gsi.gov.uk](mailto:pins8.support@pins.gsi.gov.uk)



## The Planning Inspectorate

#### You are likely to be:

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- Used to handling the complexities of a number of generally small scale cases to deadlines
- Able to commit to at least one week's work each month

The Planning Inspectorate is committed to ensuring equality of opportunity and welcomes applications from all. Previous applicants are welcome to re-apply.

**The closing date for the return of completed application forms is Friday 28 June 2002.**

We will not accept CVs. Only postal applications accepted.



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England's first game in Saitama, Japan, is against Sweden on Sunday 2 June at 10.30 BST, so that's fine. But the next encounter, with the mighty Argentina at the Sapporo Dome, is set for Friday 7 June at 12.30pm. And 'our' last, possibly crunch, game against the Nigerians is in Osaka on Wednesday 12 June starting at 7.30am.

For the Argentina game, you could try and convince your manager that it is at lunchtime – despite finishing about 2.15pm and time being money etc. Say it's good for morale, and that staffers will henceforth insert practice-threatening mistakes in all CADs if watching that match is denied them. The Nigeria game finishes at 9.15am so should not present too many problems, although productivity may be influenced if you watch it in the pub and wobble in from there. The second round matches are on a weekend too, if England gets that far, though the quarter finals (who are we kidding?) will be either Friday 21 June at 12.30pm or Saturday 22 June at 7.30am. Semis don't really bear thinking about but are Tuesday and Wednesday lunch jobs again, while the final is a Sunday special.

Alternatives for the week-day fixtures involve IT and are as dull as ditchwater. Set your Internet browser to show the score or buy a pocket TV and watch it surreptitiously under the desk.

We could suggest the option likely to be used by the rest of the country – 'pulling a sickie'. But we're a respectable journal. And that would be foul play.

Dirk Lombard

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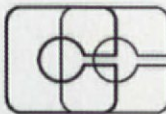


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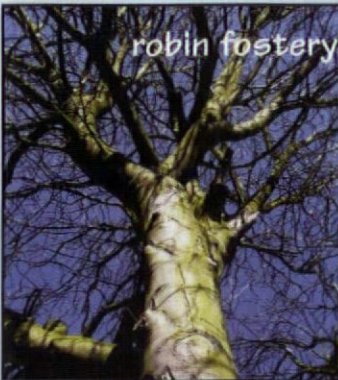


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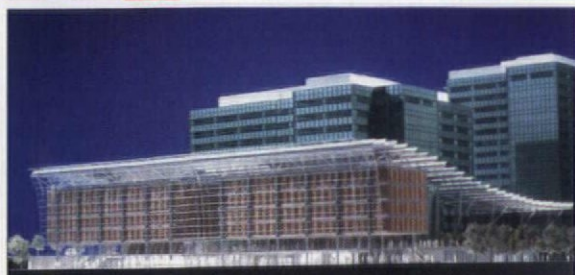


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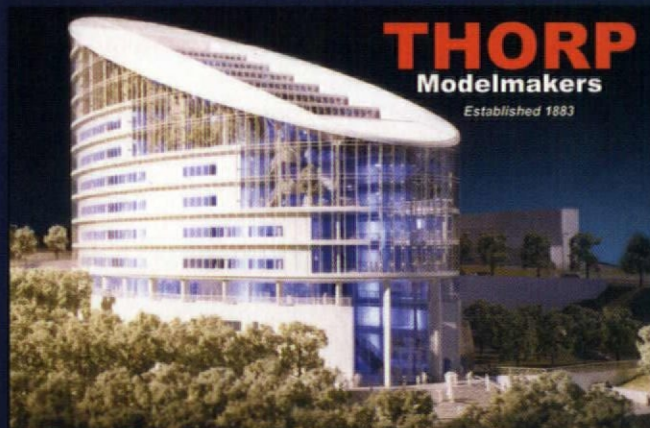
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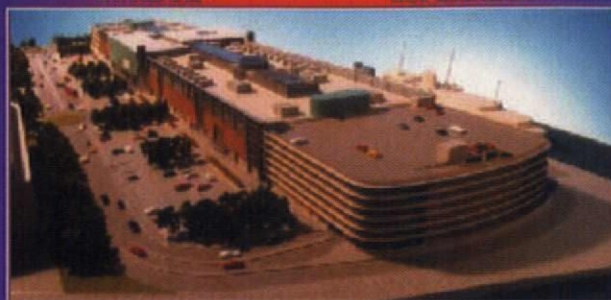
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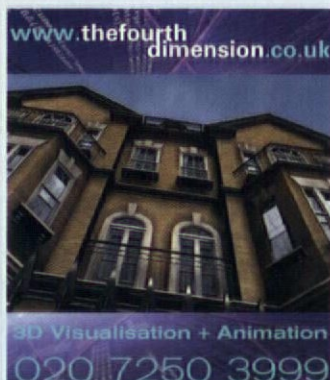
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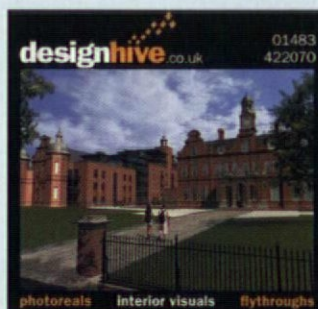
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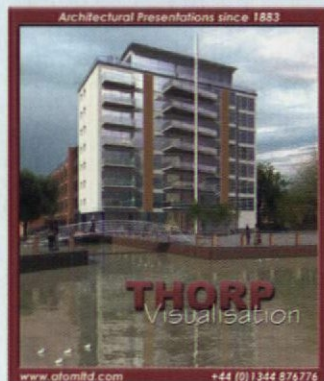
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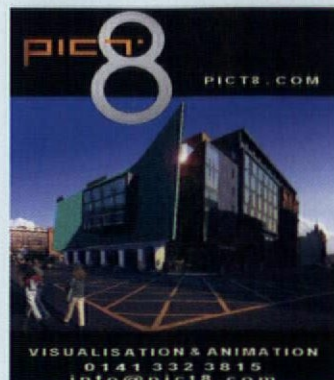
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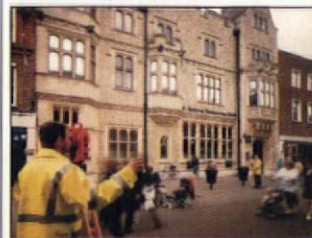
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## archicharades



Champagne goes to Jim Cox of Rolfe Judd, London SW18, who correctly identified Alison Smithson from the clues in our 'archicharades' competition last week. Can you identify the famous architect from this week's clues? Send your answers on a postcard please, by first thing Monday morning, to: AJ Astragal, 151 Rosebery Avenue, London EC1R 4GB, or fax your entry on 020 7505 6701. The first correct entry pulled out of the hat wins a bottle of bubbly.

### Whiter shade

This column is not in the habit of lifting material from other publications, having no need to do so. However, a long-running story in the *Sunday Telegraph* has taken on such significance for architects, especially those involved with refurbishment and remedial small works that, in this instance, I pass it on. The story, more accurately described as a scandal, has been monitored by **Christopher Booker** in the *Sunday Telegraph*. It concerns the forthcoming EC directive on the treatment of asbestos in buildings, (no doubt partly influenced by the appalling waste involved in stripping out and then demolishing the major EU building in Brussels, the Berlaymont). Booker's point is that the authorities, he suspects knowingly, have lumped together blue asbestos, which like brown asbestos is highly dangerous, and white asbestos, which is a very different matter, and is used in 85 per cent of buildings in Britain. Last week's House of Lords ruling in respect of the victim of mesothelioma concerned the former material, not the latter. This is important because if blue or brown asbestos is found in a building, the complications in its removal are considerable, as is the cost. Work has to be undertaken by specialists, most of whom belong to a trade body called the Asbestos Removal Contractors Association. Booker has found several cases where specialist firms have quoted for work on the basis of their full service, when nothing of the sort is required. For

small works it is perfectly possible to organise cheap removal and replacement contracts, with the full approval of the HSE. But big business and the EU seem to be pushing us towards vastly expensive and unnecessary procedures. Booker's campaign has been helped by chemist and surveyors **John Bridle**. For more information contact him on jbridle@whiteasbestos.fsnet.co.uk

### Name check

Most people can only name two living architects, and think **Sir Christopher Wren** is still with us. They are the assumptions to be drawn from a poll by Mori, commissioned by CABA and published last week. It may be that a certain percentage of the population enjoy telling pollsters that they think Wren is alive. Another statistic more to CABA's liking concerned its own recognition factor: no less than 10 per cent of the weighted sample claimed to know of its existence, a remarkable achievement for a body only formed in autumn 1999. No doubt this intelligence was conveyed to the ministerial architectural champions meeting under **Lord Falconer's** aegis yesterday.

### Role call

As **Simon Thurley** makes his mark as incoming chief executive of EH with a principled stand on Bishopsgate Goodyard, I muse on the fate of his predecessors. There was that decent old railwayman, Chris Green, forced out by the great Sir Jocelyn Stevens in circumstances never satisfactorily explained;

another was Jennie Page, whose subsequent troubles at the Dome are dwarfed by those she has found at Equitable Life. And even Simon T has not been without his tribulations. He supported multi-millionaire Christopher Moran when the latter fell out with his architect, Carden & Godfrey, which was creating his magnificent riverside home in Chelsea, Crosby Hall. The judge in ensuing legal action was less than impressed by evidence from Moran's side, who suffered a humiliating defeat.

### Barnsley chap

Will Alsop was on good form at last week's AJ/Spectrum lecture at the Commonwealth Institute, where he showed a film made by the practice, first screened for Barnsley locals a few days earlier. It concerned their thoughts about the town, and just a hint of the Alsop vision for its future (an encompassing wall which has been keeping the AJ letters pages buzzing). Alsop did not say much about his appearance on *Richard and Judy* to talk about the project, possibly because a poem by a local was read out in which the great architect was compared to a whippet. I gather he disposed of this suggestion by informing R and J that he was 'smarter than a \*\*\*\*\* whippet'. And so he is.

### Club tie

The Architecture Club is not exactly secret, but its meetings are conducted under Chatham House rules, so some memorable occasions, frequently involving Julian Wickham, do not always find their

way into print. However, Astragal would like to pay tribute to the club's honorary secretary, **Peter Murray**, who celebrates his 25th anniversary in the role tomorrow evening with a reception in a splendid old pile in Kensington Palace Gardens. I do hope this is populist enough for the club, which once debated the question of whether architecture should be popular. Terry Farrell thought it should, while Sir Philip Dowson argued that this meant agreeing with the theory that '100,000 lemmings can't be wrong'.

### Eastern eye

My Beijing sources were interested to see a live May Day broadcast involving **Arata Isozaki** in China talking to **Cedric Price** in London. The discussion concerned propulsion, anticipation, the unification of relative speeds, the projected water levels of the Three Gorges Dam and the relationship between power, energy, storage and time. Let's hope the translators kept up.

### What you see

Paper architecture has always had its fascination. After all, if architecture is about ideas (or, as Ruskin claimed, about painting and sculpture), does it matter if the building is ever, you know, built? Speculations about the nature of architecture abound in a book edited by teacher and writer **Kester Rattenbury**, published by Routledge. An unusual and stimulating series of essays, well illustrated, look set to guarantee her a long round of invitations to lecture. Check it out.

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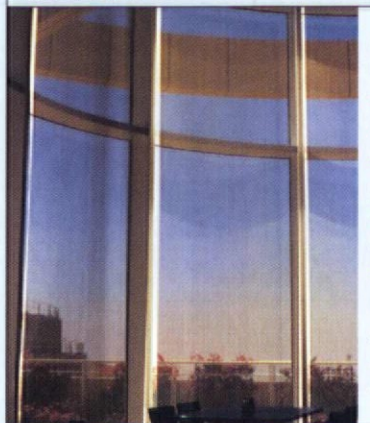
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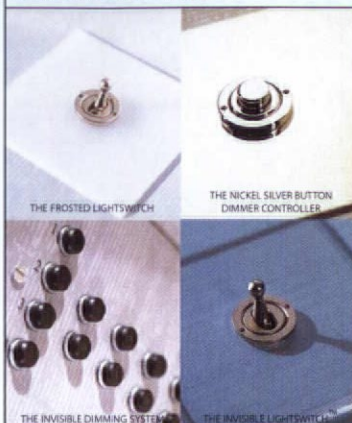
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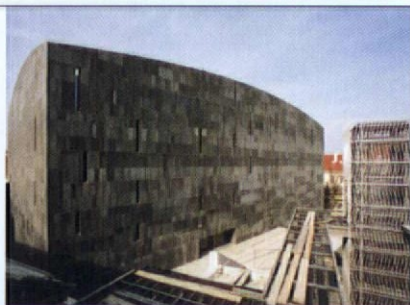


Invisible switches have flush-to-the-wall acrylic plates, allowing the wall colour to show through. Other plate finishes include frosted acrylic, stainless steel, nickel silver and unlacquered brass. The invisible dimming system is a remote-controlled, scene-setting dimmer, tel 020 7738 0202 or visit [www.forbesandlomag.co.uk](http://www.forbesandlomag.co.uk) for more information.

## MENDIGER BASALT

**AJ ENQUIRY NO: 205**

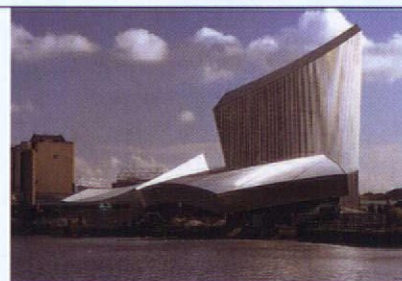
Mendiger Basalt Lava was used to build Ortner & Ortner's Ludwig Museum of Modern Art in Vienna – for the facade, the curved roof, and the inside walls. The outer wall is 500mm thick, with 10mm air gap behind the shell of Basalt slabs. It is a monument to this volcanic material, chosen for its character and resilience. For Basalt Products, tel 020 7407 1157, fax 020 7407 5364, or e-mail [info@lavastonedesigns.co.uk](mailto:info@lavastonedesigns.co.uk)



## KINGSPAN

**AJ ENQUIRY NO: 206**

The superior insulation and environmental performance of zero ODP (CFC/HCFC-free) Kingspan Insulation products, which are now available as standard, made Thermawall partial fill cavity wall insulation the preferred choice for the spectacular £28.5 million Imperial War Museum North project on the south bank of the Manchester Ship Canal at Trafford, Greater Manchester. A total of 4,500m<sup>2</sup> of Thermawall high-performance rigid urethane insulation was used.



## CORUS

**AJ ENQUIRY NO: 207**



Guernsey Post's HQ has just been roofed with Kalzip AF profile with underlying Foamglas insulation – this 4,800m<sup>2</sup> installation is one of the first of its kind in the UK and it is the first time that the Kalzip AF profile has been roll-formed on-site. The building was designed by project architect GMA Architecture in conjunction with Dunnell Robertson Partnership.

## ECOIMPACT

**AJ ENQUIRY NO: 208**



Ecofloor is made from bamboo. It is harder than oak, making it perfect for high-traffic areas. And being non-allergenic, it is particularly suitable for hospitals, hotels and fitness centres. Available in light and dark, it will transform the look of a commercial space or home and there are matching panels and worktops to go with it. Visit [www.ecoimpact.co.uk](http://www.ecoimpact.co.uk) or call 020 8940 7072.



# Working details

*creative solutions to detailing*

architects'  
**working details 8**  
by Susan Dawson

the architects' journal

## VOLUME 8 JUST PUBLISHED

The Working Details series is a collation of ideas about the detailing of buildings; some demonstrate new and innovative techniques, others refine tried and tested methods of construction. The details originate from the building studies which are published each week in The Architects' Journal.

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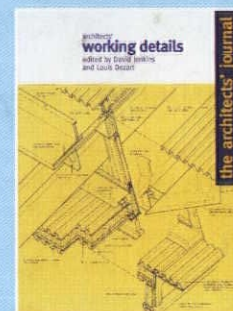
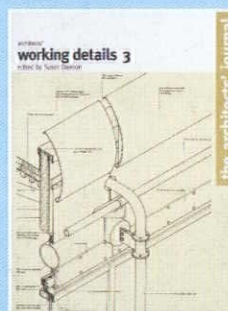
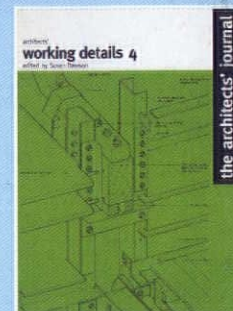
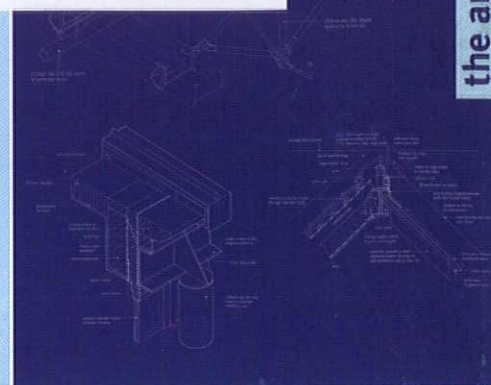
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