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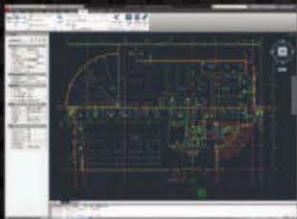
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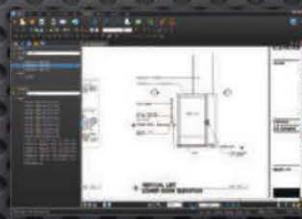
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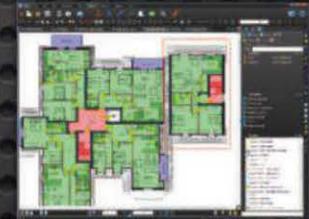
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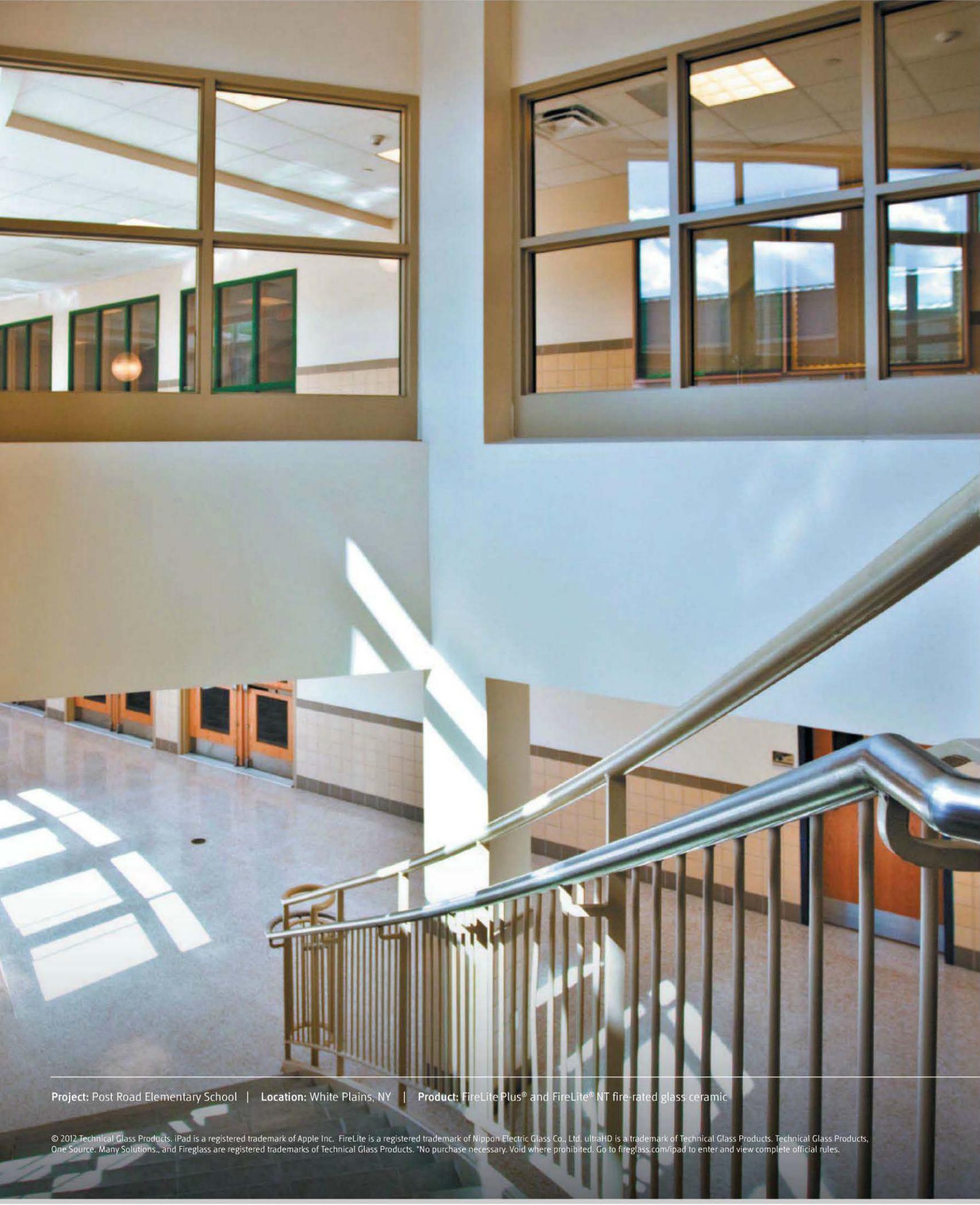
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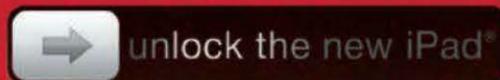
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THIS PAGE: LONDON 2012 SHOOTING VENUE, BY MAGMA ARCHITECTURE. PHOTO BY J.L. DIEHL.

ON THE COVER: THE SHARD, LONDON, BY RENZO PIANO BUILDING WORKSHOP. PHOTO BY DUNCAN MCKENZIE.

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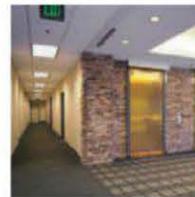
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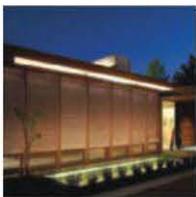


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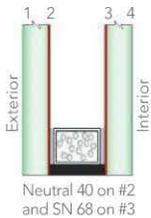
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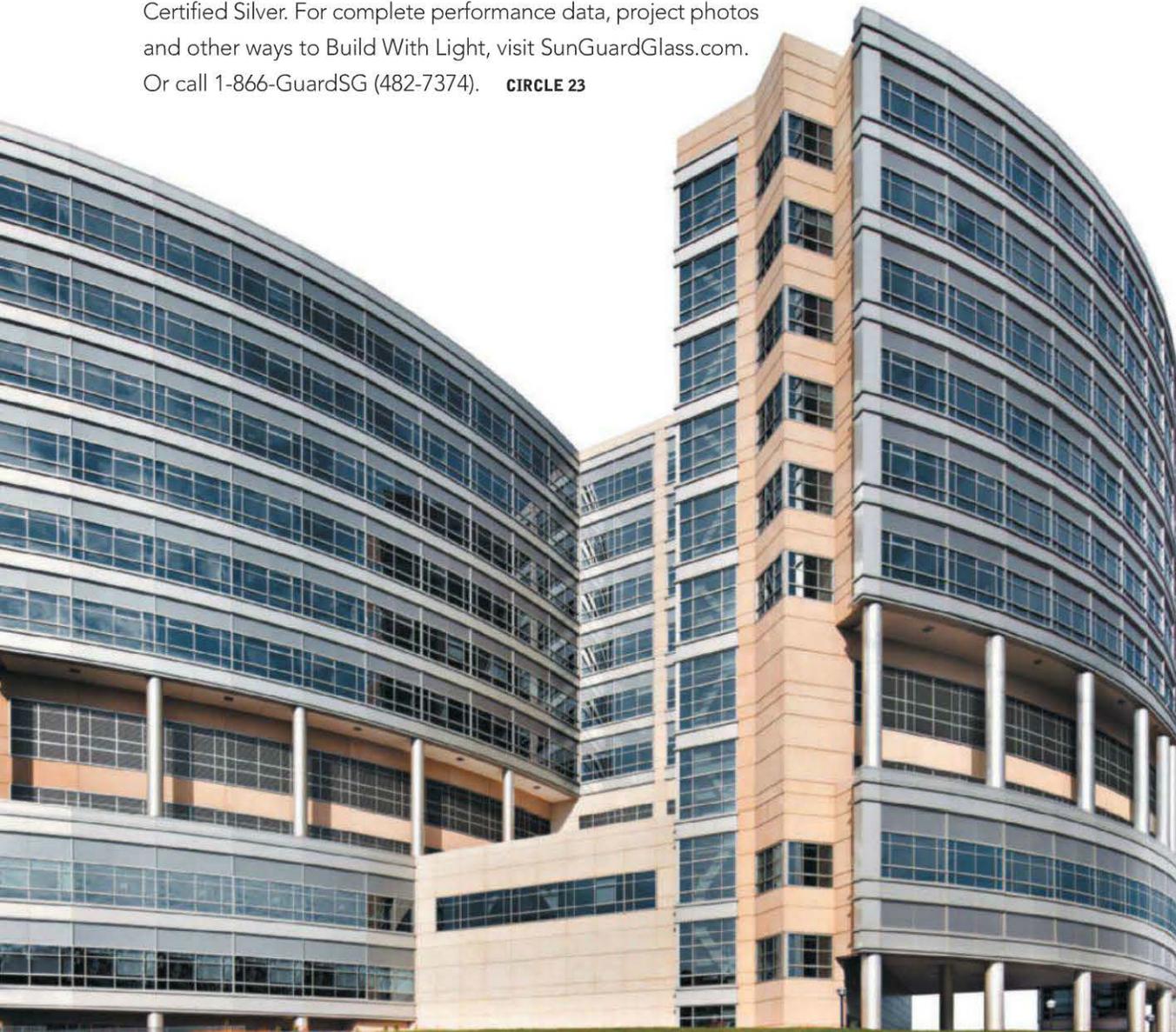
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Lessons from London

How the 2012 Olympics became the “alibi” for reclaiming a derelict swath of the city.

AFTER THE GOLD medals are carried home and the frenzy of each Summer Olympics dies down, what becomes of the much-televised architecture and urban designs created for the Games? Beijing’s Bird’s Nest from 2008—that spectacular blend of artistry and engineering by Herzog & de Meuron and Ai Weiwei—is mostly visited by tourists these days, who grab a shot of themselves in front of it, but its vast interior is only intermittently filled with shopping stalls or the occasional athletic event or concert. In Sydney, the potential to rehab the grittier areas of its port, on the city’s stunning harbor, was passed over in favor of building a shiny outpost for the 2000 Olympics on the dusty inland site of an abandoned abattoir, far from downtown or easy transit—an area that a dozen years later is still not thriving, as its promoters claimed it would be [page 90].

This summer, it’s time for the Olympics once again, and the host city of London is trying to do it right. Our preview in this issue of *RECORD* [page 80] offers a lesson in ambitious planning to create a long-term legacy of the Games. London won the bid for the Olympics in 2005, but the idea to target a derelict postindustrial part of East London for regeneration, now home to the Olympic Park, goes back at least to the 1990s and the planning strategies of architect Richard Rogers. Rogers, chief advisor for architecture and urbanism to London’s then mayor Ken Livingstone (just imagine if most U.S. mayors created such a post!), advocated increased density by reclaiming urban brownfields and maintaining a greenbelt around the city. The Olympics became “the alibi,” in the words of Deyan Sudjic, head of London’s Design Museum, to remediate toxic sites and waterways, create a 500-acre park, and build facilities for a community that will eventually comprise thousands of households. Sustainability has been a driving force here: The Games are touted as the greenest and could also be called the first pop-up Olympics. Most London 2012 sports venues are temporary structures or can be reduced in size post-Games [page 92]. Athletes will be housed in new high-rises around grassy courtyards—designed by up-and-coming British architects—which will later be converted into apartments, some of them affordable. Americans are playing a big role in this future English neighborhood: The London Legacy Development Corporation is headed by a former deputy mayor of Philadelphia, Andrew Altman, while two U.S. firms—Hargreaves Associates and James Corner Field Operations—are creating large landscape and urban design schemes.

Infrastructure is key to the success of the Olympics and East London’s future, and huge investments have been made in the public realm. Olympic Park is served by several subway and rail lines (the trip from the center of London by Tube is under 10 minutes), and the community will eventually be a stop on the Eurostar train to the Continent. Elsewhere in London, the summer of 2012 became the deadline for an array of public projects [page 78] despite the ongoing economic downturn. Railway stations, roadways, bridges, subway stops, and public plazas have been rehabbed. And with cranes visible all over the



city, private development is clearly ongoing—at least for now—thanks in part to the influx of foreign capital: Qatari money is behind both the Olympic apartments and the Shard, the new skyscraper by Renzo Piano, now the highest building in London [page 62].

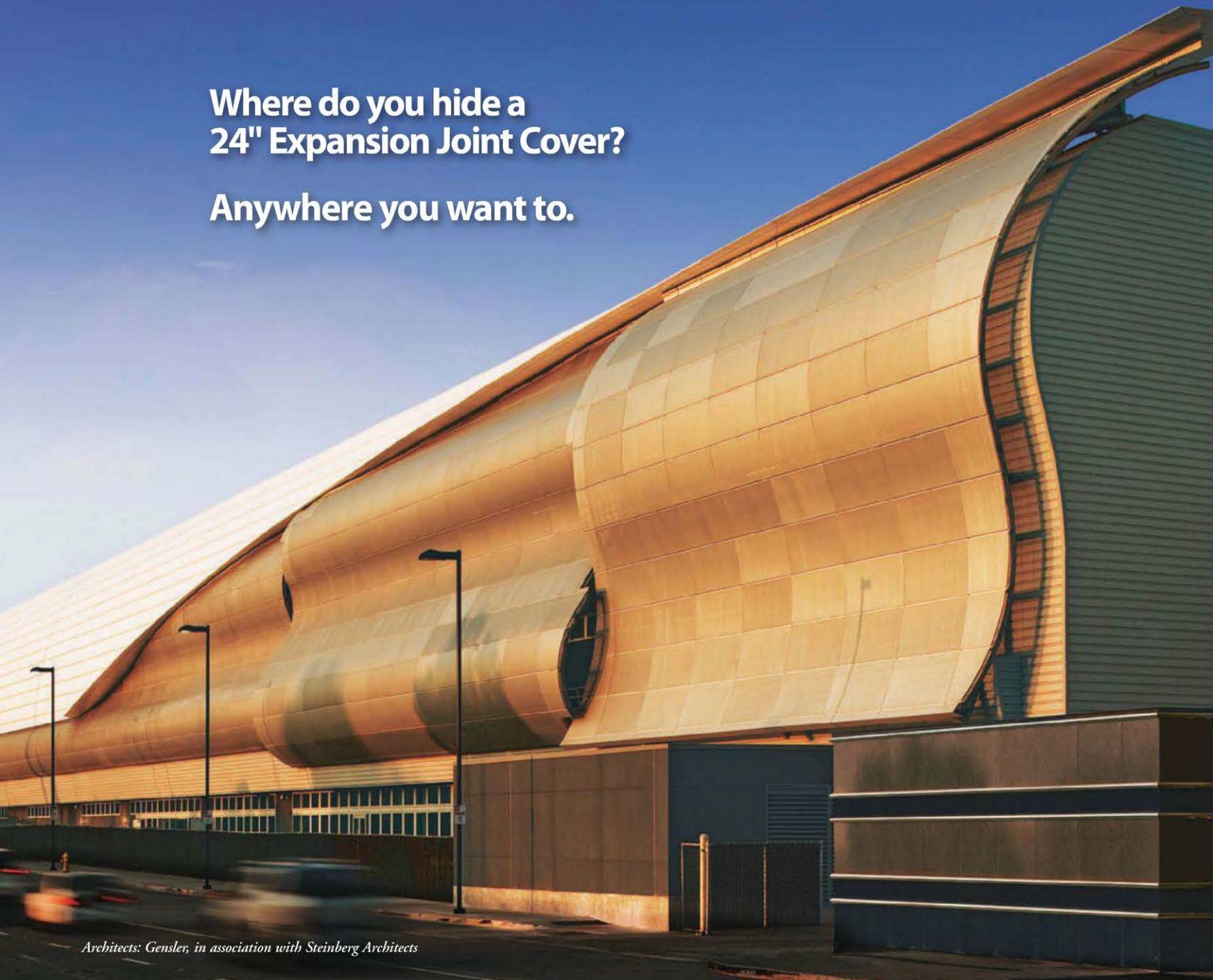
London 2012 was originally sold to the British public as the “austerity Olympics,” but the costs have soared, at a time when the government is slashing holes in the social safety net. Will the expense, in the long run, be justified? That’s the idea. The ambitious plan for the site is meant to ensure that one of the world’s biggest sporting events will have a lasting impact years after the television cameras have left. Tune in a decade from now to see how that brand of city making has begun to take hold.

Speaking of city making, we’re taking a look this month, as well, at the new Barnes Foundation in the center of Philadelphia. The city has long felt like a middle child between New York City and Washington, D.C., and moving the Barnes from suburban Merion, Pennsylvania—a controversial decision—was a step some believed would stake a firmer claim for its place as a cultural capital. The elegant new museum by Tod Williams Billie Tsien Architects not only fulfills that mission but, set in a sophisticated landscape by OLIN, rounds out an urban scheme of bygone grandeur. ■

Cathleen McGuigan

Cathleen McGuigan, Editor in Chief

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perspective

“Sir John Soane wanted to create buildings that would make people see the world differently and make them think. This is exactly what Diller Scofidio + Renfro do in our time.” —Paul Goldberger, bestowing an award upon the firm at the Sir John Soane’s Museum Foundation Gala, May 24 in New York City

Publicity Clampdown



BY FRED A. BERNSTEIN

FOR DEBORAH SAUNT, principal of the London-based DSDHA, designing a building for the 2012 Games—the tallest tower in the athletes’ village—was the kind of break most young architects can only dream of.

But it wasn’t clear how Saunt would parlay the commission into more business. Like all the architects involved in the Olympics, Saunt signed a contract ceding publication rights to the city’s Olympic Delivery Authority (ODA). That meant she couldn’t release renderings or photos of the building without its permission. And, she says, she could talk about the Olympics project only if someone asked about it. “We couldn’t go ahead and promote ourselves,” she says.

Saunt wasn’t alone among Olympics-connected architects hemmed in by what many have described as a gag order. Ken Shuttleworth, whose firm, Make Architects, designed the handball arena (known as the

Firms that designed venues for the 2012 London Olympics, but didn’t pay “sponsorship” fees, weren’t allowed to promote their involvement.

Copper Box), was refused permission to feature photos of it in his company’s annual report. And Roger Hawkins, whose firm, Hawkins\Brown, redesigned Stratford Regional Station, the main gateway to the Olympics, was unable to nominate the building for a Civic Trust Award, which would have meant sending out photos. Other firms said that with the World Cup in 2014 and the Olympics in 2016 (both in Brazil) coming up, they were hamstrung in their ability to market their services.

Peter Murray, a tireless promoter of British architects, said he was refused permission to mount an exhibition of Olympics architecture as part of the New London Architecture program, of which he is chairman. “It raises issues of free speech that I find really offensive,” he says of the publicity clampdown. According to Murray, architects risked possible criminal penalties if they defied *(continued)*

London Underground

On June 1, a pavilion by Herzog & de Meuron and Chinese artist Ai Weiwei will open in London—the 12th iteration of a yearly program that invites top-tier designers to create a temporary event space outside the Serpentine Gallery’s historic home in Kensington Gardens. Former participants include Zaha Hadid (2000), Oscar Niemeyer (2003), and Frank Gehry (2008).

This year’s design is a palimpsest of sorts—a sunken area that reveals traces of foundations from past installations. The designers will use these remnants, or “ghost patterns,” to sculpt a landscape clad in cork. A circular steel roof will hover overhead, supported by a dozen steel columns (a nod to the program’s 12th anniversary). The rooftop will serve as a reflecting pool; at times, however, the water will be drained, a balustrade will be installed, and the floating plane will become a platform for viewing or dancing.

The steel tycoon Lakshmi Niwas Mittal has already purchased the pavilion, which closes on October 14. The project marks a reunion for Herzog & de Meuron and Ai, who teamed up to design the Beijing National Stadium for the 2008 Olympics. *Asad Syrkett and Jenna M. McKnight*



A temporary sunken pavilion will be built outside the Serpentine Gallery’s historic home in London.

(Publicity continued)

the rules. In response, he is planning a Pecha Kucha-style event during the London Festival of Architecture (June 23–July 8) called “Honestly, Officer, I Never Designed an Olympics Building.”

What particularly angered some architects is that firms that paid money to sponsor the Games seemed to be largely exempt from the restrictions. Populous, the architects behind the main Olympics stadium and other Games-related projects, and Atkins, the architecture and engineering firm responsible for environmental and infrastructural planning, paid an undisclosed amount to become official sponsors of the Games.

“The reason we decided to become a sponsor was so that we could tell our story about our work on London 2012—to showcase the London 2012 Games as a feat of engineering excellence,”

Jane Shiels, an Atkins spokeswoman, wrote in an e-mail. Atkins was allowed to produce brochures and videos touting its involvement in the Games, while nonsponsor firms had trouble distributing a simple press release.

But architects who have felt stymied are seeing the light at the end of the tunnel. The ODA has turned the site over to the London Organizing Committee—which has “loosened up a bit in the last few weeks,” says Sharon Nolan, a Make spokesman. Or, as Hawkins puts it, when it comes to publishing images of Olympics-related projects, “the door has opened a bit more.” (His firm’s website now makes prominent reference to the Stratford station.)

One thing all the firms agree on: After the opening ceremonies on July 27, photos of their work will be everywhere, and any “gag order” will be moot. ■

[NEWSMAKER]

Toni L. Griffin

BY DAVID SOKOL

ARCHITECT AND urban planner Toni L. Griffin is heading up the new J. Max Bond Center on Design for the Just City at the City College of New York (CCNY), located in Harlem. Griffin, who will continue her private practice, has introduced progressive ideas to mainstream planning over her 25-year career. Her test beds have included Detroit, where she has dealt with depopulation strategies, and Newark, where she worked to spur job growth. The new center, housed within the Spitzer School of Architecture, is named after the late architect Max Bond, who served as the school’s dean from 1985 to 1992.

What prompted you to join CCNY?

The opportunity to launch the Bond Center. I first met Max through the pages of *African American Architects in Current Practice*, a 1991 book edited by Jack Travis. I was at Skidmore, Owings & Merrill [where she was an associate partner], and the fact that Max was an African American designer and a partner of a major firm impressed me. I met him 10 years later, and he ended up being a great adviser.

How would you describe the center’s mission?

To advance design through research, practice, and education. We intend to work on projects that incorporate two or more disciplines and can impact a community, city, and region simultaneously. I also want the work to be transferable: How can we extract lessons from one location and apply them elsewhere?



Griffin leads the new Bond Center on Design.

Will Harlem be a testing ground?

We’ll consider projects in our own backyard, but I don’t want to be limited by our immediate context.

How does your work in the public and private sectors benefit your academic pursuits?

The pace and urgency in the political process don’t allow you to be as experimental as you’d like. Teaching gives me the opportunity to step back and challenge that. At the same time, it’s good to bring the realities of practice into the academic setting.

What is the most critical issue facing cities today? How do we create a “just city”?

Increasingly, I find that we must confront how we understand and talk about race and class in planning and design.

Will the Bond Center also focus on diversity among architecture students?

My long-term vision is to create an academy that raises design awareness among youth of color. As we devise interventions that move toward the “just city”—if we define the just city as being inclusive and equally accessible—then architects must reflect that approach.

Morphosis Tapped for New Cornell Campus Project

Morphosis will design the first building for the Cornell University/Technion Institute campus on Roosevelt Island in New York City. The firm beat out five other contenders, including Steven Holl Architects, Office for Metropolitan Architecture, and Skidmore, Owings & Merrill, which conceived the campus master plan.

MAXXI May Be Shuttered

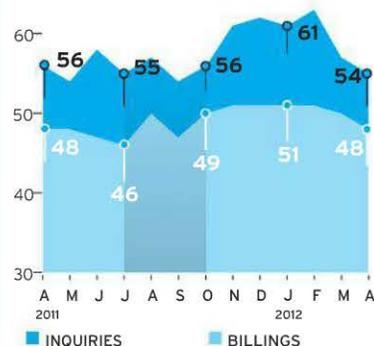
The Italian government has cut the bulk of funding for Rome’s National Museum of XXI Century Arts, putting the Zaha Hadid–designed facility at risk of closure, according to *Building Design*. The museum, which opened in 2010 and won the Stirling Prize, reportedly draws more than 450,000 visitors per year.

Winners of National Mall Competition Announced

Winners of a competition to revamp three neglected areas of the Mall in Washington, D.C., have been named: Rogers Marvel Architects + Peter Walker and Partners (Constitution Gardens); OLIN and Weiss/Manfredi (Sylvan Theater); and Gustafson Guthrie Nichol and Davis Brody Bond (Union Square).

Kahn Factory Faces Demolition

Preservationists are rallying against a plan to raze a vacant Albert Kahn–designed factory in Detroit. According to the *Detroit Free Press*, Wayne State University wants to bulldoze the two-story American Beauty Electric Iron Building to make way for a staging area for equipment that will be used to construct a nearby research center.



ABI Dips Below 50

The Architectural Billings Index dropped to 48.4 in April, the first time it’s landed in negative territory since last October (a number below 50 denotes a decrease in billings). The inquiries score slipped to 54.4. AIA chief economist Kermit Baker says the decline isn’t too surprising in light of “the continued volatility in the overall economy.”



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CIRCLE 29

Charting the Future

A NEW LEADING INDICATOR BY MCGRAW-HILL CONSTRUCTION POINTS TO A BOOST IN SPENDING.

BY KIM KENNEDY
AND JENNIFER COSKREN

THE DODGE MOMENTUM INDEX is a new 12-month leading indicator of construction spending for nonresidential buildings. The unique information is derived from proprietary, first-issued planning reports in the largest database of construction planning projects in the United States—McGraw-Hill Construction's Dodge Reports (McGraw-Hill publishes ARCHITECTURAL RECORD). One-third of the projects in the Dodge database are in planning, and those projects feed the new Dodge Momentum Index. The strength of the new index is that it's based on actual projects, many of which will become construction starts and generate construction spending. This approach differentiates the Dodge Momentum Index from other indices in the market. And, because the Dodge Reports gather such a large amount of information before projects break ground, the Momentum Index provides a reliable predictor for the U.S. Commerce Department's nonresidential construction spending data.

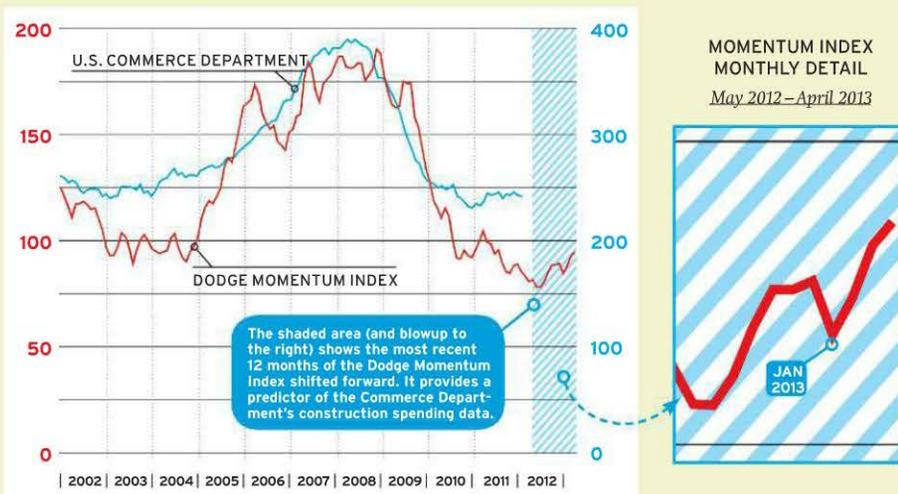
The relationship between the two measures is extremely strong: An analysis conducted from January 2002 to February 2012 found a correlation of 0.91 with a 12-month lag (1.0 is perfect). This indicates that the relationship between the two measures is steadfast and that projects-in-planning will lead construction spending by a solid 12 months.

Recent trends in the Dodge Momentum Index suggest that better times are coming for nonresidential building. The index reached bottom in July 2011 at 77.1 (base year of 2000=100) and has gone up in all but two months since that time. In April 2012, the index climbed one (1) point from the previous month to a level of 94.7. "The relatively steady upward trend since the middle of last year suggests that construction spending put in place for nonresidential buildings should begin to move in a more consistently positive direction during the second half of 2012," says Robert Murray, vice president of economic affairs for McGraw-Hill Construction. "This is good news for an industry that has been strongly hit by declines since the 2009 recession."

Both commercial and institutional construction have helped the index advance, although the institutional side of the market remains more tenuous, given constraints on public sector finances. From March to April

Dodge Momentum Index

Since hitting bottom in July 2011 at 77.1 (base year of 2000=100), the index has shown an upward trend. In April 2012, it climbed 1 point, to 94.7. The moderate positive movement suggests that construction spending for nonresidential buildings should slowly begin to strengthen.



Source: McGraw-Hill Construction's Dodge Reports

2012, the commercial components of the index rose 1.2 points, while the institutional components climbed just 0.8 points. In fact, new education-related planning projects entering the pipeline declined 0.5 points during April—a clear sign that publicly financed projects continue to feel the adverse impact of tight state and local budgets.

Despite financing difficulties, some education-related projects are still making their

activities and services center for the University of Massachusetts in Lowell.

Commercial projects, meanwhile, showed some strength in April, primarily due to an improvement in office activity. The office component of the Momentum Index shot up 7.2 points from March to April. Notable office projects that bolstered the planning pipeline include Foundry Square III, a speculative office building in San Francisco developed by

“The upward trend since the middle of last year suggests that construction spending for non-residential buildings should begin to move in a positive direction during the second half of 2012.”

—Robert Murray, vice president of economic affairs, McGraw-Hill Construction

way to the drawing board. Noteworthy K-12 projects reported in April for the first time include an addition to a high school in Marion, Illinois, by Design Architects, Inc. Major higher-education projects include Perkins+Will's conversion of a hospital building into a student

Tishman Speyer and designed by STUDIOS Architecture; the new headquarters for Teva Neuroscience in Overland Park, Kansas, by Hoefler Wysocki Architects; and an office tower in Austin, Texas, designed by DudaPaine Architects. ■



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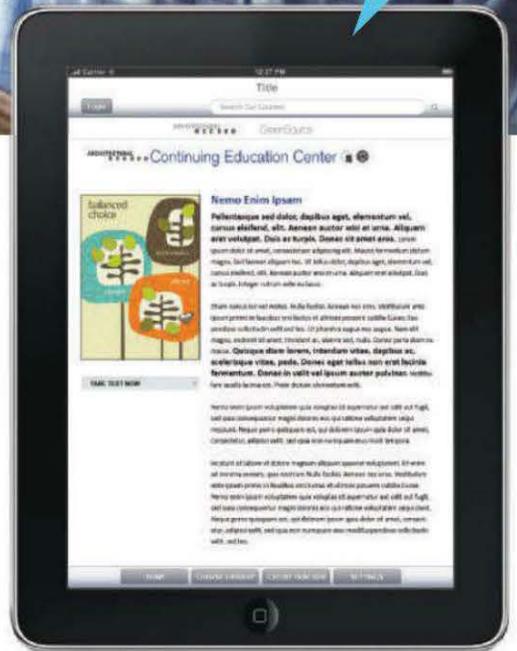


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FORECAST 2012 Hotel Construction

After a prolonged dry spell, climbing occupancy rates and increased revenue per room are helping resuscitate hospitality-industry construction projects across the country.

The hotel market sprinted quickly out of the gate in 2011 with over \$5.3 billion in construction starts – an increase of 58%. This gain followed four years of continuous decline and a stunning drop of 77% from the peak of activity in 2006 to the trough in 2010. In 2012 construction starts should continue to grow,

15%
Expected gain in U.S. hotel construction starts in 2012.

but at a slower pace than in 2011. This year, starts are expected to climb another 15% to nearly \$6.1 billion in hard construction costs. An increase in hotel-occupancy rates and revenue per available room (a widely used measure of profitability) lie behind the projected growth. According to hospitality-industry information

provider Smith Travel Research, hotel-occupancy rates rose to 60.1% in 2011, up from 57.5% in 2010. Over the same period, revenue per available room climbed 8.2%.

Hotel Starts by Region

Including U.S. total and 2012 forecast figures



Top Metro Area Markets Total Hotel Starts: 2007–2011 (in \$ millions)



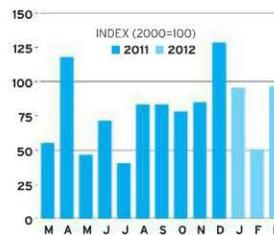
Handel Architects' Dream Downtown Hotel opened last year in New York City.

RANK	REGION	2007	2008	2009	2010	2011	2007-2011
1	New York, NY	\$877	\$1,111	\$119	\$396	\$668	\$3,170
2	Las Vegas, NV	\$1,690	\$787	\$118	\$5	\$75	\$2,675
3	Washington, D.C.	\$456	\$462	\$59	\$51	\$434	\$1,463
4	Dallas, TX	\$274	\$397	\$532	\$51	\$96	\$1,350
5	Atlantic City, NJ	\$90	\$1,145	---	---	\$66	\$1,301

THE DODGE INDEX FOR HOTEL CONSTRUCTION

3/2011 – 3/2012

This index is based on seasonally adjusted data for U.S. hotel starts. The average dollar value of projects in 2000 serves as the index baseline.



Top 5 Design Firms

Ranked by 2011 U.S. hotel-construction starts value

- 1 HKS
- 2 Cooper Carry & Associates Inc.
- 3 Ashihara Associates
- 4 Marnell Architecture
- 5 Stephen Varenhorst Architects

Top 5 Hotel Projects Ranked by 2011 Construction-Starts Value

PROJECT: Caesars Palace New Octavius Tower
ARCHITECT: Marnell Architecture
LOCATION: Las Vegas
VALUE: \$350 million

PROJECT: Marriott Marquis
ARCHITECT: Cooper Carry & Associates Inc., tvsdesign
LOCATION: Washington, D.C.
VALUE: \$300 million

PROJECT: Omni Convention Center Hotel
ARCHITECT: HKS
LOCATION: Nashville
VALUE: \$200 million

PROJECT: Four Seasons Luxury Resort
ARCHITECT: HKS
LOCATION: Lake Buena Vista, FL
VALUE: \$180 million

PROJECT: Marriott Central Park
ARCHITECT: Ashihara Associates
LOCATION: New York City
VALUE: \$130 million

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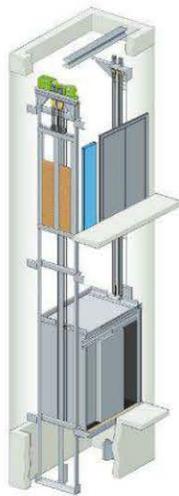


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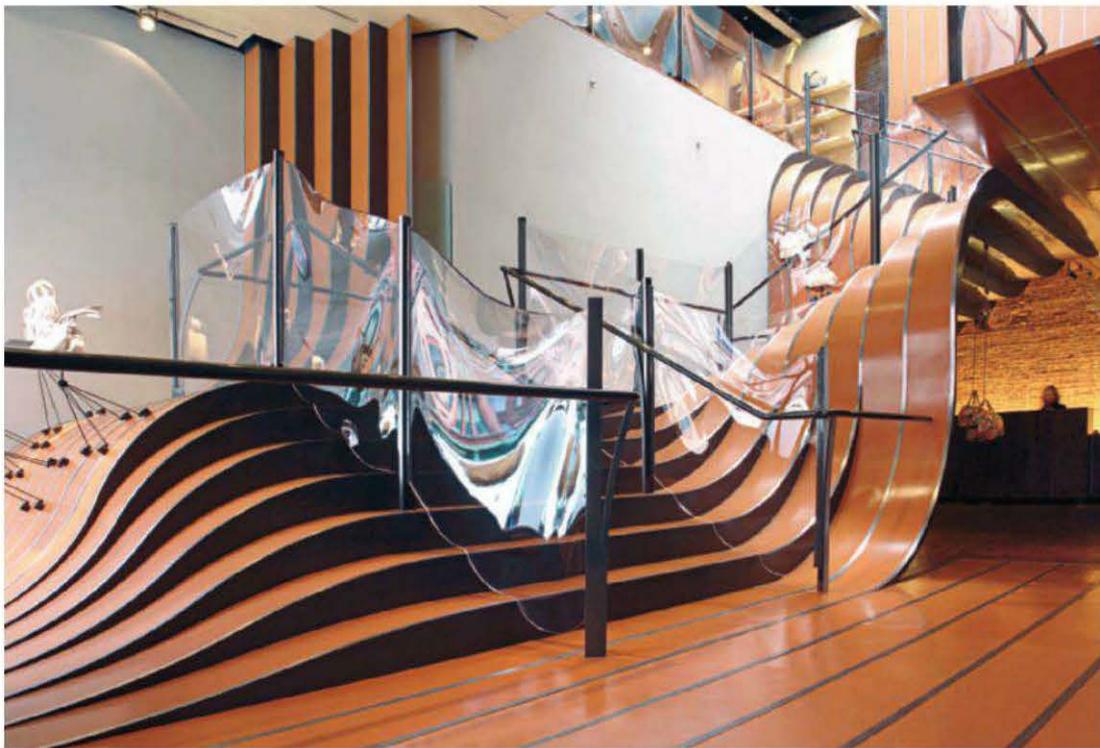


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Material Man

Thomas Heatherwick's unconventional approach flouts design orthodoxy.

BY CHRIS FOGES

A VISIT TO Thomas Heatherwick's London studio is like stepping into a Renaissance cabinet of curiosities—one of those idiosyncratic efforts to capture the wondrous variety of the natural and man-made worlds. Strange objects crowd the shelves and floor, indeterminate forms that might be product prototypes, scale models, or sculpture, hinting at the fertile imagination of a designer who transcends any narrow job description.

Heatherwick set up his studio in 1994 fresh out of college, and he employs 80 designers and architects to make furniture, vehicles, artworks, and, increasingly, buildings. His projects have no consistent style, but are usually characterized by a big idea that subverts the way we think about function or materials. A purse formed entirely from a single spiraling zipper unfastens to double its volume; a footbridge

rolls up like a graceful caterpillar to let boats pass.

Lateral thinking is easier outside the straitjacket of specialization, suggests Heatherwick. "People ask, 'Are you an artist or an architect?'" he says. "Actually, we're just developing ideas that solve problems." He calls himself a three-dimensional designer, which is what he trained to be. He had considered architecture school but was turned off by its "party games"—projects for houses on the moon and such—that seemed too abstract to be useful in the work he wanted to do: "There's something wrong if the world around us doesn't hold enough potential for imaginative thinking."

Ideas and the ability to realize them are equally important to the studio. Heatherwick's first book, a 600-page doorstop whose publication at the end of May coincides



STREAMLINED Heatherwick Studio's sleek remake of London's iconic double-decker coach, the Routemaster (above), made its debut in February. For a New York City Longchamp store (top), Heatherwick created a series of curving, thermoplastic balustrades.

with a major retrospective of his work at London's Victoria & Albert Museum, is entitled *Making*. It aims to show that the creative process relies more on experimentation and analysis than flashes of inspiration. Chapter titles are framed as questions: "How do you make customers go up staircases?" is answered by the inviting cascade of steps leading to the second floor of the Longchamp store in Manhattan that he

designed in 2006. "We have a methodical process, which is the same whatever scale we are working on," he explains. "It's almost like solving a crime—we're hunting out the solution, scraping away all the things that something shouldn't be, until we are left with a clear idea."

For some, the notion that the design of a building and a bench might be approached in the same way is heresy. As a student, Heatherwick had his first brush with the disciplinary border patrol. In defiance of teachers who thought he should be making furniture, he proposed a small pavilion of intersecting curves in wood and acrylic. When he showed his plans to architecture professors he was told "this is not architecture," and learned that the status accorded to buildings depends on who designs them as much as their inherent qualities. "OK, it's a big cabinet for people," he said, and built it anyway. This determination is combined with great sensitivity to clients' wishes, says Jane Wood, for whom Heatherwick built a restaurant in Littlehampton, England: "Part of his genius is the lengths to which he goes to find out what you want."

Clients might not know what to expect, but they can be confident that his focus is on their brief, not his own agenda. Despite that reassurance, invention involves risk. This was made painfully evident when his public sculpture made of steel in Manchester, England, was dismantled after developing structural faults. But technical problems usually can be solved; the real risk is creative compromise. "I recently found myself in a new shop that, on paper, is great: high ceilings, good stone. But it's utterly generic, utterly bland, and I'll never go back. We are motivated by a strong sense of the risk of building things that are not perceived as worthwhile," he says. "I find it interesting that people regard being different as a risk; our argument is that it is often the safest thing you can do."

Heatherwick made the same case when designing the UK pavilion at the 2010 World Expo in Shanghai. How do you ensure that a building will stand out in an architectural zoo? By daring to do something calm. Against a sharply folded landscape he placed a 20-meter-high building, whose soft exterior form comprised 60,000 acrylic optical rods waving in the breeze. In the cavelike interior, 60,000 bright spots of daylight shone from behind seeds cast into the end of each rod. All the exhibits drew big crowds, and at the Seed Cathedral people stood in line for hours simply to experience the building.

It is arguable that what is appropriate for attention-grabbing expo pavilions might not be desirable in the ordinary buildings that constitute the city. One of Heatherwick's current projects, a string of apartment towers for a property developer in Malaysia, suggests that he thinks otherwise. Their tapering bases are not an empty formal gesture, however, but respond to commercial and environmental conditions, putting real estate up high where it is most valuable, and returning large parts of the site to landscape. The real threat to good urban order is not the odd flamboyant building, he argues, but rather the insidious global spread of "best practice" urban design and polite good taste. In any case, spectacular form is no guarantee of an extraordinary building. The Bilbao Guggenheim was extraordinary as much for the freshness of the idea as for its architecture. Attempts to replicate the project have made the idea commonplace, he says, "so even if you get the world's best architect to design an incredible gallery, it can be ordinary." In contrast, the special quality of a place can derive from its particular brand of the quotidian. When Heatherwick's replacement for London's double-decker buses hit the streets, the designer was dismayed to hear talk about possible export sales: "I don't want Hamburg and Abu Dhabi to have the same buses as London."



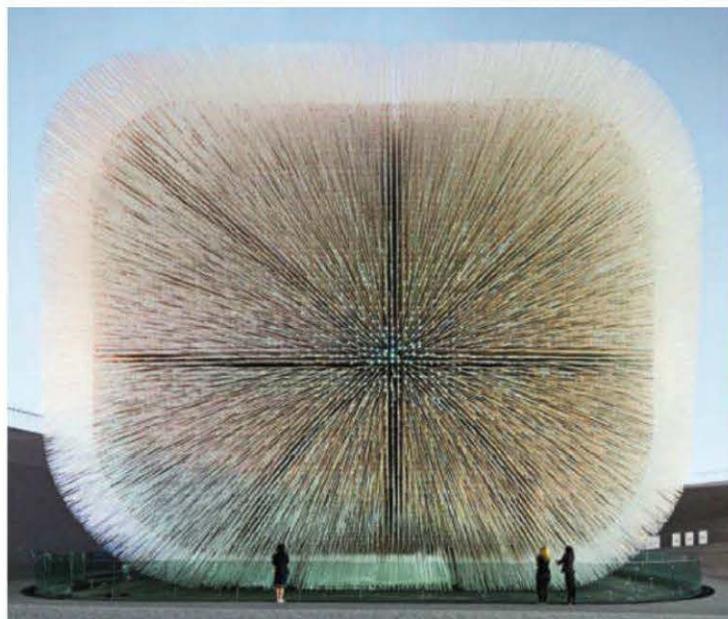
RISK TAKER

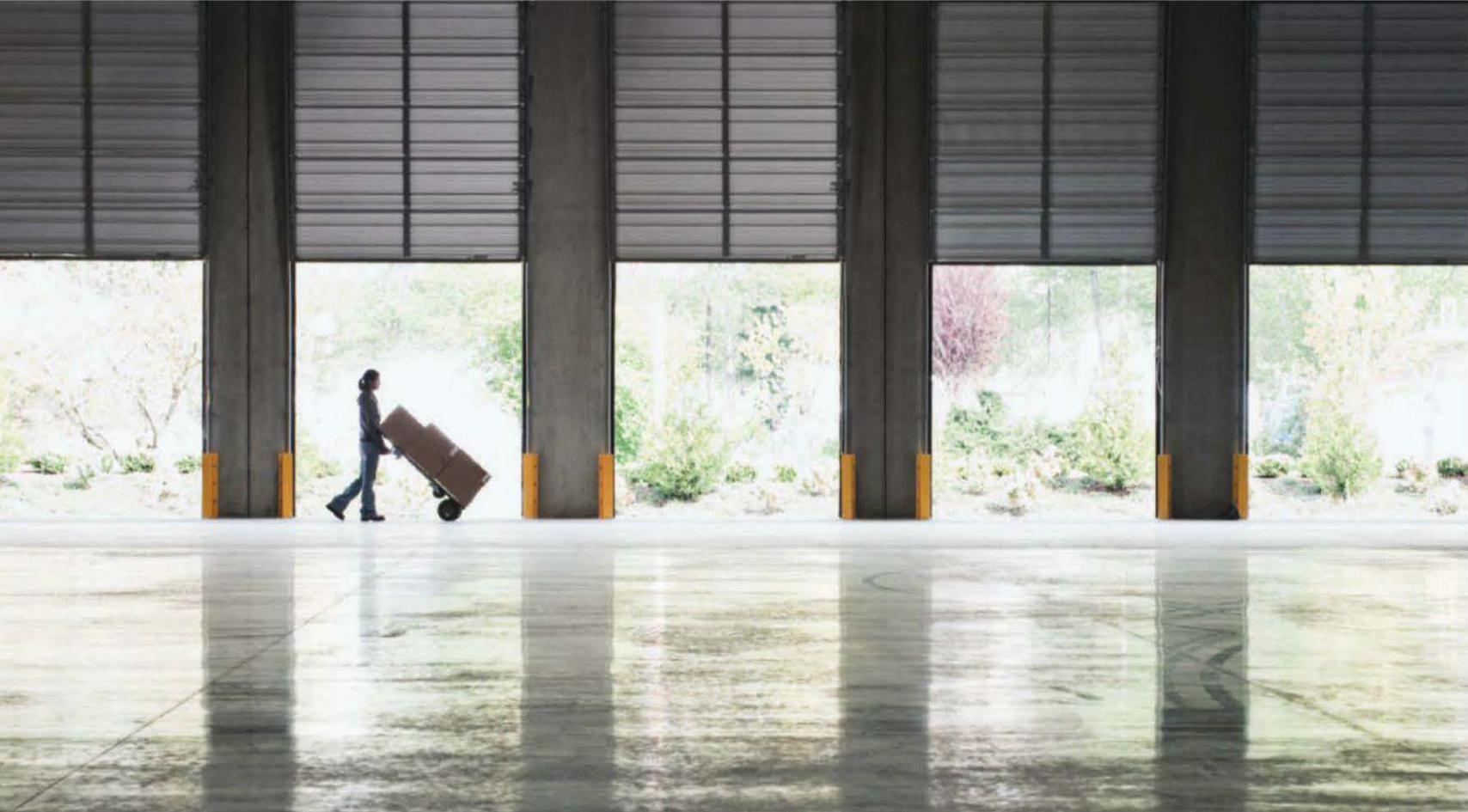
Heatherwick's design for the UK Pavilion at the 2010 World Expo in Shanghai (bottom) was enthusiastically received; thousands of acrylic, fiber-optic rods created a biomorphic, sea anemone-like form. The Studio's designs for an extruded aluminum bench (top right), writers' cabins (top left), and the facade of a hospital in London (right) are similarly organic, seeming more elemental than man-made.



Places that inspire affection are often those whose difference is embedded in their bones, Heatherwick observes—one reason he's now keen to look at how infrastructure might be used in unexpected ways to create distinctive characters for whole cities. It is another jump in scale, but the same fundamental principles apply, he says: "What people respond to are good ideas, whether that's in products, artworks, or buildings. In a way, that's what defines human beings; humans invent." ■

Chris Foges is the editor of the London-based design journal *Architecture Today*.





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perspective **house of the month**

A COASTAL VILLAGE IS THE BACKDROP FOR JARMUND/VIGSNÆS ARCHITECTS' DUNE HOUSE, ONE OF LIVING ARCHITECTURE'S MODERN HOLIDAY HOMES IN SUFFOLK, ENGLAND. BY LAURA RASKIN



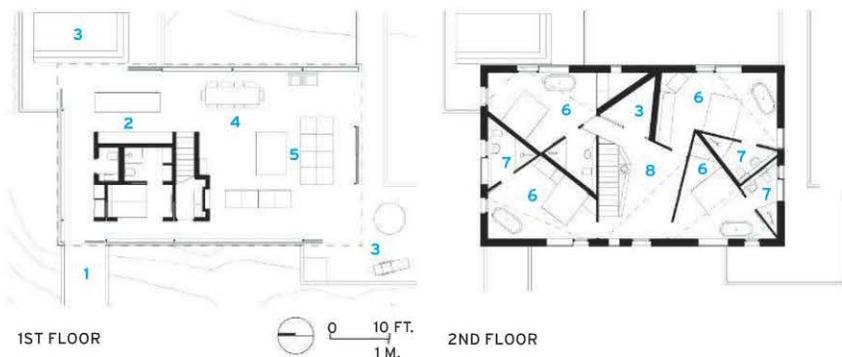
CROWNING GLORY
The jagged, timber-clad second story of the Dune House, on the east coast of England, contains bedrooms and bathrooms. A fireplace pit (below) is carved out of the reinforced-concrete floor in the living room, which is surrounded by glass. Slender lights are recessed into the ash wood ceiling.



DEFYING THE typical angst-y design process, the first conceptual sketch of the Dune House was the one that stuck. At the airport following their visit to the English seaside village of Thorpeness, Einar Jarmund and Håkon Vignsnes of Oslo-based Jarmund/Vignsnes Architects (JVA) drew a Surrealist crown floating on top of a Miesian glass box. And so it is.

The house is one of five completed by Living Architecture, a nonprofit organization founded by writer Alain de Botton in 2010 (a sixth, by Peter Zumthor, is in the works). "I think the program is interesting because housing tends to be almost nostalgic, while public architecture is much more modern," says Vignsnes. For about \$1,270 for four nights, eight or nine people can live and breathe Modern.

JVA approached the 2,690-square-foot concrete, steel, and wood house as a "mini-hotel" set into the dunes. Private spaces—four bedrooms, each with its own bath—are encased in the top floor's wild gables, an exaggerated twist on the traditional holiday homes nearby. Public space on the ground floor surrounds a central core containing a staircase and fifth bedroom and bath. "We wanted to keep the social space as open as possible," says Vignsnes. Mission accomplished, with 360-degree views. ■



- 1 ENTRANCE
- 2 KITCHEN
- 3 TERRACE
- 4 DINING
- 5 LIVING
- 6 BEDROOM
- 7 BATHROOM
- 8 LIBRARY

PHOTOGRAPHY: © NILS PETTER DALE, IVAR KVAAL



Architect: Cindy Rendely Architecture **Project:** The Ravine Residence

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During Milan's annual Salone del Mobile, the city truly becomes the world capital of design—from the main event at the Rho Pero fairgrounds, to off-site exhibits at the Triennale Design Museum and the Museum of Science and Technology, to the streets of neighborhoods like Via Tortona and Ventura Lambrate. We present a few of our finds over three days at the show, from a textured, architectural glass line to a modern (plastic) take on the classic Windsor chair.

By Rita Catinella Orrell



Bahir Sofa

Designed by Zurich-based Jörg Boner for COR, the Bahir sofa is fitted with a sloping, all-round backrest and a detachable upholstery mat. Taking the form of a large, inviting basin, Bahir's solid-wood frame is covered with a diagonally quilted machine-washable upholstery that creates comfortable hollows, corners, armrests, and backrests. The sofa comes in four sizes and is offered with a matching upholstered easy chair and a stool that also functions as a side table. cor.de/bahir

Candy Table

The sweet (and heavy) surprise about the Candy Table, designed by Brussels-based Sylvain Willenz for Cappellini, is its use of steel rebar for legs. By coating the industrial material with glossy paint, the familiar ridges of the concrete support become a design element. The tables can be used indoors or out, and are available in two sizes and five colors (red shown). The table was one of many new pieces introduced by Cappellini and its sister companies in the Poltrona Frau Group. The group had a new venue this year at the site of the Arnaldo Pomodoro Foundation on Via Solari, located in the oldest part of a former turbine-manufacturing facility. poltronafragroup.com



Lasvit LiquidKristal

At the Triennale Design Museum in Sempione Park, manufacturers and designers collaborate on special exhibits open only during design week. In one gallery, visitors entered a dark room containing a glowing pavilion made of Lasvit LiquidKristal, a new line of architectural glass designed by Ross Lovegrove for the Czech-based Lasvit Group. The transparent glass, which is curved in form and wavy in texture, is the result of a unique thermal-transfer technique. The finished product can be easily customized, allowing large-scale pattern aggregations over multiple sheets. The glass can be used as a crystal-clear partition or screen and as insulated glass units for exterior facades and storefronts. lasvit.com

Cristal Box

Designed by José A. Gandia-Blasco, president and art director of the Spanish outdoor-furnishings manufacturer Gandia Blasco, this outdoor pergola system has a lacquered aluminum frame, glass, galvanized steel ceiling, and flooring made from a rice husk and resin composite material. Intended to be a completely weather-resistant outdoor space for a studio, gym, patio, or guest room, the "Box" can withstand heavy snow loads, and can incorporate lighting, underfloor heating, and air conditioning. gandiablasco.com





Hydro-Fold

At the ECAL/University of Art and Design Lausanne booth, which participated in the 15th edition of the fair's SaloneSatellite exhibition, third year industrial-design student Christophe Guberan displayed Hydro-Fold, a water-based printing technique that turns flat paper into a self-forming 3-D object. Using software, a traditional printer, water-based ink, and a sheet of tracing paper that is printed on both sides, Guberan's experimental project creates an entirely new category of "3-D" printing.

ecal.ch



Maschera

Among Morelato's collection of desks, sideboards, tables, and other wooden furnishings was the Maschera wall unit with sliding doors designed by Centro Ricerche MAAM. This updated version features a contrast of light and dark wood with an open structure made of solid cherry, and frames and sliding doors in walnut veneer. The modular system can be customized for use as a library or display wall to fit the space available.

morelato.it

Nuvola

Designed by Paola Navone, Gervasoni's Nuvola upholstered collection includes an armchair and two sofas that are as comfortable as they look. With high arms and deep seats, the furnishings come with a plywood and solid-wood frame and a varied-density polyurethane foam filling. Both sofas and armchair have fully removable covers, including a quilted upholstery stuffed with goose down and polyester staple fiber (shown), a soft brushed fabric design, and a futuristic silvery metallic fabric. gervasoni1882.com



Light-Air Lamp + Comback Chair

Kartell drew a massive crowd to its showroom with the launch of a gussied up version of Philippe Starck's Mademoiselle Chair that he designed in collaboration with musician Lenny Kravitz (see our site for photos). Its products at the fair, however, were more interesting than the Kravitz/Starck piece, including a magical LED table lamp by Eugeni Quitllet. Light-Air's rectangular frame is formed of two pieces of laser-welded polycarbonate; a floating shade within diffuses the light. A fun take on the classic Windsor chair, Patricia Urquiola's Comback Chair has a plastic-matte frame featuring a high backrest and a reinforced hexagonal rim with slim shafts that connect to the seat. The chair's four base options include swivel, sled, wood, and rocker versions. kartell.it

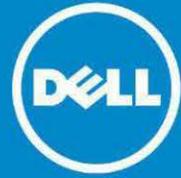


Ribbon Table

The Ribbon Table, designed by Mauro Lipparini for Bonaldo, was one of the highlights of the Padua-based company's new designs at the show this year. Not ideal for homes with small children, this living room table is made of two contrasting simple elements: a base of brushed Carrara marble that sits under a "bridge" made of a thin line of transparent or etched smoked glass. The Ribbon Table is available in 39.4"-square and 47"-square sizes.

bonaldo.it

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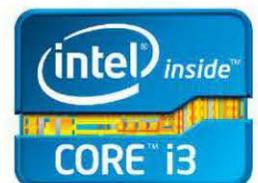
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Kolbe kolbe-kolbe.com

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Hunter Douglas Contract

hunterdouglascontract.com

Winner of a 2012 iF Product Design Award, this roller-shade system can accommodate even exceptionally large or inclined windows. The system offers three different operating systems (chain, crank, and motorized) and precision engineering that includes a patented metal clutch and durable zamac-alloy housing. **CIRCLE 202**

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Marvin marvin.com

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Windsor Windows & Doors woodgrain.com

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Serena Remote-Controlled Cellular Shades

Lutron Electronics lutron.com

Serena is a new battery-powered, remote-controlled, cellular shade that comes in three fabric styles that allow different levels of light to filter into a room—Single-Cell Light Filtering, Double-Cell Light Filtering, or Single-Cell Blackout. Starting at \$299 and using standard batteries, the low-cost shade system utilizes a patent-pending Triathlon power technology to extend the shade's battery life up to three years. **CIRCLE 205**



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BARNES STORM

After a tempest over its relocation, an acclaimed art collection settles into its spacious new home.

BY CHRISTOPHER HAWTHORNE

PHOTOGRAPHY BY MICHAEL MORAN

THERE IS A good deal to admire about the architecture of the new Barnes Foundation, which opened May 19 on Philadelphia's Benjamin Franklin Parkway, just down the road from the Philadelphia Museum of Art. The sober, handsome, and exquisitely detailed museum, designed by the increasingly busy New York City architects Tod Williams and Billie Tsien, offers a rare combination of material richness and spatial ingenuity.

Taking cues from the designs of Louis Kahn, Carlo Scarpa, and Edward Larrabee Barnes—masters of the late-Modern museum—the new Barnes shows its architects (who are best known for their modestly sized, now closed American Folk Art Museum in New York City) working at a high level. Most impressive of all is the thoughtful sense of procession that carries visitors through the \$150 million complex, first from the outside in and then from the museum's airy common spaces almost inexorably toward the smaller-scaled galleries.

At the same time, thanks to the peculiar restrictions that have governed the design of those galleries, it would hardly be an exaggeration to say that compared with the original Barnes, in the leafy Philadelphia suburb of Merion, Pennsylvania, the new building suffers from a distinct lack of soul.

The contradiction can be traced back to a single source: Montgomery County Judge Stanley Ott. At the end of 2004, Ott took an idea put forth by the trustees of the Barnes and gave it the force of law: In exchange for permission to move the superb collection of the late Dr. Albert C. Barnes from Merion to the Parkway, the Barnes would pledge to “replicate” the galleries in the original building, a fine Italianate design from 1925 by the architect Paul Cret. Ott's broader decision approving the move, which flew in the face of Dr. Barnes's own stated desire to keep the paintings in Merion in perpetuity, generated years of controversy.

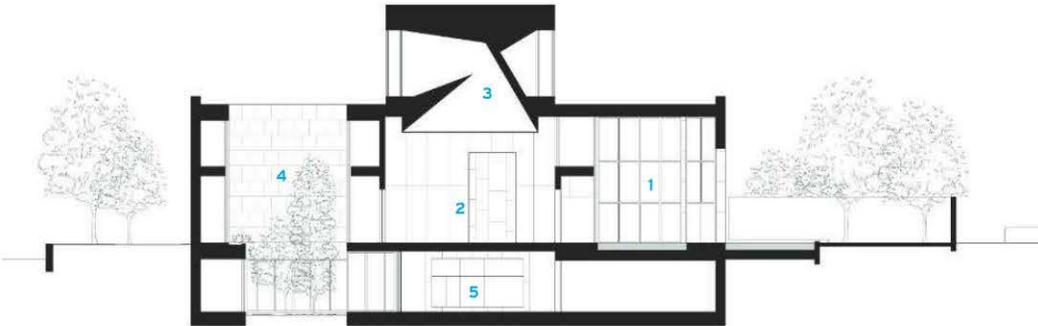
There are reasonable arguments on both sides of this debate. The old Barnes offered one of the most satisfying combinations of architecture, art, and landscape I've ever experienced; anyone who appreciates seeing great paintings in an intimate setting will mourn its loss. At the same time, growing crowds were beginning to overwhelm its suburban site. Given the remarkable quality of the collection—which is staggeringly strong in post-Impressionist and early Modern art but also includes American furniture and African art—keeping the Barnes where it was would likely have guaranteed never-ending battles about visiting hours and public access.

Lost in the hubbub, however, was any real analysis of what the notion of “replication” would ultimately mean for the architects who took on the complex job of producing a new home for the Barnes. That becomes clear as soon as you

VOLUME AND MASS

At the west end of the Barnes, the light canopy cantilevers over a terrace. A limestone rainscreen is attached to the steel-framed gallery building (at right) and a poured concrete pavilion wing (at left).





SECTION A-A

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6 M.

- 1 ENTRY ALCOVE
- 2 COURT
- 3 LIGHT CANOPY
- 4 GALLERY GARDEN
- 5 EDUCATION LOBBY



QUIETLY MONUMENTAL Along the Benjamin Franklin Parkway, the Barnes museum presents an unassuming air (right), with crisp, elegant stone detailing recalling the Modernist work of Philadelphia architect Louis Kahn. Contained within it are the galleries re-created from the museum in Merion.

At the southeast end (top left), OLIN's landscaping eases the transition from the Parkway to the main entrance in the back (left). This entrance, on the north facade, leads into the L-shaped Pavilion wing that holds temporary exhibition rooms and ancillary spaces. (Green roofs and photovoltaic panels should help qualify the building for a LEED Platinum rating.)



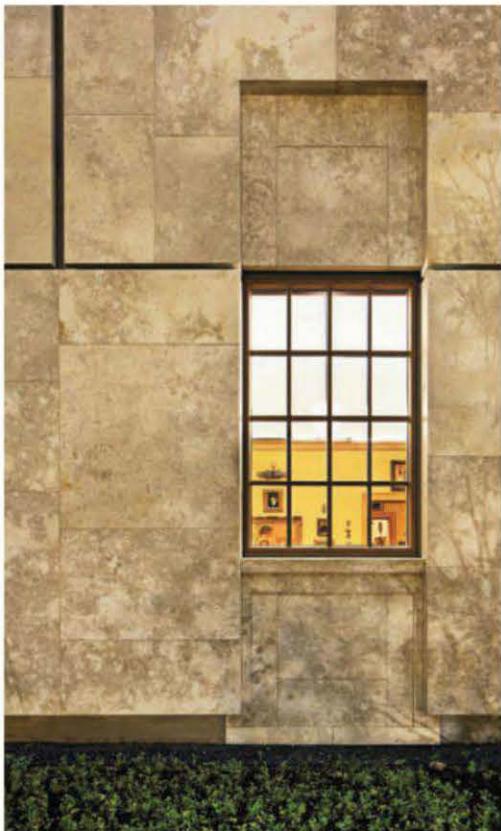
walk through the building, which sits on a long, narrow 4.5-acre site next to the 1929 Rodin Museum, another Cret design.

Wherever Dr. Barnes's collection is not on view, Williams and Tsien have been free to create a wholly new piece of architecture, one wrapped in large panels of Israeli limestone and topped by a cantilevered light box. Wherever those artworks are on display, the architects have essentially been obliged to practice an odd and unpersuasive kind of impersonation.

At 93,000 square feet, the relocated Barnes is nearly ten times the size of the old one, the latest example of a creeping gigantism in contemporary museum architecture. After making their way through an elegant, rather formal landscape by Philadelphia's Laurie Olin, visitors enter the building

through an oversize oak entry, facing to the north, away from the Parkway. What's most impressive in the design of the L-shaped Pavilion wing's common areas is the combination of tactile richness of materials—such as limestone, bronze, and concrete—and surprising shifts in scale of the various spaces.

A vast central atrium, known as the Light Court, is the one place where Williams and Tsien have really been able to let loose. It is topped by a soaring ceiling made of the same folded planes as the facade of the Folk Art Museum, albeit in white acoustic plaster instead of cast bronze. The hall will certainly be the social heart of the new Barnes. It is also meant to neatly cleave the new from the old, separating the



bar-shaped Galleries building, containing the collection from the Pavilion wing and its special exhibitions rooms, café, and auditorium.

Entering the bar building, visitors will find the re-created galleries. In a couple of places, Williams and Tsien have been able to tweak the details of the original design. They've simplified the moldings and doorframes, stripping them of some decorative detail. The lighting in the galleries is brighter and clearer than it was in Merion. The architects have added interstitial rooms, including a glass-enclosed interior garden, to give visitors a breather from this incredibly dense arrangement of paintings.

But in nearly every other way, the galleries suggest a high-culture, painstaking version of Disneyfication. The dimensions of the new rooms are exactly the same as the old ones, and the paintings hang in the same precise spots. The wall-covering in both locations is burlap. The orientation of the gallery wing is even the same as it was: If a window faced south in Merion, it faces south in Philadelphia.

The result is a suite of rooms that feel hollow and insubstantial, in great contrast to the rest of this serious, substantial, and occasionally rough-hewn building. Hanging in rooms where the subtly symbiotic relationship between art and architecture has been thrown out of whack—has in fact been rigged—the van Goghs, Klees, and Modiglianis are themselves appreciably diminished. In keeping such close company with fake architecture, they seem in their own right somehow less real. This, of course, raises the question: How much of the blame for the shortcomings

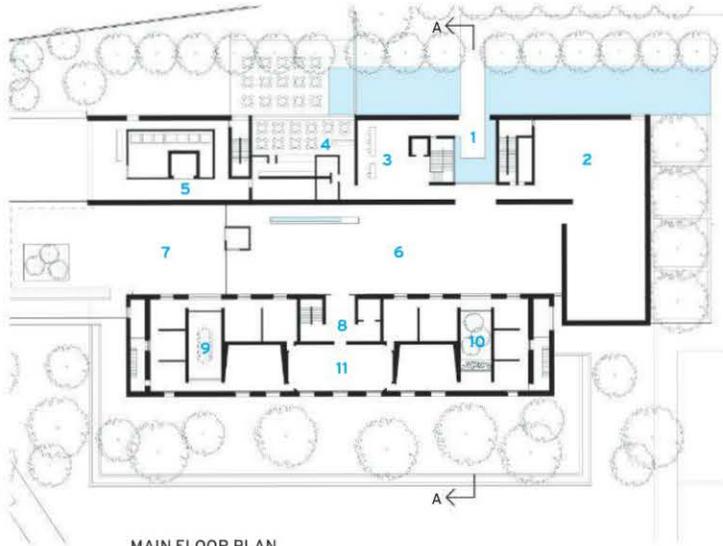


GALLERY BUILDING On the first floor of the wing containing the Barnes collection, the main hall's coves feature Henri Matisse's "The Dance" murals (above). Williams and Tsien kept the proportions, scale, and placement of the installation intact, redesigning the cornices and moldings, lighting, and window coverings. The floor is Tennessee marble. This main gallery is oriented to the Parkway; visitors can view the murals

from the balcony. On the second floor (opposite, far left, top), the architects have given gallery ceilings a very different treatment with cyma curve plaster moldings and clerestories of acid-etched glass. The shaped ceilings in ancillary first floor galleries (opposite, near left, top) echo the barrel vaults of the galleries in Merion. Seen from the Parkway facade (opposite, left, bottom), the rooms are framed within the wood-mullioned windows set in Negev limestone.



SECOND FLOOR PLAN



MAIN FLOOR PLAN



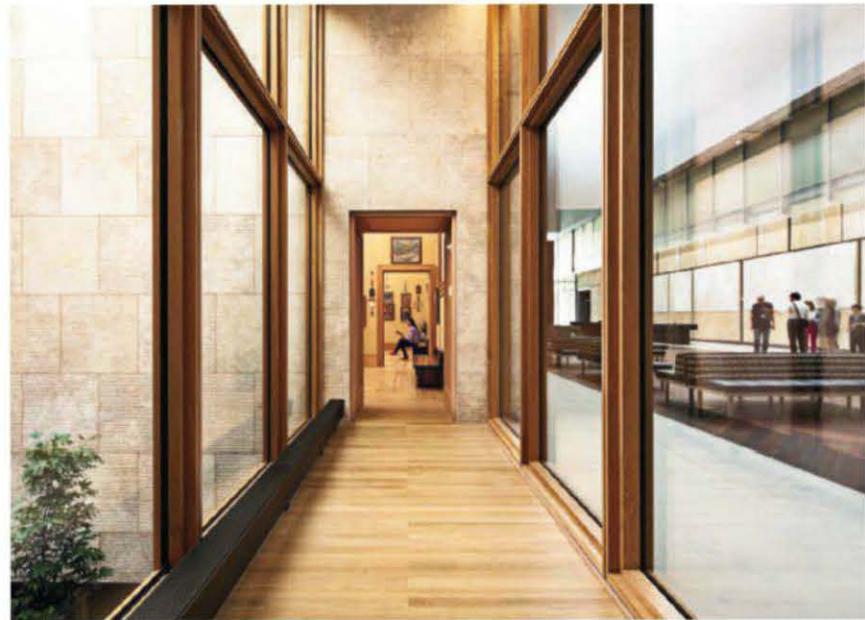
LOWER LEVEL PLAN



- | | |
|-----------------|---------------|
| 1 ENTRANCE | 9 CLASSROOM |
| 2 EXHIBITION | 10 GARDEN |
| 3 LOBBY | 11 GALLERY |
| 4 CAFÉ | 12 OFFICE |
| 5 SUPPORT | 13 BALCONY |
| 6 LIGHT COURT | 14 AUDITORIUM |
| 7 TERRACE | 15 SHOP |
| 8 GALLERY FOYER | 16 LIBRARY |

ARCHITECTS' IMPRIMATUR

In the Pavilion wing, an ipé stair framed by walnut and chiseled-limestone walls (top) connects the lower level to the lobby. The Gallery wing is entered from the Light Court (bottom). A small enclosed garden (at left in photo) divides the block of re-created Barnes galleries.





BREATHING ROOM The Light Court (above) separates the Gallery wing for the collection from the L-shaped Pavilion wing for temporary exhibitions and ancillary spaces. The angled light canopy is sheathed in seamless acoustic plaster; the floor is recycled ipé.

of the new Barnes can reasonably be laid at the feet of the architects? Weren't their hands tied?

Certainly the Barnes Foundation, in stubbornly seeking to create simulacra of the old galleries, gave the architects a singularly difficult brief. Ironically, the subtlety by which Williams and Tsien have managed to update the design of those galleries makes clear how impressive the rooms might have been had the architects truly had the chance to start from scratch. The high quality of the rest of the building makes the same argument in a different way.

But it's also worth pointing out that the architects knew precisely what they were signing up for. The Request for Qualifications that the Barnes sent out indicated that the galleries would have to be replicated. The design by Williams and Tsien flows directly from their willingness to go along with that misguided strategy—and even from the belief that they might manage, in the end, to redeem it. ■

Christopher Hawthorne is the architecture critic for the Los Angeles Times.

CREDITS

ARCHITECT: Tod Williams Billie Tsien Architects; Tod Williams and Billie Tsien, principals; Philip Ryan, project manager; David Later, project architect; Robin Blodgett, assistant project architect

ASSOCIATE ARCHITECTS: Ballinger Architects and Engineers

ENGINEERS: Severud Associates (structural); AltieriSeborWieber Consulting Engineers (m/e/p); Hunt Engineering (civil)

CONSULTANTS: OLIN (landscape); Pentagram (graphics)

SIZE: 93,000 gross square feet

COST: \$150 million

COMPLETION DATE: May 2012

SOURCES

CLADDING: ABC Stone (masonry)

CEILING: BASWAphon (acoustic); Tectum (back-of-house spaces)

WINDOWS: Duratherm (wood); JE Berkowitz (glass)

DOORS: Assa Abloy (metal doors)

FINISHES/FURNISHINGS: Armstrong (suspension grid); Milliken (carpet); Knoll (chairs, upholstery)

LIGHTING: Zumtobel (downlights); Artemide (task lighting)

PLUMBING: Kohler; Hansgrohe

PHILLY FORWARD

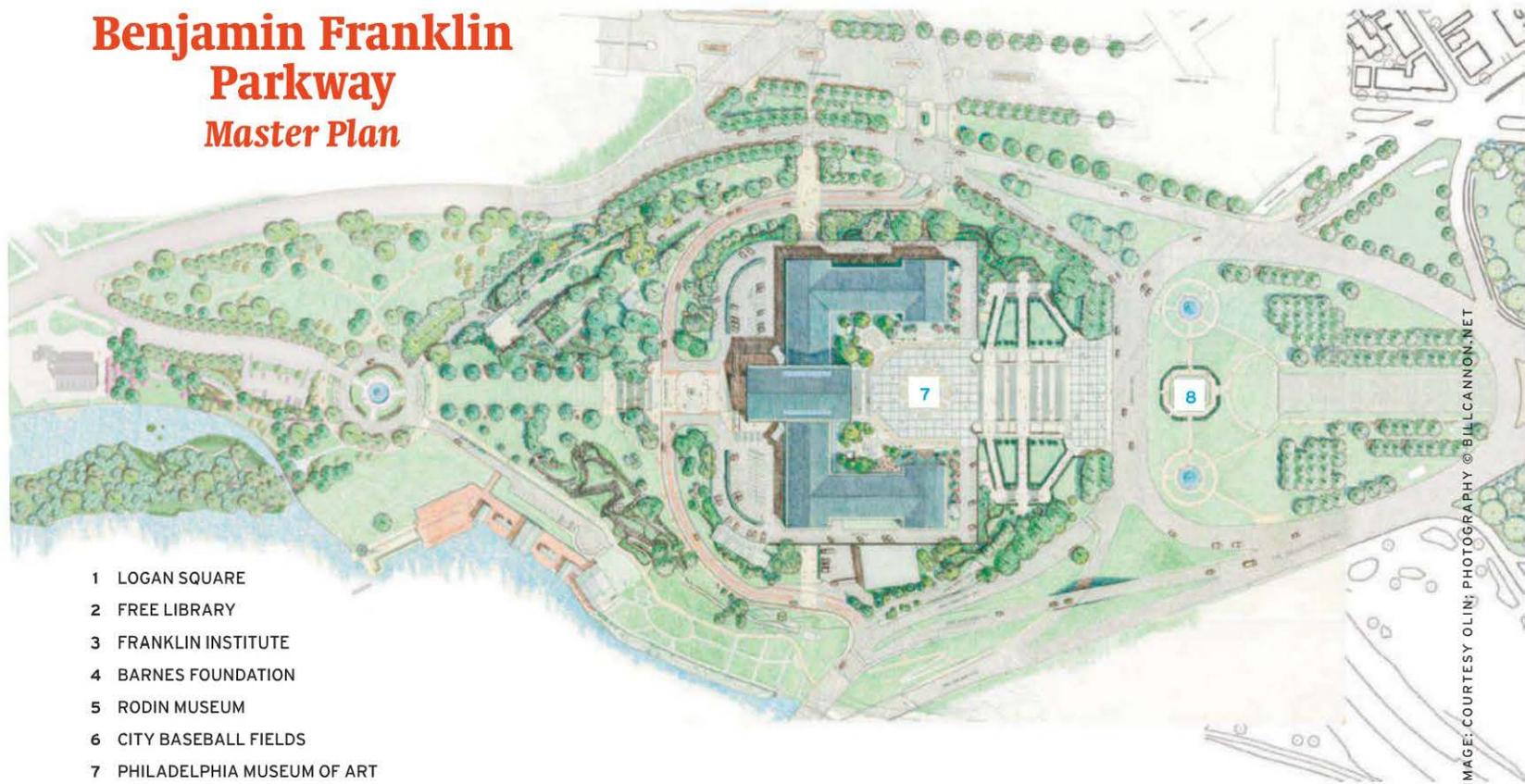
The arrival of the Barnes Foundation in its new quarters on Benjamin Franklin Parkway promises to further Philadelphia's identity as an artistic magnet.

BY DIANA LIND

SANDWICHED BETWEEN Washington, the capital, and New York, the center of culture, commerce, and media, Philadelphia has long had an inferiority complex. But the city's recent addition of nearly 90,000 people since 2006, ending a population free fall since 1950, attests to Philadelphia's comeback. It wasn't easy, or without controversy. The most notorious example of the city's bid to capture attention and boost tourism came in 2004, when the state government, the powerful Pew Charitable Trusts, the Lenfest Foundation, and the Annenberg Foundation staged a significant cultural coup. Along with a handful of other local players, they agreed to provide the venerated Barnes Foundation with \$150 million to shore up its endowment if it would move from suburban Merion to Center City. With its world-famous \$25 billion collection of art, the Barnes's move downtown was a major win for Philly.

Tod Williams and Billie Tsien Architects' new building for the Barnes Foundation, a monumental, limestone-clad structure, balances both its civic role and its function as a gallery for viewing art in an intimate setting. The dignified museum creates important metaphorical and physical links to the surrounding urban fabric, while its art program complements the city's cultural scene. It's not too much of a stretch to predict that the Barnes will bridge another gap: Philadelphia's perceived cultural lag among America's most important cities. If Washington has dozens of institutions surrounding the Mall, and New York has upper Fifth Avenue's Museum Mile, now Philadelphia offers a corollary with the Benjamin Franklin Parkway, where the Philadelphia Museum of Art, the Rodin Museum, and the Franklin Institute have

Benjamin Franklin Parkway Master Plan



- 1 LOGAN SQUARE
- 2 FREE LIBRARY
- 3 FRANKLIN INSTITUTE
- 4 BARNES FOUNDATION
- 5 RODIN MUSEUM
- 6 CITY BASEBALL FIELDS
- 7 PHILADELPHIA MUSEUM OF ART
- 8 EAKINS OVAL

been marooned for years waiting for good cultural company.

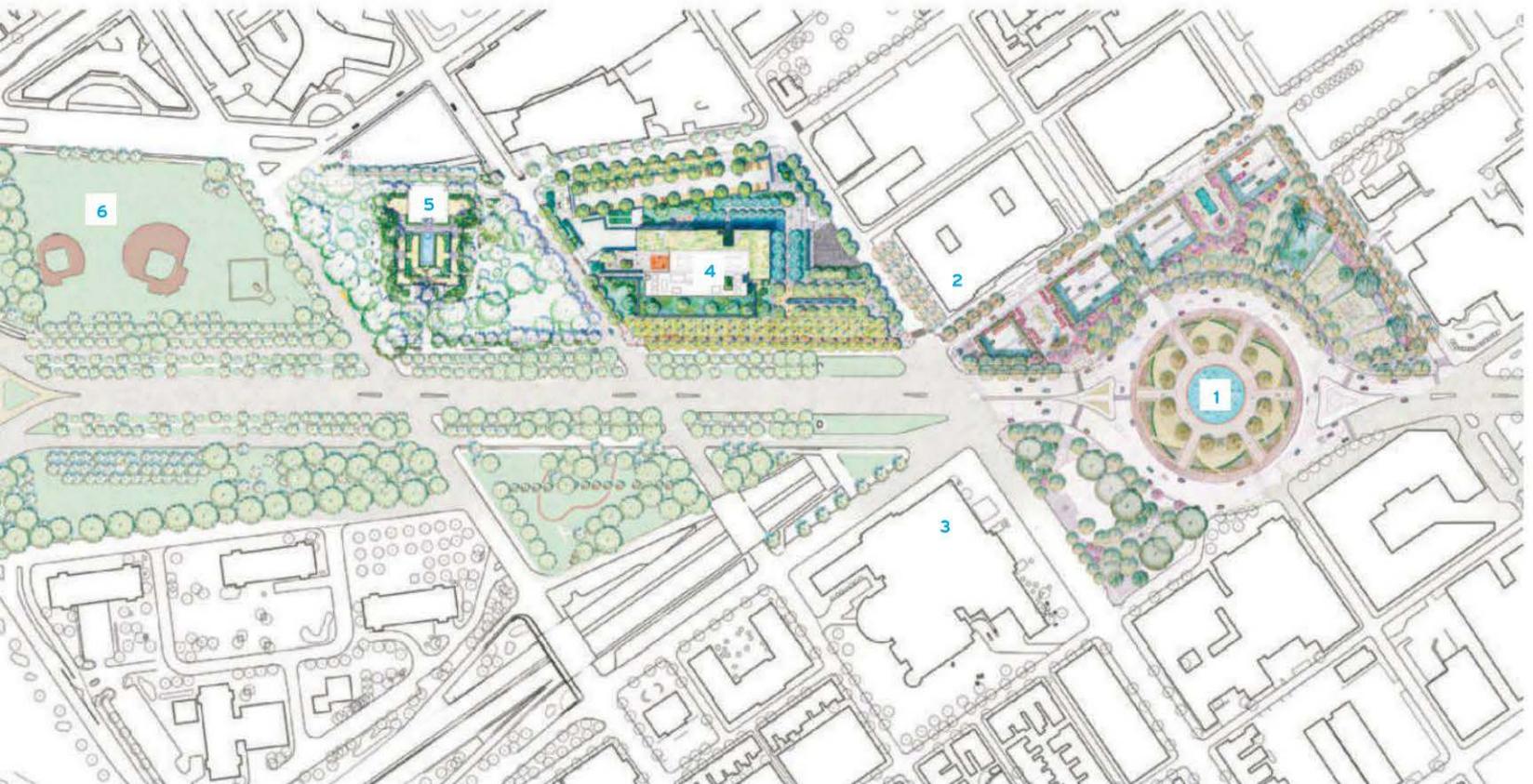
The 1.5-mile Parkway, designed in 1917 by Jacques Gréber as part of the City Beautiful movement, diagonally slices through the urban grid from City Hall at one end to the Philadelphia art museum at the other. But even with Horace Trumbauer's Beaux Arts buildings at Logan Square, where a six-lane boulevard to the museum begins, the Parkway never became Philadelphia's Champs-Élysées. The city put an end to that hope by having the Vine Street Expressway (Route 676) cross under the Parkway at Logan Square.

Now the Barnes occupies a plot that once housed the Youth Study Center (an outdated 1953 Modern building by Carroll, Grisdale & Van Alen) just northwest of Logan Square and adjacent to Trumbauer's Free Library (1927), which is still fundraising for an expansion by Moshe Safdie. On the other side of the Barnes is the Rodin Museum (designed in 1929 by Paul Cret, who also designed the original gallery building in Merion in 1925), and on the south side of the parkway sits the Franklin Institute (1934). In this corridor of important cultural institutions, the Barnes and the Franklin Institute now can be read as a gateway to the once-neglected, tree-lined boulevard. David Brownlee, professor of art history at the University of Pennsylvania, says the simple fact of the Barnes's presence has "enormously intensified the pleasure of walking along the Parkway. It's reduced the psychological size of the Parkway, and the experience is much more one of continuous architectural excitement."

That pleasure derives from the Barnes's quasi-public grounds, which help complete the series of intimate park



A LEAFY VIEW The Eakins Oval, just southeast of the Philadelphia Museum of Art, contains the Washington Monument fountain by sculptor Rudolf Siemering. The 1897 statue, moved to this site in 1928, points down the tree-lined Benjamin Franklin Parkway to City Hall.





spaces that pedestrians can enjoy from Dilworth Plaza at City Hall (under renovation) up to the Schuylkill River path and Fairmount Park beyond the art museum. On the Barnes site, the design manages transitions not only in scale and character but also a 12-foot drop in grade. Landscape architect Laurie Olin, whose firm has master planned the landscaping of the whole Parkway, sought to guide visitors from a civic promenade into a domestically scaled garden that prepares viewers for the intimate experience of the Barnes's galleries. Tod Williams says the building "wants to be a quiet citizen on the Parkway," and indeed, its beige limestone walls and translucent glass-roof structure blend into the landscaping. When visitors finally approach the entrance, on the north facade of the museum, away from the Parkway, there is a sense of a discovered treasure, a small journey that mimics the former trip out to Merion.

The aura of seclusion that the Barnes conjures is rare in cities, and is nearly ruined by an unfortunate parking lot attached to the building's north side. But while tourists will undoubtedly identify the Foundation as another institution on the Parkway, locals will likely often approach the building from the side streets. Callowhill Street, which runs just behind the museum, connects the hallowed ground of the Parkway to the grungy Loft District a few blocks east. There, the Reading Viaduct, an abandoned rail line much like New York's High Line, is undergoing landscaping that will help rejuvenate the surrounding neighborhood. The Viaduct is a contemporary, and more organic, version of the Parkway, where the institutions edging it are appropriately smaller-

scale galleries with unsanctioned public art.

Philadelphia officials are keen to support these alternate cultural corridors and to refute the notion that the Barnes is the main attraction in town; rather, it is just one of a constellation of artistic offerings. Its opening coincides with a new, two-year, tourism program, "With Art." As Gary Steuer, Philadelphia's Chief Cultural Officer of the Office of Arts, Culture and the Creative Economy, says, "[Albert] Barnes was a contemporary art collector. And while we celebrate the opening of the Barnes, we recognize this is not just a city of archival art presentation but a place where art is living, breathing, and being made today."

When asked if the architecture responds to Philadelphia's vernacular, Williams replies that he looked to the work of Louis Kahn, Frank Furness, and Trumbauer. These connections can be clearly seen in Williams and Tsien's choices of traditional materials and massing along with Modernist construction techniques and details. The combination of old and new call to mind many buildings in Philadelphia that have been added onto and altered over the years. Its unassertive mien doesn't scream, "I am a Monument"—to borrow Robert Venturi and Denise Scott Brown's famous denunciation of objectlike architecture. By delighting in this dialogue between poles of the historical and Modern, the Barnes shows a way for Philadelphia to move ahead, while looking back and forward at the same time. ■

Diana Lind is the executive director and editor in chief of Next American City.

BACK DOOR The actual entrance to the Barnes occurs at the east end of the north facade, not on the Parkway. A landscaped court separates the structure from a parking lot (foreground) near the loading dock at the northwest end.

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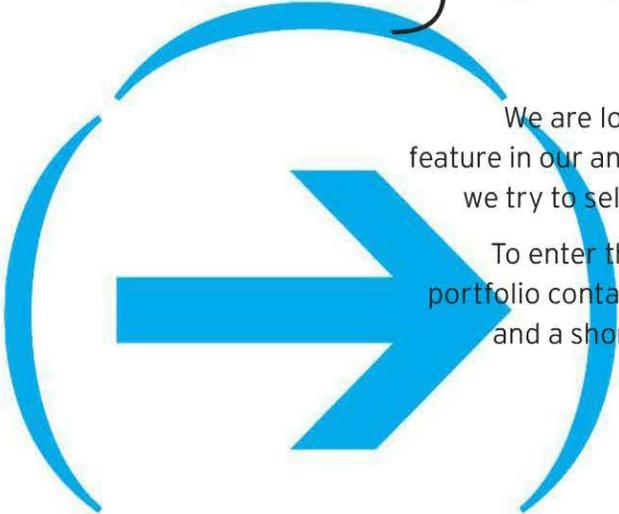


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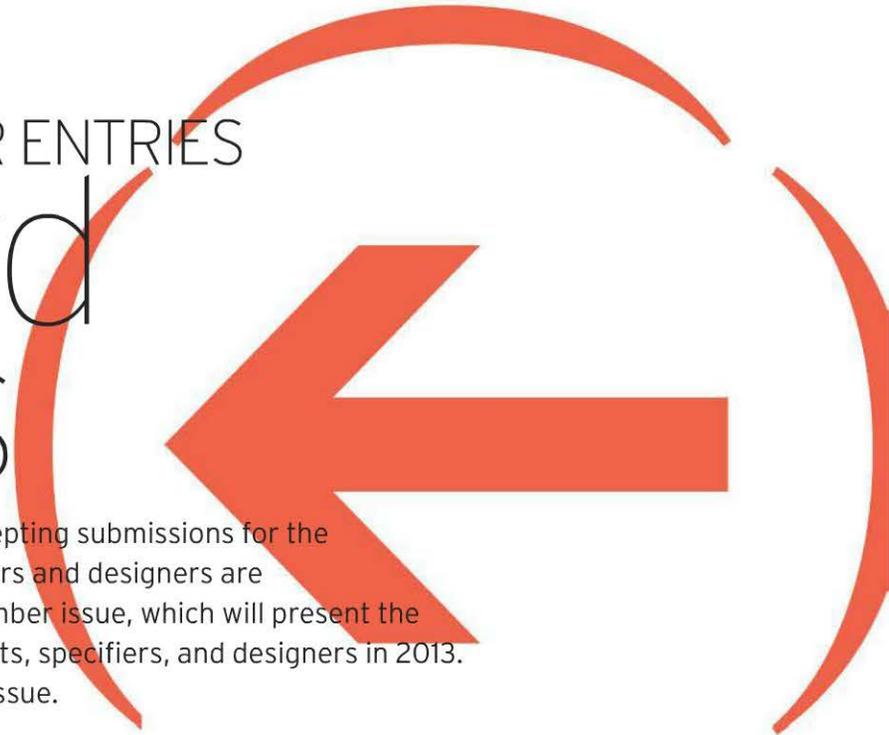
We are looking for a great group of 10 emerging firms from around the world to feature in our annual **Design Vanguard** issue. Although we do not have an age limit, we try to select architects who have had their own practices for less than 10 years.

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2012 CALL FOR ENTRIES Record Products



The editors of ARCHITECTURAL RECORD are currently accepting submissions for the **2012 Record Products** competition. Manufacturers and designers are welcome to submit new building products for the December issue, which will present the best and most innovative offerings available to architects, specifiers, and designers in 2013. Winning entries will be featured in the December 2012 issue.

There is no fee. For more details and to enter online visit <https://www.wizehive.com/apps/recordproducts2012>. E-mail questions and submissions to ARCallForEntries@mcgraw-hill.com.

(Please indicate *Record Products* as the subject of the e-mail.) **Submissions are due September 7, 2012.**



Location: Paresa, Hotel and Spa resort. Kamala Katu, Phuket, Thailand. P: Jesper Ray

A eros



Design: Ross Lovegrove. The fixture emits warm diffuse light directed primarily downwards. The reflector design is based on the organic Fibonacci pattern and provides a rare and appealing light distribution, as well as a decorative effect on the fixture. The organically inspired perforation pattern on the body of the fixture also provides an interesting and mystical lighting effect. The fixture has an almost three-dimensional expression, which makes it appear to float in the room.



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*Source: T. Montalbo, J. Gregory, R. Kirchain. Life Cycle Assessment of Hand Drying Systems. Dyson commissioned study 2011. **200 uses per day, 2 paper towels per dry (data from Dyson internal research – Jan 2010), 1400W machine shown. Standby power. Average paper towel cost of \$0.01 (data from Dyson internal research – Sept 2008), an electricity charge of \$0.0989 per kWh (Source: U.S. Department of Energy). Paper towel dispenser and Dyson Airblade™ hand dryer costs are excluded from comparisons. 12 second dry time based on NSF protocol P335 (www.nsf.org).

London Now!

GREAT CITIES aren't made but evolve, a mysterious alchemy of past and present. That's what makes London alluring, the layering of history and the contemporary. These days, Londoners are talking about the Shard, the highest skyscraper in the city which is visible from almost every vantage point (some grouse it's too high and too visible). The locals have opinions, too, about the Olympics coming later this summer, with the new Olympic Park sited in a long-derelict East London borough that's been cleaned up, overhauled, and made sustainable, not just for the Games but far beyond. The post-2012 plans call for building a community for thousands, with housing bordering a sylvan park, right next to one of Europe's biggest shopping centers, and a hub of mass transit lines. Elsewhere, along the streets—and underground—are vast improvements created by some of the best designers from Britain and abroad. Despite ongoing economic uncertainty, London is keeping its competitive edge as a true global capital. Check out the ever-changing city in the pages ahead. *Cathleen McGuigan*

London Now!



The Shard |
Renzo Piano Building Workshop

CRYSTAL PALACE

An enormous exclamation point on the London skyline, the Shard challenges the city's old notions of fitting in and offers a new approach to high-density growth.

BY CLIFFORD A. PEARSON

IF PLACED next to the Burj Khalifa (2,723 feet), the Shard (1,016 feet) would register as a small fry. But in London, it's a big deal—more than 20 stories taller than its closest rival, One Canada Square, 12 miles away at Canary Wharf. And while One Canada Square huddles in a scrum of office towers, the Shard rises all by itself in Southwark, a changing but still gritty area with few buildings more than 15 stories high.

No matter where you are in London, the Shard stands out. To its detractors, that is its biggest sin. The *Guardian's* art critic Jonathan Jones called it “arrogant” and “grotesquely out of scale with other London landmarks.” Tall buildings in London cluster mostly at Canary Wharf and in the business district known as the City, where Foster's Gherkin stands and KPF's Pinnacle and Rogers's Cheese Grater are planned.

But the Shard began as a political statement as well as a business proposition. In 2000, the British government released an Urban White Paper encouraging high-density development at transit nodes. Developer Irvine Sellar, who had bought a 24-story building adjacent to London Bridge Station in 1998, saw the report as a chance to tear down the existing structure and build something much, much bigger. With support from the new mayor, Ken Livingston, and Fred Manson, the director of regeneration for the Borough of Southwark, Sellar proposed a tower 400 meters (1,312 feet) high, then reduced it in the face of opposition. To Livingston and Manson, the 300,000 people using the subways, buses, and intercity trains at London Bridge Station every day justified the enormous project. And to Sellar—who had made a fortune retailing clothes on Carnaby Street in the 1960s, then another one developing industrial properties—the busy site right on the Thames seemed like a smart business bet.

Sellar realized he'd need a high-profile architect to match the scale of his ambitions, so he hired Renzo Piano. After an arduous review process and loud criticism that the building would ruin views of St. Paul's Cathedral, the government approved the project in 2003. Financial turmoil in 2008 nearly scuttled the project, but investors from Qatar saved it in exchange for a controlling share. Construction began in March 2009, and the final section of steel was lifted into place in April 2012. The project brings together five main uses (from bottom to top): 27 floors for offices, three for restaurants, 19 for a Shangri-La Hotel, 13 for apartments, and five for indoor and outdoor observation galleries. Office tenants won't move in until early next year, about the same time as the observation galleries and restaurants open and a few months before the hotel debuts. The 10 apartments—which range in size from 6,000 to 8,000 square feet and occupy one or two stories—have been held off the market until the building opens and higher prices (supposedly) can be had.

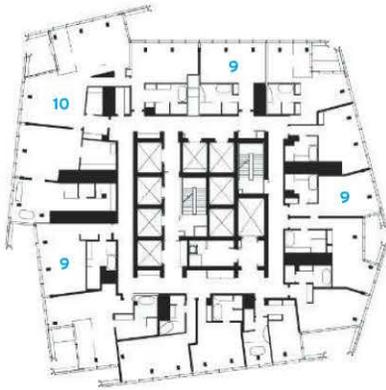
ABOVE THE FRAY The 72-story tower sits above the underground and intercity train lines at London Bridge Station. At its feet, a 17-story office building also by Piano is under construction as part of a development called London Bridge Quarter.

PHOTOGRAPHY: © JASON HAWKES

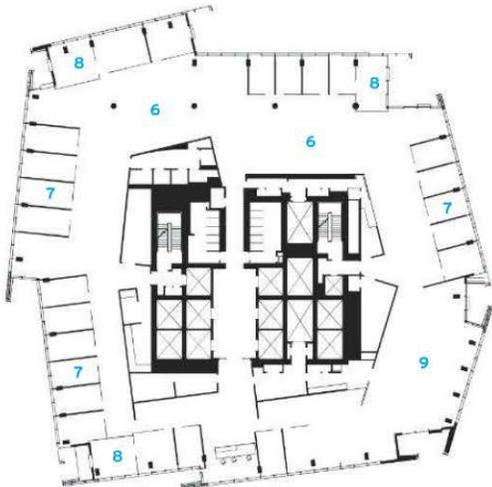
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London Now!

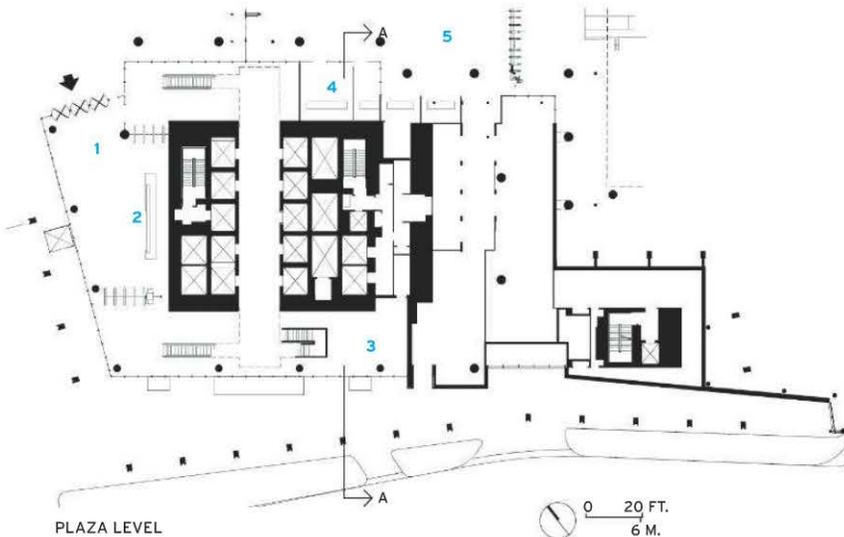
STACKED EFFECT The building combines concrete and steel structural systems and five basic uses in different portions (plans, left; section, right). A multilevel observatory offers both indoor and outdoor galleries (below). The tower's eight glass facades continue nearly 200 feet beyond the highest habitable floor, screening equipment and animating the top (opposite top). A new glass canopy and a plaza designed by Piano lead to the intercity train station (opposite, bottom).



THIRTY-NINTH FLOOR/HOTEL



TWENTY-THIRD FLOOR/OFFICE



- 1 LOBBY FOR OFFICE FLOORS
- 2 RECEPTION
- 3 CAFÉ
- 4 RETAIL
- 5 TRAIN PLAZA
- 6 OPEN OFFICES
- 7 PRIVATE OFFICE
- 8 WINTER GARDEN
- 9 GUEST ROOM
- 10 GUEST SUITE



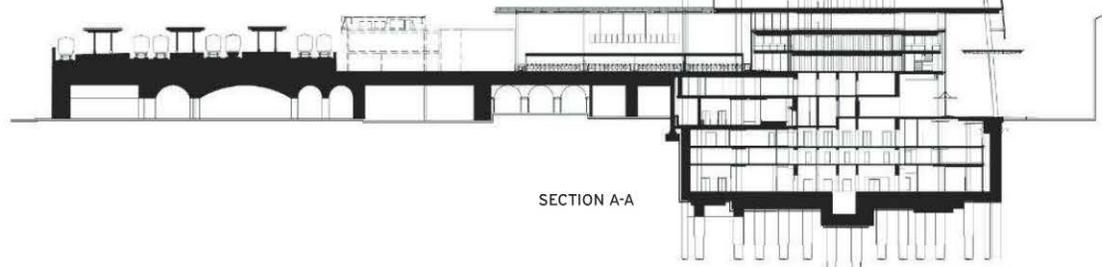
OBSERVATORY
FLOORS 68-72

RESIDENCES
FLOORS 53-65

HOTEL
FLOORS 34-52

RESTAURANTS
FLOORS 31-33

OFFICES
FLOORS 2-28



SECTION A-A

Although Piano had designed high-rises in Sydney (2000) and Berlin (1997), he was not a fan of the building type when he started on the Shard. “Very often skyscrapers are symbols of arrogance and power,” he asserts. “They are about being bigger, taller, more powerful.” He wanted the Shard to do something else. “It’s a physical expression of the energy at the most crowded place in London.” And as a mixed-use complex, it plays a different role from a building with just offices. “It is a small town that will stay active 24 hours a day,” he says.

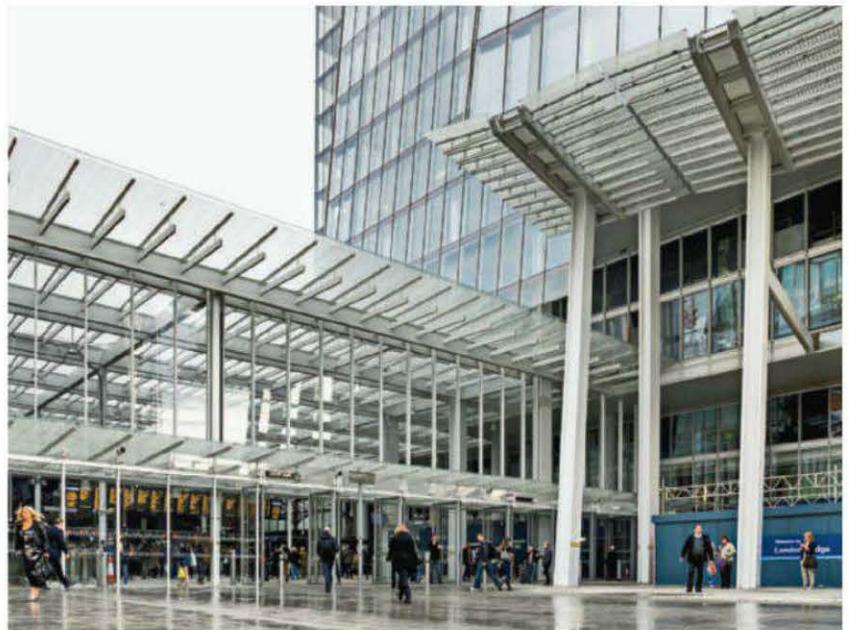
Piano drew inspiration for the project from ship masts and church spires. But he warns that “metaphors can be dangerous in architecture. You can’t imitate when you design.” The elongated, pyramidal form of the building came to Piano at his first meeting with Sellar and developed into an eight-sided tower with angled glass facades that don’t quite touch one another. Piano gave the building its name by accident, describing it at a press conference as “a shard . . . a shard of crystal.” The media latched onto the term and never let go.

Using ultra-clear, low-iron glass was critical to the scheme. “Too often tall buildings are opaque and mysterious,” says Piano. “We wanted this one to be transparent, so everyone could see all the activity inside.” And by angling the glass, the tower reflects views of the sky. “The building is an expression of the weather in London, changing all the time. It plays with the clouds and flirts with the light,” says the architect in his familiar poetic mode.

In terms of its structure, the Shard stacks a series of different systems on top of each other—starting with a concrete foundation, then a steel frame for the office floors and the public spaces of the hotel, then another concrete frame for the hotel guest rooms and the residences, and finally a steel frame for the observation galleries and the building’s unoccupied top. It may seem odd to put a concrete structure on top of a steel one, but the arrangement reduces the building’s sway, says William Matthews, the project architect for Renzo Piano Building Workshop. To speed construction, the contractor used a “top-down” process that began with a concrete platform at ground level, then built up at the same time as the foundation was being erected below. The process was more expensive, but it cut six months from the schedule.

Piano talks of the building bringing different uses together, but each one has its own entry and elevators—so it’s unclear how much mixing will actually go on. Office workers will arrive from a new glass-canopy-covered plaza on the train-station level, while people living in the apartments, staying in the hotel, or going up to the observatory will enter from different streets one level below the train shed.

Because London provides no real context or common vocabulary for skyscrapers, the Shard must work as a solo performer, graceful enough to hold public attention over time. On a typical day in April, it changed personality along with the mercurial weather: gray and moody when surrounded by clouds, dashing and a bit roguish in sunlight. But since each side looks essentially the same, it offers equal faces to all directions—foregoing the ability to surprise us. Undeniably elegant, the Shard works as a formal presence on the skyline. But it’s unclear right now whether the project directs London onto a new path of higher, denser development or—as the Empire State Building did in New York in 1931—signals the end of an era of affluence and ambition. ■





MODERN MOVEMENT The Shard joins Foster + Partners' City Hall (left) and a number of other contemporary projects such as the Tate Modern on the south bank of the Thames. But the Borough of Southwark still presents a mostly low-rise, masonry context for the new tower (opposite). To protect itself from the sun, the Shard has a double skin of glass, separated by a 10-inch cavity with motorized blinds, that allows it to respond flexibly to solar loads. Each office floor has three winter gardens equipped with operable windows to provide natural ventilation.

CREDITS

ARCHITECT: Renzo Piano Building Workshop – Renzo Piano, Joost Moolhuijzen, partners in charge; William Matthews, project architect; Eileen Chen, Bart Akkerhuis, Giles Reid, Grant Bannatyne, Jack Carter, Etain Fitzpatrick, construction phase team; Olivier Aubert, model maker

ASSOCIATE ARCHITECTS: Adamson Associates (tower); Pascall + Watson (station concourse)

ENGINEERS: WSP Cantor Seinuk (structural); Arup (m/e/p); Lerch Bates (vertical transportation)

OWNER: Sellar Property/ State of Qatar

GENERAL CONTRACTOR: Mace

SIZE: 1.2 million square feet (gross)

COST: \$729 million (shell and core)

COMPLETION DATE: July 2012 (shell and core); 2013 (interior fit-out)

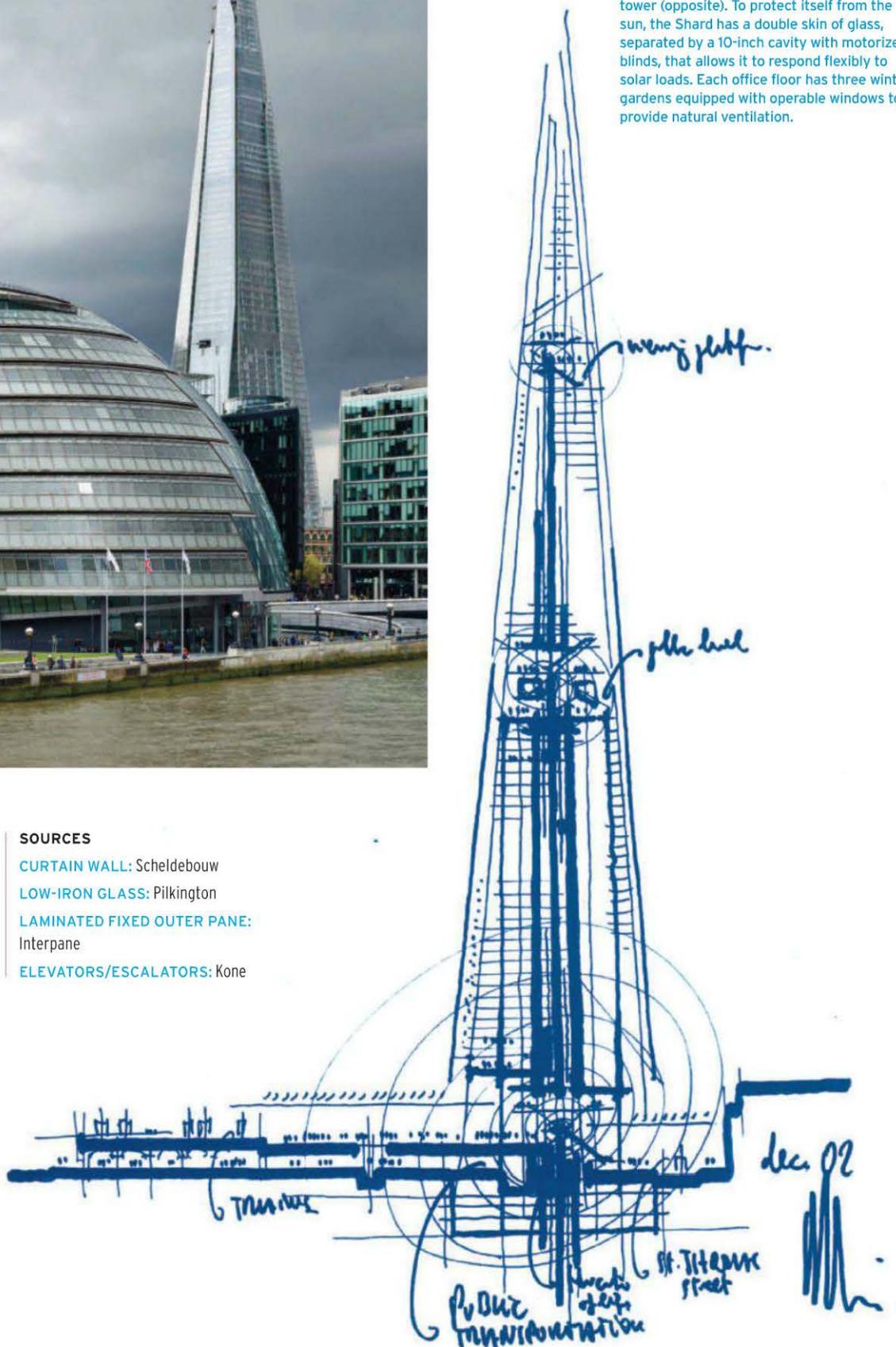
SOURCES

CURTAIN WALL: Scheldebouw

LOW-IRON GLASS: Pilkington

LAMINATED FIXED OUTER PANE: Interpane

ELEVATORS/ESCALATORS: Kone

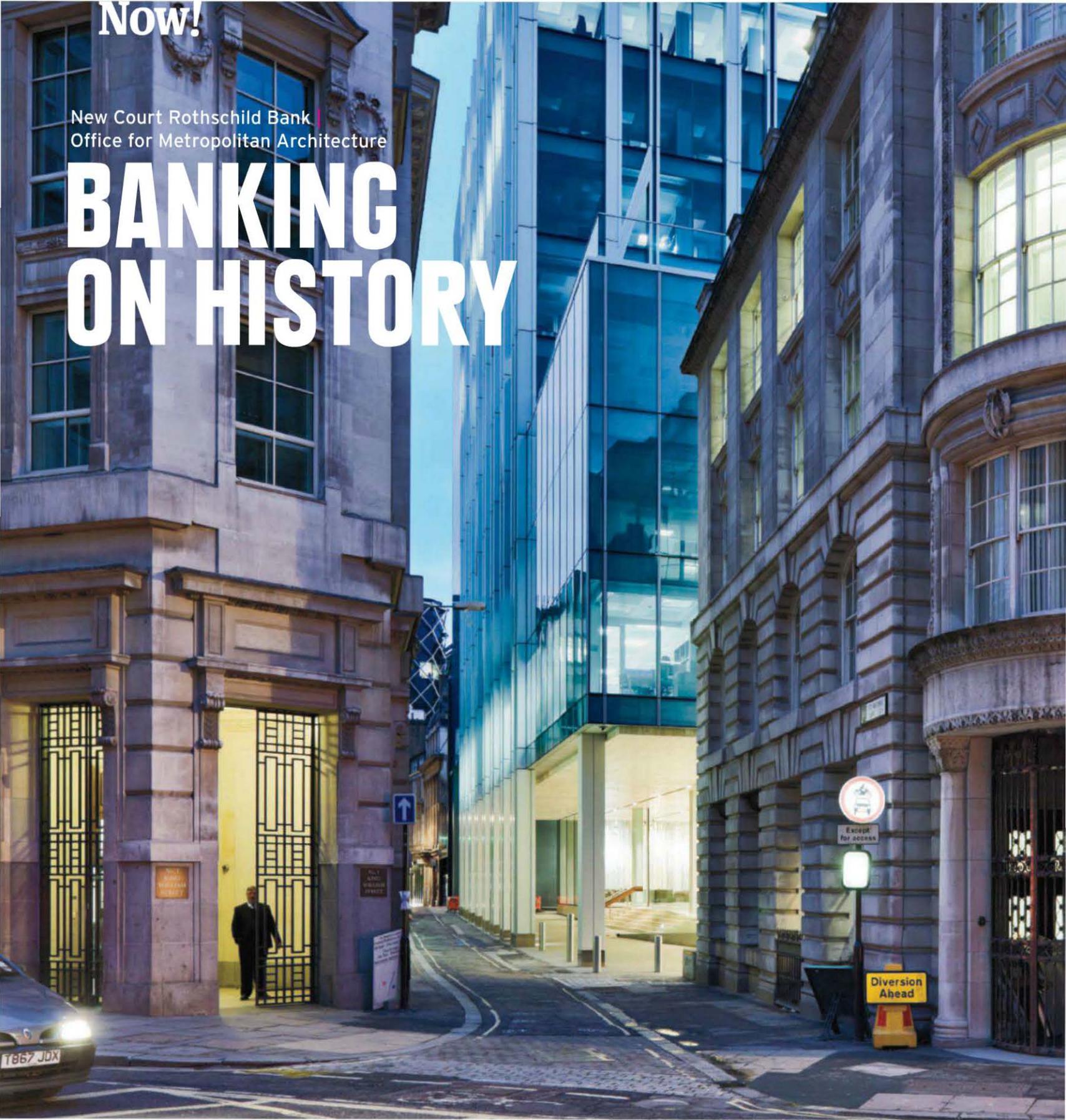




London Now!

New Court Rothschild Bank |
Office for Metropolitan Architecture

BANKING ON HISTORY



OMA tucks a new home for London's storied Rothschild headquarters into a tight site in the city's financial district.

BY CATHLEEN MCGUIGAN

A SENSE of tradition endures in "The City," London's historic financial district, despite years of economic turmoil. Bankers may have abandoned the bowler hat and sometimes even the necktie, but not the well-cut Savile Row suit. And if you turn off King William Street, a few steps from the venerable Bank of England, onto the narrow medieval St. Swithin's Lane, you'll encounter another kind of bespoke: a work of custom-tailored contemporary architecture so artfully stitched into the tight urban fabric that it seems a perfect fit.

The Rothschild family has occupied this discreet plot, called New Court, since 1809, and its new headquarters is the fourth building the private bank has constructed on the site. The last—a 1960s six-story office block—was inadequate for the rapidly expanding staff, and in 2006, OMA won an invited competition to design a building that could accommodate the entire Rothschild team under one roof. The former building was razed to make way for the new.

Unlike much new London architecture, this is not an iconic object: So densely built is the neighborhood into which OMA's glass-and-steel frame structure is inserted that there's no way to capture the entire building in a photograph. Jammed up against a curvaceous dark-glass office building by Foster + Partners that Londoners have dubbed "Darth Vader's Helmet," the new Rothschild bank is so close that the two buildings "are kissing," says Ellen van Loon, the OMA partner in charge along with Rem Koolhaas. Tucked behind the helmet is a Queen Anne house, now a private club.

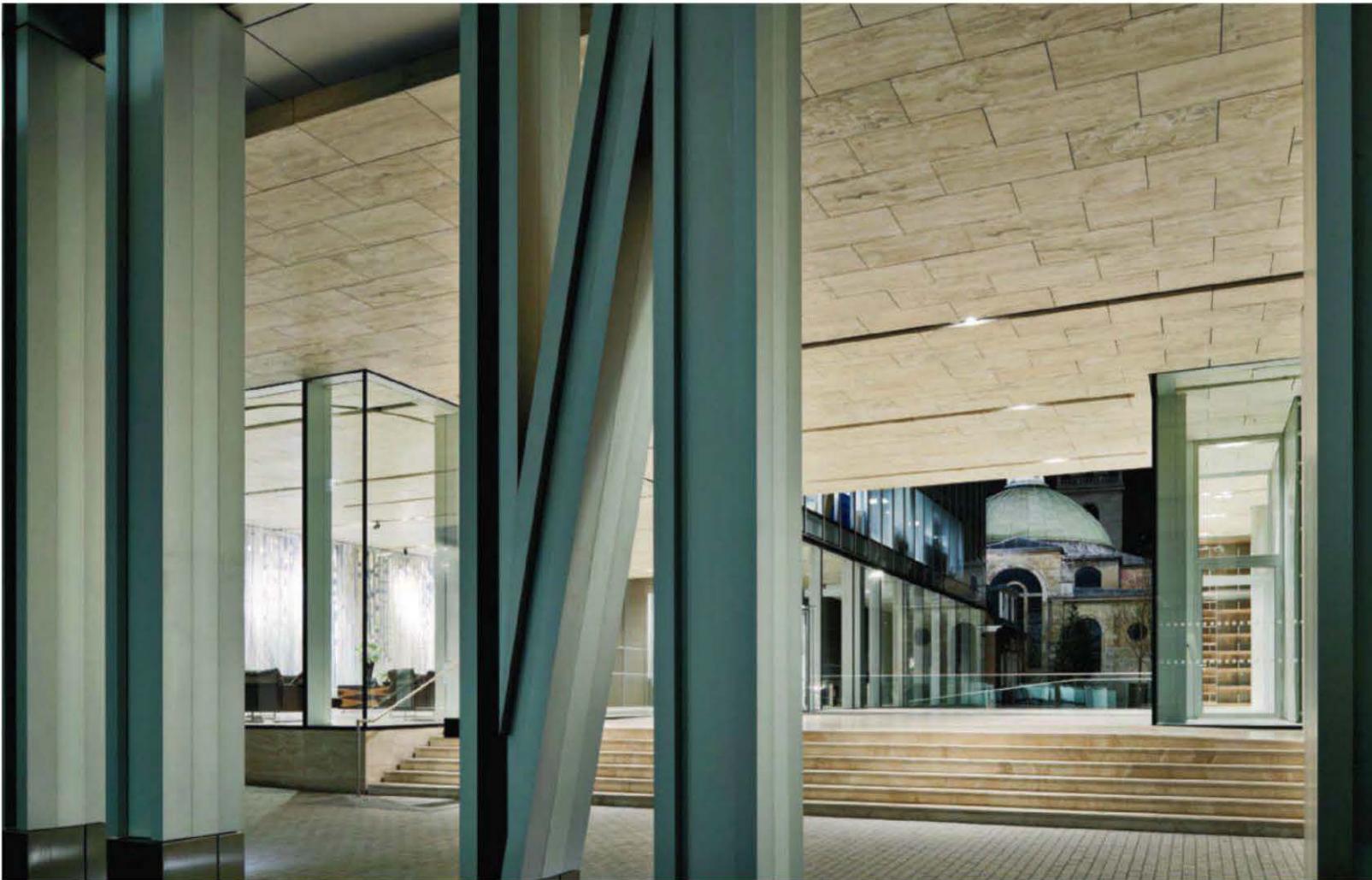
But for OMA, this intense pressure turned into a creative virtue. What's especially significant about the design is the brilliant—even virtuous—gesture to its urban context. The architects have generously carved an open forecourt out of the first floor, so as you amble down St. Swithin's Lane, a view is suddenly revealed through the new bank building into an ancient churchyard and the back of St. Stephen Walbrook, a 17th-century gem by Sir Christopher Wren (it was his own parish), with a copper dome and a sublimely simple spire—an intimate vista that was obscured for generations.

To create the 140,000 square feet that the Rothschild bank required on the small odd-shaped site was, of course, an enormous challenge. The building had to be tall—and in London, where a "right to light" law has been on the books since the 17th century, that meant getting permission from all the neighbors (there were 16 separate legal agreements). The building's footprint is shaped roughly like a fat "T": The

DIVERSION AHEAD The New Court Rothschild bank sits discreetly down an ancient lane, on a plot that's been occupied by the banking family for 200 years.



PHOTOGRAPHY: © IWAN BAAH

**CREDITS**

DESIGN ARCHITECT: Office of Metropolitan Architecture – Rem Koolhaas and Ellen van Loon, partners in charge; Carol Patterson, project manager; Elisa Simonetti, project architect

LOCAL ARCHITECT: Allies and Morrison Architects – Robert Maxwell, partner in charge; Andrew Dean, project architect

CONSULTANTS: Arup (structural, fire, services); DP9 (planning); Gia Equation (lighting); MOLAS (archaeology); Inside Outside (landscape); Stanhope (project management); Lend Lease (construction management)

SIZE: 140,000 square feet

COST: withheld

COMPLETION DATE: November 2011

scheme is based around a central block, composed of 10 floors of open-plan offices (and a roof garden), with three adjoining “annexes” wedged in that contain private offices, meeting rooms, and the circulation core. Atop the central block, a small tower, the Sky Pavilion, juts up two double-height spaces with views of the city. At 246 feet high, the building’s been dubbed a “mid-scraper.”

The knitting together of old and new runs continuously through the Rothschild design. Unlike most curtain-wall systems, the load-bearing steel columns are strongly expressed on the exterior, while inside, the expansive glazing is treated as flush. The steel columns on the ground delineate a transitional layer of space from the public street to the semiprivate forecourt. The effect is rather like the portico of a classical building, emphasized by the wide travertine steps up to the forecourt. A library-archive sits across the court from the main lobby, decorated with a witty nod to the Rothschild roots: Portraits of the five brothers, who each headed a branch of the family, appear etched into the glass front of the reading room.

The interior spaces are serene, crisply detailed, and quietly embellished with a variety of rich materials. In the capacious lobby, hung with ceiling-to-floor curtains by Petra Blaisse, is a wall of metal mesh, which also lines the elevators. Up on the light-filled private banking floors, laid with traditional oak, the designers artfully deployed a few antiques from the Rothschild collection: Old portraits in heavy gilt frames crowd together on a wall sheathed in aluminum, and some paintings inspired a scrimlike treatment on the glass walls enclosing conference rooms. Custom black-and-white tapestries echo history while looking contemporary. “We tried in certain ways to play with English traditions but in a modern way,” says van Loon.

From the dramatic event space at the top of the Sky Pavilion, you can look out across “The City’s” skyline at the crazy quilt of architecture from every era—from St. Paul’s Cathedral to James Stirling’s No 1 Poultry to Foster’s Gherkin—that makes up modern London. In such company, this clever, urbane new building may not have an iconic look, but it more than holds its own. ■



DOWNTOWN ABBEY The new headquarters is located just east of Sir Christopher Wren’s St. Stephen Walbrook church (above), a baroque landmark built in the latter half of the 17th century. The entrance plaza (opposite top) helps open up the narrow lot. In a modern take on portraiture, large-scale depictions of members of the Rothschild family (opposite bottom) are printed onto silk scrims.

**London
Now!
NOW!**

TICKET TO RIDE



PHOTOGRAPHY: © HUFTON+CROW (THIS PAGE);
© URBAN75 (RIGHT)



GRAND CONCOURSE
John McAslan + Partners master planned the King's Cross Station redevelopment, which includes reuse, renovation, and new construction. The centerpiece is the Western Concourse (left), which opened in March and was designed by McAslan and Arup. The vault is made of 16 steel-tree columns that fan out from a central funnel. St. Pancras (above) underwent a nine-year upgrade.

An upgraded Tube, an expanded King's Cross terminal, a cable car flying across the Thames: London is in a race to complete major infrastructure projects before the Olympic Games even begin. Call it the "London 2012 Effect."

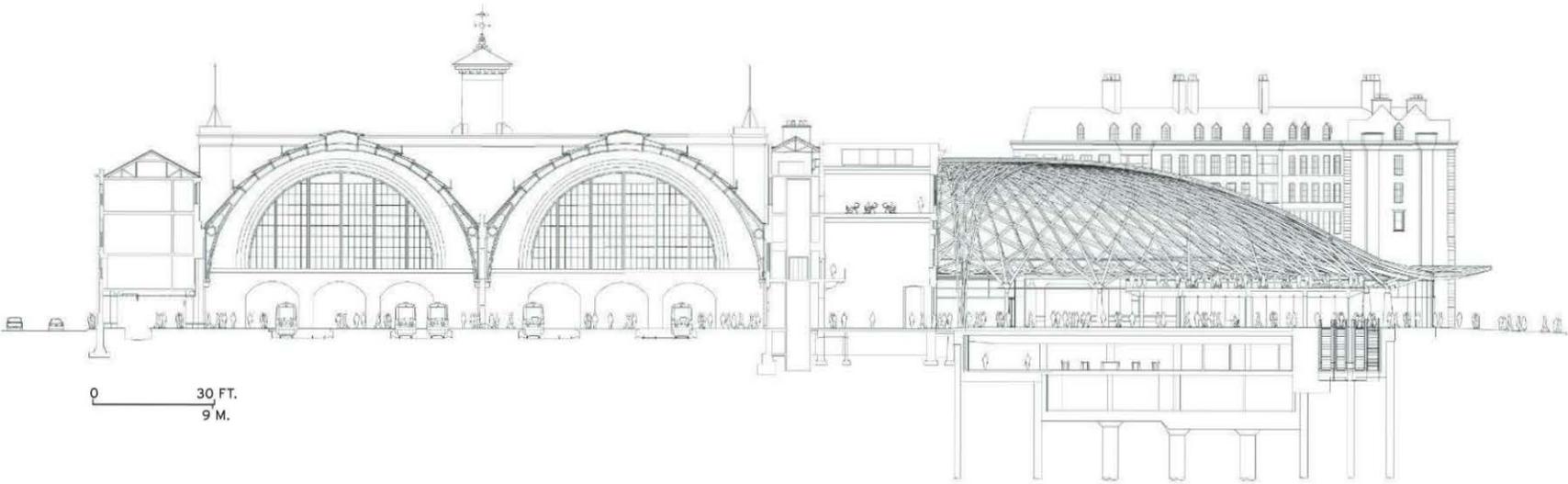
BY HUGH PEARMAN

YOU MIGHT not think, as you emerge from London's refurbished Green Park subway station near Buckingham Palace, or glimpse the development going on behind the hugely expanded King's Cross terminal, that they had much to do with the 2012 Olympics. Nor would you conclude that building an extension to the Tate Modern museum was related to the Games. But these and many more construction projects are all examples of the "London 2012 Effect."

The Olympic Games gave the city a deadline, and not just for building sports venues. As with many past Olympics cities, the transit system had to be upgraded. More hotel rooms were needed. And a rich cultural program had to be created to celebrate the event. But in London—which was awarded the Games during boom times—the remarkable extent of new and renovated infrastructure and develop-

ment is, well, Olympian. Projects that were slated to happen anyway were brought forward, such as the upgrade and expansion of the Tube network at pinch-point interchanges like Green Park (Acanthus LW Architects), Farringdon (Atkins and Aedas), and the underground halls at King's Cross/St. Pancras (Allies and Morrison). Projects that seemed too expensive and ambitious were suddenly approved and built. Even Renzo Piano's Shard skyscraper (or at least its shell and core) at London Bridge Station [page 62] will be completed in time to be featured on the Olympic telecasts.

This helps to explain why, in the midst of the UK's current economic austerity, the state-owned Network Rail was able to recently complete the new Western Concourse of King's Cross station, the gateway to Northern England and Scotland. The design for a steel-latticework hemisphere by



HIGH FLYING Designed by Wilkinson Eyre and constructed by Mace, the Emirates Air Line will stretch seven-tenths of a mile across the Thames, connecting the North Greenwich Peninsula and the Royal Docks. Thirty-four cabins will travel along a steel cable 300 feet above the river.

John McAslan + Partners and Arup was gathering a decade-plus of dust when London somewhat unexpectedly won the bid to host the Olympics in July 2005. King's Cross was already badly congested: The extra space would be even more needed at Games time. The Olympics ensured that the original concept came through largely unscathed.

The project has its flaws but is one of the fine new enclosed public spaces of London, comparable to Norman Foster's Great Court at the British Museum (2000). It sits alongside an ongoing restoration, also by McAslan, of the rest of the 1852 terminus—originally designed in dour functionalist style with a touch of the Italianate by architect Lewis Cubitt. The project will later include a new public square designed by Stanton Williams [page 78]. All in all, King's Cross will cost \$880 million when complete in 2013.

Because King's Cross is an historic landmark, the new Western Concourse could not structurally interfere with it. Even Cubitt's adjacent workaday Great Northern Hotel was deemed worth saving, generating the geometry of McAslan's scheme and meshing with it at ground level where it becomes a retail arcade. By happy chance, that led to the hemispherical form that is exactly the area required, some three times the size of the previous passenger concourse. Inside, the structure funnels down in front of the original western entrance and ticketing hall. This is not a glass house: Glazing occurs only at the point of the funnel and around the edge. There are some clumsy moments. The mezzanine restaurant at the rear of the space seems a bit too big and crude next to that virtuoso engineering. Overall, delicacy loses out to the necessary blast resistance.

The completion of the McAslan scheme, the earlier transformation of next-door St. Pancras (now London's European rail terminal), and the reopening of its 1874 Gothic Revival hotel by Sir George Gilbert Scott, opens up 67 acres of former freight yards north of the terminal to a massive development that began in 2006. This is the largest urban regeneration project of recent times in the capital. The completion of King's Cross station in time for the Olympics is revealing the new privately developed public realm (including 20 new streets and 10 new public spaces) of this former urban wasteland. Companies are planning to move in, the British headquarters of Google rumored to be one. A group of previously neglected Cubitt warehouses, including the Granary, comprises the new \$241 million campus of Central Saint



Martins College of Arts and Design, by Stanton Williams.

London's acute shortage of landing capacity for airlines will be cruelly exposed by the Olympics. Heathrow Airport's cluster of small terminals will become the new \$3 billion Terminal 2, with satellites. The whole enterprise, planned to open for London 2012, is running late. The Emirates Air Line, a cable car across the Thames, will be finished in time. Designed by Wilkinson Eyre, it will permanently link two previously unconnected regeneration sites.

It was remarkable just how many non-sporting developments were declared necessary for the Games. The Tate Modern made much of its intention to build its Herzog & de Meuron-designed \$347 million extension in time for the Olympics. Two underground galleries in former oil tanks will be ready, but the 11-story aboveground building will not be complete until 2016. So what? Well, the Olympian rush to build was more than a convenient excuse. Perhaps it can be seen as an old-fashioned Keynesian economic stimulus. Without the ripple effect of London 2012, the British economy, now back in recession, would be in even worse shape.

Overall, Londoners will have gained an improved transport system, a large, new public park on the Olympic site, and the economic boost provided by considerable spin-off development. But the poorest boroughs—in East London close to the Games—will remain stubbornly poor, and the rest of the UK outside the development bubble of London will feel very little tangible benefit. Welcome though the Games are for national pride, nobody ever pretended that they alone would be enough to save the national economy. ■

Hugh Pearman is the architecture critic of the Sunday Times, of London, and editor of RIBA Journal.

COLLAGE CITY Taking advantage of the regeneration of (and around) King's Cross/St. Pancras, Central Saint Martins College of Arts and Design (above and below) consolidated its program in one area for the first time: the

1851 Granary Building designed by Lewis Cubitt. Stanton Williams restored and adapted the Granary and adjacent transit sheds, then designed a massive addition inserted between the sheds.



London Now! DESIGN CITY: INCUBATED HERE

In an increasingly global economy, maybe it's futile to stamp any design with a national identity. But Britain still reigns when it comes to exporting cool.

BY DEYAN SUDJIC

THIS WAS the year that London-born Jonathan Ive made the journey from the butcher-block desks and cast-aluminum task chairs of his studio in Cupertino, California, to the audience chamber of Buckingham Palace so that Queen Elizabeth II could knight him. You could call it a case of stable doors and bolted horses. Britain was recognizing one of its most successful designers more than a decade after he left the country to help make Apple the United States' most valuable company.

The moment could be seen as a reminder of the essentially borderless nature of design. An iPhone comes in a

Britain is in an unusually self-reflective mood in 2012. The Queen is celebrating her 60th year on the throne, while the country is staging the Olympic Games for the second time in her life. Meanwhile, Scotland is working up to a referendum to ask its citizens if they want to leave Britain to become independent.

To ask, "What is British design?" is a self-defeating question, when even the most iconic British car of the 20th century, the Mini, is now owned by BMW, a German company. And, in any case, it was originally designed by Alec Issigonis, born of Greek parents in

SHOW OFF In 2014, the Design Museum will move from its current location on the Thames to the former Commonwealth Institute in Kensington. John Pawson is designing the transformation. The move will triple the museum's square footage.



glossy black or white box with the words "Designed by Apple in California" printed on the back, but it is made by Taiwanese-owned companies in Chinese factories with components that come from nine different countries. Is an iPhone, then, a piece of British design, based on the country of origin of Apple's chief designer? Is it Chinese? Is it American? Or is it futile to attempt to give it a national identity at all?

Turkey and forced to come to London as a refugee. When some of the most gifted British-based designers have come from abroad, such as Ron Arad (Israel) or Zaha Hadid (Iraq), it is better perhaps to talk about design *in* Britain.

Because Britain was one of the first counties to undergo an industrial revolution, it was also one of the first to develop the contemporary practice of design, the intermediary between

maker and consumer. It built a network of art and design schools of which Jony Ive and so many other celebrated designers, from Christopher Bailey to Stella McCartney, are the products. Their success continues to attract students from around the world. Many of them stay here, adding to what makes London, in particular, a center for design of all kinds.

This self-consciousness about design has helped shape the 2012 Olympics, and not just in terms of the architecture. The Olympic torch, winner of this year's Design Museum Design of the Year Award, was created by Edward Barber and Jay Osgerby. BarberOsgerby has made its name internationally with refined furniture and industrial designs that have breathed new life into the language of Modernism. The Olympic cauldron is the work of another British designer, Thomas Heatherwick. He is responsible for the striking UK Pavilion at the 2010 Shanghai Expo and the new double-decker London bus [page 33].

Britain doesn't actually manufacture too many smartphones, or T-shirts, but it has been pretty good at turning out the people who can. It's also been good at questioning design, not just seeing it as a sales tool. Ever since William Morris, Britain has taken a critical line about design, as opposed, let's say, to the more commercial approach of Raymond Loewy. Morris believed it was the job of the designer to make the world a better place. Loewy styled things to look beautiful, but also to sell. You can see this distinction in recent acquisitions by the Museum of Modern Art in New York. Of the British objects collected in the last decade, you will find a Jaguar E-Type and a Vincent motorcycle. But the largest number of objects come from Tony Dunne and Fiona Raby, and their students at the Royal College of Art. Paola Antonelli, MoMA's senior curator of architecture and design, acquired Dunne, Raby, and Michael Anastassiades's "Huggable Atomic Mushroom" (2004), a satiric cuddle toy and bitter commentary on the futility of design in the face of an apocalyptic future, and their even more troubling video "Designs for an Overpopulated Planet" (2009). These pieces provoke and make us question the role of design in encouraging us to consume.



NATION'S BEST The Victoria and Albert Museum's exhibition "British Design 1948-2012," on view through August 12, 2012, celebrates the best of the country's postwar creations. Among the 300 objects on view are a 1961 Jaguar E-Type (top left), a 1977 "God Save the Queen" poster promoting the Sex Pistols (bottom left), and a 2009 Alexander McQueen evening gown (below). An exhibition of photographs of Queen Elizabeth II by Cecil Beaton closed at the V&A in April. It included an image of the Queen in coronation robes (right) in 1953. The 2012 Olympic torch (bottom right) was designed by the British team of Edward Barber and Jay Osgerby.



Twenty-five years ago, the sense that Britain had not always made the most of its potential as a center for new thinking about design drove Terence Conran and Stephen Bayley to set up the original Design Museum. It became a gadfly irritant inside the V&A (Victoria and Albert Museum), its original host, and served as a reminder that design is about the future as well as the past, and about mass production and new technology as well as craft.

The Design Museum has operated since 1989 in its current building, a former banana warehouse transformed into a facsimile of the Bauhaus on the Thames. This year, it will move into the former Commonwealth Institute, which opened in 1962 to mark British decolonization. A landmark structure somewhat in the manner of Saarinen's TWA terminal, the building has been empty for a decade. Its rebirth as a museum is part of a wider development of a garden site in Kensington, planned by Reinier de Graaf of OMA with landscapes by West 8, which will include 60 apartments in three low-rise blocks. The museum is working with John Pawson to bring the derelict building back into use, and provide 100,000 square feet, three times what it has



now. When it opens at the end of 2014, it's expected to attract 500,000 visitors a year. It's the chance to create a new paradigm for what a museum of contemporary design and architecture can be. ■

Deyan Sudjic is an architecture and design critic, curator, and the director of the Design Museum, London.



London Now! COMING ATTRACTIONS

Though this year's Games have set a deadline for new construction in the city, for some major projects the finish line is still a few meters away.

BY LAURA RASKIN

20 Fenchurch Street Rafael Viñoly Architects

Dubbed the "Walkie Talkie" because of its top-heavy shape, this 39-story, 1.1 million-square-foot office tower is under construction, with completion expected in 2014. A sky garden will feature 360-degree views of the city.



The Tate Modern Project Herzog & de Meuron

Phase I of the Tate Modern's \$345 million expansion will open this July: Two oil tanks that were part of the former power station-turned-museum will be transformed into galleries. Phase II is projected for 2016 and will provide 70 percent more space for the Tate's collection in the form of a ziggurat-shaped wing.

King's Cross Square Stanton Williams

The renovation of King's Cross station (designed by John McAslan and Arup) will be capped off with a new public square to be completed by the end of 2013. The 1970s concourse extension will be demolished and replaced by 75,000 square feet of open space, with seating and an area for outdoor art exhibitions.





122 Leadenhall Street Rogers Stirk Harbour + Partners

This 47-story office tower looks like it might shave a block of parm quite well, hence its nickname: "The Cheese Grater." In fact, the wedge profile respects views of St. Paul's Cathedral.

The Pinnacle Kohn Pedersen Fox

This spiraling, supertall office tower in the heart of London's financial center has been under construction since 2008, but work is currently on hold. When complete, it will reach 941 feet and 64 stories. Overlapping rectangular glass panels on the exterior of the facade will give it a snakeskin appearance.



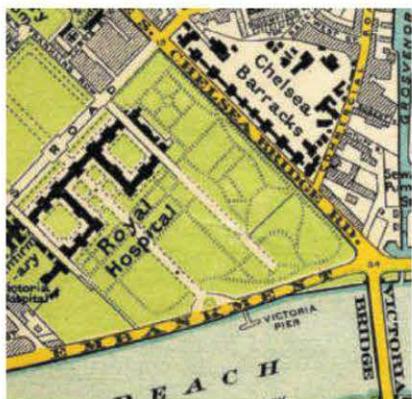
Battersea Power Station Unknown

With its iconic four chimneys, Battersea is ripe for regeneration. Real Estate Opportunities purchased it in 2006 and tapped Rafael Viñoly to master plan the site, but the architect's future involvement is unclear. The station is up for sale again. At press time, the Chelsea Football Club was one of 15 to make a bid.



United States Embassy KieranTimberlake

The 613,000-square-foot embassy, set to break ground in 2013 and finish in 2017, will be the centerpiece of a 4.9-acre park site in Nine Elms, now comprised of warehouses and low-rise offices.



Chelsea Barracks Dixon Jones Architects Squire and Partners Kim Wilkie Associates

The 12.8-acre site near trendy Chelsea and Belgravia was built in the 1860s and decommissioned and sold in 2008 for \$1.5 billion. The master plan, to be completed in phases over the next six years, envisions housing, retail, and green space.



London Now!



GOING FOR THE GREEN

Can London oust the ghosts of Olympics past and find ways to reuse its venues?

BY HATTIE HARTMAN

A

Assuming the dreams of London's Olympic planners come true, London 2012 will be as much a regeneration project as a global athletic event. From the outset, its defining mantras have been regeneration and "legacy"—East London's future. The location of the Olympic Park, straddling four of the city's poorest boroughs in East London's Lea River Valley, is far removed from the royal palaces and leafy residential squares of West London. During the early planning for the Olympic bid, a brief flirtation with a northwest London site centered on Foster + Partners' Wembley Stadium,

Closer to the mouth of the Thames, East London was historically the city's port, an area of docks, industries related to shipbuilding, and the working-class neighborhoods that supported them. It has also been the city's service zone, fragmented by transport and utility infrastructure as well as the first foothold for waves of immigrants arriving in the capital. The burning question is whether the Olympic and Paralympic Games can kick-start economic regeneration in this postindustrial landscape, approximately seven miles east of Big Ben.

Transit connectivity in Stratford, in the London borough of Newham, was the tipping point that made the Games in East London viable. Stratford International Station, underway prior to the Olympic bid, will eventually become a stop on the Channel Tunnel Rail Link to Europe. Another Stratford station serves two London underground lines, a light-rail system, and numerous national and commuter rail lines. Before the Olympics bid, a private consortium of developers had already eyed the area's potential and submitted a planning application for Stratford City, a 74-acre mixed-use scheme.

The master plan for the Olympic Park precinct not seen in light of London's overall development. A decade earlier, the UK Government's Urban Task Force, chaired by architect Richard Rogers, had promoted a vision for London's future as a compact, connected city. Redevelopment of brownfield sites was prioritized over encroachment on the surrounding greenbelt, and expansion eastward was identified as London's optimum growth corridor. Yet the master plan for the Games could have taken many forms. As in Beijing, Athens, and Sydney, the plan could have focused primarily on the architecture of the venues.

But the master plan that emerged in 2004—led by EDAW (now AECOM) with Allie & Morrison, Foreign Office Architects (FOA), and HOK Sport (now Populous)—married ecology and green infrastructure with urban design and regeneration. Protection and enhancement of the natural environment played a determining role in the location and design of new transit and utility infrastructure, as did connectivity. More than 30 new bridges in and around the Olympic Park were to link neighborhoods across the Lea Valley, knitting together an urban fabric long severed by waterways and infrastructure. FOA's proposal for a sinuous landscape centered on the waterways forcefully articulated the idea that a powerful landscape design would be at the heart of the plans. While the proposed park formed part of a 16-mile green spine, linking Hertfordshire in the North to the Thames along the Lea River Valley, that master plan still lacked a compelling concept that would secure the Games for London.

The notion of a One Planet Olympics, which would minimize the impact of the Games themselves and focus on creating exemplary low-carbon buildings and legacy communities, provided the missing allure. Use of London's historic sites and existing arenas was central to this approach and permanent venues would be built only when justified by a sound business plan and long-term community potential. Temporary facilities would be used to fill the shortfall. Events will be held throughout greater London and beyond, including beach volleyball at a temporary stand on Horse Guards Parade, not far from Buckingham Palace, and equestrian competitions at Greenwich Park. The heart of the Games centers on the new Olympic Park, built in the grand tradition



BIRD'S-EYE VIEW
Clockwise, from top: The Olympic Stadium, Velodrome, Basketball Arena, Athletes' Village, and Aquatics Centre are each planned for long-term use and adaptation.

which was under construction at the time. But then Mayor Ken Livingstone (who was defeated again by Mayor Boris Johnson last month in a run for a second term) was adamant that if London were to host the Games, the occasion should be used to redress the city's long history of economic disparity between east and west.

- 1 OLYMPIC STADIUM
- 2 AQUATICS CENTRE
- 3 ENERGY CENTRE
- 4 VELODROME
- 5 OLYMPIC AND PARALYMPIC VILLAGE
- 6 ETON MANOR
- 7 TRANSIT HUBS



**Map of
Queen Elizabeth
Olympic Park**



Basketball Arena **Wilkinson Eyre Architects**

of London's Royal Parks but responding to 21st-century challenges of climate change. The detailed landscape design by George Hargreaves and Associates and LDA Design merges water management and biodiversity, while ornamental planting and herbaceous borders, the mainstays of British horticulture, are limited to show gardens on the main concourse.

What type of architecture would give form to London's lean and green ambitions? How could the major sporting venues, particularly the big three—the Olympic Stadium, the Aquatics Centre, and the Velodrome—sit comfortably in the sustainable, walkable city of the future envisioned by London's planners? A consensus emerged for demountable structures so that the arenas would be appropriately sized for long-term community use [page 92]. The stadium could be reduced in size from its 80,000 Olympic capacity to 25,000 seats after the Games; the Aquatics Centre would have temporary wings so that an additional 15,000 would complement its 2,500 permanent seats during the Games. Only the Velodrome, to be operated in legacy by the Lea Valley Regional Park Authority, would retain its initial capacity of 6,000 seats.

But the story became more complex when competing agendas and the financial crisis erupted mid-course during the building of the Olympic Park. Due to the lack of Olympic swimming pools in the London area, Livingstone had promised an Olympic swimming pool to East Enders, wanting to leave improvements in the Lea Valley even if London lost the

bid. A design competition for an Aquatics Centre, with a jury led by Richard Rogers, took place in 2004—before the environmental agenda that informed the design briefs for subsequent buildings was fully developed. Iconic architecture that would help secure the Olympics for London took precedence, and a dramatic sculptural building with a double-curvature roof by Zaha Hadid Architects was selected over leaner schemes by Behnisch Architekten and Bennetts Associates.

After London won the bid in July 2005, the Olympic Delivery Authority (ODA) was established as the publicly funded entity to build the necessary 2012 infrastructure and venues. Critical at this early stage was the rerouting of infrastructure and cleaning up the heavily contaminated site. The Olympic Park master plan was reconsidered, together with the plans for the adjacent Stratford City development, to coordinate infrastructure investment and provide for the Athletes' Village, largely within the boundary of the private development. The ODA translated the bid's One Planet aspirations into target metrics that were then written into planning and design contracts. The Aquatics Centre was significantly reduced in scope but its steel-intensive double-curvature roof remained. Hopkins Architects' Velodrome proved to be London 2012's flagship sustainable venue. The key to its success was an integrated working relationship between Hopkins and its structural and environmental engineers, Expedition Engineering and BDSP Partnership.

REUSE AND RECYCLE

After the Games, Wilkinson Eyre's PVC-clad Basketball Arena will be dismantled and reerected elsewhere as needed [page 98]. The large wings on either side of Zaha Hadid's Aquatics Centre, which now house seating for spectators, will be removed after the games. The Velodrome is one of the few venues that will remain unchanged after the crowds disperse.



Velodrome [Hopkins Architects](#)



Aquatics Centre [Zaha Hadid Architects](#)

PHOTOGRAPHY: COURTESY OLYMPIC DELIVERY AUTHORITY



Queen Elizabeth Olympic Park [Olympic Park Legacy Company](#)



LOOKING AHEAD
Post-Games plans for the park grounds include a cable car link to downtown London and a series of public green spaces.

Queen Elizabeth Olympic Park **James Corner Field Operations**

Along with the Velodrome, another of London 2012's significant architectural achievements is its approach to infrastructure buildings. Certain to become landmarks in the new East London, these include a district energy and biomass plant by John McAslan + Partners, responsible for the refurbishment of King's Cross Station [page 72], a sewage pumping station and water recycling plant by John Lyall Architects (now Lyall, Bills & Young), and the Glasgow practice NORD's electricity substation.

But it will be the housing, schools, and community facilities that form the backbone of the regenerated area. The Athletes' Village housing will be converted into more than 2,800 mixed-income apartments. Unfortunately, due to budget constraints when the economy soured, the early schemes for four-to-eight-story buildings were rationalized into 10-to-12-story courtyard blocks on a podium of parking—a dense urban-housing type unfamiliar to Londoners. Despite detailed envelope design by various well-known architectural firms, the overall impression of the housing is soulless. After the Games, many new development sites will become available: Current plans call for approximately 11,000 new units, including more traditional terraced housing to front the park with denser housing along the canals.

Although the timeline for much of the Stratford City

What type of architecture would give form to London's lean and green ambitions? How could the major sporting venues sit comfortably in the sustainable, walkable city envisioned by London's planners?

development slowed after the 2008 financial crisis, Westfield Stratford City, a 1.9-square-foot retail complex, billed as the largest urban shopping center in the European Union, opened in September 2011. An outdoor pedestrian route through the mall will be the gateway for approximately 70 percent of visitors to the Olympic Park during the Games—and for many beyond. The proximity of Westfield's retail and leisure facilities to the Olympic Park should provide approximately 9,500 jobs, in spite of its offering a quite noticeable commercial image at the front door to the Games.

As the Games draw to a close, the integration of the Olympic



Olympic and Paralympic Village Fletcher Priest Architects; Allford Hall Monaghan Morris/Patel Taylor

Park with the surrounding city—through improvements in the public realm and thoughtful programming of park activities to attract nearby residents and other Londoners—will be critical. A team led by James Corner Field Operations will mastermind the transformation of the pivotal southern area of the park between the Stadium and the Aquatics Centre. New York's High Line—also designed by a Corner-led team—is proof that landscape can be an urban game changer, and the new Queen Elizabeth Olympic Park is a powerful starting point.

But design and planning are not enough to create a vibrant place. To secure a dynamic future for the Lea River Valley, investment in jobs, schools, and other community facilities must follow. City building is a matter of decades. Only time will tell how the new East



Chobham Academy Allford Hall Monaghan Morris

London will fare after the Olympic flame moves on. ■

Hattie Hartman, an American architect, is sustainability editor at the Architects' Journal and author of London 2012: Sustainable Design, available in the U.K.

CREATING COMMUNITY
Chobham Academy is sited on the northern edge of the Olympic and Paralympic Village. It will serve residents of the nearby town of Leyton and new residents of the Village.



RIO 2016

Though London's Games have yet to leave the starting block, work on Rio's Olympic venues is well under way.

BY DAVID HILL

THE 2012 London Olympics are still a month away, but in Rio de Janeiro, the city is already gearing up for the 2016 Games. In February, the Sambódromo, home to the city's official samba-school parades, reopened in time for this year's Carnival with the addition of four new grandstands. The parade ground, with its huge concrete parabolic gateway, was designed in 1984 by Oscar Niemeyer, whose office oversaw the new work. (The 104-year-old architect came out to visit the finished site in a golf cart). At the 2016 Games, the expanded Sambódromo will hold the archery events as well as the start and finish of the marathon.

But the Sambódromo isn't the only existing venue to be recycled for the 2016 Games. For sports-mad Brazilians, Rio is full of athletic facilities that can be adapted for the Olympics. And like the London Olympics this year, ideas about repurposing existing venues, as well as sustainability and a plan for a post-Games legacy of community improvements, helped Rio win its bid. AECOM, the master planner for the London games, won the commission to design Rio's Olympic Park, on the west side of the city, next to a lagoon, where 15 Olympic events will take place. To avoid the "white elephant syndrome" in which former Olympic sites are rarely used after the fact, AECOM has a three-phase strategy for the park, says London-based Jason Prior, chief executive of planning, design, and development. The first phase will be the August 2016 Games (and subsequent Paralympic Games), followed by a five-to-seven-year transitional phase. Finally, in the third phase, the Olympic park will be devoted to a mix of uses.

Elsewhere in the city, a number of facilities designed for the 2007 Pan-American Games are being remodeled to Olympic specifications, such as the HSBC Arena and the Maria Lenk Aquatic Park. Rio's famed Maracanã Stadium, which hosted the World Cup in 1950, is currently being renovated for both the 2014 Cup along with the 2016 Olympics. It will host the Opening and Closing Ceremonies

and the soccer matches. Track and field events will take place at the João Havelange Stadium, built in 2007, while the Maracanãzinho Arena, constructed in 1954 but remodeled in 2007, will be the venue for indoor volleyball.

AECOM's plan for the 300-acre Olympic Park, formerly the site of a Formula 1 racetrack, carefully considers what type of sports venues should be constructed on the future legacy site. "As in London," says Prior, "the post-Games development of the site is just as important as the Games themselves." As a result, some facilities—including a new swimming stadium, a field hockey center, and tennis courts—will be temporary,

Ideas about repurposing existing venues helped Rio win its bid.

while others—such as an existing velodrome and several new sports halls—will be kept as an Olympic training center.

Architects for some of the sports facilities will be selected through design competitions sponsored by Rio's city government and the Brazilian Institute of Architects. Meanwhile, the city is spending billions of dollars on new roads and public transportation projects, including rapid-transit bus lanes, to make it easier to get around the city during the World Cup and the Olympics. And, controversially, some of the city's slum dwellers, such as an estimated 4,000 people living at the edge of the park, are being pushed out of their favelas as part of the planning process.

After its experience with the London Olympics, AECOM is now "better armed" for the job in Rio, says Prior. "But it's a new country with different ways of doing things." For now, Prior is looking forward to enjoying the few 2012 Olympic events for which he was able to secure tickets. ■

Denver writer David Hill is a frequent RECORD contributor.

MARVELOUS CITY AECOM's master plan for the waterfront site of the 2016 Olympics in Rio includes several venues adapted from use in previous events, like the 1950 World Cup and the 2007 Pan-American Games.

London Now!

After the Deluge

Barcelona 1992

Atlanta 1996

Sydney 2000

Athens 2004

Beijing 2008

How have past Olympic cities measured up for reuse, post-Games?

BARCELONA NOW

BARCELONA used the investments and positive energy generated by the 1992 Olympic Games as a tool for long-term strategic planning—a model that London studied closely.

With the Olympics, the city's young government shook off the gray legacy of the Franco dictatorship to present a new modern image to the world. The Olympic Village transformed the obsolete industrial waterfront into a glittering beach, redirecting future growth into the city's neglected eastern districts.

Other improvements included the renovation of the historic core with new plazas and cultural institutions, a new ring highway, and modernized telecommunications and mass transit. These efforts, which continue today, have catalyzed economic development and increased Barcelona's potential as a major tourist destination.

Like other Olympic cities, however, Barcelona has had trouble finding uses for some Olympic sites, such as the velodrome and diving pool. The local Espanyol soccer team abandoned the Olympic Stadium—designed by Italian architect Vittorio Gregotti in the shell of the 1929 stadium—three years ago; it is now used sporadically for concerts and athletic events.

Another negative legacy is a consequence of success: Along with the 1992 Expo in Seville, the Games created an appetite for high-stakes public investments as quick fixes for local self-promotion, a superficial reading of the Barcelona strategy that, with the

present economic crisis, has revealed its limitations. *David Cohn*

ATHENS NOW

FOR THE Greeks, the 2004 Olympics in Athens and the aftermath have become a symbol for everything that has gone wrong in their country. Workers struggled up to the last minute to finish many venues as Olympic officials fretted. The cost of the effort was more than \$11 billion, double the original projections.

After the Games, plans to convert sites to new uses stalled as money ran out and political will evaporated. Santiago Calatrava's Olympic Stadium is home to two major soccer clubs, and the indoor stadium hosts basketball games and concerts, but more than a dozen other facilities on the three Olympic sites are graffiti-covered and vacant. Plans to convert the canoe and kayak slalom venue into a water park have evaporated, squatters camp on the Faliro Bay site, and the large park at Helliniko is abandoned. Half the 2,300 low-income apartments in the Olympic Village are reportedly empty, and parks and public spaces are in disrepair.

The economic crisis has also tarnished Athens's world image, one of the primary reasons for hosting the Games. This leaves infrastructural investments as their main positive legacy—expanded mass transit, a ring highway, a new international airport, and a network of pedestrian walks connecting historic sites—projects that have lowered the city's chronic congestion and pollution. *David Cohn*

BEIJING NOW

CHINA'S powers that be probably wish it wasn't Ai Weiwei—the artist, activist, and, after his nearly three-month detention by Chinese authorities last year, international cause célèbre—who collaborated with Herzog & de Meuron on the design of Beijing's



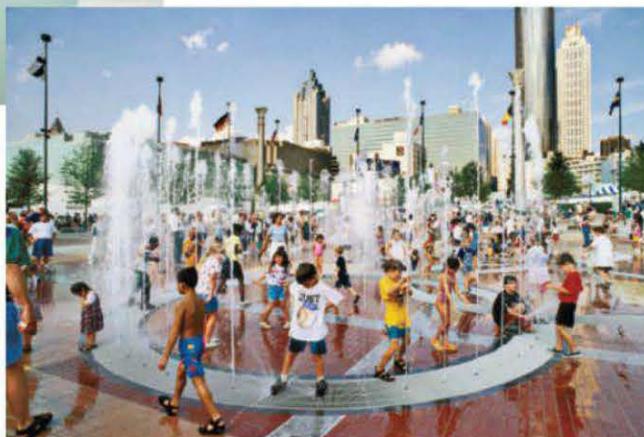
Olympic National Stadium. But at first glance, the Bird's Nest, as it's better known, is the gift that keeps on giving: Four years after the Beijing Olympics, crowds still flock to the Olympic Green to snap photos in front of the iconic structure, and pay the 50 RMB entrance fee (about eight dollars) to venture inside. The stadium's image remains ubiquitous, and latticework patterns reminiscent of its outer shell continue to pop up as motifs in trendy interiors throughout the Chinese capital.

But though the post-Olympics Bird's Nest has hosted a number of major events—including a performance of

The Beijing National Stadium (above).



(From top): Barcelona, Atlanta, Athens, Sydney



Turandot staged by the director Zhang Yimou—it's uncertain if it will avoid the white elephant fate of so many other cities' Olympic venues. The status of a proposal to transform the stadium into a shopping and entertainment complex is unclear. Meanwhile, the conversion of part of the neighboring National Aquatics Center, or "Water Cube," into a phantasmagoric "Happy Water Park" has been a mixed success.

Perhaps a turning point for the Olympic Green will come when a planned museum complex is completed

populous business districts, is so distant from public transportation that most of its families must own two cars. And the broad, sweeping boulevards, for which the Olympic Authority bought up virtually every flowering jacaranda in metropolitan Sydney, remain deserted.

Twelve years after the games, Homebush hosts an annual agricultural Easter Show and the occasional big-stadium event. A number of hotels have been built, like flickers of hope. But the place feels like a ghost town. A small, though elegantly designed, railway station by international design firm Hassell sits largely unused.

It was a great party. But, for Sydney, it's an awfully long morning after.

Elizabeth Farrelly

ATLANTA NOW

FOR THE CITY of Atlanta, the legacy of the 1996 Centennial

Olympic Games goes deeper than the moments of triumph and tragedy, including the pipe bomb attack that killed two and injured 110. The \$1.8 billion spent on infrastructural improvements and construction has actively contributed to Atlanta's transformation into a modern-day metropolis.

While some of this funding was directed at infrastructure, much went into new facilities, including the 17-building Olympic Village, built on the Georgia Institute of Technology's (Georgia Tech) campus. The \$169 million project, by Niles Bolton Associates, provided housing, dining, medical, and practice facilities for 14,000 athletes, coaches, and officials. Today, it's used as housing for Georgia Tech and Georgia State University students.

Three other projects also stand out: The \$189 million Centennial Olympic Stadium, once an 85,000-seat venue, is now the 49,800-seat Turner Field, home to the Atlanta Braves baseball team. The \$214 million Georgia Dome, which housed gymnastics, basketball, and other events, is now home to the NFL's Atlanta Falcons. Today, the 21-acre Centennial Olympic Park—designed by EDAW (now AECOM)—is the hub of Atlanta's tourism industry, with such attractions as the World of Coca-Cola and the Georgia Aquarium.

Though the games lasted just 17 days, they marked the beginning of Atlanta's ongoing transformation. *Ingrid Spencer*

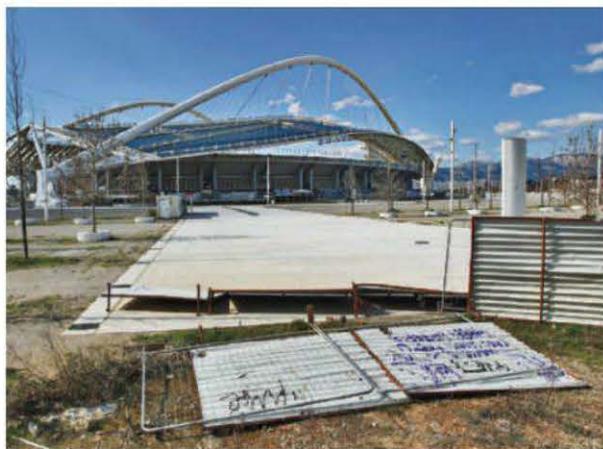
on-site. If all goes well, the centerpiece will be a new building for the National Art Museum of China (NAMOC), a coveted commission that Frank Gehry, Zaha Hadid, and Jean Nouvel are currently competing for. At 1.4 million square feet, the new NAMOC will no doubt be spectacular. But the bigger question is how they will keep it filled with art and people. *Aric Chen*

SYDNEY NOW

WHEN THE Sydney Olympic bid was initiated in 1990, the

then director of the New South Wales Department of Planning said that although the former abattoir site in outer Sydney's Homebush neighborhood was indeterminably toxic and miles from, well, anywhere, it was available, easy, and cheap. There was no attempt to locate Sydney's Olympic Park to achieve strategic benefits for the city. This expediency resulted in a site that remains excruciatingly difficult to reuse.

The park's Olympic village, now a medium-density residential enclave midway between Sydney's two most



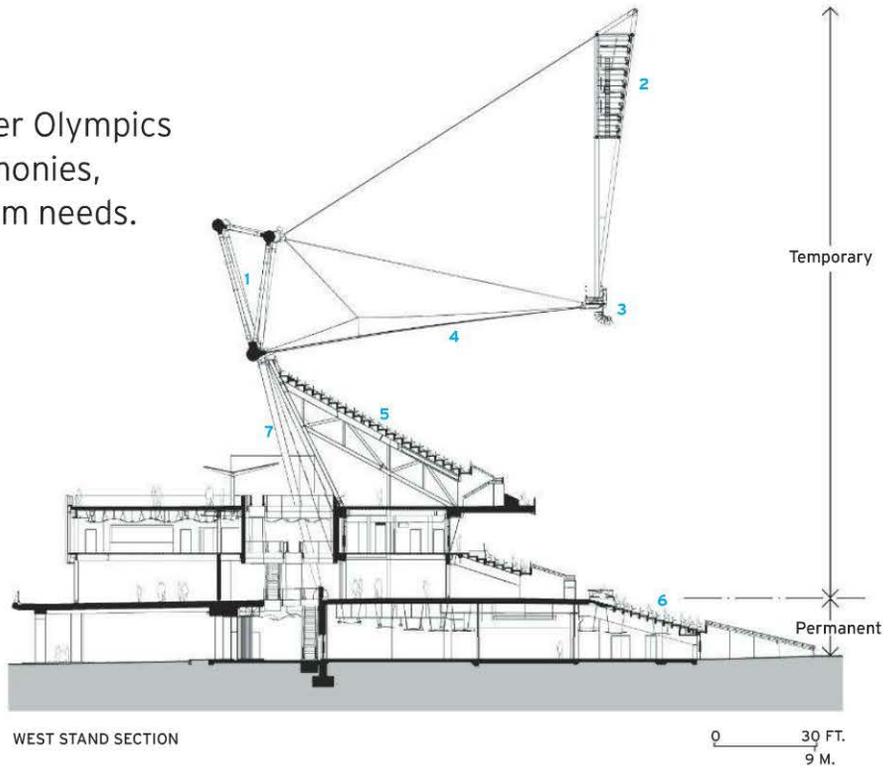
Wave of the Future

Designers behind the London 2012 Summer Olympics look well beyond the Games' closing ceremonies, creating venues that can adapt to long-term needs.

By Joann Gonchar, AIA

FROM THE MOMENT London won the bid in July 2005 to host this summer's Olympic Games, the organizers' chief goal was to use the massive athletic and media event as a catalyst for economic and social change in East London—a gritty and long-overlooked section of the city. For planners, the Olympics was an opportunity to remake a zone full of contaminated industrial sites, transforming it with amenities such as parkland, affordable housing, and improved public transport.

As part of this strategy, the London Organising Committee of the Olympics and Paralympic Games (LOCOG) mandated that the only permanent sports facilities that would be built were those for which there was a demonstrated long-term need. These would be designed so that they could easily shift from Olympics mode to community use. Other competition venues would be adaptable, or temporary in nature, with elements that are quickly demounted and the land freed for other uses. "At the end of the Games, we have to rapidly unpack the site and turn it into a real piece of the city," says Jason Prior, chief executive of planning, design, and development for AECOM, the Olympic precinct's master planner.



WEST STAND SECTION

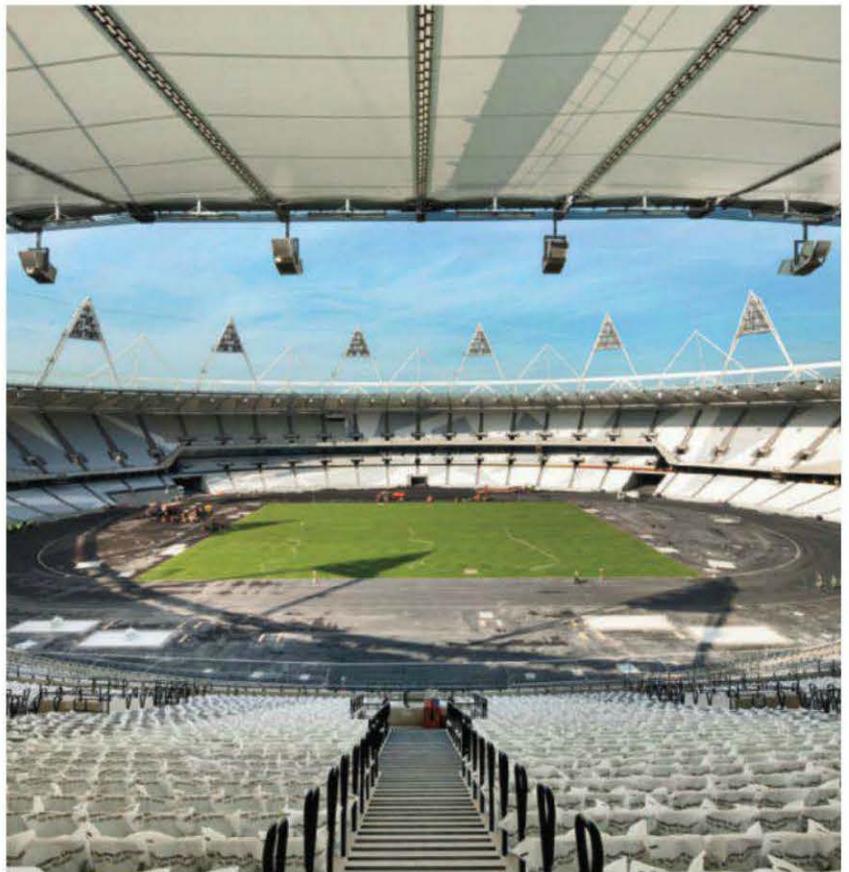
- | | |
|---------------------|----------------------|
| 1 COMPRESSION TRUSS | 5 UPPER-SEATING BOWL |
| 2 LIGHT TOWER | 6 LOWER-SEATING BOWL |
| 3 COMPRESSION TRUSS | 7 DIAGONAL COLUMN |
| 4 ROOF MEMBRANE | |

Olympic Stadium Populous Architects

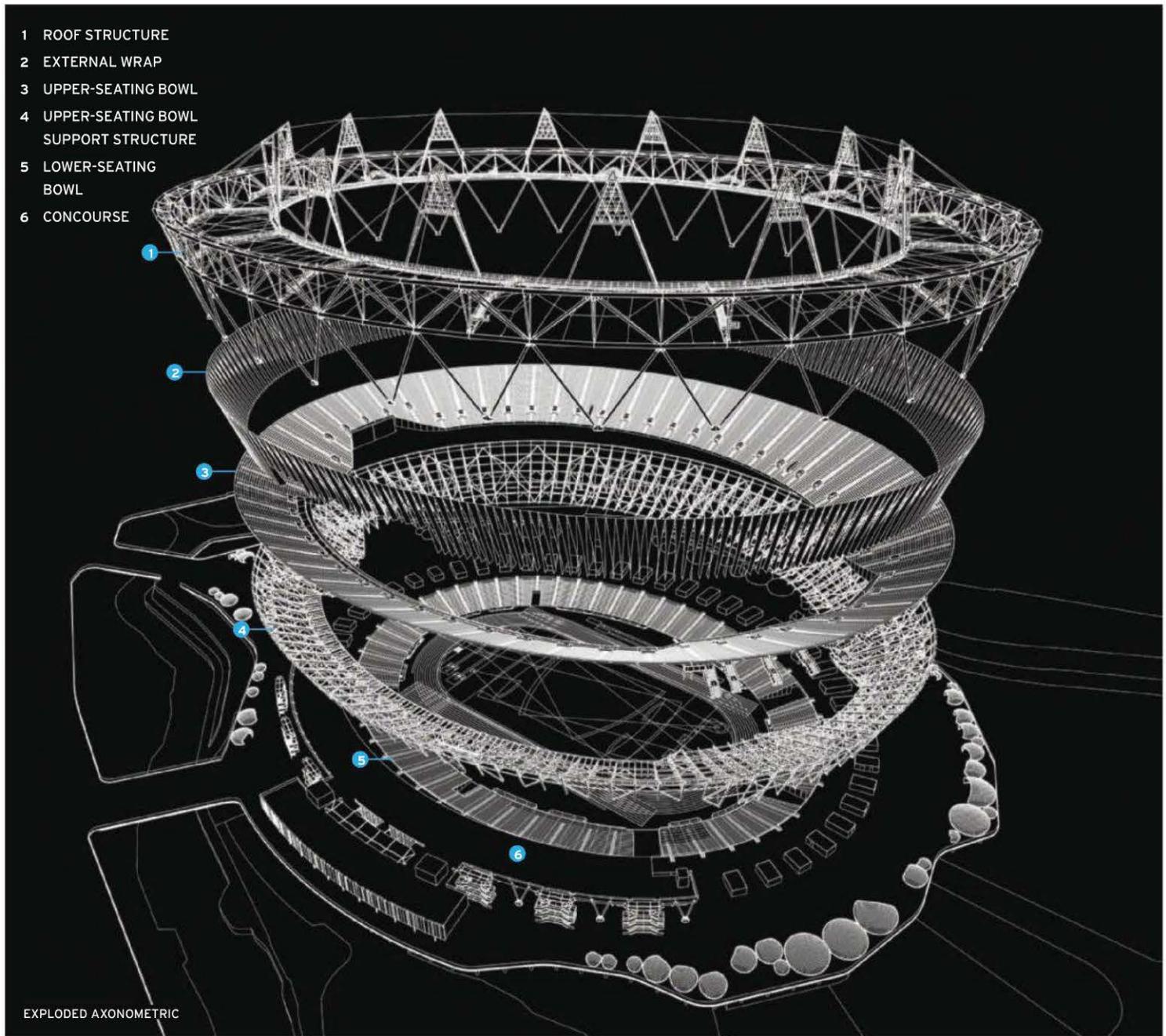
ONE OF THE venues conceived to be unpacked or, more accurately, scaled back, is the main Olympic Stadium, designed by Populous. The building has been devised to shrink, through partial deconstruction, from an Olympic venue for 80,000 spectators to a post-Games stadium with less than one-third of that capacity. To facilitate this transformation, Populous developed a scheme that includes a partially below-grade, 25,000-seat stadium bowl intended to be permanent, and a 55,000-seat upper bowl designed with ease of dismantling in mind: It has a bolted-together wide-flange steel structure supporting precast concrete terrace units.

The project team, which included engineering firm Buro Happold, considered a stadium without a roof. However, computational fluid dynamics (CFD) analysis indicated a roof was needed to shield the field from wind. So designers developed a polyvinyl chloride (PVC) awning that extends over three-quarters of the stadium's seats. It has a bicycle-wheel-like structure made of bolted tubular-steel members, many of which were salvaged from a gas-pipeline project. The system, which is structurally independent of the seating bowls, comprises a perimeter-compression truss linked by cables to a tension ring at the roof's inside rim. Backward-leaning diagonal columns transfer the resulting forces to footings.

The strategy results in a structure requiring only about 11,000 tons of structural steel, making it the lightest Olympic Stadium to date, according to the Olympic Delivery Authority (ODA), the agency in charge of construction for the Games.



PHOTOGRAPHY: © MORLEY VON STERNBERG; DRAWINGS: COURTESY POPULOUS



By comparison, Herzog & de Meuron's "Bird's Nest" stadium, built for the 2008 Beijing Olympics, used almost 42,000 tons.

A decision to pull the concessions out from their usual location under the seating bowls contributes to the leanness. By housing vendors within temporary pods at the stadium's periphery, designers were able to reduce requirements for mechanical ventilation and for fire-suppression equipment.

This structural and planning efficiency translates into a stadium with a low embodied energy (the energy consumed by the processes associated with producing a building, including material extraction, product manufacturing, and construction, but excluding operations). According to some estimates, a stadium's embodied energy represents more than 60 percent of its lifetime energy load—a much higher

proportion than for other building types. Because of its infrequent use, "the energy that goes into running a stadium is relatively small," says Rod Sheard, Populous senior principal.

Part of the elegance of Populous's solution is that it allows removal of the roof without disturbing the seating bowls. It also permits the dismantling of the upper stands while leaving the lower ones in place. However, the current plans of the London Legacy Development Corporation (LLDC), the entity overseeing post-Games development, involve keeping both upper and lower bowls and the roof intact, while reducing the number of seats to about 60,000. The LLDC is now evaluating proposals from bidders who would operate the building as a multipurpose venue. The stadium is already committed as the setting for the 2017 World Athletic Championships.

WIND SHIELD The primary purpose of the roof over some of the Olympic Stadium's seats is to control conditions on the field. A bicycle-wheel-like structure made up of a perimeter-compression truss linked with cables to an inner-tension ring supports the PVC-membrane awning.

Aquatics Centre Zaha Hadid Architects

ALTHOUGH THE stadium now seems destined to be a long-term fixture in the Olympic Park, it was intended to be largely temporary. In contrast, the Aquatics Centre, designed by Zaha Hadid Architects (ZHA), from the outset was envisaged as a permanent icon—albeit one that would shed 85 percent of its 17,500 spectator seats after the Games. Within a concrete podium, and underneath a swooping roof inspired by the fluidity of water, the building houses two pools—one for swimming and one for diving competitions. A third pool, for athletes' warm-ups, is tucked below a bridge that will serve as the primary access to the center post-Olympics.

The facility has been criticized for the two winglike appendages that enclose 15,000 Olympics-mode seats. Their blocky shapes, at least from the exterior, obscure the Aquatics Centre's otherwise sinuous forms. But in order to convert the venue into a pool for community use, these wings will be "clipped" after the Games and replaced by glazed facades. As part of a PVC "take-back" policy established by the ODA, the wings' wrapping will be reclaimed by its supplier and either reused or recycled into a lesser grade

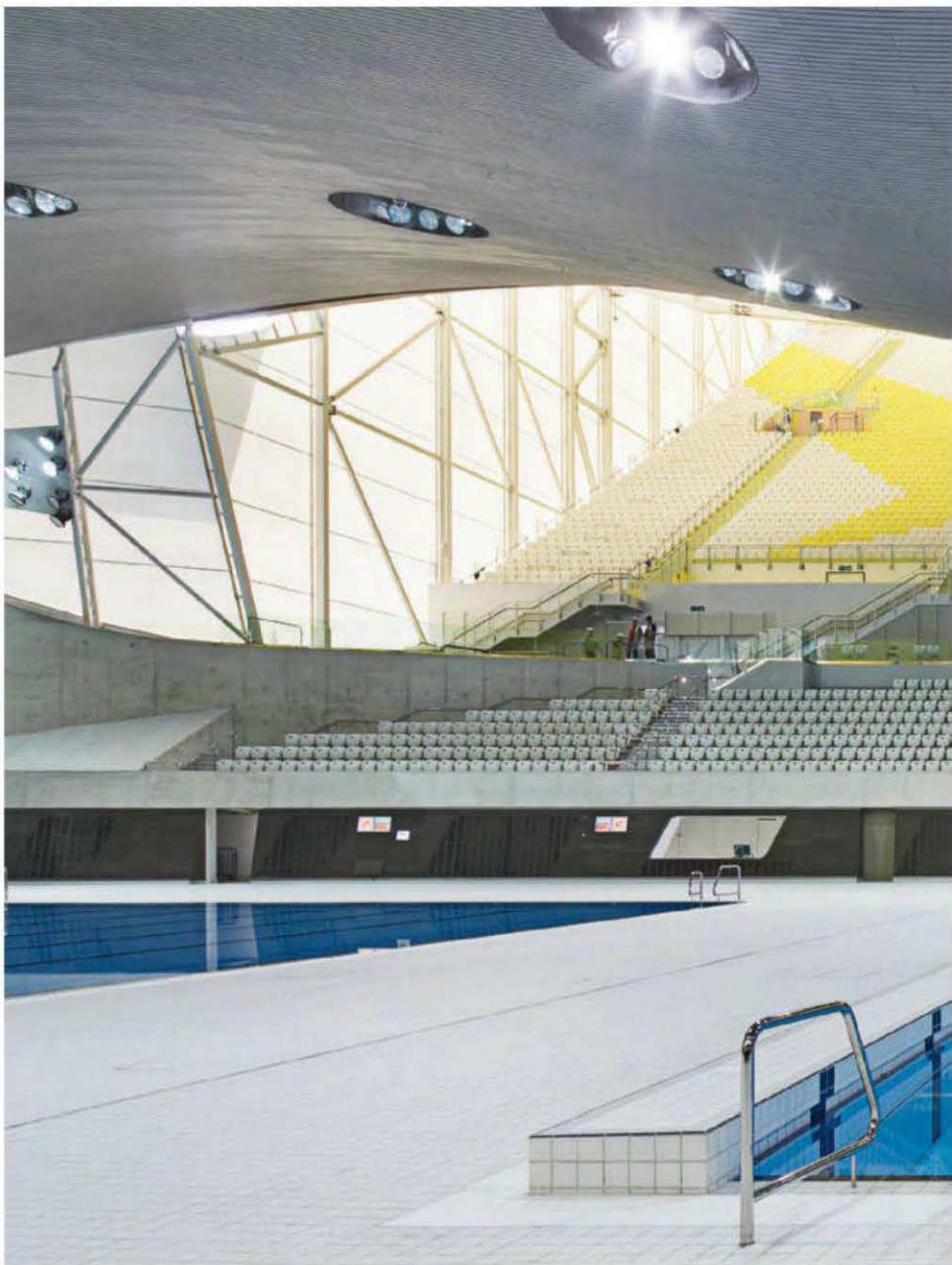
Somewhat paradoxically, sight lines from the temporary stands determined the height and geometry of the roof.

of vinyl. The seats, which are leased, will be returned to the rental market. And the steel supporting the stands, made of bolted-together, standard wide-flange shapes, can be readily used in other construction projects.

Somewhat paradoxically, the sight-line requirements from the temporary stands determined the height and geometry of the 118,000-square-foot permanent roof. It sweeps in wavelike fashion from south to north over the column-free hall, dipping down between the diving pool and main pool, and tipping up at its east and west edges.

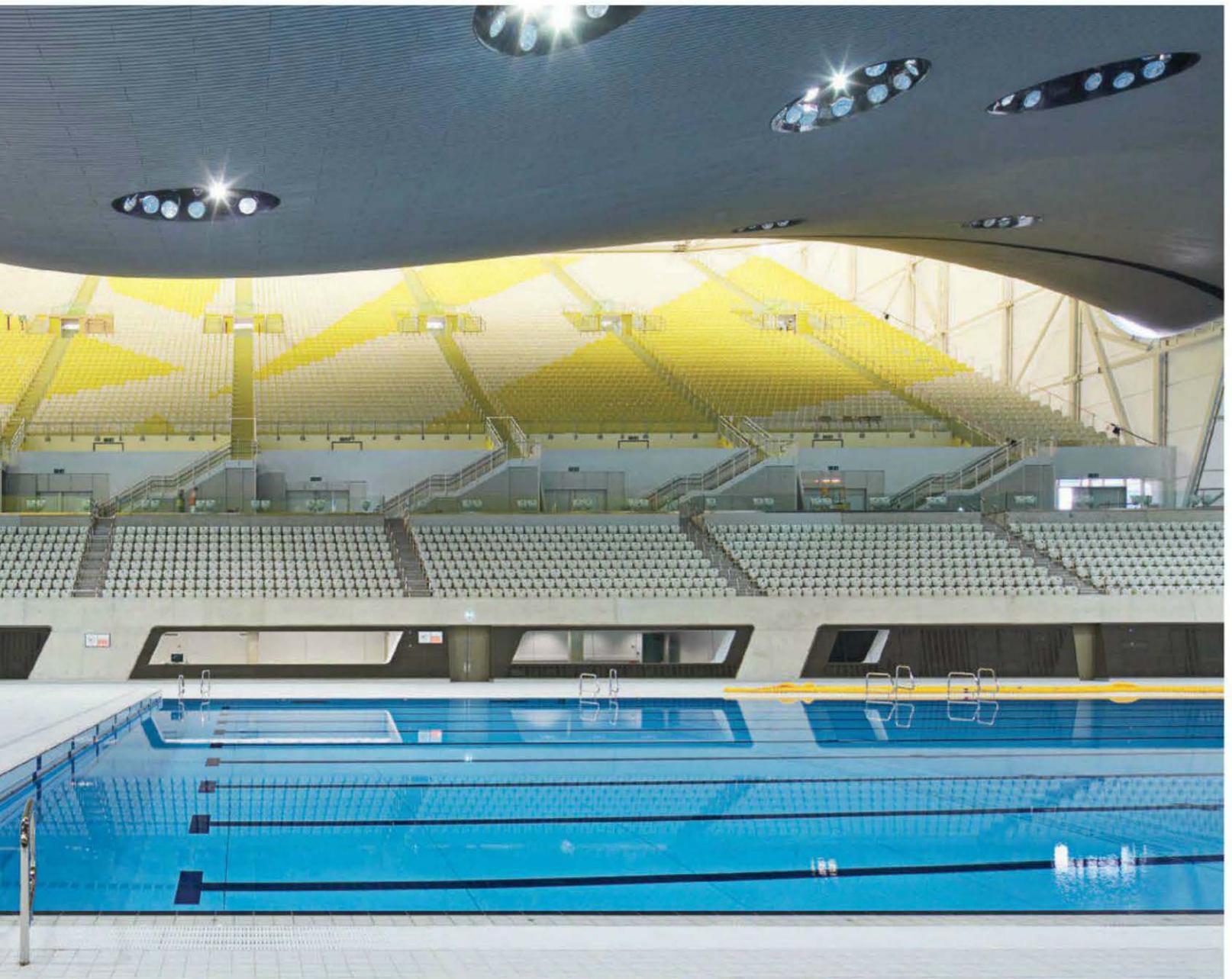
To support the doubly curved form, engineers from Arup devised a system of 10 fan trusses made up of mostly rectilinear members. The trusses span 390 feet between two transverse trusses—one bearing on a 90-foot-wide shear wall at the hall's south end, and another spanning two concrete cores 177 feet apart at the north. Purlins spanning the trusses' top and bottom chords provide attachment points for the aluminum cladding on the roof's upper surface and for red louro panels (solid in some locations and veneer-on-plywood in others) on the roof overhang and on the ceiling.

The complete truss assembly weighs about 3,500 tons. And even though a less sculptural shape might have resulted in a lighter roof, the roof members have been highly optimized for structural efficiency. According to the ODA, the realized roof scheme has a 95 percent utilization factor (a ratio of actual to permitted stress). "None of the sections is being lazy," explains Glenn Moorley, ZHA project architect.



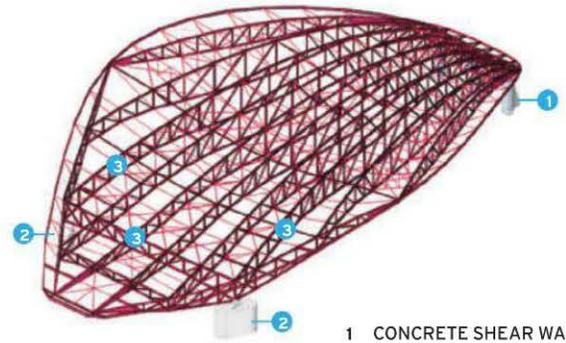


HIDDEN BEAUTY At least from the exterior, the temporary seating wings, which house 15,000 spectator seats, dominate the Aquatics Centre in its current, Olympics mode (far left and below). After the Games, the wings will be "clipped" and expansive, glazed facades will be installed in their place (left). The main pool hall's swoopy red louro-clad ceiling will appear to continue seamlessly from inside to out.





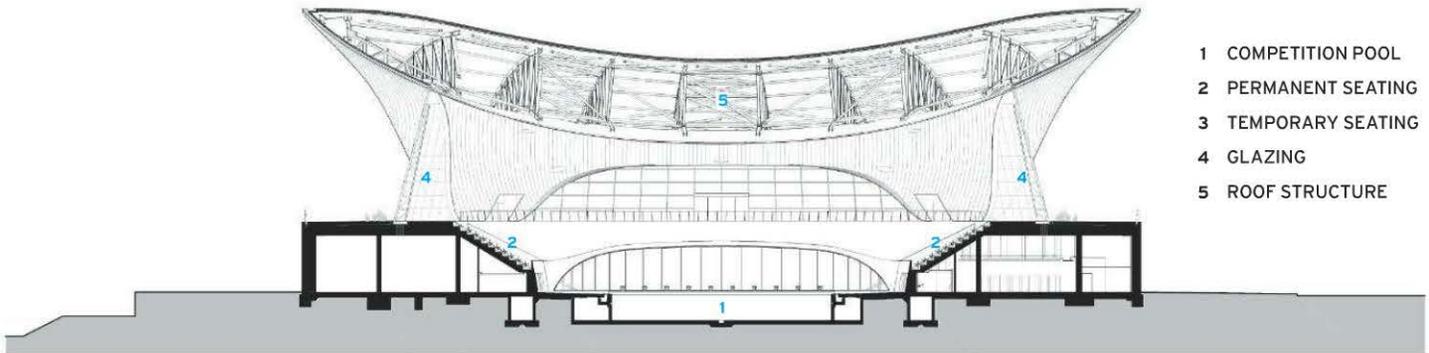
SCULPTURAL SPAN
The Aquatics Centre's roof is supported on two transverse trusses bearing on a concrete shear wall and two concrete cores. The fan trusses making up the wave-form element, which spans 390 feet and is nearly 300 feet at its widest point, were built almost entirely of rectilinear members.



- 1 CONCRETE SHEAR WALL
- 2 CONCRETE CORE
- 3 FAN TRUSS

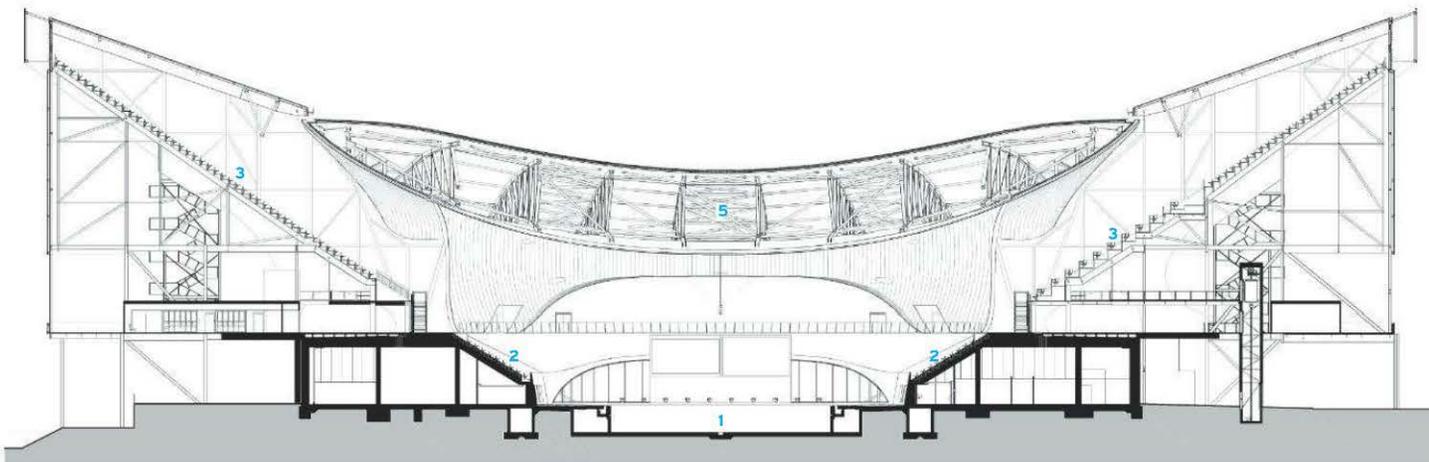


ROOF STRUCTURE DIAGRAM



- 1 COMPETITION POOL
- 2 PERMANENT SEATING
- 3 TEMPORARY SEATING
- 4 GLAZING
- 5 ROOF STRUCTURE

SECTION - LEGACY MODE



SECTION - OLYMPICS MODE

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PHILIPS





Basketball Arena
Wilkinson Eyre Architects

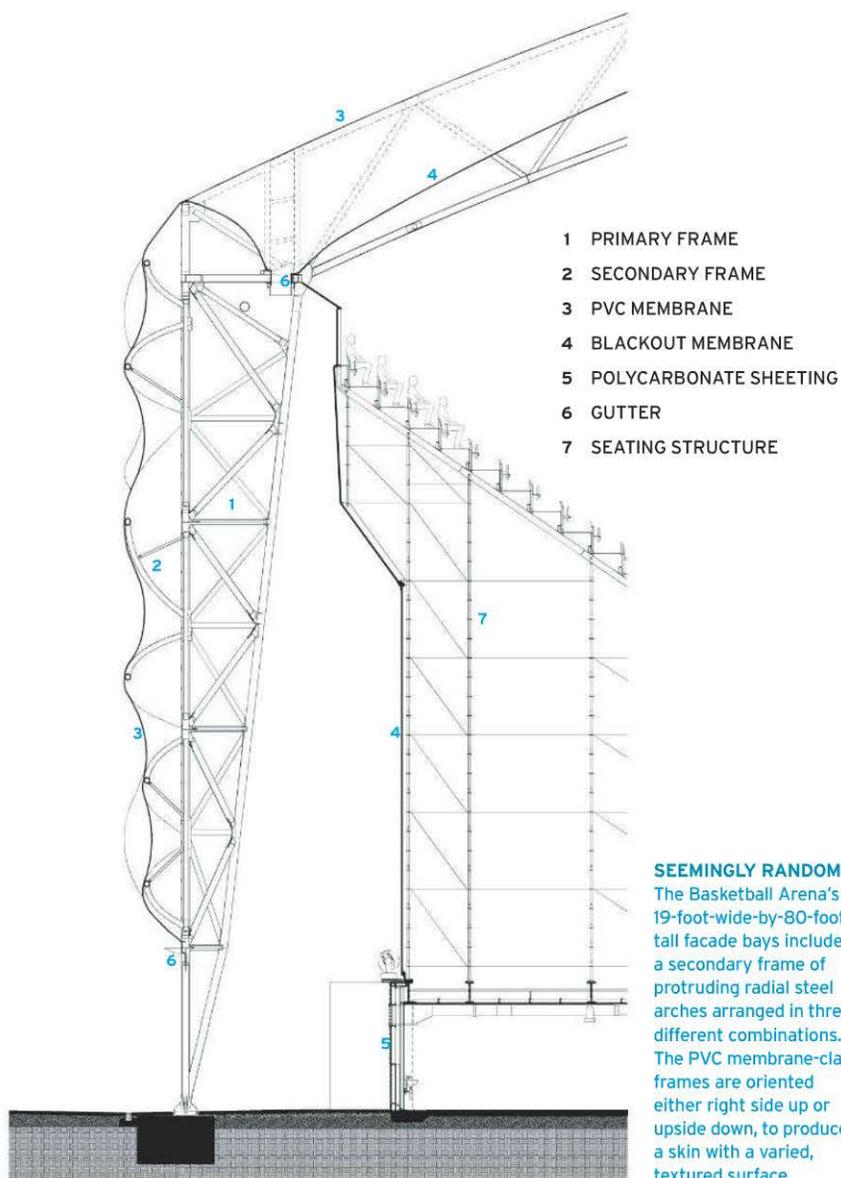
Basketball Arena Wilkinson Eyre Architects

WHILE THE Aquatics Centre and Stadium were designed to be scaled down after the Games, officials took a much different approach for the Basketball Arena, developing a brief for a 12,000-seat temporary venue that could be completely disassembled with at least two-thirds of its components reused or recycled, or reerected elsewhere. In response, the design team, which included architect Wilkinson Eyre and structural engineer SKM, explored a number of schemes, such as a cable-net structure and a geodesic dome, evaluating these options on the basis of cost, ease of construction, and the ability to be disassembled and reused. They eventually settled on a steel-portal frame, but one with a shallow barrel roof, rather than the more typical pitched roof. The volume is covered with 215,000 square feet of PVC membrane, creating a building with a profile that Wilkinson Eyre associate director Sam Wright likens to a loaf of bread. “We didn’t want to present a blunt, gabled end to the park,” he says.

The arena is far from plain white bread, however. It has plenty of surface articulation provided by sub-dividing its elevations into 19-foot-wide-by-80-foot-tall bays. These include a secondary frame of protruding radial steel arches arranged in three different combinations. The units are used both right side up and upside down, producing six modular variations and a seemingly random, undulating surface. These bays, which have fittings that allow the membrane to be “unzipped,” can be disassembled and then reerected or reconfigured, explains Jim Eyre, Wilkinson Eyre director.

The arena’s remaining components have also been designed to facilitate their reuse, depending on many of the same strategies deployed in other venues. The structure supporting the seating, for example, is self standing and is bolted together rather than welded, as is the portal frame. And to keep the arena compact, the team relied on an approach similar to that used for the concessions at the main stadium: The arena’s support services, including warm-up courts, areas for catering, and security, are housed in an adjacent modular building that Eyre refers to as a “bar of accommodation.”

One especially unusual aspect of the arena was the method



- 1 PRIMARY FRAME
- 2 SECONDARY FRAME
- 3 PVC MEMBRANE
- 4 BLACKOUT MEMBRANE
- 5 POLYCARBONATE SHEETING
- 6 GUTTER
- 7 SEATING STRUCTURE

SEEMINGLY RANDOM
The Basketball Arena’s 19-foot-wide-by-80-foot-tall facade bays include a secondary frame of protruding radial steel arches arranged in three different combinations. The PVC membrane-clad frames are oriented either right side up or upside down, to produce a skin with a varied, textured surface.

DETAIL SECTION



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*Keith Boswell, AIA, Technical Architecture Director
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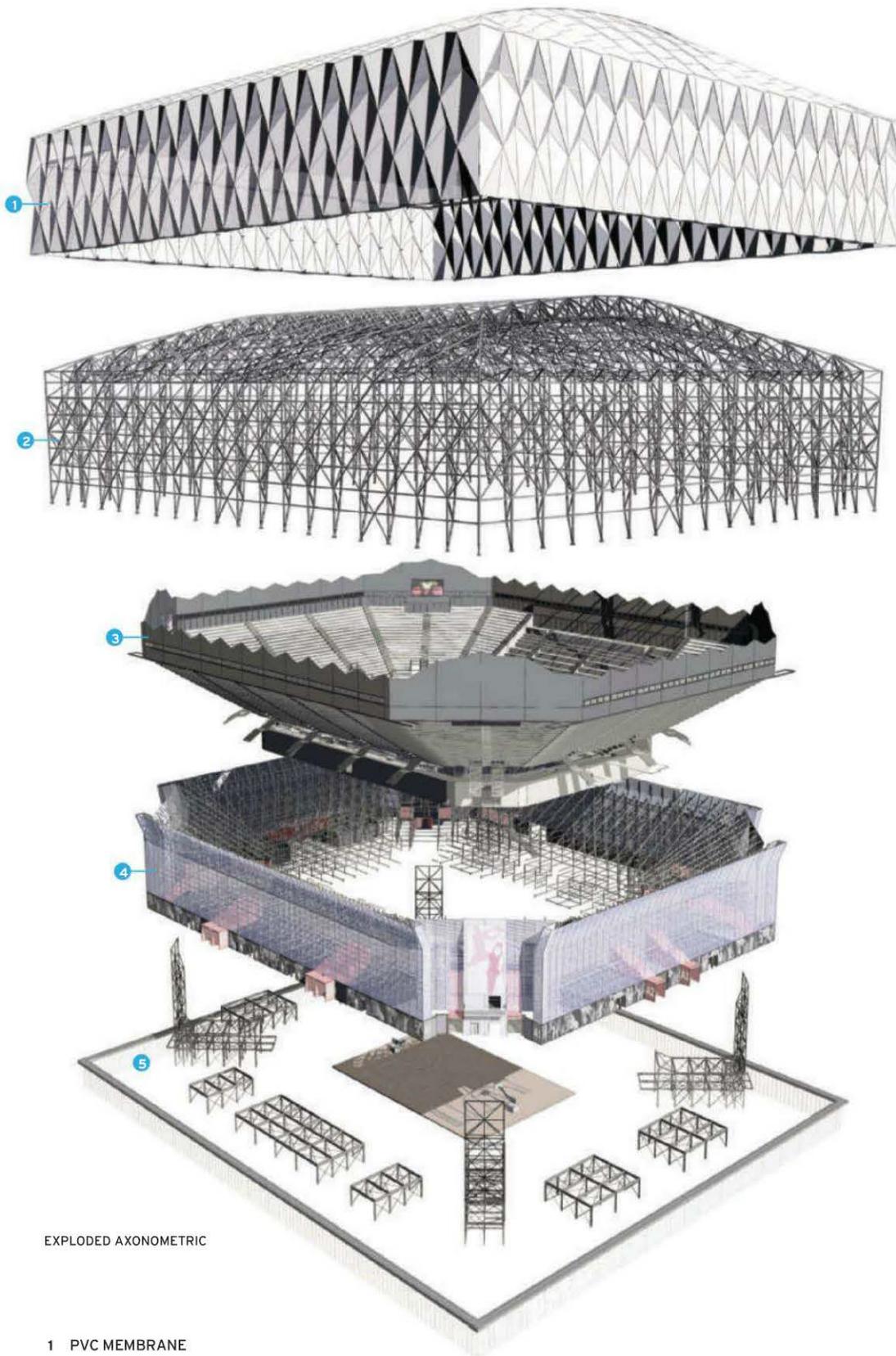
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EXPLODED AXONOMETRIC

- 1 PVC MEMBRANE
- 2 PORTAL FRAME
- 3 SEATING SYSTEM
- 4 PLENUM
- 5 TRANSFER STRUCTURE AND FOUNDATIONS

used to procure it. The building was divided into six packages, each separately bid: the portal frame and the PVC envelope; the seating and the seating bowl; the interior fit-out; the mechanical and electrical work; and the foundations. The responsibility for reusing or recycling the elements within these packages lies with the contractors, making it hard to predict where the arena's individual pieces will eventually land. However, the textured shell and its portal frame could well be traveling to Brazil for the 2016 Games. According to LLDC, officials from Rio de Janeiro and the supplier of the membrane and its underlying structure have been discussing such a possibility.

If the Basketball Arena's envelope travels to Brazil, it will certainly help validate London's approach to planning the Games. But to more accurately gauge London's accomplishments, we will have to wait more than four years, watching all the while to see how well facilities like the pool, the stadium, and the park as a whole meet community needs, and if the hoped-for regeneration actually materializes. If the Olympic site transforms into "a real piece of the city," as AECOM's Prior hopes, the 2012 Games will have been a true success. ■



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Learning Objectives

- 1 Discuss some of the legacy goals for the London 2012 Summer Olympics.
- 2 Describe the structural systems deployed in several of the venues built for the London 2012 Games.
- 3 Explain how these venues have been designed to ease post-Games adaptation or disassembly and the recycling or reuse of their constituent parts.
- 4 Discuss the measures taken to make the structures as efficient as possible.

AIA/CES Course #K1206A

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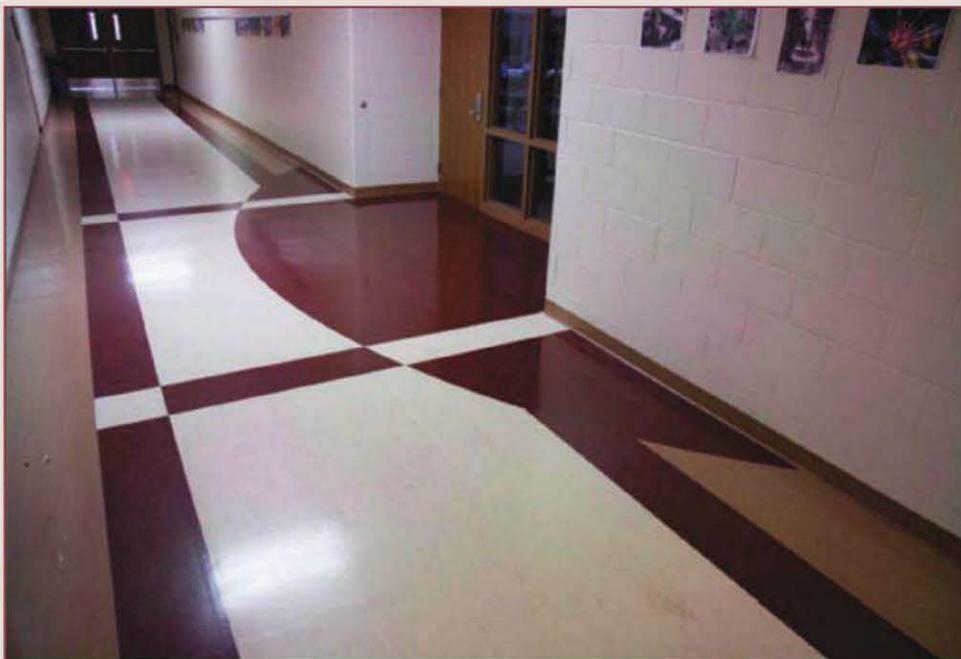
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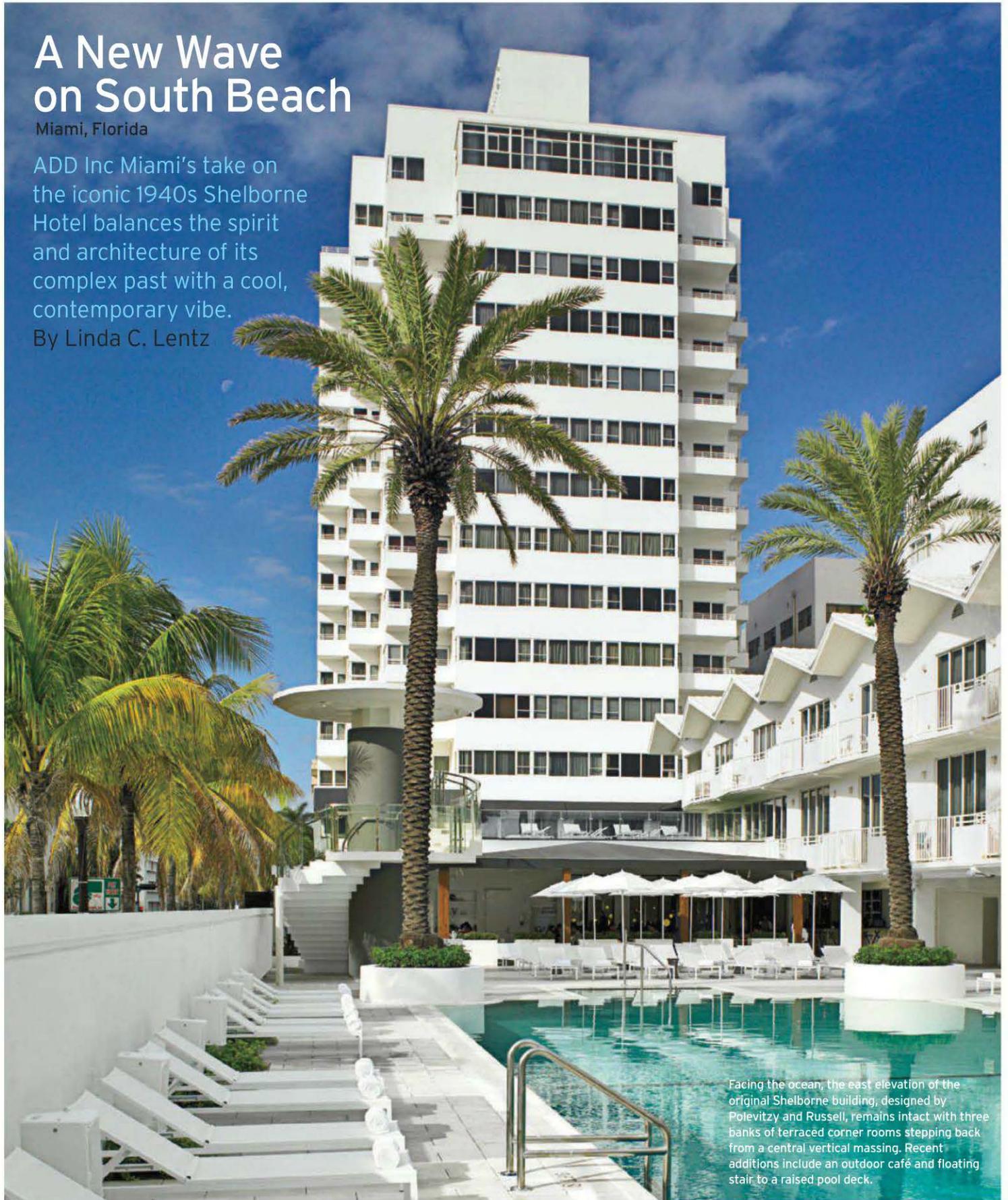


A New Wave on South Beach

Miami, Florida

ADD Inc Miami's take on the iconic 1940s Shelborne Hotel balances the spirit and architecture of its complex past with a cool, contemporary vibe.

By Linda C. Lentz



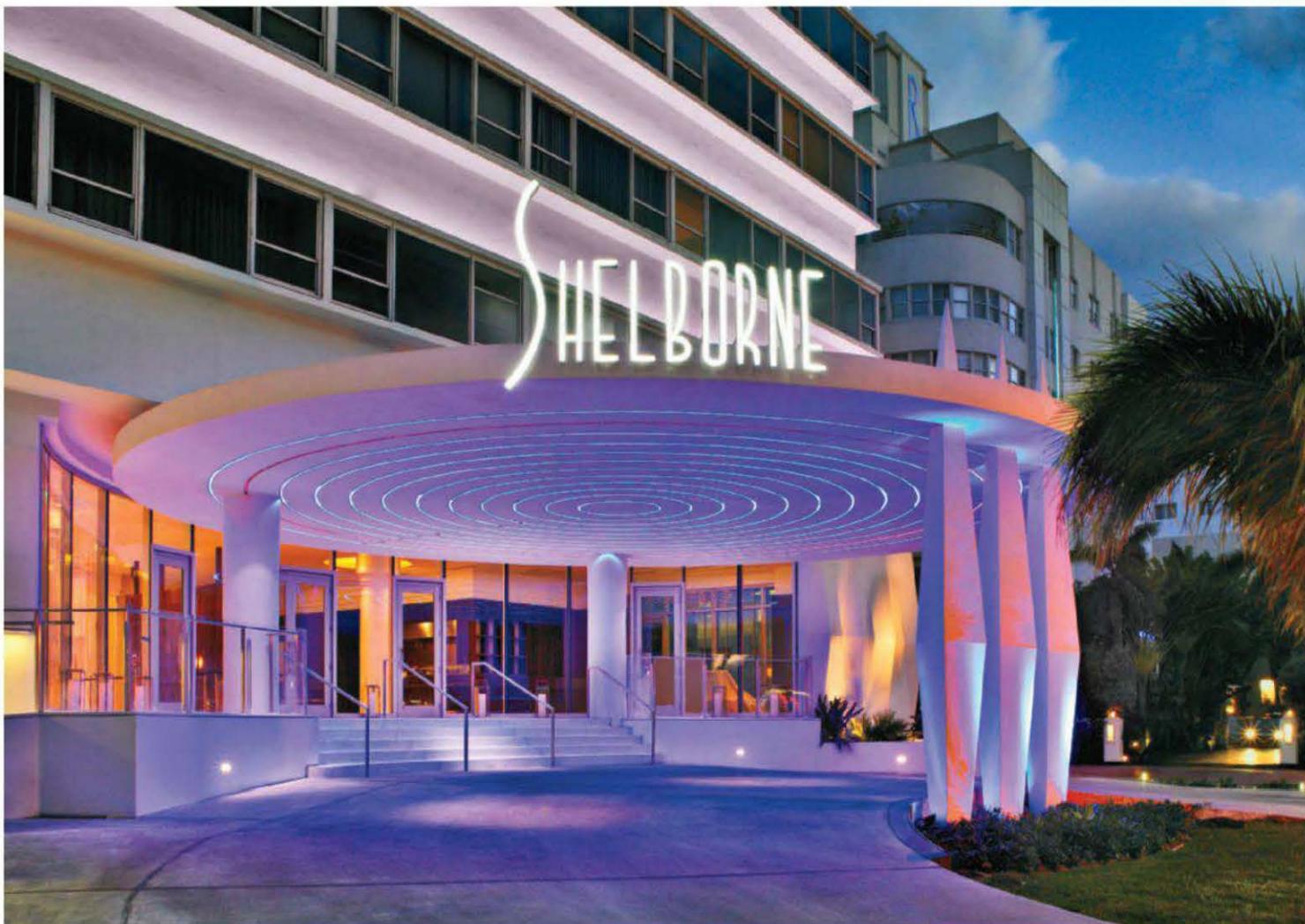
Facing the ocean, the east elevation of the original Shelborne building, designed by Polevitzky and Russell, remains intact with three banks of terraced corner rooms stepping back from a central vertical massing. Recent additions include an outdoor café and floating stair to a raised pool deck.

YOU CAN'T escape history in Miami Beach, where vestiges of former halcyon days document its recurrent ups and downs as one of America's most luxurious resort towns. An on-again, off-again boom, generated in the 1990s, continues to spur the reinvention of vintage hotels built in the 1930s, '40s, and '50s for a new generation of locals and international tourists. The Shelborne Hotel, built in 1940, was one of the finest. Its recent renovation, thoughtfully executed by ADD Inc Miami, is indicative of the iconic district's past, as well as its future.

The Shelborne, a forerunner of the Miami Modern (MiMO) movement, emanated from a creative flurry of activity between the Great Depression and World War II (during which it was appropriated for the war effort). Singled out in the July 1941 issue of *RECORD* as "the most newsworthy" of the more than 40 Miami Beach hotels built over the previous year, the original Shelborne was designed by Igor Polevitzky and his partner Thomas Triplett Russell. More International style than Art Deco, the 14-story, steel-frame building was urbane and gracious, notable for its compact plan with generous ocean views, avant-garde driveway approach, and use of the latest materials: etched clear plastic for a curvy balustrade, and fluorescent tube lighting in ceiling coves. A respectful, eight-story addition by Morris Lapidus in 1958 lengthened the narrow 100-by-400-foot site by more than 200 feet, reoriented



LIVING HISTORY RECORD featured Polevitzky and Russell's Shelborne in 1941 (above). The updated Lapidus addition has a curved glass entrance and revised porte cochere (below and left).





the entrance with a neon-lit, circular porte cochere, and supplemented the original 140-room beachfront tower with a ballroom and 103 guest rooms on Collins Avenue.

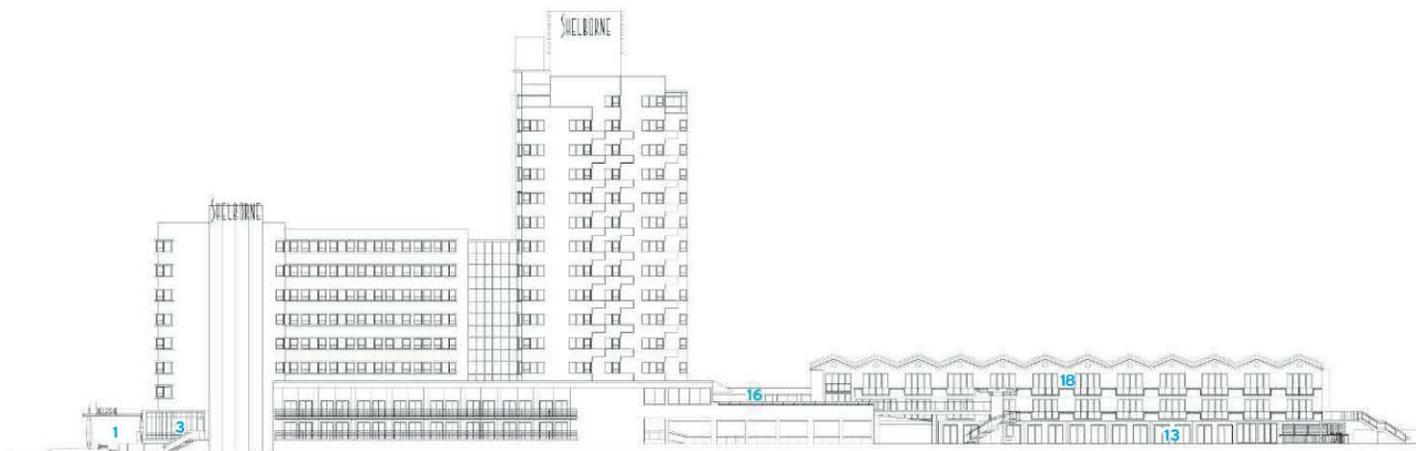
In 2009, when developer Russell Galbut contacted ADD Inc Miami principal Jonathan Cardello to revive the seaside resort, it had undergone a subsequent 1980s “upgrade” that reconfigured the Lapidus lobby with the insertion of a row of condos along the building’s south side, and enclosed a portion of the Plevitzky patio—compromising the fluidity of the space and blocking daylight. The once-glamorous destination looked tired, dark, and dated, showing wear typical for its 70 years and numerous alterations. It was also losing guests to tony, restored venues such as the nearby Delano.

“He asked us to bring the Shelborne back to life,” says Cardello. The challenge was how to preserve the fabric of the two early buildings, while at the same time modernizing them. “We needed to look at them holistically, then knit the whole thing back together,” he explains. Seeking the approvals required by the city’s Historic Preservation Board, the design team reviewed archival documents, the Plevitzky and Russell plans (on microfilm), and Lapidus renderings to piece together the intent of the original designs. Luckily, the structures were largely intact. The crew repaired structural columns and beams that had been manipulated during previous renovations, brought the building up to code, and redesigned the guest rooms within the existing footprints. They enlarged the diameter of the porte cochere canopy by 22 percent, based on the existing scale and proportion, and raised it to accommodate today’s larger vehicles, replacing

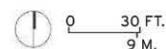


LAPIDUS REVISITED
ADD Inc Miami designed the new lobby (above) to reflect the Morris Lapidus 1958 version—drastically altered in the 1980s—with an airy, visible mezzanine level, whimsical front desk, and deluxe materials such as the white, mirror-flecked terrazzo floor and stair, Negro Marquina marble columns and lounge, and Maria Theresa chandeliers.

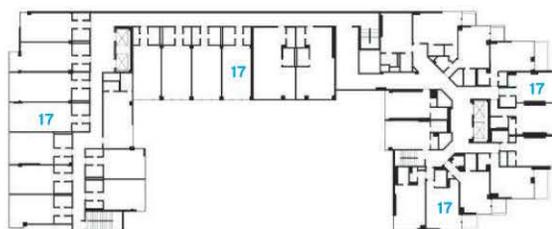
Behind the pool, a floating stair up to a raised pool deck (left) features a canopy inspired by both the Lapidus porte cochere and a 1940s bathhouse pictured on an early postcard (and thought to have been destroyed during a hurricane). Two levels of condominiums were built over the original cabanas in the 1980s.



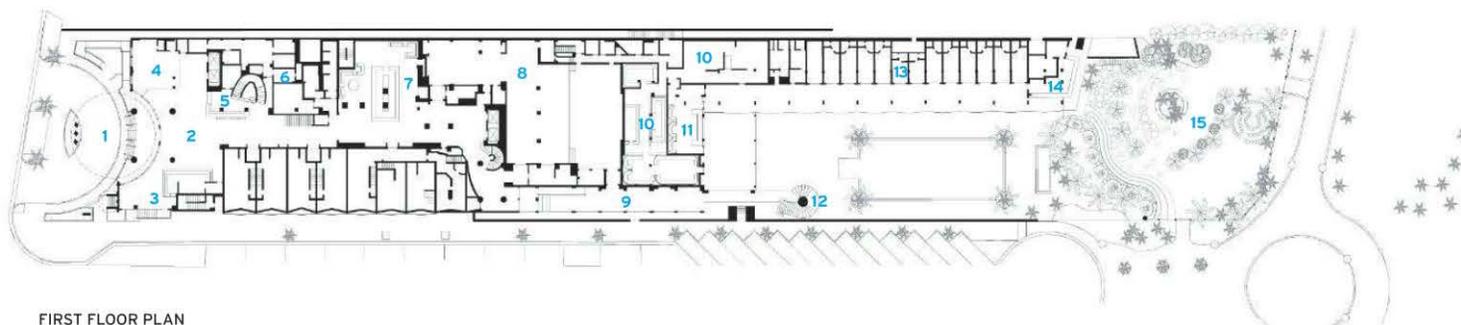
SOUTH ELEVATION



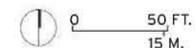
- | | | |
|----------------|--------------------|------------------------------|
| 1 MAIN ENTRY | 8 EVENT SPACES | 15 OUTDOOR LOUNGE AND GARDEN |
| 2 LOBBY | 9 LOGGIA | 16 SUN DECK |
| 3 SUSHI BAR | 10 RESTAURANT | 17 GUEST ROOM |
| 4 BOUTIQUE | 11 OUTDOOR CAFÉ | 18 CONDOS |
| 5 RECEPTION | 12 FLOATING STAIR | |
| 6 OFFICES | 13 POOLSIDE CABANA | |
| 7 LOBBY LOUNGE | 14 TACO BAR | |



TYPICAL TOWER LEVEL PLAN



FIRST FLOOR PLAN

**CREDITS**

ARCHITECT: ADD Inc Miami – Jonathan Cardello, partner in charge; Kevin Terra, project architect; Alison Smith, interior designer; T. Jack Bagby, construction administrator

ENGINEERS: Steven Feller (m/e/p/fp); McNamara Salvia (structural); HSO (civil)

CONSULTANTS: Crème Design (interiors); Witkin Hults (landscape); design (lighting)

CLIENT: Shelborne Condominium Association; Shelborne Associates

SIZE: 201,654 square feet

COST: withheld

COMPLETION: December 2011

SOURCES

WINDOWS: PPG, American Architectural Metals and Glass (glazing); Glasswall, R.C. Aluminum, YKK AP (metal frames)

the neon with color-changing LEDs. Then they opened the lobby to the street with a curved glass entrance, flanked on the interior by a sushi bar and boutique that flow into it.

Since the Lapidus lobby was demolished in the '80s, the designers devised a swanky black-and-white scheme in keeping with the midcentury architect's concept and flair for materials. They replaced existing patched terrazzo floors with the same material, in a mirror-flecked, white agglomerate, and crafted a backlit front desk faced with blue, pearl-like acrylic spheres. Pristine, sheer drapes surround the upper half of the soaring space and conceal the glass-enclosed meeting areas that overlook it, while an obsidian-like black lounge slices through its core to provide a welcome contrast.

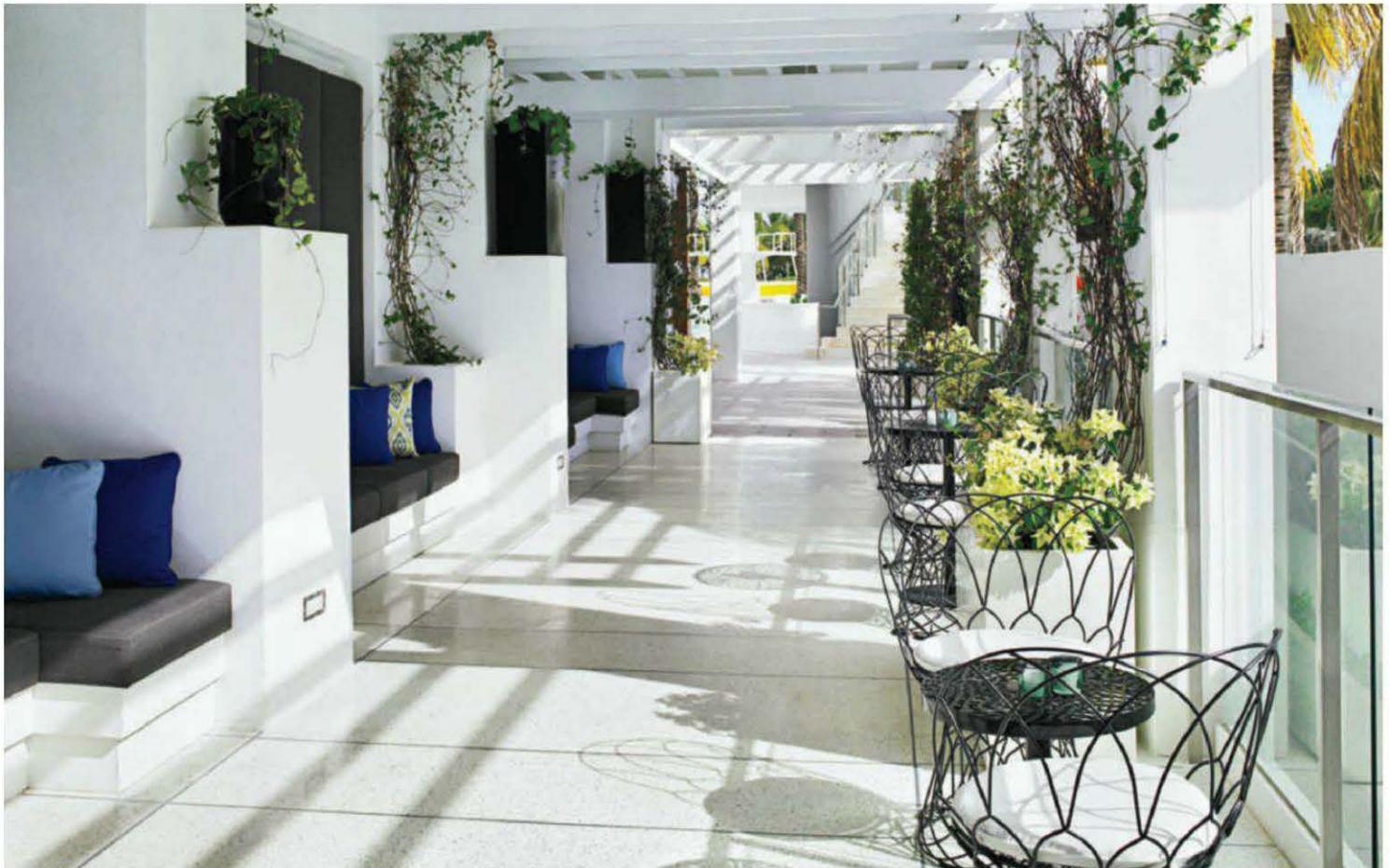
A nod to Plevitzky, known for blurring indoor and outdoor boundaries with seamless transparency, ADD Inc broke through an enclosed passage to create a trellis-covered loggia that recaptures the lost patio and directs guests to a new infinity pool. A floating spiral stair "à la Lapidus," restored upper sundeck, refurbished cabanas, taco bar, and colorful lounge seating boost the resort's allure for passersby—a 2012 priority for popular venues.

"We redefine historic hotels to work for today," says Cardello. Through good times and bad, Miami Beach has evolved—since its time as the posh getaway of the '40s and '50s—into an increasingly vibrant community. The rejuvenated Shelborne South Beach reflects this transition with a dynamic composition that plays to a broad audience—and from the outside looks like it hasn't skipped a beat. ■



MIMO 2012 The 281 guest rooms and condos are being renovated over time, with 70 completed as of press time. The comfortable, renewed accommodations feature crisp, gray-and-white color schemes, up-to-date technology, and sleek furnishings designed by the architects (top left and center).

A new trellis-covered loggia recaptures an original patio enclosed during one of the property's later renovations (below). Here guests can relax at banquette- or table-seating or wander onto the newly refurbished hotel grounds where they will find well-appointed cabanas, an infinity pool, and an original diving board transformed into a fountain (opposite).



Cabins in the Sky

Valle de Guadalupe, Mexico

For a rustic retreat in Baja's wine country, Gracia Studio perches a series of cubes on a hill, offering panoramic views of the fertile valley below.

By Jenna M. McKnight



PHOTOGRAPHY: © LUIS GARCIA



SUN-SPLASHED BEACHES have long been the main draw for vacationers in Baja, Mexico. In recent years, however, an inland wine region two hours south of San Diego has increasingly attracted tourists seeking an alternative to the sand and surf. With verdant fields ringed by hills and mountains, Valle de Guadalupe harbors some 60 wineries scattered among colorful shops, modest dwellings, and a handful of quaint inns. Untouched by commercialization, the area often elicits comparisons to the early days of Napa Valley.

Hotel Endémico, a striking newcomer designed by Tijuana architect Jorge Gracia, blends with the milieu while catering to the sophisticated traveler. Opening in July, the resort features 20 Modernist cabins on pilotis—all nestled within a rural setting teeming with flowering shrubs, sculptural boulders, and desert wildlife. “I conceptualized them as camping tents with all the comforts of a luxury hotel,” Gracia says while giving a tour of the grounds. “They’re sealed boxes in this aggressive nature.” The 232-acre site is also dotted with small vineyards and includes a 19,400-square-foot wine-production facility (designed by Gracia) that, once complete, will house a tasting room and restaurant.

Endémico marks the 13th property in the portfolio of Grupo Habita, a Mexico City-based hotelier that offers fashionable establishments for the jet set, such as the Enrique Norten-designed HôtelAmericano in Manhattan that debuted last year [RECORD, December 2011, page 90]. Given its earthy atmosphere, Endémico is a departure for the group; guests are best advised to leave their stilettos and slim-cut suits at home. “It’s not about 1,000-thread-count sheets,” says Rafael Micha, Grupo Habita cofounder. “The luxury here is sitting outside on the terrace, enjoying one of the wines you selected that morning.”

While operated by Micha’s company, the rustic getaway was developed by Grupo Metalco, a steel manufacturer, and is owned by several investors. The consortium acquired the site years ago with an eye toward creating a



TREADING LIGHTLY To minimize each building’s footprint, the architect raised the cubes off the ground using steel stilts anchored to a layer of granite below the earth’s surface. The boxes are clad in rusted-metal panels affixed to a steel frame (left).

Overhanging, corrugated-metal canopies float over the cabins (above), providing shade and reducing solar heat gain. While nights are cool, daytime temperatures can reach 100 degrees during the summer.



winery, resort, and housing development (collectively referred to as Encuentro Guadalupe). When it came time to hire an architect, they turned to Gracia. “We called him immediately,” says Juan Yi, one of the investors, noting that the ambitious young designer is gaining renown in northern Mexico. Since launching his studio in 2004, Gracia has completed dozens of houses and Tijuana’s Culinary Art School, among other projects. All of his buildings share a similar vocabulary: clean lines, simple forms, and low-cost (often salvaged) materials.

For Endémico, Gracia’s overall strategy was to create singular architecture that would catch the attention of motorists winding through the valley. He succeeded. While some cabins are tucked out of site, others jut from a hilltop overlooking a main road; drivers often pull over to examine the curious boxes perched overhead. The guest experience also played a key role in the site layout. “We focused on views and privacy,” says Gracia, who positioned the cabins between 30 and 600 feet apart. Sixteen units contain one bedroom and encompass 200 square feet; four have two bedrooms and total 240 square feet. Each has a small deck with chairs and a clay fireplace.

Though the cubes appear to be clad in wood, it’s not the case, says the architect: “It’s so warm during the day and so cold at night. Wood would crack and deteriorate very fast.” Instead, Gracia used rusted steel panels that he coated in flaxseed oil to slow further rusting (Cor-Ten was too pricey). Still, he doesn’t mind if the exterior walls show their age. “They will grow old with dignity,” Gracia says.

The panels are affixed to steel frames that were precut at the client’s manufacturing facility in Mexicali, located 130 miles away. Hovering over each cube are angled corrugated-metal canopies that provide shade and mitigate solar heat gain. “The sun hits the roof, not the box,” Gracia explains. In order to preserve the environment, he lifted the structures



SITE PLAN

CREDITS

ARCHITECT: Gracia Studio: Jorge Gracia, principal

ENGINEER: Grupo Metalco

SIZE: 4,160 square feet (cabins)

COST: withheld

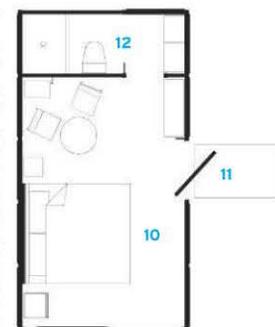
COMPLETION DATE: June 2012

SOURCES

STEEL: Grupo Metalco

MOISTURE BARRIER: Dupont (Tyvek)

GLAZING: Vidrios y Aluminios El Tigre



FIRST FLOOR

0 6 FT.
2 M.

- 1 ENTRANCE
- 2 SALES OFFICE
- 3 RETENTION POND
- 4 EVENTS AREA
- 5 WINE PRODUCTION
- 6 VINEYARD
- 7 HOTEL CABIN
- 8 POOL
- 9 MODEL HOME
- 10 BEDROOM
- 11 TERRACE
- 12 BATHROOM



off the ground. Steel stilts of varying heights are anchored to a layer of granite several feet below the earth's surface.

Inside, the rooms are notably restrained. White or black plastic laminate walls are paired with concrete floors and minimal furnishings. Bathrooms, while stylish, offer the bare necessities. A tight budget "pushed us to be more creative," Gracia says. To wit: The architect crafted bedside lighting fixtures of steel pipes and Edison bulbs—a clever, inexpensive solution that adds industrial flair to the pared-down space.

The architect faced numerous challenges throughout the project: a rugged topography, dearth of water, lack of on-site electricity, and searing summer heat. Moreover, Gracia was determined to protect the landscape throughout construction, which meant working without large cranes.

Patrons, too, will be asked to tread lightly. No cars are allowed on the grounds; instead, staff members will shuttle visitors around in all-terrain vehicles. Upon check-in, guests will be given a radio to call for a ride, along with a flashlight and emergency whistle. They won't forsake all creature comforts, though. The property boasts an infinity pool and Jacuzzi, wireless Internet, and built-in stereo systems in each cabin (and, yes, the units have heating and cooling systems and hot water). Still, "this hotel is not for everybody," admits Gracia. "It's for people who really want to be in nature."

Local residents seem impressed with their stunning new neighbor. "It's something completely different," says Luis Pelayo, who runs a charming café with his mother in the valley. With overnight accommodations hard to come by, Hotel Endémico could help draw more tourists to this idyllic wine country. Perhaps someday, Baja will be more revered for its merlots than its margaritas. ■

RUSTIC REFINEMENT

Solar panels will heat water for an infinity pool nestled into the hotel's undulating landscape (opposite). Boulders and native vegetation were left in place.

Rooms feature plastic laminate walls, concrete floors, and minimal furnishings (top). Heating and cooling systems, plus industrial-style ceiling fans, ensure climatic comfort.

Guests can watch the morning fog lift from the verdant valley while relaxing on wood decks connected to each cabin (right). The architect designed the benches, tables, and clay chimineas.



Swishing and Dishing

New York City

Thom Mayne of Morphosis evokes Walt "Clyde" Frazier's passions in a striking West Midtown restaurant.

By Suzanne Stephens

DON'T CALL Clyde Frazier's Wine and Dine a "sports bar." True, the New York City restaurant, designed by Morphosis Architects, comes with a foul-shooting basketball court at one end of the bar. And, true, the persona of the former Knicks guard Walt (Clyde) Frazier, who owns the eatery along with ARK Restaurants, permeates the place as the visual inspiration for its arresting interior. ARK's chairman and CEO Michael Weinstein didn't want the beery, greasy-burger, shouty, TV atmosphere endemic to a sports bar. The restaurant, at the base of a new residential tower on Tenth Avenue, emphasizes "quality food" by acclaimed chef David Waltuck and is built around "Clyde's style," Weinstein notes. Frazier, now 67, famous in his day not only as an athlete, but as a flamboyant dresser, earned the nickname "Clyde" after the natty protagonist of the 1967 film *Bonnie and Clyde*. Now an announcer for the Knicks at Madison Square Garden near his new restaurant, Frazier recently decided he was ready "for being out meeting and greeting."

In a slam dunk, Morphosis's Thom Mayne turned to both Frazier's sartorial and sports interests to give the restaurant interiors a distinctive panache. But if you think that the 6-foot-4-inch Mayne might bring a special sports expertise to this commission, forget it. "I was a horrible basketball player," he says. "It was embarrassing." Nevertheless, he saw eye to eye with Frazier. "We decided early on that all material patterns and the color palette in the restaurant should come from his clothes," Mayne explains. "When Thom saw the raw space," Frazier recalls, "you could see his mind percolating."

Within the generic 10,000-square-foot rectangular room, which extends 182 feet between 37th and 38th Streets, Mayne put the restaurant at the south end, the bar in the middle, and a lounge at the north where the grade drops 5 feet. Inside the entrances at either end, the architect created what you might call Clyde-style columns as monumental gateways for the dining establishment. The clustered cylindrical columns, structural and fake, are sheathed in resin-covered digital images that were taken of Frazier in his exuberant attire. "It's kind of an Egyptian pharaoh look," says Frazier, grinning. Along the front of the restaurant, a translucent scrim of black-and-white photos from Frazier's Knicks days conceals smaller columns running just behind the glass and metal curtain wall of the street elevation.

The transformative feature in the room, however, is suspended from the ceiling, where a 170-foot-long assemblage of colorful, patterned, flat and folded aluminum fins floats over the dining area, bar, and lounge. Morphosis found the stripes, plaids, and prints for this polychromatic sculptural



MOVIN' & GROOVIN' The name of one of the restaurant cocktails also conveys the spirit of the totemlike images of Clyde Frazier at the south entrance to the restaurant (top left). Vertical baffles carrying photographic images of Frazier back the glass curtain wall along Tenth Avenue (above). The colorful metal fin structure floats above the dining area, the bar, and the lounge (opposite). Inspiration came from Frazier's clothes.



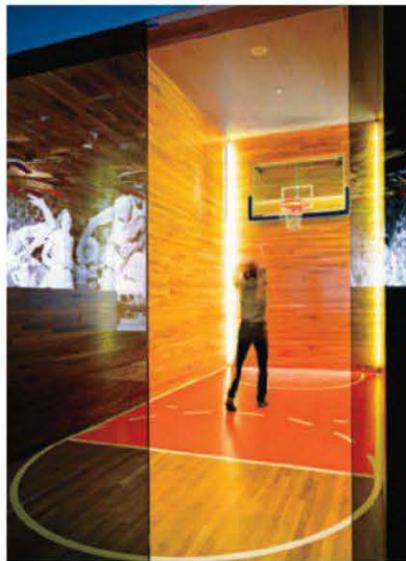




reef in Frazier's closets. The architects photographed their contents and, working with Zahner's metal fabricators, digitally printed images for a film adhesive applied to 544 aluminum panels of six shapes. The palette varies from blue to brown-gold to charcoal, with red painted undersides enhancing the gestalt. "It's mesmerizing," says Frazier.

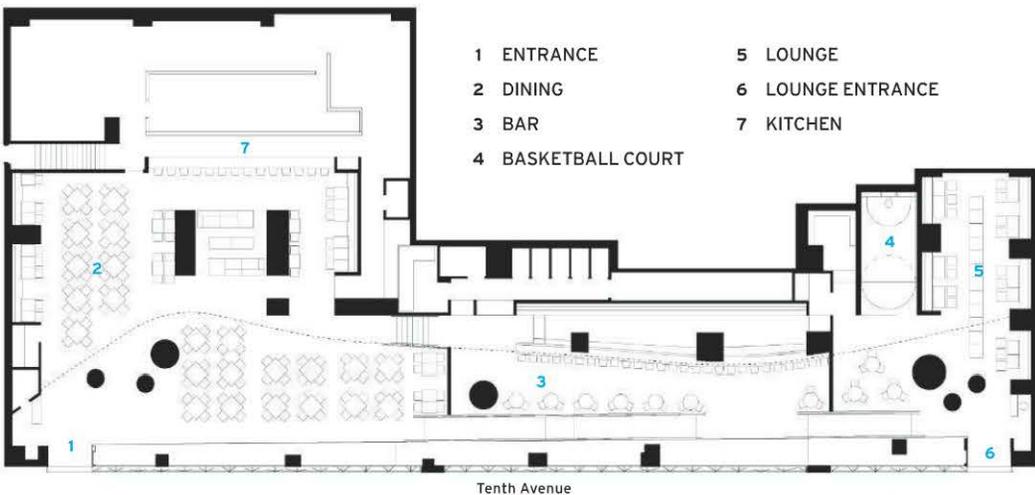
The scintillating color scheme contrasts theatrically with the rest of the restaurant, which is rendered in low-key gray tones for the polished-charcoal concrete floors, resin countertops for the bar and open kitchen, and fake-fur banquettes. For sound insulation—deemed essential in a residential building—the architects hung an acoustical ceiling from the concrete deck. Below it they placed mechanical ducts, and under that the raft of architectonic fins.

"It's really a stage set," says Mayne of the architectonic ceiling plane's surging spatial effects. Seeing this swooping metallic construction that resembles the multicolored feathers of a giant bird as it glides above the sloping space, you definitely sense you are not in a sports bar. Even as you take a sip of Posting & Toasting, a Clyde cocktail, you can go swish a shot in the court. ■



SPINNING & WINNING

The polychromatic palette of the suspended metal fin construction shifts to gold tints and patterns at the bar. Upturned LED lights dramatize the jazzy hyperkinetic ceiling. Guests ambling past the bar (far left) down a ramp, edged by the a black-and-white photographic scrim on the exterior wall, end up in a lounge at the north end. Next to the bar is a 10-by-21½-foot foul-shooting court (near left) lined in oak.



- 1 ENTRANCE
- 2 DINING
- 3 BAR
- 4 BASKETBALL COURT
- 5 LOUNGE
- 6 LOUNGE ENTRANCE
- 7 KITCHEN

FLOOR PLAN

Tenth Avenue



CREDITS

- ARCHITECT:** Morphosis Architects - Thom Mayne, design principal; Ung-Joo Scott Lee, project manager; Edmund Ming-Yip Kwong, project architect; Natalia Traverso Caruana, Suzanne Tanascaux, Satoru Sugihara, design team
- ENGINEERS:** Reynaldo C. Prego (m/e/p, fire)
- CONSULTANTS:** Tillotson Design Associates (lighting); Shen Milsom Wilke (acoustical)
- CLIENT:** Michael Weinstein, ARK Restaurants
- SIZE:** 10,000 square feet
- COMPLETION DATE:** March 2012
- SOURCES**
- METAL CEILING:** Zahner
- COLUMN ENCLOSURE AND SCRIM:** 3Form

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Sustainable Hospitality Hardware

Recycled Bronze Meets Many Demands

Sponsored by Rocky Mountain Hardware | By Peter J. Arsenault, FAIA, NCARB, LEED-AP

Architectural hardware is a significant part of any commercial building, but particularly so in hospitality settings. Hotels, resorts, restaurants, and related building types all rely on properly controlling the flow of people and goods to maintain privacy, security, and operational success. Typically, this control requires well-designed and durable hardware systems that include door and window operating and locking components. From a design standpoint, the selected hardware needs to be consistent with these operational demands, but also with the overall design vocabulary of the building. Further, since all manufactured metals have an environmental impact, the selection of hardware that is made from predominantly recycled material by manufacturers using green and sustainable practices is paramount to green building design. Architects and other design professionals are increasingly finding that bronze architectural hardware meets all of these demands. As a long-standing traditional metal, it has proven its characteristics of durability and sustainability. Modern manufacturing methods

combined with this historical strength, allow hospitality facility designers and owners to reap the benefits of the old and new characteristics of bronze architectural hardware.

BRONZE AS A MATERIAL

Bronze is one of the most innovative alloys ever discovered and has been used by humans since prehistoric times. Its significance in antiquity gave rise to the name “The Bronze Age” when it emerged as one of the dominant materials in early civilizations. Initially bronze was used to fashion utilitarian items such as tools, weapons, armor, and various building materials. More recently, bronze continues to be one of the materials of choice for monumental statuary, other types of artwork, and building materials such as hardware, plumbing fixtures, and lighting fixtures.

Bronze is actually an alloy or a mix of several different metals that are heated together to create a superior material. The individual metal components and their ratio vary based on the desired quality and color. Commonly, bronze

is a mix of copper and tin, but fine art-grade bronze is predominantly a mix of copper and zinc

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EARN ONE GBCI CE HOUR FOR LEED
CREDENTIAL MAINTENANCE

Learning Objectives

After reading this article, you should be able to:

1. Differentiate among basic qualities of bronze as a sustainable building material compared to other architectural metals.
2. Analyze and assess the multiple qualities of recycled bronze that can contribute to green and sustainable building design.
3. Explore the qualities of recycled bronze when used in door hardware, particularly in hospitality buildings.
4. Examine the different applications of recycled bronze in other interior and exterior applications that support green building design.

AIA/CES COURSE K1206E
GBCI COURSE 0090008222

with other elements added in smaller quantities. For architectural hardware, two art-grade alloy compositions are common that are suitable for high-quality installations that are both decorative and functional. The first and probably the most common composition is referred to as “silicon bronze” even though it contains only 4 percent silicon compared to 6 percent zinc content and the remaining 90 percent, or the overwhelming majority, coming from copper. This produces the commonly pictured coppery gold color that ages to a deeper, rich color that most people associate with bronze. A second popular choice for hardware where lighter natural colors are desired is referred to as “white bronze” or Tombasil. This alloy composition contains much less copper at 56 percent content, but much more zinc at 24 percent content. In addition, manganese (13 percent), nickel (5 percent), aluminum (1 percent), and lead (1 percent) are added to create the desired silvery color and other properties.

While different in color and other finish features, both types of bronze alloy described above have enjoyed popularity due to many favorable attributes, including:

Durability

Bronze is a non-ferrous material, meaning that it doesn't rust the way iron and steel can. In this way it can be superior to iron in many applications. Since it is also considerably less brittle, it will not bleed the way iron will. Further, it also conducts heat and electricity better than most steels. All of this allows bronze to achieve its well-known long-lasting durability. Bronze artwork and architectural elements in particular have been commonly known to last for centuries, making it a very sustainable metal with a very long service life.

Corrosion resistance

In addition to being extremely durable, bronze offers excellent resistance to corrosion. This trait is further helped by its ability to develop a naturally occurring coating, or natural patina that forms on the metal due to the oxidation of the alloy. This thin oxide layer protects the underlying metal from further corrosion. By forming this protective surface film, bronze, like most copper alloys, resists many corrosive environments.

Fatigue resistance

Since bronze oxidizes only superficially, it resists metal fatigue and corrosion (especially seawater corrosion) better than steel. As a particularly dense alloy, it offers high-strength capacity in stressful environments.

Lower melting point

Copper-based alloys such as bronze have lower melting points than steel or iron, and are more readily produced from their constituent metals. This lower working temperature and workability of bronze permit detailed and intricate working of the material to create final products. It also means that less heat is required to create the bronze which translates directly into less energy being required compared to the manufacture of other metals.

Photo by Rocky Mountain Hardware



All bronze castings start with the creation of pattern by carving it out of wood or plastic.

Easy care and maintenance

Ideally, bronze surfaces should not be treated with a harsh cleaner. However, to help it age gracefully, bronze can be cleaned with mild soap, water, and a non-abrasive cloth. A high-quality clear paste wax may be applied to protect the oxidized patina finish. It should be noted that the easy care of bronze contributes to its many sustainable features since the use of harsh cleaners is not required, saving time, money, and most importantly, the environment.

As a material, then, bronze has remained a reliable, durable, and sustainable material for a dramatically long time and continues to be so today using both time-tested and innovative manufacturing techniques.

MANUFACTURING WITH BRONZE

The art of crafting bronze products to fit the image in an artisan's mind begins with the casting process. In general, art-grade bronze ingots are fired at temperatures of up to 2,200°F and are hand poured from a crucible into a mold, creating the raw bronze shapes referred to simply as castings. Once cooled, these castings are then given to the experienced hands of skilled craftsmen for detailed finishing of every surface.

There are two fundamental methods of creating bronze castings for architectural hardware—sand casting and investment casting, both of which are described further below. The principles involved in each are not new, but rather, have been gleaned from processes used since antiquity.

Sand casting process

Sand casting is one of the oldest and most efficient forms of casting dating as far back as 4000 B.C. It is very diverse, and responsible for nearly 90 percent of the world's castings, ranging in size from less than an ounce to hundreds of tons. Its popularity is likely based on the fact that the sand casting method can be used to duplicate a bronze work repeatedly and usually in significant numbers. Though the basic process remains the same, many technological advances have been made to produce the high-quality casting commonly seen today.

Each piece of a bronze product, such as hardware, begins life in a pattern shop where craftsmen first hand-carve wood or plastic versions of the product. The resulting item is then used to create a permanent three-dimensional “pattern board” of numerous parts that can be re-used hundreds or even thousands of times. These pattern boards are used to create the sand molds to cast bronze pieces.

First, the pattern board is locked in the middle of a two-sided metal mold or “flask.” Next the flask is filled with sand which is prepared by mixing it in a muller where clay and water are added to achieve the desired strength and moisture level that will make it rigid enough to hold its shape during the casting. The prepared sand from the muller is added to the bottom of the flask and is compacted tightly to the pattern board. Then the flask is flipped over and the process is repeated on the other side. The idea is that sand mold halves are created on either side of the pattern board forms. This usually means that the two sand form halves are brought together along a seam or parting line and held together for casting.

Photo by Rocky Mountain Hardware



Sand molds are formed using pattern boards and then filled with molten bronze to create products using the common sand casting process.

Finally, when the sand mold is ready, it is removed from the flask and stands alone with the shapes of the desired product formed as cavities inside the mold. Bronze ingots and scrap bronze are then melted down to the proper molten pouring temperature, (approximately 2,000°F), and poured into the molds until they fill the internal cavities. After the molds have cooled and the bronze has solidified, the sand is simply pulled away while the remaining bronze casting is removed by hand and set aside to cool. The sand itself is reclaimed at this point going on to be re-conditioned and re-used repeatedly in the manufacturing process, thus avoiding any waste or by-products. The bronze castings then leave the foundry to be worked on by

Photo by Rocky Mountain Hardware



Cast pieces are finished and polished by hand.

hand where every part is ground down to remove any unwanted parting line ridges caused by the mold pieces. In the process, nothing is wasted—scrap metal and filings are melted down and used once again.

Investment casting process

Investment casting, also known as lost wax casting, is another form of traditional metal casting and is considered to be one of the oldest manufacturing processes used. The Egyptians are known to have made jewelry for their pharaohs through this process some 5,000 years ago. Originally beeswax was used but contemporary methods use a high-technology wax. Unlike sand casting, investment casting yields only a single piece because the mold needs to be destroyed at the end of the process to remove the cast. However, this process is inherently more controllable and allows for more refined pieces to be cast with greater and finer detail than with sand casting.

Investment casting also starts with patterns to create two-part metal molds made up of a top and bottom. Warmed liquid wax is injected into the mold and after it cools, the resulting solid wax parts are removed from the mold; these mimic the final bronze product exactly. From there, each wax part is carefully attached to a tube or runner with a funnel-like pour cap at the top to create a “tree” of multiple wax parts. This wax tree is the basis for creating a final ceramic mold for casting. To do this, a cold slurry of ceramic material is prepared for the tree to be dipped into numerous times. After each dipping, the excess slurry is drained off, leaving the tree coated with a fine ceramic layer which is left to dry overnight or longer. Each dipping adds

to the thickness of the mold until the desired shell thickness is achieved, at which point the wax is then removed (or “lost”) by flash steaming the trees in an autoclave. The melted wax drains out the bottom and is saved to be reused. The remaining ceramic mold now has cavities in the exact shape and pattern of the bronze pieces to be cast connected to the tube and pouring opening. While this method can produce many parts in each batch, it obviously takes much longer than sand casting to make each mold due to the multiple dippings and time between them for drying.

Photo by Rocky Mountain Hardware



During the investment casting process, wax pieces are combined onto a “tree” of parts and dipped repeatedly into a ceramic slurry to create a ceramic mold.

The next step is to place the ceramic tree into a kiln or furnace to harden it, much like firing pottery. This also preheats the ceramic molds to prepare them for the casting process. Hot molten bronze is then poured into the top of the ceramic mold and flows into the cavities previously formed by the lost wax shapes, producing the same forms out of metal. These molds are allowed to cool but now the metal is trapped inside the ceramic instead of the wax. Hence, the ceramic needs to be destroyed and removed by breaking it away either with simple hand tools or by pressure washing. The result is that each metal piece is extracted and is then ready to move onto final finishing processes.

Photo by Rocky Mountain Hardware



The completed ceramic molds receive the molten bronze and are broken away after the bronze cools to reveal the finished cast product.

Patina process

Patina is a natural process common with many non-ferrous metals that occurs when the metal interacts with the atmosphere and oxidizes, forming a thin protective layer on the metal. Bronze is one such metal that will naturally oxidize over time, thus changing the color, sheen, and texture of the surface. Factors that affect this ongoing aging process include time, touch, climate, and exposure to elements. The patina will continue to evolve at a natural rate based on these factors and actually helps to protect the surface of the metal, thus adding to its longevity and durability.

Recognizing the appeal of different patina colors and textures, manufacturers have developed ways to create these variations during manufacturing and get a substantial head start on nature. It is common for them to offer products with hand-applied patinas that bring

a desired aged appearance to bronze hardware that enhance the hues and deep beauty of the bronze. Note that both silicon bronze and white bronze can be finished in either a brushed, light, medium, or dark patina. Rust-colored patina can be applied to silicon bronze only.

Manufacturers offer numerous finish and design options to complement a range of architectural styles, from rustic organic, to Tuscan, to more contemporary lines. As a result, architectural bronze hardware provides almost limitless design potential for today's designers and architects.

Continues at ce.architecturalrecord.com

Peter J. Arsenault, FAIA, NCARB, LEED-AP, practices, consults, and writes about sustainable design and practice solutions nationwide. www.linkedin.com/in/pjaarch

To receive AIA/CES or GBCI credit, you are required to read the entire article and pass the test. Go to ce.architecturalrecord.com for complete text and to take the test. The quiz questions below include information from this online reading.

- Bronze is a non-ferrous material meaning that it can be superior to iron in many applications since:**
 - it doesn't rust the way iron and steel can.
 - it is considerably less brittle than iron.
 - it will not bleed the way iron will.
 - All of the above
- The type of bronze alloy with 90% copper content is:**
 - art-quality bronze.
 - silicone bronze.
 - white bronze.
 - Tombasil.
- Bronze manufacturing using the sand casting method:**
 - can be used to duplicate a bronze work repeatedly and usually in significant numbers.
 - can only be used once since the sand is removed after each casting.
 - requires artisans to shape sand as the first step.
 - is only used for a small percentage of bronze castings in the world.
- Bronze manufacturing using the investment casting method:**
 - allows for ceramic molds to be used over and over again.
 - is inherently more controllable and allows for more refined pieces to be cast with greater and finer detail than with sand casting.
 - is also called "lost wax" casting even though wax is no longer used.
 - is a recently developed method of casting.
- Green and sustainable attributes of bronze include those below EXCEPT:**
 - the ability to specify 90% or even 100% recycled content.
 - the ability to perform well in an LCA due to its long life expectancy and durability.
 - the ability to reduce energy use due to its high conductivity.
 - the high copper content of bronze has been shown in numerous studies to actually kill bacteria thus reducing the risk of transfer.
- When specifying bronze, it is possible to consider manufacturers that have adopted sustainable manufacturing practices, such as recycling bronze scraps from casting and machining processes.**
 - True
 - False
- Lockset is the overall term to describe:**
 - the visible portions of hardware that is usually attached to the surface of the door and can vary interchangeably with other parts.
 - only the hardware operated by the handles, cylinders, thumb latches, and turn pieces.
 - locking hardware on a door that is typically made up of multiple pieces, both visible to the user and concealed inside.
 - the portion of a lock where the key is inserted to lock or unlock the set.
- Electronic card lock trim made from bronze integrates its traditional durability and beauty with the advanced security features of an electronic locking system.**
 - True
 - False
- Many different bronze door accessories are readily available including:**
 - bolts.
 - ornamental hinge straps.
 - flush pulls.
 - All of the above
- Other bronze hospitality products include bronze sinks with bronze faucets, bronze lighting fixtures, and unique customized ornamental decoration, signage, logos, or other artistic pieces.**
 - True
 - False

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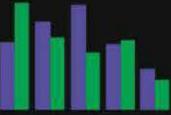


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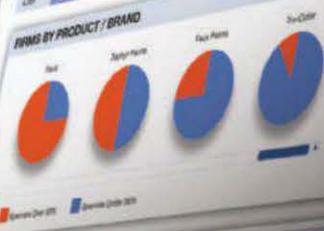
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3	XYZ Paints	Pepper	MD	45	5	300	100	2008	www.xyzpaints.com	410-555-9012
4	HomePro	Baltimore	MD	10	10	100	50	2007	www.homepro.com	410-555-3456
5	PaintPro	Dallas	TX	25	10	100	50	2006	www.paintpro.com	214-555-7890

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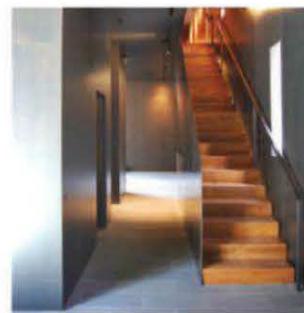
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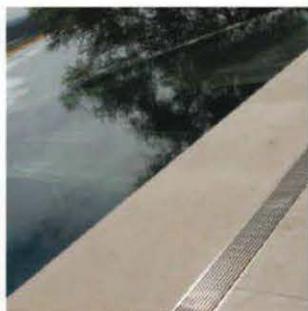
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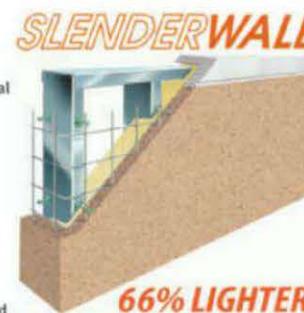
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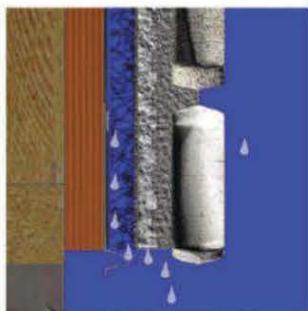
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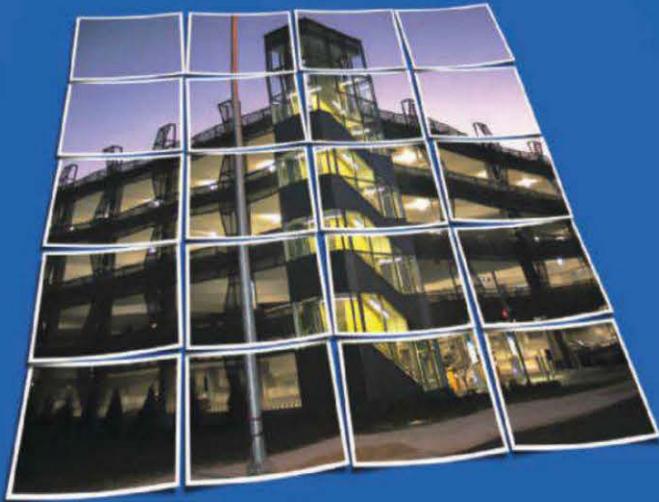
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New and Upcoming Exhibitions

MADE4YOU: Design for Change

Vienna

June 6–October 7, 2012

Offering a comprehensive survey of design innovations from corporations such as Amazon, Apple, and more, as well as seminal studies by a young generation of designers, this exhibition at the MAK Exhibition Hall was developed in close collaboration with Hartmut Esslinger, one of today's most influential designers. It emphasizes the significance of design as a crucial factor in fundamental social and technological transformations in the 21st century. Visit mak.at.

Dine with Design: A Culinary Event to Benefit the Glass House

New Canaan, Connecticut

June 9, 2012

This epicurean event at the Philip Johnson Glass House includes the "Modern Picnic," which provides an opportunity to sample savory dishes prepared by six award-winning chefs and 10 talented artisans from across the country while exploring the buildings, grounds, and art collections located on the 49-acre site. The Food Film Festival will also come to the property. For more information, visit philipjohnsonglasshouse.org.

Judith Turner: The Flatness of Ambiguity

Ann Arbor, Michigan

June 9–September 2, 2012

Judith Turner is a noted American photographer whose subject is mostly architecture. Her training as a designer allows her to visually understand an architect's intention and to reveal it in compositions that she constructs and edits through her camerawork. This exhibition will present approximately 40 photographs spanning Turner's three-decade career. At the University of Michigan Museum of Art. Visit umma.umich.edu.

RUMBLE

Los Angeles

June 11–16, 2012

UCLA Architecture and Urban Design's end-of-the-year exposition engages students, faculty, and the international design community in a discourse on the forefront of contemporary design. With 10,000 square feet of studio and program installations, 200 projects on view, and 90 leading critics and practitioners, RUMBLE redefines the provocative opportunities confronting the next generation of architects. Visit ucla.edu.

Ute Decker

London

June 13–July 8, 2012

For her minimalist yet dramatic wearable sculptures, London-based jeweler Ute Decker has been described as "the architectural jeweler." This summer, the London Festival of Architecture showcases a solo exhibition of her pieces. At the Goldsmiths' Pavilion, Somerset House (June 13–17); at the Cockpit Arts Open Studios in Holborn (June 15–17); and in the Corner Shop Gallery on Clerkenwell Green (July 3–8). Visit utedecker.com.

AIA Houston Artist of the Year Award Exhibition

Houston

June 14–July 13, 2012

A parametric tree that emits a cloud of fog, a photo booth that captures a vortex of activity at parties, and a shipping container that soaks up the sun to produce its own power: These are a series of projects that create their own microclimates which will be exhibited at Architecture Center Houston by MetaLab, a multidisciplinary design firm that specializes in architecture, civic art, and product design. Visit aiahouston.org/ArCH.cfm.

London Festival of Architecture 2012

London

June 23–July 8, 2012

Held since 2004, this festival will reinforce London's reputation as an international creative hub, with a program of exciting events taking place all over the capital. The theme of this year's festival is "The Playful City," proposing ways in which both Londoners and visitors can use the city and its buildings in more creative, interactive, and healthy ways. At multiple locations in London. Visit lfa2012.org.

Stadia: Sport and Vision in Architecture

London

July 6–September 22, 2012

This summer, London's Olympic Park will be filled to capacity, but how did the tradition of the sports stadium begin? What were the origins of the thousands of stadia and sports arenas that can now be found on every continent? In this exhibition, Sir John Soane's Museum will trace the evolution of these iconic structures from ancient times to the London 2012 stadium in Stratford. Visit soane.org.

Designed to Win

London

July 25–November 18, 2012

Designed to Win celebrates the ways in which design and sports are combined, pushing the limits of human endeavor to achieve victories



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of increasing wonder. From the design of F1 cars to running shoes, bikes, and carbon fiber javelins, the quest for enhanced function is endless. This exhibition explores the ways in which design has shaped the sporting world. At the Design Museum. Visit designmuseum.org.

Ongoing Exhibitions

Snarkitecture: Furniture

Chicago

Through June 13, 2012

Snarkitecture's first solo exhibition at the

Volume Gallery consists of new works and site-specific installations, which combine to create a landscape of childlike wonderment. Furniture reconsiders our reality, often centering on creating confusion—whether with familiar objects in unexpected contexts, or through the dissolution of recognizable volumes into irrational forms. For more information visit wvolumes.com.

Future City Lab

Berlin

Through July 5, 2012

Organized as a peer-to-peer network, Future

City Lab seeks to mobilize the efforts of students of architecture and urban design around the world, combined with the expertise of the network experts. Through networking and social media technologies, Future City Lab is developing a global, grassroots discourse on how to address our cities' most pressing issues. At Aedes am Pfefferberg. Visit ftrctlb.com.

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New York City

Through July 15, 2012

This exhibition at the Skyscraper Museum chronicles the high-rise headquarters of New York's great metropolitan dailies from the 1870s through the 1930s in historical prints, films, architectural renderings, photographs, typesetting equipment, and, of course, newspapers, attempting to create a collage of this lost or fading world. Visit skyscraper.org.

The Utopian Impulse: Buckminster Fuller and the Bay Area

San Francisco

Through July 29, 2012

This architecture and design exhibition links the legendary Buckminster Fuller's radical idealism to local innovators inspired by his visionary thinking. The presentation will feature some 65 works, including prints, drawings, photographs, documentary video, books, models, and ephemera representing some of Fuller's most iconic projects. At the San Francisco Museum of Modern Art. For more information visit sfmoma.org.

Out Spoken: Lectures from the SCI-Arc Media Archive

Los Angeles

Through August 12, 2012

The MAK Center for Art and Architecture Los Angeles has invited four noted architects and scholars to mine the rich history of public presentations hosted by SCI-Arc and stage a preview of the content of the new SCI-Arc Media Archive, forthcoming in fall 2012. At SCI-Arc. Visit sciarc.edu.

Inventing the Modern World

Kansas City, Missouri

Through August 19, 2012

This exhibition traces the technological, design, and artistic innovations catalyzed by World's Fairs. It features furniture, ceramics, jewelry, textiles, and glass. In keeping with World's Fairs as incubators for technological and stylistic advancements, the Nelson-Atkins Museum of Art launched a design contest for a temporary pavilion which will be constructed on the museum grounds during the exhibition. Visit nelson-atkins.org.

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The Homestead Project—A Residence Reimagined

Rockland, Maine

Through September 23, 2012

This exhibition at the Farnsworth Art Museum features the designs of 10 architectural firms, including Henry N. Cobb of Pei Cobb Freed & Partners Architects, who have been charged with creating a home for a growing family in 2012. This home has been loosely modeled on the Farnsworth Homestead of 1849, designed for a businessman, his wife, and three children. Visit farnsworthmuseum.org.

Lectures, Conferences, and Symposia

A View from the Future

New York City

June 5, 2012

This lecture at the CUNY Graduate Center will illuminate the enormous transformation that has occurred in the architecture/engineering/construction industry over the past five years. Internationally acclaimed futurist Edie Weiner, joined by a panel of top experts, will discuss emerging new opportunities. For more information, visit bwaf.org.

HD Asia

Hong Kong

June 18–20, 2012

Positioned as the Asia Pacific region's leading conference dedicated solely to defining trends in the hospitality sector, this two-day event will offer unparalleled access to products, services, and industry insight that will provide further development for those in the hotel, resort, casino, health-care, restaurant, and purchasing businesses. At the Grand Hyatt Hong Kong. For more information, visit hdexpo.com.

Celebrating New American Architecture and Design: A Salute to Checkerboard Film Foundation

Washington, D.C.

July 6–7, 2012

In 1979, Edgar Howard founded Checkerboard Film Foundation, a nonprofit producer and distributor of films on the American arts for both public exhibition and archival purposes. It has created nearly 50 works in film and video since then. The National Gallery of Art will feature 10 of these films about architects and works of architecture over two days. Visit nga.gov.

Sketch at the Beach

Costa Brava, Spain

July 20–22, 2012

This three-day drawing and watercolor workshop explores the landscape and architecture of the

Costa Brava and will be conducted outdoors by Sophia Gruzdy, AIA, NCARB. Sessions are open to everyone. They will relate the experience of landscape to buildings and will focus on light, material, and visual grouping. For more information, visit campus.mob-barcelona.com.

Competitions

New Contemporary Art Museum

Registration Deadline: June 30, 2012

The aim of this international competition is to design a new contemporary art museum in the

heart of Buenos Aires. The architecture of this new building should reflect contemporary design tendencies. The proposal must not only attend to the specific function, but also take into consideration the urban insertion and its impact. Visit ac-ca.org.

Rebuild the National Cathedral in Port-au-Prince

Registration Deadline: July 15, 2012

This competition, sponsored by *Faith & Form* magazine and the Institut de Sauvegarde du Patrimoine National (ISPAN) in Haiti, seeks to engage international architects in the design

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of the National Cathedral in Port-au-Prince, which was almost entirely destroyed in the 2010 earthquake. The ideal design must engage the future and celebrate life, as well as memorialize. Visit competition.ndapap.org.

2012 World Monuments Fund/Knoll Modernism Prize

Nomination Deadline: July 31, 2012

This prize will be awarded in fall 2012 to a design professional or firm in recognition of innovative design solutions that preserved or saved a Modern landmark at risk. The prize was established to raise public awareness of the contribution Modernism makes to contemporary life, the important place Modernism holds in the architectural record, and the influential role that architects and designers play in preserving Modern heritage. Projects must have been completed in the past five years. Visit wmf.org/modernism.

Fentress Global Challenge 2012: Workplace of the Future

Registration Deadline: August 6, 2012

Employee productivity, environmental quality, information technology, and energy costs were of little concern when many of today's buildings were designed. Now they are of vital importance. This ideas competition invites students to share innovative ideas about the future of workplace architecture. The winning student will be awarded a prize valued at \$10,000, including \$3,000 cash and a paid internship at Fentress Architects. Second and third place winners will receive cash prizes of \$1,000 and \$500 respectively. Winning designs will be displayed at the Architecture and Design Museum in Los Angeles. Visit fentressarchitects.com/edge/global-challenge.

Silestone Design Contest

Submission Deadline: September 30, 2012

Silestone, a leader in natural quartz surfacing, introduces this new program to recognize independent designers on the forefront of creative and inspiring kitchen design. From bold backsplashes to innovative islands, Silestone is seeking designers who celebrate the influence of color and push the envelope of design possibilities in the foremost room of the home. A panel of high-profile design experts will judge and select three winning projects that feature Silestone natural quartz in a kitchen. The grand-prize winner will receive an all-expense-paid, six-day trip to Spain and \$2,500. Visit silestoneusa.com/contest.

E-mail information two months in advance to recordevents@mcgraw-hill.com. For more listings, visit architecturalrecord.com/news/events.

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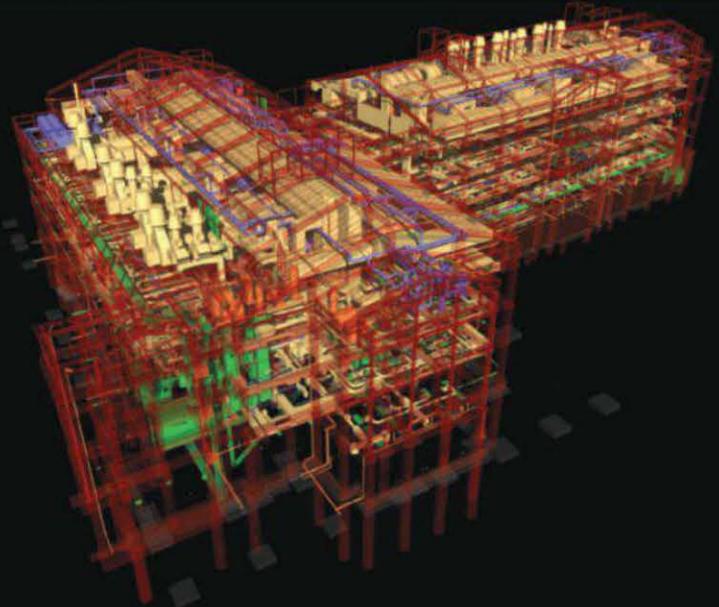


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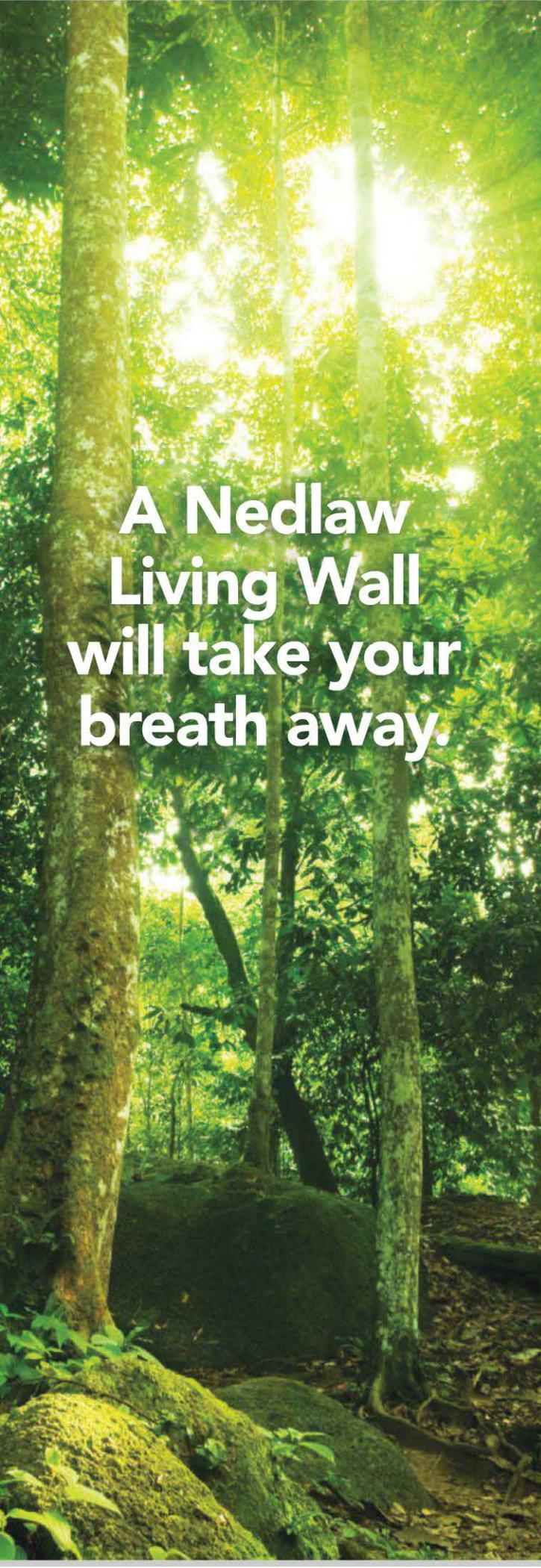


ALONG THE narrow cobblestone road of Shad Thames, a bit of preserved Victorian-era Britannia on the south bank of London, the adage “What’s old is new again” rings especially true. Walled in by warehouses built in the late 1870s and repurposed for use as offices and private residences in the 1980s, Shad Thames gets sunlight about “twice a year,” says London-based amateur photographer Rob Telford, who captured the street in a rare moment of early-morning illumination: “At about nine o’clock in the morning, the light comes down and you get these great shadows.” Wrought-iron bridges that once helped transport goods between inner-ring and dockside factories along the lane are now terraces for families and businesses. Yet for all its spruced-up-Dickensian charm, Shad Thames—which snakes past London’s Design Museum and is dotted with restaurants and boutiques of all kinds—is very much a result of modern forces, including the resurgent 1960s preservation movement. Change may be afoot across the city, but the past remains a clear lens for progress.

Asad Syrkett

Virtus

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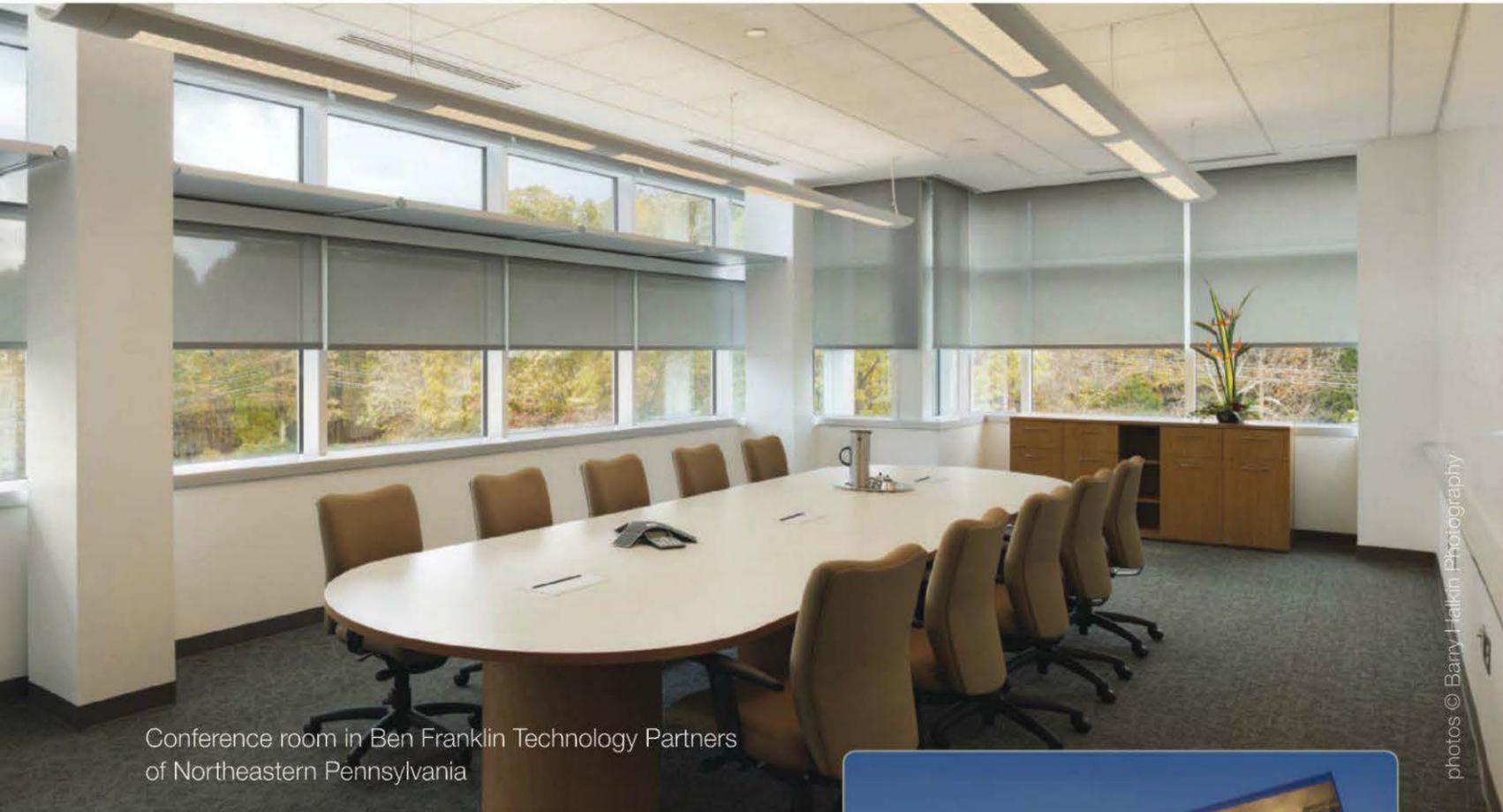
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