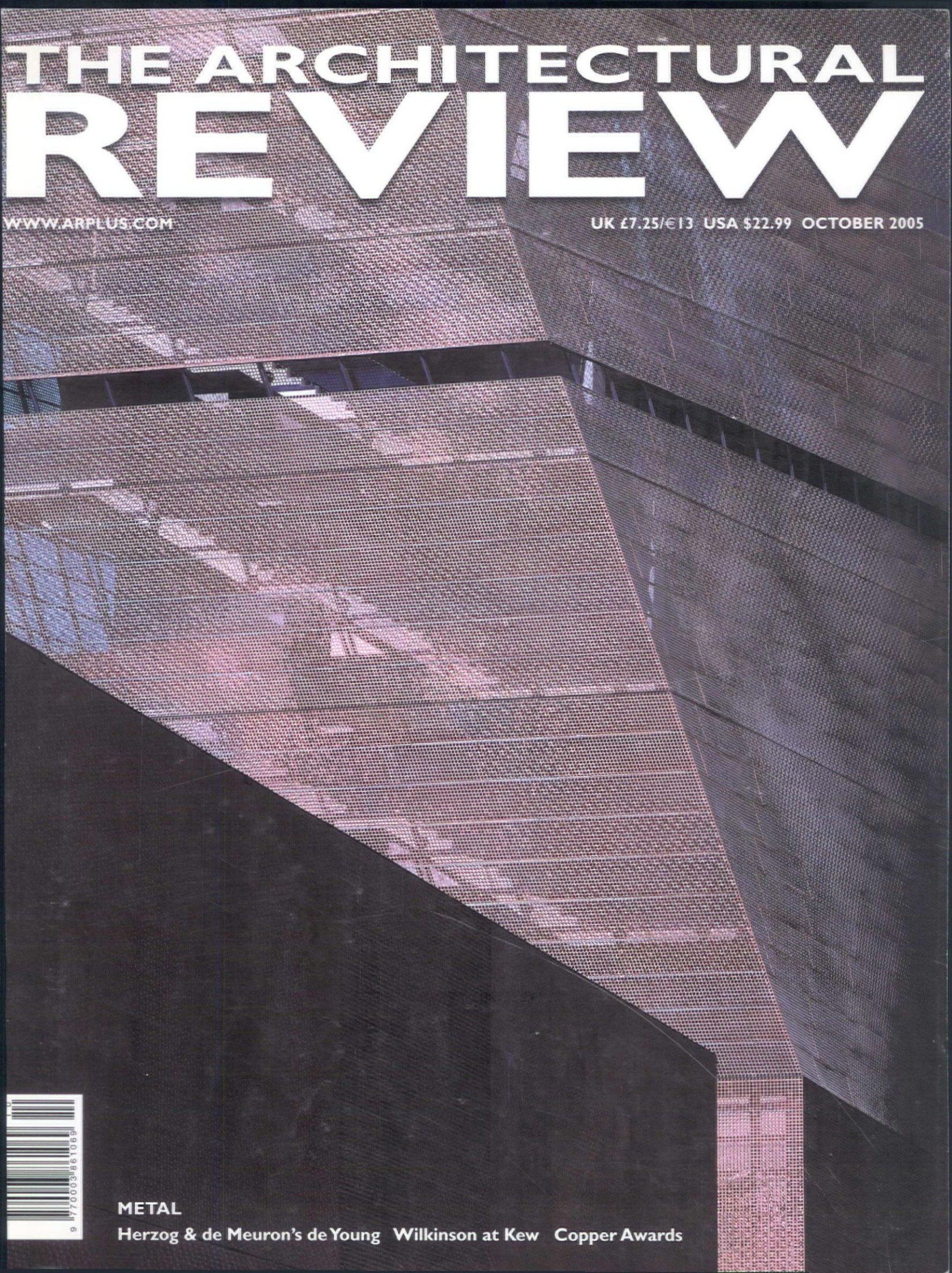
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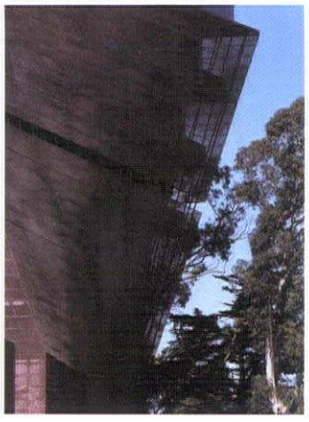
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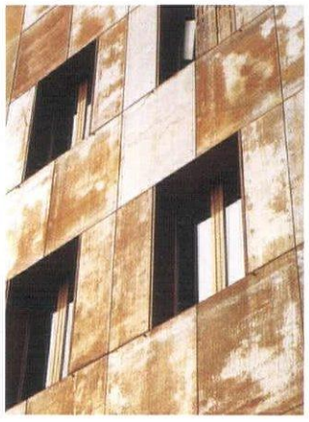
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The Architectural Review (ISSN 0003-861X) is published monthly for $108 per year by EMAP, Royal Mail International c/o Smartmail, 140 58th Street, Suite 2B, Brooklyn, NY 11220-2521. Periodicals postage paid at Brooklyn NY and additional mailing offices. Postmaster: send address changes to The Architectural Review, c/o PSMJ Resources Inc., PO Box 95120, Newton, MA 02495.

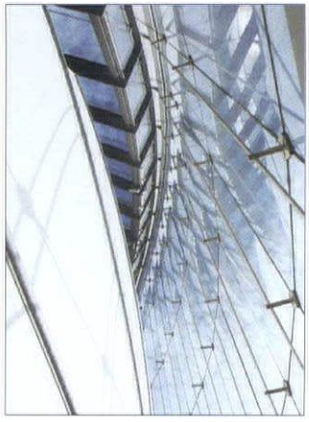
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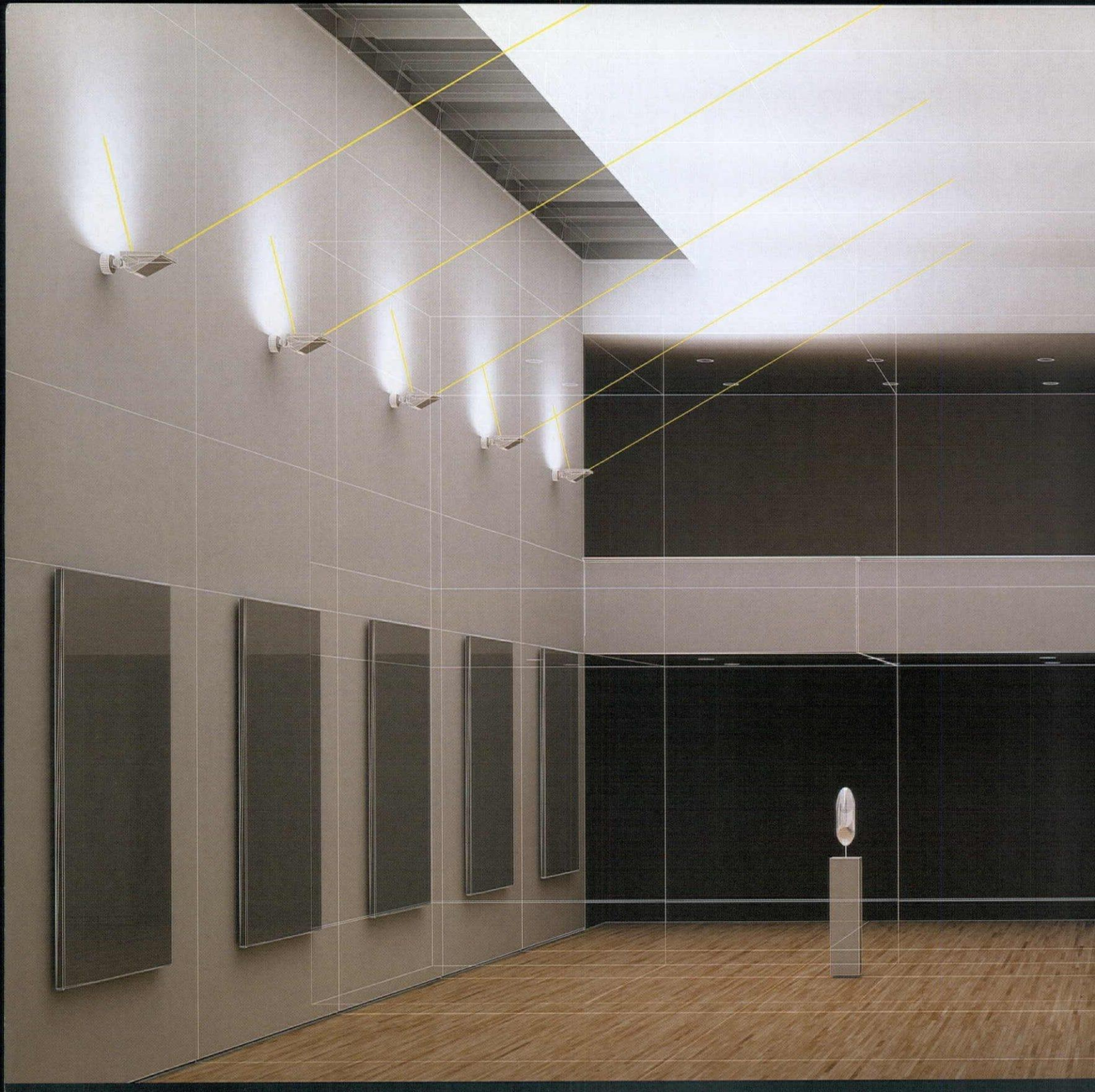
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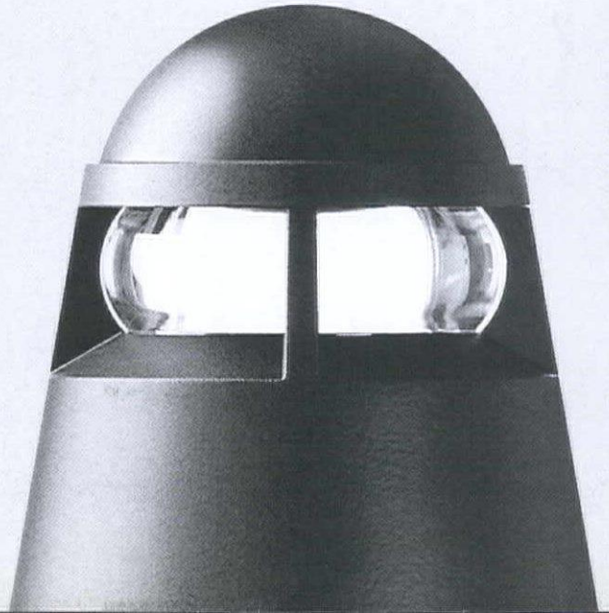


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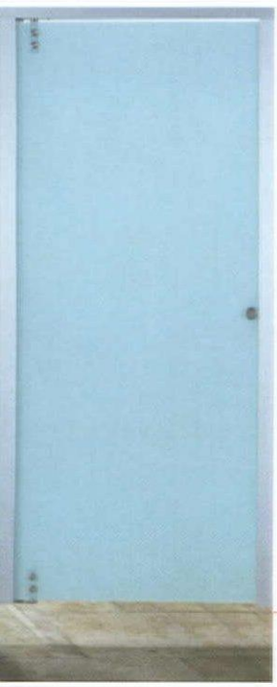
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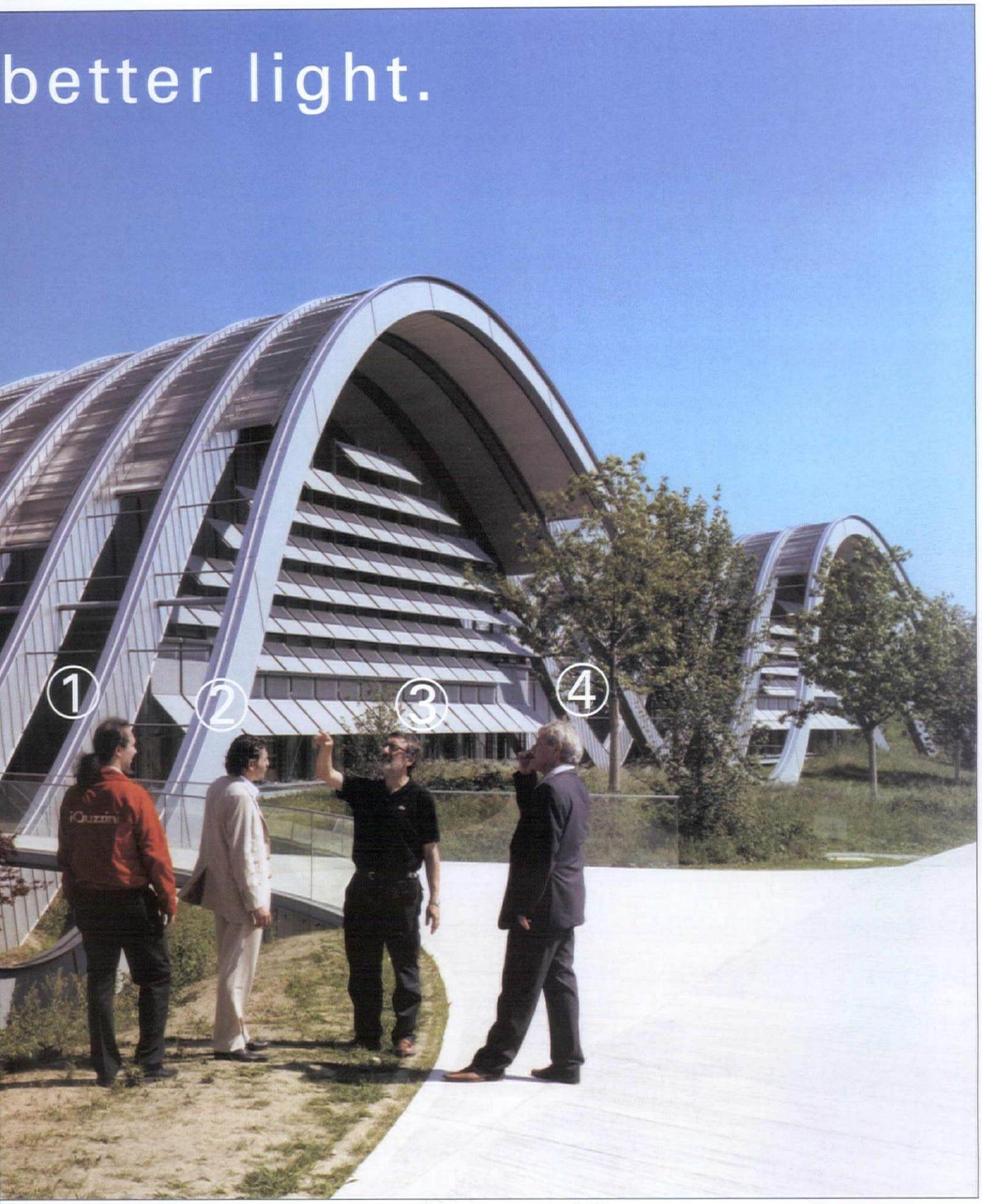
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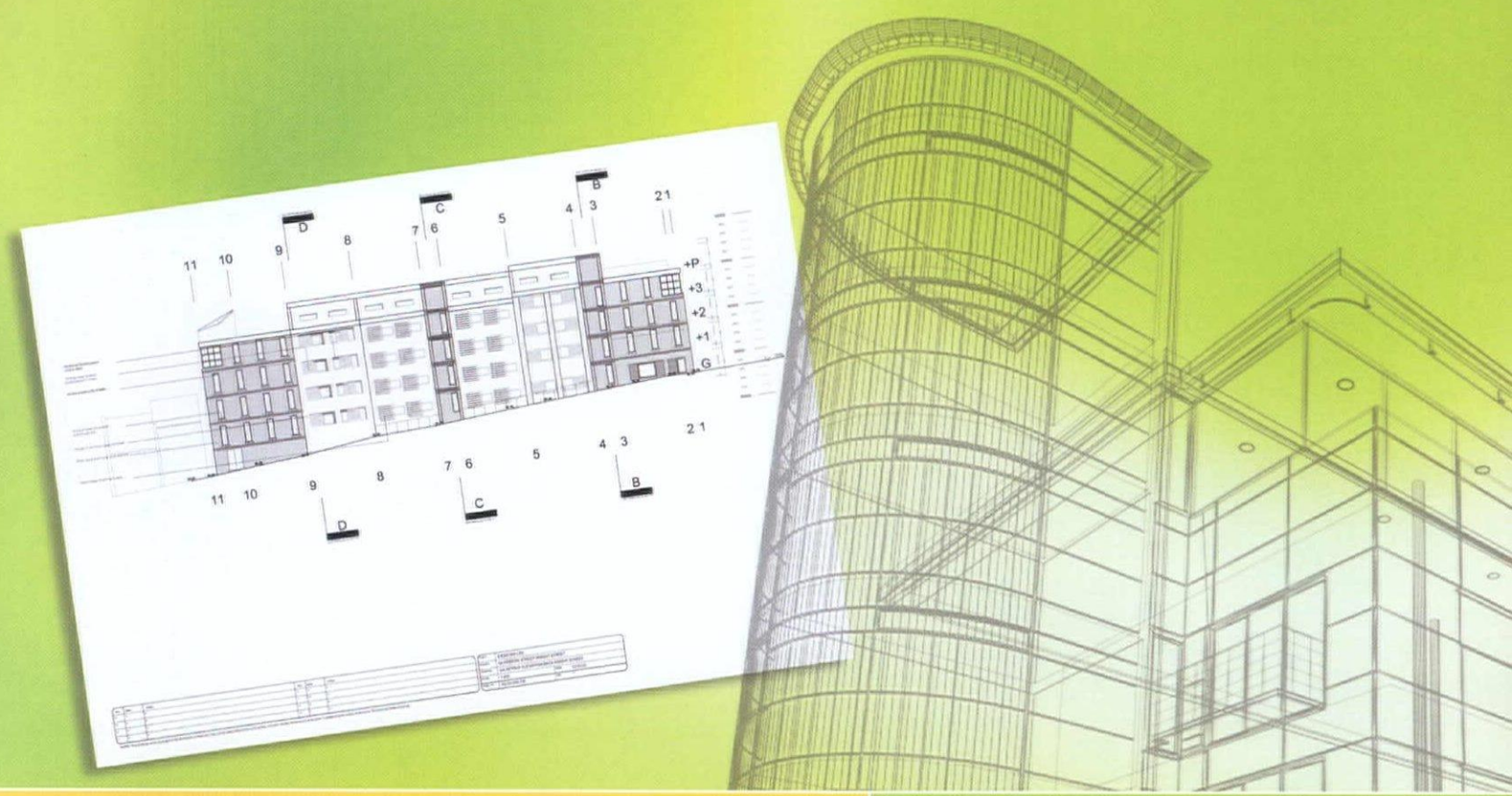
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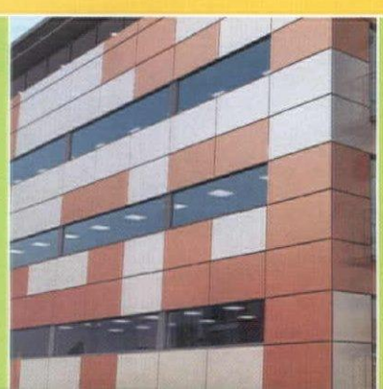
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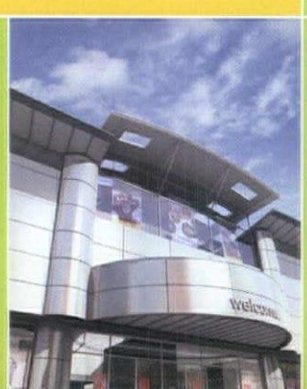


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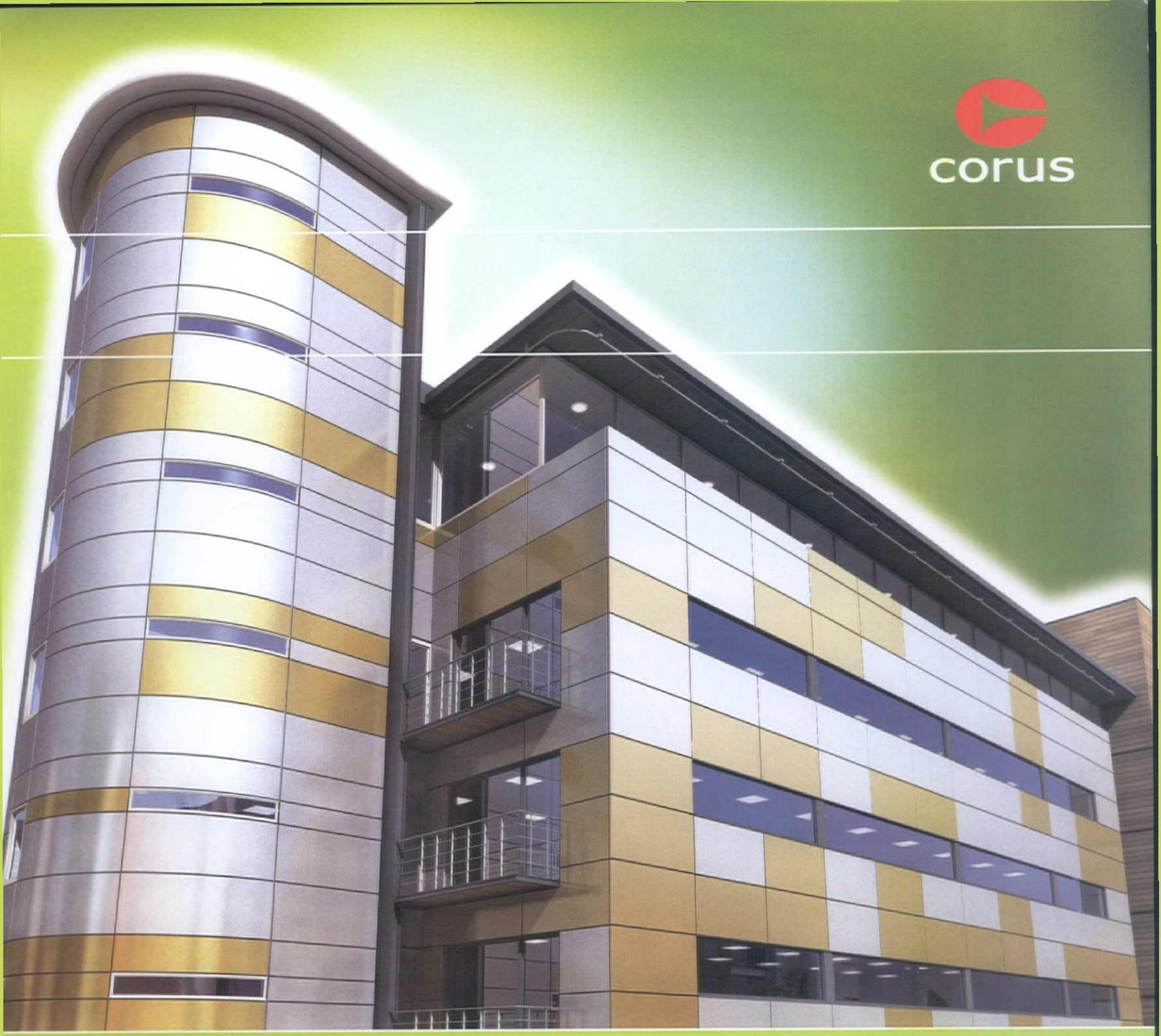
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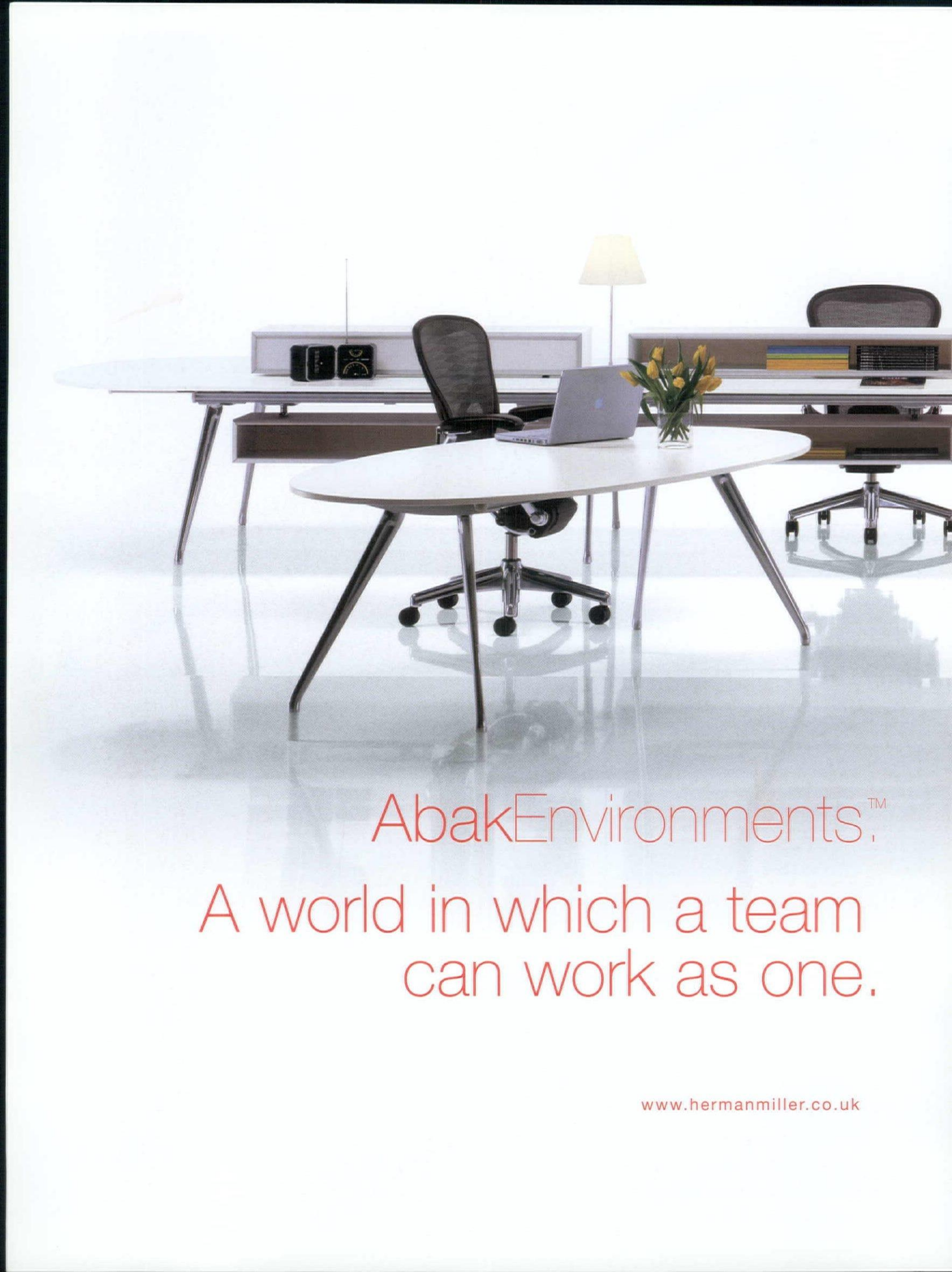
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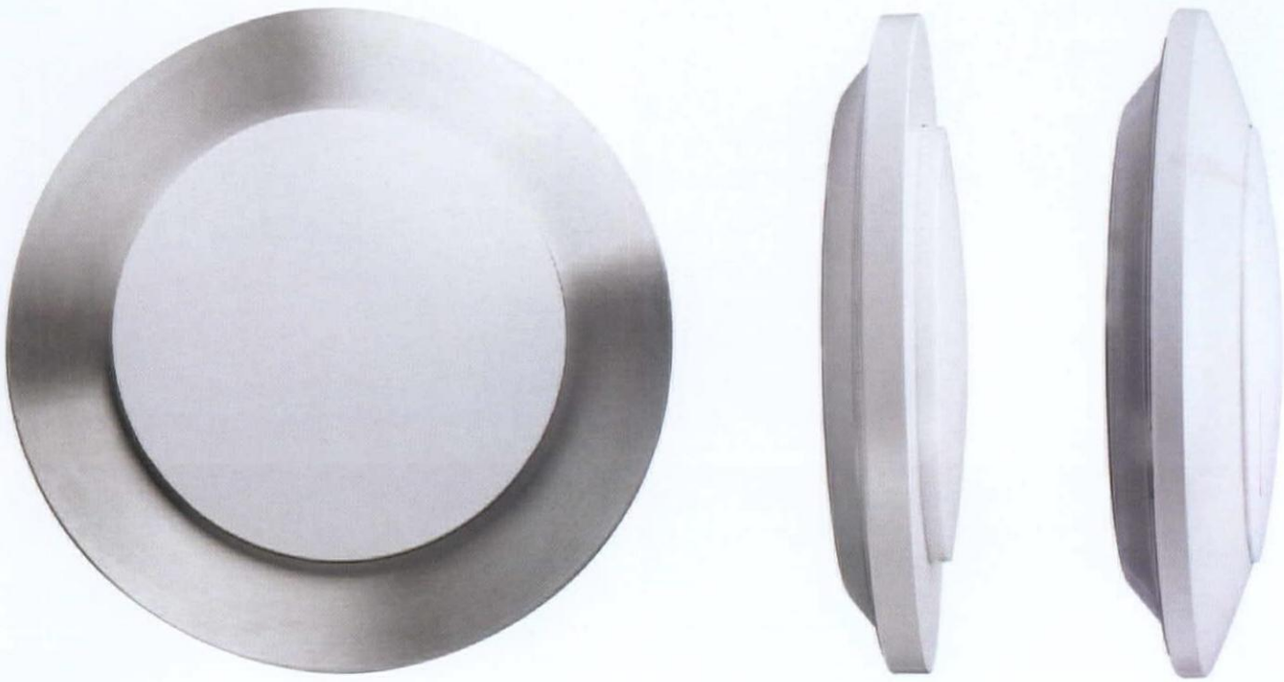
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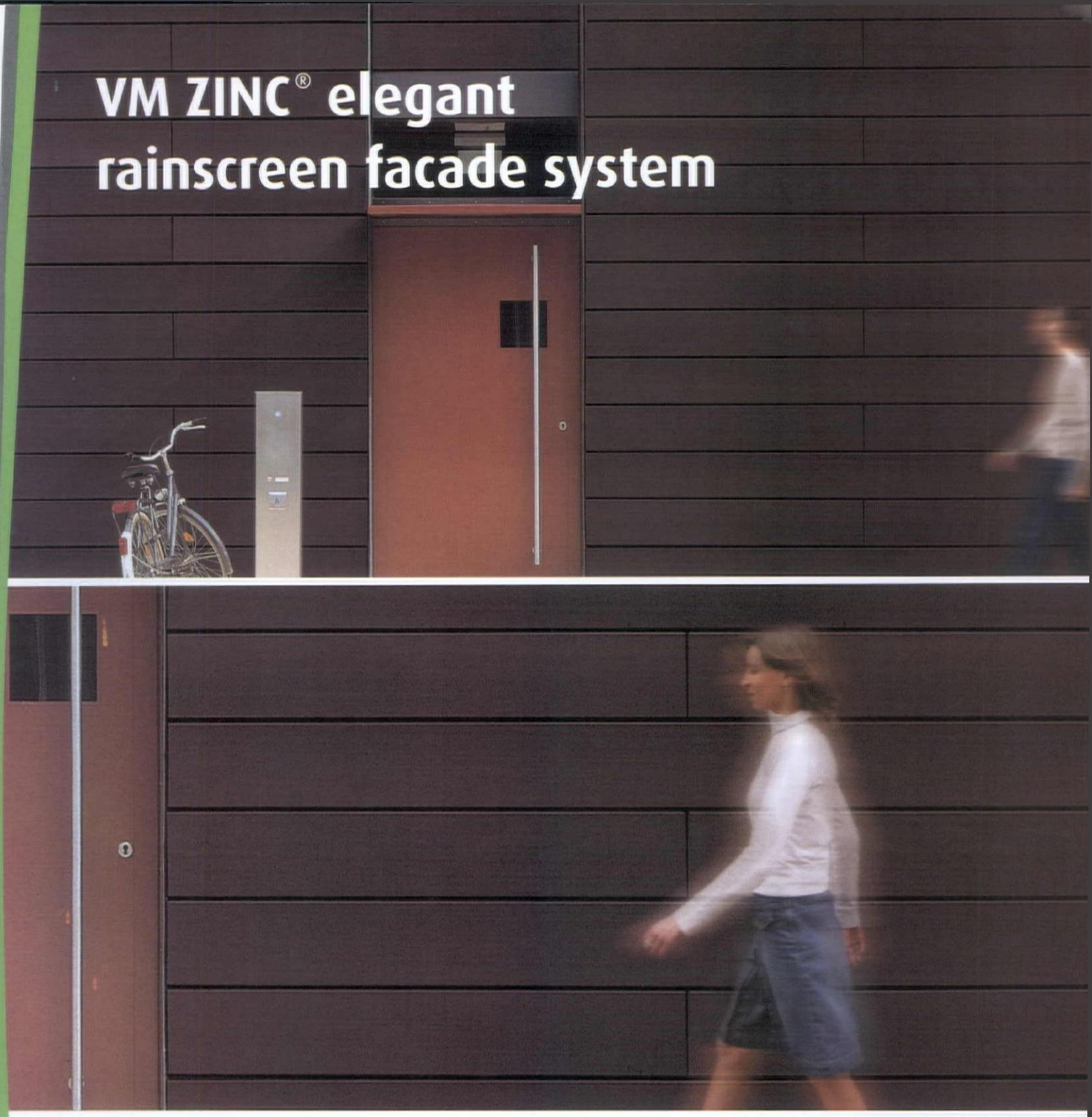
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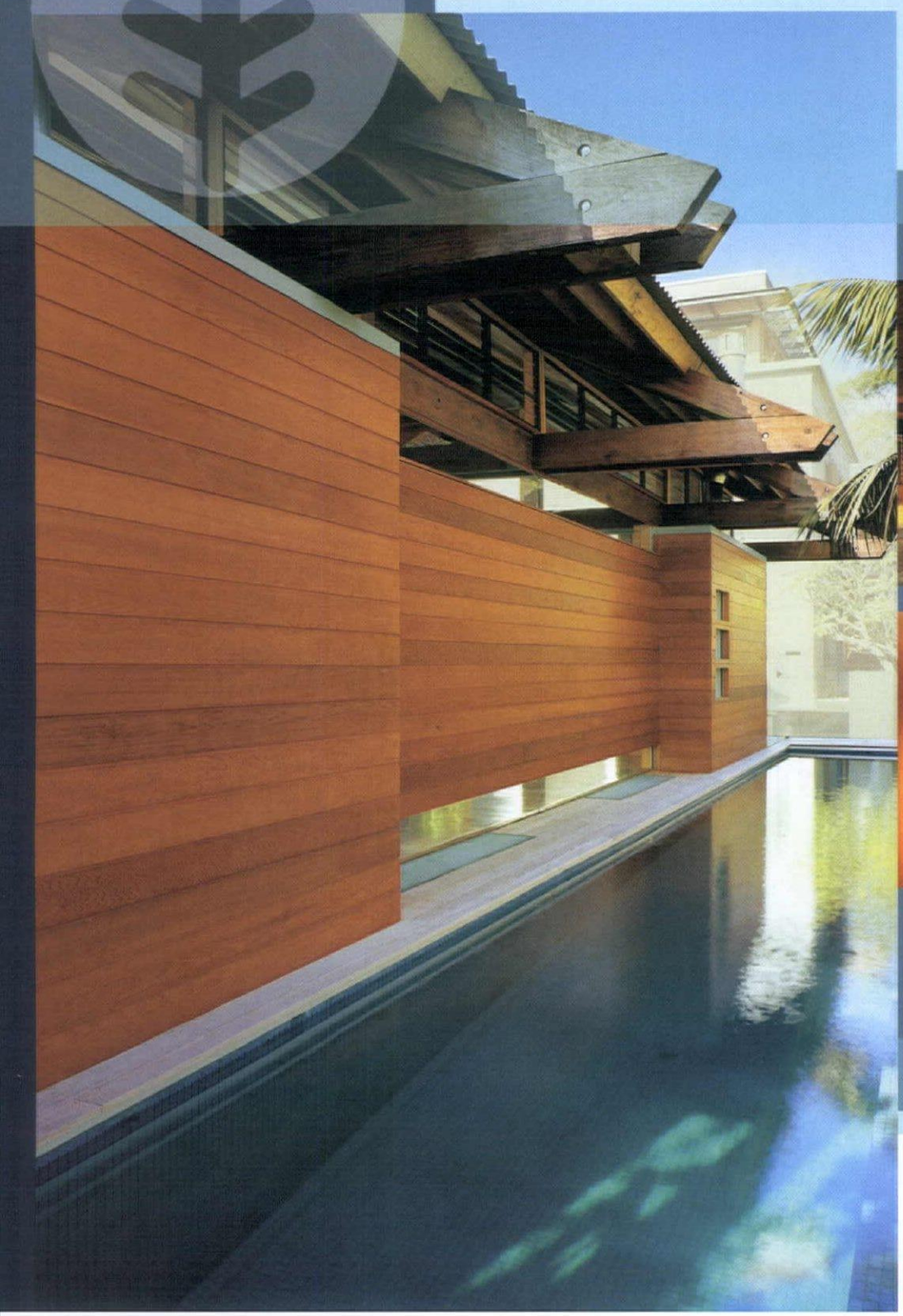
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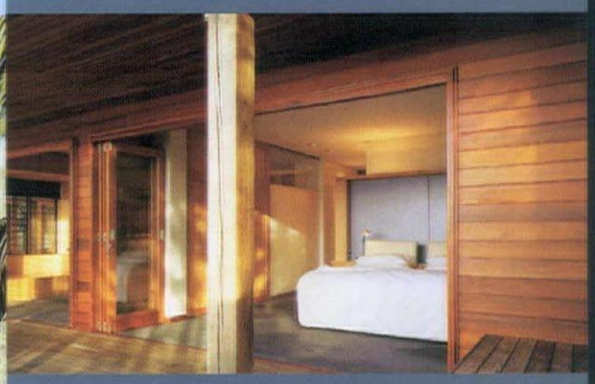
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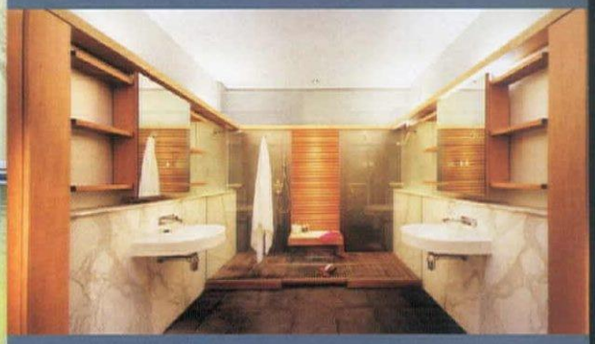
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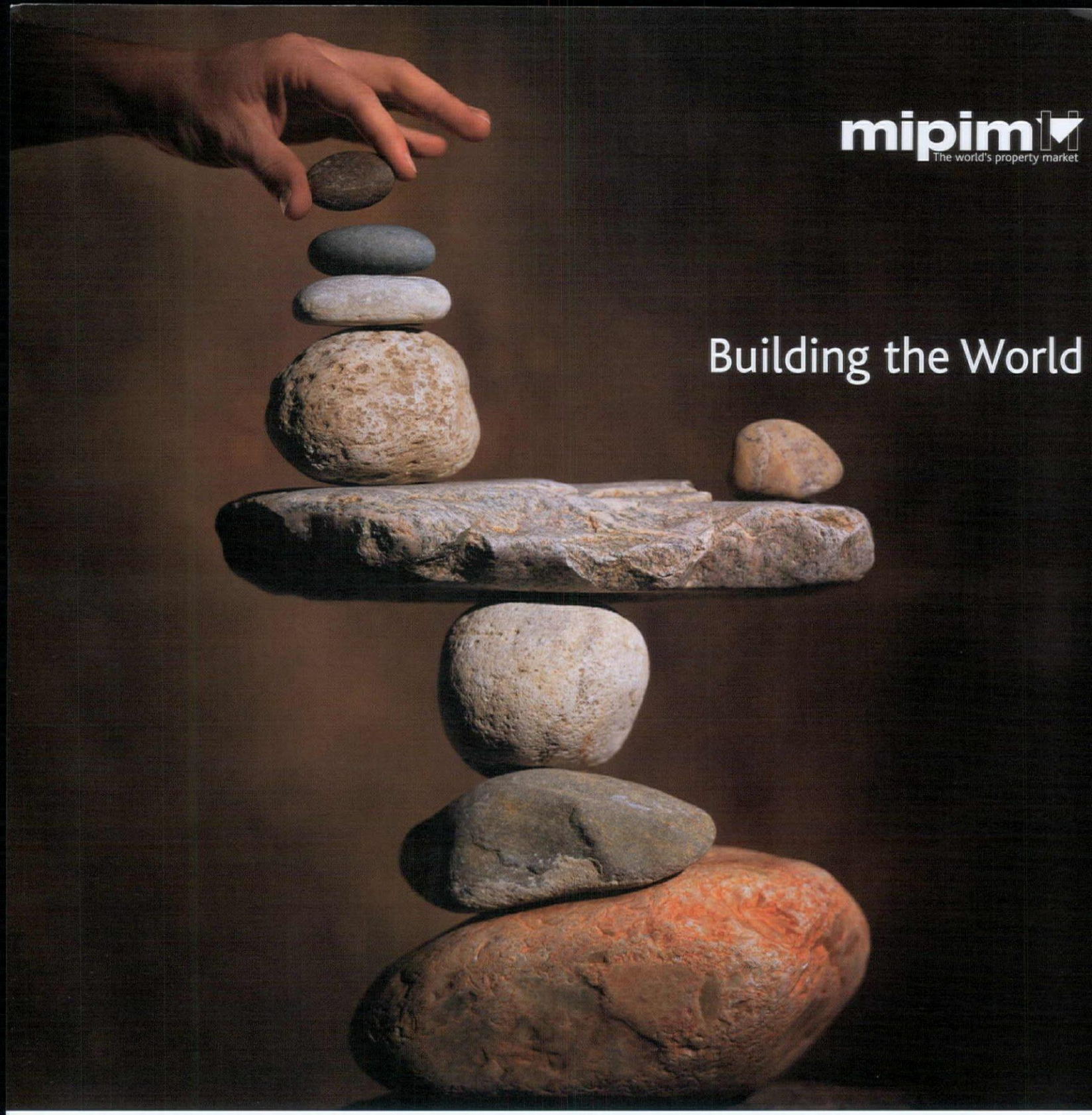
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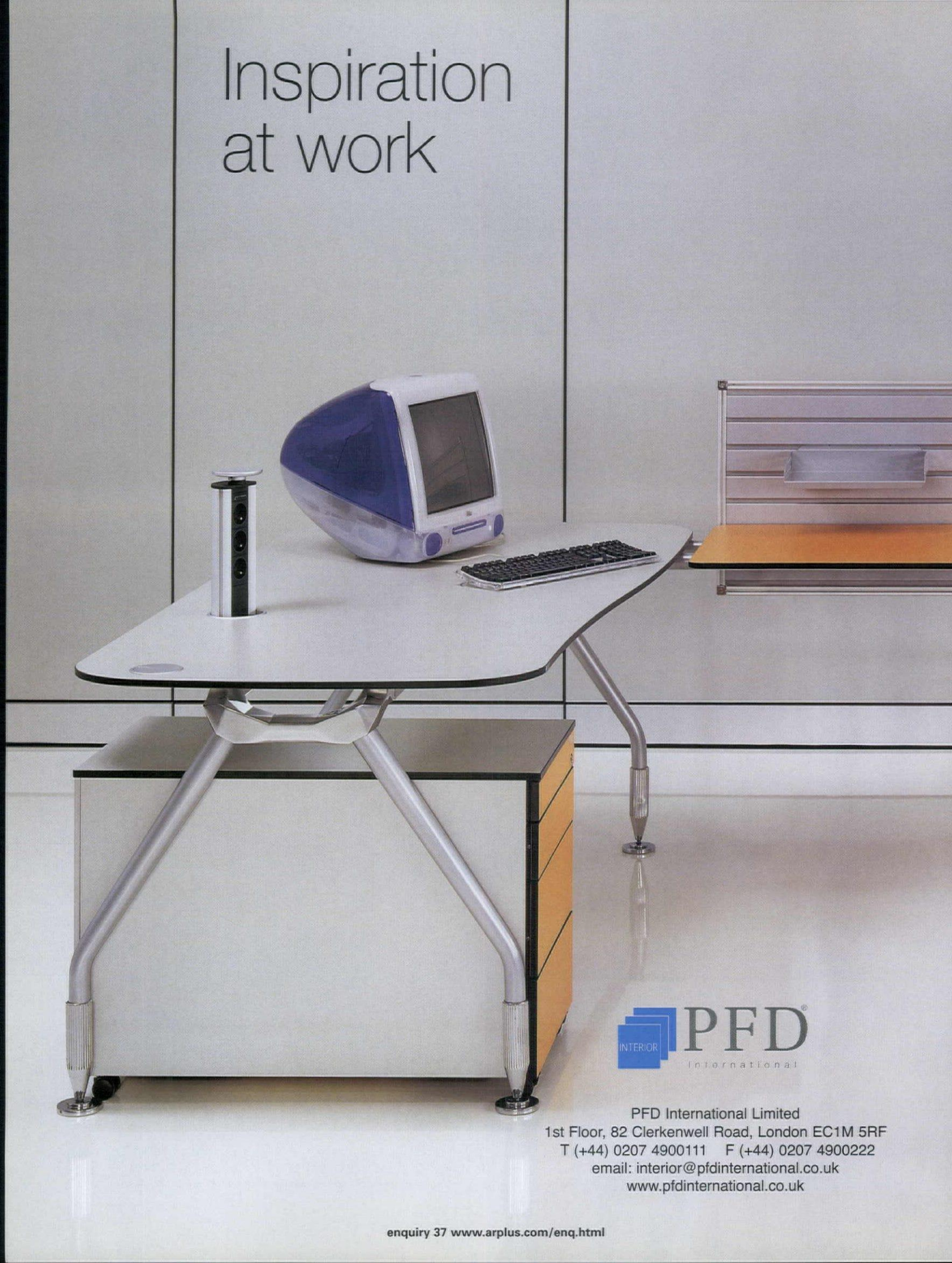
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TSUNAMI MEMORIAL

DESIGN COMPETITION

Competition Alert
The Government of Thailand is staging the Tsunami Memorial Design Competition to gather and develop concepts from participants with the objective of building an appropriate and interactive Tsunami Memorial.

The Tsunami Memorial will be built to honor and commemorate the victims, both Thai and foreign, of the December 26 tsunami that struck the six southern provinces of Thailand along the Andaman coast along with their islands. And as importantly, it will commemorate all those across the globe who provided assistance and relief in the hours, days and weeks following the tragedy.

Competition Procedure
The Tsunami Memorial will be created through a two-stage design competition. Stage I is conceptual design. A jury of prominent design professionals from Thailand and other countries will select finalists, who will then be invited to produce detailed designs in Stage II of the competition. A second jury will review these designs and recommend a design for submittal to the Government of Thailand in May 2006.

Jury
The Jury for Stage I of the Design Competition will consist of 5 leading design professionals chosen worldwide and 2 design professionals from Thailand.

Honoraria & Expenses
Those individuals or teams that are invited to participate in Stage II of the Tsunami Memorial Design Competition become eligible to receive a US$ 25,000 Honorarium. There is no compensation for Stage I participants.

Eligibility
The Design Competition (Stage I) is open to professional architects, designers, artists and laypersons worldwide - individuals or teams.

Registration
Individuals or teams interested in participating in the competition must either (1) submit a written request and a non-refundable US$ 25 or Baht 1,000 registration fee by mail to receive the competition Packet at the official competition address or (2) register on-line at the official competition website at www.tsunamimemorial.or.th with payment of the non-refundable registration fee by credit card.

Competition Schedule
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Submission of Stage I Design Entries :
30 November 2005

For more information please visit the Competition Website at **www.tsunamimemorial.or.th** or contact the Competition Advisor at:

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The Construction Project of the Main Stadium for 2009 World Games in Taiwan

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Charles Lin
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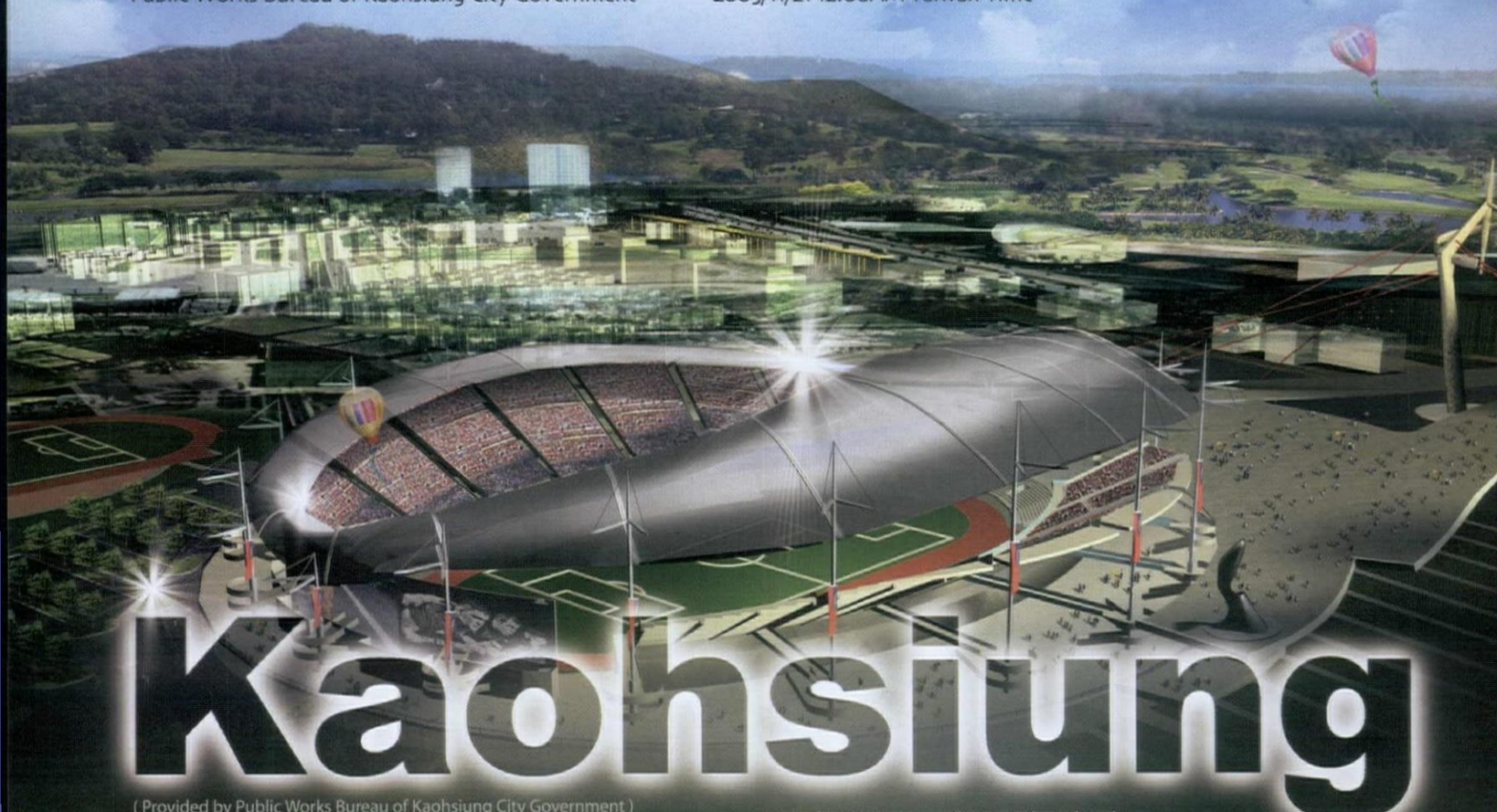
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Tender Details

For details, please see the official tender documents or visit the project website:http://worldgames2009stadium.com.tw

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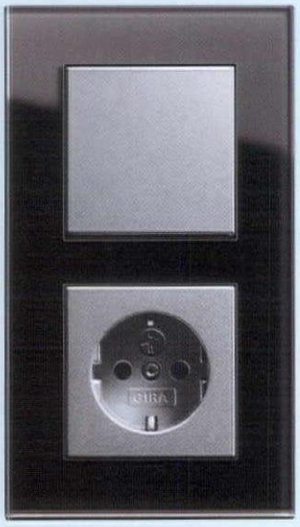
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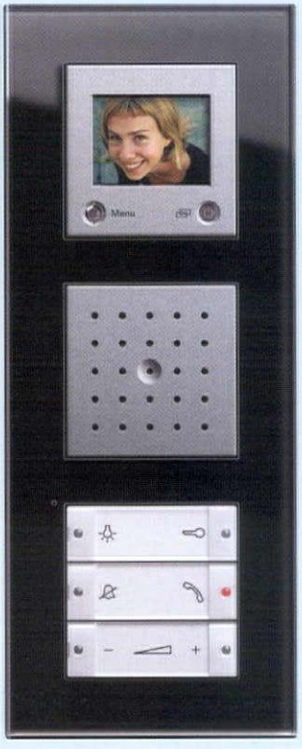
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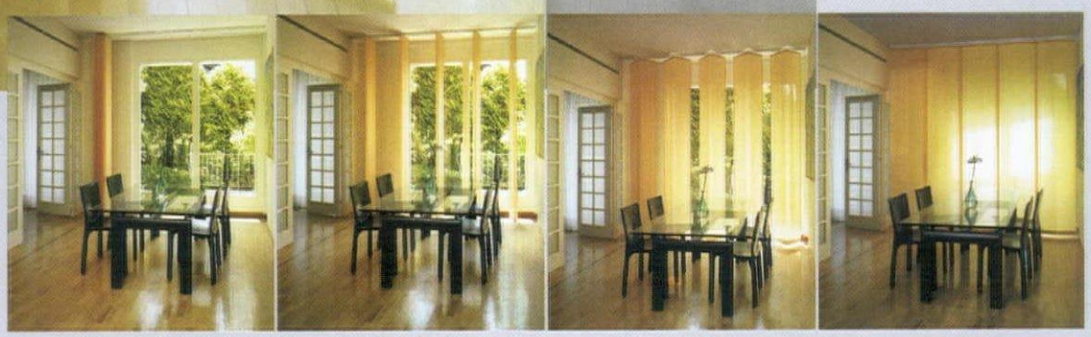
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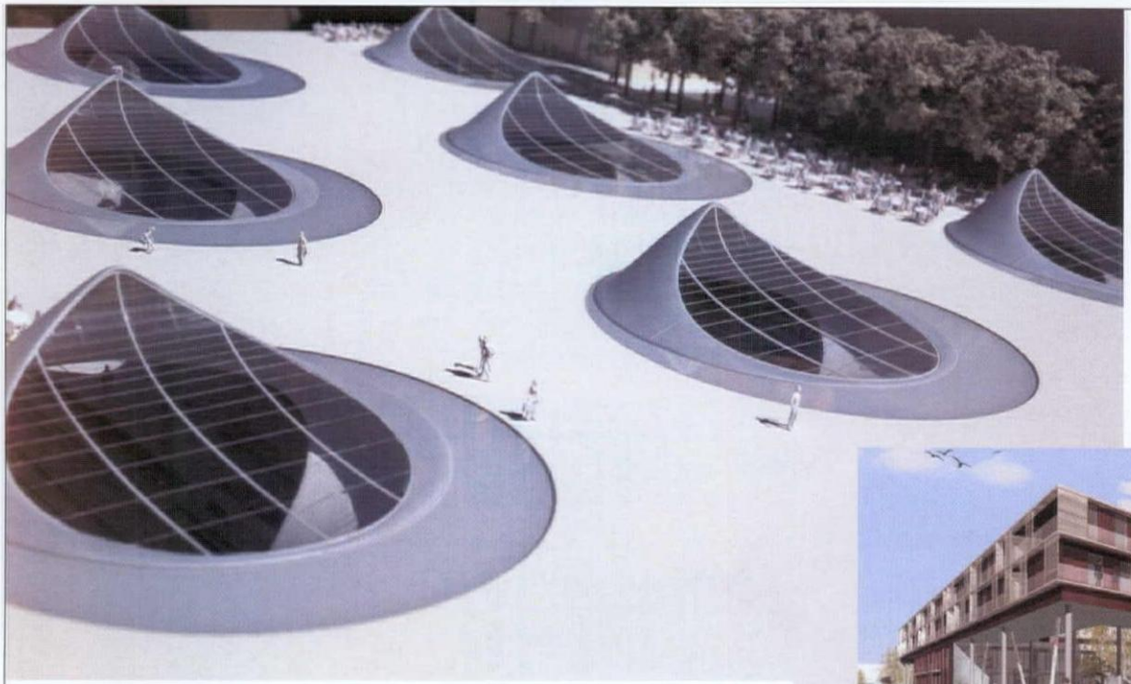


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MIPIM ARCHITECTURAL REVIEW FUTURE PROJECT AWARDS 2006

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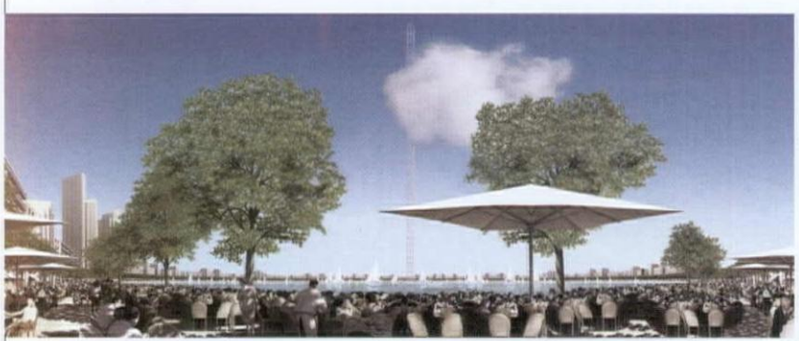
MIPIM, the international property market, attracts over 17 000 delegates to Cannes every March. For the 17th anniversary of MIPIM, the MIPIM awards are divided into two branches: the long-running MIPIM Awards for completed projects, and The Architectural Review Future Project Awards for unbuilt work. The Awards are in eight categories: offices; retail and leisure; masterplanned communities; big urban projects; residential; tall buildings; innovation and local revitalisation. There will also be a Best of Show Award. Winning entries will be presented at Cannes. All submissions will be displayed at MIPIM and will be published in a catalogue to be given to all delegates.

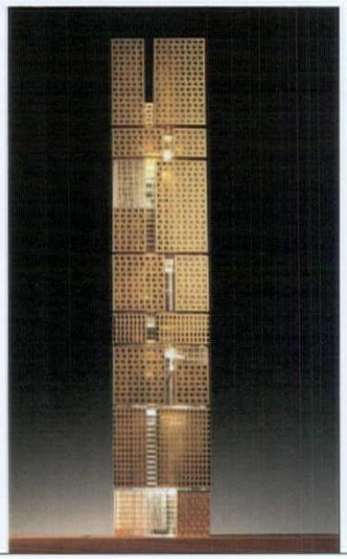
The MIPIM/AR Future Project Awards are organised in association with Immobilien Zeitung.

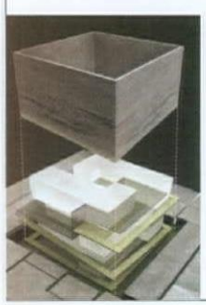
Closing date for entries to the Architectural Review Future Project Awards is 28 November 2005. For further information and an entry form see The Architectural Review website at www.arplus.com. Email enquiries to tina.covill@emap.com

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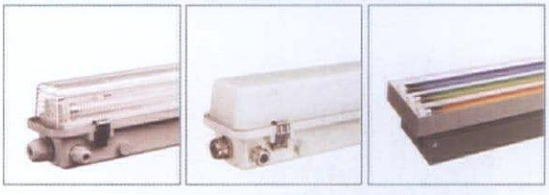






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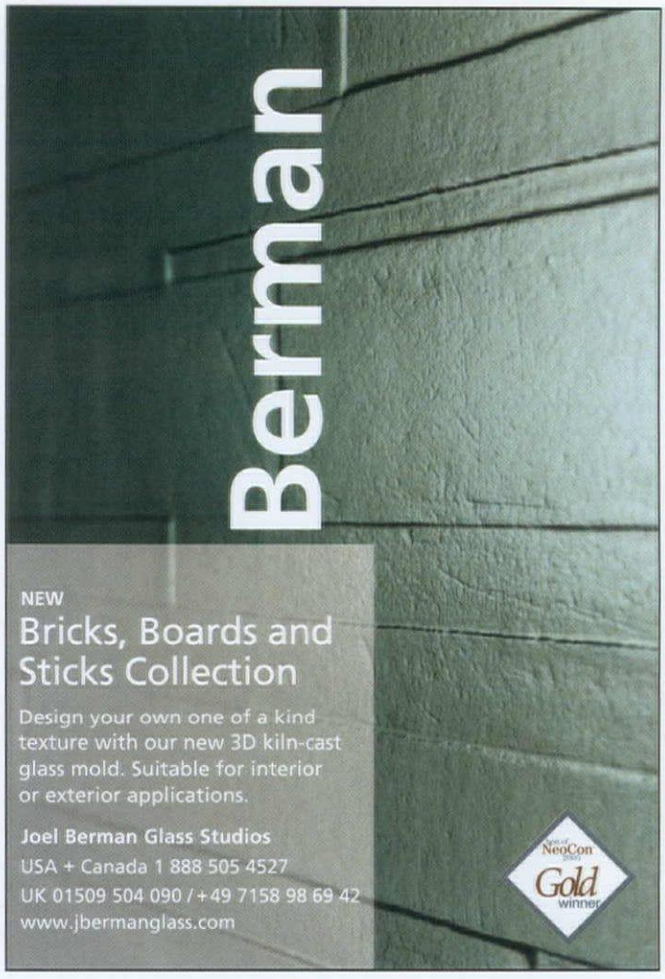
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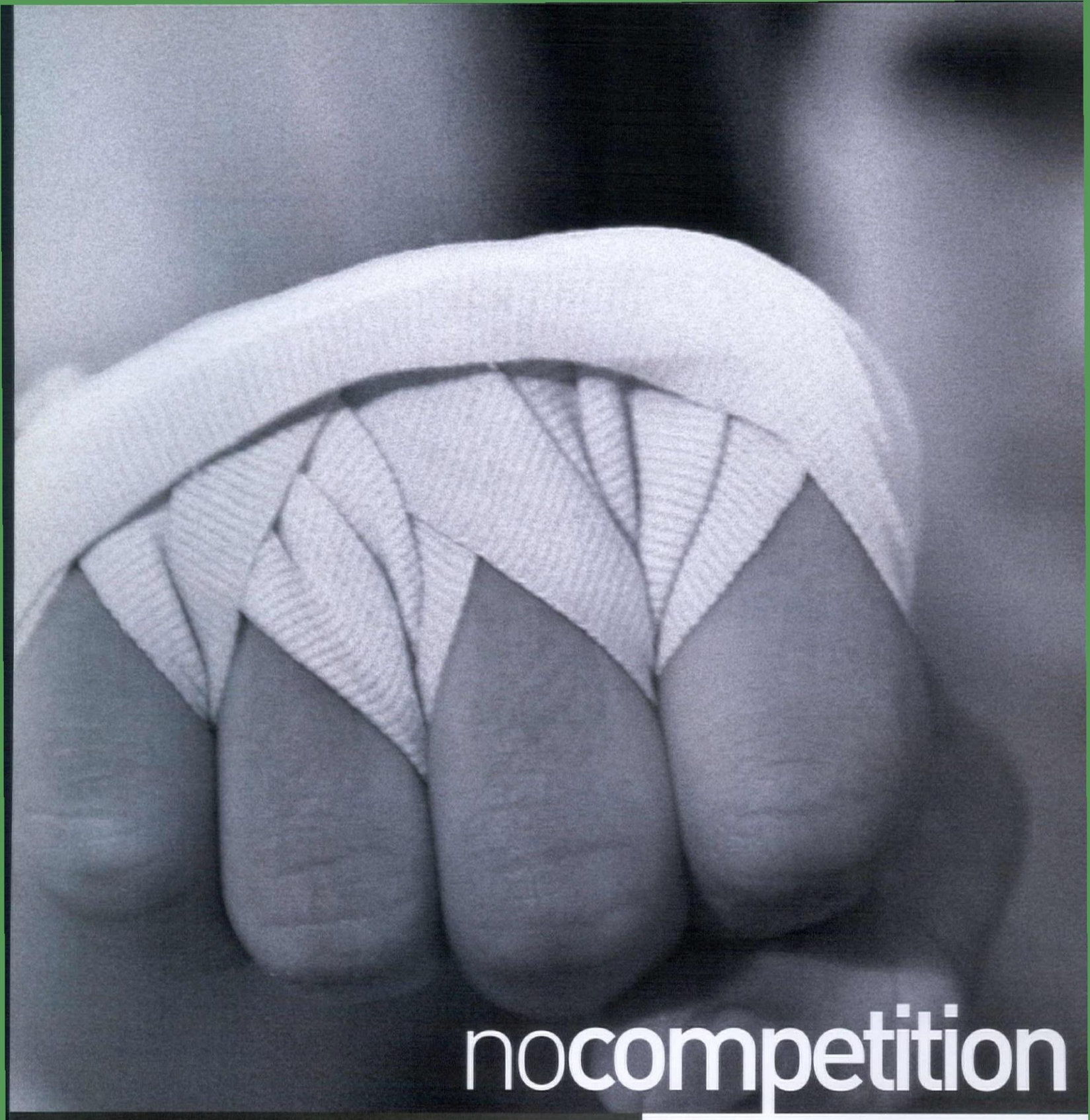
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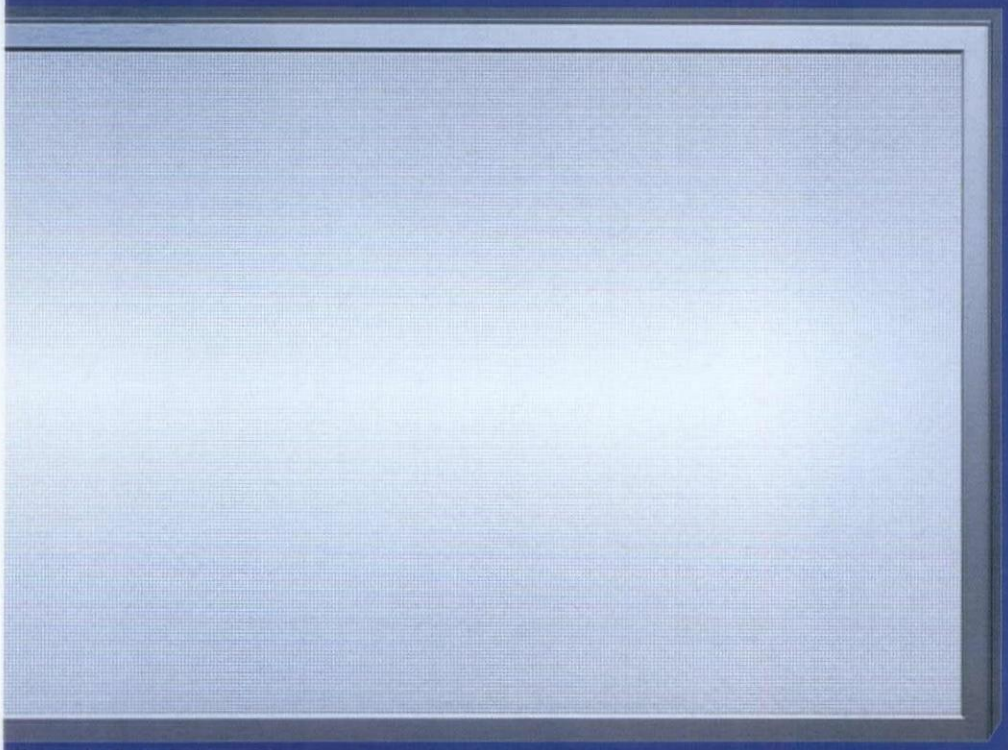
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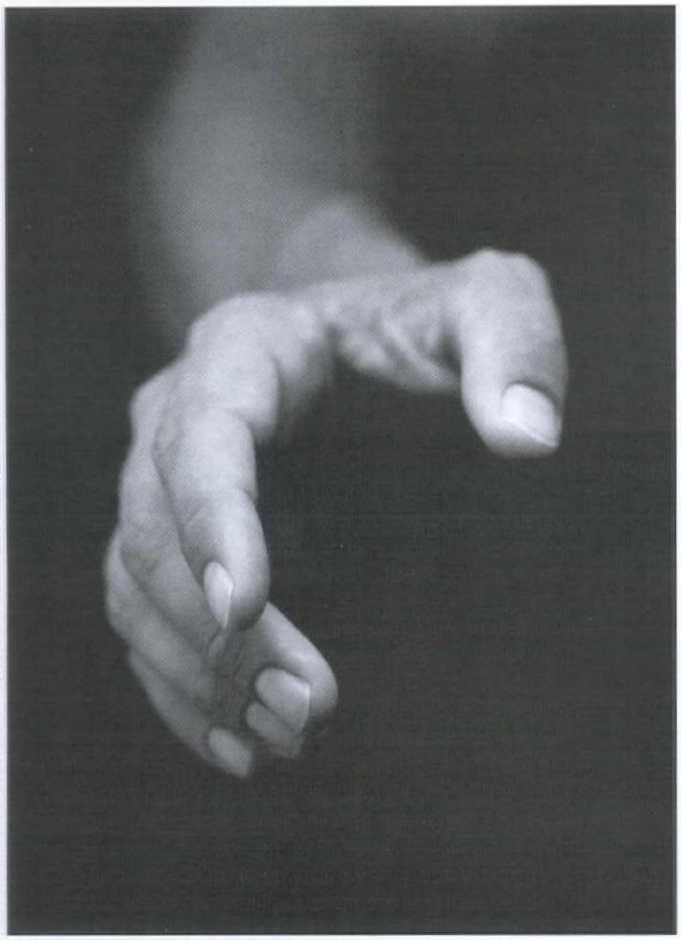
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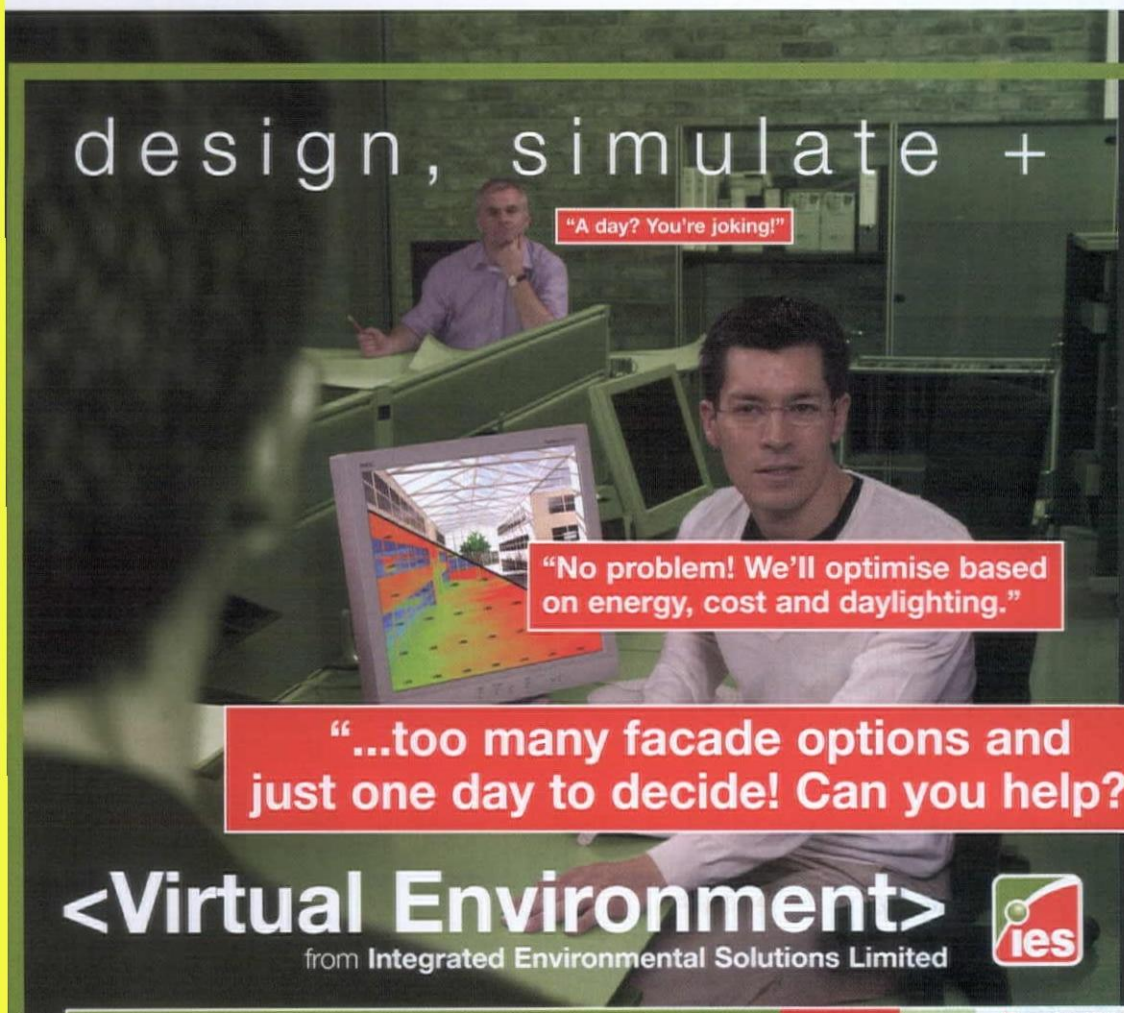


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THE PRESERVATION OF BRUNEL'S SS GREAT BRITAIN, THE WORLD'S FIRST IRON-HULLED PASSENGER LINER, BY ALEC FRENCH ARCHITECTS; AR FUTURE PROJECT AWARDS AT MIPIM; THE NEW EXTENSION TO THE ORDRUPGAARD MUSEUM, COPENHAGEN BY ZAHA HADID; HATMAP IN FRANCE; PETER COOK AT LARGE.

DESIGNING FOR DISASTER

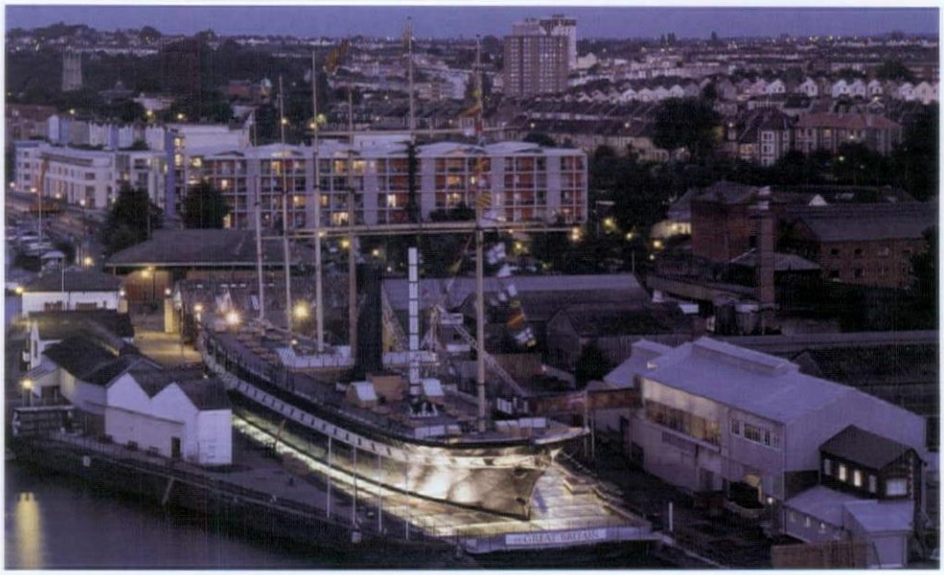
Recent events across the world have induced an understandable sense of paranoia about whether the built environment is capable of resisting what used to be called 'the elements'; that is to say extreme conditions in respect of earth, air, fire and water. Ancient Greek cosmology may seem old hat in a world of fractals and cyberspace, but earthquake, hurricane, conflagration and flood have been all too relevant since the Pacific tsunami heralded the year 2005. Man-induced climate change, a worrying enough possibility in its own right, can scarcely be held accountable for the natural disasters that have afflicted both first and third worlds in recent months. Nor has there been any rush to judgement in respect of the architecture that has signally failed to survive elemental attack; perhaps that phrase beloved of the insurance industry, 'Act of God', has led the public to excuse some of the results of extreme climate. Instead, the search for somebody to blame switches to those responsible for what happens *after* a natural disaster, and those who might have prevented the disaster from happening in the first place, generally speaking engineers and politicians.

However, there are questions that architects might care to ask themselves as they view scenes of devastation across the globe, scenes which are not the consequences of terrorism. It is an observable fact that architects can be all too quick to design buildings and environments in ways which are bound to create problems – and then show their ingenuity by bypassing them, waiting for a round of applause rather than the proper response, which is 'Why did you do something which created a problem in the first place?' The classic example of this, across the developed world, is the near obsession with building on flood plains. No sooner does this become the subject of warnings, than clever designs for houses (on stilts, for example) make an appearance, though this sort of thinking is rarely applied to road construction in the same areas. That, of course, is someone else's design problem. Perhaps when governments stop underwriting the costs of retrofitting, after the inevitable flooding, we will all learn some sense.

This is not to say that the Dutch have wasted their time reclaiming land across the centuries. We are where we are, but given the likely effects of climate change it is going to be a highly expensive exercise to keep all those flood defences in good order. Not everyone has to behave as though they can defy nature in the same way; why not try working *with* water rather than against it? Why build on seismic faults? Why imagine that a once-in-200 year risk means you can wait two centuries rather than acting now? To an extent, architects are in the 'what if' game, as much as those engineers and politicians. Perhaps they should be supplying more lateral thought. PAUL FINCH

SHIPSHAPE AND BRISTOL FASHION

Brunel's SS Great Britain was the world's first iron-hulled passenger liner and forerunner to virtually all modern shipping. Through recent improvements led by Alec French Architects, this pioneering structure can now be preserved for generations to come.



From Clifton Wood, the SS Great Britain in now modestly illuminated, with borrowed light from the dry dock.

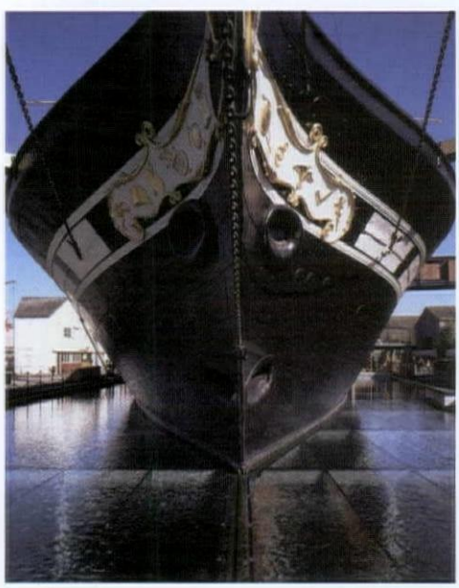
You shouldn't need to show off in the presence of greatness. And fortunately Alec French Architects have avoided the temptation to do so in the company of the SS Great Britain; the iron-hulled, steam-powered, screw-propeller-driven liner, designed and built in Bristol in the mid-1800s by legendary engineer Isambard Kingdom Brunel. Affectionately know as IKB to his fans, Brunel was recently voted second only to Winston Churchill in a BBC TV poll to find Britain's Greatest Briton. Attracting almost 400 000 votes, 25 per cent of the poll, the engineer, highly productive in his relatively short 53-year life, surprised many by being rated above military heroes, politicians, authors, royalty, even pop icons. It should come as little surprise to architects; Brunel has long been an inspiration. Ever since Corbusier wrote about eyes that did not see, ocean liners have inspired Modern architects. Beyond the obvious associations, celebrated less convincingly in the 1980s and '90s with masts, gantries, tension wires and sails used to adorn relatively dull buildings, fundamental issues prevail when engineering leads the way. Scale and heroic ambition remain and live on in structures and pieces of machinery that were the product of the world's first generation of industrial engineers; a pioneering generation of engineers led (all too briefly) by IKB.

Following engineering logic, where the superfluous is rarely encouraged, the interventions by Alec French Architects are simple and unadorned, described by project architect Tim Burgess as simple, understated and true to the form of the dockyard aesthetic. The Jefferies Range shed has been simply reinforced and overclad to make a space for an informative, interactive and easy to digest exhibition, designed by David McCabe Design. Unlike other apparently endless chronological exhibitions, the disposition of the artefacts is such that visitors can see their route ahead, gently ramping up to the deck level exit point, without instilling fear of being overfed with historical facts, figures and salvage. The main business here is undoubtedly to see the ship itself. So, the dual phased highlights occur when crossing the new Alec French bridge to the beautifully restored deck, from where interior explorations can begin, and perhaps even more dramatically when descending below the virtual water level; a new glazed water plate that creates an environmentally controlled dry dock chamber. Suffering from severe deterioration caused by the corrosive effects of years of salt saturation, the strategy here has been to dehumidify the chamber to approximately 20 per cent – which should reduce the effects of corrosion to virtually nil.

Throughout the project the architects had to employ restraint and a physical lightness of touch, with all interventions being reversible. This not only included work to the ship itself as wheelchair lifts and lavatories were creatively integrated, but also to the listed dry dock, with 1m long resin anchors supporting the glazing structure being the most significant physical link and concrete bearing pads that support the struts sitting on polythene so as not to damage the dock masonry below. In anticipation of next year's celebration of Brunel's birth, 200 years on, and plans to create The Brunel Mile, linking his Clifton Suspension Bridge with Temple Meads Great Western Railway Station (a perfect opportunity perhaps to open up the incarcerated Clifton Rocks Railway), this new visitor centre is perfectly placed to inspire future generations of designers along the way.

ROB GREGORY

All photographs by Lance McNulty



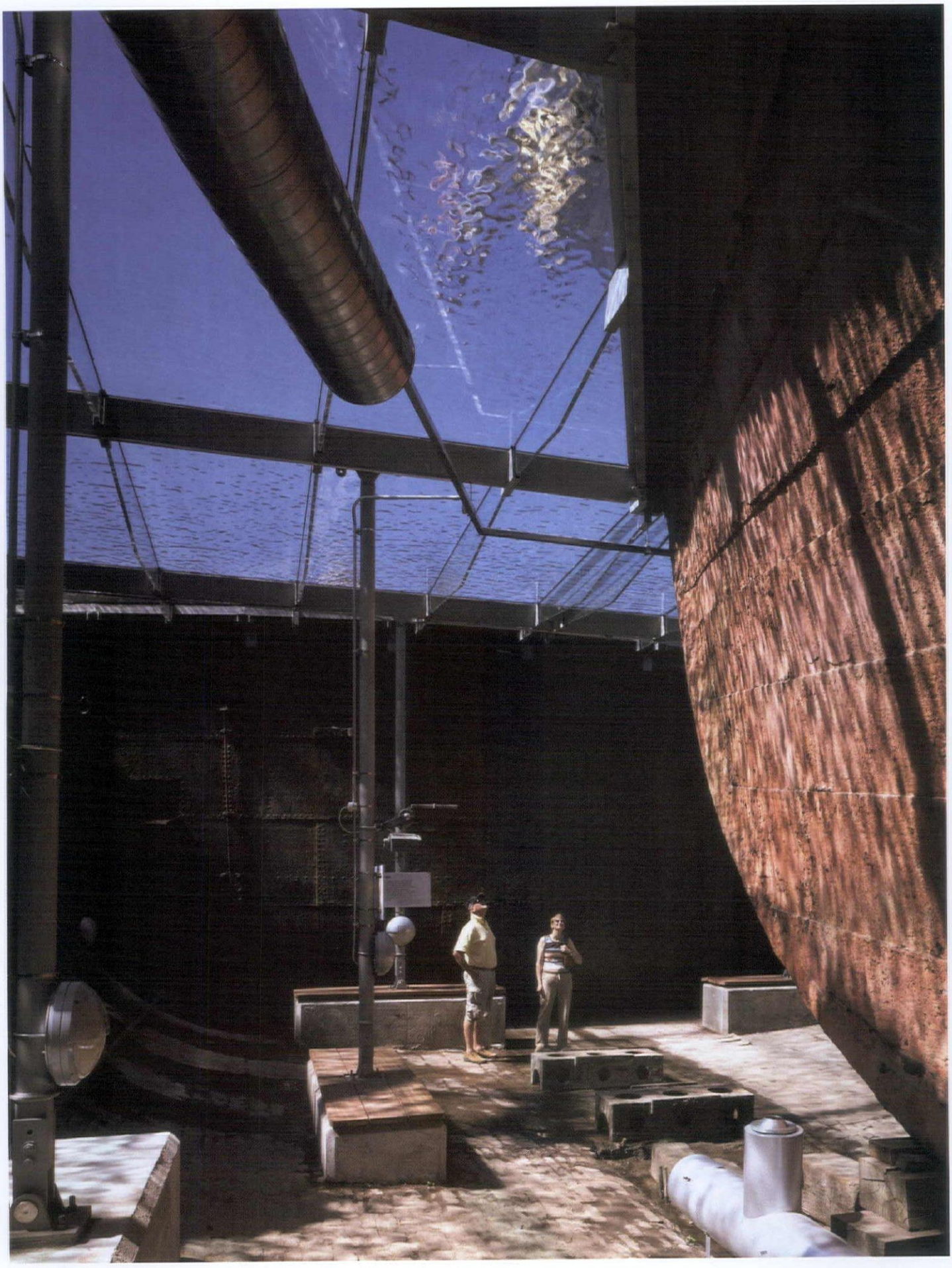
The flooded deck above and below (above and opposite).

AR FUTURE PROJECT AWARDS AT MIPIM

The MIPIM AR Future Project Awards 2006 have just been launched. The awards are for unbuilt work in eight categories – offices; retail and leisure; masterplanned communities; big urban projects; residential; tall buildings; innovation and local revitalisation. Closing date is 28 November and submission details can be found in the flyer enclosed with this issue or on the AR website *www.arplus.com*. The awards will be presented at MIPIM in Cannes next March.

HOUSING COMPETITION TIME

There are two months left to register expressions of interest in one of the larger global architectural competitions of recent years, organised by Living Steel, a consortium of steel-makers from across the globe. The competition, which was announced at the UIA Congress in Istanbul earlier this year, is to design high-quality, affordable housing using steel, in the first instance for sites in Poland and India. Other sites in other countries will later be chosen as part of a five-year programme. From the expressions of interest list, Living Steel, which intends to build on the chosen sites, will invite up to a dozen firms to take part in the (paid) design stage of the competition. Judges include Glenn Murcutt and Charles Correa. For further details visit *www.livingsteel.org*, or email *info@livingsteel.org*

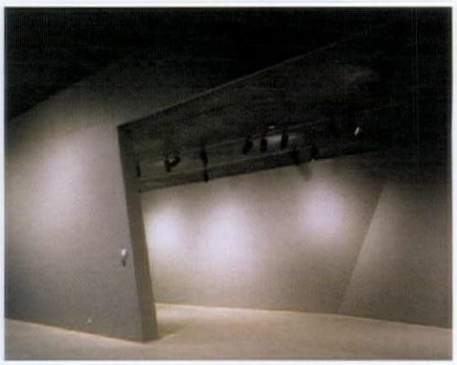


ZAHA'S ZEITGEIST

'I am not a regionalist', asserted Zaha Hadid at the opening last month of the new extension to the Ordrupgaard Museum in a leafy suburb of Copenhagen. Though she professes to admire the imposing canon of Danish Modernism, her first building in Scandinavia embraces the more familiar International Superstar Style. Set in a lushly mature park, Hadid's pulsating sinew of black lava concrete gives little quarter to its neighbour, a genteel stately home-cum-gallery built in 1918 to house an art collection begun by Danish insurance magnate Wilhelm Hanson. With a sizeable haul of nineteenth-century French Impressionism and Danish Golden Age art, Ordrupgaard is internationally renowned, but still has the intimacy and singularity of a personal collection. Lack of space and less than ideal climate conditions in the historic house precipitated the building of a new extension, which effectively doubles the exhibition space, allowing the collection to be displayed in its entirety for the first time, while also adding a new gallery for temporary exhibitions.



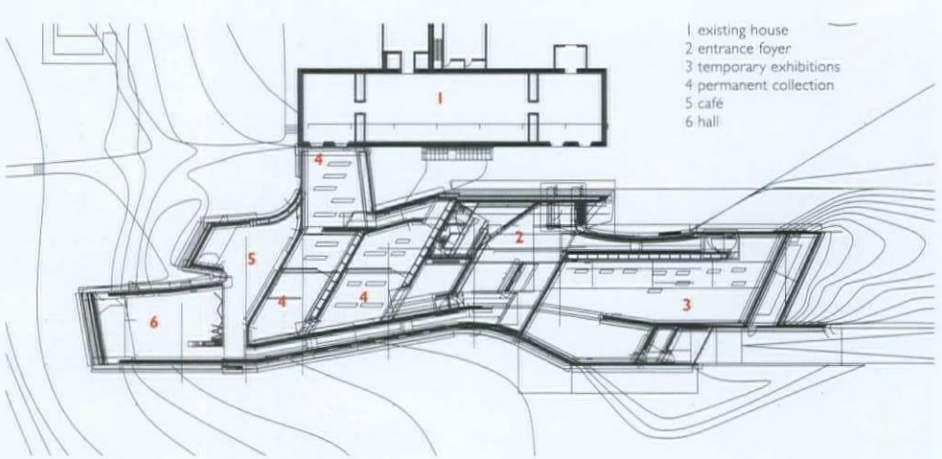




Top: the new extension thrusts through the trees, a taut sinew of black lava concrete. Above left: lecture hall and café immerse the visitor in the forest. Above right: part of the new temporary gallery. Photographs: Roland Halbe.

In the Copenhagen context, the idea of an art museum in a sylvan setting has obvious parallels with the Louisiana Museum of Modern Art, just up the coast, but where Louisiana is a discreet, almost Japanese presence in the landscape, Hadid's concrete and glass sinew is a powerful topographic gesture that thrusts through groves of trees, lustily in thrall to its own zeitgeist. Inside, galleries cant and weave around each other and paintings are displayed on charcoal grey walls, enhancing the strong colour palette of Impressionist masters such as Gauguin, Cezanne and Monet. Compared with the BMW centre, Leipzig (AR June 2005) the building does not seem as impeccably well made – the concrete is uneven in places and there some slightly hamfisted junctions – yet it is still an impressive *amuse bouche* that whets the appetite for the Phaeno Sciences centre in Wolfsburg, while putting Ordrupgaard firmly on the architectural groupie map. CATHERINE SLESSOR

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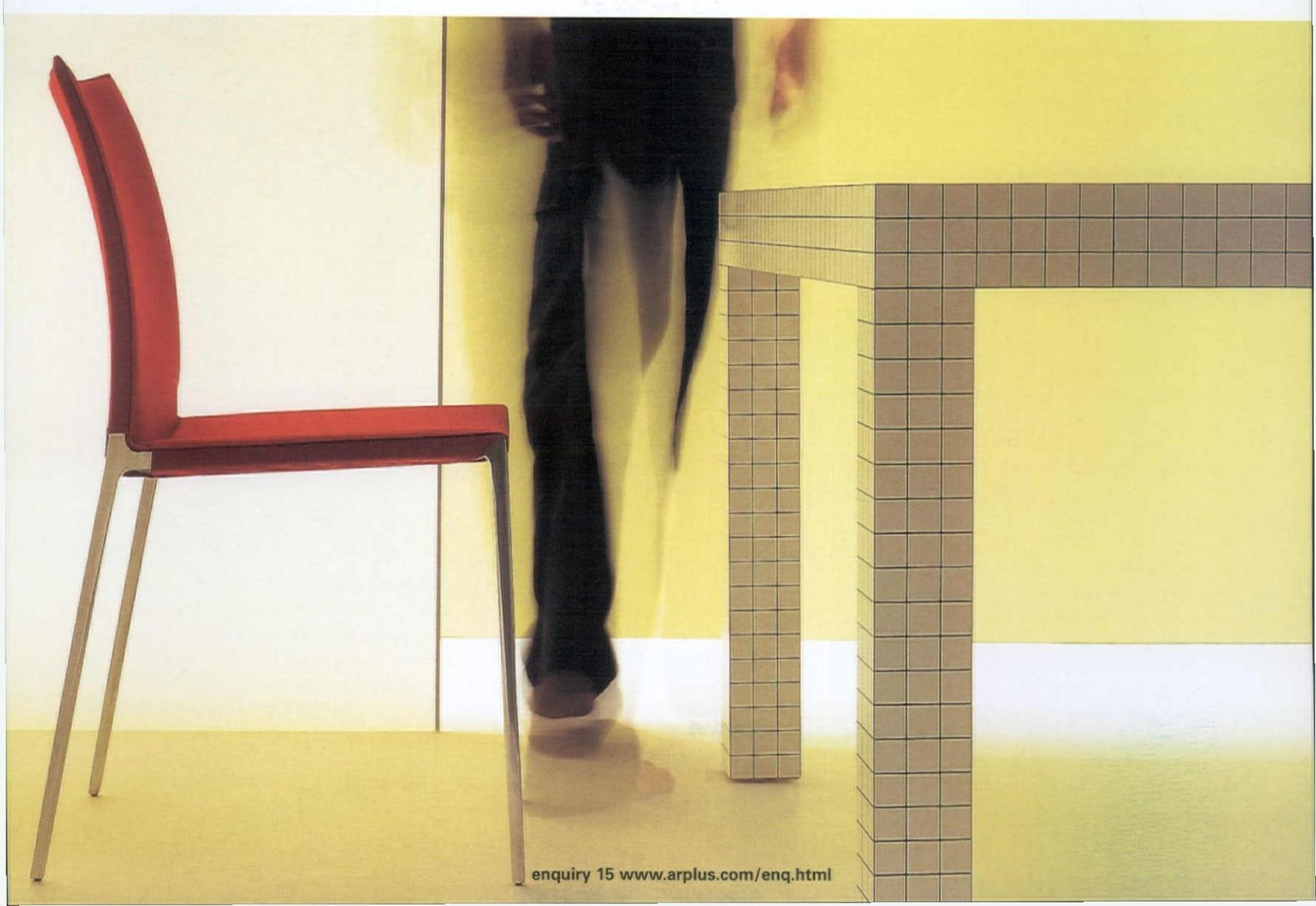
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Peter Cook

Architect, teacher, critic and traveller, Peter Cook joins as a regular diarist.



Icons require talent

Hurrah for the icon, the iconic, the iconographic. These words – loved, hated, feared, derided – seem to be on everyone's lips just now. How many worried archihacks there must be, recoiling from the international trade that their former clients broker with the assumed masters of the icon. Responding to the declared aim of cities, street corners, even wine bars to become somehow 'iconic'. Provoking the sour rejoinder from the school of the deliberately restrained that it will lead to a silly, gimmicky, valueless architecture. New and curious alliances create a loop: one end with flowing digital architecture, intellectually distancing itself from the architecture of the nooky, the particular, or the expressive. At the other end the forms and mannerisms of the digital stuff that we saw at the last Venice Biennale interlocked into the currently favoured iconography: so Asymptote morph into Reiser into Himmelblau into Zaha into UN Studio and so on. Less talented operators run after them with undulations that cannot quite keep up with it all, introducing a pinnacle or two just when more undulations would be appropriate, or nibbling away the pure forms in order to get a bit of interest.

Mother of reinventions

My timing was lucky; out at Copenhagen airport and over the giant bridge to Sweden and to Malmö, a city threatened with anonymity as it becomes a preferred suburb of Copenhagen, a city over the water that has been desperate to re-announce itself. It has done so by persuading Santiago Calatrava to make a tower of housing and offices that is higher than anything else in northern Europe. With a twisted torso and Calatravan twisted corset that sticks out from the bodice, it celebrated the completion with a launch to end all launches. Invited to arrive at 5pm, I (and 2200 other lucky spectators) was plied with continuous Spanish bubbly for seven hours. In the first hour came the exhibition and the smiling hostesses. In the second hour what seemed to be the entire Swedish athletics team. In the third hour, popular singers. In the fourth hour, opera. A full 90-strong symphony orchestra. Fireworks. Calatrava himself was brought on for three minutes somewhere along the fourth hour. The rest of the time he was to be found in a quiet corner with his wife and another friend delighted to talk about life, engineering and their new apartment in New York. (I hope that someone took them for a meal.) It really did feel as if the launch could have been for the new model of a car, a telecom service or a dating agency. Malmö has its icon. Thank you. Now what next? The building doesn't say anything much about housing or work conditions. It doesn't say much about cities or water or technology or material either: it is just plonked there next to a general-purpose exhibition hall at the end of a dusty road. And by the way, none of the 2200 of us was actually allowed to go into it.

Comfort factor

What a contrast, two days later in Copenhagen itself, when Zaha Hadid arrived to the opening of her extension of the Ordrupgaard Museum.

A small, noble house hidden in the woods, an exquisite collection of Gauguins and beside it a confidently folded sweep of concrete, with Zaha herself emerging in a coat of uncharacteristic green, claiming that it 'went with the greenery'. Many congratulations, many close friends of the architect, herself tanned and relaxed and encouraging gossipy conversation all around her. Nearly everybody there enjoyed touching the concrete, stroking the benches or skipping on and off the ramps. A steady set of curves, an assured and simple plan, a classy shade of dark grey concrete – everyone happy. Yet on reflection it came a little too close to a July revisit to the Vitra Fire Station (now itself a museum). Reminding one of Zaha's virtuoso wit and zing, so that the Danish building did seem a bit … well … Danish, in that comfy, streaky-bacon kind of way. Sensible, cautious, relaxed. Iconic perhaps – as a designer label trophy must be.

Summer salute

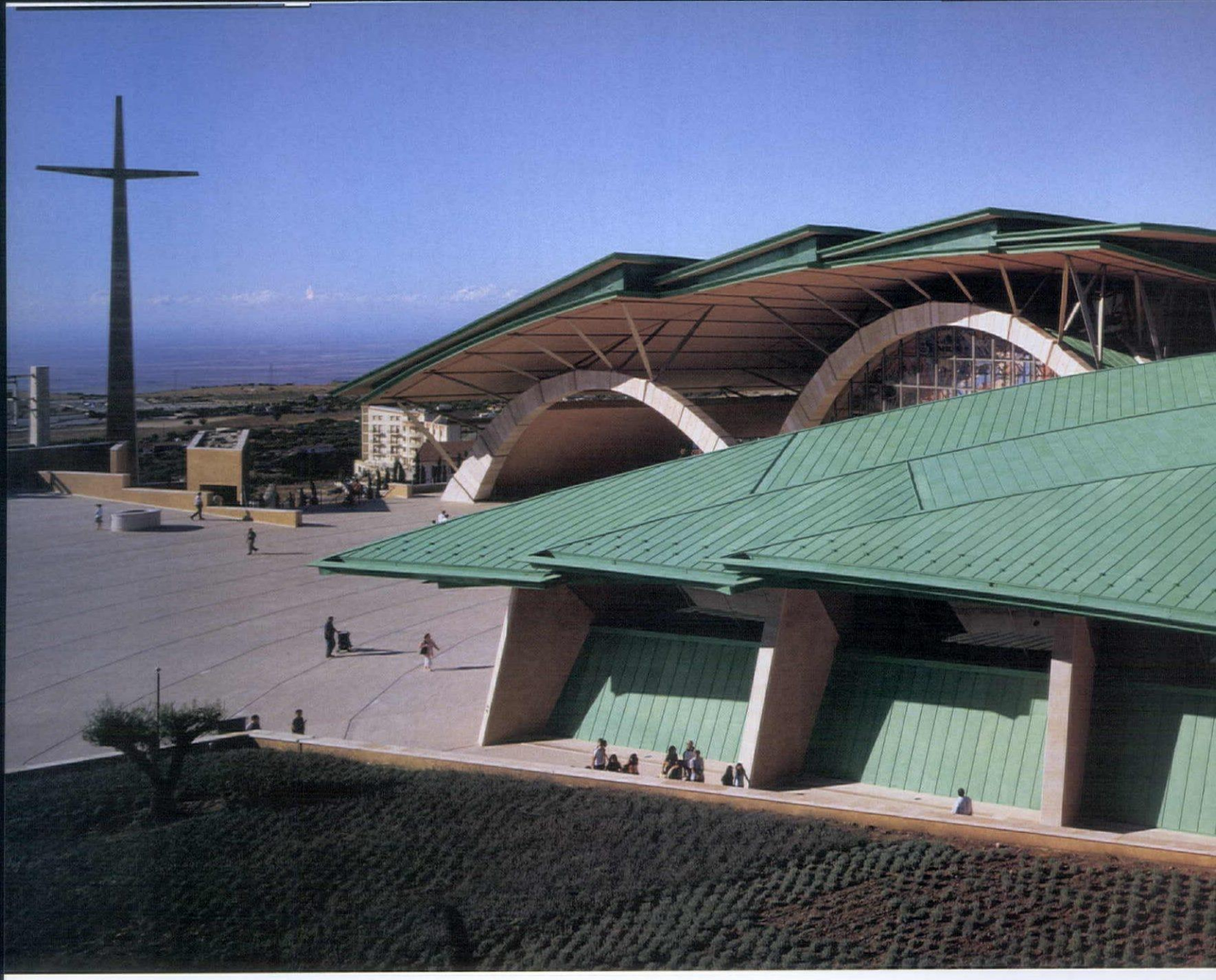
So the summer remains as a perfect excuse to detour and introduce the new generation to old friends like Darmstadt's Mathildenhohe, which resonates still across the near-century of its existence. Its combination of wistful elegance, strange corners of Jugendstijl, of invention and an ultimate, timeless field of original architecture. Say nothing, hold up your hand, let the taxi driver take you straight to the five-fingered tower (I've tried it, it works). That's iconic.



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PRECIOUS METAL

A new era of bespoke systems of structure and cladding is testing metals and architectural imagination to their limits.



Perforated copper panels enclose the new De Young Museum by Herzog & de Meuron in a delicate veil. Photograph: Dennis Gilbert/VIEW

The Machine Age was the golden age of metals. Constituting both the means and end to production, machine tools and the goods they produced during the past 150 years fundamentally changed the way we live. Consumer society, for better or worse, was nourished on a diet of metal products ranging from fridges to Fords. In architecture, the steel frame and the enormous tensile capability of steel spawned both high-rise and long-span structures that radically transformed the scale and character of the built environment. The concept of doing more with less emphatically combined aesthetic ideas and industrial efficiency – themes made manifest, perhaps symbolically, in the structures produced in Britain that celebrated the new millennium.

However, the concept of lightness is changing. As Italo Calvino observes, 'The second industrial revolution, unlike the first, does not present us with such crushing images as rolling mills and molten steel, but with "bits" in a flow of information travelling along circuits in the form of electronic impulses. The iron machines still exist, but they obey the orders of weightless bits.'[1] As in all areas of our lives, the processes of design, fabrication and assembly of metal structures and cladding are being dramatically altered by these weightless bits. Gehry's Bilbao Guggenheim (AR December 1997) fired the public imagination of an architecture for the future. However, even though its design and fabrication were made possible by software, the rationale of its construction belonged to the old world of standard rolled steel sections and modular cladding systems. The Experience Music Project (EMP) (AR October 2000), completed just three years later, albeit superficially like Bilbao, was built using very different processes. It belongs to the new order of complex bespoke systems in which every structural and cladding component is unique.

Further evidence of the paradigm shift is provided by Foster's Swiss Re (AR November 2003), Toyo Ito's Sendai Mediathèque (AR October 2001) and OMA's Seattle Library (AR August 2004) which, like Bilbao, straddle the boundary between the machine and digital ages, using standard rolled steel sections in variable structures. While in Swiss Re, the system that changes incrementally from floor to floor can be readily perceived and understood, Sendai and Seattle are preoccupied with creating the appearance of instability and replacing overarching rational systems with what Cecil Balmond calls 'improvised connectivity'.[2]

Liberating cladding

Considering cladding, in addition to the effect of 'light' digital design and fabrication processes, the move from sealed systems to the rainscreen is having a profoundly liberating influence. Instead of the literal opacity of sealed systems with their cumbersome folded seams, top hat sections and gaskets, the open jointed rainscreen with its separate waterproofing membrane behind provides enormous freedoms for designers, which they are exploiting to different conceptual and practical ends.

In the hands of Herzog & de Meuron – whose work has transformed the perception of many materials – metal rainscreens become delicate perforate veils. The copper bands of their early Signal Box 4 Auf dem Wolf – which both become three-dimensional and transform from sealed to perforate through rotation from vertical to horizontal – were ostensibly designed to function as a Faraday cage as well as a visual screen. More recently, the expanded aluminium mesh cladding of the extension to the Walker Art Center (AR January 1989) and the copper cladding of the De Young Museum (p46) have less to do with technical performance and more to do with appearance and perception. Both are carefully judged explorations of the balance between standard panel sizes that conform to the old economy of mass production and complex surface treatments made feasible by digital production. Although the bas relief surface patterns of both buildings initially appear random, each has an underlying system. The Walker's distinctive wrinkled skin is created by random rotation of a single pattern created by a good old-fashioned metal stamping dye, while the De Young's patterning – perforated and stamped – oscillates between abstraction and image, having been derived from a dot screened photograph.

Perhaps most provocative in the rich ambivalence between palpable materiality and thin abstraction – perhaps even surface decoration – is OMA's recent work with metals. On the one hand is their unbuilt proposal for San Francisco Prada, which – in contrast to both the Modernist separation of structure and skin and the current fascination with the multilayered rainscreen – developed a perforate *and* sealed stainless-steel skin that also worked as a structural diaphragm. Instead of a kit of parts, it was monolithic; instead of repetition, it was a variable system to have been fabricated by CNC (computer numerical controlled) water jets; in place of the desire for thinness as an index of efficiency, it was emphatically thick. On the other hand, in the new concert hall in Porto (AR August 2005), super-thin super-scaled pixellated gold leaf cross-dresses as wood grain on the plywood lining of the auditorium.

In the recent work of Morphosis – notably the Caltrans Headquarters in LA and the Federal Office Building in San Francisco (both AR July 2005) – the metal wrapper literally takes on a life of its own. Here, the thin scrim is manipulated three-dimensionally with greater freedom than the watertight volumes it veils. Conceived as a 'metabolic' skin, it performs as a key component of the buildings' environmental systems, which are designed to reduce energy consumption and advance sustainability. Thom Mayne notes, 'In lieu of a conventional mechanical plant, the building actually "wears" the air conditioning like a jacket.'[3]

With another agenda, the cast bronze facade of the Museum of American Folk Art (AR February 2002), by Tod Williams Billie Tsien & Associates, uses the same rainscreen principle to create a surface pitted with craters and fissures – unpredictable imperfections from the fabrication process that contrast markedly with the smoothness of Gehry, the controlled patterning of Herzog & de Meuron and, looking to the past, the machined precision of the Seagram Building, a bronze-clad icon just a few blocks away. MAFA's metal cladding, although perforate, differs in significant ways. With panels ranging from 6 to 16mm in thickness, this bronze skin is neither actually nor apparently light. It was not digitally fabricated but instead was cast at a sculptors' foundry, aiming to reinstate the imprint of human craft – or what David Pye called the 'workmanship of risk' – in contemporary construction.[4]

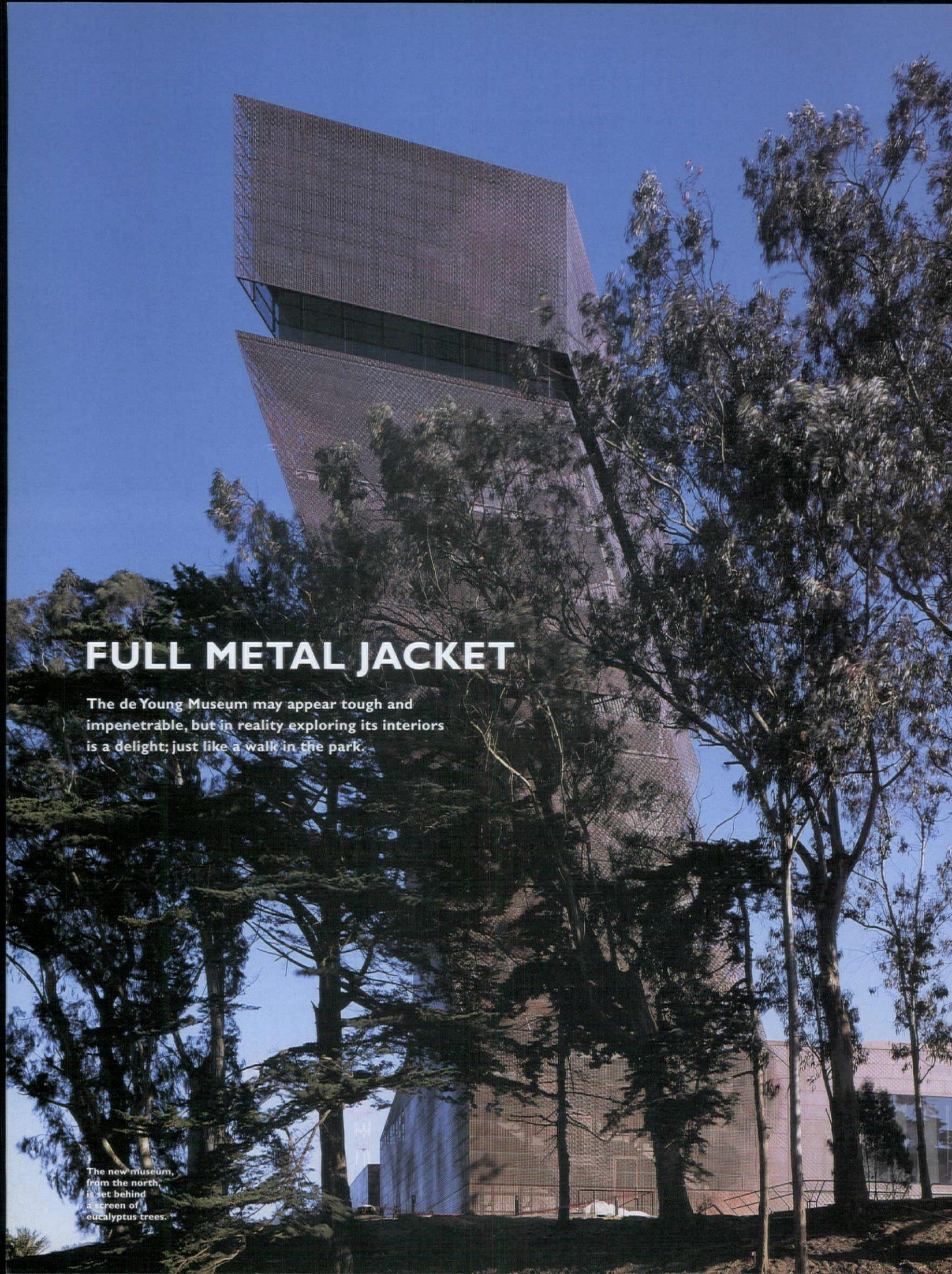
These preoccupations are driven by digital design and CNC cutting, stamping and welding, with weightless bits enabling machines to create the appearance of craft, almost without human intervention on the shop floor. In contrast with the formerly arduous process of 'tooling up', the A. Zahner Company, which has fabricated metal cladding for both Gehry and Herzog & de Meuron, is fleet-footed, moving rapidly through generations of software as they seek to handle complexity more efficiently. As an example, they note that each of the 3600 unique cladding panels of the EMP required an average of 250 megabytes of data and a design time of 2.5 hours. On more recent Gehry projects, this has been reduced to 30 megabytes and 15 minutes per panel.[5] As always in construction, time has cost implications. With constant scrutiny aimed at streamlining process, Henry Ford's principle of minimising labour is being energetically applied, not only on the shop floor, but also to the human content of CAD-CAM technologies themselves.

This streamlining has been well suited to an economic environment in developed countries that, during the past thirty years, has seen relatively modest increases in metals prices but rapidly escalating costs for labour. Suddenly the equation is changing with the cost of steel, copper and other metals skyrocketing in response to the insatiable appetite of China's developing economy combined with the effect of both war and weather on the price of oil. Will metals continue to provide fertile territory for the exploration of form, performance and perception, or will global economic pressures render the use of metals in architecture a luxury? ANNETTE LECUYER

1 Italo Calvino. *Six Memos for the Next Millennium*, New York: Vintage International, 1988, p8.
2 Cecil Balmond. 'New Structure and the Informal', *Architectural Design*, Sept-Oct 1997, p88.
3 *A Model of Excellence – The New Federal Building*, Washington DC: US General Services Administration, p26.
4 David Pye. *The Nature and Art of Workmanship*, Cambridge University Press, 1968, pp4-8.
5 Interview with William Zahner, A. Zahner Company, 2002.

FULL METAL JACKET

The de Young Museum may appear tough and impenetrable, but in reality exploring its interiors is a delight; just like a walk in the park.



The new museum, from the north, is set behind a screen of eucalyptus trees.



Museum, San Francisco, USA
Architect
Herzog & de Meuron





The de Young Museum has occupied this site since 1895. Initially in Charles McDougall's Egyptian Revival Fine Arts Building with its top-lit gallery and subsequently ...

If you go down to the woods today, you're in for a big surprise; a very big surprise, but a welcome one at that. For the people of San Francisco the anticipation is over, and for Museum curators, the Board of Trustees, and the designers involved, the gala opening of the new de Young Museum in Golden Gate Park this month concludes years of hard work. After the devastating effects of the Loma Prieta earthquake of 1989, plans were made to rebuild the Museum's damaged buildings. Following two failed attempts to secure funding through a city bond, when it was hoped that public money would help preserve its valuable art collection, the decision was taken to raise funds privately, increasing the target from $35 to $135 million; an apparently unattainable target that was subsequently surpassed with an astonishing $180 million being raised by over 7000 donors. With this determined demonstration, the ambition to design an architectural masterpiece not only gave the Museum the opportunity to rebuild its galleries, but also to reinvent itself; challenging how art is displayed through a serious of unique interiors, and confronting the pre-existing formality of the Beaux Arts garden site.

The architect of London's Tate Modern and the recently completed Walker Art Center in Minneapolis, Herzog & de Meuron was chosen from a long list of well-known contenders. Meier and Botta were both ruled out and, presumably with subsequent regret, Gehry, Holl and Piano all declined the Museum's invitation. From a shortlist of eight, the final three emerged with Tadao Ando from Japan, and regional local Antoine Predock alongside eventual winners, H&dM from Basel. There were many reasons for their success, but one in particular was that they were the only architects to talk extensively about the nature of the collection, setting out their commitment to avoid Disneyfying the art work, striving instead to establish a higher order of expression; an order that they defined as Heterotopical.

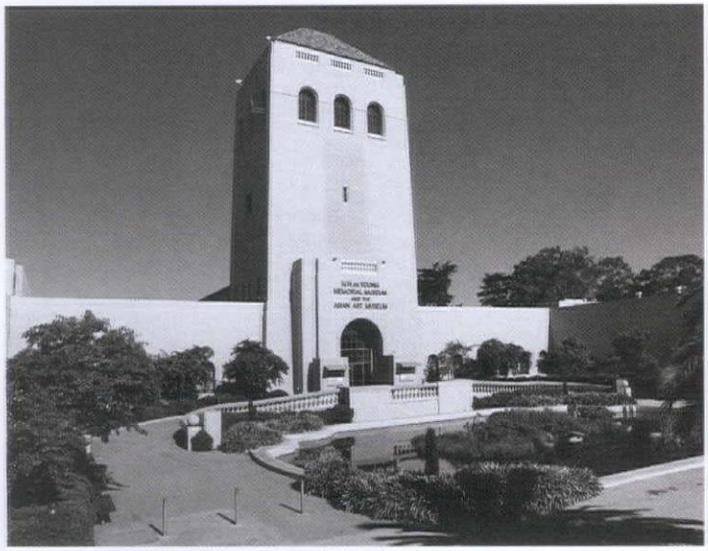
The de Young collection is vast and varied, ie, heterotopical, with work that dates back to the dawn of human history. Established in 1895 as the Memorial Museum, it originally housed an eclectic collection of exotic oddities in commemoration of the California Midwinter International Exposition that took place the previous year. It has remained in this location ever since, undergoing a number of redesigns on its way to becoming the principal museum in the Western United States (focusing on the art of the Americas, Oceania and Africa). As well as the collection itself therefore, the site – buildings and landscape – has had a significant influence on H&dM's response; a site that has been transformed from a desolate expanse of sand dunes to a much cherished, highly contrived, naturally manmade urban oasis.

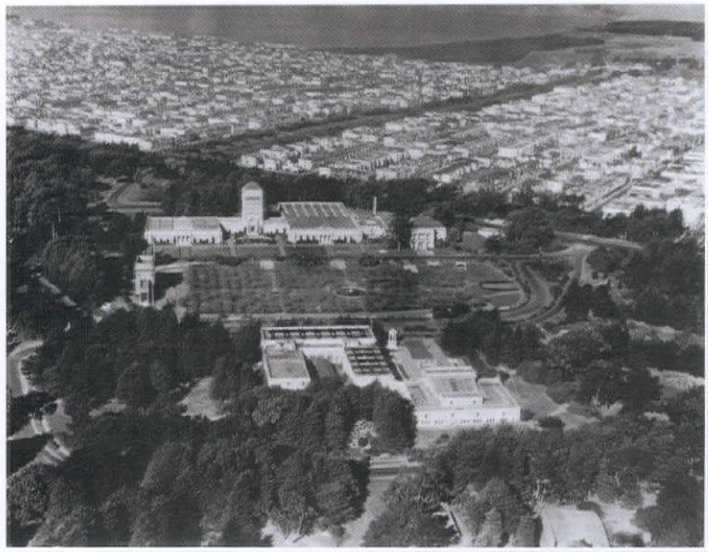
Through early explorations, H&dM initially tested ideas based on a series of individual pavilions, each housing a different collection and expressing the diverse range of the cultures represented. This was soon rejected, in favour of a strategy that did precisely the opposite; one that created a single unified container – a string of pavilions, each retaining their own landscaped borders, compressed into a single three-bay mould. When read as a series of parallel bands, buckled to allow the park's landscape to fill the spaces in between, this interpretation describes an assemblage of conjoined linear spaces. As a conceptual counterpoint, however, this building can also be read as an eroded solid, which is an equally pertinent interpretation, particularly when considering its construction above a single base-isolation raft foundation.

The building is not structurally fractured, despite its deeply incised footprint and roof plan ridges that trace a series of notional fault lines. Instead, this beautifully clad, subtly distorted copper monolith is a very simple, rigid, orthogonal steel box, with no real claim to structural innovation. And this is no criticism; if anything it is an observation that underlines how the pursuit of sophistication and the particular in architecture is more often than not most effectively realised by employing the most basic, logical, dare I say banal means. Once again, as at Laban, Schaulager (AR August 2004) and the Barcelona Forum (AR September 2004), to name just three previous buildings, H&dM demonstrate their ingenious and masterful ability to create highly sophisticated and intricate spatial sequences within remarkably straightforward unremarkable structures. It is highly unlikely, for example, that many visitors would be immediately aware of its rectangular plan or be able to perceive the regular grid hidden within walls and display cases, and stepping in on occasion as diagonals dictate. The building is simply too vast to take in in a single glance, and through expert nip and tuck, the subtle inflection along its roofline, the graceful twist of its tower, the inviting inset entrance courtyard, and the gently nodding cantilevered brow, this steel box is made unique. The building succeeds in becoming an objectified compelling piece in its own right – a work laden with sculptural intention producing another distinctive H&dM silhouette, while remaining efficient, functional and adaptable; the ultimate, for want of a simpler word – Gesamtkunstwerk.

The copper skin is perhaps the most immediate characteristic that may surprise unprepared visitors. Gone are the stuccoed Classical and mock Egyptian facades that addressed the formal gardens. In their place is a super-graphic projection that superimposes dappled foliage onto a material that over time will take on its own naturally dappled patina. Prevailing winds are anticipated to accelerate the effects of oxidisation along the more exposed angular leading edges, so the skin will literally change with the wind. Light too will play its part bringing out subtle semi-tones, as will the famous Bay Area mist which will soften hard edges as it passes through the tower's countless perforations.

continued on p60

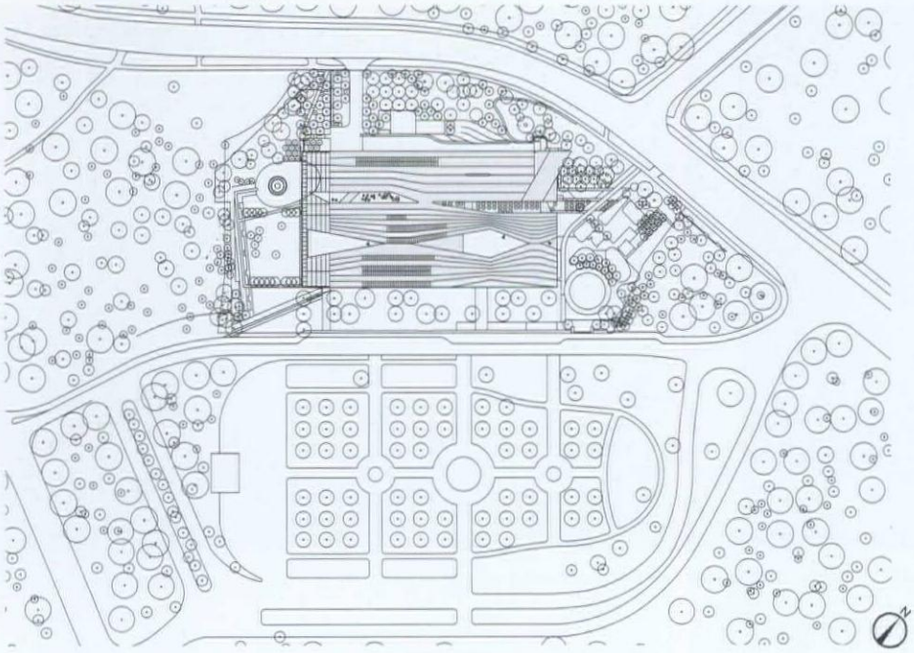




... in ornate 1920s buildings by Louis Christian Mullgardt. Herzog & de Meuron's gallery is now open to the public (images, Thames & Hudson). 2, the de Young today.

2

Museum, San Francisco, USA
Architect
Herzog & de Meuron



site plan showing formal gardens and Herzog & de Meuron's distinctive roof ridges (scale approx 1:2500)

3
De Young's powerful southerly aspect defies the site's symmetrical hold.
4, 5, 6, 7
Powers of Ten? Mapping de Young from satellite to on-site.

Museum, San Francisco, USA

ARCHITECT

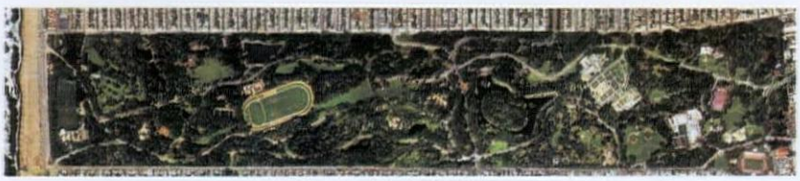
Herzog & de Meuron

3

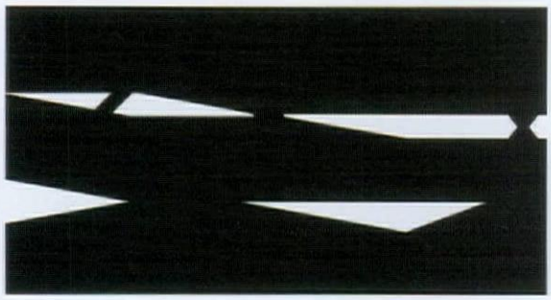




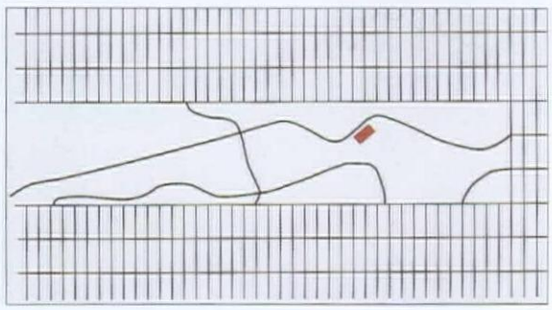
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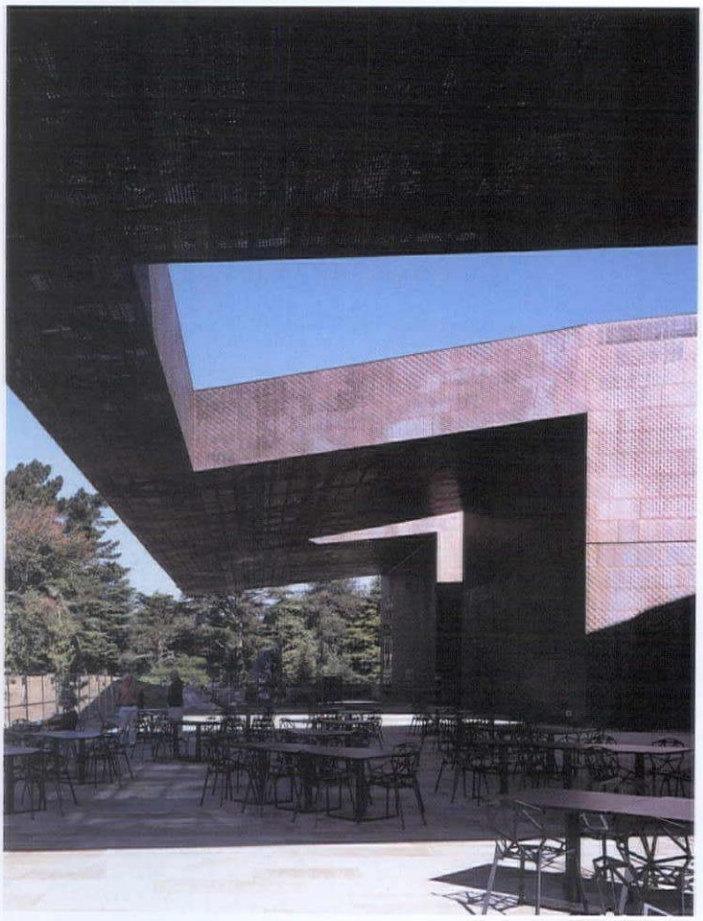


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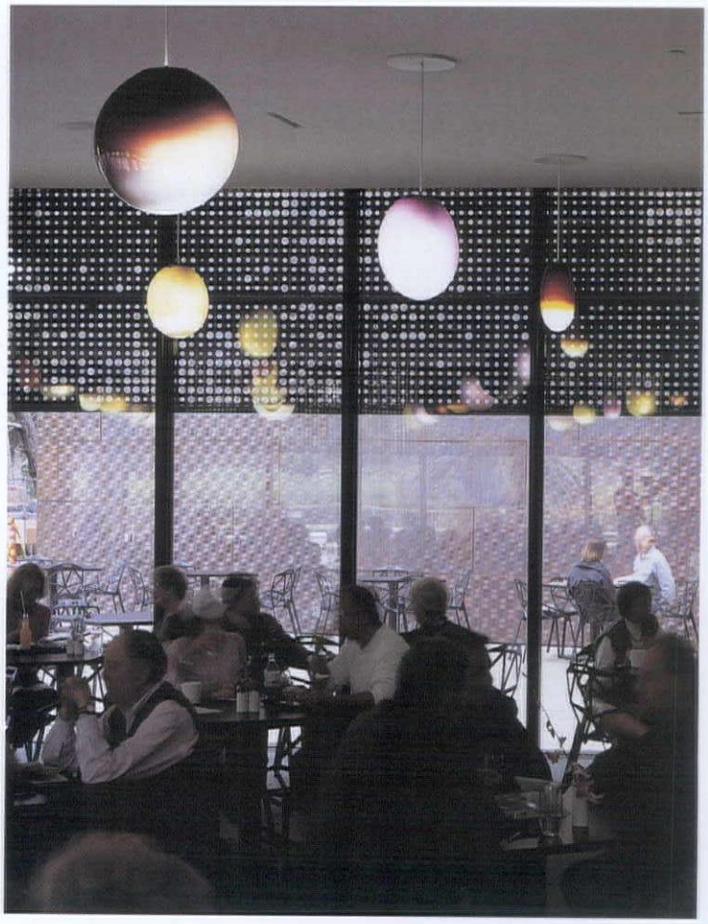


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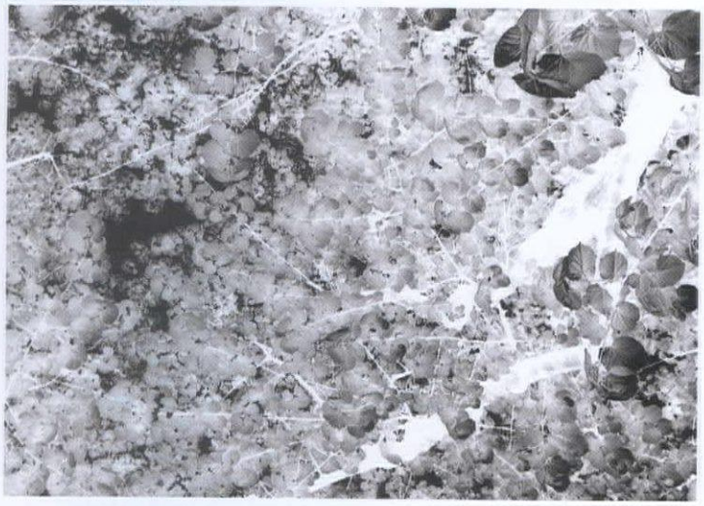




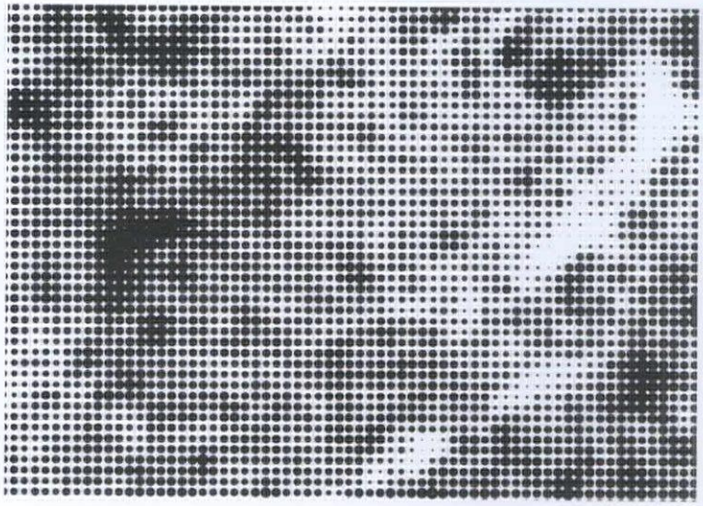
8



9



Digitised images of foliage ...



... translate to cladding patination.

8
At the west end, the generous cantilevered canopy provides the café terrace with dappled shade.
9
Inside, the café features hand-blown glass lampshades by Dan O'Reilly.
10
Detailed scrutiny shows the subtle effects of the embossed copper panels and the perforated canopy.

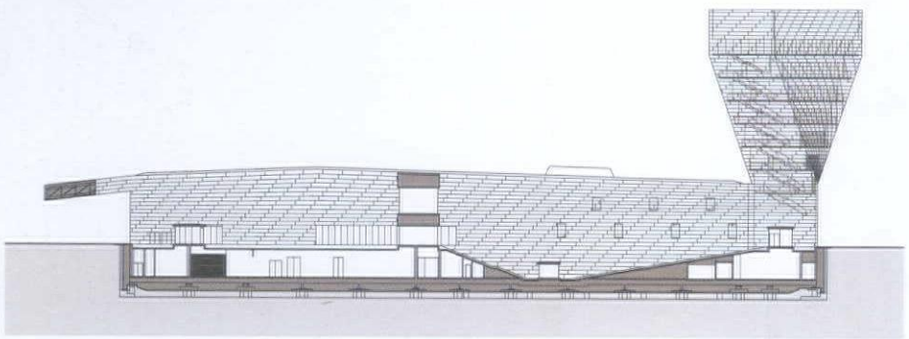


south elevation

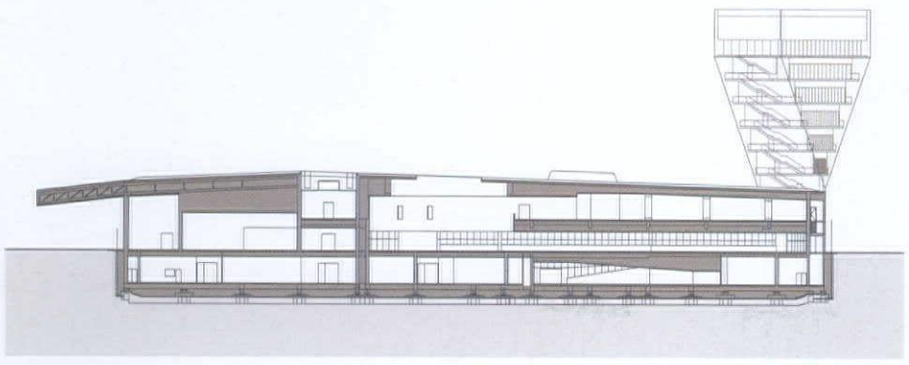


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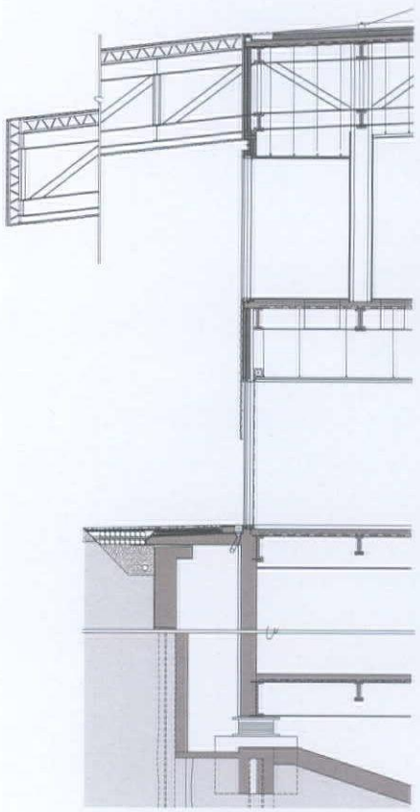
MUSEUM, SAN FRANCISCO, USA
ARCHITECT
HERZOG & DE MEURON



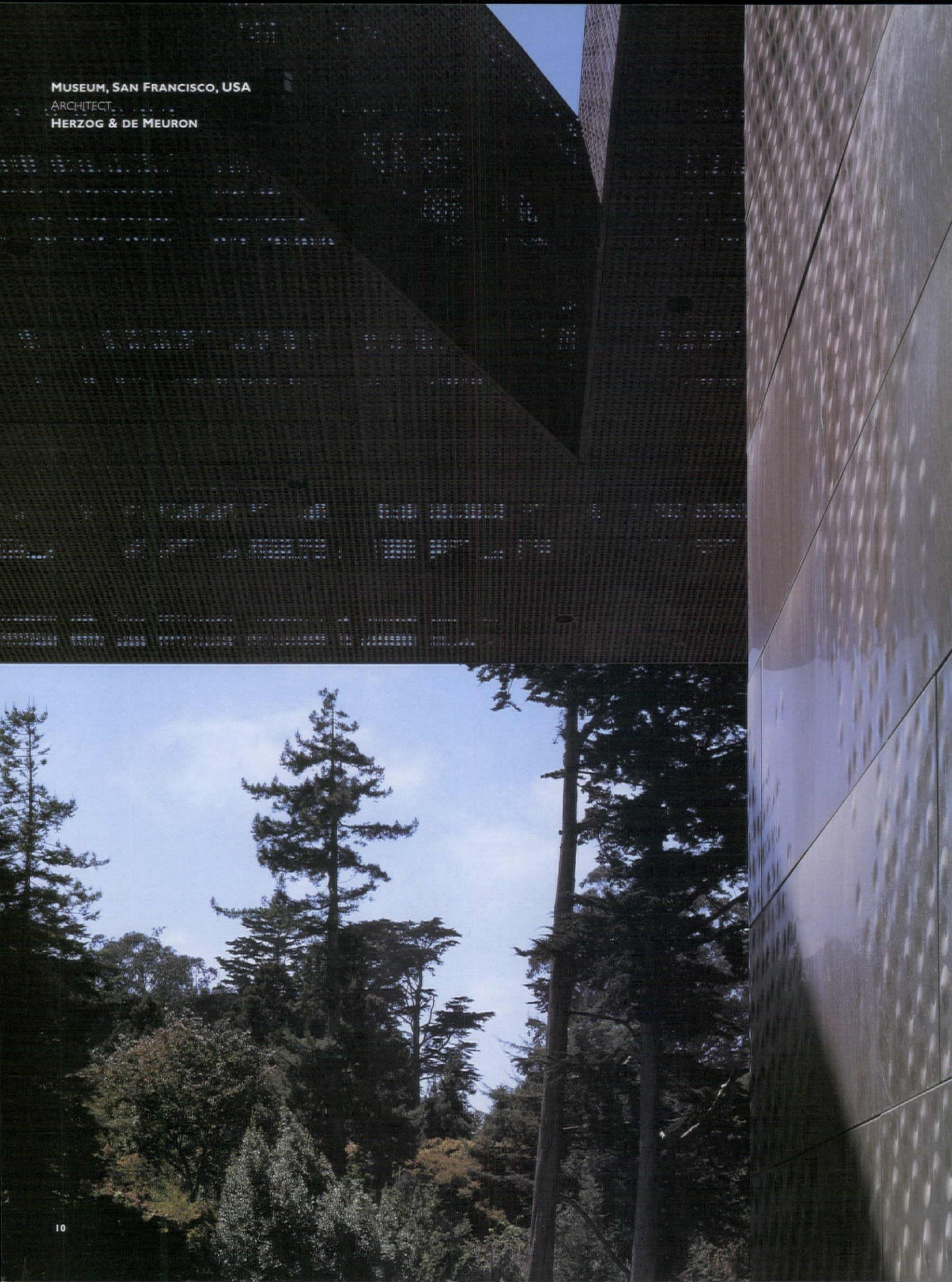
long section through Eucalyptus and Fern Courts



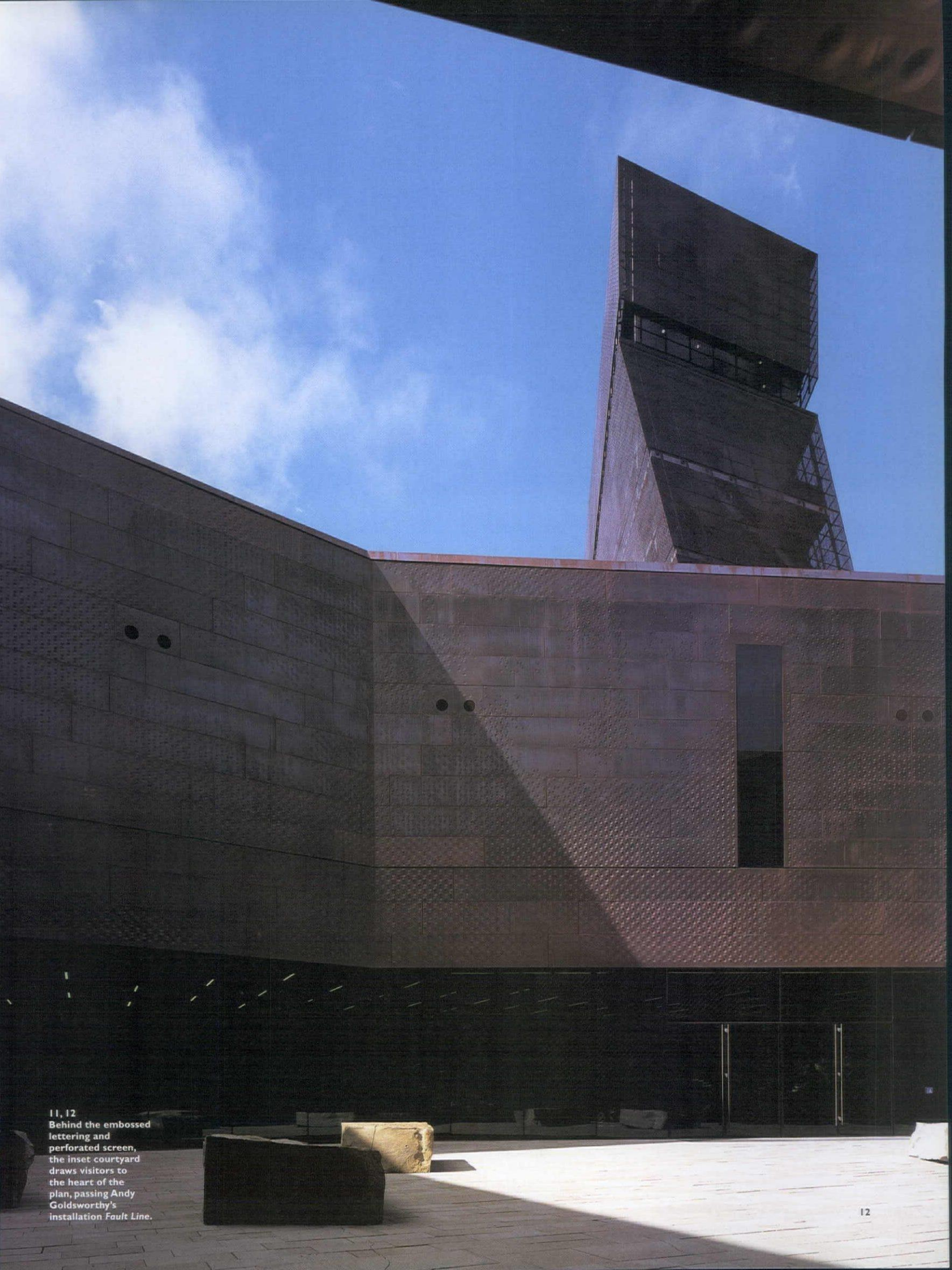
long section through Wisley Court



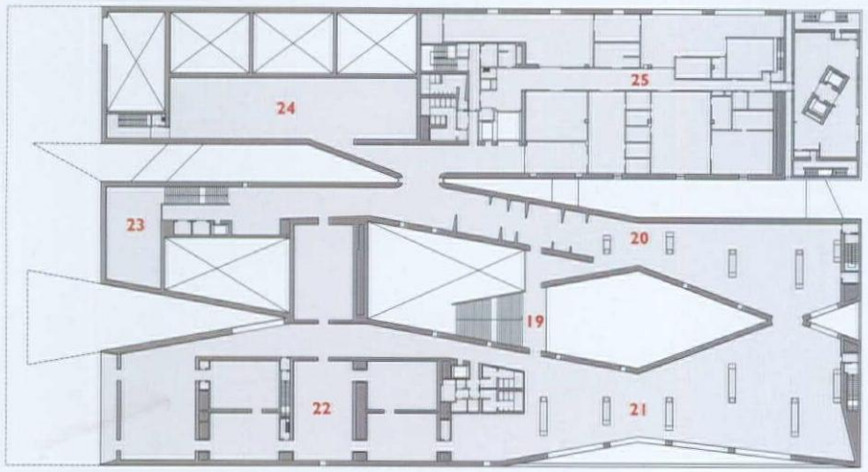
detailed section showing cantilever and base-isolation



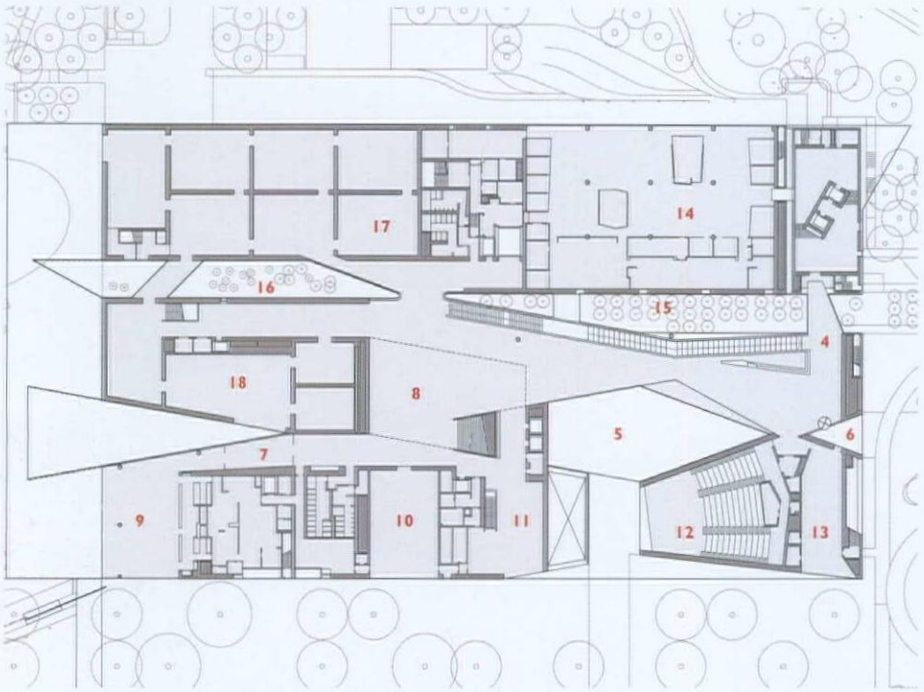
Museum, San Francisco, USA
ARCHITECT
Herzog & de Meuron



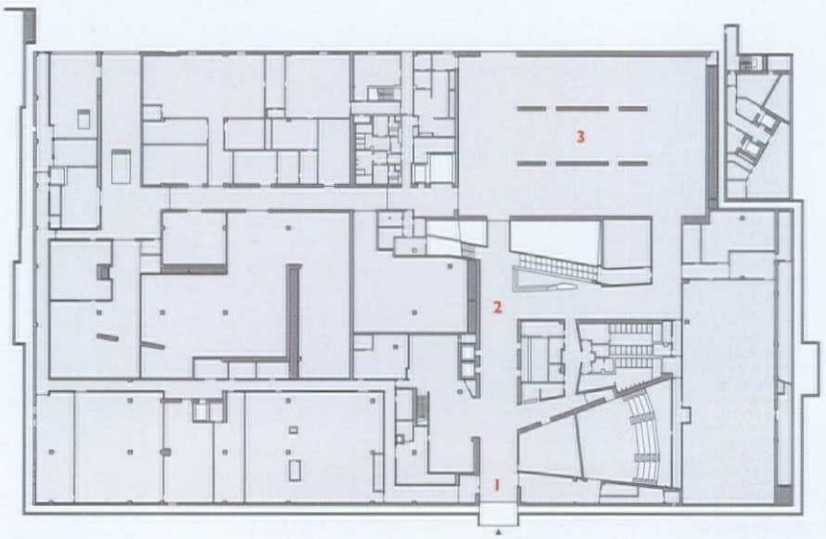
11, 12
Behind the embossed lettering and perforated screen, the inset courtyard draws visitors to the heart of the plan, passing Andy Goldsworthy's installation *Fault Line*.



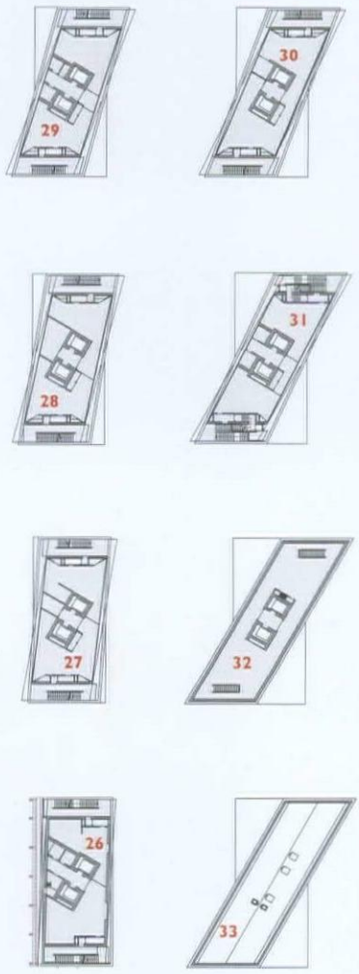
upper gallery level



ground floor level (scale approx 1: 725)



lower ground floor level



ascending plans of education tower (clockwise from bottom left)

1 entrance from car park
2 entry/information
3 temporary exhibitions
4 upper info point/tickets
5 entry court
6 entry (school parties)
7 entry (café)
8 Wisley Court
9 café
10 family room
11 shop
12 auditorium
13 Children's Gallery
14 offices
15 Fern Court
16 Eucalyptus Court
17 American 20th Century Art
18 American Native Art
19 main stair landing
20 African Art
21 Pacific Art
22 American 19th Century Art
23 American Native Art
24 Textile Gallery
25 storage
26 public reading
27 publications
28 education office
29 classroom/artist studio
30 education office
31 classroom
32 observation room
33 roof

13, 15
Entering from the lower ground car park, a lazy stair rises against the three-storey Fern Court.
14
Contact or switch? A critical spatial pinch point.
16, 17
Wisley Court with grand stair, shop and bench.

MUSEUM, SAN FRANCISCO, USA

ARCHITECT

HERZOG & DE MEURON


13


15


14


16


17

Museum, San Francisco, USA
Architect
Herzog & de Meuron

18
Despite its scale, Wisley Court is dominated by one of Gerhard Richter's latest works *Strontium* (2004).





The building has three entrances, one on each of its three parkside facades, which all work against the formality that dominated the previously axially planned site. Internally and externally (working with landscape architect Walter Hood), H&dM set up a series of convergent cross axes that create unorthodox spatial relationships. Externally, this is manifest in routes that subvert the convention of frontal planning, denying ceremonial approaches and traditional iconic symmetry, instead leading visitors almost accidentally to one of three points of entry. Internally, geometries set up highly charged relationships between apparently unrelated parts of the collection.

Wherever you enter the building, either at ground level or by car through the basement which leads to the paired stair that flanks the glazed landscaped court, all visitors are collected within a vast foyer-shop-café sequence that is freely accessible to all. Controlled access then leads to the galleries that extend across the upper level, and to the education tower that is structurally and spatially isolated from the low-lying ground-scraper. Avoiding the temptation to reserve the best view for the museum director, the top of the tower includes an observation room set aside for visitors in a space that turns to address the city's rigid orthogonal grid. This building is without question an art rambler's dreamland, designed for roaming and for being casually led. By offering apparently incidental glimpses, visitors are drawn through galleries of contrasting ambience and content, in a series of spaces that break down conventional hierarchies and give equal representation to both classical spaces, those with fixed walls and overhead lighting, and those with freer open arrangements with windows, free-standing cabinets and display cases. Throughout this non-hierarchical landscape, however, the plan is moderated by a number of key topographical fix points including the grand stair (beautifully sculpted to include an under-stair bench), the entry court – featuring *Fault Line* by Andy Goldsworthy – and most potently the two hairpin intersection points between galleries where acute geometries are resolved. While the designers have not settled on a single name for these devices, occilating between the term contact and switch, the electronic analogy suitably encapsulates the highly charged spatial experience that this building provides.

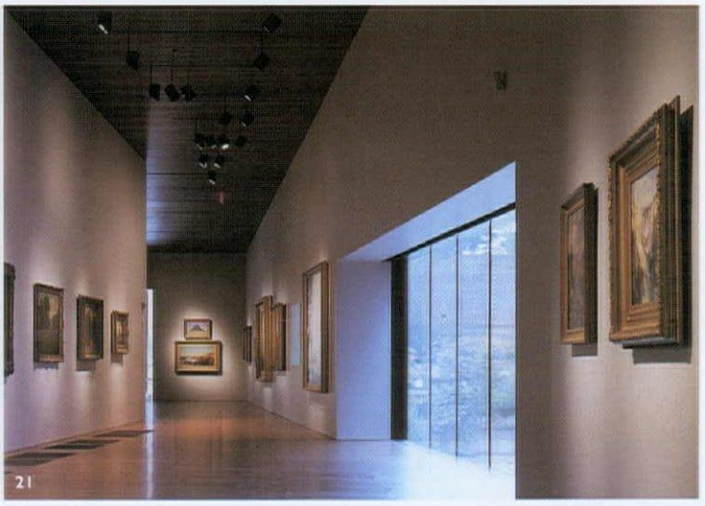
From the park, across the foyer, through the galleries and over Fern Court, the ascent to the tower is a fitting spatial climax, reminding keen art viewers and casual park walkers alike of their immediate and more distant physical and cultural context. ROB GREGORY

More information is provided in *The de Young in the 21st Century – A Museum by Herzog & de Meuron* by Diana Ketcham, published this month by Thames and Hudson.

Architect
Herzog & de Meuron, Basel
Jacques Herzog and Pierre de Meuron
Partner in charge
Ascan Mergenthaler
Associate
Mark Loughnan
Project manager
Jayne Barlow
Associate architect
Fong & Chan Architects
Landscape
Hood Design
Photographs
All by Dennis Gilbert/VIEW except 2 & 3 which are by Mark Darley.

19-22
Clockwise from top left, plasterboard eucalyptus and fair-faced concrete help create a variety of exhibition environments, in the Nineteenth-Century and Twentieth-Century American Art galleries, at the base of the education tower, and throughout the free-form Pacific Art gallery.
23
The spatial climax: the observation tower provides views towards the Golden Gate Bridge.


19


21


20


22



Museum, San Francisco, USA
Architect
Herzog & de Meuron





2

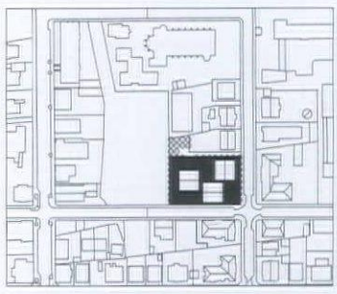
STEELY DETERMINATION

With a seamless skin of steel, this training centre is a subtly subversive urban presence.

Reutlingen, a picturesque Swabian town near Stuttgart, is the setting for one of the most intriguing architectural and urban design projects in Germany for many years. Munich architects Allmann Sattler Wappner, known for their radical redefinition of building types, have completely shrouded their new training centre for Südwestmetall with a 4mm stainless-steel skin. (Appropriately enough, Südwestmetall are the German employers' association for the steel and electrical industries.) Laser-cut steel sheets, up to 1.5 x 6m in size, seamlessly cover walls, doors, windows, roofs and even the landscaped garden. Utilitarian details such as eaves, gutters or drainpipes do not impinge on the spooky purity of the abstract volumes.

The scheme cunningly subverts the strict German building regulations pertaining to inner-city sites. Allmann Sattler Wappner managed to implement their radical vision by taking the simple cubic volumes and pitched roofs of the surrounding historic houses as a template. By zealously adhering to local guidelines, the architects delivered three saddle-roof buildings with small, square groundplans that blend in perfectly with the *petit bourgeois* neighbourhood, though there is clearly no precedent for such an enthusiastic use of steel.

The client was flabbergasted by the design which, after some initial public consternation, has attracted favourable accolades. Who could have anticipated that a competition for an unpretentious regional training centre would produce a building which employs, in such a direct way, a material so closely associated with the client? But it has other aspects, such as the shift it precipitates in the perception of a house as 'a box with a roof on' and its



location plan

1
An ornamental screen of laser cut steel envelops both the ground plane and the base.
2, 3
Though distinguished by unconventional use of materials, the basic pitched roof forms blend with the surroundings.



3

TRAINING CENTRE, REUTLINGEN, GERMANY
ARCHITECT
ALLMANN SATTLER WAPPNER

riff on traditional buildings and regional construction methods (for instance, the ornamental steel trelliswork). The final coup is its technical detailing, which transforms what could have so easily been an ordinary off the peg metal facade into constructional *haute couture*.

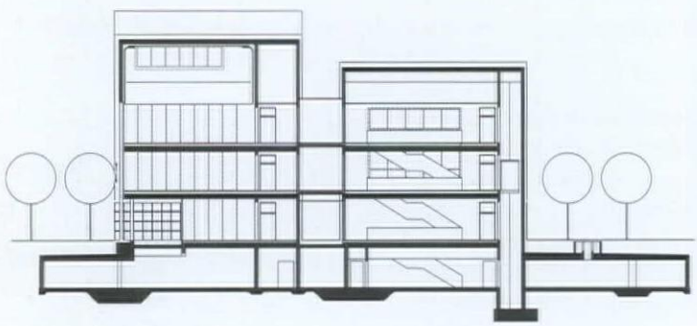
At first sight, the building volumes appear almost immaterial, encased in the sandblasted metal sheets that faintly reflect their surroundings. Depending on light conditions, the subtle shades of the silvery grey steel merge completely with an overcast sky. On days like these, the monoliths just vanish in a contextual mist. Only the 3164 piece puzzle of individually-cut metal sheets, which enclose the garden and the lower part of the facades in a decorative screen, provides visual animation. The upper three storeys, which include 9m high attic spaces under the saddle-roofs, gradually fade up into the sky. Most of the time the window shutters (made from the same material as the metal sheets and set flush with the facade) are closed, so the disguised apertures appear as imperceptible ripples on the metal skin. As hard as you might try to detect them, there are few gaps or details to distract from the overall impression of seamlessness. A rare example is the single 50mm expansion joint on each side of an otherwise homogeneous surface.

Clear glass bridges connect the buildings, allowing a rare, furtive glimpse of the inhabitants of the monolithic cubes. Otherwise the double facade – a fully glazed floor-to-ceiling thermal glass frame behind the metal – successfully maintains the illusion of the cubes as impenetrable, sharp-edged objects. The interior takes its cue from the exterior, with no colours other than white and various shades of grey. Excessive features and details are also ruthlessly eliminated. Steely in all senses, this is an architecture of clarity, precision and control.

CHRISTIAN BRENSING

Architect
Allmann Sattler Wappner, Munich
Structural engineer
Sobek Ingenieure
Mechanical engineer
Schreiber Beratende Ingenieure
Facade
R+R Fuchs
Photographs
Roland Halbe

4
Light percolates through the decorative screen animating the austere interiors.
5
The staff café.



long section



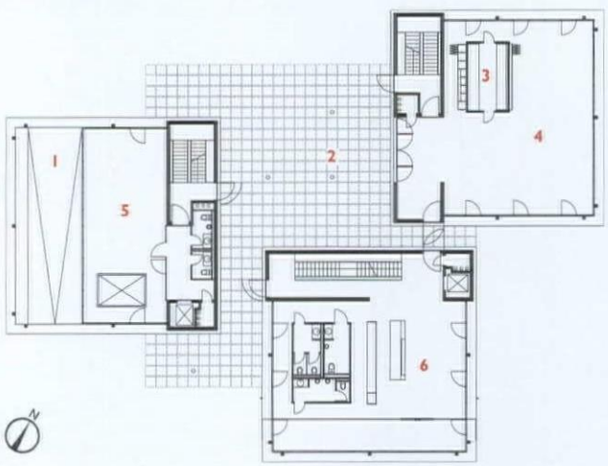
cross section

TRAINING CENTRE, REUTLINGEN, GERMANY

ARCHITECT

ALLMANN SATTLER WAPPNER

1 ramp to underground car park
2 courtyard garden
3 servery
4 staff café
5 open plan offices
6 reception
7 cellular offices
8 bridge links



ground floor plan (scale approx 1:500)



typical upper floor plan



4

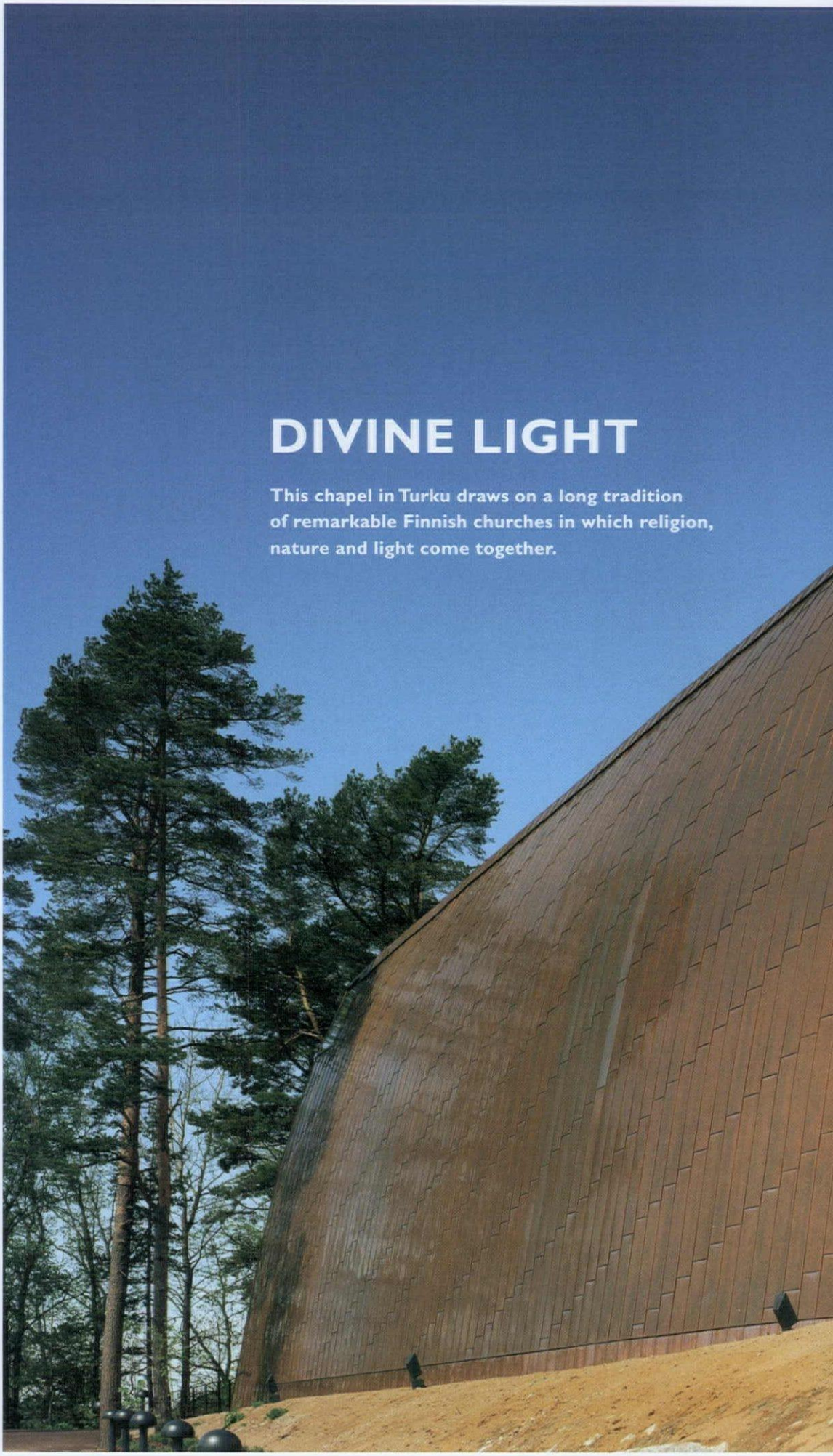


5

ST HENRY'S ECUMENICAL ART CHAPEL, TURKU, FINLAND
ARCHITECT
SANAKSENAHO ARCHITECTS

DIVINE LIGHT

This chapel in Turku draws on a long tradition of remarkable Finnish churches in which religion, nature and light come together.



In a quiet backwater of fields and woods on the island of Hirvensalo in the south-west of Finland, St Henry's Ecumenical Art Chapel grows from its site – a hillock surrounded by pines and spruces – embracing context and the natural environment.

The chapel is not immediately apparent on approach: following the bend of the road you are suddenly confronted by the elegant copper-clad church, its volume contrasting with its surroundings. It has the appearance of an upturned ship's hull. The design vocabulary juxtaposes copper and wood, light and shade. The chapel was finished earlier this year so the copper is new; eventually its green patina will help the church blend with the surrounding pine trees.

St Henry's is approached head on, up a gentle dogleg pedestrian ramp to the small foyer lit by natural light at the western entrance. You proceed from here through a passageway to the church proper, from darkness to light; at the far eastern end two side windows the height of the chapel throw light down onto the altar, breathtaking on a sunny day. The architect describes the main hall as the stomach of the fish, the fish being a symbol of early Christians (fitting as the church is ecumenical).

Gallery and chapel are one volume, with the gallery at the back, and the chapel proper in the front, with the altar terminating the axis. The benches are removed for art exhibitions and you can view the art while religious ceremonies are being conducted.

The whole interior, bar the glazing around the altar, is of wood, the warm smell of which permeates the space. Seating is simple angular backless benches made of solid, edge-laminated common alder; but this elegant, pared down minimalism could prove inhospitable during long church services. The chapel's loadbearing structure consists of tapering ribs of laminated pine



1
The wide windows at the front of the chapel light up the altar. The copper cladding will take on a green patina in time.



2

two metres apart. Between these ribs is a curved interior lining of 100mm wide, untreated pine boarding. At the moment this is very light, but with time the tone will deepen to a reddish hue. The pine ribs are lit by spotlights.

The floorboards are 200mm wide, 50mm thick pine planks and run parallel to the axis of the space. These have been waxed to create a clicking sound when walked on, reminiscent of the floors of old churches. The patinated altar is the last public work by academician and sculptor Kain Tapper. In the altar window an artwork by Hannu Konola filters light onto the altar wall.

Matti Senaksenaho continues the distinguished legacy of the Finnish church architecture of Engel, Aalto, Sonck, Bryggman and more recently of Juha Leiviskä in his luminous churches in Myrrmäki and in Männistö (ARs June 1987 and June 1994). JULIA DAWSON

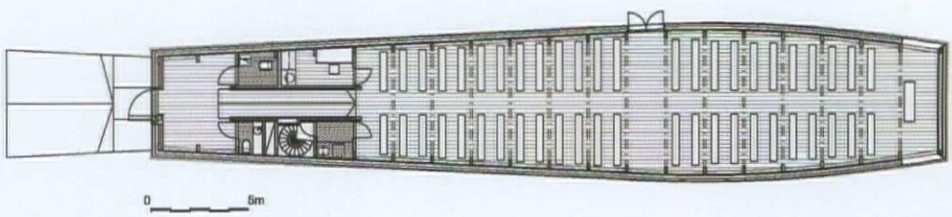
Architect
Sanaksenaho Architects, Helsinki
Project architect
Matti Sanaksenaho
Photographs
Jussi Tiainen

ST HENRY'S ECUMENICAL ART CHAPEL, TURKU, FINLAND

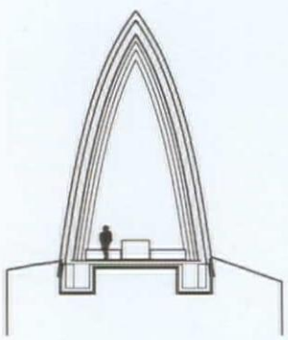
ARCHITECT

SANAKSENAHO ARCHITECTS

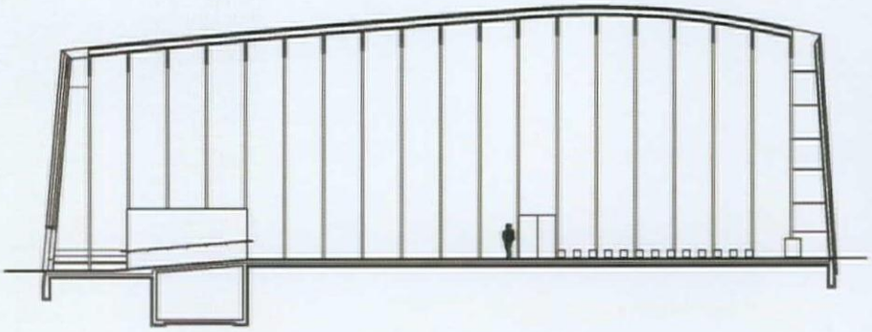
2
The chapel, rising from its hillock, is reminiscent of an upturned hull, or, more prosaically, an upright iron.
3
Looking towards the simple altar, illuminated by natural light from side windows.



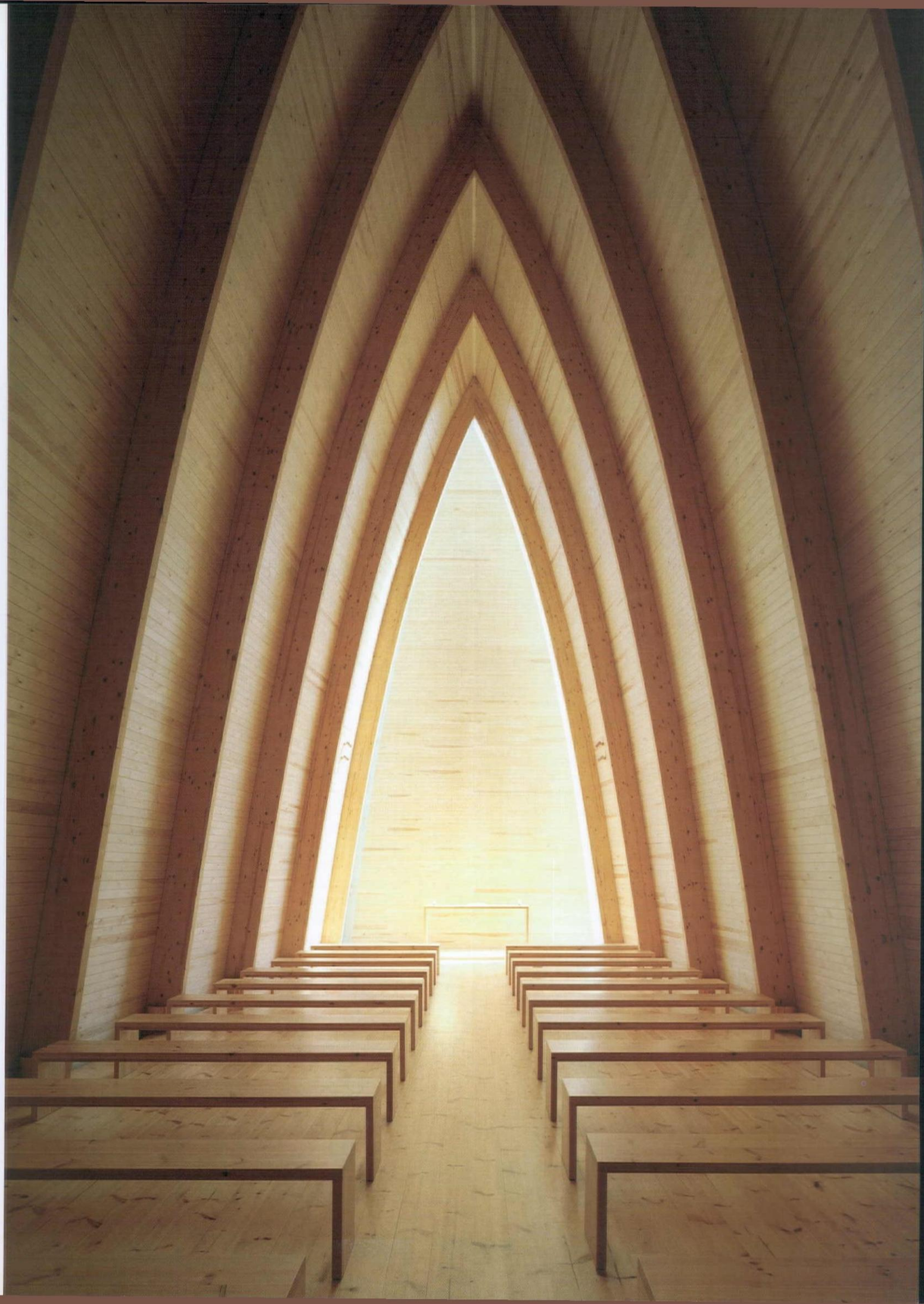
plan



cross section



long section





1

THE JOY OF RUST

Clad in a coarse carapace of rusted steel, this housing block is a startling urban presence.

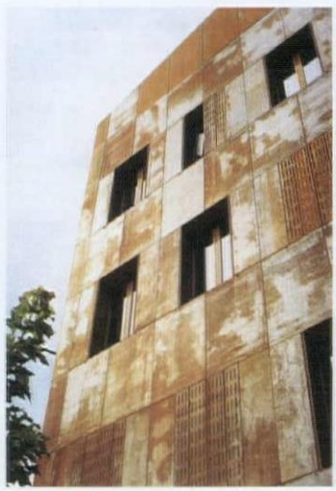


2

HOUSING, BRUSSELS, BELGIUM
ARCHITECT
MARIO GARZANITI

Ever since John Winter audaciously clad his seminal Highgate house in a skin of weathering steel back in 1969, Cor-ten's quasi industrial aesthetic of shipyard and factory floor has become globally ubiquitous. According to Neil Jackson, in his entertaining study of the genre in *The Modern Steel House*, it took seven years for Winter's little building to slowly acquire the coveted purplish-brown patina of worn-out boiler plating. Now pre-weathered Cor-ten clads the world, from police stations and parking lots to OMA's Las Vegas Guggenheim (June 2002). Yet it never quite loses its quality of otherness, as demonstrated by its use in this recent Brussels apartment block. Here the 'instant' patina of age and distress still provides a bracing shock of the new and unusual amid wedding cake historicism.

The building lies in Schaerbeek, to the north-east of Brussels city centre, a district populated by many Turkish immigrant families. It occupies a compact, chunky wedge that turns a corner between Avenue de la Reine and Place Liedts. Cars and trams surge past the prow-like site which is anchored between a couple of existing muscular apartment blocks. To the spirit, if not the letter, architect Mario Garzaniti follows the familiar template of the continental walk-up tenement, though the proportions and internal arrangements are more generous and imaginative than might normally be expected. Two duplex apartments are stacked above a shop at ground level, the floors linked by a narrow



3

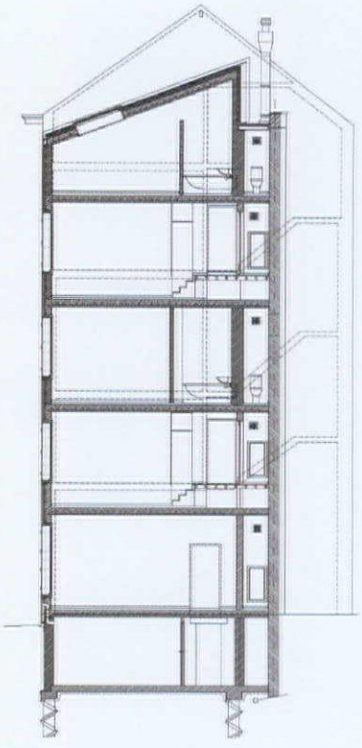


1
Shock of the new.
2
The cramped corner site.
3
Cor-ten panels are only 4mm thick.
4
The new block thrives on contrast.

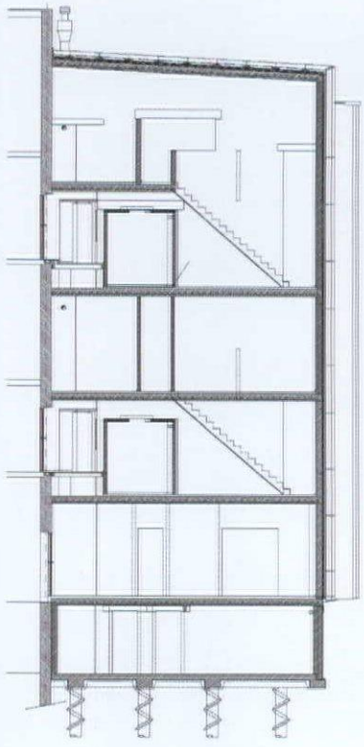


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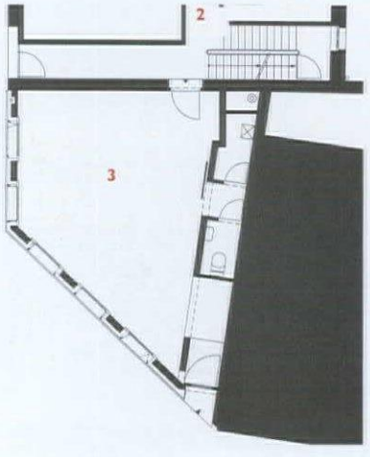
HOUSING, BRUSSELS, BELGIUM
ARCHITECT
MARIO GARZANITI



cross section looking north-west

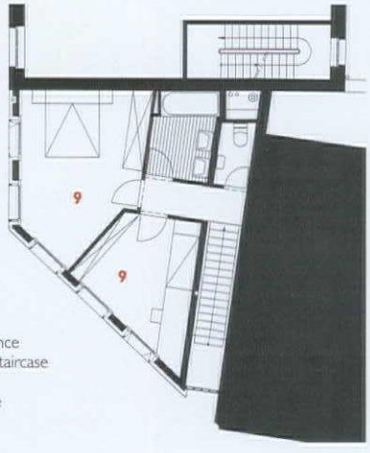


cross section looking north-east

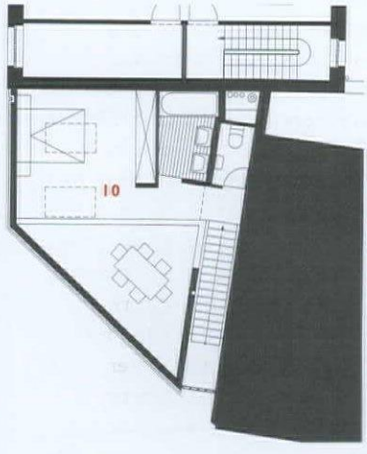


ground floor plan (scale approx 1:200)

1 street entrance
2 communal staircase
3 shop
4 flat entrance
5 living
6 dining
7 kitchen
8 internal staircase
9 bedroom
10 sleeping loft



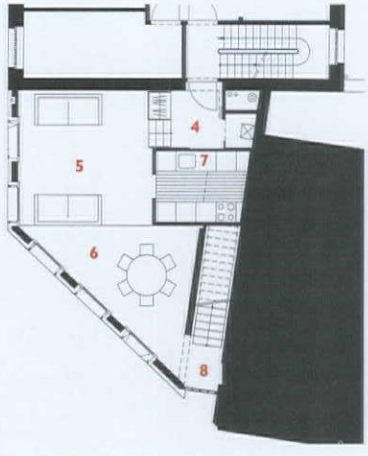
second floor



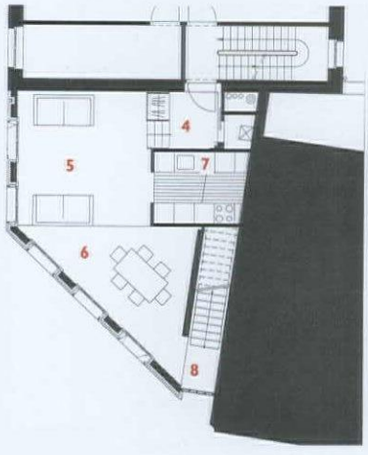
fourth floor



site plan



first floor



third floor

communal staircase inserted into an intermediate slot between the new and old buildings. Despite being *logements sociaux*, the duplexes are quite inventive spatially, making the most of the awkward, wedge-shaped plot. The top floor flat even has a modish sleeping loft overlooking the living space below.

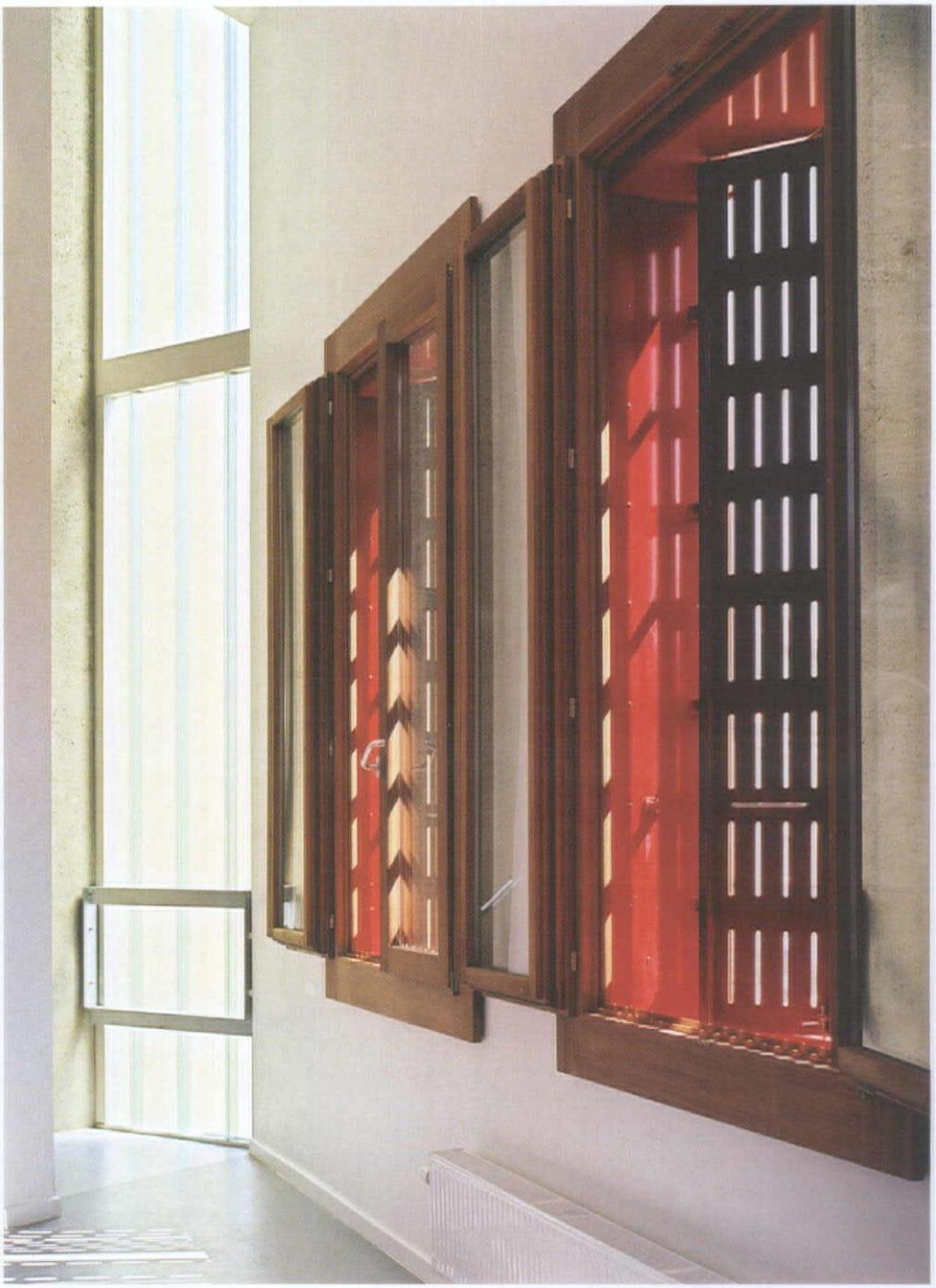
But the most striking aspect of the project is the rusting metal carapace that envelops the building in a coarse caress, as if the hull of an ageing supertanker had somehow careered into the block. Yet the monolithic appearance is slightly deceptive; the Cor-ten panels are only a thin outer skin (a mere 4mm thick) riveted to stainless-steel omega profiles attached to the concrete walls. Flexible bands prevent the risk of galvanic coupling (where one type of metal encourages the rapid corrosion of another) that can occur when Cor-ten and stainless steel come into contact.

Slight disparities in the ochre tones of the panels add a sense of patchwork variety and animation to the overall composition. Cor-ten shutters are incorporated into the facade, filtering light through vertical slits in the manner of a modern mashrabiya. When closed, the shutters lie flush with the panels, giving the block an unsettlingly seamless, hermetic quality.

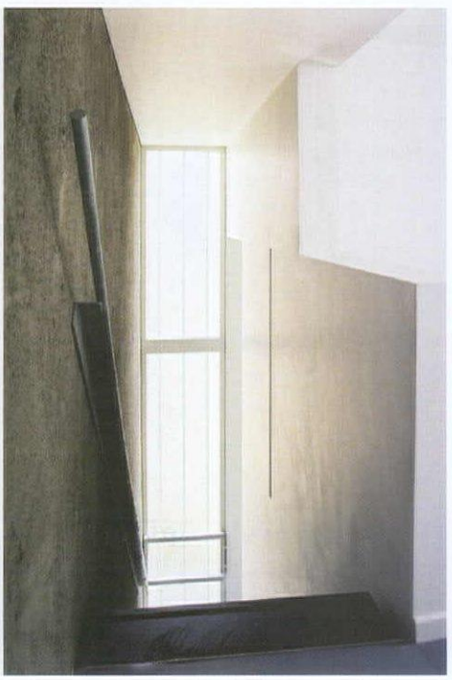
Clearly this is a building that thrives on contrast (modern Cor-ten and traditional wedding cake) enhanced by the jolting surprise of seeing so visually and culturally challenging a material employed on such an ambitious scale. Yet it is more than just a skin, attested by the generous proportions of the apartments and the way in which light animates the interiors. The gritty boiler plating conceals a sensitive soul. C. S.

Architect
Mario Garzaniti, Liege
Photographs
Alain Janssens

5
Facade detail.
6
Light filters through the perforated shutters.
7
Duplex apartments are quite generously proportioned.
8
Sleeping loft.



6



7



8

The Royal Botanic Gardens in Kew, one of London's great wonders, had its origins in the seventeenth century, when a private family estate development included a noted orangery. A century later, two neighbouring estates were amalgamated, bringing together landscapes and buildings by Capability Brown and William Chambers, creating a marvel of vistas and architecture which was eventually made over to the nation in 1841 – not least to formalise the botany research undertaken there. Significant buildings include various classical temples and the Pagoda by Chambers, and mid-nineteenth-century additions including the Palm House and Temperate House by Decimus Burton and William Turner. The new Alpine House, by the London architects Wilkinson Eyre, is a delightful and ingenious addition to this greenhouse history.

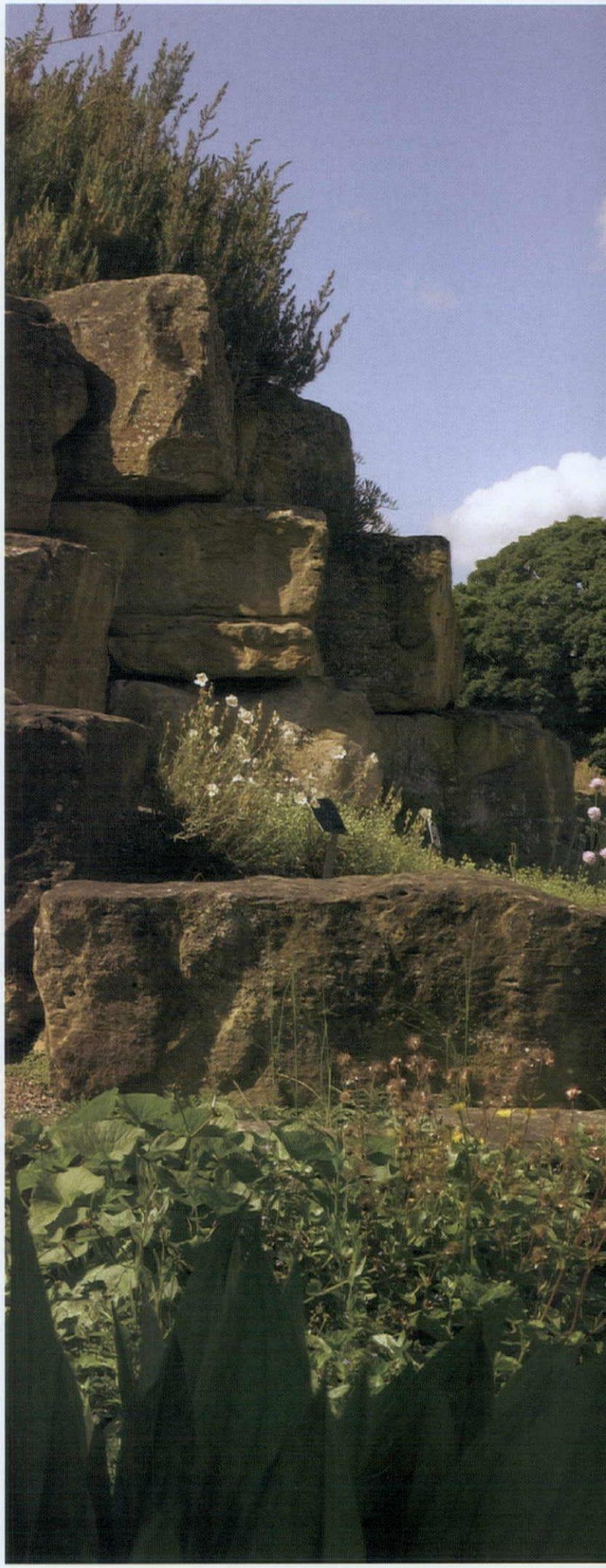
As part of a long-term strategy to complement its World Heritage Site status (formally granted in 2003), a competition to produce a site development plan was held, resulting in Wilkinson Eyre's winning proposal which is now being implemented. As part of the redevelopment of research facilities at the northern end of the site (by the same architect), a decision was taken to move the Alpine House, one of the least known of all Kew's pavilions because of its obscure location.

The new site is highly prominent, close to the Princess of Wales Pavilion in a surrounding of planting, trees and rockeries. The Alpine House, a small structure (144m^2 and 10m at its highest point), nevertheless makes a big impression. From a distance, it looks as though it might be the arch of a railway bridge, especially as you can see through it, the result of low-iron glass providing 90 per cent light transmission. In bright sunlight, internal fabric sails can be raised to protect the plants – this is not one of those glazed buildings where combating sunlight has been dealt with as an afterthought.

In Britain's temperate climate, the usual purpose of greenhouse design is to keep the environment warm. The requirement for alpine plants, however, is to give them plenty of light and, crucially, a constant flow of cool air. The architects had to provide a sheltered environment with suitable cooling, without resorting to air-conditioning and cumbersome plant, and retaining transparency as a key driver for the project.

The design process was aided by greenhouse engineer Green-Mark International; structural engineer Dewhurst MacFarlane; and service engineer Atelier Ten, who worked with Wilkinson Eyre to produce a response which is both pragmatic and visually striking. The height of the back-to-back painted steel twin arches is determined by the need for stack effect ventilation, created by opening vents at high level and low-level perimeter air inlets. Below ground, air is pushed through a labyrinth within a concrete double slab; its thermal mass cools the air, which is re-circulated round the perimeter and onto the plants via displacement nozzles and pipes.

ALPINE HOUSE,
KEW GARDENS, LONDON
ARCHITECT
WILKINSON EYRE

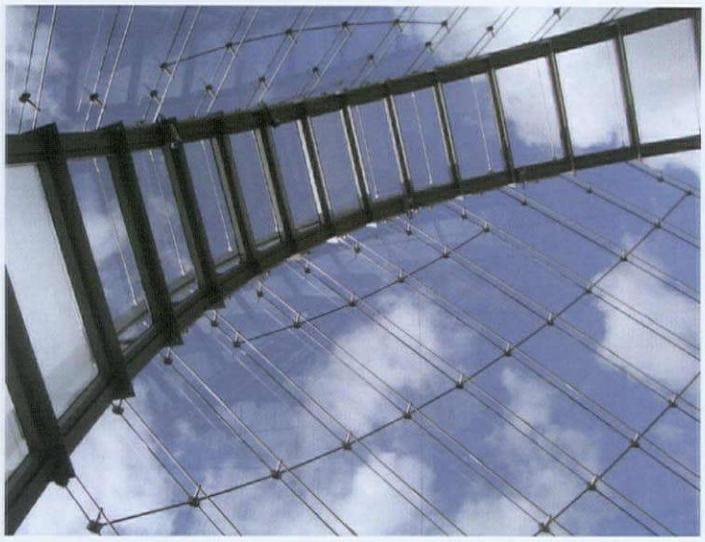


COOL QUALITY

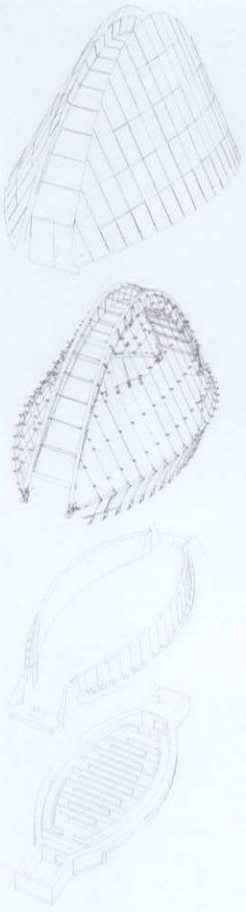
An ingenious greenhouse for Alpine plants required a design which maximises light – and cold air.



1
The Alpine House with fabric shading sails fully raised. Direct sunlight is avoided by longitudinal orientation on a north-south axis. Faceted glazing means sunlight will only concentrate on a single panel at any one time.



2



from top: glass, steel, concrete, labyrinth

The silicone jointed glazing system, produced by Swiss firm Tuchschmid Constructa, uses laminated glass (two panes of 6mm toughened glass). The key feature is the structural glazing to the sloping side-walls, where patch fittings clamp on to tension rods which span between the upper and lower arches. The fittings support 2 x 1m panels at each corner. The advantages of this system over a conventional framed glazing alternative is the relative increase in light transmission allowed by the former (1.5 per cent obscurity) against 5 to 10 per cent with the latter.

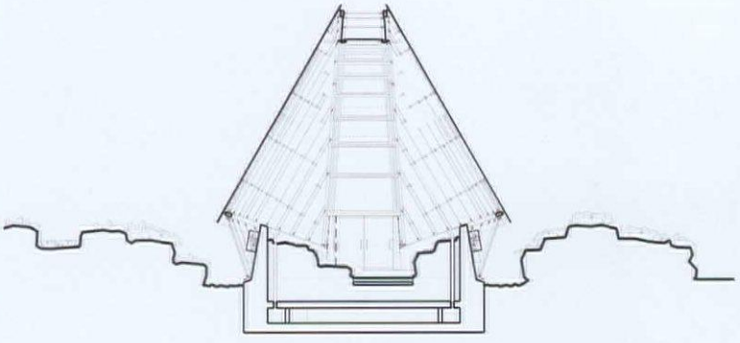
The architect has succeeded in creating what will be a new magnet for visitors, and has stayed true to the tradition of the iron and glass generation who combined creativity with economy of means. PAUL FINCH

Architect
Wilkinson Eyre, London
Greenhouse engineer
Green-Mark International
Structural engineer
Dewhurst MacFarlane
Services engineer
Atelier Ten
Photographs
1, 3, 4, 5, Nick Guttridge
2, Wilkinson Eyre

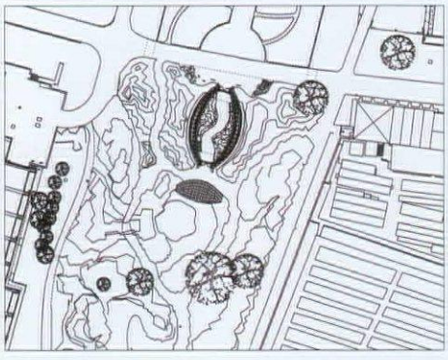
2
Steel flats were preferred to circular hollow sections.
3
Low-iron glass gives extraordinary transparency.
4
Blind system uses pulleys and carrier cables to span between concrete wall and upper arch.
5
Steel arches taper towards the top. The glazing 'skirt' provides air inlets.

ALPINE HOUSE, KEW GARDENS, LONDON

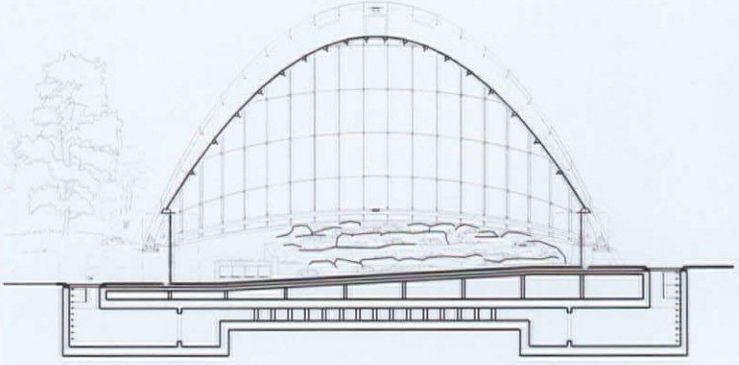
ARCHITECT
WILKINSON EYRE



section looking north



site plan showing north-south axis



section looking west showing sloping through route



3



4



5

INTERNATIONAL ARCHITECTURE COMPETITION

LIVING STEEL'S INTERNATIONAL COMPETITION FOR SUSTAINABLE HOUSING

CALLS FOR EXPRESSION OF INTEREST

8 billion people, 193 countries, 1 globe, 1 challenge...

Living Steel, a worldwide programme to stimulate innovation in the design and construction of housing, has launched the first of it's international architecture competitions to take on the challenge.

The first competition is underway with the call for expressions of interest to design sustainable housing in India and Poland, with the winning entries in each country being built. The buildings will be designed to advance the concept of sustainable housing, demonstrating the value and performance of steel in meeting the economic, environmental and social criteria demanded in each location. A second competition is planned for 2007 in other regions of the world.

The UIA approved competition will be judged by an independent jury, including Glenn Murcutt, Charles Correa, Jaime Lerner, Andrew Ogorzalek, James Berry and Nicholas de Monchaux (alternate).

Architects are invited to submit their expression of interest to participate in the competition by 1 December 2005. Up to 20 firms, 10 for each of the India and Poland locations, will be short listed to submit proposals for the design of the first demonstration housing developments. A range of firms, with different levels of experience and geographic practice, are desired.

Short-listed firms will be notified in January 2006 and provided with a full competition brief. Completed submissions are due by 14 April 2006 and the winners will be announced in June 2006.

Each short listed firm will be paid an honorarium of €10,000. The two winning submissions, one for each location, will be awarded a prize of €50,000 and a contract for building completion.

To learn more about Living Steel and obtain the expression of interest documents visit www.livingsteel.org or contact info@livingsteel.org.

Meeting the need for more sustainable housing is a tremendous challenge. Join us.

Steel. The strength to innovate
www.livingsteel.org

living Steel

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enquiry 42 www.arplus.com/enq.html



COPPER IN ARCHITECTURE AWARDS 12

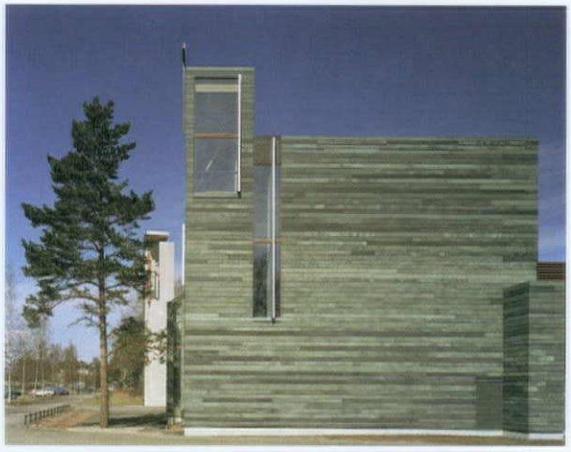
WINNER, EUROPE

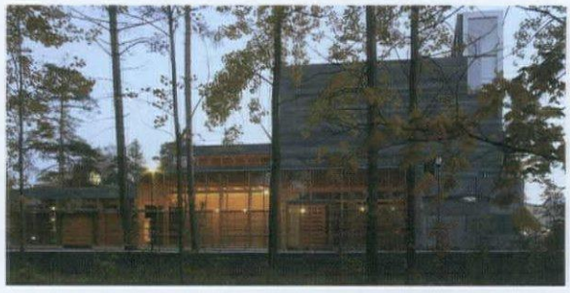
Laajasalo Church, Helsinki
Kari Jarvinen Ja Merja Nieminen

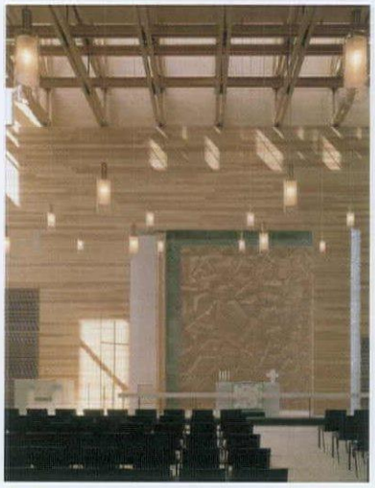
The church's main areas are on the street corner to be prominent; the copper-clad steeple is separate from the church to complete the approach to the building. The parish wing, with its everyday activities, is placed alongside the street. The large facades of the halls are clad in green-patinated copper sheets, with strips of 150, 200 and 250mm varying at random. The brown-patinated light towers on the yard side shine like lighthouses at night; during the day, they let in sunlight. The height and character of the interiors vary, highlighting each functional space; from the low, smooth ceiling in the foyer, to the taller pergola hall between interior and exterior, beyond which is the luminous church hall.

Interior surfaces areof pine and birch plywood boarding and acoustic wood louvres. The floors are made of oil-treated pine planks, giving the impression of a music box or wooden container. Wall and ceiling structures are made of glulam in the form of pillars and stiffening boards. The artwork of cross-end cuts of wood in the altar is partly framed by copper sheets. Specialist contractor: Outokumpu/Levykaksikko. Photographs: by Jussi Tiainen except night view which is by Arno de la Chapelle

Judges' comments
A beautiful church where copper has been used in 'strata', almost like a cliff face, with soft colours and controlled tones that will develop over time, adding to the harmonious relationship with its natural landscape setting. In contrast to Feilden Clegg Bradley's Queen Mary University (p82), the build-up of copper panels is concealed with flat, striated surfaces creating an extreme horizontality and tactile quality. The light, airy interior spaces also possess a strong quality and all the materials used blend harmoniously.







These awards are the 12th iteration of an event celebrating the use of copper in architecture in all its various forms. The jury this year was chaired by the editor of The Architectural Review, Paul Finch. It comprised Laurence Bain of Bain & Bevington; Craig Casci of Hamilton Associates; Stas Louca of Glas Architects; and Gordon Talbot of Ian Ritchie Architects.

The judges welcomed the range and quality of the schemes submitted, though noting that some of the photography and presentation did not do the schemes justice. The winning, highly commended and commended schemes were considered excellent examples of designs which were inherently interesting, and which exploited the attributes of copper to the full.

It was hoped that the expansion of the awards to encourage a wide European entry would continue on future occasions.

EUROPE

Shortlisted schemes

Popstage Mezz, Netherlands, Erick van Egeraat; **Debrecen University building, Hungary**, János Megyik; **St Henry's Ecumenical Art Chapel, Finland**, Sanaksenaho Architects; **Ice Hockey Federation building, Switzerland**, Tilla Theus und Partner



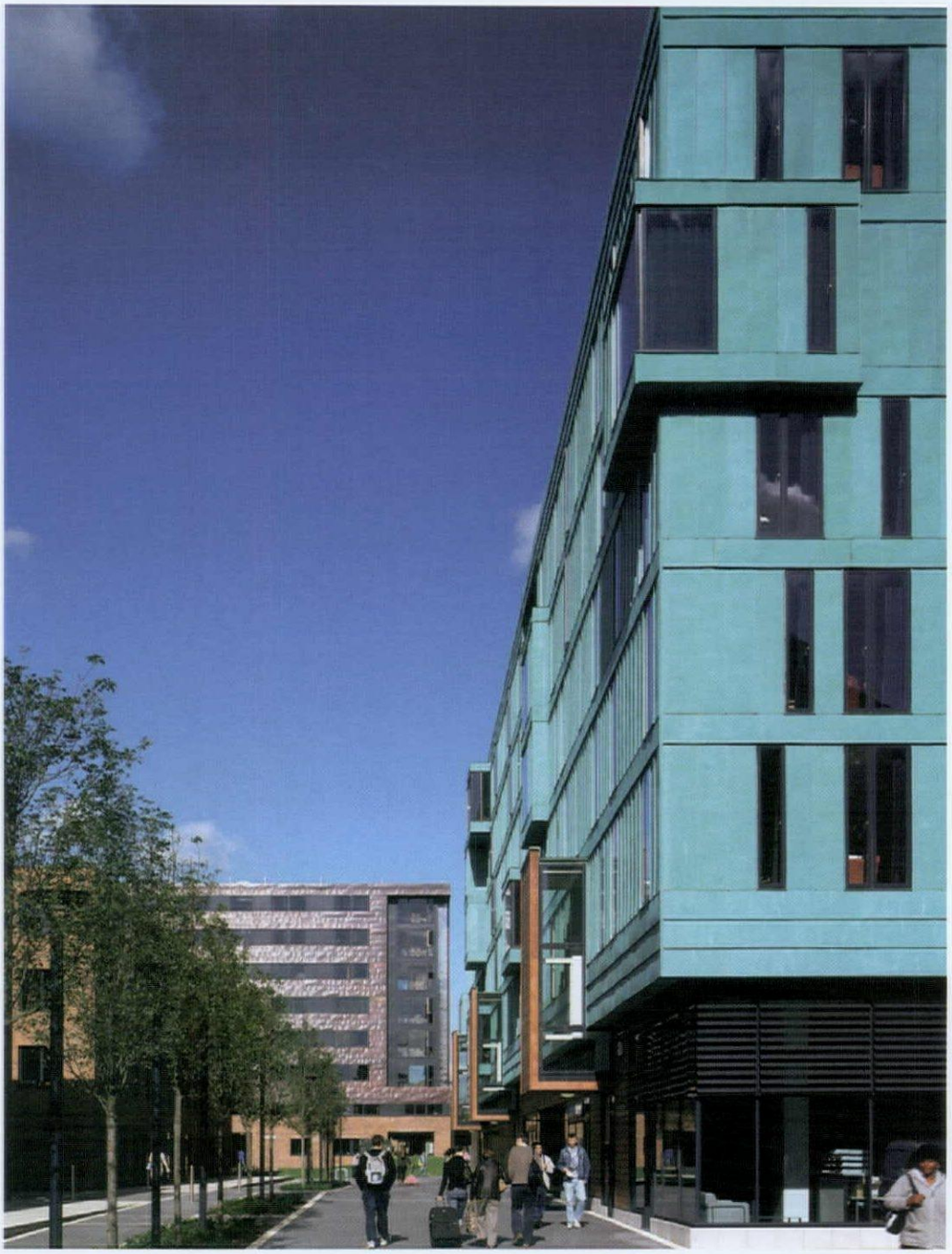
JOINT WINNER, UK

Westfield Student Village, Queen Mary University of London
Feilden Clegg Bradley

Westfield Student Village is one of the largest new student residence schemes in Britain, and the largest in London, with 995 bed spaces in flats and maisonettes. The scheme includes ancillary facilities with a canal side café/bar, shop, common room and a laundry.

The Student Village comprises six buildings constructed in two phases; three four-storey brick courtyards and a brick pavilion, which formed phase 1 of the work, and two copper-clad buildings on the 'exposed' public edges of the site, which formed phase 2. The disposition of the buildings creates landscaped spaces with distinct characters and levels of privacy, off a hierarchy of routes.

The copper cladding package was at the time the largest subcontract of its kind in Europe, with an approximate area of 9000m^2 of both pre-oxidised and pre-patinated copper. The copper cladding forms the main cladding material for the two taller perimeter blocks to the campus, it complements and contrasts with the more solid brick elevations of the lower courtyard blocks.
Specialist contractor:
T & P Roofing
Photographs: Peter Cook



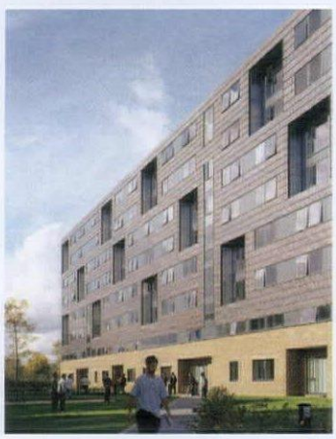
UK

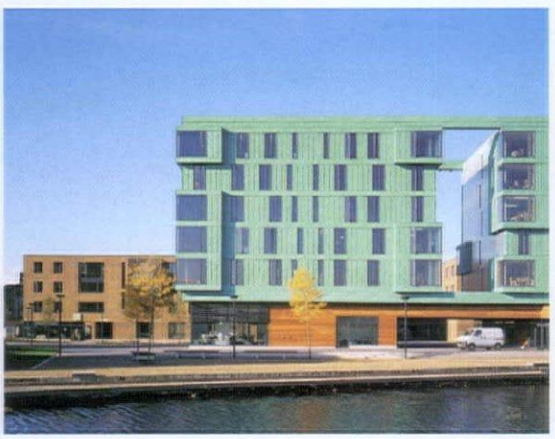
Shortlisted schemes

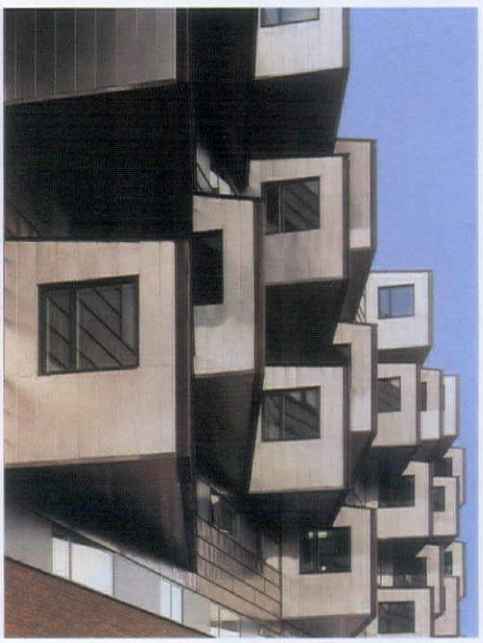
Caldicott Performing Arts Building, Slough, Buschow Henley; **Perth Concert Hall**, Building Design Partnership; **Butterfly House, Sussex**, Chetwood Associates; **Royal Geographical Society study centre, London**, Studio Downie Architects; **InfoLab21, Lancaster University**, FaulknerBrown.







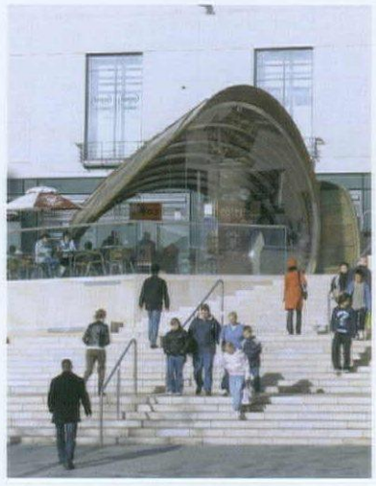




Judges' comments

This substantial development seems unexpected in its waterfront, park-side context, generating a serene but urban environment. The design excels in synthesising budgetary restrictions, a tight brownfield site and other constraints. Copper is intrinsic to the 'honest', thin-skin approach to facade design that enables a break-up of mass and a fenestration regime reflecting the discipline of accommodation requirements. Everything fits with an impressive dimensional rigour. The project shows that, even with the budgetary constraints of higher education, architecture of a high quality is possible for student dwellings, using the qualities of copper to contribute to a mixed urban landscape reflecting this university's admirable aspirations.

JOINT WINNER, UK



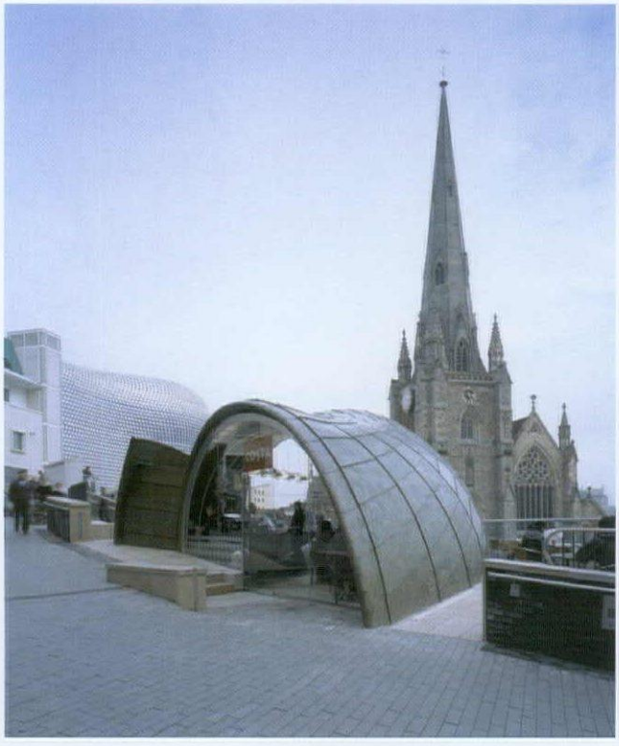
Spiral Café, Birmingham
Marks Barfield Architects

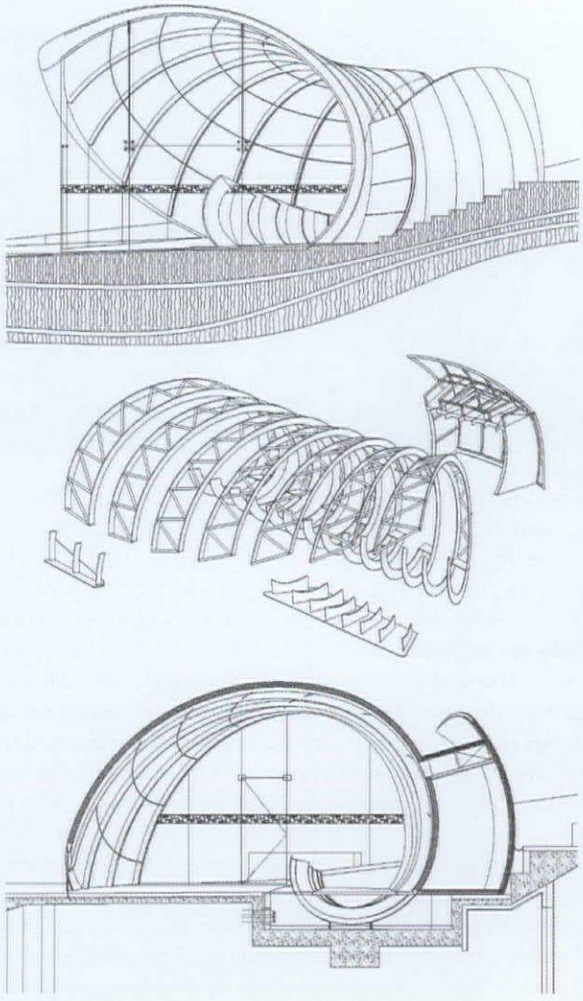
Located in St Martin's Square, the new public square and centrepiece of Birmingham's new Bullring development, the Spiral Café is a distinctive shell-like enclosure inspired by the Fibonacci principles of growth in nature. It unites the timeless principles of geometry with modern construction techniques.

The Café is formed by eight curved structural ribs which enclose the seating and servery space. A frame attached to these ribs forms a rear annex for storage. The ribs pass beneath the level of the floor, into a glazed pit emerging to form the bar separating the servery from the public space of the café.

The superstructure of the café is painted plasma cut mild steel plate, connected by CHS mild steel sections for lateral support. This is skinned with a plywood timber decking using a warm roof construction, and clad externally entirely with post-patinated copper clad between the ribs with an SS capping piece along each rib line.

The café was clad in a relatively traditional manner. After the external copper work had been completed, Andy Elton, an artist specialising in patination, was commissioned to apply a coloured finish to the external cladding, resulting in a rich, textured and durable exterior. Contractor: Thomas Vale

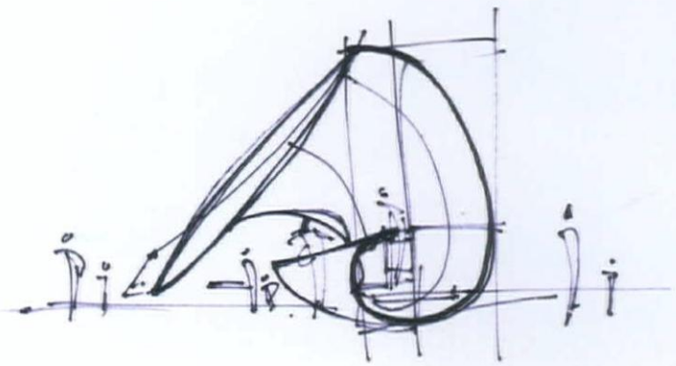






Judges' comments

Commissioned to add focus to an overly open public space, this coffee shop is an artistic response at a modest scale to a challenging, major urban site. It fully exploits a geometric idea to generate an intriguing form that is nonetheless functional. This is a simple but difficult-to-realise concept, delivered in a way that is not clichéd. The spiral form maximises the architectural characteristics of copper and the surface patination treatment is beautifully handled, resulting from collaboration with an artist. The rustic surface feel of the copper provides a marked contrast with the nearby Future Systems' building and works well against the neighbouring stone church.







COMMENDED, UK

Maggie's Highlands Cancer Care Centre, Inverness
Page & Park Architects
Charles Jencks Landscape Design

Maggie's Highlands Cancer Caring Centre at Raigmore Hospital, Inverness is a one and a half storey copper-clad timber frame building designed to reflect and harmonise with the adjacent landscape, designed by Charles Jencks. The building aims to provide a supportive and homely environment for the users of the centre – essentially anyone with or involved with cancer.

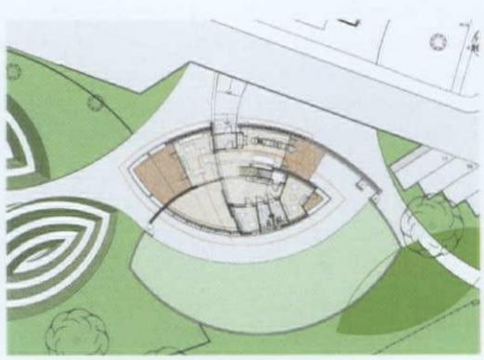
The building is conceived as an inversion of one of the vesica-shaped spiralling landscape mounds near the building, combining to create a trilogy of interconnected forms. The walls angle away from the vertical by 10 degrees and wrap around to create a rising spiral shape that can be read from both inside and outside.

The external envelope is clad predominantly in pre-patinated copper panels, wrapping around the spiral in rising 'bands', responding to and emphasising the spiralling shape and echoing the stepped form seen on the paths of the landscape mounds. The copper cladding is brought inside the building to blur the perceived boundaries between inside and outside, while clearly identifying the basic spiral form.
Specialist contractor: W. B. Watson



Judges' comments
An iconic building making dramatic use of copper, this project has a clear intention to integrate architecture with landscape, although the transition was considered by some as a little too hard-edged to allow the merging of building and its surroundings. Nevertheless, this is without doubt architecture as therapeutic environment.



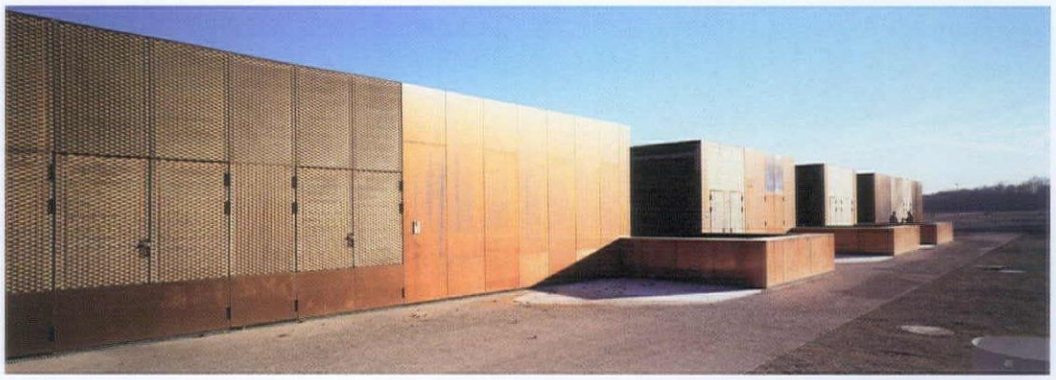


COMMENDED, EUROPE

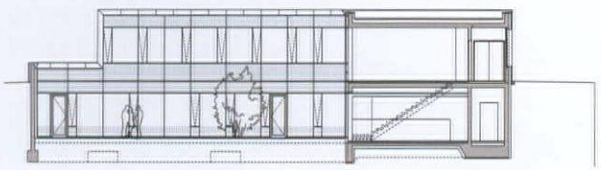
Service Centre, Munich
Staab Architekten

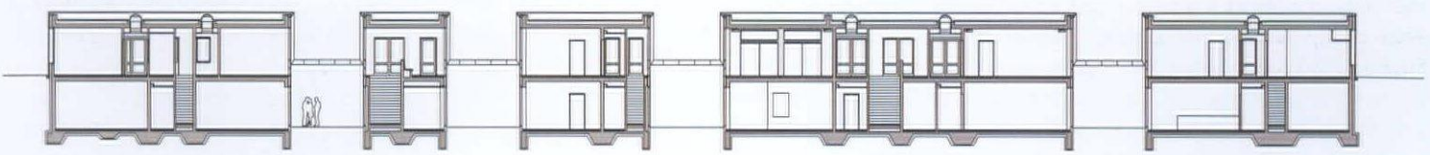
Like a bar of copper, the building unassumingly crouches on its site. Its precise, simple shape, and its copper facade make it blend into the colours of the Theresienwiese. The facade will accumulate patina to match the colour of the slope behind it. The only aspect of the building's facade that reflects its inner workings is the surface pattern of closed and perforated copper sheeting. Areas used for movement are glazed, and then protected from sunlight and vandalism by a perforated metal facade. Specialist contractor: Regensburger Metallbau. Photographs by Werner Huthmacher.

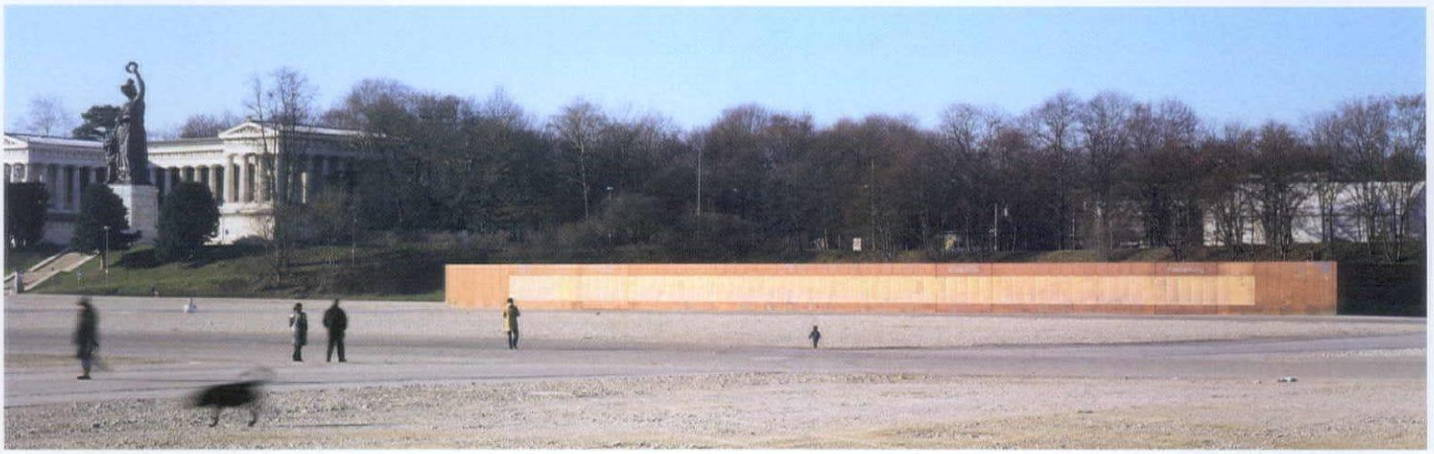
Judges' comments
A bold, monolithic building, forged from a perforated copper screen, which could be considered as a bar of gold in the landscape, particularly intriguing to visitors. A rigorously executed abstract statement, this is an extreme solution which works well in its sensitive location, possessing a calmness which modifies our sense of scale.

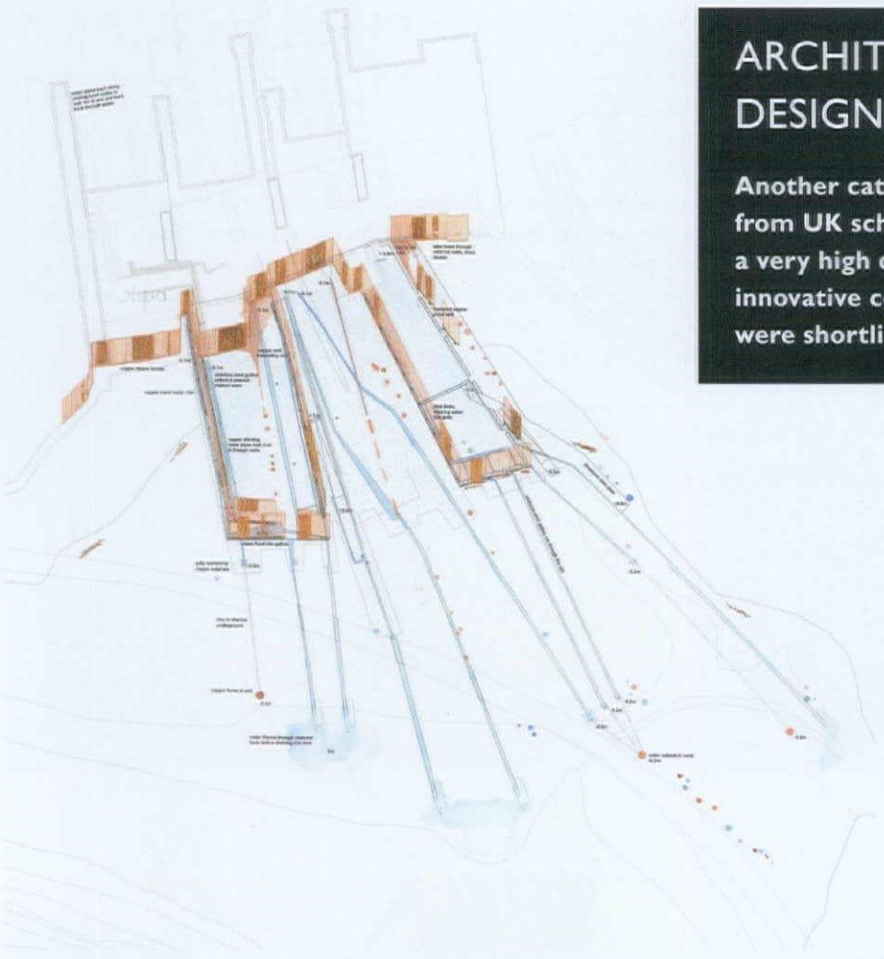












ARCHITECTURAL STUDENT DESIGN AWARDS, UK

Another category enjoying an increase in entrants from UK schools of architecture, generally with a very high quality of presentation exhibiting innovative concepts. From the ten entries, three were shortlisted.

Judges' comments
This project stands out in its use of copper as an intrinsic part of the programme for the building, not just as a cladding material. It addresses current architectural interest in the environment and seeks to make water and its treatment a subject of interest not secrecy.

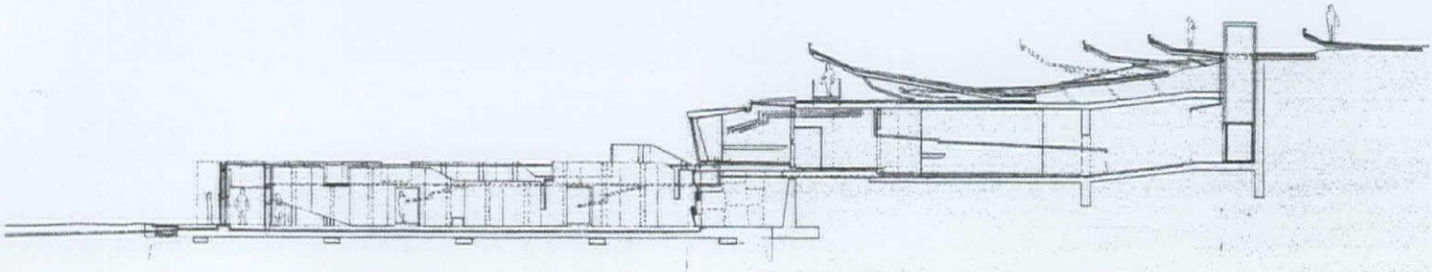
WINNER



Water Bottling Factory, Oslo
Poppy Kirkwood, the Bartlett, London

This project is located next to the Maridalsvannet Lake in Norway. The lake supplies Oslo with drinking water, therefore public access is prohibited. The programme is to make the water accessible at this source. The building, a water-bottling factory and public pavilion, is a contemporary well, drawing people to the site. The intention is to provide a visual register of water on the site by staining the ground. The approach is to design the 'stain plain' and then investigate how to control corrosion on the surface of the building to produce the desired staining effects.

Copper is chosen as the material for the ribbon facade which weaves in and out of the building. The project highlights the potential of copper as both a 'responsive' and 'active' building material: copper provides an opportunity to manipulate the building fabric to create an architecture that continues to evolve after completion.

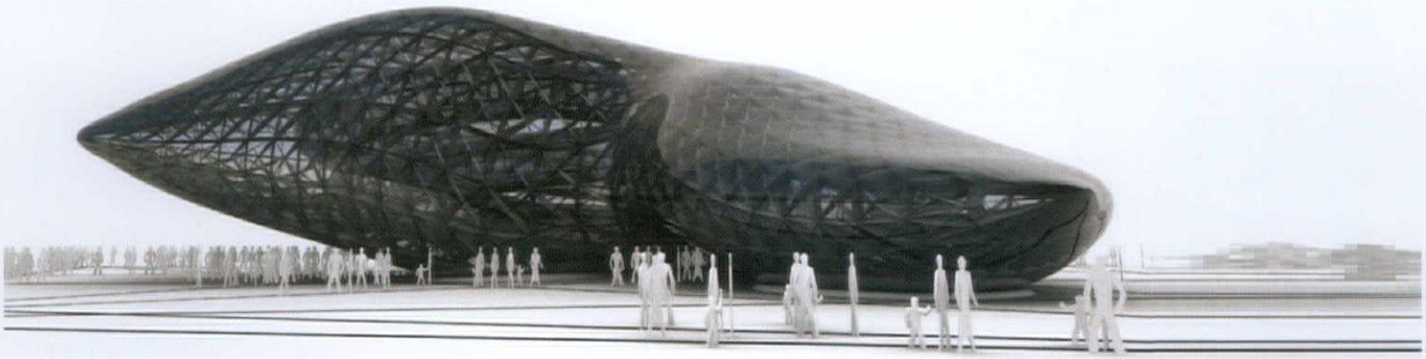


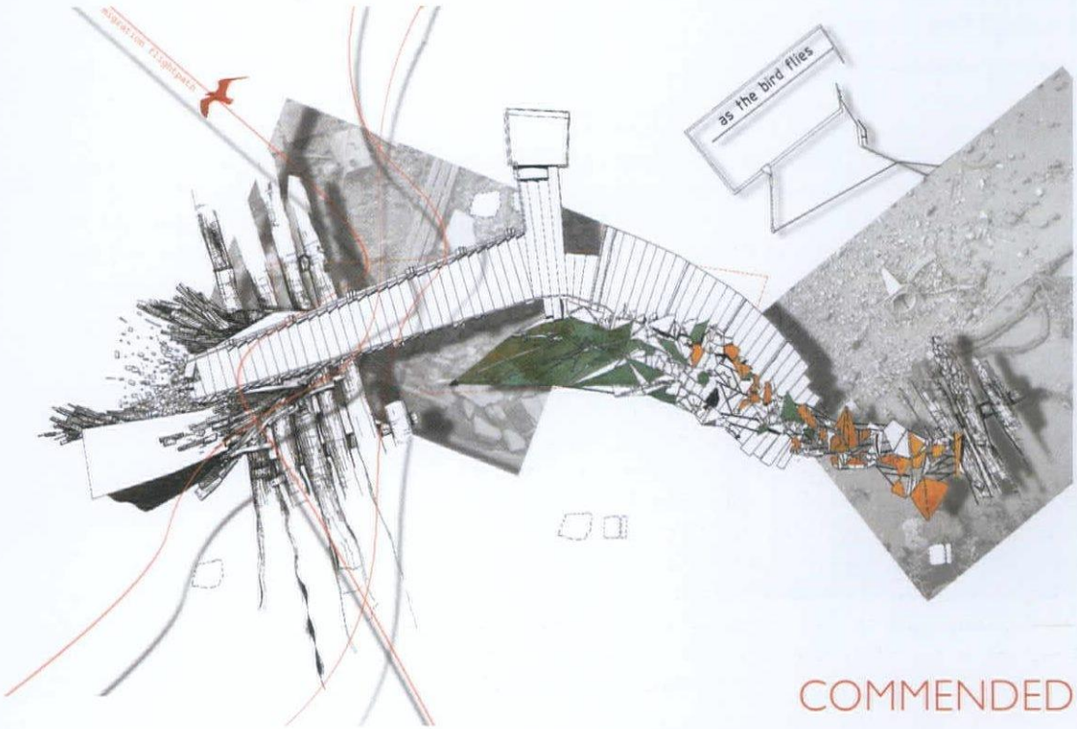
COMMENDED

Pavilion Cu29
Stefan Krakhofer, University of East London

The aim was to reduce all structural elements into two-dimensional elements so that they could be laser cut out of two-dimensional metal sheet. The copper cladding extends the 'time-space' continuum architectural concept by exhibiting decay over time.

Judges' comments
Excellent, sophisticated visualisations make this elegant building easy to imagine in the flesh. Copper and glazing form a successfully resolved surface pattern where structure and skin can be seen to coordinate in a clever way. This is a pavilion that, if built, would deserve to be experienced in its own right.





Judges' comments
An imaginative project using copper elements to create a conceptual wing shelter, suggesting metaphors of birds and tidal flow. It takes forward the concept of a 'hide' to observe wildlife, while reflecting the essence of migration and change – particularly appropriate in the context of moving water.

COMMENDED



The Thames Wharf Bird Hide, west London
James Curtis, Oxford Brookes University

The bird hide sits in water in west London opposite the London Wetland Centre, acting as a calm place for the observation of albatrosses. The building had to appreciate existing conservation issues. Copper was used to allow the hide to act as a camouflaged lightweight wing, just as twitching convention dictates. The use of copper in its preserved and pre-patinated state allows albatrosses and wildlife alike to feel at home in its greenness, further blending machine, bird, man and structure.

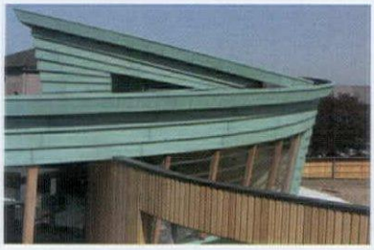
WINNER

Maggie's Highlands Cancer Care Centre, Inverness
Page & Park Architects
Copper contractor: W. B. Watson

Already commended in the Architectural Design category (p86), the Craftsmanship judges could not find fault with this project. Jointing details are all executed thoughtfully and the shiplap panels relate beautifully to the gently curved elevations.

CRAFTSMANSHIP

Assessed by specialist judges, this category recognises the importance of craftsmanship in realising the designer's aspirations working with copper in architecture.



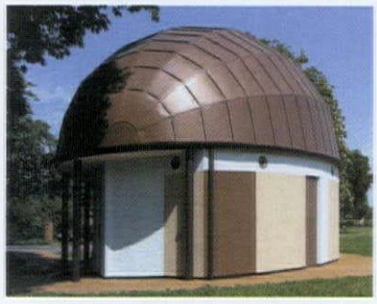




HIGHLY COMMENDED

Victoria Avenue Public Convenience, Cambridge
Freeland Rees Roberts Architects
Copper contractor: CEL

The chestnut form of this roof could only have been carried out successfully in copper and its success lies in careful setting out and an attention to detail that made this project such a close contender to winning.



COMMENDED

Redington Road, London
Monahan Blythen Architects
Copper contractor:
Salmon Plumbing

The architects for this barrel-vaulted roof required a mix of standing seam and shingle techniques – challenges which the contractors met with excellent copper work.

COMMENDED

Disney Place, London
Malcolm Pawley Architects
Copper contractor:
Cu Tech Zn Ornamental

This unusual design has irregular copper cladding based on a grid generated by vertical gutter sections. It incorporates banks of small square glass blocks that were all set out and completed to a high standard.

Copper in Architecture is part of the European Copper in Architecture Campaign, promoted by Copper Development Association and participating copper fabricators. It offers architects technical advice, literature (including a 120-page technical manual), RIBA assessed CPD seminars and contractors' listings.

european copper in architecture campaign

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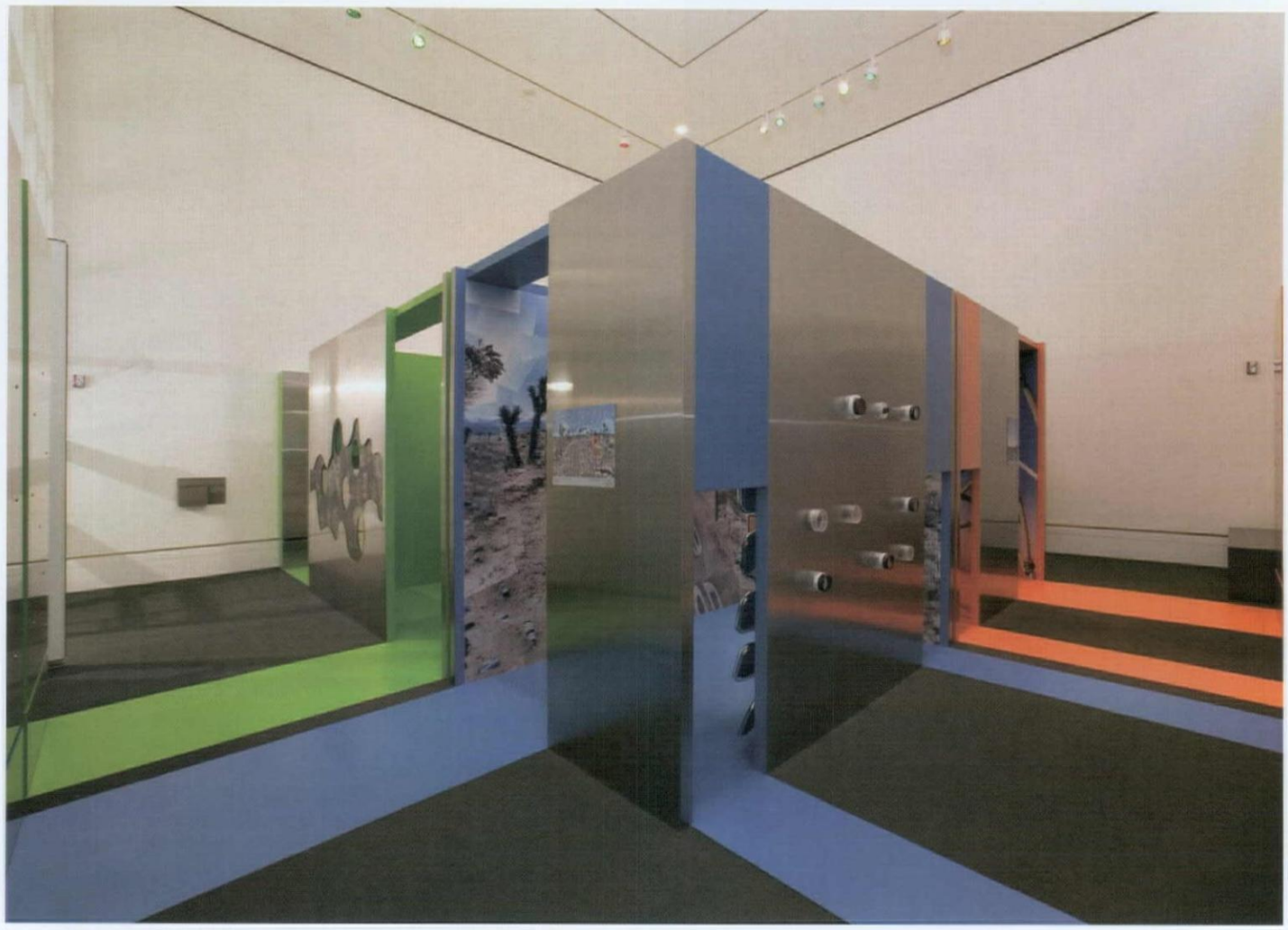
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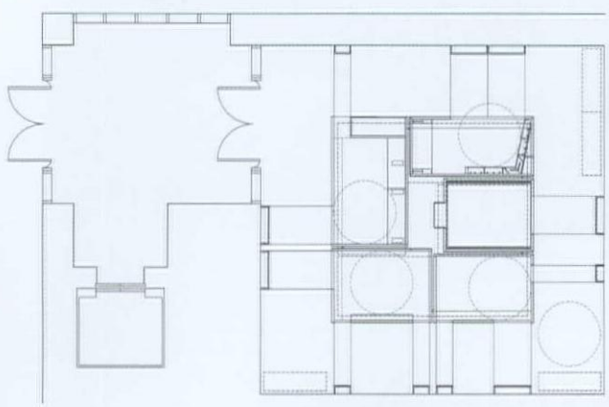
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1

Art education

Children can lose themselves in art in this colourful educational labyrinth devised for LA's Getty Center.



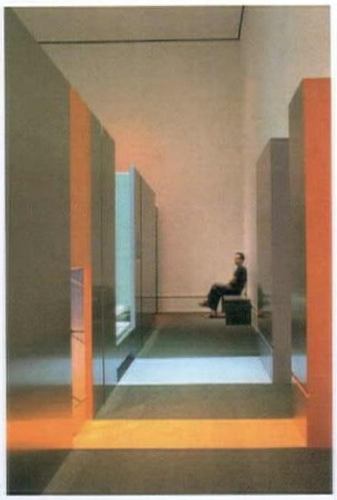
floor plan (scale approx 1:200)

Planning and construction of the Getty Center in West LA stretched out over 14 years (AR February 1998) and it has taken another seven to remodel the Roman Villa in Malibu, which will reopen to the public as a centre for the antiquities collection early next year. By comparison, the new Family Room in the J. Paul Getty Museum (within the Getty Center) was fast-tracked, but the 90sqm space was planned as meticulously as if it had been an entire institution. A hundred architects, artists and designers were invited to submit proposals. 'We wanted to get new ideas and fresh perspectives, rather than filter everything through our own thinking,' explains Peggy Fogelman, the Head of Education at the Getty. 'In the process, we educated ourselves.'

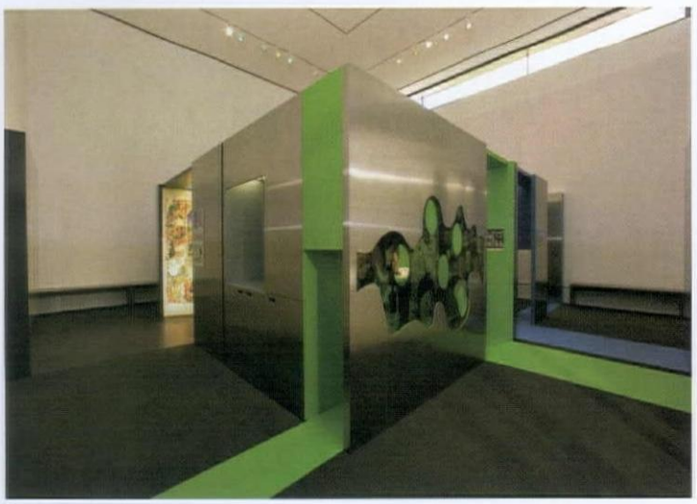
The LA-based partnership of Hadrian Predock and John Frane developed the winning proposal and collaborated with the client to create a joyful experience that brings children and parents together. The architects understood that children are much more intuitive and open-minded than most adults, but can easily get bored by the restrictions and labels in art museums. Their goal was to break down barriers between different generations and plug into the Getty's varied collections, while offering an alternative to the monumental, monochromatic and timeless character of its buildings. By contrast, the Family Room is intimate, polychromatic and spontaneous, but it respects Meier's geometry, even as it tweaks his grid.

Starting with a simple diagram that was inspired by a carousel – a circle in the square – Predock Frane developed a multi-cellular structure, in which a key work from each of six collections (of painting, sculpture, drawing, illuminated manuscripts, photography and decorative arts) can be engaged. The tubular metal sculpture by Martin Puryear on the plaza is transformed into a game of attaching

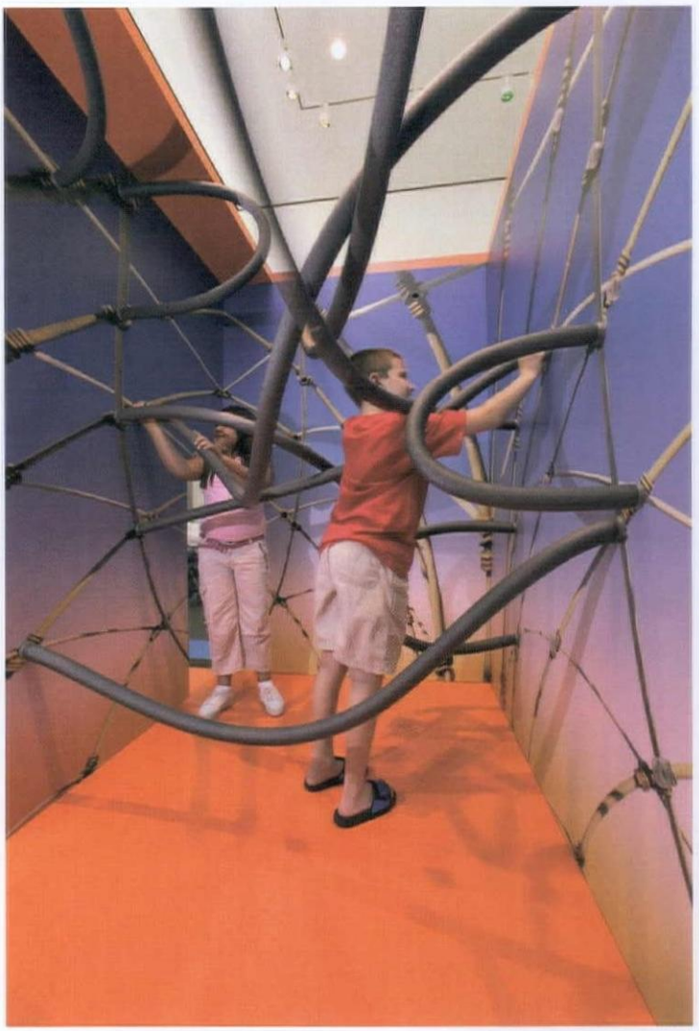
**FAMILY ROOM,
ART MUSEUM,
LOS ANGELES, USA**
ARCHITECT
**PREDOCK FRANE
ARCHITECTS**



2



3



4



5

foam tubes in different configurations. James Ensor's painting *Christ's Entry into Brussels in 1889*, provides an opportunity to make masks and add your own face to the crowded panorama. David Hockney's *Pearblossom Highway*, a photo collage of a desert highway, can be viewed through lenses set at different heights, which offer surprising vistas and a sense of how lenses change the way you see the world. An elaborate eighteenth-century French bed provides a retreat for younger children. A drawing and manuscript share the final enclosure.

These five alcoves, their intense colours cued to the art works they contain, serve as a labyrinth to draw people in and get them involved with a specific work. The exterior of this Rubik's cube is clad in a seamless skin of stainless steel, which is cut away at the height of a small child, and generates reflections. Objects and images are embedded in the perimeter wall and can be glimpsed through peepholes set at different heights, and these serve as clues in a treasure hunt. The idea is to provoke curiosity and encourage visitors to view the originals in the circuit of exhibition pavilions. Child development experts, curators and teachers offered advice, but Hadrian Predock relied on his own four-year-old daughter and eight-year-old son to test the architects' ideas, and ensure that they worked for that age group.

All museums emphasise education as a way of building an audience and increasing their relevance to the communities they serve. The Getty has deeper pockets than most and provides a service few other institutions can match. It pays to bus in school groups and provides trained specialists to interpret works of art. Kids who have never been in an art museum before are riveted by the experience, lingering far longer than adults as they puzzle out the meanings of a single work. MICHAEL WEBB

1
The alcoves are wrapped in a skin of stainless steel.
2, 3
Colour and play of reflections add to the sense of animation.
4
Energetic hands-on junior users.
5
Detail of lens in photography alcove.

Architect
Predock Frane Architects, Los Angeles
Photographs
All photographs by Elon Schoenholz/J. Paul Getty Trust, except no 5 which is by Jason Predock

Brass origami

Delicate planes of patinated brass fold around this imaginative extension to a house in south London.

Trinity Road in south London is a typical leafy Victorian suburb. Stolid brick houses with bay windows and big gardens exude an air of decorousness and prosperity. Yet even in a sleepy conservation area the urge to remodel is quite common. Here, however, Alison Brooks attempts something rather different. Commissioned to extend a Victorian house as part of a larger remodelling, she saw it as a chance to experiment, both with form and materials. More specifically, it intensifies her investigations into the use of metal that began when she worked with Ron Arad in the early '90s, and the idea of continuity – manipulating a single architectural material to perform a multitude of functions, so that spaces are 'wrapped' and tend to de-materialise.

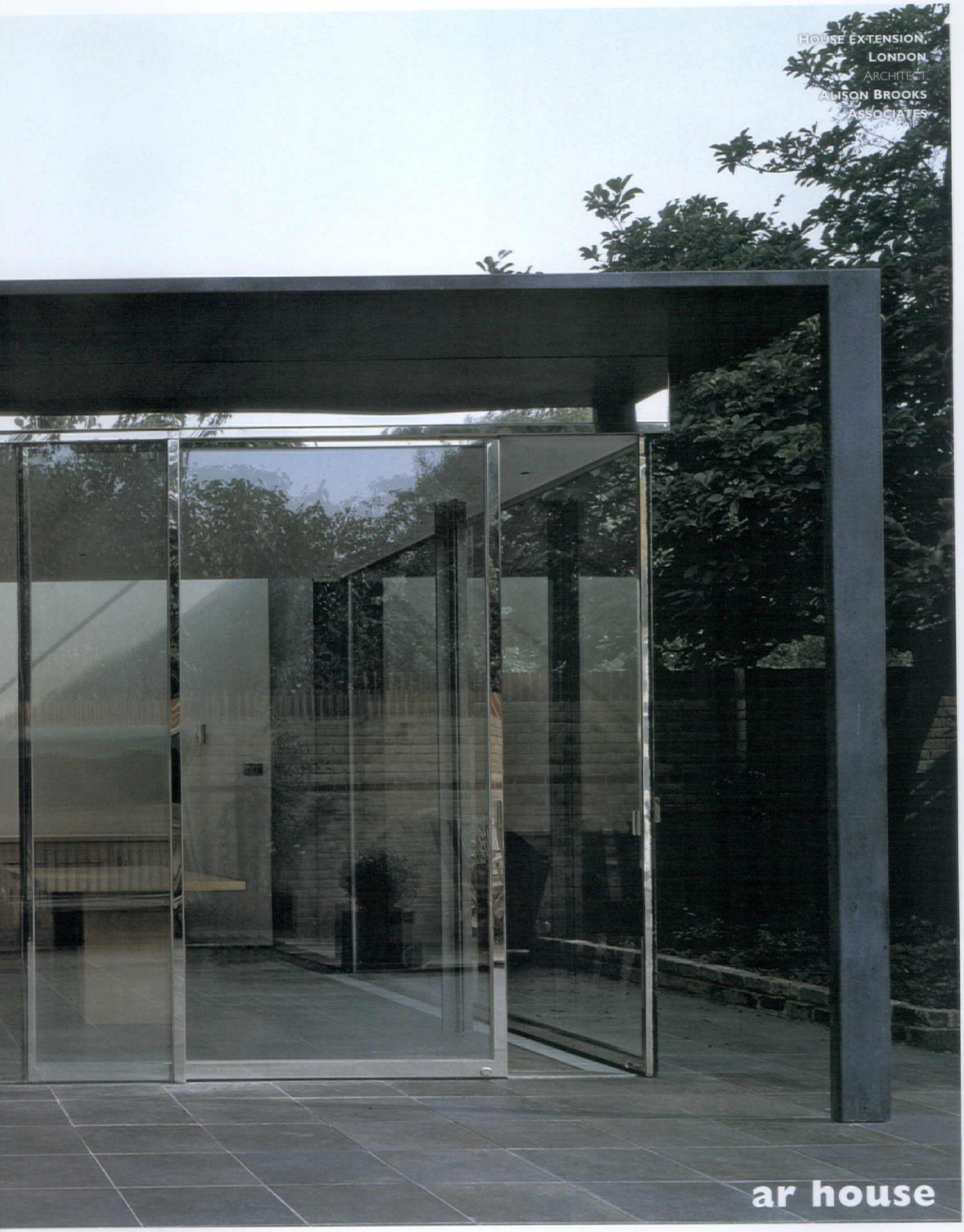
The extension opens up the house to rear, consolidating its relationship with the large garden. Brooks was adamant that the new architecture should not compete with the robust character of the existing Victoriana, so her tactic is to make the addition as intangible and ethereal as possible. But the outcome is not the stereotypical glass box. Instead, lightness is expressed through a single planar skin of patinated brass that is apparently cut and folded to form walls, roof, columns and benches. The exquisitely thin brass planes enclose a new kitchen, dining room and external terrace, as well as framing and filtering views to the garden beyond.

Though the crisp, orthogonal geometry was derived from simply folding a piece of cardboard, the actual construction was inevitably more complex and crafted. The richly patinated brass panels are, in fact, supported by a slim steel structure. Cor-ten was initially considered for the cladding, but it tends to bleed and stain before the coating of rust finally stabilises. By contrast, the patination of brass is gentler and its effects can be more closely controlled. Though not commonly used as a cladding material, brass is also harder (stiffer) than its closest relative copper, and more economical.

Brooks likens the construction process to the fabrication of a large-scale piece of jewellery. The 3mm thin sheets of raw brass



1
The new glass and patinated brass pavilion tactfully extends an existing Victorian house.


House extension,
London.
Architect
Alison Brooks
Associates

ar house



2

2
The pavilion is conceived as a series of thin folded planes.
3
Pared down architectural language does not attempt to compete with original house.
4
Views through to garden are framed and defined.
5
Mounted on a slim steel sub-structure, the brass planes are only 60mm thick.

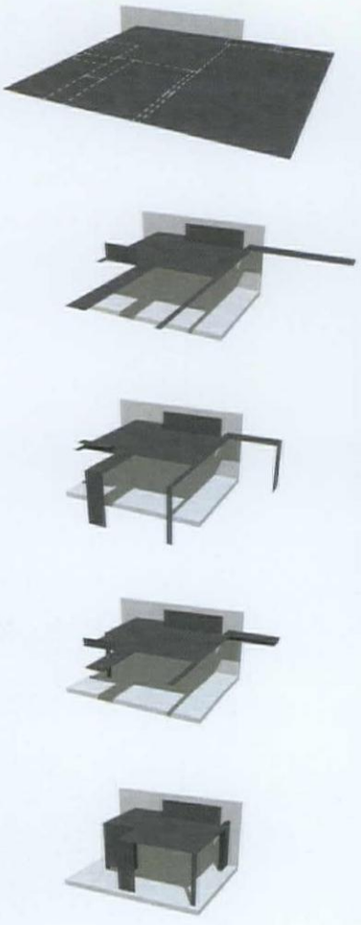


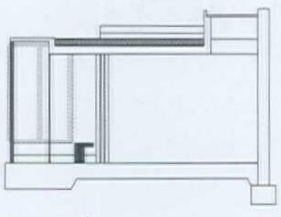
diagram of folding process

were cut and folded in a specialist metal fabrication workshop and temporarily assembled on site. The panels were then dismantled and removed to be patinated by hand. Varying the effects of acid and heat generates different hues, from pale blue to deep turquoise, but the patina also responds to the daily effects of the weather, so the panels have a genuinely chameleon-like quality. Finally, the patinated pieces were carefully reassembled. Full-height glazing adds to the sense of lightness and seamlessness and the composition is anchored by charcoal grey porcelain floor tiles.

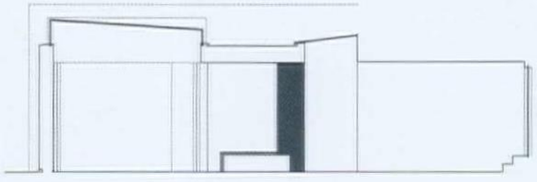
Thinness is another crucial aspect of this language of elegant abstraction. The brass panel constructions are only 60mm thick and, as the pavilion is seen from the upper storeys of the house, its roof is also a rigorously pared down structure, with an upstand reduced to 50mm from the more usual 150mm.

Though the pavilion is a meticulously crafted one-off, Brooks sees it as a useful prototype which feeds into an ongoing process of experimentation and discovery. The practice is working on a major housing development in Cambridge and plans to incorporate off-the-peg brass cladding panels (developed by copper specialists KME) in a six-storey apartment block. In an era besotted by conspicuous gestures, it is especially pleasing to see humble or disregarded materials used imaginatively. Brooks' architecture has always reflected a concern for making and materials, and her latest project consolidates this lineage. CATHERINE SLESSOR

Architect
Alison Brooks Associates, London
Metal fabrication
John Desmond
Photographs
Dennis Gilbert/VIEW

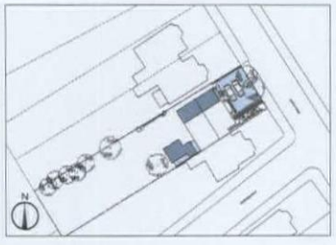


cross section

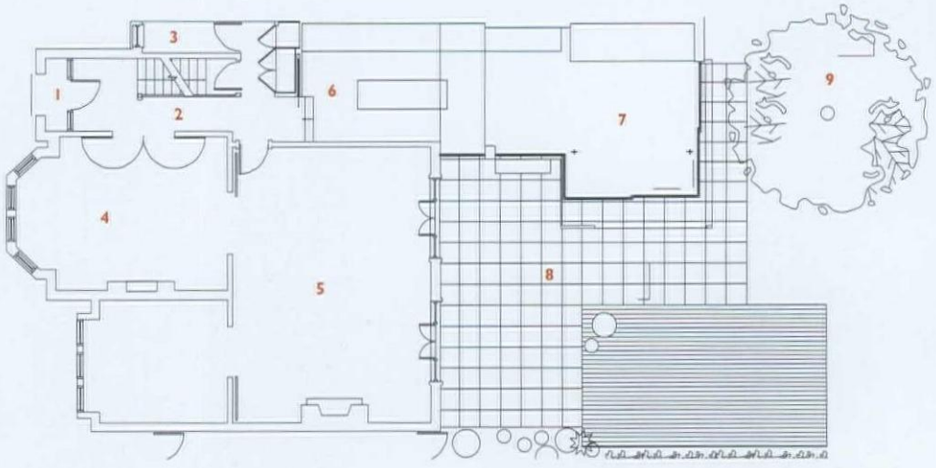


long section

1 entrance
2 hall
3 wc
4 dining room
5 living room
6 kitchen
7 dining pavilion
8 terrace
9 magnolia tree



site plan

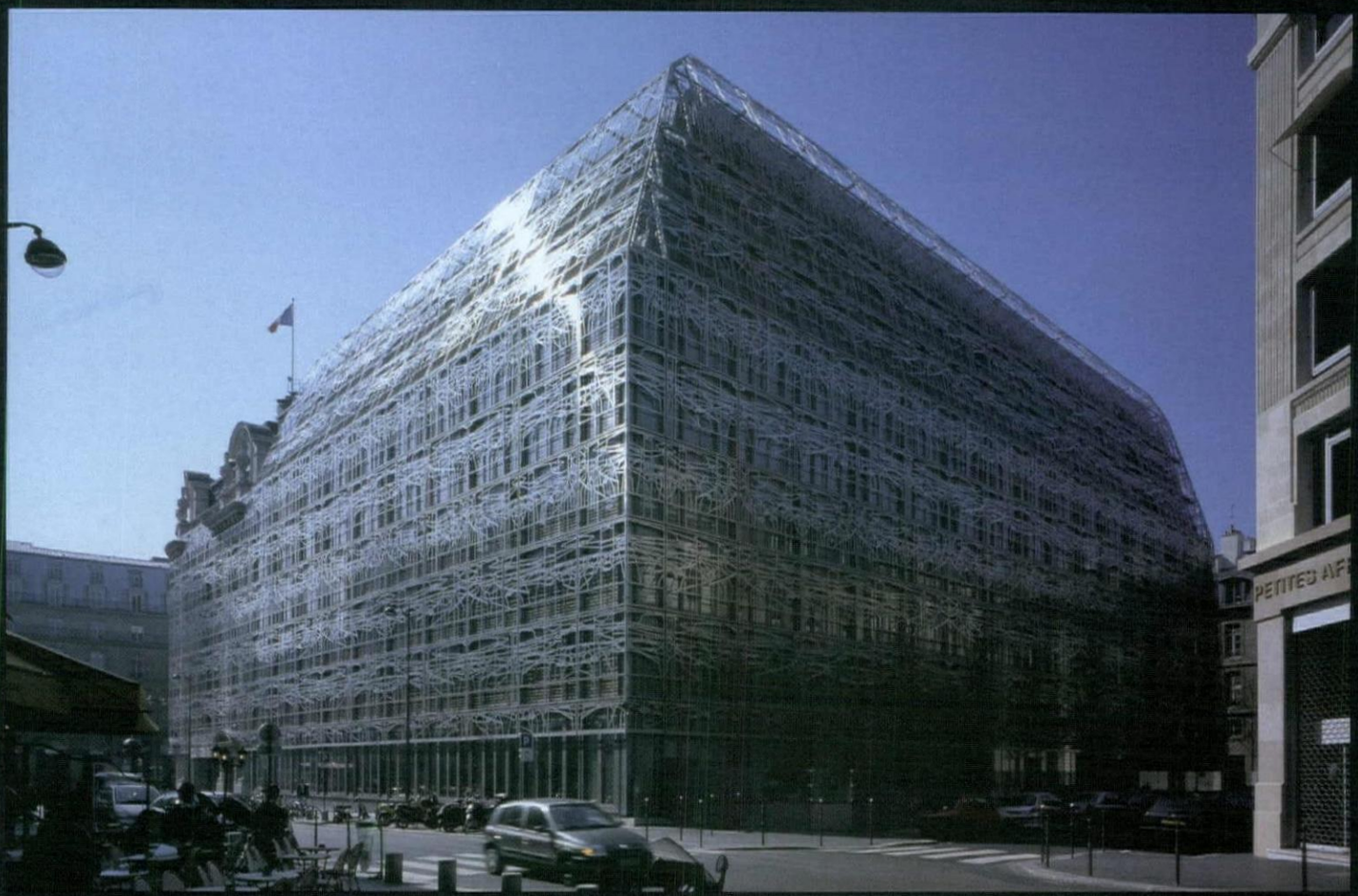


ground floor plan (scale approx 1:200)

HOUSE EXTENSION, LONDON

ARCHITECT
ALISON BROOKS ASSOCIATES

product review



501

501 ARCELOR
The Ministry of Culture and Communications building in Paris, recently modified by architect Francis Soler, features 5000sqm of steel mesh by Arcelor. To harmonise the two buildings, each from different periods, the screen also moderates the building's exposure to solar gain. The screen is made from laser cut Inox Uranus 35N steel plates, 12mm thick.

Enquiry 501 www.arplus.com/enq.html

501



Rob Gregory steps outside to look at exterior envelopes.



3



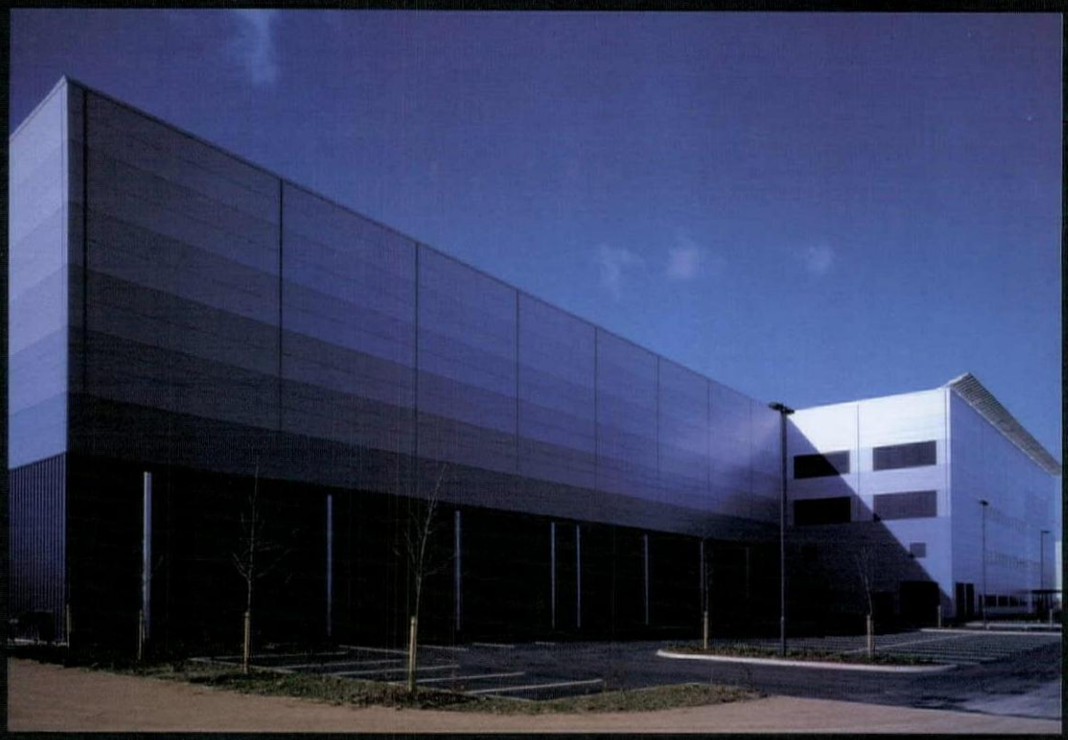
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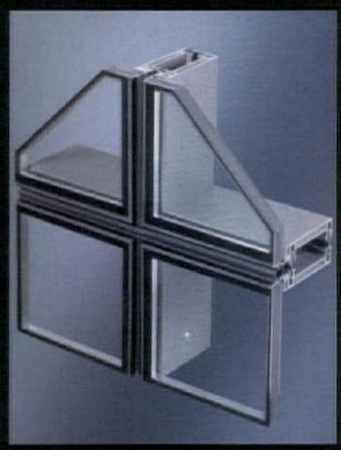
5

502 CORUS
The building has become known as Godzilla, which is presumably something to do with its horrific scale; but green and scaly it's not. Instead, Colorcoat Prisma® by Corus has been used on this recently completed distribution centre in Bedford in the UK, to help enliven its vast skin. A range of six bespoke shades of blue, with a metallic sheen, have been used to help improve its visual impact. Introduced as a premium product to the construction industry, Colorcoat Prisma was developed from client demand for an unusual, appealing colour solution that would at the same time provide optimum protection to steel architectural wall cladding.

Enquiry 502 www.arplus.com/enq.html



502



504

503

503 TECU
In western Rotterdam, this atrium hospitality island features metal shingles made of TECU® Gold, a new copper alloy. The original bright colour remains when used in interior applications, however if exposed to weathering it undergoes its own characteristic changes, turning from an initial matt shade to a matt golden yellow colour and, gradually, a darker golden hue. TECU® Gold is a recent addition to the TECU® product range, and can be readily combined with other copper surfaces of the same brand and with many other materials.

Enquiry 503 www.arplus.com/enq.html



504 SCHÜCO
To reduce construction time, without losing quality or freedom in configuration, Schüco has developed the Skyline range; an integrated facade system. They claim that conventional mullion/transom facades are less practical as individual profiles are delivered to the site before being mounted onto the building. For integrated facades, however, which have been fully prefabricated and glazed in the workshop, they are simply transported and hoisted into position by crane. As a result, installation times on site are significantly reduced allowing trades to promptly start on interior fit-out work prior to occupation.

Enquiry 504 www.arplus.com/enq.html



enquiry 27 www.arplus.com/enq.html

UNIVERSITY OF BATH

Department of Architecture and Civil Engineering

Professor/Reader/Senior Lecturer and Lecturer

The Department of Architecture and Civil Engineering is seeking to make two full-time permanent appointments, one a Professor/Reader/Senior Lecturer and the other a Lecturer. Applicants should carry out research in either:

Sustainable Design, with a preferred emphasis on environmental design or the sustainable use of building materials.

Architectural Computing, with a preferred emphasis on modelling the environmental implications and performance of new buildings.

Applicants for either post should possess a PhD and preferably have a background in architectural design. For the senior appointment applications are invited from internationally recognised scholars who have a proven track record of top-ranking publications, obtaining research grants and academic leadership. For the Lectureship, applications are especially invited from candidates in the early, post PhD phase of their career.

These appointments are to consolidate the research strengths of the joint Department, Grade 5 in RAE 2001, and to foster interdisciplinary research with the Civil Engineering members of the Department. A willingness to teach students at all levels is required.

Further information about the Department, its courses and research can be obtained from the website http://www.bath.ac.uk/ace or by contacting Sally Tuffin (S.Tuffin@bath.ac.uk) +44 (0)1225 386693 or Professor Vaughan Hart (absvh@bath.ac.uk) +44 (0)1225 386361.

Further particulars are available from the Director of Human Resources, University of Bath, Claverton Down, Bath BA2 7AY (tel: +44 (0)1225 386026; email: c.pearson@bath.ac.uk) or phone the 24 hour answerphone service on +44 (0)1225 386924, textphone +44 (0)1225 386039, quoting reference 05/350.

Alternatively further details can be found at http://www.bath.ac.uk/jobs

Closing date for both applications: 31 October 2005.

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900 www.arplus.com/enq.html

Ecophon

The architectural consultant responsible for designing an important new children's hospital in Dublin, Ireland has made extensive use of Ecophon's Focus XL product. Specifying a 2000 x 600mm module for the ceilings over circulation areas, the company's Meditec E system has also been used within wards and treatment rooms. Specialist subcontractor, Kehoe Acoustics, installed close to 3000sqm of the Meditec E in units such as EEG, Dermatology and a Hepatitis C clinic, as well as spanning corridors with the plank-style Focus XL system.



901 www.arplus.com/enq.html

Wrightstyle

Size does matter. A successful project related fire test in Hong Kong has demonstrated that Wrightstyle have increased the dimensional integrity and fire resistance of WSL F glass, while reducing its thickness to 32mm. WSL F glass 60/60 can go to a maximum panel width of 2.05m and a maximum height of 4m. WSL F glass 90/90 can be produced in 4.4m^2 panels, at a maximum width of 1.8m and height of 3.5m.



902 www.arplus.com/enq.html

Stone Age

For those who require more individuality over standard fixtures and fittings within their home, look no further than Stone Age Masonry, a sister company to Stone Age, for some truly bespoke and individual design. Stone Age Masonry has the ability to tackle almost any design request: from staircases to fireplaces, kitchen worktops to wet-rooms, bathroom basins to patios and even garden furniture. Since establishing the business in 2000, the company continues to experience a demand for beautifully crafted and customised pieces.



903 www.arplus.com/enq.html

Nova Metals

Nova Metals have introduced the range of Gagecast®, a cast metal wall surfacing available in stainless steel, aluminium, bronze and many other alloys. Suitable for a variety of interior architectural applications, patterns offer high lustre, relief, and durability. Twenty-eight designs are standard, however custom collaboration is encouraged. Gagecast® can be used in many installations such as corporate and hotel receptions, car showrooms, and many other exclusive architectural requirements.



904 www.arplus.com/enq.html

Euroheat

Leading heating stove distributor Euroheat has formed a partnership with Danish stove manufacturer HWAM, strengthening its position at the forefront of the market. Developed with architects, the range includes Vivaldi, Mozart and Monet. The stoves are very efficient with environmentally friendly combustion and DIN Plus approval. The move means that Euroheat specialist heating stove retailers across the country can now offer their customers both contemporary and traditional choices backed up with Euroheat's excellent technical and sales support.



905 www.arplus.com/enq.html

ASSA

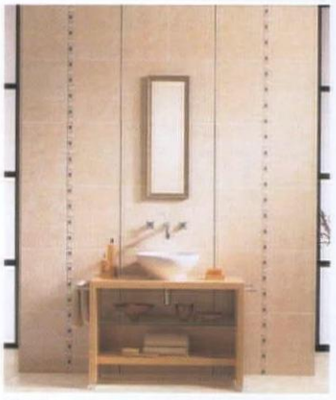
Drawing on its vast experience in the design and development of physical security products, ASSA has launched the Evolution range of locks. The range is the first ever to combine mechanical and electromechanical locking and escape functions in a single device and the first to incorporate high-security hookbolts as standard. There are currently five solenoid handle locks and three motor locks in the range which will now be supplemented by a series of complementary mechanical locks.



906 www.arplus.com/enq.html

Chesney's

Chesney's is delighted to report the continuing success of their all-time best-selling fireplace, The Burlington. This striking design supersedes the high fashion mantel, recently to have flooded the market, and provides a longer lasting, more sophisticated and timeless alternative. The stylish Burlington remains true to the architectural and decorative role of a fireplace, naturally asserting itself as the focal point of the room, providing warmth and character to both traditional and contemporary settings. Its simple elegant lines ensure that it is a design that will never date.



907 www.arplus.com/enq.html

H&R Johnson

H&R Johnson, the UK's largest manufacturer of ceramic tiles, has brought out the Essence floor and wall tile range which offers a modern interpretation of classic marble for any bathroom setting. Six new rectangular format (400x300x10mm) gloss wall tiles (Navona, Fiorito, Giallo, Amarello, Kavalas and Bosco), and six coordinating matt floor tiles (300x300mm) are complemented by a range of accent mosaic and ceramic borders to widen the design options. For further information telephone: 01782 575575.

RED DAWN

CHINA'S NEW DAWN: AN ARCHITECTURAL TRANSFORMATION

By Layla Dawson. Munich: Prestel. 2005. £25

China uses 54 per cent of the world's concrete production and some 36 per cent of its steel. No less than 90 per cent of the world's most polluted cities are in China. Layla Dawson has heroically dived headfirst into the filthy maelstrom to find herself surrounded by creatures at least as bizarre as those encountered by Alice in the Caucus Race, but they are, for the most part, a great deal more nasty and less endearing than Lewis Carroll's characters.

China's New Dawn: an Architectural Transformation is a mainly pictorial survey of some 50 projects, recently completed or in train, with a perceptive introduction that sets the current building boom into historic, political, economic and philosophical contexts. Paradoxes abound. The authoritarian state still exists (and makes the construction explosion possible while just about keeping it under control). While keen to demonstrate cultural independence, the Chinese collect work by Western superstars. Wanting iconic object buildings, they nevertheless demand profitability in crude real estate terms. Frank Gehry's response was that 'these guys were out to lunch! ... Chinese architecture seems so skin deep'.

Perhaps that is why China brings out the worst in visitors. Foreign architects renowned for their capering in Europe and North America can make even thinner and more perverse gestures in China, as long as they can be run up on the cheap. They make up most of Dawson's examples. Horrors like Koolhaas's absurdly writhing Chinese television headquarters in Beijing, Andreu's literally carbuncular National Theatre next to the Forbidden City, and P&T group's cardboard neo-fascist compositions slither off her pages. They are relieved by gigantic commercial towers and vast empty neo-PoMo piazzas. But here and there is decent work like that of von Gerkan, Marg & Partner, who play a very straight bat, Rocco Design's delicate (though expensive) Boao Canal Village on Hainan island and Shanghai practice MADA's humanly scaled urban buildings for smaller cities.

Dawson is far from being an uncritical chronicler. She rarely tries to excuse the excesses, superficiality and inhumanity, but ends in hope, quoting I. M. Pei – 'China needs to develop confidence in its own culture. Out of confidence will come a new life, a new culture, and a unique architecture'. Yet, until then, as Dawson says, 'China is wearing Western camouflage'. With energy, insight and iron guts, she has recorded both camouflage and some of what it conceals: one of the most extraordinary episodes in the whole history of architecture.

PETER DAVEY



Palmach Museum of History, Tel Aviv, by Zvi Hecker, a museum devoted to the underground Jewish organisation that fought against British rule in former Palestine. One of the more interesting specimens from *New Museums*, by Raul A. Barreneche, London: Phaidon, 2005, £39.95, a glossy and geographically expansive survey that tracks the leading edge of the museum building boom. All your favourites are here, from Zaha in Cincinnati to Peter Cook in Graz, documented with ravishing photographs and irritatingly skimpy drawings. Such blockbuster architecture deserves a more thorough exposition.

REACHING FOR THE SKY

THE AMERICAN SKYSCRAPER – CULTURAL HISTORIES

Edited by Roberta Moudry. Cambridge: Cambridge University Press. 2005. £45

The skyscraper is a slippery, paradoxical subject – at once (as Spiro Kostof observed) materialistic and poetic. Skyscrapers are more interesting as an urbanistic or social or cultural phenomenon than as architecture per se. Correspondingly, they are more interesting than many other building types to non-architects – and on the whole less interesting to architects.

This book of 13 essays offers a new take. The editor's introduction describes it accurately as a kaleidoscopic view. Limiting their subject matter to New York and Chicago between the 1880s and the 1950s, the authors, academics from several disciplines, nevertheless cover a wide range of topics. This is not a book about the architecture of the skyscraper, rather about its relationship with the city and the life of the city.

In some of the essays, the focus stays close to the nominal subject matter: for example, an account of the way that the professionals who designed early skyscrapers had to systematise their own working methods in a manner analogous to the purpose of the office buildings they were designing. Other essays deal with the emergence of the need and desire to prevent the uncontrolled spread of skyscrapers – then, as now, aesthetic and social control being exercised by the introduction of rules whose stated purposes, such as public safety, were quite different and less open to challenge in the land of the free.

Skyscrapers are clearly felt to be symbolic, to represent something, but it is seldom clear what. In Chicago, the first 'tall buildings' represented, more than anything, the large scale systematisation of office work, and so in some of the essays, the investigation of the life of the buildings is largely focused on this new phenomenon. Merrill Schleier, author of 'The Skyscraper in American Art', gives an account of the 1928 play 'Machinal' in which a young woman is driven mad by the alienating consequences of working in a skyscraper.

In this and other cases, the skyscraper is little more than a nominal starting point for an (interesting) excursion into an aspect of cultural studies. Sarah Watts' essay, for example, contrasts the public realm as a setting for labour protests with the perceived appropriation of public space by the corporate headquarters that towered over them.

In the latter case, as in much of the book, the skyscraper as a work of architecture is beside the point. And although the 'skyscraper problem' first identified by the American critic Montgomery Schuyler – how to make them authentic works of architecture – is an interesting one, there have been few good answers, and you would struggle to find many examples worth listing, particularly in the last fifty years. Yet they remain a source of fascination, with fans and detractors, but either way arousing stronger feelings than many other buildings. So it is not a surprise that this cultural approach to the subject matter – applied more commonly to unregarded corners of the city, in deliberate contrast with mainstream architectural discourse – produces equally interesting results when applied to this most in-your-face of all building types.

Skyscrapers clearly 'contain multitudes'. There is no attempt at a conclusion to the book; although I feel better informed, that kaleidoscopic view remains, and I'm still not really sure what I'm looking at.

PETER STEWART

INDIAN TAKEAWAY

INDIGENOUS MODERNITIES: NEGOTIATING ARCHITECTURE AND URBANISM

By Jyoti Hosagrahar. Abingdon: Routledge. 2005. £24.99

This is a short but nonetheless intelligent, well-organised, and well-illustrated investigation into some of the aspects of conflict between the British-led municipal authorities and the rest of the population of the city of Delhi, from the Indian Mutiny until India's eventual independence.

It is an account of a great historic tragedy. British control began in earnest with the sack of the city and the razing or mutilation of its famed *havelis*, the urban mansions of its aristocrats and well-to-do. The new municipal authorities then tried for decades to introduce novelties from home, in particular the idea of property as a marketable commodity that stimulates the urban economy, and the enforcement of slum-clearance schemes and sewage and sanitary works.

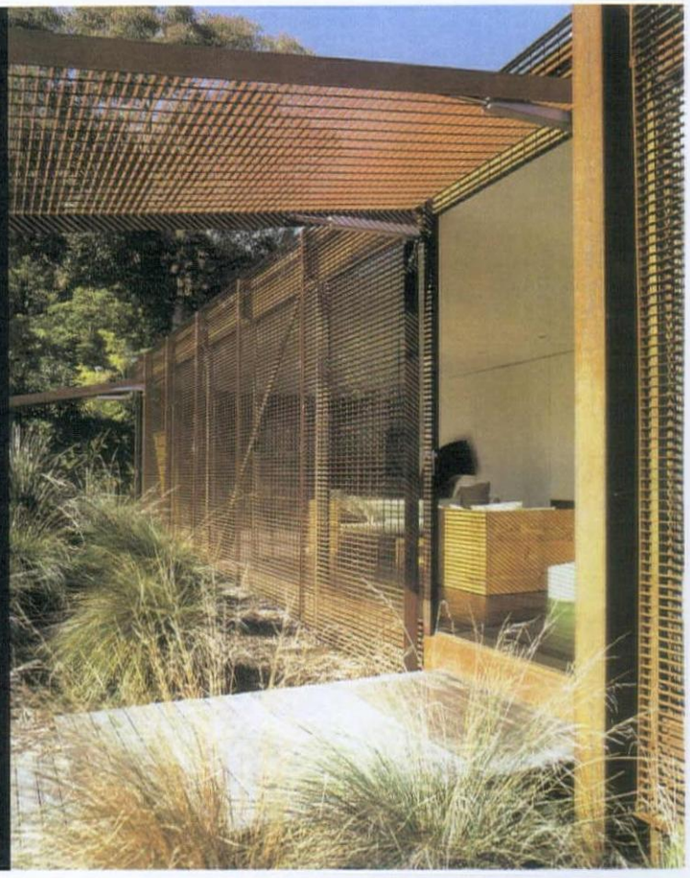
Although they were aided in their quest for demographic information by street sweepers, who were able to make their way into every household, the British were eventually defeated by the force of local tradition; and this in turn was reinforced by the rapid growth of the population, and by the fact that most of the urban schemes underestimated the complexities of the local economy.

The conclusion is, therefore, that Western modernity arrived in the city at a superficial level only: a neat white building here and there, rather than a reorganisation of city life along the lines of Paris or London. And New Delhi, of course, was a foreign body that did little or nothing for the precious fabric of the ancient capital.

My English teacher used to say that one should erase the first and last paragraph of every essay before handing it in; and, substituting 'chapter' for 'paragraph', that's advice that Routledge authors really ought to take on board.

Although identifying with Delhi's natives in their struggles against the British, Hosagrahar does mainly steer clear of whingeing Saidian claptraps; but her jargon-strewn top and tail add nothing to the book. It's the usual stuff about 'paradoxical modernities', 'dominant discourses' and 'universal paradigms'. Surely a book's narrative should suffice to make its point, instead of relying on this self-indulgent twaddle? And why isn't the book simply called 'Urban Conflict in Delhi, 1857-1947', instead of the idiotic title chosen?

TIMOTHY BRITTAIN-CATLIN



Kew House, Melbourne, by Sean Godsell, one of a series of houses by this talented and lively standard bearer for a younger generation of antipodean architects that explores contemporary notions of an Australian vernacular. A sensitive response to light and climate is allied to an inventive use of materials, such as cedar battens, recycled shipping containers, glass and rusted steel. *Sean Godsell*, Milan, Electa Architecture, 2005, £35.00, is a revealing study of his oeuvre, prefaced with an essay by Leon van Schaik, professor at the Royal Melbourne Institute of Technology, where Godsell both studied and taught.

ST SANDY THE HUMANIST

AN ARCHITECTURE OF INVITATION: COLIN ST JOHN WILSON

By Sarah Menin and Stephen Kite. Aldershot: Ashgate Publishing. 2005. £60

Working as a practitioner, teacher, writer, researcher and critic, Sandy Wilson has been influential in shaping the way many of us think about architecture. This book maps his career from formative moments in aedicular spaces under the table as a child in a Cheltenham vicarage through subsequent conversations with artists, a prince and an international coterie of professional colleagues, friends, and politicians, to decisions at the drawing board, faculty meeting and building site. In highlighting these various events, the book also confirms the major impact of his long and influential association with the school of architecture at Cambridge.

The development of Wilson's work, first inspired by Le Corbusier and subsequently by the Nordic modernism of Asplund, Lewerentz and especially Aalto, is analysed and the impact of ideas from aesthete Adrian Stokes and the English Free School traced alongside the rigorous rationalism of Leslie Martin. North America continues to be a significant influence too though while Louis Kahn is mentioned here, albeit somewhat anecdotally, Wright remains surprisingly invisible, Moore is acknowledged only briefly and Venturi dismissed as 'the smell of Hollywood'.

Tougher editing would have helped – do we really need to know that HMS King Arthur was a former Butlins Holiday Camp, Kahn played the piano magically in California or R. J. Kitaj had difficulties getting a satisfactory likeness of M. J. Long? The book would also benefit from additional architectural information. Drawings are often intricate, difficult to read and rather casually presented. Larger drawings and details tracking the development of projects, influential competition schemes and recent designs, would help illuminate the words and the formulation of ideas.

The book defines the inspiration, commitment and tenacity of this particular architect and thinker. It also highlights the difficulties of building a significant practice and a school of architecture simultaneously. But perhaps most importantly it projects a humanist view of architecture and the city that is in sharp contrast to current preoccupations with the construction of emphatic landmarks and privatised worlds.

BRIAN CARTER

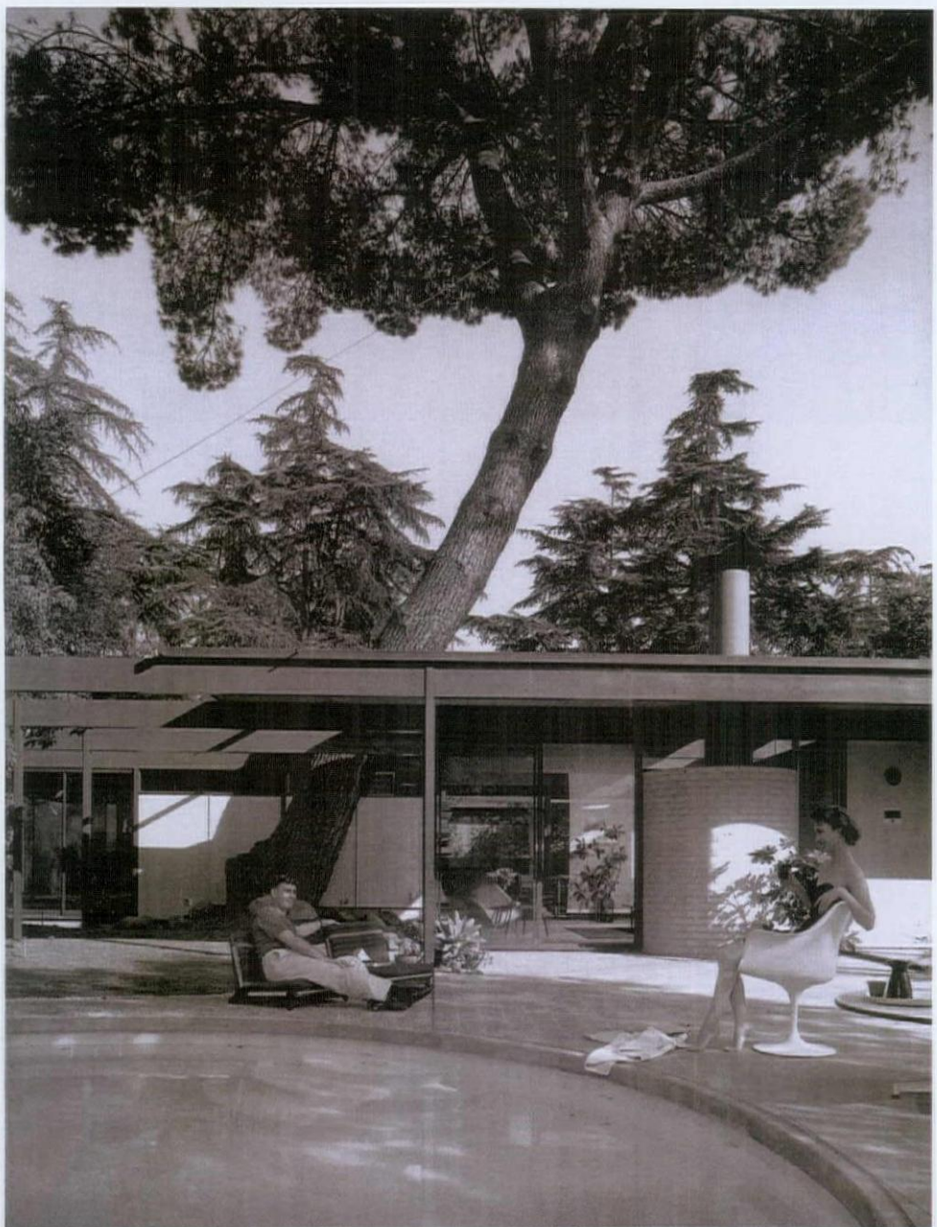
Book reviews from The Architectural Review can now be seen on our website at www.arplus.com and the books can be ordered online, many at special discount.

browser

Sutherland Lyall may be in the gutter but he's always looking at the cyber stars.

unCurb your enthusiasm

According to Manhattan's *Village Voice*, in May last year Lockhart Steele abandoned his gossipy eponymous website for the real estate trade and started up the much more elaborate magazine Curbed.com, at *www.curbed.com*. It is now an essential daily read for New York realtors. Of what conceivable interest, you snort, are estate agents to us? Well conceivably, an important part of a lot of architects' professional lives involves keeping up with developers and knowing what's what in the realm of flogging space and buildings. More interestingly there is the gossip. Delicious gossip about clients and people in the business. And about architects. Curbed has a special column written under the byline 'Guttersnipe' which is devoted entirely to architectural gossipy stuff. Steele is remarkably coy about who writes for it. One theory in our trade is that staffers on the conservative USA architecture-related mags have become adept at nipping out to the local internet caff when an unprintable rumour comes in. There they can happily and untraceably file the filth on the great and good straight to *The Gutter*. US libel laws are nothing like our own so it is always fun when UK architectural big beasts get a mention. The evil UK libel laws being what they are, don't expect us to be prepared to repeat any of it. *The Gutter* happily has its own url at *http://gutter.curbed.com*.



To celebrate Julius Shulman's astonishing 95th birthday, The Getty Center is holding a major retrospective of his work, which also marks the Getty's acquisition of his archive. Shulman's tautly composed black and white photographs defined the emergence and the flourishing of Southern Californian Modernism. The boldly reductivist architecture of the Case Study Houses and their equally fashionable inhabitants – poised, wasp-waisted women in cocktail frocks and square-jawed chaps – suggested an exciting new world of metropolitan affluence and possibility. Here, in a typical Shulman tableau, is Case Study House no 20, dating from 1958, designed by Buff, Straub, Hensman for graphic designer Saul Bass. Californian sybaritic living at its most delectable.

Julius Shulman, Modernity and the Metropolis, Getty Center, Los Angeles, 11 October – 22 January 2006. www.getty.edu

Comfy revisit

We used to mention the Dutch site Archined a lot. But for some reason, not for three years after we reported that it would soon be sporting an English version. It now does. Remember to hit the 'switch to English' text under the banner at the left when you type in *www.archined.nl*. The home page is arranged as three columns. What looks like the navigation runs down the left with a column of ads on the right and a triple-width column in the middle. Here, and this is a bit confusing, the lead features material from previous 'issues'. It is confusing because you normally expect to find here the meat of the current issue. The other confusion is that the navigation turns out to be across the top: the left-hand side stuff is actually a set of links to new websites and books and things like that. OK it doesn't conform to standard, but you don't really mind because this is a well-worn couch of a site. You feel comfortable enough about the bit of chaos here and there because there is so much material. An exception is the chat room, The Forum. This is, as this sort of feature tends to be, moribund: the last entry is dated March last year. Happily the Events section is right up to date. There are details of competitions, reviews, new sites, jobs and some news. This is the sort of site it's worth checking out from time to time if only to see how other Europeans are thinking about architectural things.

And the earth was without form and void

In the battle of the Titans for Mother Earth, Microsoft's Virtual Earth is slugging it out with Google's Earth. Apart from the admittedly deep satisfaction of peering at a fuzzy image of your own house from a long way up in the sky, plus finding spare vacant plots of land, I can't see a lot of use for either. Nevertheless, every single London estate agent has signed up for both, presumably in pursuit of that elusive mini-development site. And I guess a lot of architects are signed up for the same reason. Virtual Earth has been the source of much amusement because when you look for rival Apple's R&D campus site at Cupertino you get a vacant lot.* The official reason is that this is because the relevant aerial photo is a rather old one. Good explanation, but hey, to be of any use, the photos must be up to date. Google Earth was effortlessly doing pre- and post-hurricane satellite photos of New Orleans. So there.

There is a down side to up-to-dateness: Google is, along with images of the rest of the surface of our planet, running satellite pictures of every military installation on earth. Take a look at some at *www.theregister.co.uk/2005/09/13/google_earth_threatens_democracy*. Thai and South Korean generalissimos have apparently been bitching like mad. The rest seem to take the view that if everybody knows, who cares. A very nice feature of Google Earth is Google Moon at *http://moon.google.com*. There's a slider towards the top left. Slide it up towards the + sign and happy lunar surfing. All right, another geek joke.

*the page is at *http://terraserver.com/imagery/image_usgs.asp?cpx=122.04708457508015&cpy=37.31810903147848&usgs_res=13&provider_id=200&t=pan*)

On doing a lot less

Architect Ian McChesney suggested that I take a look at Daniel Eatock's site at *http://www.danieleatock.com* and click on 'about this site'. Eatock offers a free and copyright-free template, complete with code, for what turns out to be a really sensible website layout. In fact it is so simple I wonder if you could ever stop people copying it. All it seems to be is two columns. The left-hand one contains the navigation stuff. The other, four times wider, has the basic material. You see my point about simple. And you think of my old favourite at *www.adrianjames.com*. In the more effective variant on the basic Eatock structure, the left- hand column remains fixed so that when you get fed up with looking at images and text in the main bit you can immediately click on another section. This obviates the need for a Back button.

But hold on, you say, 'Where's the creativity in two columns?' Well, first of all we are talking information websites here not cathedrals. Second, take a look at the sites which have joined the Eatock Template Connection – including McChesney's at *www.mcchesney.co.uk* and another at *www.metwork.co.uk*. There is nothing particularly stereotyped about them. Because this is merely a structural template, you can run riot with the graphics, drop in all kinds of art work, objects, buildings with captions and whatever – but please, not, as at the above Metwork site, with text running sideways down the page. This is a crime against nature for we surfers and potential clients are not normally trained as professional contortionists. The only other thing to watch when following the Eatock template is getting the resolution of images down to a point where they are still readable but whose files are small enough to allow instant uploading. That is really instant uploading. I think the secret is that this template starts out so simply that, unless you are a complete prat, you will want to keep it that way. OK. Less is more.

Less can be less

But maybe the Venturis were right. Less can actually be less. I think an example of this is designer Widianto UTOMO's website, which is at *www.geocities.com/widianto/wutomodesign.html*. I wondered if I had somehow got stuck because the site is a long vertical scroll with no interaction. Widianto emailed back 'Yes no interactive screen – vertical scroll, as I think the web should be quick to open and safe to use – no cookies or bugs.' Can't really fault that. But a long banner of intriguing images does need some kind of explanation, especially when some of them look like buttons. Explanation does not have to be interactive. Something's going on here. I did a final check and, mysteriously, the banner was now running sideways instead of vertically. Maybe by the time you read this it will be running diagonally and there will be some captions.

Pleasure principle

And so to Yugo Nakamura's site at *www.yugop.com*. Turn up your sound. If you liked those very early ground-breaking graphic animations from the Film Board of Canada you will love these – not least because you have a modicum of control. At least I think you do.

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AR SUBMISSION GUIDELINES

We are always happy to accept unsolicited material for publication, but within the following guidelines. A basic submission should comprise a short project description (in English), a set of drawings (plans, sections, site plan) and some photographs of both the exterior and interior. In an increasingly electronic age, we still find it more efficient when discussing work among editors to have paper copies of drawings and photographic images, so please include paper versions of all electronic material. Should a submission be successful, we will contact you as soon as possible to discuss plans for publication. Finally, we accept no responsibility for unsolicited drawings, manuscripts or photographs, and no unsolicited material will be returned.

addendum

In the article on Snell Associates' refurbishment of the Arnolfini Gallery in Bristol, England (pp20-21), the photographic credits were unfortunately omitted. They should have been – p20, small photograph, top right: Arnolfini archive; p21, top small photographs, left: Arnolfini archive, middle: Arnolfini archive, right: Jamie Woodley; bottom three photographs: Jamie Woodley.

diary

AR'S CHOICE OF INTERNATIONAL EXHIBITIONS AND EVENTS

CANADA
SUPER CITY
Until 20 November
Canadian Centre for Architecture, Montreal
Curated by Douglas Coupland, the prophet of 'Generation X', this show explores ideals of the contemporary city as played out through construction kits for children. His thesis is that childhood experiences and visions of the world condition adult choices; clearly some architects were allowed to play with Meccano longer than might reasonably be thought healthy.
www.cca/qc

THE NETHERLANDS
A ROYAL EXHIBITION
Until 23 October
Netherlands Architecture Institute, Rotterdam
Patriotic show of contemporary Dutch architecture to coincide with and celebrate the silver jubilee of Queen Beatrix. Includes work by Koen van Velsen, Sjoerd Soeters, Wiel Arets and Atelier Pro, among others.
www.nai.nl

SWITZERLAND
ZAHA HADID ARCHITECTURE
Until 13 November
Architekturmuseum, Basel
Timely Hadid exposition on the back of her winning the competition for the Neues Stadt-Casino in Basel in 2004. Current favourites include the Ordrupgaard Museum extension, Copenhagen (p38), the Contemporary Arts Center, Cincinnati and the Wolfsburg Science Centre.
www.architekturmuseum.ch

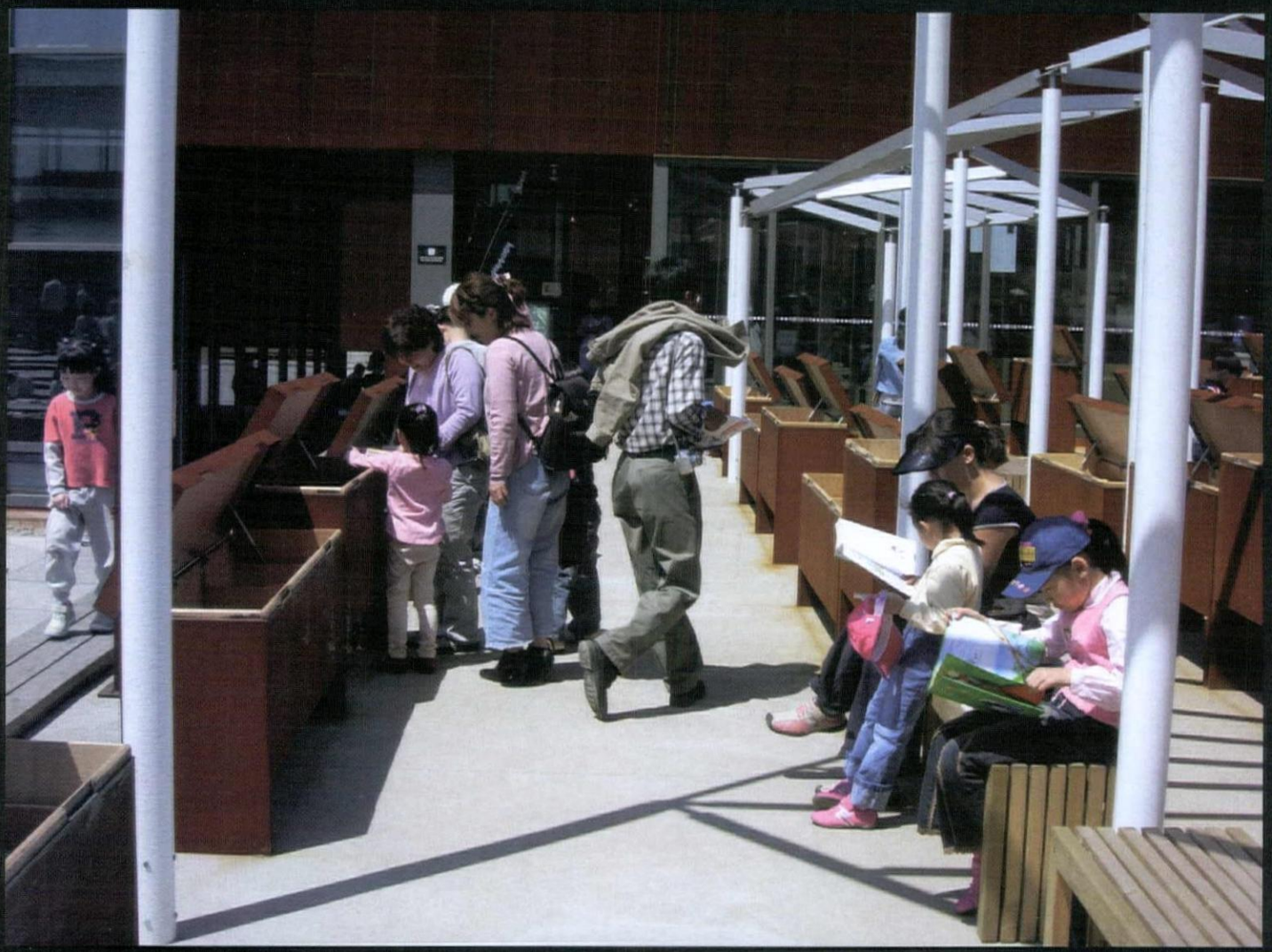
UNITED KINGDOM
EILEEN GRAY
Until 8 January 2006
Design Museum, London
Major retrospective of the Irish designer who infused the industrial aesthetic of Modernism with opulence and sensuality. Her Bibendum chair and E-1017 table – designed for her sister to enjoy breakfast in bed – are among the most enduring examples of early twentieth century furniture.
www.designmuseum.org

UNITED STATES
JULIUS SHULMAN, MODERNITY AND THE METROPOLIS
11 October 2005 - 22 January 2006
Getty Center, Los Angeles
Exhibition celebrating Shulman's 95th birthday and announcing the Getty Research Institute's acquisition of his archive consisting of more than 260 000 prints, negatives and transparencies, a stunning visual record of modern architecture and Los Angeles.
www.getty.edu

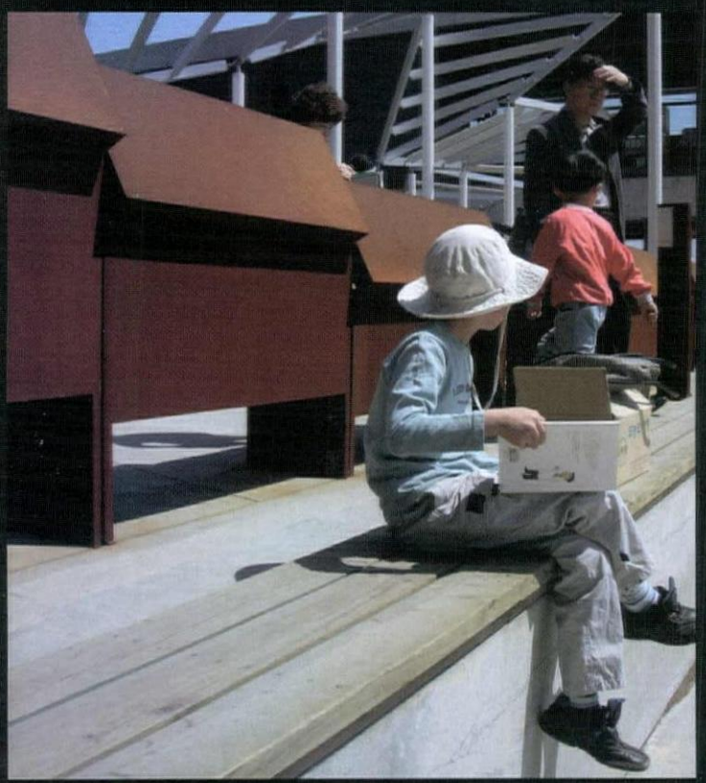
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delight



Photographs: Lee Sang-geon



WITH SCULPTURAL COR-TEN TRUNKS AND A WARPED PERGOLA, THIS BOOK MARKET IS A LIVELY LOCAL FOCUS.

We're all familiar with the simple urban pleasure of browsing around open air bookstalls looking for that elusive first edition. In Paju Book City, a town of publishing companies near Seoul, in South Korea, this pleasure is amplified by the unusual form and layout of a local book market. Designed by Seung H-sang, of Iroje Architects, it employs robust materials, including Cor-ten steel, in an unaffected way to create a lively civic focus.

Set on the first floor deck of a large and somewhat anonymous cultural centre, the market needed to promote its presence and draw in trade. This is achieved by an aluminium pergola supported on slim tubular columns that warps and cranks its way around the market. Periodically adorned with colourful banners, its angular profile is highly conspicuous from street level. Books are displayed and stored in rectangular trunks of waterproof plywood wrapped in rusty Cor-ten steel panels. When closed, their heavy, monolithic quality recalls a collection of Richard Serra sculptures, but when open, they are transformed into enticing treasure chests, with books spilling out everywhere. The Cor-ten trunks vary in height, so the landscape of the book market becomes, in some ways, a scaled-down version of the urban skyline. Simple slatted timber benches provide respite from browsing. Animated with books and people, the market has quickly become a popular local landmark. C. S.