

It would be easy to open this second edition of our annual with a self-congratulatory review of the year. In 2005 make opened two new studios, took on 75 new jobs, saw nine projects receive planning approval and three start on site – and the new year will see the completion of our first building. All this, and the practice is less than two years old.

But 2005 will probably be best remembered for a devastating array of natural disasters, from tsunamis to hurricanes and flooding. Such events forcefully demonstrate the precarious nature of our foothold on the planet – whether in the 'developing' or the 'developed' world – and inevitably make us think about the environmental impact of our actions. And with buildings making a major contribution to the world's CO₂ emissions, architects have a particular responsibility in this respect.

At make we are passionate about the environment, designing buildings that work harder and perform better in the drive to be as energy efficient as possible. We have embraced the new building regulations with enthusiasm, and we relish them becoming even tougher. We are reducing glazing, over-specifying insulation, introducing our clients to wind turbines, photovoltaics and ground water cooling, and campaigning for sustainable energy wherever we can. Above all, we view the 'death of the glass box' as an urgent and invigorating challenge which demands all our ingenuity.

As the new year approaches, we can be confident that the environment – and our effect on it – will become an ever more pressing public concern. As a practice, we will continue to do all we can to make a difference.

Ken Shuttleworth, December 2005







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Some have THREE coffee cups (did you get ANY sleep last night?), others little mascots and Post It notes scribbled in a language comprehensible to none but the writer: 'need to be up @ 13.01'??' Pavement @ Limeburner – 11.5'??

8.03 The eight o'clock stragglers start arriving.

8.09 The Big Boss arrives, looking the image of James Bond (come on, he IS paying me for this), a dinner jacket draped over his shoulder. Another night of international intrigue and passion, Ken? 'It's the Movers and Shakers Club Dinner straight after work tonight at the Four Seasons. Like a more sensible MIPIM.' Such is the glamorous life of the man who made make. He's clutching his breakfast sarnie: 'ham and lettuce. My girlfriend makes them. Lovely.'

8.23 Upstairs, a corner of the office has been cordoned off. Behind lies the model for A Very Important Project, 'top secret' says the Guvnor, and not for my or indeed any other visitor's eyes. Though the defences wouldn't trouble my 93-year-old great aunt, let alone a spy. make's decidedly makeshift strong room comprises giant, rickety sheets of cardboard, bound by gaffer tape. Some wag has drawn on a peephole and sign: 'DOOR. PLEASE KNOCK'. I reckon I could storm it with a pair of scissors.

8.30 Here's a man in a hurry. John, The Man from Coventry. Yes, he commutes in from the Midlands. The things they do for the privilege of working here! He's so busy he speaks in staccato. 'There's a lot going on right now, a lot going on. I've got ten projects on the go all at once. It's all on the go! This is a special moment at make. All eyes are on us. We've got the work, we've got the attention, now we have to deliver.' And off he pops down a hole, like Alice in Wonderland's White Rabbit. He's right, though. Two years old, and this is still an office literally growing before your very eyes, a very hungry two-year-old indeed. Turn your back for a second and my hasn't it grown! Another person hired, another room added to the studio, another project won. They pin up their creations on the wall, projects around the world with whizzbang looks and supercool names: Future City! Stellar Tower! The Serpentine!

9.05 The nine o'clock rush is in full swing. I don't notice the air con any longer, just the office hum. The first informal meetings are taking place, little groups here and there.

9.13 A chap arrives for a job interview. Blimey, they're not as nervous as they used to be. This one's smart, got a confident handshake, and talks liberally about 'the line of Zaha Hadid'. Hire him! Ken and The Man from Coventry — good cop, bad cop — flick through his portfolio, while he looks on like a proud father. 'What are you passionate about outside architecture?' That stumps him.

9.58 Morning coffee. Ah, the make kitchen. You can tell a lot about a place from its kitchen. Ecover washing up liquid: this lot want to save the world. Lots of breakfast cereals for early morning/late night munchies. Quaker oats, herbal teas. Hmm, healthy bunch. Organic muesli: very saintly. I bet they cycle. >







... Two years old, and this is still an office literally growing before your very eyes...

I bet they read *The Guardian*. Tesco's Strawberry Crisp cereal and, scrunched in a jar, bags of PG Tips: thank gawd, they ARE human. Duchy Originals chocolate biccies: a devilish side, too! Mostly, though, it's just that generic beige kitchen you get in every office — slung tea towels, strewn J-cloths, the stench of stewed tea bags sunk into the melamine work surface — with a whiff of a student house. Everything's labelled — make — only with the kind of posh, art directed labels only architects would bother with. The kettle's red hot. People pop in and pop out every three minutes, but they don't linger. There's no room. And it smells of old tea.

11.02 Lots of intent staring at computers. Designs whiz round the screens. Some ears are plugged into iPods. Bike couriers arrive. Parcels come, and come again. The office hum rolls in waves, though all is silence on the Baker Street Gang. They're in for the big push. On site, contracts to tender. The concentration is palpable.

11.54 Beside the window. For those of you who haven't visited, make is different for five reasons. One: everybody has a stake in it. Two: as Jason the Office Dynamo says, 'there are no B or C teams, everyone's hands on, right up to Ken.' Three: every day's different; nobody spends every waking hour glued to a computer — they see a project from every angle. Four: it's delightfully informal. Five: the office is like a bloody great goldfish bowl. It sits right on the street like a refugee from Oxford Street, with big plate glass windows showing off a freaky zoo of alluring architectural models like wares to be bought, which, in a way, they are. You're always on display. People steam pass, eyes fixed forward, forward march, nose in a newspaper, shoppers lost, looking for Habitat. 12.30 Lunch begins. Some pop out. Those who don't have the time are gobbling at their desks. Melisa, the office manager, favours a ham and cheese panini. Upstairs the Very Important Top Secret Project has escaped from the not-so-strong room, leaving in its wake the makeshift door on its 'hinges', an

exploded mass of paper, Styrofoam offcuts and an almost

finished pack of plain chocolate digestives. →

... Each day is different. No one spends every waking hour glued to a computer they see a project from every angle...

13.24 A quiet moment for Ken, who's finishing off his speech for the office party on Friday, examining embarrassing photos of his colleagues. 'It's like a best man's speech.' He's already popped out for a kebab — 'but a good one' — from Gig's Fish Bar, Restaurant and Kebab House down the road, doing a roaring trade this lunch.

13.51 'Good afternoon, Ma-ake.' Otherwise a postprandial hush has descended on the office. Upstairs, a game of table tennis to the death: 'I beat Gary twice! Yes!' James, permanently full of beans, punches the air.

14.10 A suit arrives. Slightly portly. Gold watch. Must be a developer. Indeed, A Very Important Developer. Ken and Stuart, Mr Cornflakes, sit down with him. Once they've got past the price of bread/aluminium, who's new at Cabe, who's in, who's out at the ODPM, they talk brass tacks. AKA 'looking for options where we all win', 'optimising sessions'. AKA the architect's art: how to squeeze in more space without compromising the architecture. Everyone's friendly, but firm. Under the table, feet are tapping. 'We've got another project for you, Ken, but we can't breathe a word of it to you yet, 'specially with press watching.'

15.24 Ken's off to be filmed by CNN on the art of something or other.' What are you going to say? 'No idea. But I've got fifteen minutes to think of something.'

15.26 The cat's away and the mice do play. A cry goes up. 'Chocolate!' The office erupts and flings itself onto the stash brought back from Slovenia by Matt, who's been inspecting a cladding factory. Office Rule Number 3125: All those who gad off somewhere foreign must bring back goodies for the unfortunates left behind. Like a pack of piranhas, the office reduce the stash to a mess of silver foil and cardboard. Order returns.

17.24 Matt's having a sly game of table tennis. Beside him, Ken and The Bigwigs are having a Very Important Top Secret Project meeting debriefing. Smiles. I think it's gone well. It's getting dark outside.

18.25 Ken in full James Bond dinner jacket attire says his goodbyes. He's off to Move and Shake.

18.54 People are peeling off. The cleaner's arrived.

19.10 Jason leaves, a mere ten minutes shy of a full twelve hours. Lightweight. The gentle hum of the air conditioning is reclaiming the place. Outside, sensible people are off down

19.30 Only the hardcore remain, a few on Baker Street, most on the Very Important Top Secret Project. But it won't be an all nighter. A slight air of hysteria has infected the room, as if normal, daytime rules are being reversed, and they're pumping laughing gas through the air con. Someone's cracked open the biscuits and a cheeky can of beer. There's manic laughter, and bulging baggy eyes glued to screens. Oh, the night is most definitely young. But they can stay as long as they want. I'm outtahere. It's half seven. I'm missing Eastenders.

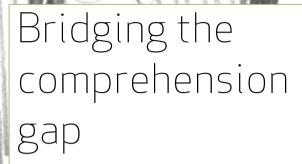






page 014 make annual 2005

We asked two of our regular collaborators to discuss how they work with make. Paul Morrell of Davis Langdon...



As a child, I can recall being confused and disturbed by my dreams. It was not just the vivid reality of the images in my head that troubled me, but also their lack of conformity with everyday experience. On one occasion, I got out of bed and went to wake up my parents, telling them that there were pictures in my bed. With that very particular expression that only a parent can produce, combining irritation at being woken up in the middle of the night with love and concern for a troubled child, my mother came to investigate. Throwing back the covers, she announced, 'See? No pictures.' This was intended to be conclusive, and with a kiss she was gone.

How, I wondered, could she fail to see? Clearly there had been pictures there. For me, this was an early indication of the fundamental gap in comprehension that we all experience throughout our lives - between the creative imagination and the everyday, between the left and right sides of the brain, between art and science, between dreams and reality.

And of course it doesn't matter if we cannot see, still less understand, another person's dreams – until we set out to build them. Then we have to find a way to cross the divide. That this is a difficult process is indicated by the regularity with which people, when faced with this particular journey, tend to reach for their dictionary of clichés and talk of architects and designers not living in the real world, and congratulate themselves on recognising an ivory tower when they see one.

At the risk of offending the rules of hospitality implied by an invitation to contribute to an architect's annual review, it has to be added that some designers – not many, but enough to reinforce the stereotype – enjoy this distance, and actively cultivate the idea that they alone have access to the sacred flame of what is right in the built environment. The rest of the team is an instrument in the service of their gift, and cannot be expected to understand. I have news for this self-selected band: the fact that no one understands you doesn't necessarily mean that you're an artist.

It is therefore altogether more helpful (particularly to the client – remember them?) to find a way of bridging the comprehension gap. On the one hand, computers have helped. 3D visualisations and the fly-through, which now employ software so simple that even a grown-up can use it, allow the many people who cannot read two dimensions as three to visit a building while it still exists only in virtual reality.

On the other hand they have complicated things by making it possible to create shapes that could scarcely be conceived, let alone drawn, on the conventional drawing board – the kind we used to have to go back to all the time. So now we make buildings that lean, curve, and eschew the right-angle at all costs, quite literally, sometimes just because we can.

And quantity surveyors have to smile kindly as designers tell them that these shapes now cost no more than a sheet of 4 x 8, 'because it's all done by computer.' Whereas the reality - that word again - is that some of this stuff is so difficult to take into the marketplace that it can only be procured by the open cheque book method.

There is a point to this banter, which perhaps resembles precisely the interdisciplinary strife that I'm complaining of here: in really good teams (ones that take the job, but not themselves, too seriously), this kind of interchange becomes common currency. It is a sign of confidence in each player's contribution, and it leads to my favourite form of dialogue between, in my case, quantity surveyor and architect. This runs, 'That's never going to fly Ken. Why don't you do it like this?' Answer: 'Because that would be a crap idea, Morrell – but now you mention it, we could perhaps try it like this...' And so a third idea, better than the first two, or maybe just more do-able, is born.

So the complete answer does not lie in a computer, or in simulations of reality. It lies in the way people work together, in the skills and instincts they bring to the process, and, maybe above all, in the culture of the team – the one consistent unit of success in this troublesome industry. It calls for people not of like minds, for diversity often lies at the heart of creativity, but of sympathetic minds. People who strive to understand not just each other's problems (although that would be good) but each other's aspirations. People who can meld themselves into a team, and their collective ideas into a proposition that meets the client's highest aspirations as well. People who can combine technical excellence, functionality, affordability and beauty to produce not just what clients want, but what they never even

Now that would be a dream team.

... and David Glover of Arup, use very different metaphors to describe the process.

Cracking the crab

Barcelona: a restaurant table overloaded with platters of assorted crustaceans and bottles of wine. We plough through whelks, winkles, soft-shelled crabs, and an unpronounceable Spanish sea creature that the waiter, with great gusto and humour, shows us how to eat. The platter is crowned with two king crabs. Ken takes one, and the other falls to me.

As befuddled Shuttleworth considers how best to attack, lask, 'Didn't your father ever teach you how to deal with a crab?' I immediately assume my professional guise of brilliant structural engineer; 'It's simply a process of engineering and anatomy, not to be confused with the nature-always-providesthe-answer-to-our-design-problems approach. Let me offer you the masterclass my father gave me, so that the art will

The table is now transfixed by my fingers (which were likened to 'Wall's Sausages' by my best man on my wedding day). The crab is flipped onto its back, and legs and claws are ceremoniously removed and laid aside to be dealt with later. As when approaching a modern building, the process begins with an attempt to identify the point of entry: and where the crab is concerned this is one of the less celebrated entrances.

Peeling back the armadillo-like undershell from the crab's mouth, you expose what are affectionately known as the 'dead man's fingers'. 'They don't really kill you – they just taste bitter. You should try them,'I tell the table. Strangely, no one rushes to take up my offer.

It's at this stage that the amateur crab cracker discards the delicate labyrinth of white bones that form the eightcylinder engine block that propels the crab. Each cylinder houses muscles that my father always referred to as the crab's 'hidden treasure': when cracked open, they provide a bountiful supply of white muscle meat.

Having removed the engine block, you expose the dark meat lying inside the hardened outer shell. This is the crab's central processing unit, and it is here that the next generation of shell is being grown. I explain to my rapt audience that the soft-shelled crabs lying on a plate nearby illustrate the stages of this process: before ending up on our table they had shed their juvenile hard shells to temporarily become deliciously edible versions of their original selves. Returning our attentions to the main course, we examine the membrane that acts as a shock absorber between the hard exoskeleton and the delicate innards of the crab. When these meats are combined, they make up the true rich flavour that we associate with crab.

The claws require a bit more finesse, and a delicate touch is required to release the large muscles operating the powerful pincers which are both feeding and defence mechanism. At this point, it is easy to misuse the crab crackers and end up

crushing the shell into the meat. The preferred technique is to use the crackers like pliers, working progressively from knuckle to knuckle and pulling the crab shell away from the white meat until you reach the claw. With deft movements, it is very easy to remove large areas of shell to completely expose the slabs of white meat. You know you've succeeded when you are left with an entire claw-shaped piece of meat, including the now limp pincers.

The conscientious crab-cracker will then gently split each of the remaining legs down the middle to release the final prize of the white meat. In true multifunctional fashion, the crab shell now becomes its own serving dish for the intensely flavoured dark meat and the white meat. If successful, the accomplished cracker should have two whole claws sitting on top giving the impression that you have turned the crab inside out. I have to confess that this was a goal not attained this particular evening!

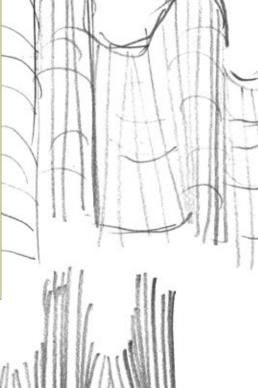
So, why focus on this particular event? Why was the table transfixed by something as ordinary as learning to crack a crab? It is a process that is often repeated in our life as designers: knowledge and experience openly shared and communicated through the fun and enthusiasm of everyday activities. This is the process that continues to this day, when we take on complex design problems and aim to make the solution look simple.

Befuddlement isn't a crime: it's the thrust that drives us forward. It shows that we are neither teachers nor students - we are always both. For me, the process of cracking the crab typified the way we work with make, and the reason we enjoy it <mark>so much.</mark> The tension and release of learning and achieving in the company of like-minded friends means that everyday is a masterclass.















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2005 saw make expand to open a new studio in Edinburgh and a project office in Birmingham. Ewan Anderson describes the process of setting up the Edinburgh studio...

Edinburgh – the first eight months

I'm writing this on a Friday afternoon in late November. The studio is gently buzzing with talk of what has happened this week and everyone's plans for the weekend. It's just started snowing outside, and Cara is determined to light the fire for a few hours, despite some objections about wasting fossil fuels. And if that description doesn't make it sound like a typical architectural studio, then that's about right: for me, it's much more than that.

To date we have all been so focused on looking ahead that it's a bit of a surprise to look back and see how far we've come. There are ten of us in the studio now, and the walls are plastered with amazing projects; but when make's Edinburgh studio officially opened in March, I was the only team member who lived in the city, we had one project (although it was a multi-million pound hospital), and no office space. Instead, the 'studio' was my dining table at home, which was soon piled high with CVs, office space details, NHS Design Guides and sketches. It didn't take long for the cat to be banished from the room, and the search for the right kind of studio space began in earnest.

The first few weeks seemed to be a constant round of office viewings, interviews with potential team members, and 6.10 am Easyjet flights to Luton to meet the rest of the hospital project team in London. But by April we had found a good studio space in Palmerston Place – a former cashmere showroom with an open fire and a fantastic view of St Mary's Cathedral. We decided to keep the chandeliers.

The furniture arrived, and Sarah started shortly afterwards, immediately doubling the size of the Edinburgh-based team. Frank and Tammy continued to commute from London, until the momentous day early in May when we had our first full day with everyone working in the same place at the same time. There was no broadband connection as yet, but the lack of phones, computers, and e-mail was a rare luxury that gave us time to sketch and throw ideas around. At the end of the day we opened a bottle to celebrate. It all felt very special.

No time to sit around admiring our new premises, though. The hospital project was beginning to hot up, and another round of interviews produced the blend of talent and experience that we needed to expand our team. Pohkit joined in May, followed by Martin, Chris, Lisa, Andrew and finally Cara – who arrived with a single suitcase and the rest of her worldly goods still on a container ship somewhere in the South China Sea. Just in time, because the full force of the task ahead hit us with the arrival of the hospital brief – page after page after densely-worded page.

This document generated scheme after scheme after

scheme, until we arrived at an agreement with the client team as to which was the right one (it was actually one of the first we put forward, but that's a story for another time), and the final bid submission was eventually completed in November.

In the ensuing rush it was difficult to take stock, and it was only when we saw it all pinned up for presentation that we realised we'd managed to come through a very difficult and often fraught process with a fantastic piece of architecture to show for it.

'Why on earth are you doing a PFI hospital?' is a question I've got used to fielding. This much-maligned building type hasn't had much of a reputation for architectural quality in recent years, but the answer, from our perspective, is very straightforward. Hospitals are vitally important public buildings, which everyone will engage with at some point in their lives – usually at times of extreme emotional stress. As designers, if we have an opportunity to make one of them better than it would otherwise be then we have to take it. It's certainly a difficult and occasionally frustrating process, involving many compromises along the way – but that's all the more reason for toughing it out and trying to achieve something better than the norm.

So much else has gone on in the last eight months that it's impossible to recount it all, but certain moments do stand out. The lengthy team lunch we held to celebrate winning the Westfield mixed-use masterplan – our first project since the studio opened... Discovering we were on the front page of the Edinburgh Evening news after winning the Ross Bandstand competition and getting doorstepped by a journalist... A three-hour train journey through the Cairngorms to visit another project site which, for me, brought back vivid childhood memories of family holidays... The look of horror on Tammy's face as she was photographed in her borrowed site get-up of wellies and an old Barbour jacket – being a strictly city girl she doesn't normally wear any footwear that doesn't have heels.

So what next? The first year will always be special, but there is so much to look forward to. We have a very supportive and inspiring set of clients, and fascinating new projects keep coming in on a regular basis. Sarah is expecting a baby in the New Year, we've got the rest of the (make) family coming up for the Christmas party ... and we might be building a hospital.

For me, though, one of the best things is that our studio has a really good feel about it – and its own distinctive character. The team here are all either from Edinburgh, or have made it their home, and our workspace shares all the best aspects of the London studio – the approach to design, the way people are treated, the refreshing sense of common purpose – but it is very much a part of this city.

In conclusion, I can't help recalling the question someone asked me when I announced I was leaving my former job: 'So why do you want to join make and open up a studio in Edinburgh?' I hope that this goes some way to answering that question.

... Tammy Chong offers an account of moving from London to Edinburgh, and Frances Gannon reports on the first stages of establishing a permanent presence for make in Birmingham.

Back to basics in Edinburgh

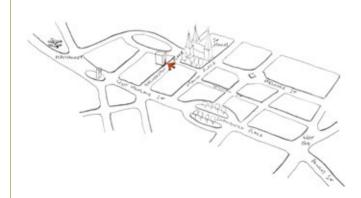
The very first thing we bought for the office was a set of wine glasses. It's been almost eight months now since we cracked open a bottle of champagne at our makeshift cardboard-box coffee table to celebrate make's new studio space in Edinburgh a former cashmere showroom in the Georgian West End, complete with wooden floorboards and a marble fireplace.

For me it's been a move back to a city I love and know well, having spent four years here as a student. Naturally I jumped at the chance to return and help to set up the new office, with little regard for what that would entail.

There were just four of us to begin with, constantly shuttling between meetings in London, Edinburgh and Glasgow, and at times I was the only one in the office. Consequently, the key to a successful day turned out to be serious multitasking. I quickly discovered that there were certain things I had taken for granted in the London office: stationery that was magically replenished, bins that were emptied, an (almost) constant supply of milk in the fridge. Not so here. But everyone pitched in, learnt how to fix the photocopier, file invoices, wash dishes, and get on with the architecture.

Setting up has been a steep learning curve, but greatly rewarding. Within a few weeks of moving in we won our first competition in Edinburgh, and not long after, made the front page of the Evening News with another coup on the Ross Bandstand. And so the office has doubled in size from four people to eight, and now has a growing number of exciting and diverse projects on the drawing board.

make Edinburgh is happily settling into the city. We've got a great sound system set up on the mantlepiece and the studio is still small enough that your tearound will cover the whole office... as long as someone remembers to buy the milk.



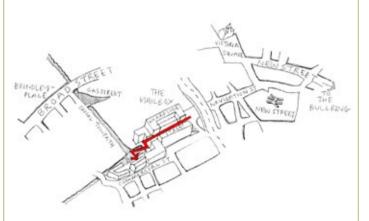
Luxury lunches in Birmingham

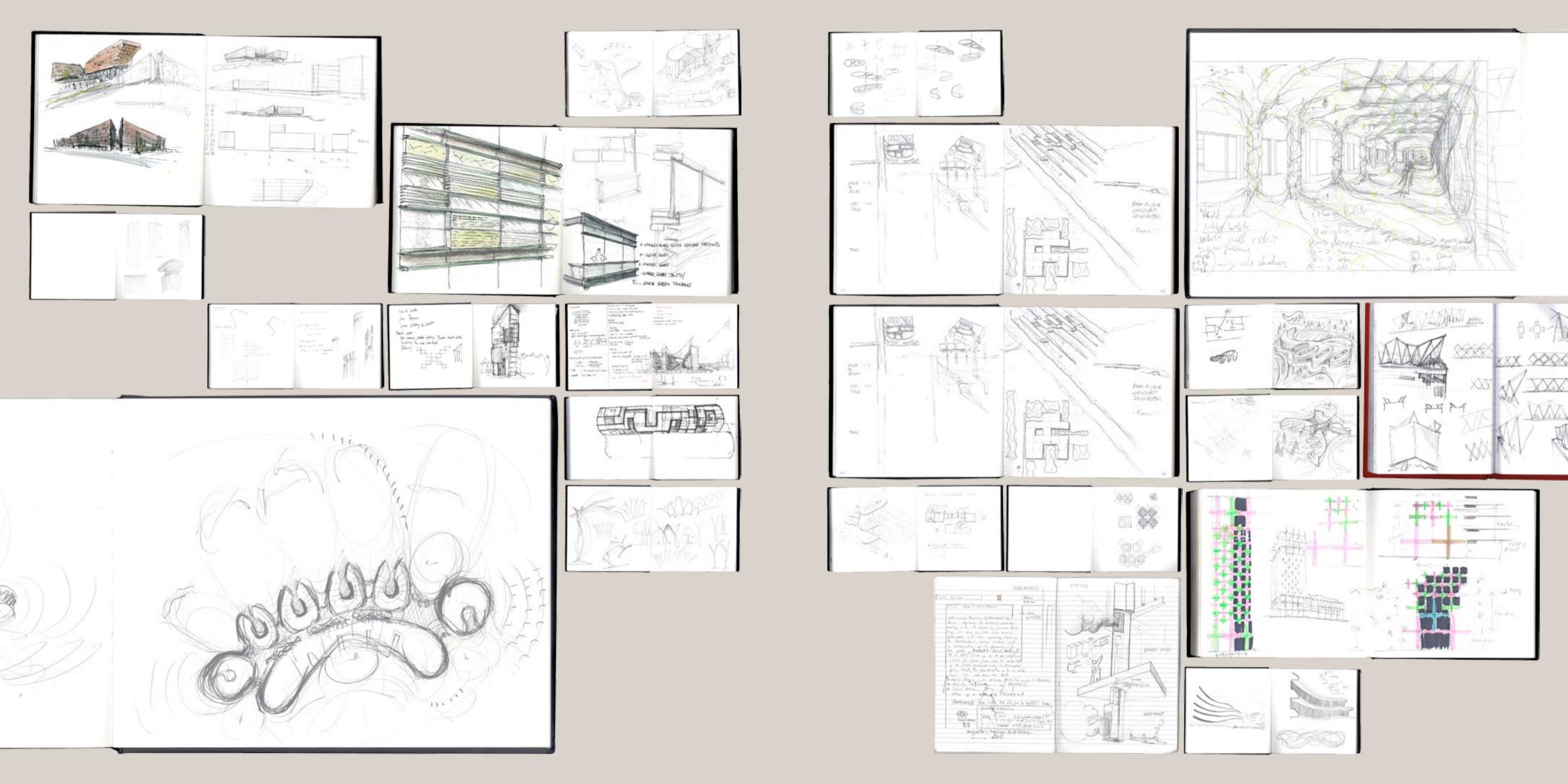
We presented our competition entry for The Cube in May 2005. We heard we'd won in June, we attended the first design team meeting in July, and submitted a planning application in August – and by September we were sitting at our new desks in the clients' offices in Birmingham, with The Cube well under way and the make London studio a distant memory.

Arriving from London with a couple of carrier bags of stationery, it was surprisingly easy for the three of us just to carry on working. The initial inevitable IT headaches caused a welcome reliance on pencils and yellow tracing paper. The luxury of large desks, after the notoriously tight London office benches, meant plenty of room for creative mess and no filing. And the fact that the client orders our daily sandwiches from the corner shop – which just happens to be Harvey Nichols – meant that we felt very well looked after.

There are other advantages to our location. The fact that we are just two minutes from site makes any discussion of the scheme much more vivid. Being part of the client team means that decisions are often made instantaneously. And having the design consultants, planning officers and building control so close by encourages a broad and inclusive sense of 'the team' – which is regularly reinforced at our local Thai karaoke bar.

The design team will soon be moving into the dedicated project office on the canalside next to the site, and working together from this relatively early stage means that The Cube's rapid progress will only accelerate. From there, it won't be long until make sets up an independent and permanent Birmingham home.





The following projects featured in last year's annual. Here, we provide an update on key developments over the past year.



... regenerating an important urban transport node...



Elephant and Castle masterplan

The make masterplan for Elephant and Castle provides a template for the regeneration of one of London's most important urban transport nodes. Following the completion of the detailed masterplan strategy, make has been nvited to join the Southwark Council consultation group working towards the ppointment of development partners.



The Vortex

The 300-metre, 72-storey Vortex tower was the first project to emerge from the make drawing boards, and has undergone considerable development in the intervening period. The scheme has doubled in size – both in terms of height and volume: it now consists of two towers, each with the distinctive Vortex profile, linked by a series of sky



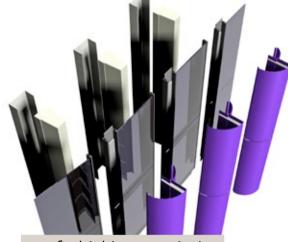
Erco The refurbishment of Erco's Dover Street showroom was make's first completed project, opening in October 2004. This space has provided the subject matter for an artwork recently comissioned by the practice. Created by artist Deborah Jaffe, the work is a collage of over fifty photographs, and currently hangs in the make London studio.



Hampstead Road Designed in collaboration with

RHWL Architects, the Hampstead Road development provides office and warehouse facilities within a dynamic building that will revitalise the site and the surrounding area. The scheme received planning approval in May 2005.

... revitalising the site and surrounding area...



... refurbishing an existing 30-storey tower...

King's Reach

This project will refurbish and extend an existing 30-storey tower to meet current office and environmental standards, creating a lively new office and retail community overlooking the River Thames. Planning approval was received in July 2005, and we are currently working with the client to develop the scheme.

... make's first completed interior project...



Dartford Judo Club

make's first completed project combines a world class sports facility with an open and accessible community resource, housed Dartford Borough Council decided, within a simple, highly efficient pavilion form that captures the spirit of judo without resorting to pastiche.

Dartford Judo Club is one of the UK's most successful judo clubs. Founded by Senior National British Judo Association Coach Alan Roberts, himself a Seventh Dan, the club has produced both Commonwealth and Olympic champions, including Olympic silver medallist Kate Howey MBE. In 2003 the club was awarded the title of UK Sport Club of the Year, and Alan Roberts is unique in having been named England Coach of the Year three times.

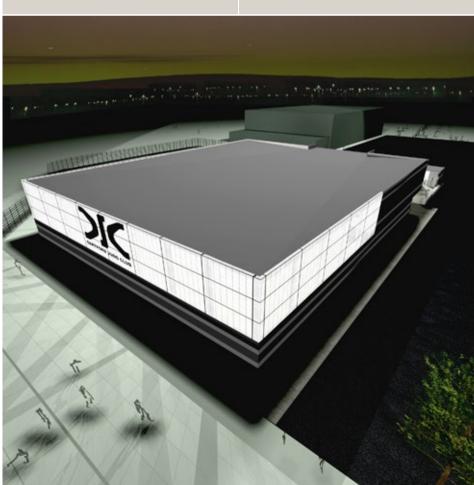
In recognition of these achievements, in 2004, to fund a much-needed refurbishment of the club's facilities and, assisted by a grant from Sport England, allocated a scrubland site adjacent to an old metropolitan tip south of the Dartford river crossing. An initial proposal commissioned by the Borough

Council sited facilities far back from existing services and the primary access road. make were appointed to design the new club after demonstrating that a more rational approach to the site would result in a facility comprising two separate structures and costing £3.5 million, as opposed to a single structure costing

From the outset, the design team were keen to ensure that the new building enjoyed a sympathetic relationship with its surroundings and embraced its greenfield setting. It was also essential that such an important community resource was housed in a suitably open and welcoming structure. Finally, there was a desire for the building to express the spirit of judo. Judo's practitioners aim to achieve the maximum effect with the minimum effort, road. A car park lies in front of the \Rightarrow

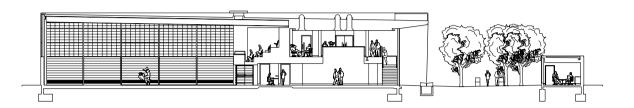
a mantra that echoes the architectural philosophy of doing the most with the least. These principles of a sympathetic relationship with the natural setting, a sense of openness and accessibility, and an efficiency and economy of form were key generators for the design of the Dartford Judo Club.

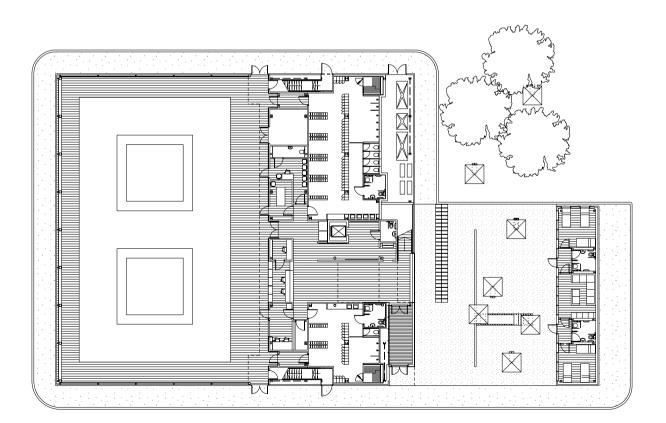
The building is square in plan, evoking the dimensions of a judo mat, with a smaller, ancillary rectangular pavilion located immediately adjacent to the main entrance on the southern facade. The juxtaposition of these two structures establishes a spatial relationship that ties the building into its site, breaking down its mass and drawing the landscape through the gap between the two. It also defines a clear entry route into the building from the main access











are of an equally high standard, and include a sauna and a drug-testing suite. The changing rooms contain identical facilities and are not permanently assigned to male or female, so that the club can allocate them according to need and ensure a smooth flow of users through the building.

The interior is calm and uncluttered throughout, with white walls and timber floors. Dividing walls and partitions are arranged to screen doorways, and the maintenance of clear lines of sight through a succession of unfolding spaces is reminiscent of traditional Japanese architecture. A glass wall behind the reception desk allows visitors entering the building to look directly through into the dojo itself. The wall also doubles as a trophy cabinet, so that this view of the mats is framed by a display of the club's many awards.

Reflective tubes, or sunpipes, draw natural light into the social spaces and gallery areas on the upper level, and the cladding envelope of translucent GRP panels ensures a glare-free day-lit interior. The building is naturally ventilated, with mechanical ventilation available when necessary.

An extremely efficient maintenance strategy ensures that all back-of-house areas are easily accessible and the building can be serviced without interrupting club activities. Security has been an equally important consideration, and the protection of the building and its occupants has been achieved without recourse to a series of forbidding and unsightly security devices. The perimeter fence is concealed within a border of native shrubs that extends the hedgerow already existing on the site, while a threemetre band of slate grey cladding that →





runs around the base of the building is in fact a site-applied liquid plastic membrane that can be reapplied as required to cover any graffiti.

With London's new Olympic park situated due north of the site, Dartford Judo Club is well placed to play a key role Dartford Borough Council in the 2012 Olympics. Above all, the club With is a community resource, housed within a building whose simplicity and clarity ensures that it is open, accessible, and inviting.

Avoiding an obvious pastiche of traditional Japanese architecture, the pared-down efficiency of the Dartford Judo Club building represents a more sophisticated approach, fully in tune with the philosophy of judo in its drive to achieve maximum effect with minimum effort. □

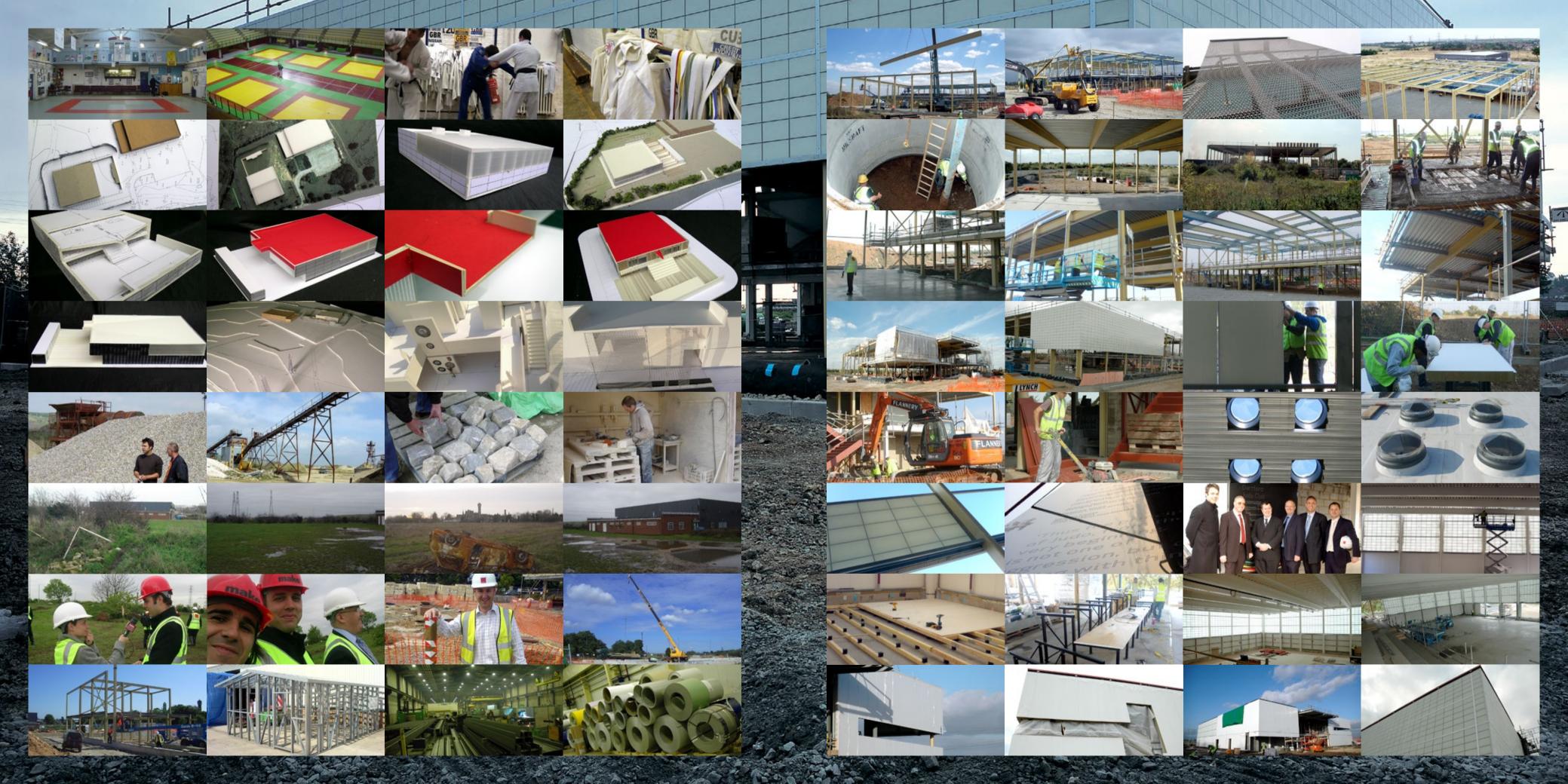
Marcos De Andres, Francis Fawcett, Katy Gharemani, Christina Gresser, Yumi Saito, Matthew Seabrook, Ken Shuttleworth, Matt White

Cyril Sweet, Hilson Moran, Hyder Consulting









Matt White, project architect for the Dartford Judo Club, provides an insight into the use of materials in the scheme.

何 何故 何処

What, why, where?

make were approached to design Dartford Judo Club's new home in December 2004. We were asked to take an existing proposal, halve the cost, and deliver it complete within a year. Oh, and it must be world class architecture too...

Such constraints made the use of standard off-the-shelf or prefabricated components a necessity, with one element of the building, the accommodation block, arriving in its entirety on the back of the lorry to be craned into place. What we were keen to avoid, however, is the dislocation between building and context that often results from this approach.

Two centuries ago, most British buildings were made from materials found within a few miles of the site – anything else would have been prohibitively expensive. In addition, the manual labour required to transform these local ingredients into a building was relatively cheap. The resulting buildings were married to their location by their actual fabric and also by their detailing, which featured as many quirks and variations as the personalities of the people who built them.

In the present day, we find this model reversed: the cheapest materials are mass-produced and local labour is both expensive and relatively unskilled. This is where the problem begins. Buildings 'arrive' on site as objects, and do not embrace their neighbours, spatially or socially. A good example of this lies next door to the Dartford Judo Club: the isolated prefabricated structure of the Stone Lodge Indoor Bowls Club 'landed' here two decades ago, making no attempt to engage with its surroundings. Inevitably, it has been heavily vandalised, despite its CCTV cameras and razor wire.

In order to avoid this sort of dislocation, we relocated the Judo Club to establish a quasi-civic space between it and the adjacent Bowls Club. In addition, a single building was divided into two: the volume of the overnight accommodation block was pulled back from the Club building to create an entrance and draw the landscape through the site, thereby tying the facility into its surroundings. The result is a form that engages with its site, rather than simply being imposed on it.

Our choice of materials throughout has been guided by the

two principles of Judo from the outset: <code>seiryoku zenyo-</code> 'maximise efficiency'— and <code>jita kyoei-</code> 'create mutual benefit'. Accordingly, the building uses a simple ubiquitous palette of black, white and naturally finished materials, with the number of visible edges, joints or components for any given element reduced wherever possible. On fast cheap buildings, edges are often the first casualties in the battle for quality, and simply reducing the number of opportunities for potential errors will greatly improve the overall effect. Accordingly, shower areas are floored with seamless vinyl sheets, and the garden is a seamless area of resin-bound aggregate. The need to coordinate and control elements such as drains and benches is correspondingly diminished because the user's ability to see them as out of place is reduced.

For the exterior we have specified one of the cheapest facade systems available, which is a composite metal cladding panelling commonly used for retail warehouses. This option has been dictated by time and cost, but careful decisions about its use in detail remain crucial. We have deliberately specified flat panels, in preference to the conventional, corrugated variety which betray the slenderness of their construction, and have arranged them vertically to remove any requirement for visible movement joints. The insulation in the panels is rockwool, which is more benign than typical isocyanurate or polyurethane fillings, whilst proving easier to recycle.

Although the panels are quick to assemble, they are vulnerable to damage. To safeguard against any future vandalism, as well as repairing any damage that may occur on site, we are hand-applying an aggregated liquid plastic membrane to the lower three metres of the facade, much like an oversized skirting. Damaged panels can be easily filled, overpainted and made good at minimal expense, and this customisation by hand also works to personalise the building, mitigating the anonymity of its off-the-shelf elements. →



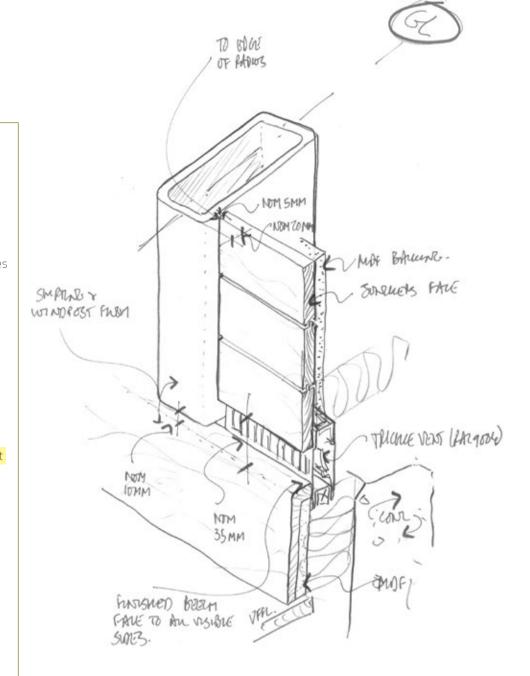
One of the building's most dramatic features is also a key piece of value-engineering. The roof drains via a single ten-metre wide 'gargoyle' down a stainless steel screen and into a chalk aggregated pre-cast concrete soakaway placed just before the main entrance. The mesh screen refers to the oriental tradition of using chains rather than pipes to guide water off a building, and also evokes the chain mail of Samurai armour in reference to the warrior tradition from which Judo has evolved. More poetically, this feature illustrates the key judo principle of softness overcoming hardness as the chalk element is eroded by water trickling down the screen. But perhaps most important of all from a structural and cost-efficiency point of view, this feature adds value because the monopitch roof requires only one drainage point (where originally there were four), and the mesh screen shades the glazed south-facing entrance from solar gain.

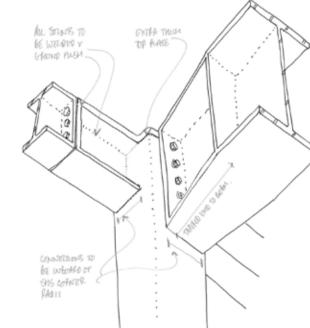
While the design of the building exterior was informed by the nature of the site, the selection of materials for the interior was even more tightly defined by either technical or budgetary requirements. Here, the issue was one of how to manipulate the spaces to present these materials to their best advantage. For example, cost constraints required the installation of the most economic doors available, but the interior spaces have been articulated to tuck these elements out of sight and create the impression of an expansive – and more expensive – series of spaces. As a result, no doors are visible on entering the main reception area. Instead there are simply white walls and soft light.

Similarly, light fittings have been removed from view wherever possible. In the social areas this means that low-cost fittings don't diminish the perception of quality, while in changing areas this strategy also limits the potential for damage by excitable children. Bench and desk laminates are black, matching the only available solid core colour but also ensuring that scratches and wear and tear will not be excessively obvious over time. By contrast, handrails and balustrades have been made out of materials that tend to improve with time – stainless steel and beech, respectively.

The hallmark of an object's successful design is often the extent to which it becomes invisible. On picking up the phone, for example, we think about who we are going to call, rather than marvelling at the ergonomic and tactile qualities of the handset that allows us to talk to them. This has been a guiding principle behind the development of our scheme for Dartford Judo Club. The building has been designed as a community resource rather than an iconic architectural statement. And while we hope that it will be appreciated for its own qualities, the best measure of its success will be the continued growth and success of Dartford Judo Club and its members. *Ippon!**

* The maximum score achievable for a single throw in judo.





Future City Kuwait

Located 35 kilometres south of the Kuwaiti capital, the Khabary Al Fahaheel Future City masterplan will transform 23 hectares of urban wasteland into a dynamic new city quarter with a dramatic public space at its heart.

No project of this magnitude has yet been constructed in Kuwait, and it is destined to become a unique destination within the country and throughout the region as a whole.

The masterplan establishes a template for a new business, leisure and social community by organising a range of uses into two distinct zones: the eastern half of the site is retail, culture and leisure-oriented, while the western half accommodates offices, medical facilities and residential buildings.

A broad, 1.5 kilometre pedestrian avenue is drawn through the centre of the scheme, binding the diverse elements of the development into a cohesive whole, and terminating in a generous public park that fans out to meet the coastline. This public space is sheltered from the harsh local climate by a spectacular lightweight

canopy that runs the entire length of the site, shading and cooling the public zone by as much as 10° Centigrade without resorting to air-conditioning.

This highly efficient, curvaceous structure has been developed in collaboration with the Arup building physics group, and draws on the traditional climate-control strategies found in Arabic architecture while creating a distinctively modern focal

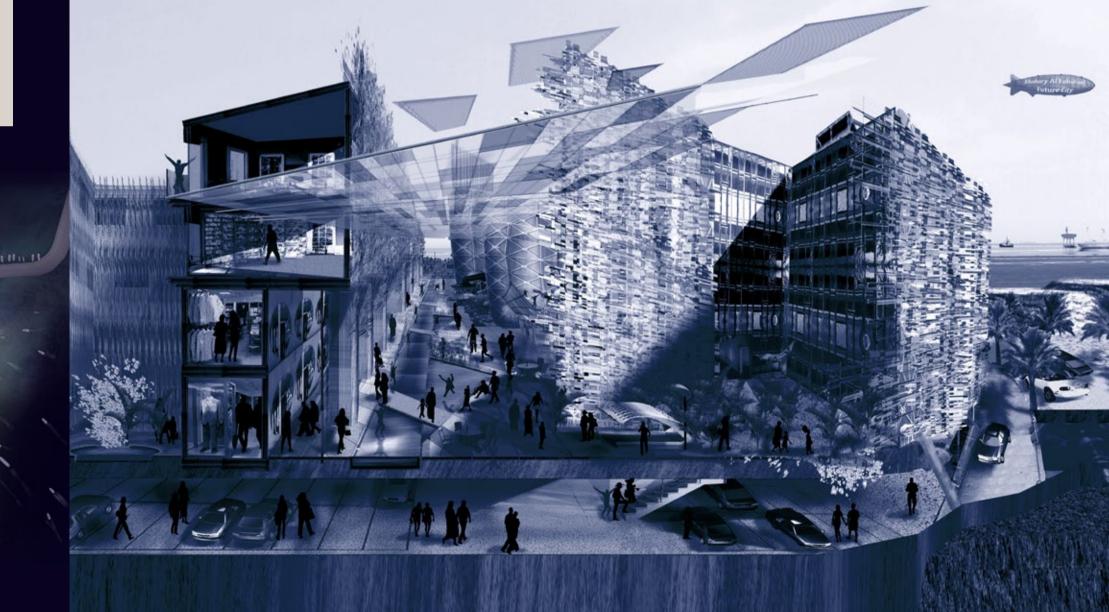
point for the masterplan.

The entire scheme minimises environmental impact. Building layout, landscaping and the canopy structure combine to create a low-energy microclimate, reinforced by the incorporation of a wide range of sustainable energy systems.

Toam

Aziz Al Humaidhi, Michael Bailey, Ramon Gomez, Dominique Laurence, Juan Molina, Yumi Saito, Ken Shuttleworth, Timothy Tan, James Thomas For Al Dar International Consulting With

Arup, Gehl Architects, Lovejoy, Mace



... a dynamic new

city quarter...

St Paul's information kiosk

make have recently been commissioned to design a new information centre for St Paul's Churchyard, which will replace an existing facility originally constructed for the 1951 Festival of Britain.

Located in an area of exceptional architectural heritage, the kiosk stands at the convergance of one of London's principal tourist routes, connecting St Paul's Cathedral and the City with the South Bank and Tate Modern, via the Millennium Bridge.

The structure combines simplicity and efficiency of form with a distinctive visual presence. Triangular in plan and oriented to address St Paul's Cathedral and define new, enlarged public arrival space at the top of Peter's Hill, the building has a folded metallic envelope that seamlessly wraps the internal accommodation.

Reminiscent of origami, the folded effect ensures maximum strength while giving the structure a sense of lightness that allows it to sit gently in its context.

The roof is clad in stainless steel

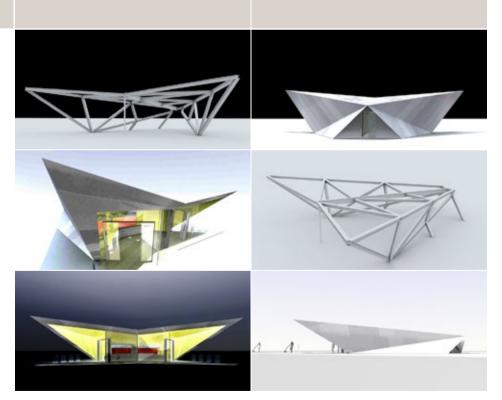
panels and is inclined in profile, flaring out and upwards to mark the public entrance, and tapering down towards the rear staff entrance point.

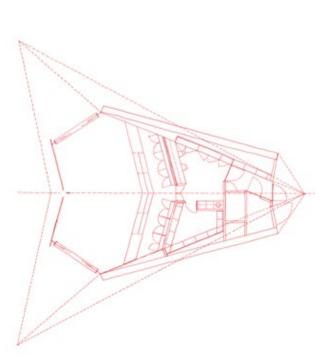
Surrounding hard areas will be relandscaped to provide a generous green public space that invites visitors to linger and admire St Paul's. A fully glazed frontage ensures that the building's function is clearly displayed at all times, and it will glow like a lantern when illuminated at night.

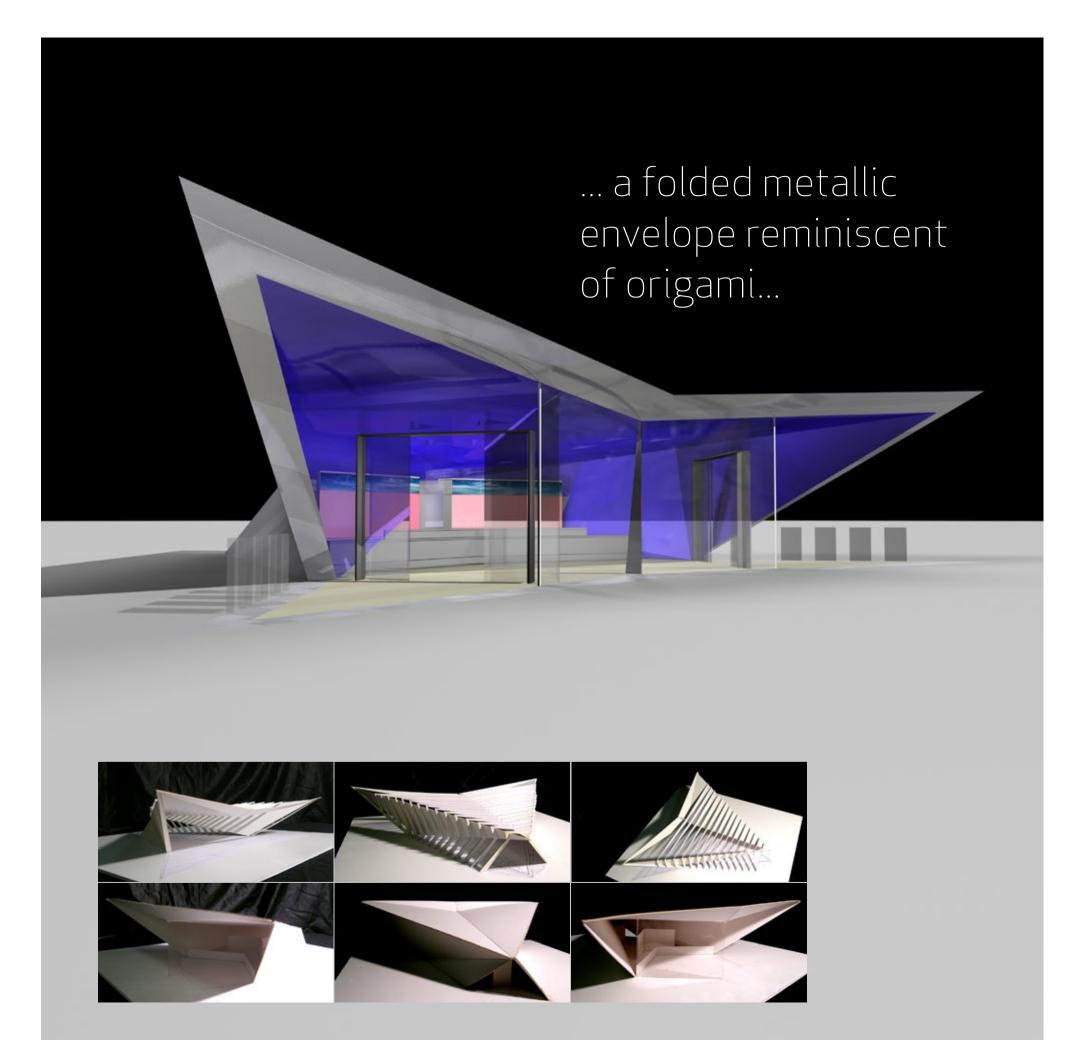
The building meets exacting environmental standards, and the roof has been designed to support a highly efficient photovoltaic installation.

Sean Affleck, Matthew Seabrook, Ken Shuttleworth Collaborator Stuart Lipton/Stanhope For Corporation of London

Arup, Davis Langdon, Unit 22









This scheme for 102 homes in Aylesbury recently won the competition organised by the Office of the Deputy Prime Minister, which challenged developers to design and build high performance units for an exceptionally low build cost of £60,000 per home.

An undulating strip of building divides the site into two clear zones: a public hard edge that extends from the main entrance to the site and addresses a light industrial area to the west, and a private, green soft edge which is sheltered by the line of development and faces onto the residential zone to the east

Within this curving form, a series of dwellings are arranged on a single, continuous street, thereby combining the best elements of the cul-de-sac and the terrace. This distinctive articulation minimises overlooking, and defines pockets of private space which are essential to the formation of a sense of security, belonging and community. Alternating convex and concave areas also create the opportunity to establish distinct communities within the

development as a whole, assisted by the clustering together of family housing or studio apartments.

The scheme is to be built using the high-performance prefabricated techniques perfected by Weberhaus. Each unit is constructed using timber frames and timber cladding which provide the most environmentally friendly option available. The wood cladding also has a warm domestic character that will enrich the development and help it blend with its surroundings. The roofs are to be tiled, in accordance with the local vernacular.

The individual prefabricated units have received a BRE Environmental Assessment Method rating of 'Excellent', surpassing the 'V Good' rating required in the brief.

Team

ACD, Weberhaus,

Juan Molina, Yumi Saito, Matthew Seabrook, Ken Shuttleworth, Timothy Tan, James Thomas For William Verry Ltd , Saxon Homes







Olympic Aquatics Centre

The shortlisted competition scheme for the London Aquatics Centre positions a world class venue for the 2012 event as a dramatic gateway to the Olympic Park.

Following the theme of integrating buildings into the site established by the Olympic Park masterplan, the scheme makes ingenious use of the topography of the immediate area and uses the structure to manage a significant drop in ground level at the park entrance.

Two pools, one for swimming and a smaller one for diving, are sunk into the ground on either side of the main entrance to the site, linked at basement levels by a training pool and warm up and sports science facilities. Spectator grandstands are banked around each pool to rise up above ground level, and the main entrance concourse is drawn between them to lead to the Olympic Park beyond.

The whole complex is spanned by a spectacular lightweight roof, whose sweeping curves are inspired by the

arching, outstretched arms of a swimmer performing the butterfly stroke – the most physically demanding stroke in competitive swimming. The roofing system of transparent ETFE pillows allows each pool arena to be bathed in natural light, and the structure facilitates rainwater collection.

Team

Sean Affleck, M

Ken Shuttlewor

Collaborating a Faulkner Brown

For

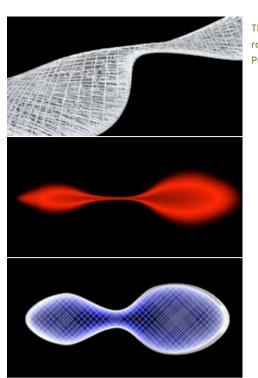
Sport England

With

Longevity of use was a key aspect of the brief, and the scheme was designed to adapt to long term use after the close of the Olympics, leaving a lasting and sustainable leisure facility for the use of the wider community.

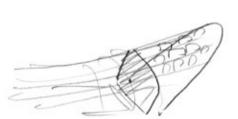


Sean Affleck, Matthew Seabrook,
Ken Shuttleworth
Collaborating architects
Faulkner Brown
For
Sport England
With
Arup, Davis Langdon, GMJ,
Vector Foiltec

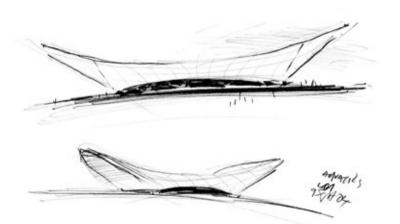


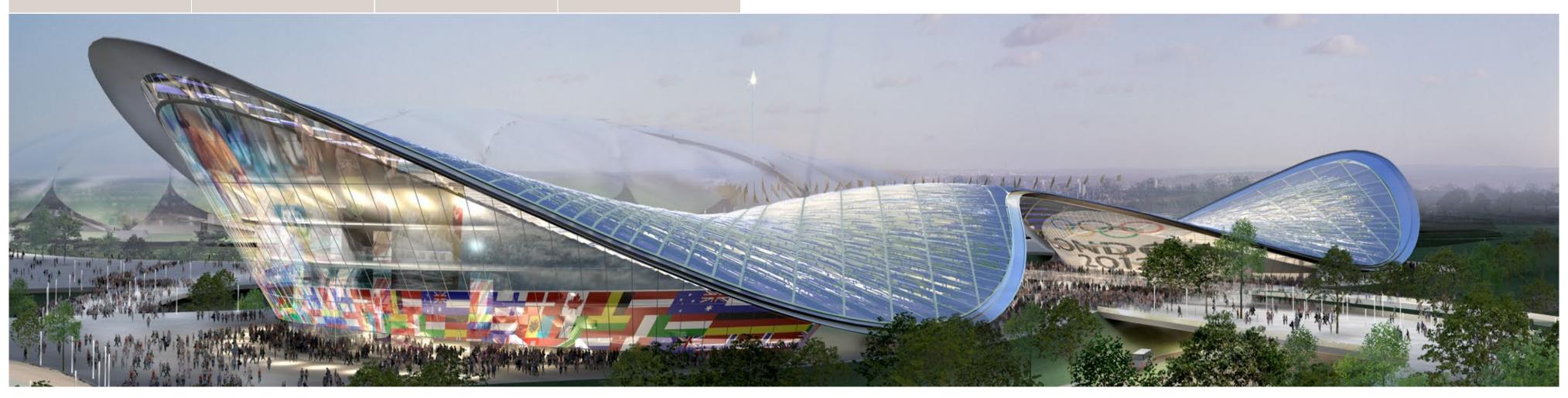
These drawings of the Aquatics Centre roof featured in last year's annual as Puzzles 1 and 2. Did you recognise them?





... sweeping curves inspired by a swimmer's arms...





Huntingdon Water Tower

This proposal to convert Huntingdon water tower into an office development will preserve a Cambridgeshire landmark that has lain derelict since the 1970s, while complying with current planning guidelines on sustainability and the re-use of existing buildings.

The design challenge was to develop a scheme that respected the existing 24-metre structure, built in 1935, while incorporating all the amenities required for a modern office development.

The tower is retained intact and surmounted by a dramatic new glazed structure which houses three floors of office accommodation, supported by a series of steel piers contained within the existing tower structure. This new element derives its faceted form from the octagonal plan of the water tower, and the contrast between the solid concrete of the tower and the glazed panels of the new addition is reminiscent of a lighthouse and its lantern. The tower contains service cores, stairways and meeting rooms, while a four-storey ancillary structure, roughly triangular in plan, flares out from pump system.

the base to offer additional office space. The walls of this additional block are clad Michael Bailey, Ramon Gomez, in anodised aluminium and glazed panels where they extend out from the tower, but the flat south-western elevation is finished in reinforced concrete panels and animated by coloured glass slot windows.

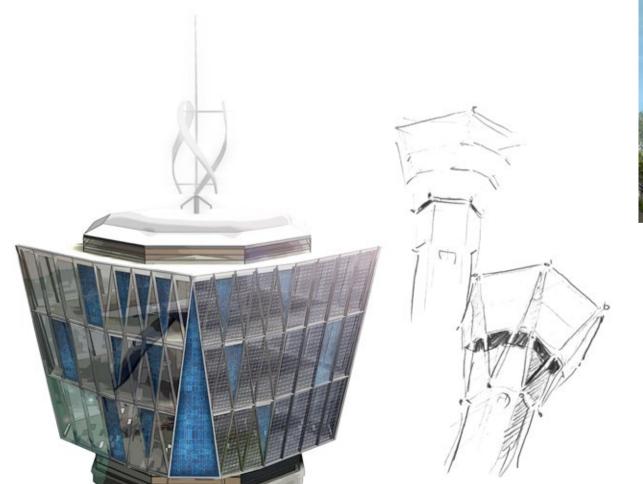
In addition to the cost and energy savings represented by retaining the existing structure, the scheme incorporates a range of energy efficiency measures. An extensive photovoltaic array will be incorporated in the southern face of the upper glazed element, applied both as solid panels and as a laminated translucent film. The structure is also capable of supporting a roof-top wind turbine, while additional energy savings are represented by a geothermal heat



Dominique Laurence, Jason McColl, Yumi Saito, Matthew Seabrook, Ken Shuttleworth, Timothy Tan, James Thomas

Landro Ltd

Arup, Barker Storey Matthews, Davis Langdon, Unit 22









Hooks, rails and handles

Architectural hardware specialists lzé have commissioned make to design an exclusive range of products, combining simplicity of function and construction with purity of form to create an elegantly streamlined system.

The initial concept was explored and tested in a series of wood models, before being prototyped. A flat strip of stainless steel provides the basic element for an infinitely extendable and flexible product range whose hallmark is its clarity and integrity.

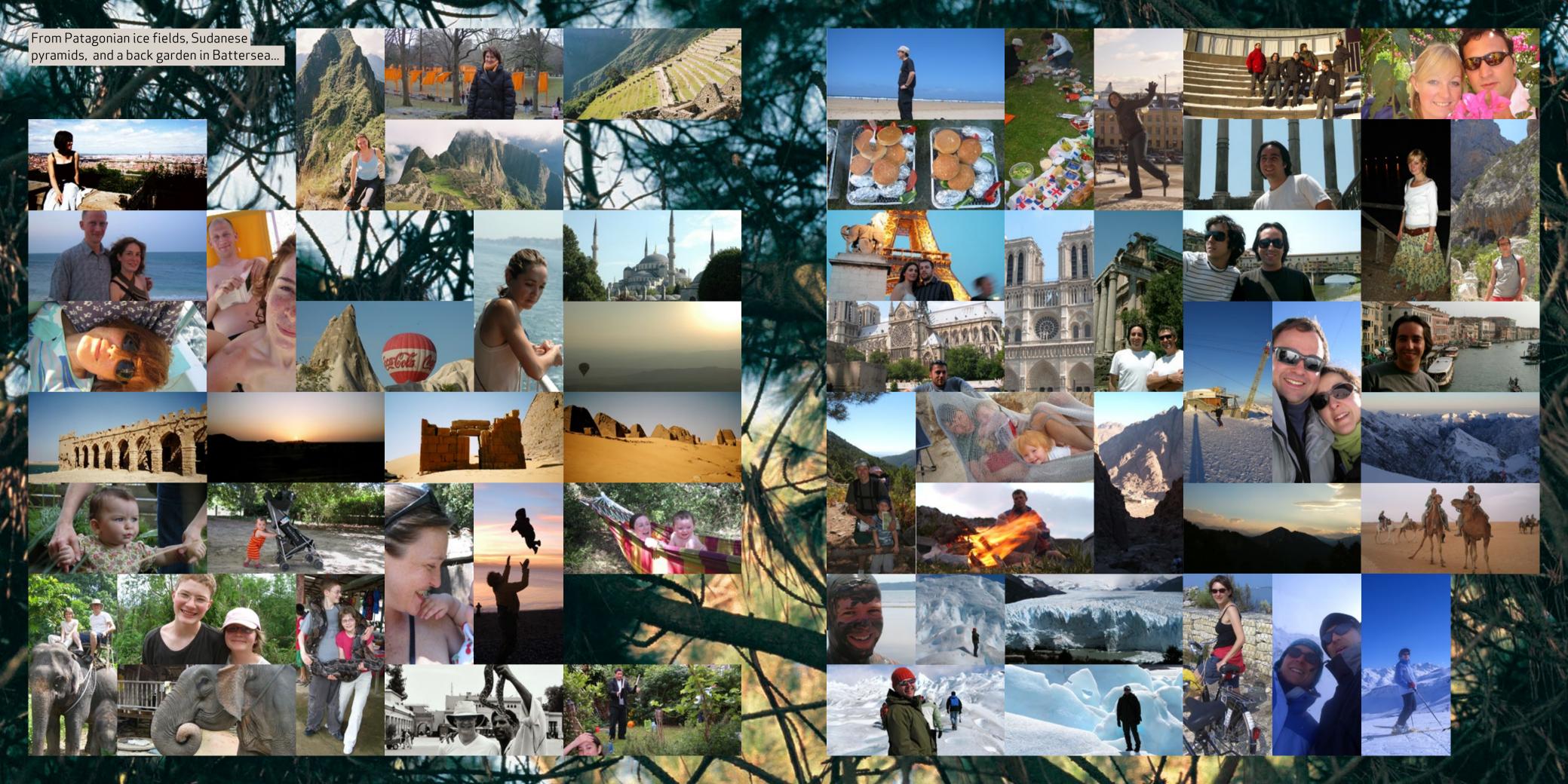
The range comprises a long and short pull handle, a lever handle, a hook, a toilet roll holder and a towel rail. Ease and comfort of use were key considerations, and each item is available in a version tailored to ensure disabled access. The disabled access version features an extension of the flat strip element, which kicks up at an angle to provide an increased surface for leverage.

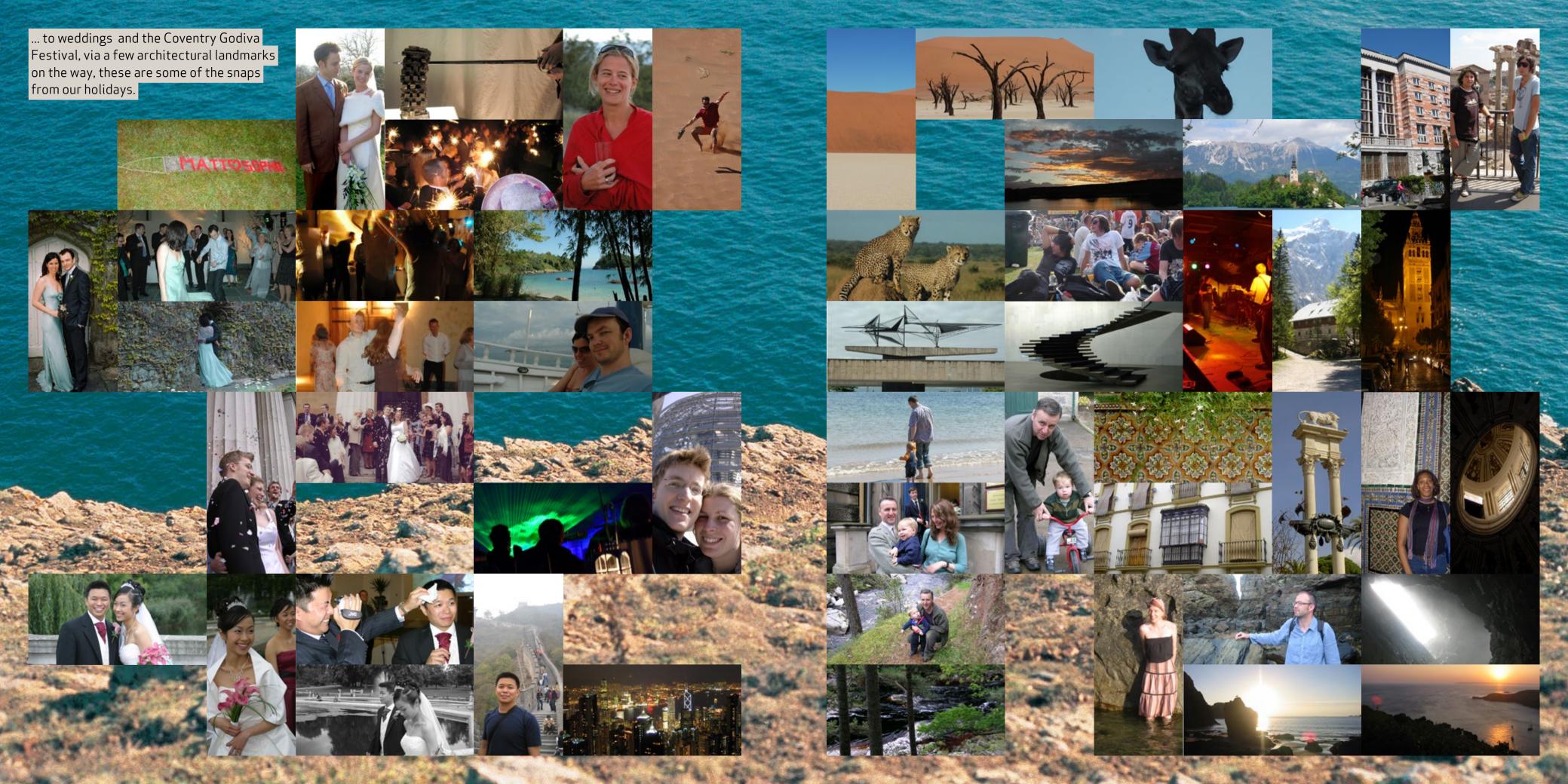
Launched at London's 100% Design showcase in September 2005, the series has been used in the fit-out of make's Dartford Judo Club.

Katy Ghahremani, Ken Shuttleworth, Matt White





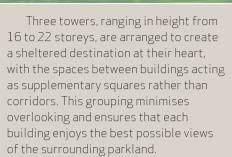






One North, Singapore

This competition-winning scheme proposed a cluster of three residential, office and hotel buildings for a site within the 200 hectare One North development in Singapore's heritage Rochester Park area.



Gardens, soft edges and gradual level changes at the base of each tower subtly integrate the built scheme with the environment, and allow the parkland to gently flow between the buildings.

Service bays and access roads are concealed beneath landscaped mounds.

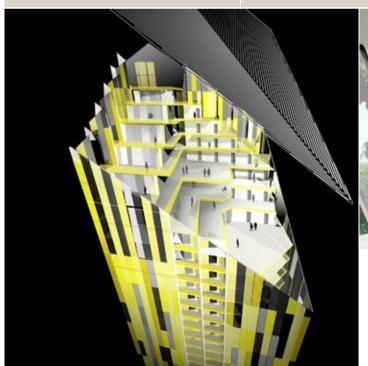
The largest tower contains a hotel and serviced apartments with a gym and child care centre, and is located to serve as a gateway to the site from the nearby Buona Vista Road. Two smaller towers

contain apartments and retail facilities, and office spaces and a civic library respectively. All share the same distinctive diamond-shaped form with an angled roof plane, and each is distinguished by an individual colour palette and the specific range of solar shading devices used in the cladding.

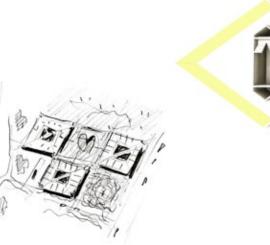
Each building is crowned by a distinctive solar shading device inspired by the delicate fronds of a tropical palm leaf. Diamond-shaped in plan and formed from a light-weight metal grille, this structure provides critical shading during the day as well as storm water drainage. It can also be dramatically lit at night to create a strong presence for the development on the city skyline.

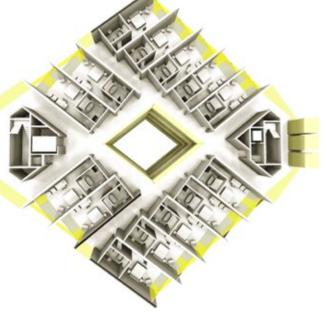


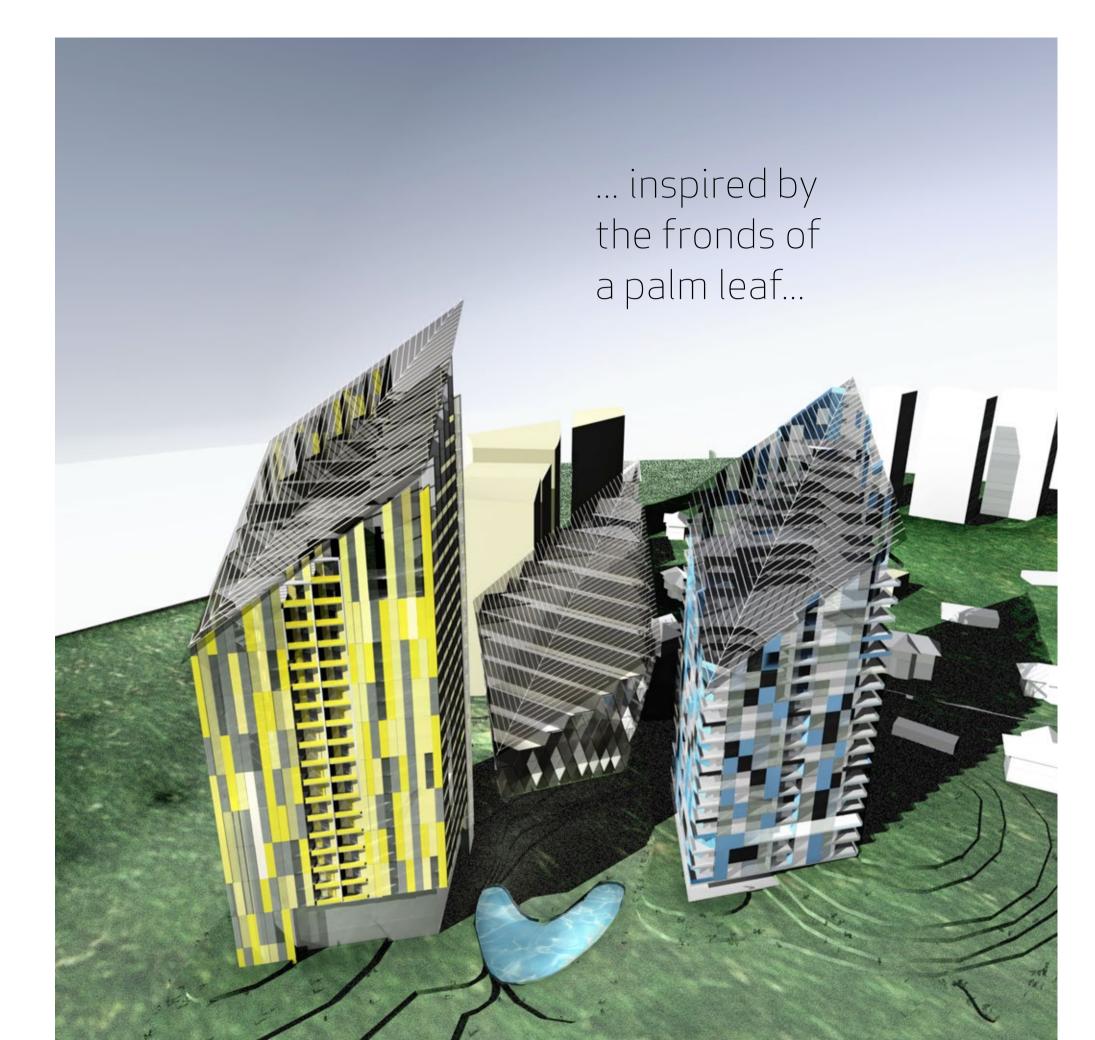
Pontiac Land
With











The Cube

The final phase of
Birmingham's highly
successful Mailbox
development, The Cube
will provide 46,500 square
metres of accommodation
for a rich mix of shops, bars,
cafes, offices, apartments,
a boutique hotel and skyline
restaurant.

The Cube is firmly knitted into its context and actively draws people through the site to become a new hub for pedestrians. Extensive studies of routes defined the essential plan of the building as a square, with public space at its heart and diagonal axis dividing it into two L-shaped structures at lower levels. As the building rises the floorplates expand to bridge the ground level route and terrace at the uppermost levels to allow a dramatic asymmetric atrium to occupy a third of the plan.

The atrium twists as it rises upwards, slicing through the floor plates to create dynamic spatial relationships while drawing natural light deep into the heart of the building. The resulting building draws pedestrian traffic between the canal and the street, and creates a dramatic new 'front door' to The Mailbox.

The building's facade is as visually exciting as its form. A geometric metal and glass cladding system is used for the lower levels and upper floors of accommodation, dissolving into a fretwork screen where the facade wraps around the atrium at upper levels. The modular cladding system also plays a key role in the building's environmental strategy, as it offers infinite flexibility to tailor the glazing of each facade in response to potential solar gain.

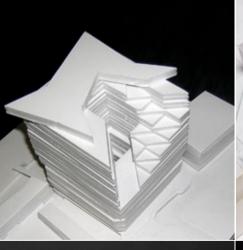
Other energy efficient measures incorporated into the building design include natural ventilation, canal cooling, and the installation of a CHP generator.

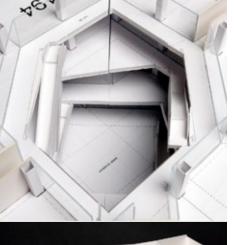


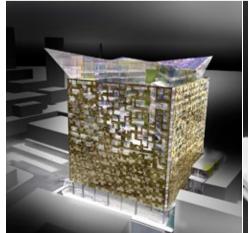
Hoare Lea, Unit 22

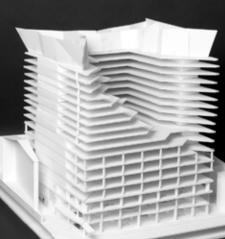
Frances Gannon, John Man,
Chris Marquis, Alan Morrissey,
John Prevc, Paul Scott, Matthew
Seabrook, Ken Shuttleworth, Greg Willis
For
Birmingham Development Company
With
Buro Happold, Faithful & Gould, GMJ,



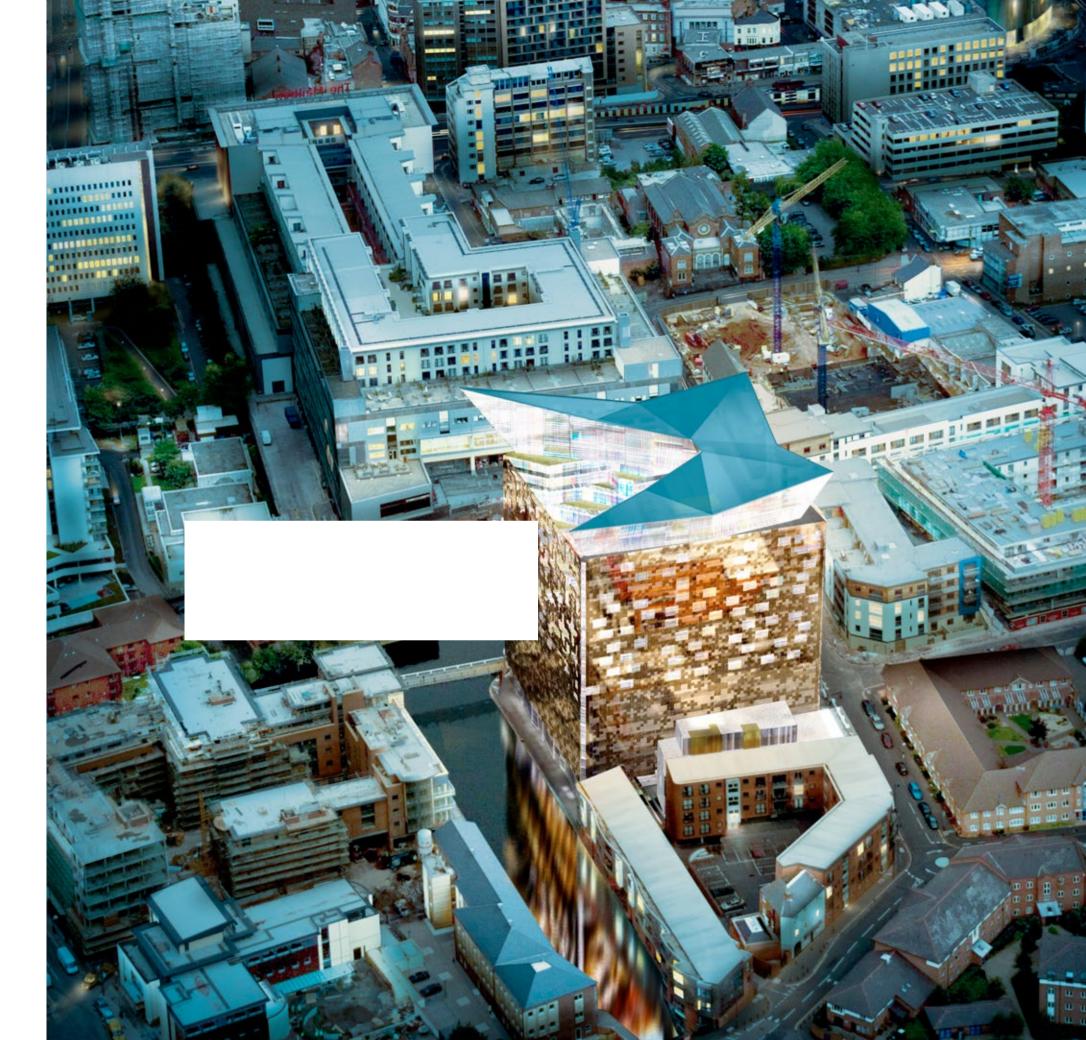












Cancer Research Building

This state of the art cancer research facility will replace two existing buildings on a brownfield site to create a striking new gateway to Oxford University's Old Road campus.

The 14,000 square metre building is three storeys above ground, with a partial basement that accommodates a slope across the site, and is arranged in three wings connected at front and rear.

The accommodation comprises flexible laboratory and office space, with communal facilities facing onto two principle social areas in much the same way that a traditional university college building overlooks the quad at its heart. These social areas consist of a courtyard lit by a generous lightwell in the western half of the building, and 'the street', which links the main and the secondary entrance to draw a pedestrian route through the structure.

An aluminium and glass cladding system with external shading wraps the building, and has been designed to harmonise with the mature planting on

the campus. A spectrum of greens is distributed across the panels to create a Dan Farmer, Stuart Fraser, pixilated effect similar to the disruptive visual effect of camouflage, breaking down the scale of the building.

As well as blending with its surroundings, the facade responds to the orientation of the building and the composition and use of internal spaces by appearing more opaque on its western Oxford University Estates Directorate elevation and gradually becoming more transparent at the north-east entrance to Peter Brett Associates, DPDS, the building.

The building has been designed to satsify the anticipated building regulations relating to energy consumption, achieving a 28 per cent reduction in carbon emissions when compared to an equivalent building under current legislation.

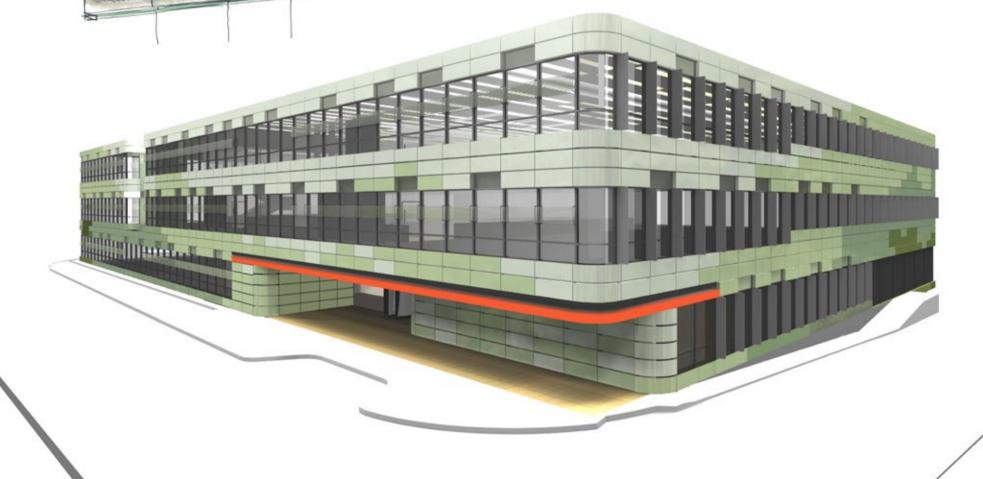
Frances Gannon, Doris Lam, Jonathon Mitchell, Justin Nicholls, David Picazo, Carolin Schaal, Matthew Seabrook, Ken Shuttleworth Nightingale Associates

EC Harris, Foreman Roberts, HCD Group, Price & Myers, RB Development Management, Warrington Fire









Brando

Occupying a key location on the north bank of the River Thames, this mixed use development enjoys a panoramic view of Hammersmith Bridge. Four office buildings define a generous landscaped public route that sweeps down to the river, where a pontoon deck offers stunning views up and downstream.

This scheme will maximise use of the river by creating a direct link between the public transport hub at the Hammersmith interchange and the riverside. It also incorporates significant improvements to Fulham Palace Road and the nearby Frank Banfield Park.

The office buildings facing the river have chamfered facades to allow views deep into the site and increase public space along the waterfront. Those at the entrance to the site are similarly angled to create an entrance plaza set back from the road, emphasising the public route that draws through the site.

The clean lines and simple forms of the office buildings define and complement the generous swathe of green landscaped space at the heart of the scheme. Cafes, shops and a health club animate the ground floor levels and

bring activity to the public landscaped area, while terracing at the upper levels and pitched roofs break down the in solid and tinted glass panels, arranged in bands to maximise views outwards.

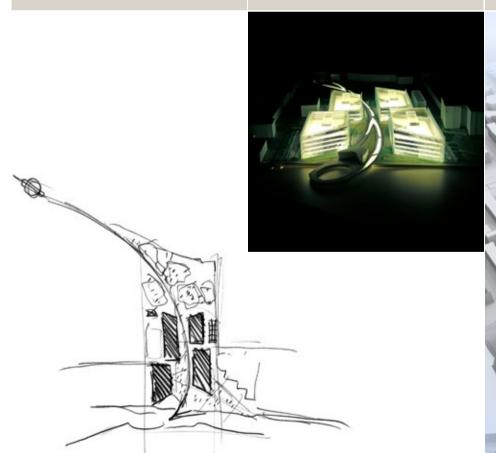
The new public amenity of the river deck is complemented by a water sports facility which will support a range of waterborne and educational activities for the local community.

On the north-eastern perimeter of the site, a new terrace of 12 residential units extends the existing street pattern Peter Stewart, Rybka, Safe, Unit 22, and mediates between surrounding residential properties and the scale of the new office buildings beyond. In form, the terrace has been designed to maximise the availability of natural light and exploit views towards the river.

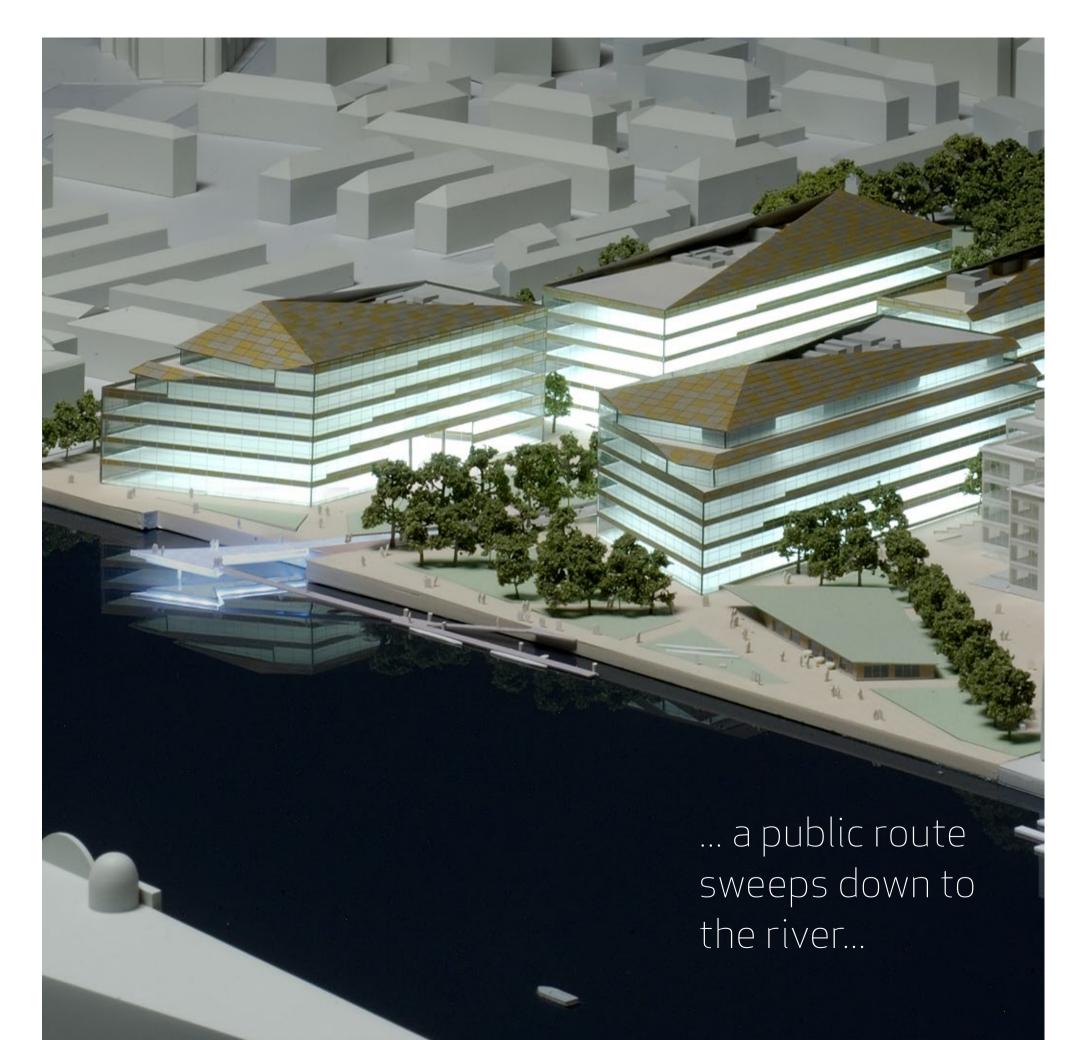
Tim Davies, Frances Gannon, Simon Lincoln, Juan Molina, Jason McColl, building mass. All four structures are clad Jason Parker, John Puttick, Gary Rawlings, Timothy Schreiber, Matthew Seabrook, Ken Shuttleworth, Bibiana Zapf

Akeler Delancev

APS Project Management, Amalgam, Bowmer & Kirkland, Camargue, Connell Mott MacDonald, GMJ, Indigo, Lovejoy, Nathaniel Lichfield and Partners, Whitby Bird & Partners







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Nottingham University

The make masterplan for Nottingham University's Jubilee Campus extends and enhances existing facilities to offer students and staff a welcoming and vibrant environment for research, study and leisure.

The masterplan creates a new lateral route through the site in the form of a generous landscaped pedestrian boulevard that links two existing bodies of water at opposite sides of the site. This boulevard draws the theme of nature through the campus while providing a focus for leisure activities.

A rich array of buildings and functions are enlivened and softened by this natural element, with new development limited to a maximum of four storeys to harmonise with the suburban setting. The highest structures are centrally positioned in order to create a clear focal point and assist orientation.

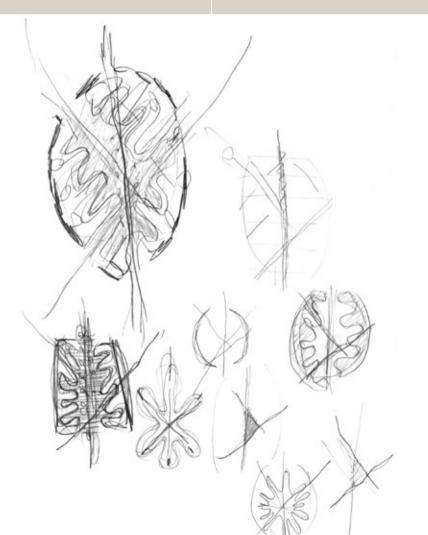
The campus is divided into two main zones – the science-based Research and Innovation Park to the east, and academic facilities to the west. Three potential

buildings have been identified for the first phase of the masterplan. International House and its support building, which houses catering and fitness facilities, are sited to the north of the academic zone of the campus, and are highly distinctive in form. These structures rise from the groundplane like With natural landforms, an effect heightened by their cladding system which consists of terracotta tiles arranged in bands like geological strata.

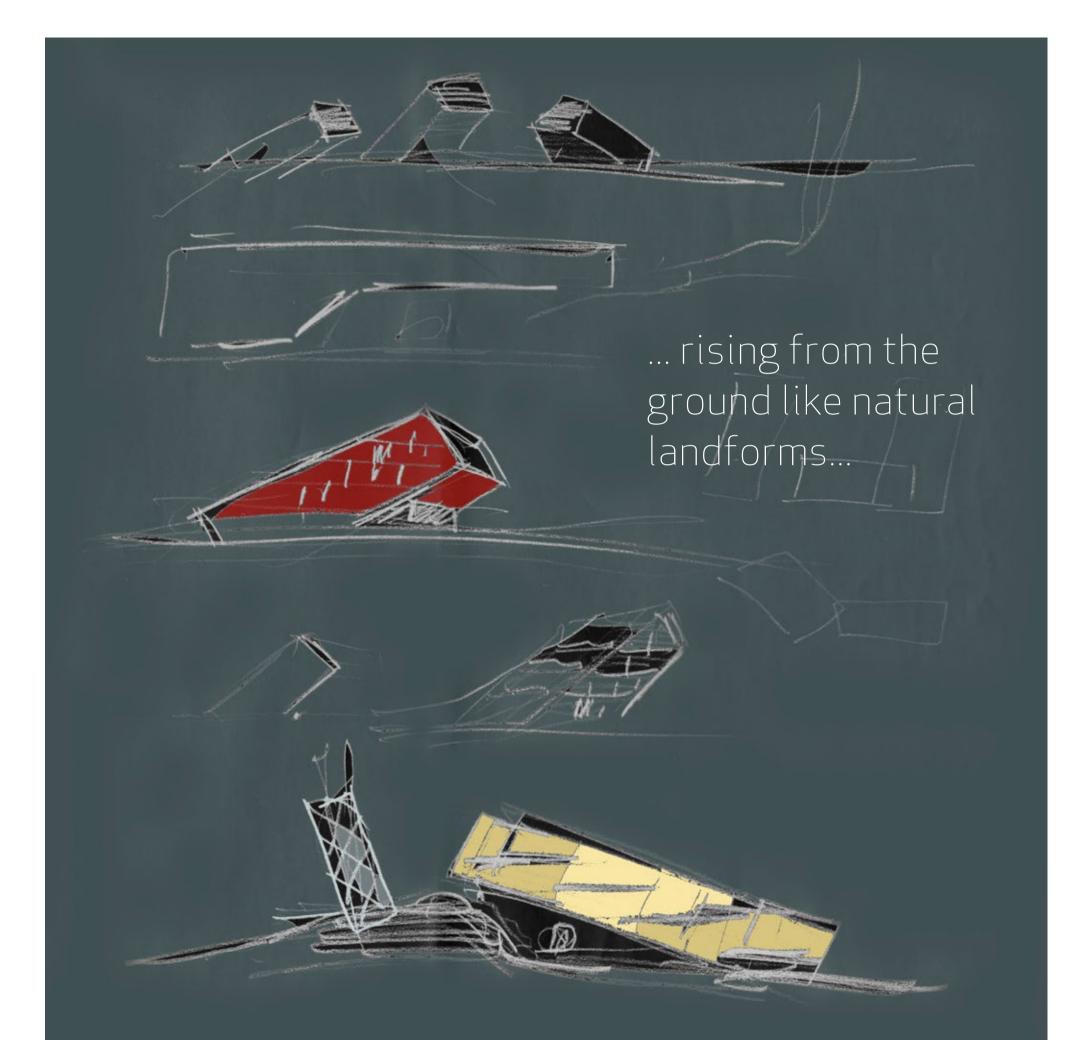
The third building houses a range of facilities for new businesses, and straddles Triumph Road to physically and symbolically link the two halves of the campus. This structure, known as the Gateway Building, will mark the heart of the campus, symbolising the innovation and expertise the University encourages.

Katy Ghahremani, Christina Gresser, Sam Hobson, Simon Lincoln, David Patterson, John Prevc, Matthew Seabrook, Ken Shuttleworth University of Nottingham

AECOM, Adams Kara Taylor, Faber Maunsell, Gardiner and Theobald LLP







Dynamic coloured facades are fast becoming a make hallmark. Architects John Puttick and Jason McColl discuss the practice's distinctive approach to designing the skin of a building. Colour, pattern and efficiency in cladding One of the first things clients tend to notice when they arrive at the make studio is the sheer variety of the cladding solutions we are currently developing. A mass of drawings and computer images are pinned up all over our studio walls, showing how colour, pattern, and materials are being explored to develop unique facades for a number of exciting projects, ranging from systems of coloured glazing or translucent stone, to complex geometric arrangements of gold anodised aluminium or burnished bronze panels. This is usually followed by some reference to our use of colour, as if people are amazed that we've managed to break away from the conventional architectural palette of grey accessorised with touches of grey. Perhaps as a result of concerns that colour is too closely bound up with fashion and personal taste, contemporary architecture has become synonymous with expanses of white and grey. But this monotone obsession has not always been the case, and colour is integral to some of the iconic works of modern architecture. Frank Lloyd Wright's houses reveal the deep earth tones of their bricks and are enlivened by stained glass, Charles and Ray Eames' Case Study House uses primary colours as a backdrop for family life, and in the heart of Paris, the bright colour-coded services of the Pompidou Centre bring a distinctly urban vibrancy to the surrounding, highly popular public spaces. Such examples illustrate colour's extraordinary potential to enrich the places and spaces we inhabit. Colour is an and it is often the first thing that we notice about an object. It can enhance and exaggerate local context, or deliberately contrast with it; it can dissolve a building into fragments, or emphasise its mass; it can draw the eye around a form or define patterns within a structure that would otherwise remain hidden. Above all, by making a building colourful we can create

essential part of our environment, whether natural or manmade, something unique and inject a new sense of life into a location.

These strategies are being explored in a number of our current projects. For example, our refurbishment of the King's Reach tower overlooking the River Thames refaces the building with a new, energy-efficient cladding system, and here colour is used to forge a connection between the original structure and the new elements that revitalise it.

The existing building has an unusual structural arrangement of cranked perimeter columns which result in an interesting pattern of loading. Recladding has provided an opportunity to reveal this integral aspect of the building through colour, and a range of five blues accented by silver are employed to create an abstraction of the load pattern across the facade. At the same time, the applied colour responds to the tower's 360 degree context, gradating from deep subdued shades facing the residential areas to the south to a bright cyan looking out over the river towards the West End.

Whereas colour is used to articulate and define structure at King's Reach, in another project it serves the opposite purpose, helping a building melt into its surroundings. The new Cancer Research Building for Oxford University's Old Road Campus has a smooth flat aluminium and glass cladding system with external shading that wraps around the structure as a continuous surface. Here, colour is used to break up the building's considerable mass and ensure that it harmonises with the mature planting that embraces three sides of the campus. A spectrum of greens has been selected from the tones of the summer foliage on site, and distributed across the panels to create a pixilated effect similar to the disruptive visual effect of camouflage.

By comparison, red might seem an unlikely choice to help integrate a building with its surroundings, but it is used in very much this capacity in our scheme for a faculty building at the University of Nottingham. The building erupts from the ground almost like a natural landform, and the geological aspect is further emphasised by the horizontal bands of red glazed terracotta tiles that run like strata along the length of the facade. However, the choice of red is also a response to the context. The residential area enclosing the campus consists largely of red brick houses, and the building directly opposite the site is also red in colour. The use of glazed terracotta as a cladding material therefore establishes a dialogue with the local conditions.

In addition to exploring colour, we have been introducing textures and patterns to our facade solutions. The use of repeating elements is an integral part of facade design, but we are currently working on several office projects which allow us to pursue increasingly complex geometrical formulations in the drive to develop facades that are both high performance and visually dynamic.

The needs of client and users are fundamental to determining the ultimate form of a building's facade, and office buildings impose a very particular set of conditions in this respect. The majority of office developments are built speculatively, and in order to ensure maximum flexibility for their occupants we are usually required to comply with a 1.5- metre planning grid that allows tenants to install \Rightarrow

standardised cellular offices. In turn, this planning grid determines the dimensions of a cladding system, and here too we often design to the same 1.5-metre dimensions. But within this framework there is potential for infinite variation, and we are currently working on a number of office buildings which use these planning requirements to generate a radically differing range of dynamic, high-performance facades.

For example, the office accommodation in our Brando development in Hammersmith features continuous horizontal slots of glazing, in order to take full advantage of the site's panoramic views of the Thames. These are interspersed with solid cladding panels that break up the appearance of the building. Another office scheme for Hampstead Road, which has recently received planning permission, features a jigsaw of interlocking L-shaped gold aluminium panels to form a repeating series of recessed windows. While the constituent parts of this facade are standard cladding elements, the overal appearance is unique.

Although cladding systems traditionally employ a rectilinear grid, another London office scheme uses a rather different approach. Here, we have developed a cladding system of floor-to-ceiling-sized circular windows, wrapping around the entire elevation. The resulting honeycomb effect breaks up the appearance of the building and creates a striking new point of focus for its urban setting.

The use of colour, pattern and texture is not purely a question of decoration, however. These cladding systems are designed to perform and please the eye. Each creates an energy-efficient facade that responds to its particular environment, and in many cases colour and pattern are harnessed specifically as a way of addressing environmental performance, in addition to their visual qualities.

In practice, this means that we use solid, insulated components to decrease thermal loss, while colour can be used to provide shading and reduce solar gain. In order to achieve the optimum thermal performance in our buildings, we avoid using triple-glazed facades, which are very costly, or complex double-skin constructions which use valuable site area, and are difficult to clean and maintain.

By contrast, a facade with approximately 50 per cent solid elements and 50 per cent glazing enjoys a greatly improved thermal performance compared to the typically wasteful 'glass box', and sees a significant reduction in heating and cooling costs.

The facade of the Hampstead Road office scheme, for example, comprises only 40 per cent glass, meaning that heat loss from the building will be at least 25 per cent less than that of a comparable all-glass design – and its distinctive essellated panelling relieves what would otherwise be a blank solid surface.

Elsewhere, in very different climactic conditions, use of colour has allowed us to resolve the issue of solar heat gain in an all-glass building. Our designs for a cluster of all-glass buildings for the One North site in Singapore incorporate body-tinted, coloured glass panels to create interiors bathed in gently tinted coloured light, with thermal heat gain reduced by the glass coating. To further reduce solar gain, the cladding also features solid elements consisting of back-painted coloured glass panels in front of insulation to provide good performance.

The British weather ensures that solar gain is less of a challenge in this country than in Singapore, but the heat generated by people, computers and other office equipment means that heat gain can pose a considerable challenge for many office buildings in this country. Accordingly, we are currently developing a scheme for a new London office which addresses this by using a very common material in an unusual form. The cladding system for this building will primarily consist of translucent stone laminated into double-glazed units, which will admit natural light but provide impressive solar shading, thereby reducing air-conditioning requirements.

The cladding will subtly change from elevation to elevation, ensuring more solar protection on those facades that receive the most sun, with more clear glass on those where heat gain is less of a problem. The natural grain of the stone will create beautifully textured patterns when viewed from both interior and exterior, with the colour, texture and pattern of individual panels selected to respond to the variety of building types surrounding the site.

As these approaches demonstrate, colour and pattern can be essential tools in our drive to create the most energy-efficient buildings possible. That they might also enhance the cityscape and heighten people's pleasure and enjoyment of their surroundings - whether in general terms, or relating to a particular building - is an added benefit, but one of considerable importance in itself. \square

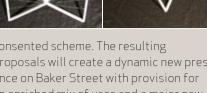


55 Baker Street

This office building occupies a significant location on one of London's most important urban thoroughfares: the scheme to refurbish and upgrade this unremarkable structure will revitalise Baker Street, and bring a major new public space to the streetscape.



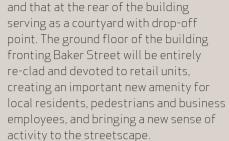
Despite these failings, the building is in relatively good condition, a fact which has enabled the design team to pursue a cost and energy-efficient strategy of retention and enhancement, rather than the wholesale demolition and rebuilding determined by a previous



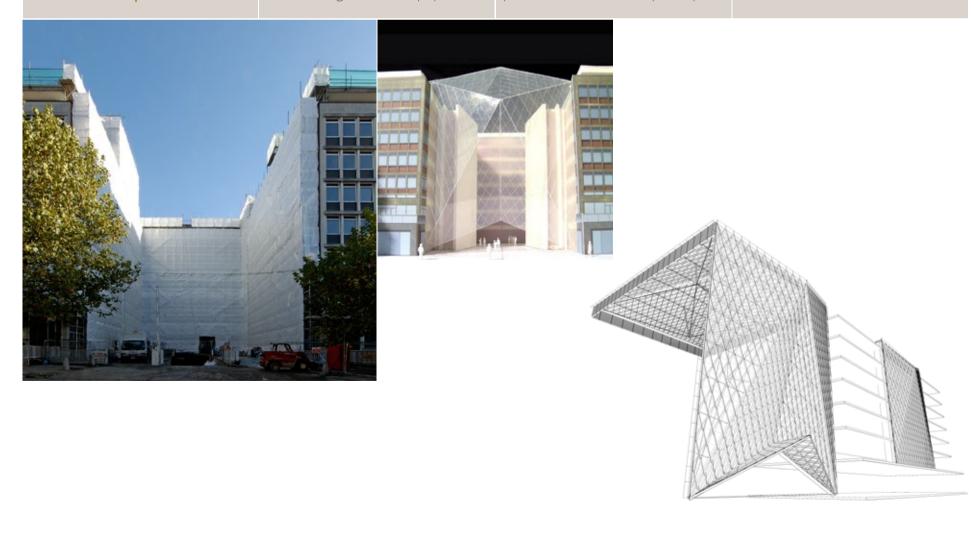
consented scheme. The resulting proposals will create a dynamic new pres- serving as a courtyard with drop-off ence on Baker Street with provision for an enriched mix of uses and a major new public space at its heart.

While the majority of the existing building is to be retained, the structure will be rationalised by the removal of the existing vertical cores, and further consolidated by the creation of new floorplates which bridge the projecting fingers of accommodation and allow the development to offer a substantially increased area of office accommodation. Full height atria are retained at the heart of these office floors to draw natural light deep into the building.

The central voids between the blocks will be retained at both front and rear, with the space fronting onto Baker Street existing blocks, reducing solar gain and preserved as a new covered public space,



The transformation of the building is dramatically expressed by the three glass infills or 'masks' which will span the voids between the existing blocks to create a unified but dynamically modulated new facade for the building. Angular and gently convex in form, the masks situated at either end of the facade will act as double-skinned glazing for the new floor space between the noise transmission from the street. \Rightarrow





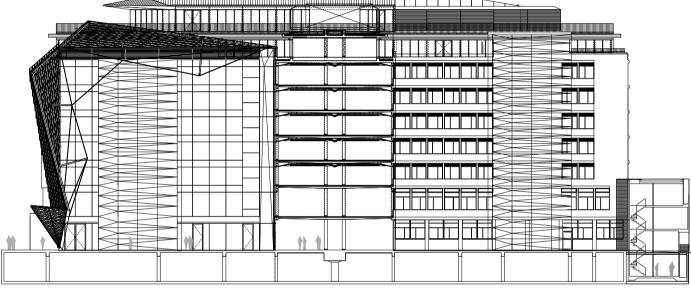
energy efficient as possible. The introduction of a chilled beam system in all office spaces will considerably reduce energy use, while the double skinned glazing masks enclosing new floor areas are fritted to prevent excessive solar gain. Planted roofs will also be used on the new housing development to the rear of the building to offer more effective insulation and encourage biodiversity in the area.

Team

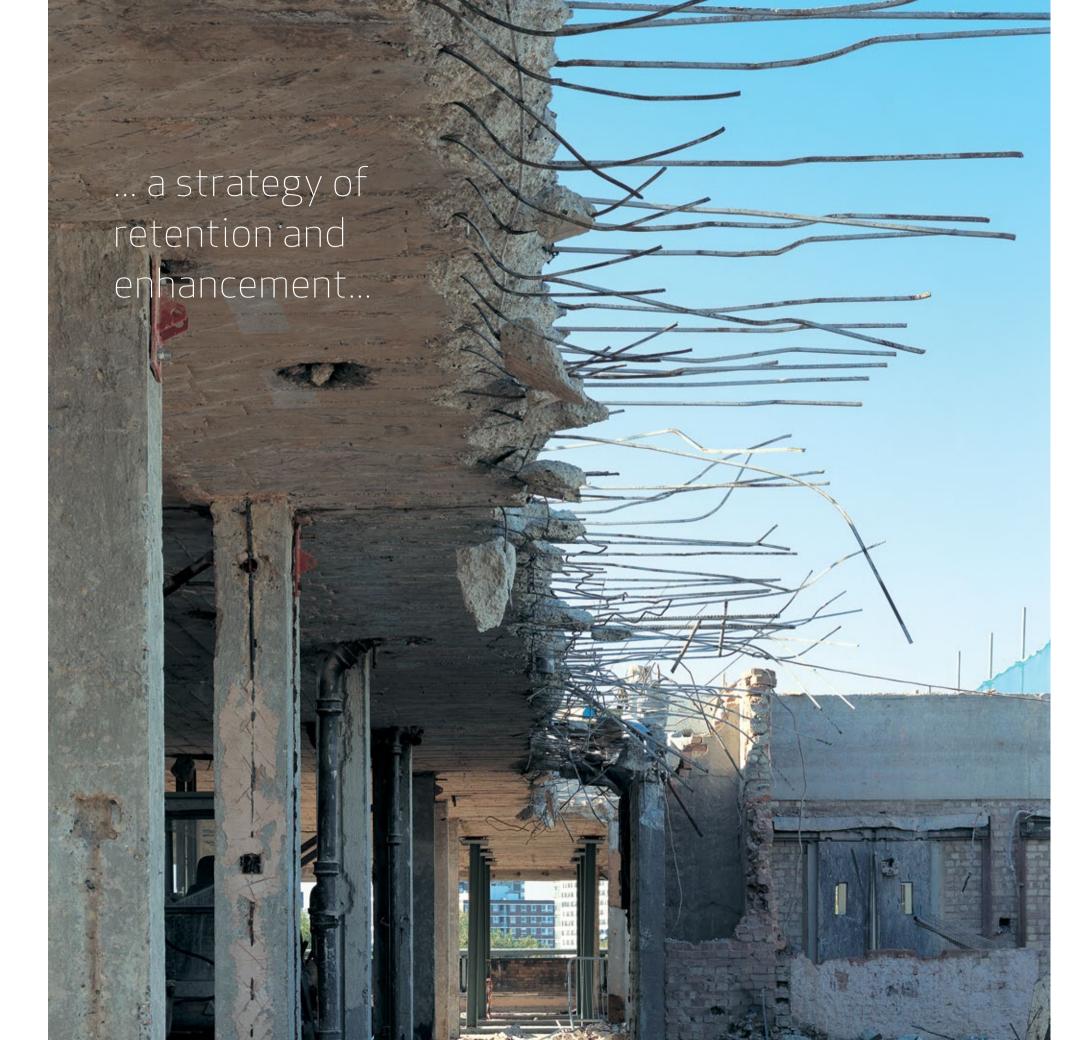
Alan Chung, Marcos De Andres, Wendy Fok, Will Freeman, Christina Gresser, Lorenzo Grifantini, Sam Hobson, Ian Lomas, Dan Morrish, Jason Parker, David Patterson, John Puttick, Matthew Seabrook, Ken Shuttleworth, Julius Streifeneder, Natasha Telford, Matt White

London & Regional

Arup Access, Blyth & Blyth, DP9, Expedition, HBG, Hann Tucker, Indigo Lighting, Jason Bruges Studio, Safe, Tweeds









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Centro Commerciale

This scheme for a shopping centre near Rimini replaces the labyrinthine spatial organisation of most buildings of this type with a model of clarity and coherence, creating a public amenity which is also a striking landmark.

The brief was to create a flexible and inwardly-focused space housing a range of facilities and services that would be alive with activity at all times of day, and throughout the seasons. In addition, the building was to have a distinct presence and serve as a landmark on the expanse of flat terrain comprising the site.

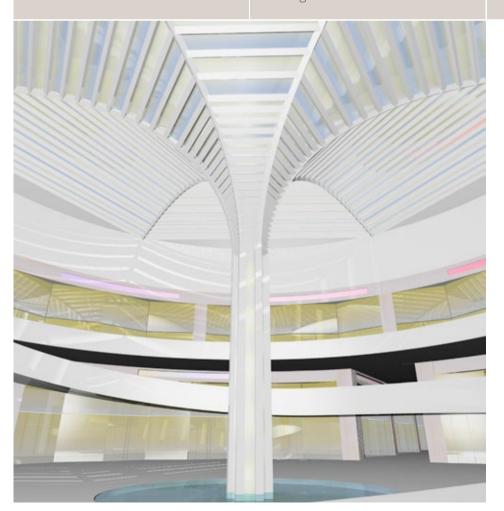
In response, the building is circular in plan, with four principle routes, or streets, radiating outwards from the central point. Shop units of varying sizes are arranged along each street, with service areas located in the triangular segments between the retail accommodation. This simple layout ensures that the central focal point of the development is visible from all points along the shopping streets, assisting orientation.

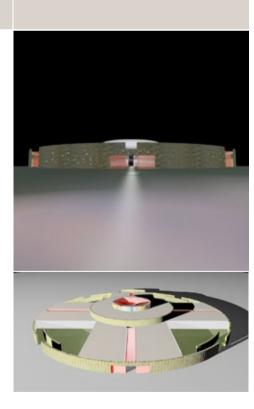
At the centre of the scheme, a secondary tier of accommodation overlooks a generous public space drenched in natural light. Here, the glazed roof is drawn down into a tapering point that meets the floor, creating a dramatic sculptural element.

The curving exterior wall of the building is constructed using gabion technology, and this use of basic raw materials lends the structure a monumental presence not usually associated with shopping centres. Glazed strips in the external facade mark the four principle entrance points, ensuring that the activity within is visible at all times.

Katy Gharemani, Lorenzo Grifantini, Ken Shuttleworth

L'Emisfero di Sergio Rossi





... a model of clarity and coherence...

Spiracle Tower

Occupying a pivotal point in the new Carey Jones masterplan for St Paul's Quarter in Leeds, and marking a new gateway to the city centre, the streamlined, cylindrical Spiracle Tower reinvents the residential block as an urban icon.

Offering 100,000 square feet of residential accommodation and rising 25 storeys above ground, the tower's already slender profile is further softened by its cylindrical form. Each circular floorplate has an identical layout, with the arrangement of core and service risers accommodating a 30 degree rotation in plan. The building can therefore be tuned by apartment size, aspect and view to create a richness and variety of external expression that is totally unique. A gently curving amphitheatre radiates outwards from the base of the tower, with cafes, stepped seating and softly sloping ramps creating an informal public zone.

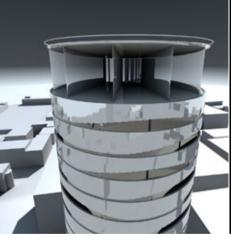
The tower's sculptural impact is further enhanced by its cladding.
A system of flat, rectangular anodised aluminium panels is applied in

undulating horizontal bands which emphasise the stacking of the floors while lending a rhythmic quality to the facade. The rippling effect of this external skin is determined by the interior spaces, with the panelling extending downwards to create glazing slots for bedrooms and opening up to enable views out from generous balconies that lead into living spaces.

At the apex, a vertical axis wind turbine will generate five times the power required for the common areas of the building, such as lift lobbies and reception spaces. A centralised heating plant can be adapted to run on bio-fuel, and also includes provision to be upgraded to a CHP unit in the future

Team
Sean Affleck, Matthew Seabrook,
Ken Shuttleworth
Collaborating architects
Carey Jones
For
HBG and Barratts
With

Arup, Turner and Townsend

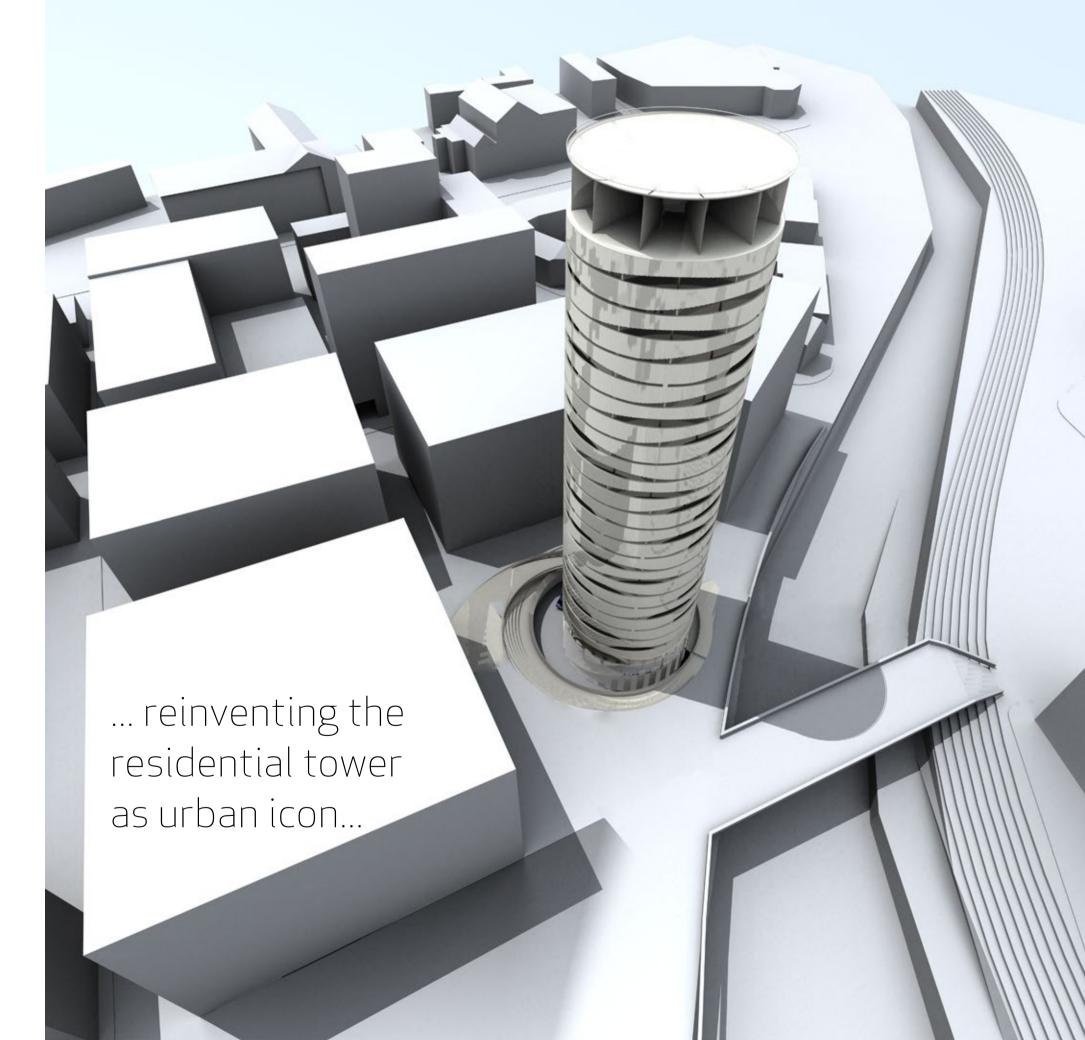












Nevis spa resort

A jungle spa resort for Nevis, a volcanic island to the west of Antigua, captures the unique spirit of the place in a distinctly luxurious built environment.

The 600 acre site on the western shore of the island will be transformed by the creation of a crescent-shaped lagoon that sweeps water inland. The main hotel building sits on the arc of the lagoon closest to the main access road, with individual rooms clustered along the edge of the water and nestling into the surrounding jungle.

In order to respond to the tropical setting, each hotel room is designed to be as open as possible. The walls consist of a series of sliding screens that can be moved to create new views and draw in sea breezes, while cabins stand on stilts with the lagoon waters lapping beneath. The scheme also includes a range of private apartments which are located on the stretch of the lagoon furthest from the rest of the development.

Two quays project from the shoreline



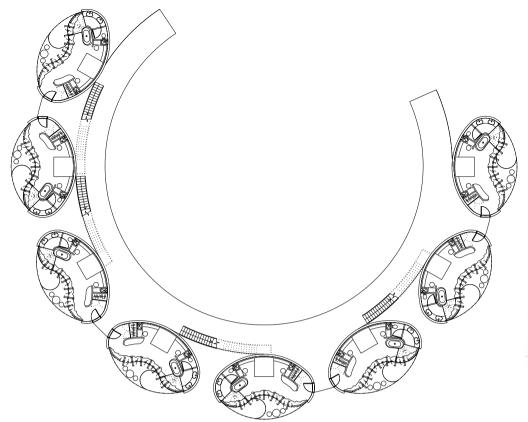
to shelter the beach, featuring bars and restaurants that enjoy views of the sun setting over the water. A newly created coral reef calms the water and prevents erosion, while providing an additional facility for the resort. Gyms, tennis courts and beauty salons are tucked in a Arup, Davis Langdon, XCO2 coconut grove at the heart of the island created by the lagoon, while villas, a golf course, and the spa – volcano-themed to link with its setting – are located on the upper slopes of the site.

The scheme is designed to be as sustainable as possible. Natural ventilation is used wherever possible, wind turbines and photovoltaic installations will meet the complex's energy demands, and solar-powered golf carts will provide transport around the complex.



Frank Filskow, Katy Ghahremani, Ken Shuttleworth, Matt White Newfound Property Group





... responding to the tropical setting...





Wandsworth Riverside Quarter

The Wandsworth Riverside Quarter development will create a new residential community in a generous landscaped context that makes the most of its Thames-side setting.

Five towers ranging in height from six building rises in order to maximise the to 27 storeys contain a mix of residential and affordable accommodation, clustered in a generous swathe of green parkland space that merges with the water's edge.

The buildings are pulled as far back as possible from the waterside in order to preserve the existing riverside walk and open up the Thames to the public. The tallest tower is located at the centre, with surrounding structures stepping down in height towards the edges of the site. This ensures a harmonious relationship with the surrounding built environment, as well as providing a more sympathetic alternative to the monotonous 'bath-line' developments that face the river in other areas.

Each tower shares the same basic floorplate which increases in width as the

floor area at upper levels where views out across the river are most dramatic.

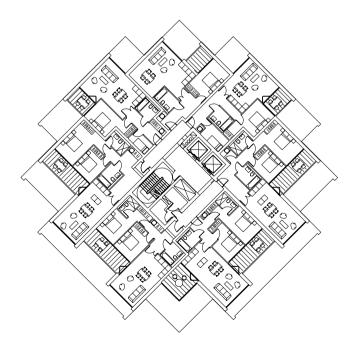
A series of vertical blade walls project from the facade at the upper levels, working to define views outwards and protect individual apartments from being overlooked. These uniform architectural elements link the towers together as a clearly defined family, but also play a key role in the development's environmental strategy, shading the facade and internal spaces and thereby reducing the need for artificial cooling.

Meanwhile, a community energy centre will deploy sustainable technologies such as solar panels and ground-coupled heat pumps to meet the development's energy, heating and cooling needs.

Sean Affleck, Francis Fawcett, Katy Ghahremani, Graham Longman, David Picazo, James Redman, Matthew Seabrook, Ken Shuttleworth Carey Jones

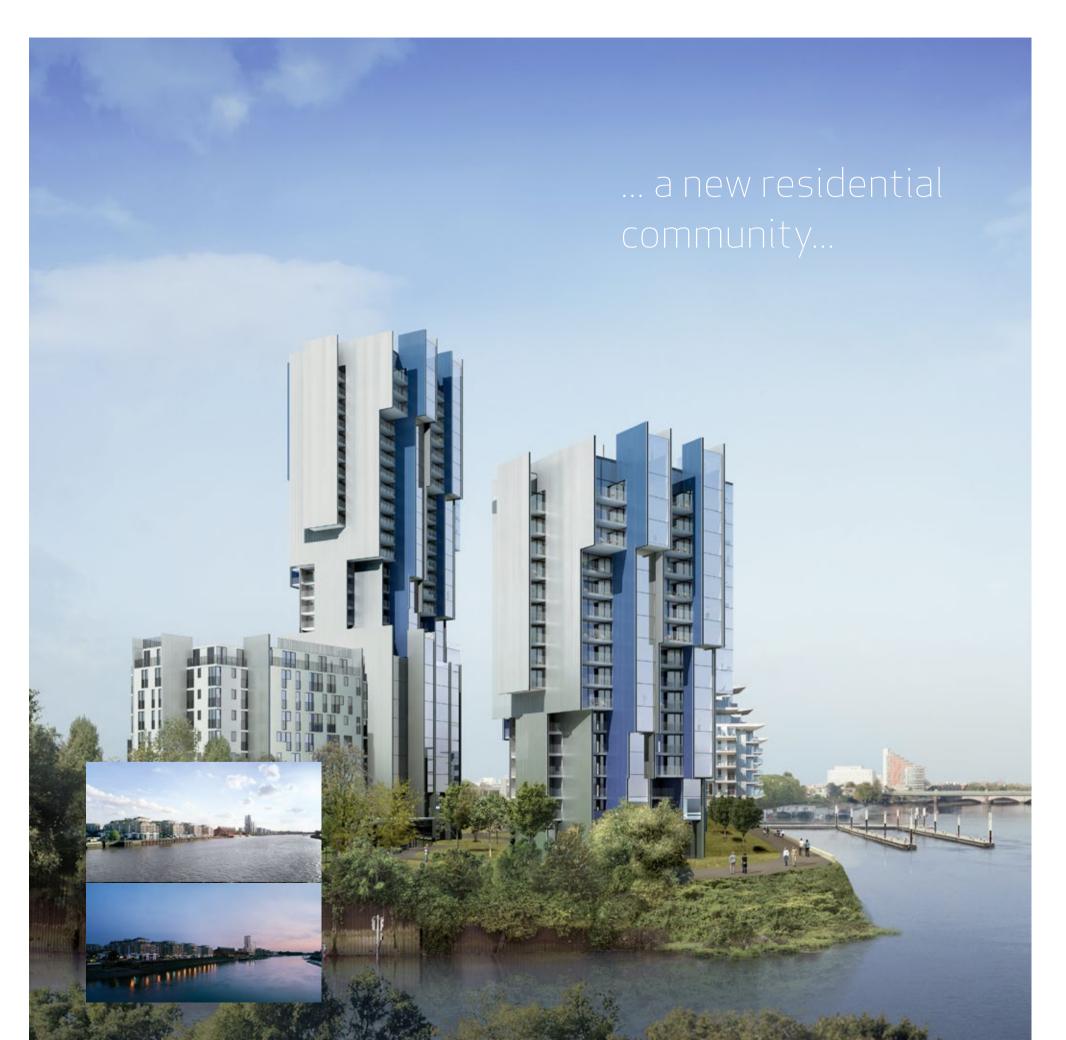
Wandsworth Riverside Quarter Ltd

Arup Fire, Arup Traffic, Atelier Ten, Burnley Wilson, Fish, DP9, Environ, Francis Golding, Gordon Ingrams, Lovejoy, Reef, Unit 22, Whitby Bird









Thetford Forest

make have been appointed to work with Expedition Engineering on the design of a treetop walkway and a cleverly camouflaged interpretation centre for a unique visitor attraction in the heart of East Anglia's Thetford Forest.

Set in the heart of Britain's largest lowland pine forest, Go-Ape! is an aerial assault course, consisting of a network of rope bridges, platforms, netting and trapezes. These facilities are to be supplemented by a new aerial route that loops half a kilometre through the canopy surroundings. Rather than using natural of the mature woodland, rising from 13.5 to 27 metres above the forest floor and offering a unique perspective on the natural environment.

Although reminiscent of a rope bridge, the walkway is considerably less precarious, securely supported by a minimal web of timber spars and cables which are virtually invisible against the background treescape. It is also fully accessible, with wheelchair access provided by a windmill-powered passenger lift counterbalanced by a tank of water, ensuring the project is entirely



carbon neutral in use.

make are designing the ticket office and interpretation centre which will stand at the entrance to the site. This simple pavilion adopts an unusual approach in seeking to blend into its materials or employing organic forms to make the building harmonise with its environment, the uncompromisingly rectilinear form is clad in sheer mirrored surfaces which reflect the surrounding trees to make the building simply

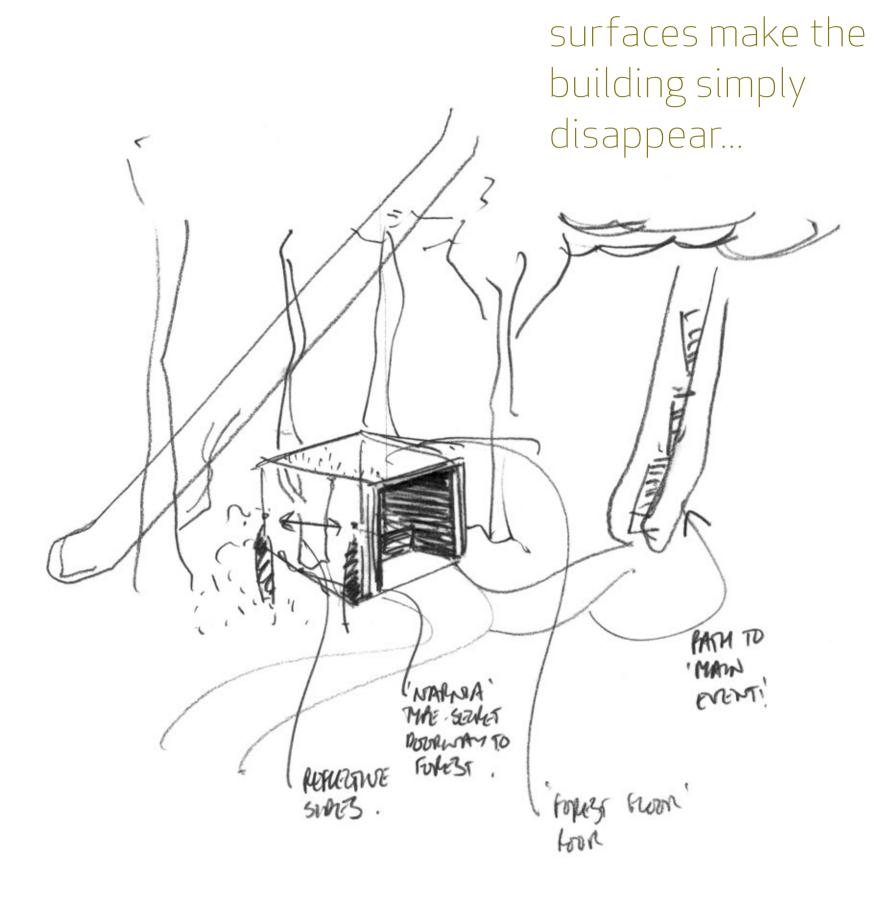
A single clearly-defined doorway marks the entrance to the building, creating the illusion of a doorway into the forest itself – an appropriately fantastical touch for an interpretation centre that will encourage children to learn about and care for the environment. Expedition Engineering

Juan Molina, Ken Shuttleworth, Matt White

Go-Ape!







... sheer mirrored



Grosvenor Waterside

Located at the heart of the restored Grosvenor Dock in West London, this residential scheme of affordable and private housing forms part of a broader development that will transform a derelict, former industrial site into a new urban quarter.

Two blocks of accommodation are angled to maximise views out towards the River Thames and the nearby Grade II listed Pumping Station, each scaled to complement its surroundings. The larger of the two structures addresses the adjacent listed buildings of Churchill Gardens and rises to eleven storeys, while a smaller, nine-storey structure is aligned with the dock's inner basin.

A double-height colonnade faces onto the dock at ground level, recalling the traditional vernacular treatment of London's waterfront spaces. Within the colonnade, a restaurant, bar and health club bring a lively mix of activity to the waterfront.

The residential blocks contain 264 affordable and private apartments, and the two buildings are linked at ground level by a single-storey structure \Rightarrow

containing a health club. Landscaping wraps up the walls and over the roof of the health club, concealing this structure from overlooking apartments beneath a generous area of greenery.

Facades are animated by a range of window sizes and shapes. Large recessed balconies and full-height glazed openings create light and airy living spaces, while the slender vertical and horizontal glazing slots used for bedrooms create more intimate spaces.

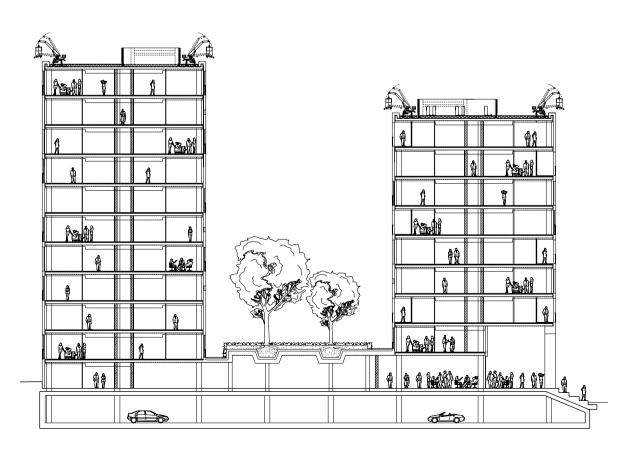
The building is clad in anodised aluminium panels whose distinctive champagne colouring harmonises with the weathered metal roof of the Pump House. The subtly reflective effect is further enhanced and given texture by a design etched across the panels, the result of a collaboration with artist Clare Woods.

Team

Stuart Fraser, Lorenzo Grifantini,
Doris Lam, Dominique Laurence,
Justin Nicholls, David Picazo,
Matthew Seabrook, Ken Shuttleworth
Collaborating architects
Finlay Harper, Sheppard Robson

St James Group Limited With

Arup, Barton Willmore, CPM, Charles Funke Associates, Davis Langdon, FPD Savills, Future City, Herbert Smith, Howard Sharp & Partners, Unit 22 ... a subtle reflective effect...





Artist Clare Woods has been working with the Grosvenor Waterside team to produce an artwork which will be etched into the building's cladding. Sophie Carter visited Clare at her studio to discuss the project, the site and the process.

Shot-peened shadows

SC: Clare, how did you first become involved in this project?

CW: The initial go-betweens were Future City, the art consultants. Then I came along to the make studio for a meeting, and as soon as I saw all those models and drawings piled up all over the place I knew that these were the sort of people I could work with!

SC: And what was your response when you saw the building designs for the first time?

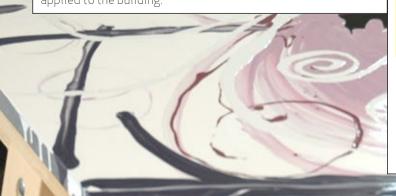
CW: I don't think it was until I saw the model in the marketing suite that I really understood the scale of what we were doing — I just thought, oh God, it's absolutely massive! And also it was quite scary because it's an amazing building — I really love it. It's so bold and solid, such an incredibly pure form.

SC: So how did you begin to approach it? What was the starting point for you?

CW: I got really interested in the history of the site and the general area. The site itself is really fascinating, with all these layers of history that have been present and then replaced by something else. And I really like the idea of London as a series of footprints, with marks on top of marks as one thing gets knocked down and replaced with another. I'm not one of those people who just wants to keep everything as it is. But at the same time it's quite nice to retain something of what was previously there, like a kind of trace.

SC: So that was the real hook for you – the site itself... CW: I was there all the time. I took about 400 photographs,

going backwards and forwards and trying to get the right shot, the right angle. And then Stuart Fraser [the make project architect] and I were meeting up maybe once or twice a week, so it wasn't a case of just being asked to go away and do my thing to come up with something quite abstract that would then be applied to the building.



SC: And from there, how did the design evolve?

CW: Initially I was looking at the idea of something quite ephemeral, like shadows projecting onto something. I liked the idea of light projecting onto a building being captured and remaining in place. And also I was really interested in the way that nature had integrated itself with some of the architecture on the site already. So that's really where the design came from – the idea of making the building somehow a kind of reflection of what was there before. And also I didn't want it to be too decorative or too pretty – more gothic and a bit ghostly.

SC: So what was the actual physical process?

CW: I stitched the photographs together on the computer and then printed them out on acetate and used an OHP to project them onto drawings of the aluminium panels. And then it was a case of putting all the photographs together, and doing a lot of drawing and a lot of tweaking and moving things around, making it all fit.

SC: And how did you adjust to working at this sort of scale?

CW: Most of the work I do is quite small, but when this project came a long I was already working on a couple of quite big pieces, some of which filled a whole wall. So I was already thinking quite big when the project actually started. And it's even better when you get to work on that scale without actually having to make it!

SC: But what's striking is that there seems to be a real continuity between your previous work and this – it does seem like a kind of logical progression.

CW: This whole project was a first for me. Just working with anyone else – let alone architects! – was a new thing, and I was quite nervous about how it would work, and how it was going to link back to my own work. That was a real concern for me. And luckily that hasn't been the case at all. In fact, when I was looking at the final design the other week, I was thinking that it would be great to make a screen print of it. And then some of the drawings are really nice in their own right, and I'm going to use them for some small paintings as well. So it's interesting how the whole process is still continuing.

SC: And the affinities aren't just a question of scale, are they? Because you paint on aluminium yourself – and there's also a connection between the way you work and the whole process of producing the aluminium panels, isn't there?

CW: Quite early on, Stuart took me along to the factory to see how they would be producing the design on the panels, and the process is just incredible. They cut out a stencil of the design and use that to mask the aluminium before shot-peening it, and the thing that was really odd is that I make my own work on aluminium, by drawing the image onto it and then masking it and cutting away the mask before painting. >

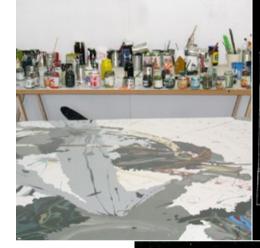


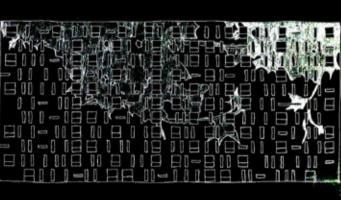
SC: So it's almost like the way you were already working, but on an industrial scale?

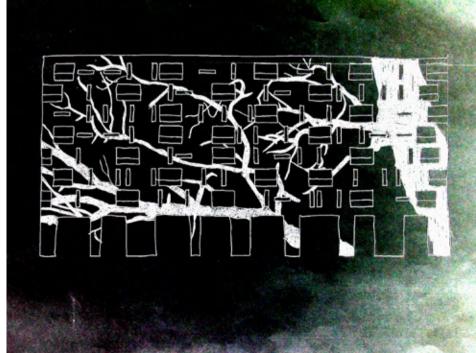
CW: Yes, and it really helped me to get my head around things. Although it's still very abstract for me – we're here now, looking at this very simple line drawing pinned up on a studio wall... And when it's a huge, ten-storey aluminium clad building it's going to be very different!

SC: When you look at the facade and the arrangement of windows on the building, it's quite a busy elevation, isn't it? It must have been a challenge to come up with something that meshed with all that and didn't compete with the rest of the building...

CW: It's true, one of my first reactions was to think, this building is incredible, so how am I going to compete with it? On the one hand, it's a very solid pure form, and then you look at it again and it's an incredibly complicated geometric jigsaw. And what was interesting was that when we actually drew out the design, and Stuart cut out all the windows and balconies and walkways, there wasn't actually that much drawing there – there was quite a lot missing. But it's amazing what the eye fills in. It just seems to hold together somehow.







SC: With a commission like this there must always be a bit of a worry in the back of your mind that your design might get watered down or compromised by all the constraints on cost and materials and so on...

CW: What was great is that Stuart was really definite that nothing like that was going to happen. He was very clear. He knew the technical side of things and the financial constraints, but within that he was very clear that the final design had to be something that was very pure and had a real integrity – it wasn't just decorative. It had to have a function and a meaning. I think it also helped that I was brought on board very early on, and the whole idea of a public art work was written into the planning application, so it was really integral to the whole idea of the end product.

SC: So you haven't been completely scarred by working with architects then?

CW: No, but from what I've seen, make don't seem to be normal architects – they have a sort of freeness and openness, and I really enjoy that. And it's funny looking at the final design now too, because it looks so simple and straightforward, as if we knew straight away how it would work. But we only got there through a lot of work – I was surprised what hard work it was. When I was first approached I was told there were some architects who needed a drawing for a building and I thought, fine, I can just do them one – little did I know...

SC: But you wouldn't have been happy doing it any other way, would you?

CW: No, of course not. I couldn't just make something that was just a pattern or a drawing that didn't have a concept, that wasn't actually grounded in something. That's just not the way I work. A lot of my work appears really abstract, but it's grounded in photographs and in something that actually exists. So that was really important to me. And afterwards, I realised that the way we were working – taking photographs, pinning them together, projecting them up onto the wall so I could make drawings from them at a larger scale – that's the way I've always worked. So that was a kind of confirmation for me, really.

SC: It's a bit of a mean question, but I have to ask: would you want to live in the building?

CW: No, but only because I wouldn't be able to have a garden! I lived in a flat for eight years, and I almost went mad, but now I've got a garden and there's no turning back for me. But I think living opposite it and looking at it every day would be great – as long as I was looking out on it from a house with a nice big garden.

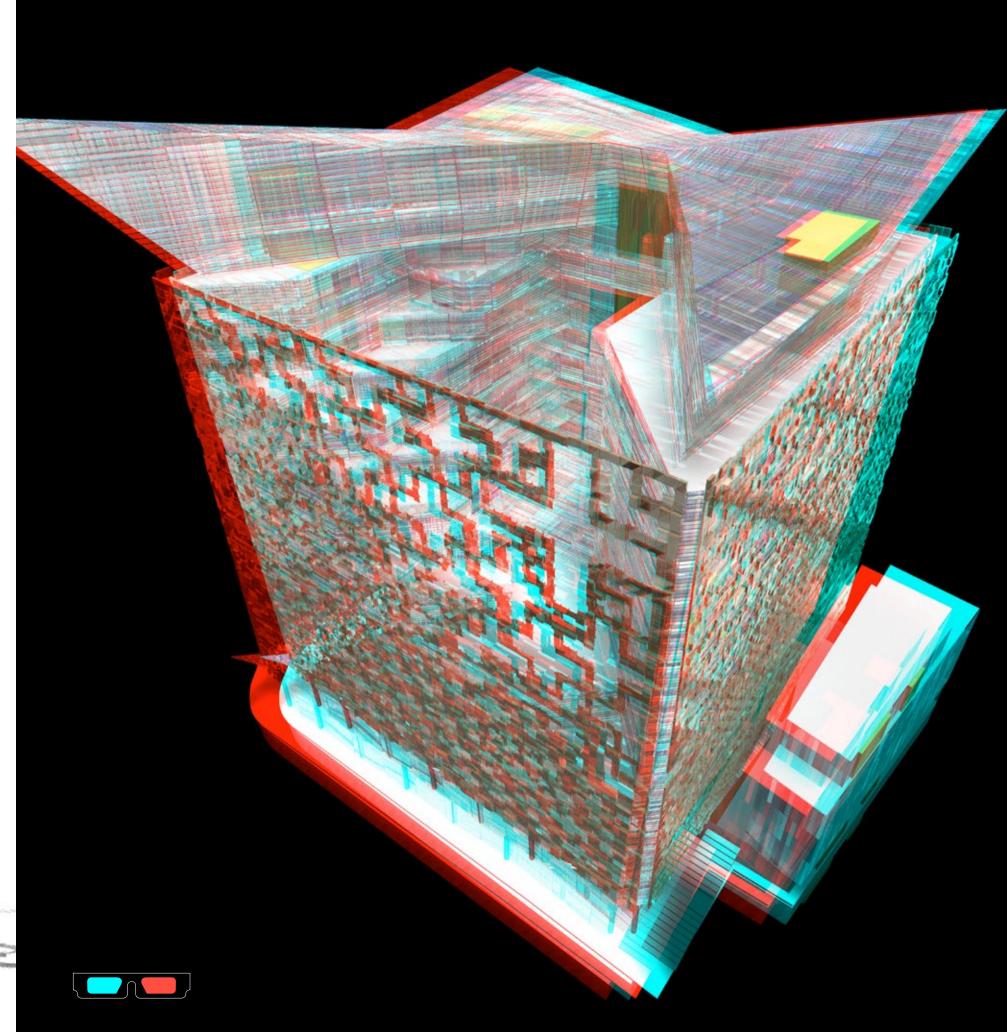
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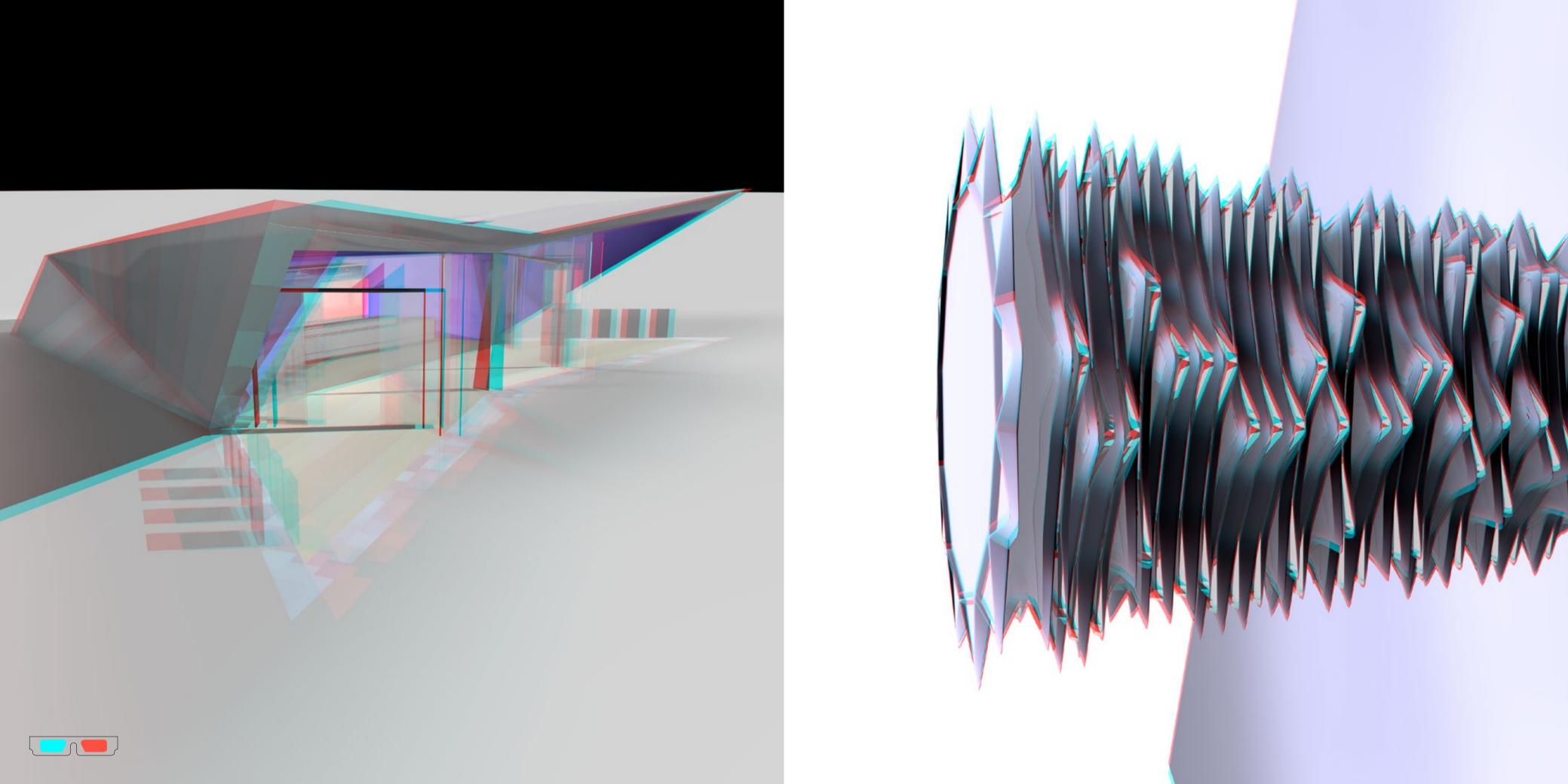


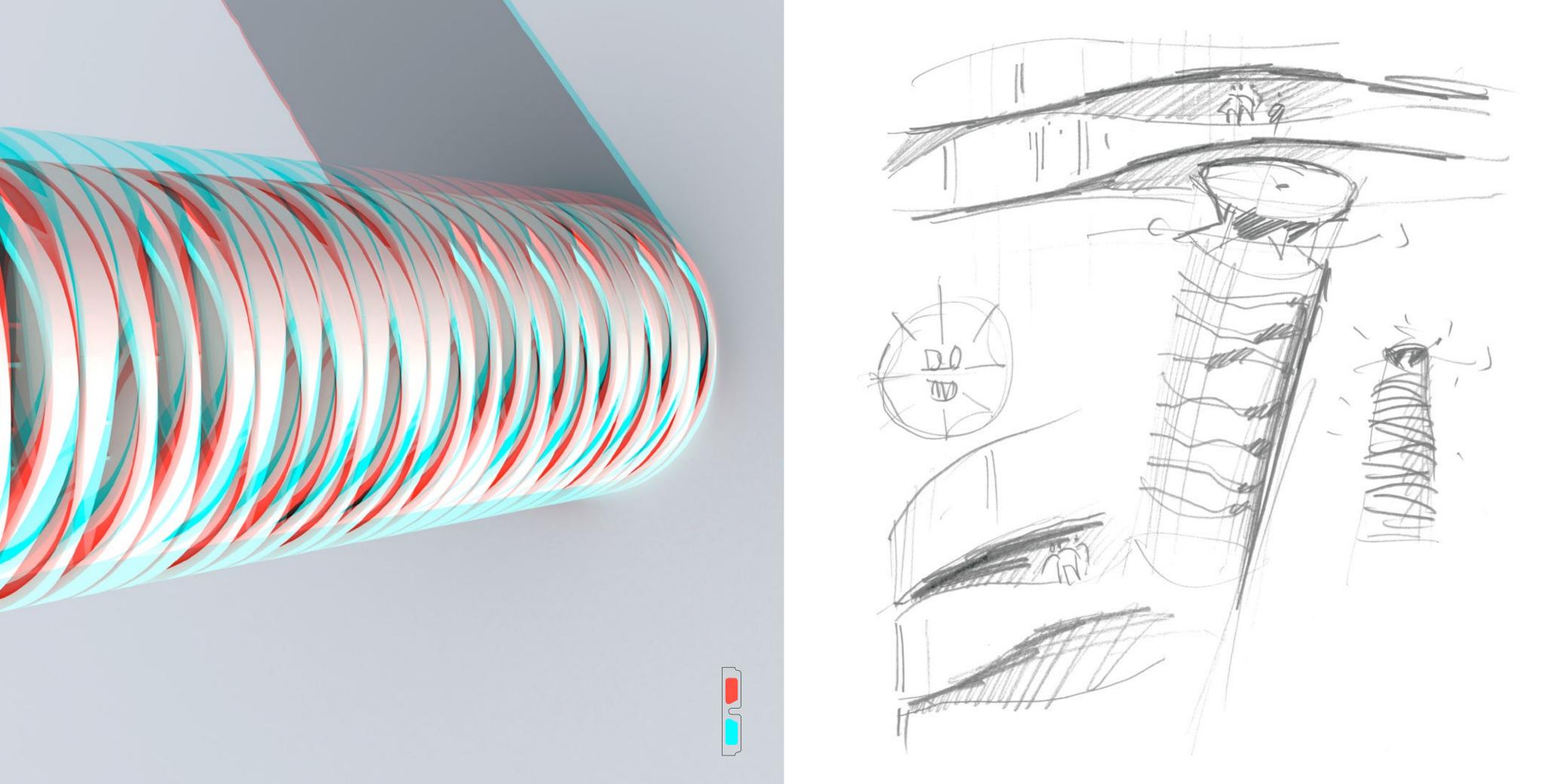
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Use the enclosed glasses to see these buildings in 3D on the following pages: The Cube, the St Paul's information kiosk, the Plot 36 tower scheme and the Spiracle Tower. Some may be more familiar than others...









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A selection of student work and solo projects from the past year.

Chris Gray's fourth year project creates a series of workshops for an art college in Leith. Metalwork, woodwork, glass-blowing, printmaking and photography are taught in an environment that breaks down conventional boundaries between disciplines and practitioners.

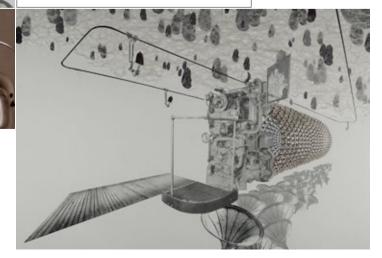






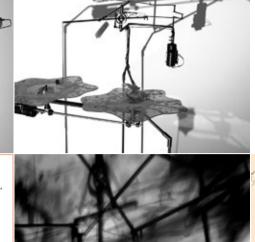








Uwe Schmidt-Hess's MArch project explores the space between geometry and language, creating a cybernetic garden in which a series of machines engage in 'conversation' with each other, developing complex and mutable relationships as they do so.





Yumi Saito's diploma project introduces airborne elements to the Lea Valley Park in north east London to create a new form of recreational facility. A series of helium-inflated structures hang in the sky, forming an aerial park that harvests energy from an on board gymnasium.



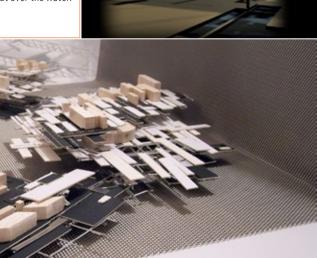
Natasha Telford's third year project proposes a border crossing for an island off the coast of Finland, near Helsinki. Form and materials are used to express arrival and departure, emphasising the sense of transition from one place to another.

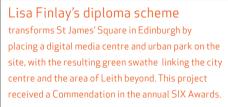


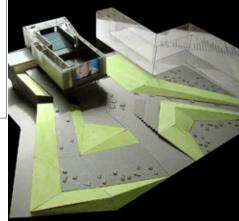


Lorenzo Grifantini's solo project
to refurbish a warehouse in Rome was awarded
second prize in a recent competition. A series of
horizontal slots cut into the walls establish visual
continuity as they lead the eye through a succession
of layered spaces.











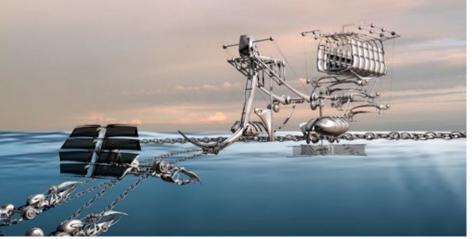




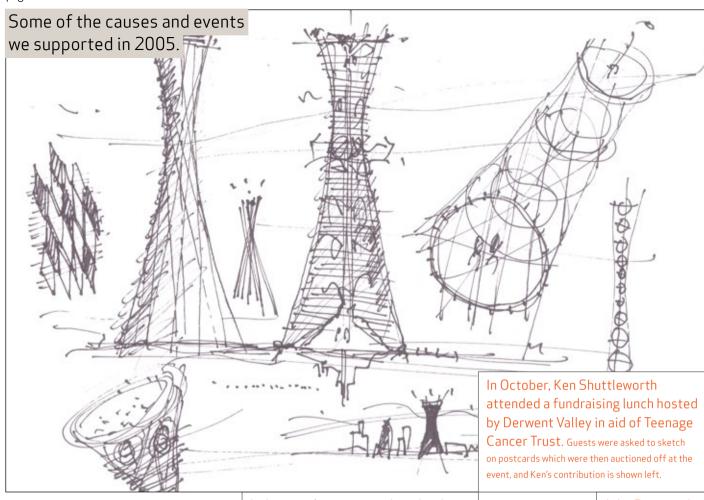
John Ross's third year scheme for an adult education centre in Dagenham was produced as part of a studio on tectonics. The scheme features a central, strongly sculptural element containing the building's principle staircase.



Sam Hobson's diploma project envisages a combined cockle-harvester and chain ferry, in the form of a delicately balanced structure that responds to minute changes in its environment. This project was selected for publication in BD in July 2005



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In April, make participated in the Building magazine annual awards by sponsoring the 'Unsung Hero of the Year Award'. This new category was created to honour the people who work behind the scenes in the construction industry. The award was presented to Tim Wotton, a contracts manager with Midas Property Services, who professed himself 'absolutely delighted' to win. He added, 'It's not everyday you get recognised like this in this industry, and for me this was really the ultimate form of appreciation'.



In June, make sponsored a school competition for Key Stage 1 and 2 pupils to design a new coach station for Birmingham. The competition was held as part of the fifth International Primary Design and Technology Conference, and make's John Prevc is shown below, giving one of the winners her prize.



Simon Lincoln and a team of friends joined 5,000 other cyclists to take part in London's annual Bikeathon in July, raising over £800 for Lukaemia Research. The course started in Richmond and finished at the Royal Chelsea hospital, and while Simon refuses to say how long it took them to complete the course, he reveals that numerous stops for refreshment were involved. It was a warm day, and it's the taking part that counts, after all.

John Ross ran his first marathon in October, joining his brother-in-law and over 1,000 other runners tackling the Loch Ness marathon.

He completed the course along the banks of the Loch in four hours and 18 minutes to raise money for Marie Curie Cancer Care. Asked if he would consider running another marathon, he groans and admits that he is considering the Edinburgh marathon next year, but only if he's fully recovered from this one.



to raise money for charity Hope
Worldwide. They took part in The Big Night Out
in Oakhill Park, East Barnet – a sponsored night of
sleeping rough to raise awareness of homelessness.
Participants were equipped with only a few pieces
of cardboard and some old sleeping bags. As this
photograph suggests, James did not get much sleep.

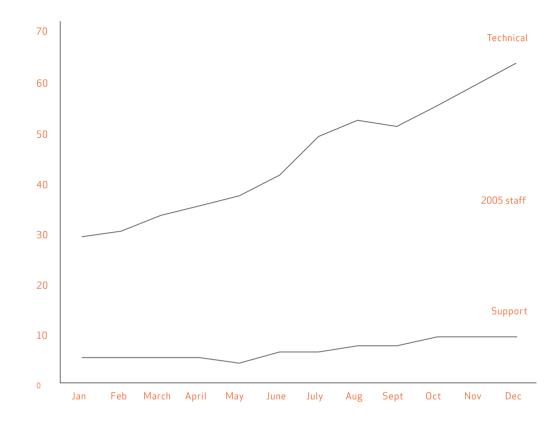
JJ, however, loved every minute.

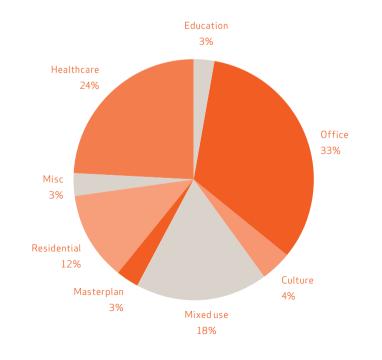
In September, James Thomas and his

son JJ sacrificed a good night's sleep



Barry Cooke desribes the business model which has laid the foundations for the success of the practice.





The make business model

make was founded in January 2004, with the vision of creating fantastic architecture in a friendly and enjoyable environment. We already had plenty of friends in the construction industry, and one potential client had already indicated to us that a large project was likely to come our way within a couple of months. That was enough. Arup kindly provided us with sufficient space for a couple of desks, and we had one lap-top (which broke within a week), and our own credit cards and mobile phones. But, most importantly, we had drive and enthusiasm, backed by many years of professional experience.

We met with accountants and lawyers to discuss how to establish a company structure that would endure and succeed, while being protected from the greed and personal agendas of shareholders or partners – and it took a while for this unusual concept to be fully understood. We were particularly aware of the problems an architectural practice can encounter when ownership is transferred between shareholders or equity partners. The issue of succession is also a significant problem for a practice that bears the name of a single figurehead. The resulting complications are often only addressed by drafting in consultants who provide endless expensive advice while their clients worry and argue about these matters.

make has avoided these potential pitfalls by creating Make Limited – a limited liability company which, unlike a partnership, is a legal entity which is recognised in law around the world. The entire issued share capital of this company is owned by an employee benefit trust for the benefit of everyone employed in the practice. This means that each employee is effectively a shareholder, and all share in the profits each year, without exception.

The trust also prevents the practice from being sold or misappropriated for the benefit of a few, and so endless discussions relating to succession are eliminated. In addition, the creation of make as a strong practice brand name averts the problems relating to fairly accrediting work frequently seen in signature architectural practices.

By the end of our first year we had grown in number from three to thirty people, and there will be nearly seventy of us as we approach the end of 2005. This second year has also seen our income grow by 300 per cent, with a positive cash flow throughout. I'm convinced that our current success can be traced to the fact that we have a group of highly talented designers who are able to produce the most exciting work for our clients because they are not hampered by the internal politics and financial manoeuvrings that dominate most conventionally structured practices.

As I write this, It is incredibly satisfying to look about the make studio and see that the ideals and principles which were so important when we laid the foundations for the practice are still in operation today.

Lectures 2005

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Imperial College, London 14 March 2005

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Centre for Window and Cladding Technology, University of Bath 21 September 2005

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lan Lomas

Universidad de la Communidad de Valenciana, Alicante,

11 Feb 2005

John Drove

Leicester De Montfort University 16 June 2005

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London Development Conference 24 February 2005

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CRIPT Conference, Birmingham 27 June 2005

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Eversheds National Planning Conference, Birmingham 18 November 2005

100% Detail, London 29 September 2005

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Kon Shuttloworth

School of Architecture, Nottingham University 20 January 2005

Building Assets by Design Conference, Royal Society of Medicine, London

31 January 2005

Department of Architecture and Civil Engineering, Bath University 22 February 2005

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Bartlett School of Architecture, University College London 24 February 2005 \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow

Design Laboratory, Central Saint Martin's College of Art and Design, London 2 March 2005

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Royal Incorporation of Architects in Scotland, Glasgow 6 May 2005

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British Council for Offices Conference, Paris

13 May 2005 → → → → → →

Department of Architecture and Civil Engineering, Bath University 20 May 2005

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CRIPT Conference, Birmingham 27 June 2005

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The Cheshire Society of Architects, Grosvenor Museum, Chester 20 July 2005

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Glasgow City Council 30 August 2005

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Constructing Excellence Cluster
Meeting, Leeds Civic Hall
6 September 2005

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Barcelona

17 September 2005 → → → → → →

Considerate Contractors Awards, Imperial War Museum, London 22 September 2005

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World Design Congress Conference, Göteborg, Sweden 23 September 2005

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Euro Design Conference 05, Kuala Lumpur, Malaysia 1 October 2005

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ARCHImet 2005, Leeds Corn Exchange
22 June 2005

Highlights of 2005

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The life-drawing class has been great – a really interesting way to get back into the habit of sketching, sketching, sketching, all the time...

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I've only been here two weeks – so getting my own business cards has been a real highlight for me!

It would have to be the rock climbing trip. I got completely stuck in the middle of a rockface. I was there for at least fifteen minutes and I just couldn't move. But everyone down below was shouting up and encouraging me and telling me where to grab hold, and in the end I managed to pull myself up. And when I got to the top that was really a highlight of the whole year for me.

My highlight of the year has been consistently beating Graham at table tennis, without question.

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The party was fantastic. We'd finally made a whole year. When we started out we really weren't sure what would happen, or how we would do. It was all a mystery. But after one year we could really see how all the effort we'd put in was paying off and becoming something real. That was just great.

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One of the things that has really impressed me since I've been here is seeing how clients are treated – and how happy they are. It's a really impressive thing, and it's not something that I've seen at other offices.

Working with lots of different people, and getting to travel to places like the Carribean – for work, of course!

At the end of August we reached a staff total of sixty people. That was a landmark for me.

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For me, the real highlight of the year just happened – I got my Part 3.

Watching the triumphant rise of the make football team, culminating in a nine-one victory in our recent match against Whitby Bird. A triumph!

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The best bit about working here is definitely the annual bonus – not because of the money, but because it's the absolute proof that make is about the people and not just about a glorious leader.

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Probably a recent trip to Dubai for a meeting with a client. We arrived very late in the evening, and after desperately searching for somewhere we could get a bite to eat, we ended up in a Russian mafioso bar with some very unsavoury characters. It wasn't quite what we were expecting!

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For me it was probably seeing Ken talk so enthusiastically and positively about the work of the practice.

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I like the fruit that magically appears on the tables by the sofa at 4.00pm every day.

Having found fame on the internet with an enormous photograph of myself on the make website.

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Getting my first pay cheque for something I love doing.

Vital statistics

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6 January 2004 – Ken Shuttleworth founds the practice

26 July 2004 – move to Whitfield Street studio

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1 Sept 2004 – Whitfield Street studio extends

14 January 2005 – 1st Birthday Party, Whitfield Street studio

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14 February 2005 – Erco receives planning approval \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow

1 March 2005 – 55 Baker Street starts on site

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4 March 2005 – Dartford Judo Club receives planning approval → → → → → →

20 April 2005 – Edinburgh studio opens

21 April 2005 – Dartford Judo Club starts on site

13 May 2005 – Hampstead Road receives planning approval

30 June 2005 – Grosvenor Waterside receives planning approval

5 July 2005 – King's Reach receives planning approval

12 September 2005 – Birmingham project office opens

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8 November 2005 – Grosvenor Waterside starts on site >>>>>>

1 December 2005 – The Cube receives outline planning approval

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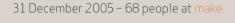
2 December 2005 – Nottingham University receives outline planning approval $\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$

7 December 2005 – Thetford Forest walkway and visitor centre receives detailed planning approval

15 December 2005 – 55 Baker Street receives planning approval

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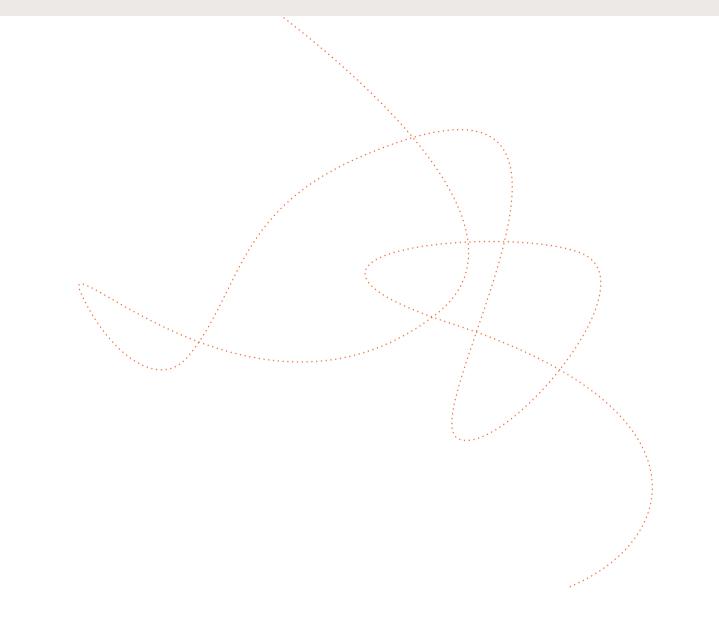
31 December 2005 – 219 job numbers assigned







make 2005 Emmanuel Addo Sean Affleck Ewan Anderson Michael Bailey Andrew Balster Cara Bamford Scott Beaver Matthew Blaiklock Simon Bowden Martin Brooks Sophie Carter Tammy Chong Alan Chung Barry Cooke Oundra Dashdavaa Timothy Davies Marcos De Andrés Rebecca Eng Daniel Farmer Francis Fawcett Rachel Fay Frank Filskow Lisa Finlay Wendy Fok Megan Fowke Stuart Fraser Will Freeman Frances Gannon Katy Ghahremani Pohkit Goh Ramon Gomez Christopher Gray Christina Gresser Lorenzo Grifantini Rachel Hainsworth James Hirstle Sam Hobson Adrienne Johnson Doris Lam Dominique Laurence Simon Lincoln Sarah Lister lan Lomas Graham Longman Chris Marquis Jason McColl John Man Jonathan Mitchell Juan Molina Alan Morrissey Justin Nicholls Sharon Nolan Jason Parker Ruchi Patel David Patterson David Picazo John Prevc John Puttick Samira Raphael Gary Rawlings James Redman Melisa Rice John Ross Yumi Saito Carolin Schaal Markus Seifermann Matthew Seabrook Uwe Schmidt-Hess Timothy Schreiber Paul Scott Ken Shuttleworth Julius Streifeneder Alan Sturrock Timothy Tan Natasha Telford James Thomas Emma Torkington Matthew White Greg Willis Bibiana Zapf



make would like to thank all our clients, collaborators, friends and families.



