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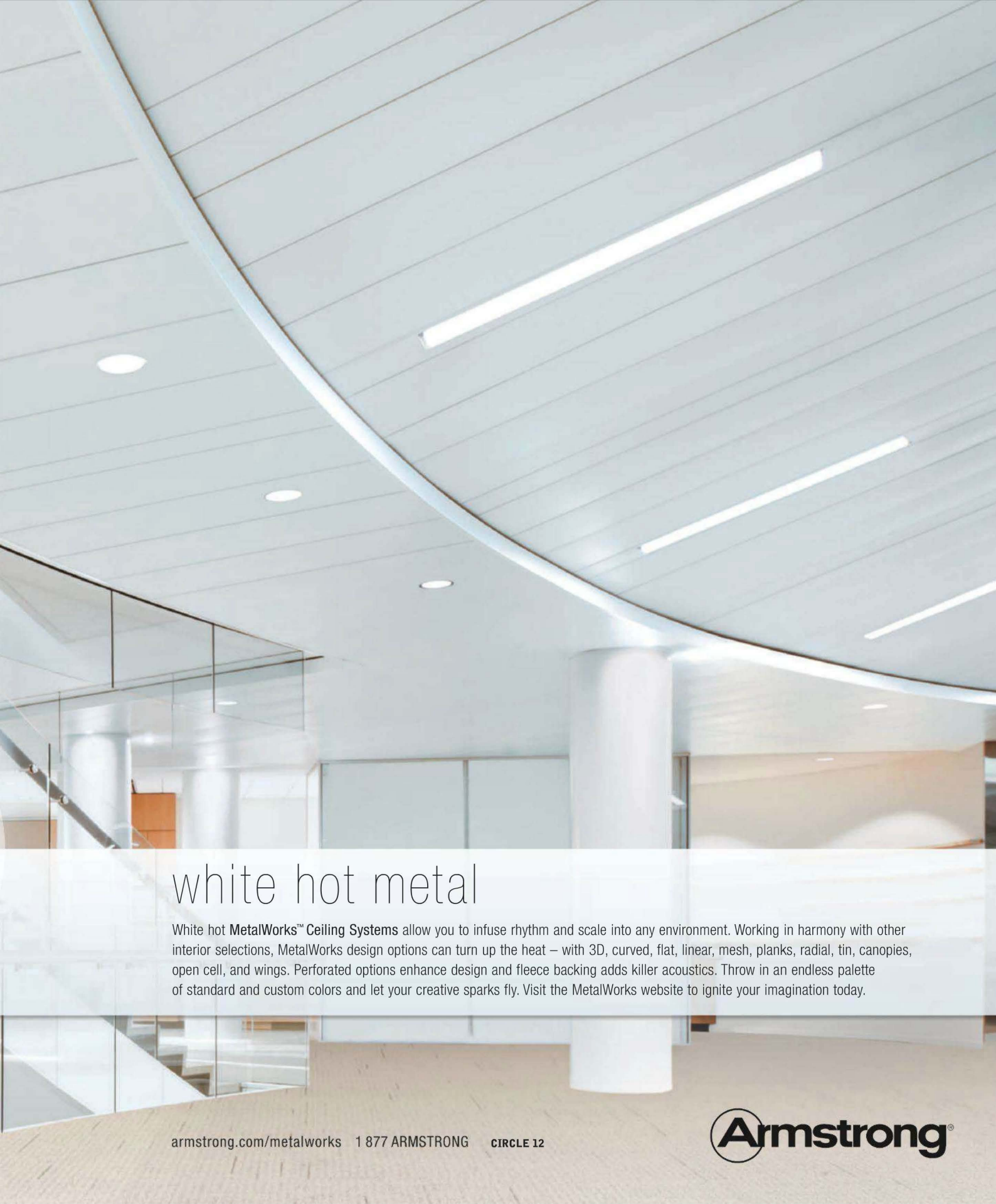

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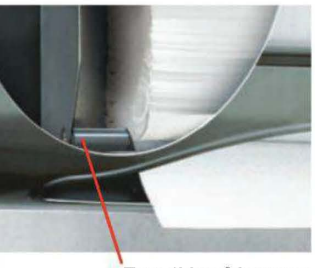

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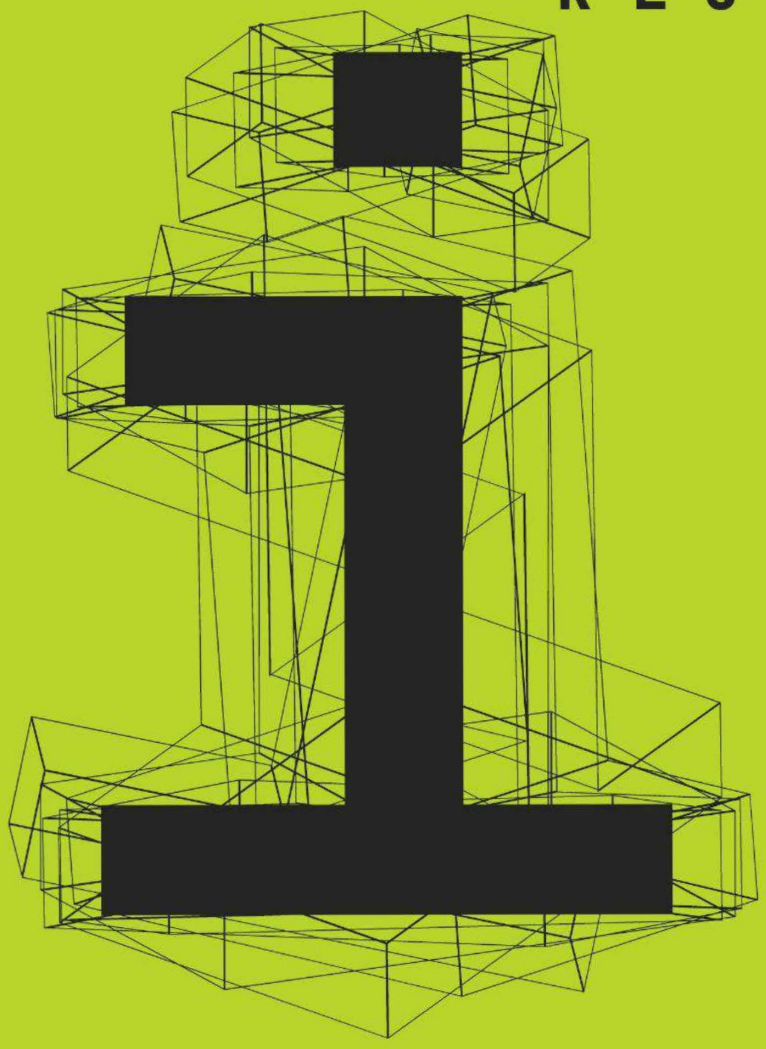

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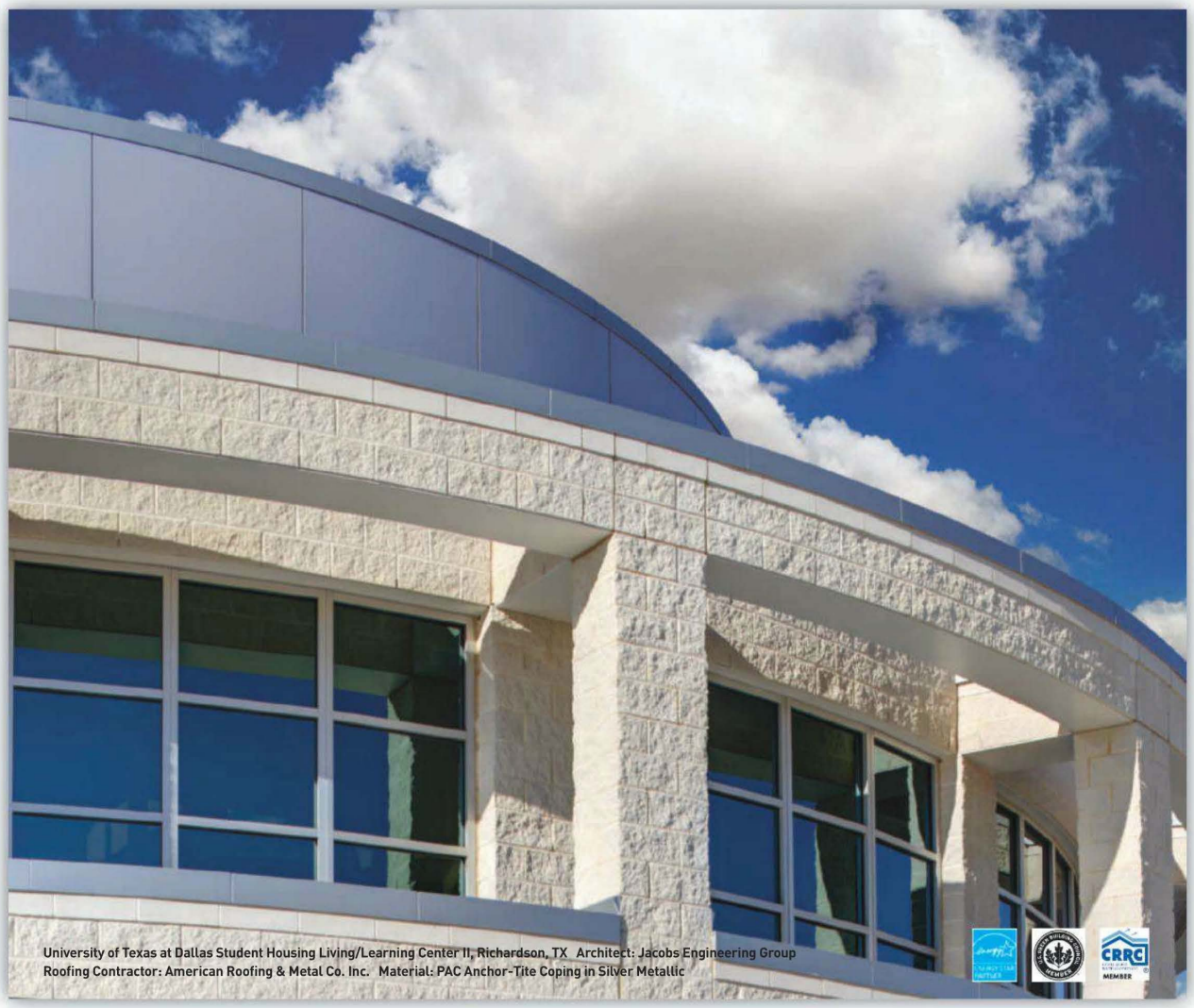

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ON THE COVER: EL B AUDITORIUM AND CONGRESS HALL, SPAIN, BY SELGASCANO. PHOTO BY IWAN BAAN.

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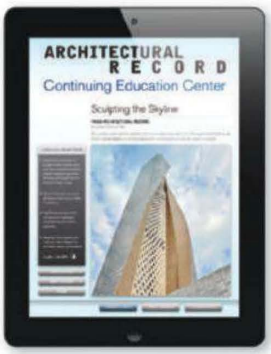

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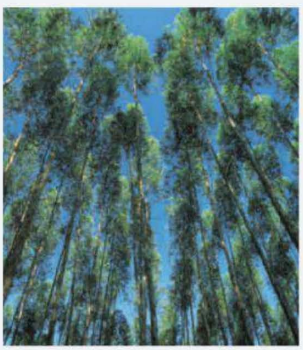

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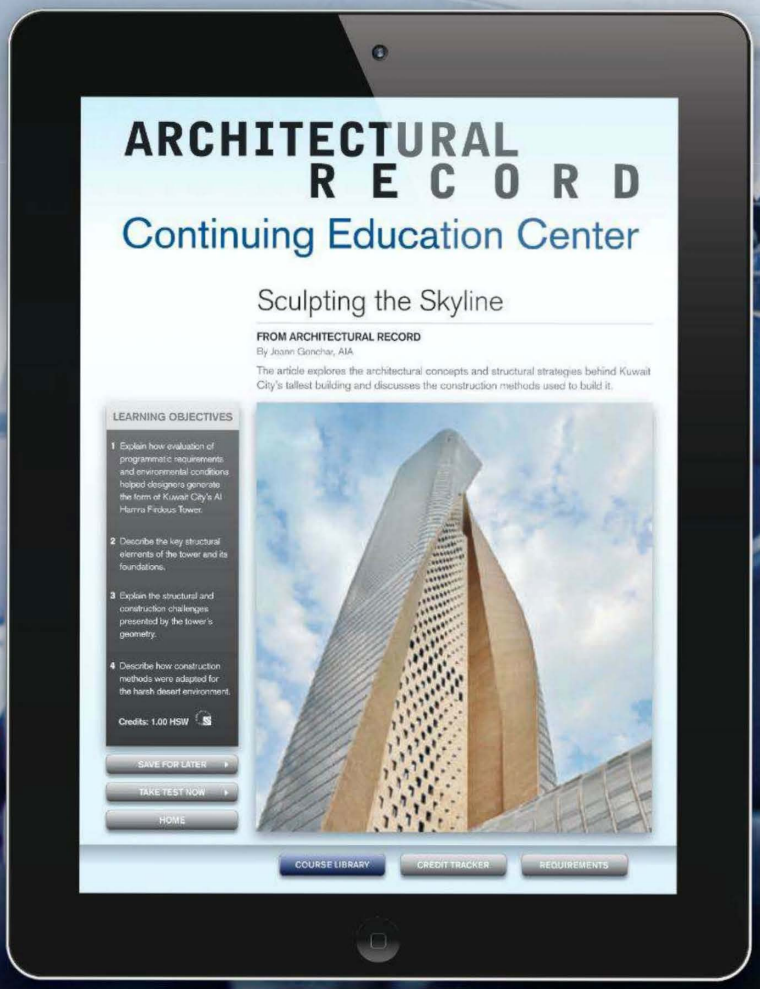

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Design in the Present Tense

Finding the delicate balance between tradition and innovation.

A FRIEND who recently returned from China remarked that the country reflects the past, present, and future, all at the same time. In smog-choked Beijing, where the 15th-century Temple of Heaven is still a beloved and much-visited oasis, the eye-popping, epic-scale works of contemporary architecture—the CCTV headquarters by OMA, the Bird's Nest by Herzog & de Meuron—announce that the future is already here.

But the latest Pritzker laureate, Chinese architect Wang Shu, has some issues with that future, and he used his platform during the award ceremony in Beijing a month ago to criticize the way his country has responded to economic growth, questioning the sweeping "demolition and new construction" in its rapidly expanding cities and the reliance on "gigantic and iconic architecture." Citing Wang for architecture with a "strong sense of cultural continuity and reinvigorated tradition," the Pritzker jury seemed to concur—though the prize has been awarded in the past to designers most famous for the kind of iconic buildings Wang decried. Some of those architects, including Frank Gehry, Zaha Hadid, and Jean Nouvel, were in the audience listening to Wang speak.

Traditional or radical? Those choices are fraught and usually complex. In Beijing, the destruction of *hutongs*—the narrow alleys lined with traditional courtyard houses—in favor of the soulless sprawl of high-rise apartment towers is a cultural loss, which Wang would understandably deplore. Yet as charming as those hutong houses might seem, most failed to provide such basic amenities as modern plumbing. And the problems of housing China's exploding urban population are on a scale never seen in human history. Architects are at the epicenter of these dilemmas and, at their best, try to navigate between respecting the past and embracing the future. Yet tensions over how to strike such a delicate balance keep cropping up.

In Washington, D.C., those who favor traditional design are declaring a momentary victory in their opposition to the proposed Eisenhower Memorial designed by Gehry. The bipartisan Eisenhower Memorial Commission, which has unanimously supported the design, is now delaying the approval process. While some members of the Eisenhower family have expressed dissatisfaction with aspects of Gehry's scheme, an organization called the National Civic Art Society wants to derail the design entirely. According to its website, the "Society will continue to seek the restoration of the classical tradition to its rightful primacy in our nation's capital." The memorial as planned, says the site, "would be an uncivil, brutal insult to the classical city envisioned by Pierre L'Enfant and our nation's Founders."

Interpreting our founders' convictions as extending to 21st-century design is an astonishing exercise in fantasy; most of the founding fathers were radicals, at least in politics, in their day. But the leaders of the National Civic Art Society are clever at portraying themselves as the outliers now, terming their movement for classical architecture antielitist and the "new counterculture."

In this issue of RECORD, we showcase architecture that *we* think is antielitist, through the ingenious use of humble materials in projects that reflect artful mediation between tradition and innovation. In Cartagena, Spain—a onetime Roman port with a long history visible in its ancient amphitheater and centuries-old ramparts—a seaside congress center has been created almost entirely of gorgeously colorful plastic, in a form that echoes the shipping containers on neighboring wharves. And in another locale with Roman roots—Alise-Sainte-Reine, France—a drum-shaped building, cloaked in larch wood strips, commemorates the site as the place where Julius Caesar finally defeated the Gauls to expand his empire.

Between that distant past and an unknowable future, the present is always a good place to land. And while the greatest architecture conveys an aura of timelessness, it also reflects the authenticity of its own time and place. ■

Cathleen McGuigan

Cathleen McGuigan, Editor in Chief

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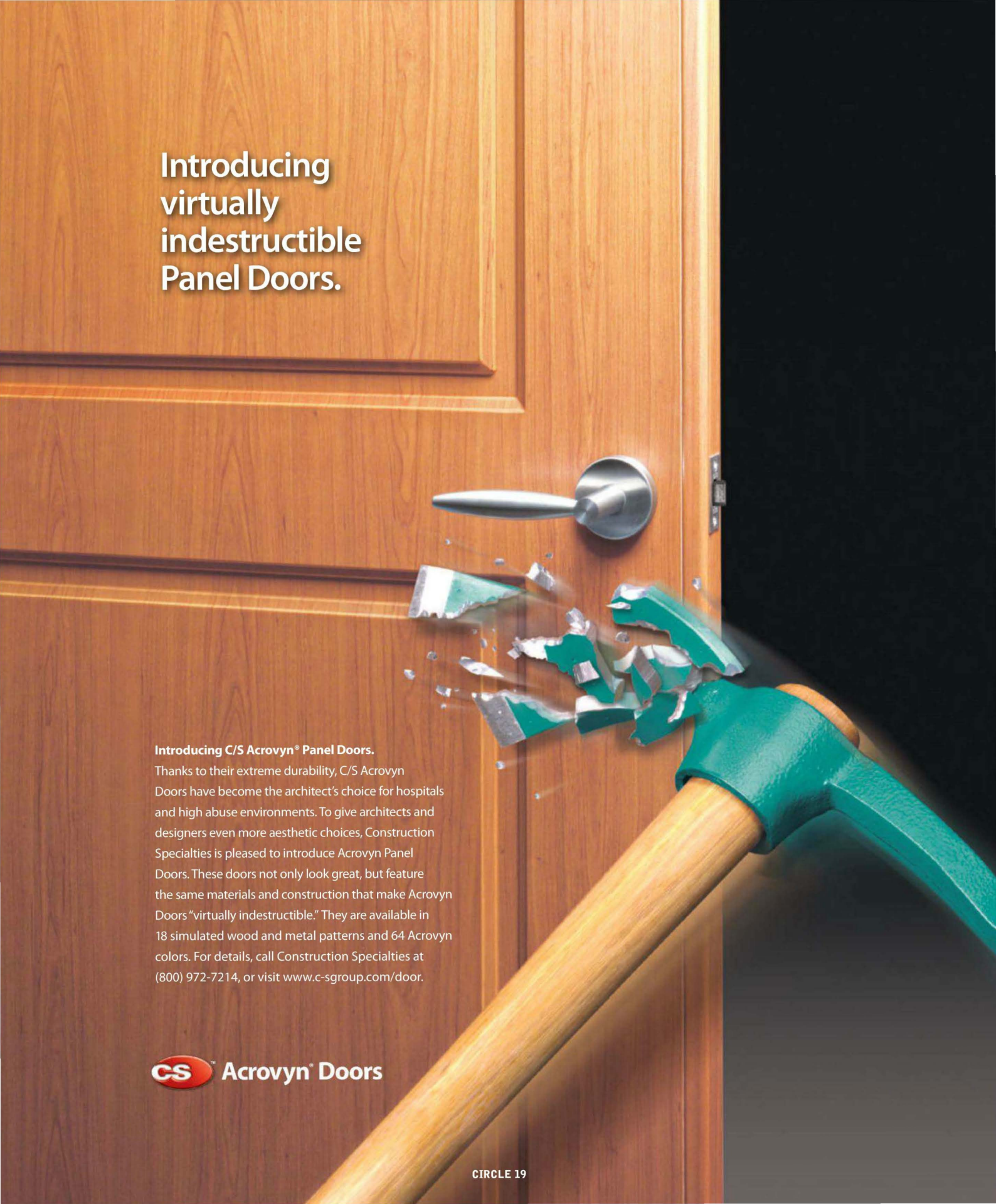
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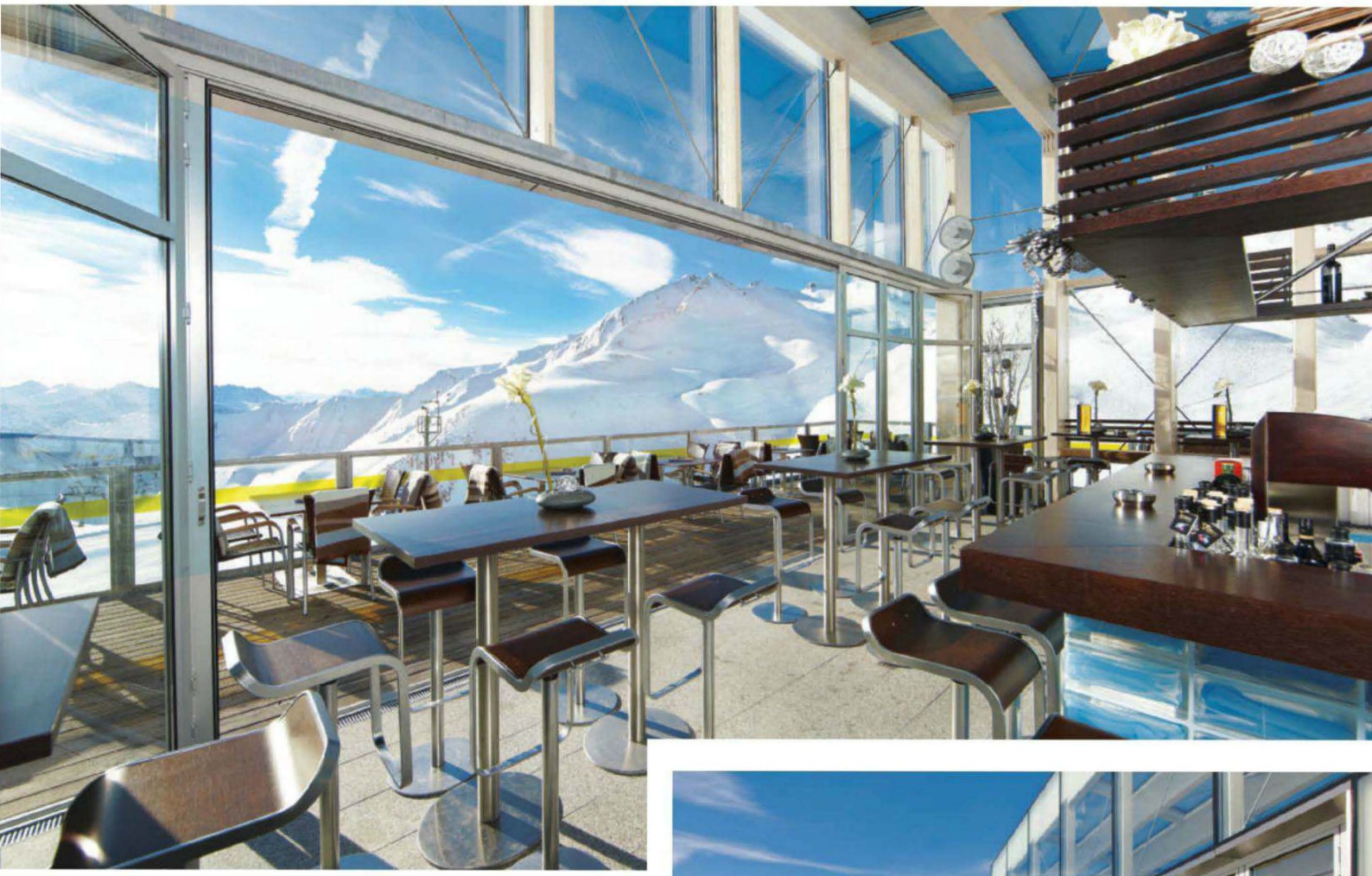

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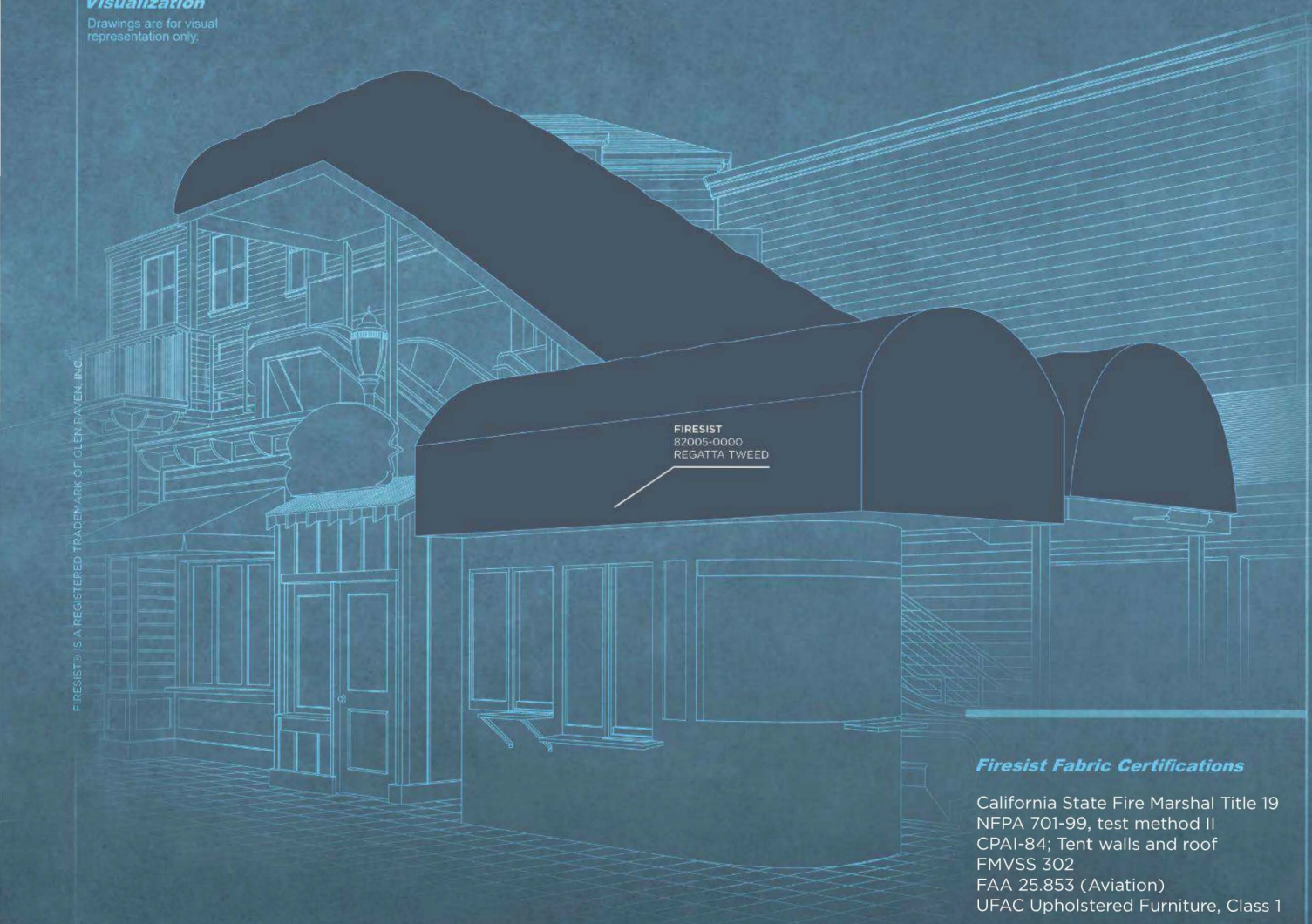

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"You make the divine human, and the human divine." *–AIA President Jeffery Potter's parting words during the closing ceremony on May 19 at the AIA convention in Washington, D.C.*

Battered by the Recession, Architects Pursue New Careers

BY C.J. HUGHES

BRANCHING OUT Yeekai Lim started a coffee company in 2009 due to a slowdown in architectural work.

THE RECESSION and its aftermath have clearly taken a toll on the architecture profession. In May, during the AIA's annual convention, Kermit Baker, the institute's chief economist, reported that 60,000 payroll jobs had been lost at firms over the past four years, with 36,000 of them being designers and architects. Of that group, about a third have found work outside of architecture, according to surveys conducted by the AIA.

Roughly 6,000 of these architects will likely quit the profession for good, the surveys found—a move that could have serious ramifications. This doesn't even account for recent graduates who, unable to find jobs at firms, may pursue work in entirely different fields. According to sources we interviewed, these new career paths vary widely, from culinary endeavors to digital game design.

"I hung on to my desk as long as I could afford to, but I realized I wasn't going in nearly as much," says Yeekai Lim, 39, who ran his own practice while also holding down jobs at various firms over the years. In 2009, he decided to pursue his second passion: coffee.

For years, Lim had been experimenting with beans and brewing styles at his California home and had become "obsessed with this notion of the perfect cup." This ultimately led him to found Cognoscenti Coffee, which began as a coffee cart. Today, Lim has six employees and two coffee shops: one in Los Angeles and another opening soon in Culver City. Moreover, his business is turning a profit, he says.

Lim hasn't abandoned architecture entirely. He designed his two stores, and he's working for a client on a restaurant in Los Angeles. He doesn't know if he will ever return to architecture full time, but if he does, his coffee company experience will be a boon. Pouring lattes "has definitely provided a lot of insight on client-architect relationships," he says. "I better understand the service side, which is what architects should be focusing on."

Also drawn to food service was Natasha Case, who, after graduating from UCLA in 2008, went on to design hotels for Disney. But after her six-month contract wasn't renewed due to the recession, Case started an ice cream company in 2009 with a friend. Coolhaus—whose name is an amalgam of Koolhaas and Bauhaus—now has 10 trucks, two carts, and an L.A. storefront, where customers can choose flavors such as Louis Pe-Kahn and Mint-alism. The company's ice cream sandwiches are also sold in certain Whole Foods Markets. Case says her architecture know-how has been helpful, particularly in regard to packaging design. "I'm obviously not working in CAD," she says, "but there's a huge amount that has translated from my background."

Some architects *(continued on next page)*

New Life for L.A. Landmark

The Los Angeles County Museum of Art (LACMA) has owned the Art Deco building at Wilshire Boulevard and Fairfax Avenue—home of the May Company department store from 1939 to 1993—for almost 20 years, but has never quite known what to do with it. Meanwhile, the Academy of Motion Picture Arts and Sciences has been trying to build a museum for decades. A recently unveiled plan resolves both issues.

The May Company building will house a movie museum.

In late May, the Academy announced that it had hired Renzo Piano Building Workshop and Zoltan Pali, principal of the local firm SPF Architects, to convert the historic landmark into a movie museum. The Academy will lease the building—designed by Albert C. Martin and S.A. Marx—from LACMA. The facility could open as early as 2016. Piano says the challenge will be to create something new inside while preserving the facade. He adds that the edifice represents a golden age in Hollywood: It debuted the same year as *Gone with the Wind* and *The Wizard of Oz*. *Fred A. Bernstein*

PHOTOGRAPHY: © SYE WILLIAMS (LEFT); COURTESY WIKIPEDIA (RIGHT)

(Recession, continued)
determined to stick with the profession are expanding the services they offer. Robert Vecchione, of Sarasota, Florida, has run a private practice since 1997. Two years ago, he began advising nonprofit clients on how to drum up additional revenue in the face of declining public funding. He helped the Easter Seals of Southwest Florida, for instance, conceive a plan to sponsor design competitions for toys that can later be sold in stores.

For aspiring architects, finding a job is no easy feat. Those who recently completed undergraduate architecture programs have the highest rate of unemployment, at 14 percent, of any profession, according to a recent report from the Center on Education and the Workforce at Georgetown University. (In contrast, the rate for those working in law is 8 percent; for journalists, 7 percent.) These headwinds come against a national overall jobless rate of 8.2 percent.

Some graduates are forced to take drastic measures. Drew McNamara, 22, finished his MS.Arch. degree—which combines architecture, engineering, and construction—in May. Unable to land a job, he's considering enlisting in the Army or Navy, where he hopes he'll be tapped to do design work. He adds that joining the military would help him repay "tens of thousands of dollars" of student loan debt.

For others, the graphic design and tech industries are providing opportunities. To wit: Evan Sharp quit the M.Arch. program at Columbia University to take a product development job at Facebook. In 2011, he launched Pinterest, the popular photo-sharing site.

Kemper Smith, 30, who was laid off from a Mississippi firm, is now working with Pitch Interactive, a Wisconsin company that creates eye-catching infographics for magazines like *Wired*. "I'm kind of the oddball with the architecture degree," he says, though discussions among the staff about form versus function recall critiques from college.

One field that's expected to lure architects moving forward is digital gaming, where CAD skills are a huge plus, explains Brandii Grace, creative director for the game developer Transform Entertainment. Salaries for designers usually start at $30,000 and rise to $80,000, though the sector is hard to break into and turnover is high. Still, Grace says architects often excel as "level designers," who create realistic-looking rooms. "Architects are good at designing corridors where the walls slant inward, creating a claustrophobic feel. Or they might bevel a window to force players to look out of it," she says. For some architects, designing for the virtual world may end up paying their real-world bills. ■

Gensler Takes the Crown

BY LAURA MIRVISS

NABBING THE title from long-standing leader AECOM, Gensler claimed the top spot in our 2012 "Top 250 Architecture Firms" list, which ranks U.S. companies based on architectural revenue from the prior year. (The top 25 firms are spotlighted here, with the full list available online.) Gensler's $764 million in revenue far surpassed AECOM's $445 million; it also marked a record high for the San Francisco–based firm. "It truly has been about global growth," says Andy Cohen, Gensler's executive director: In 2011 the firm opened seven offices in burgeoning cities such as São Paulo and Bangkok.

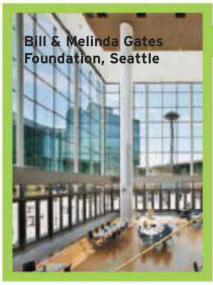
Overall, this year's survey points to industry growth. Collectively, the 250 firms earned $10.4 billion in revenue in 2011, up from $9.4 billion in 2010. Domestic income rose from $7.6 to $8.2 billion; international income, from $1.8 to $2.2 billion. Firms like RTKL and Kohn Pedersen Fox now generate more than half their revenue from foreign projects.

Other items of note from our 2012 survey include CH2M HILL's leap from 84th to fourth place; the company underreported its architectural revenue last year, according to its financial analyst. Also, acquisitions continue to be a boon for some firms. Jacobs, a newcomer to our ranking, clocked in at no. 6 (it bought KlingStubbins last fall). And Stantec, which has acquired several firms, is swiftly ascending the list: It ranked 51st in 2010, and 17th this year.

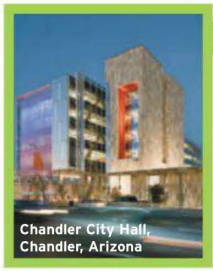
TOP 25 U.S. ARCHITECTURE FIRMS OF 2012

Companies are ranked by revenue (in **millions of dollars**) for architectural services performed in 2011. This data also appears in *Engineering News-Record*'s Top 500 Design Firms list, which, unlike our ranking, also includes engineering-exclusive firms.

The Tower at PNC Plaza, Pittsburgh



Bill & Melinda Gates Foundation, Seattle



Chandler City Hall, Chandler, Arizona

RANK 2012	RANK 2011	FIRM, U.S. HEADQUARTERS	TYPE OF FIRM	TOTAL ARCHITECTURAL REVENUE
1	2	**Gensler,** San Francisco	A	764.08
2	1	**AECOM,** Los Angeles	EA	445.40
3	3	**Perkins+Will,** Chicago	A	365.40
4	84	**CH2M HILL,** Englewood, CO	EAC	365.10
5	4	**HDR Architecture,** Omaha	EA	364.10
6	--	**Jacobs,** Pasadena, CA	AEC	353.71
7	5	**HOK,** St. Louis	AE	318.28
8	6	**URS,** San Francisco	EAC	294.10
9	8	**HKS,** Dallas	AE	213.03
10	10	**Skidmore, Owings & Merrill,** New York City	AE	188.90
11	12	**Cannon Design,** Grand Island, NY	AE	185.10
12	7	**NBBJ,** Seattle	A	181.64
13	9	**RTKL,** Baltimore	EA	164
14	20	**Kohn Pedersen Fox Associates,** New York City	A	143.88
15	11	**Leo A Daly,** Omaha	AE	136.36
16	15	**Perkins Eastman,** New York City	A	130
17	24	**Stantec,** Irvine, CA	EAL	129.90
18	19	**Callison,** Seattle	A	128.48
19	14	**ZGF Architects,** Portland, OR	A	120.25
20	17	**Rafael Viñoly Architects,** New York City	A	112.67
21	13	**Bechtel,** San Francisco	EAC	108
22	16	**SmithGroupJJR,** Detroit	AE	96.50
23	33	**Ingenium International,** Detroit	AE	90
24	21	**HMC Architects,** Ontario, CA	A	87.97
25	18	**Populous,** Kansas City, MO	A	86

Key to firm types

A Architect
AE Architect Engineer
AP Architect Planner
EAL Engineer Architect Landscape
AEC Architect Engineer Contractor
(not all combinations listed)

See the entire Top 250 Architecture Firms list at architecturalrecord.com/practice.

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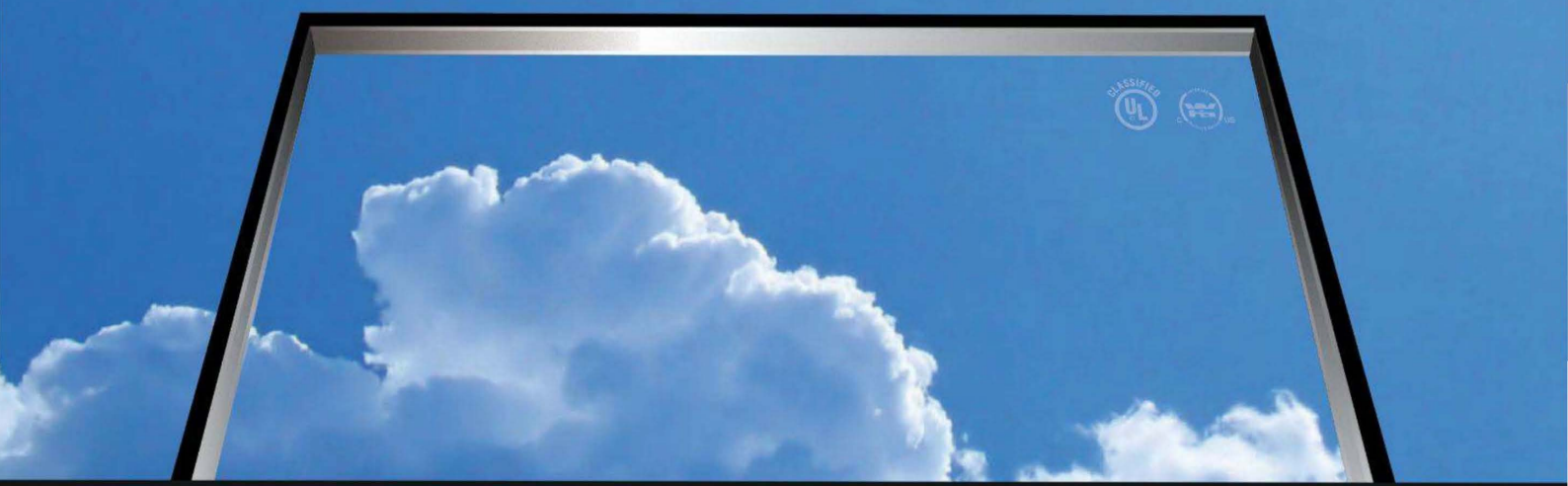

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"Innovation District" Rising in Boston

BY FRED A. BERNSTEIN

Announced years ago, the Seaport Square development is finally gaining traction.

IF EVERY journey begins with a single step, Seaport Square, a 23-acre mixed-use development on the Boston waterfront, is starting with a single-story building.

In May, Mayor Thomas Menino held a groundbreaking ceremony for the Boston Innovation Center, an angular, 12,000-square-foot structure designed by local architects Hacin + Associates. The building will give tech masterminds a place to meet with venture capitalists—much as they do at the successful Cambridge Innovation Center across the Charles River.

The center may soon be dwarfed by office, hotel, and residential buildings expected to total some 3.5 million square feet. But with the city branding Seaport Square as an "innovation district"—part of a larger initiative to draw tech companies to Boston—the center may be the neighborhood's symbolic heart. Its corrugated metal facades will support two large LED signs that will both promote events and provide a revenue stream from advertising. Inside, walls will be covered by whiteboards or blackboards. "It's going to be a completely 'writable' building, almost like a big work surface," says architect David Hacin.

The Innovation Center will be a counterpoint to the massive buildings called for in Seaport Square's master plan, conceived by Kohn Pedersen Fox (with input from ADD Inc. on retail facilities). Once a rail yard, the site is now a vast expanse of parking. In January, the Boston Redevelopment Authority gave the developer—a partnership of Boston Global Investors and Morgan Stanley—permission to start construction of the multi-billion-dollar project. Beyond the Innovation Center, the permit process has begun for five buildings, with work slated to commence in 2013.

James von Klemperer, a KPF principal, says the master plan continues existing street grids into the new district, as if historic neighborhoods were knitted together. Height limits due to the site's proximity to Logan Airport mean buildings will top out at 250 feet, resulting in wide blocks at ground level. According to Hacin, smaller structures, such as his Innovation Center, will help "establish a granular human scale to the district."

The development will also feature a green plaza—the namesake square—designed by Reed Hilderbrand, the Boston landscape architecture firm. The plaza will serve as a public gathering space, much like New York's Bryant Park, which KPF cited as inspiration. ■

An Ellis Island hospital complex appears on the 2012 list.

America's Most Endangered Sites

In June, the National Trust for Historic Preservation released its 2012 list of America's 11 Most Endangered Historic Places. The trust, a private nonprofit organization, has produced the annual ranking for 25 years, drawing attention to more than 230 sites—including buildings, landscapes, and entire communities—at risk of destruction or significant damage. View this year's list, along with those from prior years, on our website.

noted

USGBC Delays Update to LEED Rating System

In a surprise move, the U.S. Green Building Council is postponing plans to ballot the next version of LEED until as late as June 2013. The decision came in response to outcry from building industry professionals who expressed myriad concerns about the proposed changes.

Phifer Unveils Design for Corning Museum Expansion

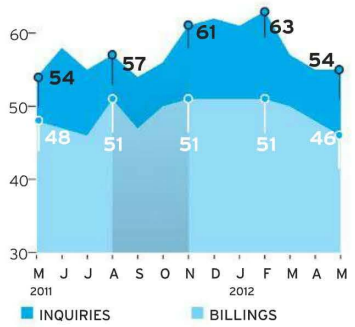
Thomas Phifer revealed in June his scheme for a $64 million expansion to the Corning Museum of Glass in Corning, New York. Completion is slated for 2014. A 26,000-square-foot addition will adjoin the museum's International Style building by Harrison & Abramovitz, which opened in 1951.

MoMA's Young Architects Program Expands to Turkey

Offered in New York, Rome, and Santiago, the Museum of Modern Art and MoMA PS1's Young Architects Program is now taking root in Istanbul. Emerging Turkish designers will be invited to create exterior temporary installations for the Istanbul Museum of Modern Art.

National Gallery Presents Architecture Film Series

On July 6 and 7, the National Gallery in Washington, D.C., will showcase 10 architecture documentaries produced by the Checkerboard Film Foundation, a nonprofit founded in 1979. Film subjects include Studio Gang Architects, KieranTimberlake, and Vincent Scully, among others.



Significant Drop for ABI

The Architectural Billings Index hit 45.8 in May, down from April's 48.4 (a number below 50 denotes a billings decrease). All regional and building sectors showed declines. "This should be an alarm bell going off for the design and construction industry," says AIA chief economist Kermit Baker. The May inquiries score was 54.0.

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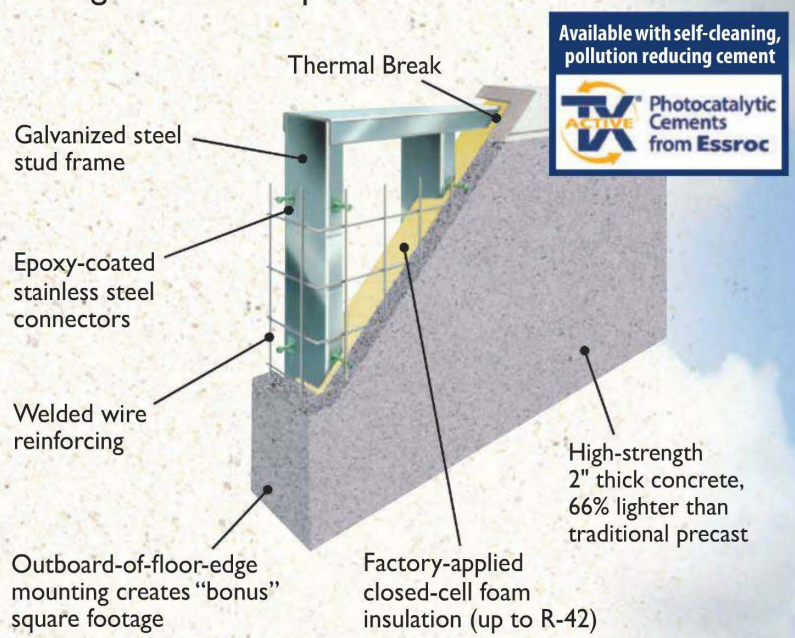

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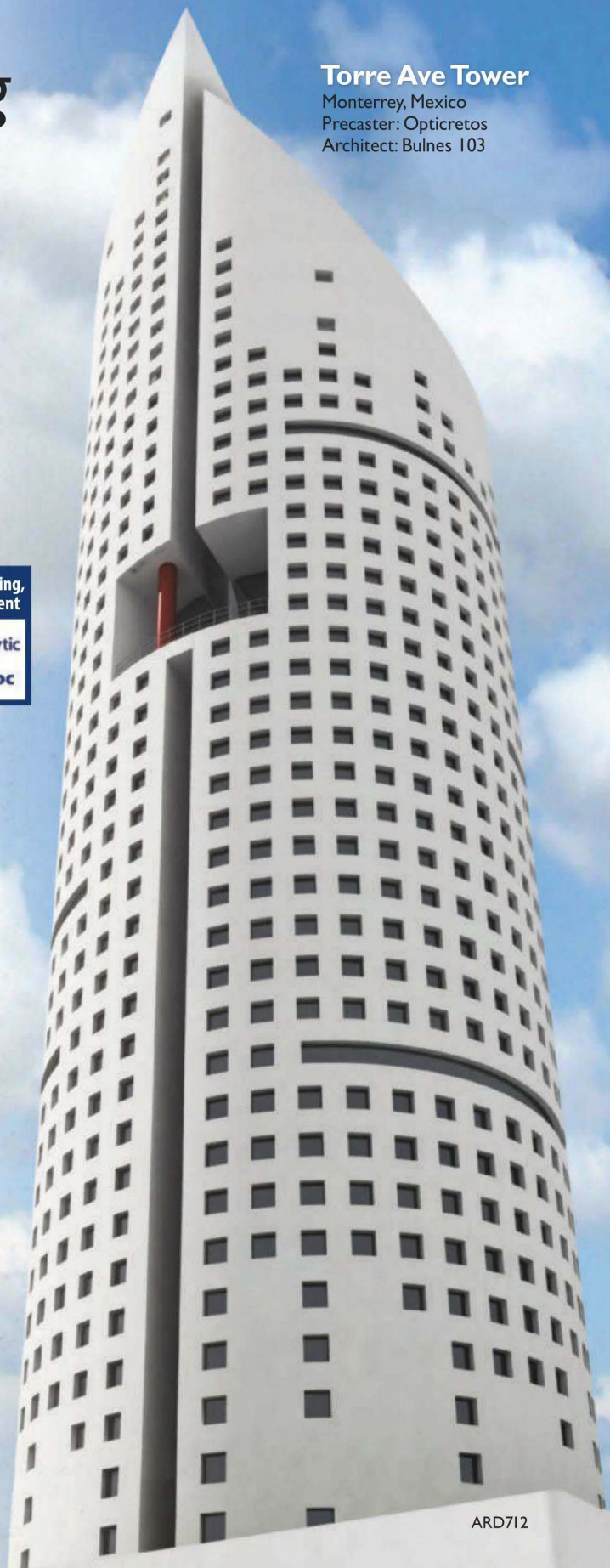
Monterrey, Mexico
Precaster: Opticretos
Architect: Bulnes 103



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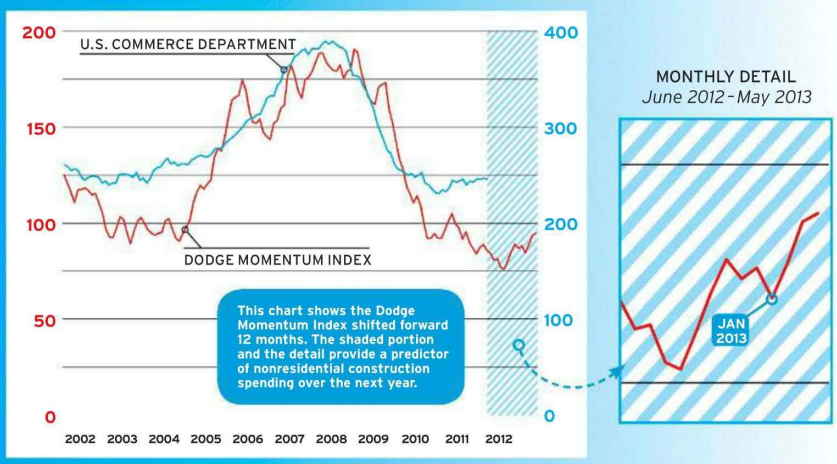
perspectivestats

Data from McGraw-Hill Dodge Analytics

DODGE MOMENTUM INDEX DIPS IN MAY

In May, the Dodge Momentum Index slipped 1.2% to 93.6 (2000=100). The decrease follows a 1.0% gain in April, when the index hit 94.8 – its highest level since August 2010. In recent months, the index had been showing a gradual upward trend after falling to 77.1 in July 2011. May's softening reflects a 4.0% decline for commercial projects, which outweighed the effect of a 1.5% gain for institutional buildings.



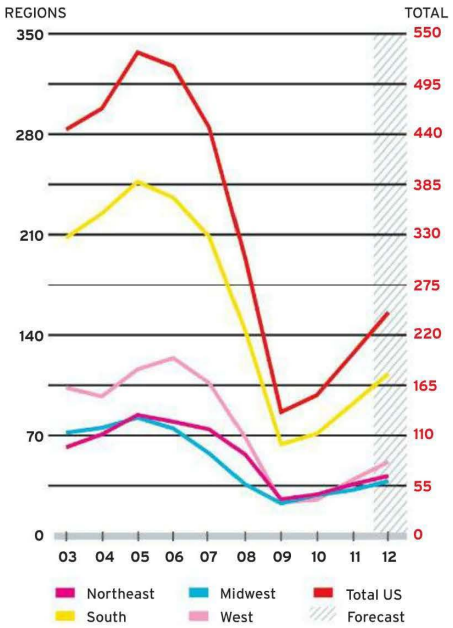
The Dodge Momentum Index is a 12-month leading indicator of construction spending. The information is derived from first-issued planning reports in the largest database of construction projects in the U.S., McGraw-Hill Construction's Dodge Reports. The data have been shown to lead the U.S. Commerce Department's nonresidential spending by a full year.

MULTIFAMILY CONSTRUCTION

Multifamily construction has grown 46% since hitting bottom in 2009. This year, the sector is expected to continue to advance, increasing by 23%.

Multifamily Starts by Region

Including U.S. total and 2012 forecast figures by thousands of dwelling units



Top Metro Area Markets

Total Mulifamily Starts, 2007–2011*

RANK	REGION	2007-2011
1	New York City	122,027
2	Washington, DC	48,112
3	Dallas	42,448
4	Houston	39,927
5	Chicago	36,303

*Multifamily dwelling units

Top 2012 Multifamily Residential Projects

Ranked by Construction-Starts Value through April*

*Values indicate the construction cost of the residential portion of mixed-use developments.

$184M
PROJECT: *388 Bridge Street*
ARCHITECT: ***SLCE Architects***
LOCATION: *NYC*

$164M
PROJECT: *The Village*
ARCHITECT: ***Koning Eizenberg Architecture/ Moore Ruble Yudell Architects***
LOCATION: *Santa Monica, CA*

$140M
PROJECT: *The Watershed*
ARCHITECT: ***Cook + Fox Architects***
LOCATION: *NYC*

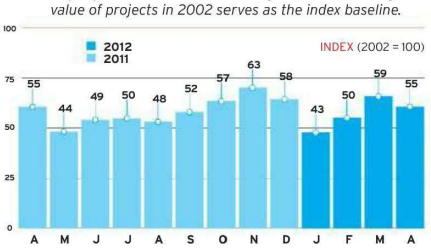
$90M
PROJECT: *Crescent Village*
ARCHITECTS: ***MVE & Partners***
LOCATION: *San Jose, CA*

$89M
PROJECT: *250 North 10th Street*
ARCHITECT: ***SLCE Architects***
LOCATION: *NYC*

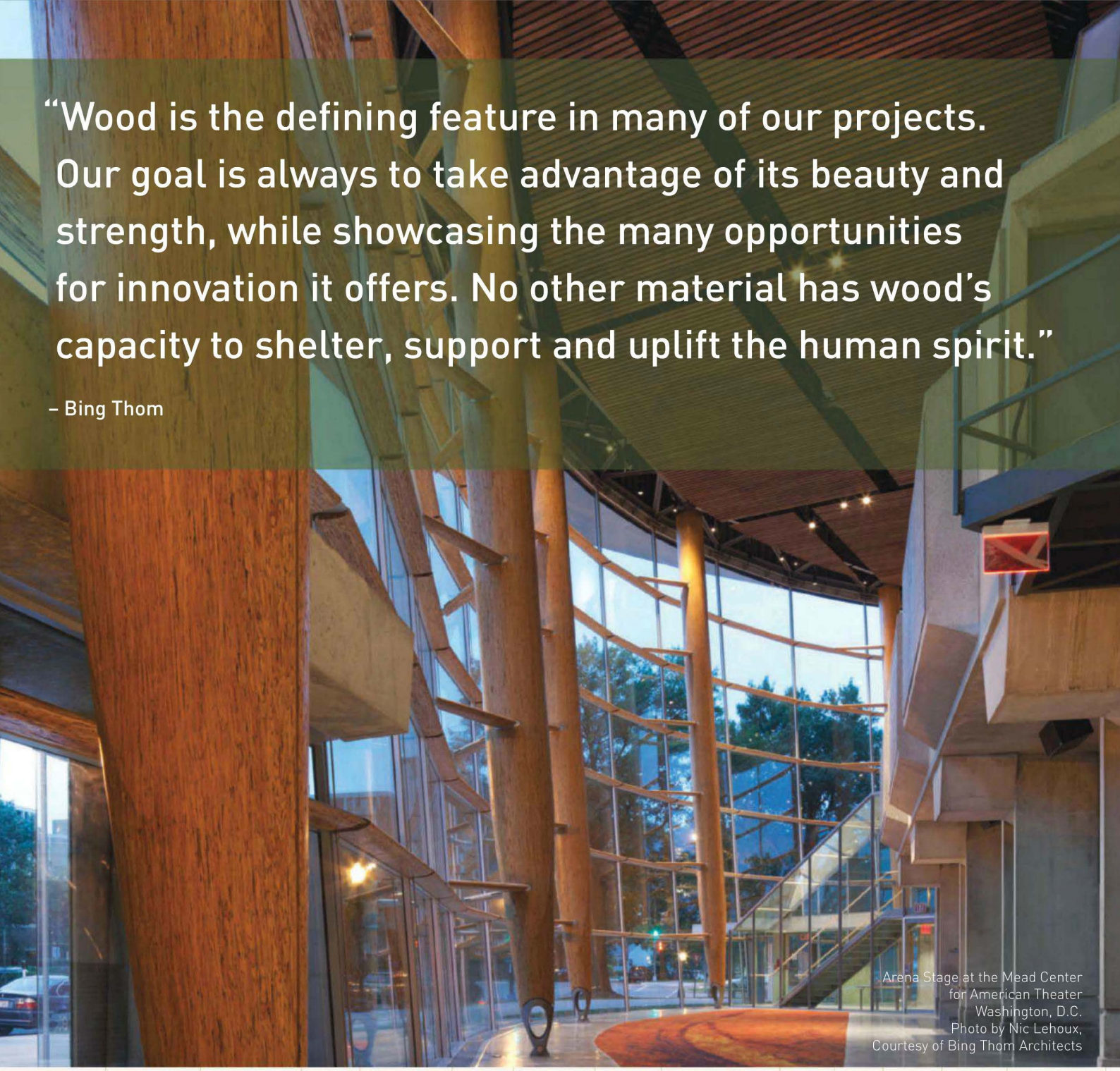
THE DODGE INDEX FOR MULTIFAMILY CONSTRUCTION

4/2011 - 4/2012

The Dodge index for multifamily construction is based on seasonally adjusted data for U.S. housing starts. The average dollar value of projects in 2002 serves as the index baseline.



McGraw-Hill Dodge Analytics tracks projects from predesign through construction to capture hard construction costs, square footage, and other key statistical information.



Arena Stage at the Mead Center
for American Theater
Washington, D.C.
Photo by Nic Lehoux,
Courtesy of Bing Thom Architects

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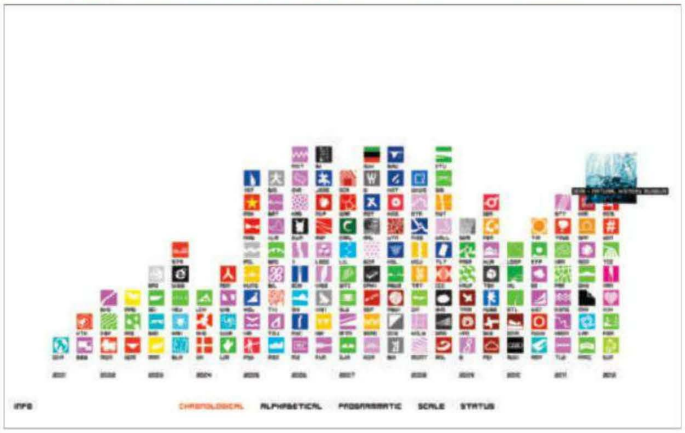
perspective**commentary**

WEBSITES ARE A VITAL MARKETING TOOL. UNLESS YOU'RE A SUPERSTAR DESIGN FIRM, STEER CLEAR OF ARCHISPEAK AND TRICKY GRAPHICS. USERS WANT A SITE THAT IS CLEAN AND SIMPLE.

BY FRED A. BERNSTEIN



OMA's home page (top) changes daily and typically features a news announcement laid on top of a full-screen image. BIG's site (bottom) is whimsical yet difficult to navigate.

JULIE SNOW is a terrific architect. But you might not know it from her website. Say you'd like to see her residential projects. From a series of tiny images darting across the bottom of the screen, you have to pick the ones that look like houses, and click before they disappear—like playing a video game. Simultaneously, the words "transparency enclosure veiling lightness structure detail assembly material surface performance technology transformative connection release" also dart about, as if to make the video game harder. And if you want to just pick up the phone, well, try finding the contact information.

Snow says her site is almost 15 years old—an eternity in web years—and that it has served her well during that time. (And she is in the process of developing a new site, she says, having heard the criticisms before.) Meanwhile, she's in very good company. Some of the best architects have websites that are flashy but dysfunctional. "Too many architects see their websites as design projects rather than marketing projects," says Richard Staub, a marketing consultant based in New York. Sites that are too complicated to use may send a subliminal message: This firm cares more about how things look than how they work.

If you're a superstar, it's OK to play hard to get on the web. Frank Gehry's website doesn't have a single photo. Nor does SANAA's site, a "splash page" listing the firm's e-mail addresses. But that's more information than you'll find on Maya Lin's site. Lin has struggled to make time to create large-scale artworks; it's perfectly reasonable that her website has no contact information. Besides, she isn't close to the most reclusive designer on the web. That might be Peter Zumthor, who has no site at all.

But what works for Gehry and Zumthor isn't going to work for a young firm. Nor is the intellectual approach taken by OMA, whose site recently opened with a photo of Rem Koolhaas and Hans Ulrich Obrist interviewing a Japanese Metabolist. Of sites loaded with architecturespeak, Staub says, "Sometimes, I can't tell if they're talking to potential clients, or to other architects." Staub believes a website should explain in plain English—almost like a well-written résumé—how the firm addressed the challenges of each project.

Sites that have too many bells and whistles generally employ the animation software Flash. But Flash content takes time to load. (Potential clients may not stick around.) And it doesn't always show up in search engines. According to Kristen Richards, the tireless promoter of architecture through her website archnewsnow.com, people (whether journalists or potential clients) searching for architects may miss Flash-dependent sites. Not only that, Flash content doesn't load on most mobile devices—a final nail in the coffin.

Sites that are too complicated to use send a subliminal message: this firm cares more about how things look than how they work.

A few architects have gone to the other extreme, creating home pages without photos. That's true for Leong Leong Architecture in New York, whose home page is words-only (although the rest of the site offers images). True, the words are beautifully arranged—the site was designed by the polymath Marc McQuade, a project architect for David Adjaye who also takes on freelance work. "In a time when we're so saturated with flashy images, I was interested in testing the inverse," he says. The Leongs say they might add visuals once they have more work to show.

Another trend among young firms is to incorporate blog-style news feeds. That works if you're BIG, the Bjarke Ingels Group, which seems to make news every day. But if you don't have that much to announce—and who besides Ingels does?—the format may fall flat. And don't even try it if you don't have somebody to keep the site updated. In early June, the "news" tab at stanallenarchitect.com pointed to a blank screen. (This writer is sympathetic: I haven't updated my own website in years.)

But the most important thing, in the post–phone book era, is that people be able to reach you. Emulate Antoine Predock, who provides complete contact information for his Albuquerque, Los Angeles, and Taipei offices on his firm's home page. And list the e-mail addresses of actual people at the firm: If you want to reach the director of development at Morphosis, the website directs you to Kim Groves (k.groves@morphosis.net). By contrast, if you want to reach someone at Elkus Manfredi Architects, in Boston, you are asked to fill out a form and hit "send," not knowing if there's anybody at the other end. ■

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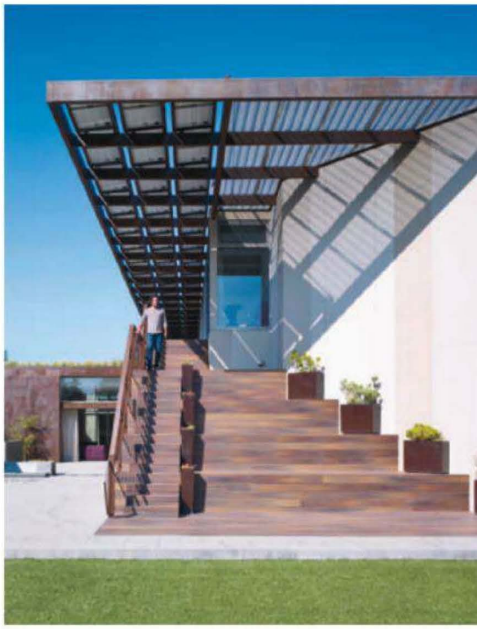
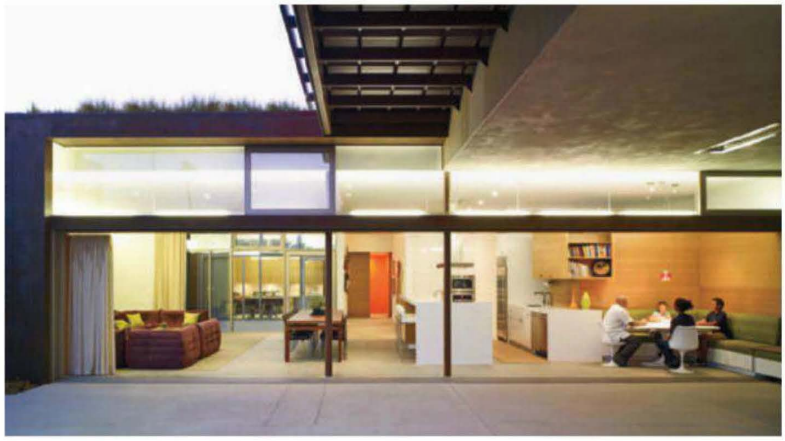
CIRCLE 35

FROM THE CREATORS OF AdvanTech

CAPITALIZING ON SOUTHERN CALIFORNIA'S CLIMATE, BROOKS + SCARPA'S HOUSE FOR A GROWING FAMILY GIVES THE PHRASE "GO OUTSIDE!" NEW MEANING, WITH SEAMLESS INDOOR-OUTDOOR SPACES.





BALANCING ACT The Yin-Yang House, named by the clients, unifies indoor and outdoor spaces into a whole. It appears solid from its street-facing facade (top left), clad in cement board, but gives way to courtyards. The living room (left) features a 50-foot-long sliding glass door. Bedrooms on the second floor open out onto a porch with direct access to the backyard (top right) and bamboo bleacher stairs.

BY LAURA RASKIN

LARRY SCARPA grew up in Florida, where the heat and humidity kept him indoors. "In Southern California, however, living outside is easy to do," says the architect, whose firm Brooks + Scarpa is based in Los Angeles. "Now I can't get away from imposing my desire on others." Recent beneficiaries of his imposition include a couple whose young children are friends with Scarpa's son. The family was living on a cramped lot on one of the canals in nearby Venice, but they gave up this otherwise desirable waterfront location for a Scarpa-designed, net zero energy, 4,700-square-foot house and roomy backyard elsewhere in the seaside district.

Family spaces trump private ones in the steel, glass, and bamboo house, which is L-shaped in plan and organized around outdoor courtyards. (It's technically a remodel, but Scarpa tore down most of the existing structure, keeping only the foundation, garage, and the perimeter wall on the east side.) While the house appears solid from the street, the front entry leads directly to one of these courtyards. From there, the entire backyard, all the way to the rear garden gate, can be seen through the glass-walled living/dining room, which flows from an open kitchen.

On the second floor, four small bedrooms keep the emphasis on the spaces where the family can be together, even if they're not engaged in the same activity. The bedrooms exit onto a bamboo deck and bleacher stairs, allowing children to bypass the rest of the house on their way inside or out. "I know from having a young kid of my own that you're always screaming, 'Inside or outside!'" says Scarpa.

To visually unify the house, the architect defined horizontal and vertical edges with a steel band that winds without interruption around the exterior. "It pulls all the pieces together, a continuous squiggle," says Scarpa. ■

GROUND FLOOR PLAN

0 30 FT.
10 M.

1	ENTRY	5	KITCHEN	9	REC ROOM
2	OFFICE	6	DINING	10	PATIO
3	GARAGE	7	LIVING	11	POOL
4	COURTYARD	8	COVERED PATIO	12	BATHROOM

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CIRCLE 51

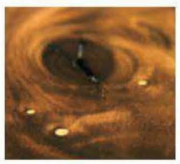
NY Design Week

Although New York City doesn't yet have a massive citywide design festival comparable to those in Milan and London, this year's International Contemporary Furniture Fair (ICFF) at the Jacob K. Javits Center made up for it with a solid showing of new and returning exhibitors. On top of that, there were the annual open houses at showrooms and galleries around town, and a strong second edition of WantedDesign, an off-site event at the landmark Terminal Stores building that included workshops, conversations, and presentations.

By Rita Catinella Orrell

Volk Furniture Collection

The handcrafted furnishings from New York–based Volk Furniture feature unexpected details including drawers lined with shirting fabric and antique organ stops reused as drawer pulls. One of these surprises is found in the new dresser and hutch (left) where inlaid brass nails follow the patterns formed by pinhole knots in the walnut (detail below). The 60" high x 42" wide hutch also features sliding doors with inset panels covered in Harris Tweed, Mid-Century-inspired brass V-shaped pulls, and fabric-lined drawers. Other pieces in the collection include a ladder-back chair with a fabric-lined walnut drawer, and a solid walnut stool with brass details and inlaid vintage typewriter keys.



volkfurniture.com CIRCLE 204

CP Lounge Collection

In 1965 Florence Knoll debuted Charles Pollock's iconic Pollock chair, which became both a best seller and a symbol of the modern office. Bernhardt Design president Jerry Helling sought him out in 2010; by the meeting's end, the two decided to explore several design concepts for a new product. Introduced at ICFF, the CP Lounge Collection is the 82-year-old designer's first product for an American company in 47 years. The CP Lounge is available in two versions, both with a polished stainless steel frame. CP.1 (shown with Pollock) features a large loop stitch around the perimeter of the chair; hand-quilted panels of leather, suede, or felt upholster the seat and back. The CP.2 version comes untufted and can be upholstered in custom materials.

bernhardtdesign.com CIRCLE 205

Blueair Sense Air Purifier

Designed by the Swedish architecture and design firm Claesson Koivisto Rune, the Blueair Sense air purifier features an interactive motion-sensitive tempered glass top that allows users to change speeds with a simple hand swipe above the scratch-proof surface. Ideal for small rooms, the quiet, low-energy unit employs second-generation HEPASilent Plus technology to efficiently clean indoor air of pollen, allergens, and harmful pollutants. The system includes a pre-filter that removes bigger particles before the air reaches the ion chamber and main filter, resulting in higher filtration efficiency. Made principally of steel, in six colors.

blueair.com CIRCLE 206

Chroma Wallcovering

One of the most eye-catching exhibits at the Javits Center was from Trove, a New York–based wallcovering company founded in 2006. Inspired by science and history, Trove's Spring 2012 collection includes three new patterns: August, a selection of head shots of past queens; Otium, which recalls microfiche slides from school-room science classes; and Chroma (shown), a burst of colors that form a blurry strand of DNA. All wallcoverings are available in a range of materials, including SILVER, a new Type 1 matte foil with a nonwoven back; FSC-certified Printed Wood Veneer; and StoneGround tree-free "paper" made from ground stone and natural resin.

troveline.com CIRCLE 207

For more information, circle item numbers on Reader Service Card or go to architecturalrecord.com/products.

products ICFF

12 x 12 Exhibition

The juried 12 x 12 exhibition was part of the second annual off-site WantedDesign event. Presented by New York–based Sawkill Lumber, the exhibition showcased 12 contemporary furniture designers who used the reclaimed wood from 12 demolished local buildings to create new works. The pieces were auctioned off to benefit woodworking education and job training for low-income New Yorkers. Shown here is a drawing and writing desk, by the New York design practice Tri-Lox, which was made from wood salvaged from 131-137 Emerson Place in Brooklyn. 12x12nyc.com CIRCLE 208

Kohler Colors featuring Jonathan Adler

Kohler has partnered with designer Jonathan Adler to introduce four special edition colors available in limited quantity on six select Kohler enameled cast-iron kitchen and bathroom sinks. The colors, shown here on the Iron/Tones kitchen sink, include the mod Piccadilly Yellow, the crisp Greenwich Green ("not dull avocado green" says Adler), the Mediterranean-inspired Palermo Blue, and the classic hue of Annapolis Navy. Each piece is crafted in the company's foundry in the village of Kohler, Wisconsin.
us.kohler.com CIRCLE 209

StickBulb Collection

Rather than create a one-off lighting installation for a residential project in Miami, the multidisciplinary design firm RUX of New York developed StickBulb, a modular "light-up erector set." Using reclaimed materials, including linear pieces of wood waste, StickBulb is an LED strip housed within a sleek wooden beam. The bulbs come in lengths from 1' to 7' long and can be displayed as a sconce, leaned against the wall as a minimalist light fixture, or mounted to the underside of a shelf to illuminate work surfaces.
stickbulb.com CIRCLE 210

Solace Mirror

Native Trails unveiled its Renewal Series of bathroom furnishings at the show, a collection consisting of recycled, hand-hammered copper lavatory basins, and bamboo-based vanities and accessories. The latter pieces are made with 100% FSC-certified moso bamboo, one of the fastest-growing and most durable species, with plants reaching full maturity in five to seven years. Shown here is the Solace circular mirror, which is handcrafted in two finishes (Caramel Bamboo and Woven Strand Bamboo) and comes in 22" and 28" diameters. A detachable bamboo shelf, sold separately, adds storage space. nativetrails.net CIRCLE 211

Stairs in a Box

Developed by the Vancouver, Canada–based design company SB7, Diamond Stairs is a universal cantilevered-stair kit in a box. Designed for either new construction or renovation projects, each step assembly comes with a tread, two brackets, bolts, and a telescoping support stud. The assembly is made from powder-coated structural steel; on request, treads may be clad with other materials, such as wood. Local building codes may require the project engineer to sign off on the kit and installation. diamondstairs.com CIRCLE 212

Here's to the new two-story Strong Frame™ ordinary moment frame. This latest solution from Simpson Strong-Tie has the same great benefits as our one-story frame, but can span up to 35' high within a 2x6 wall space – an industry first. Accommodating openings up to 18' high per story and 24' wide, our new two-story ordinary moment frame is ideal for projects featuring tall ceilings, expansive windows and other customized designs. With 100% bolted connections and a streamlined anchorage design, our pre-engineered frames are easier to double up for the designer and the installer.

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CIRCLE 50

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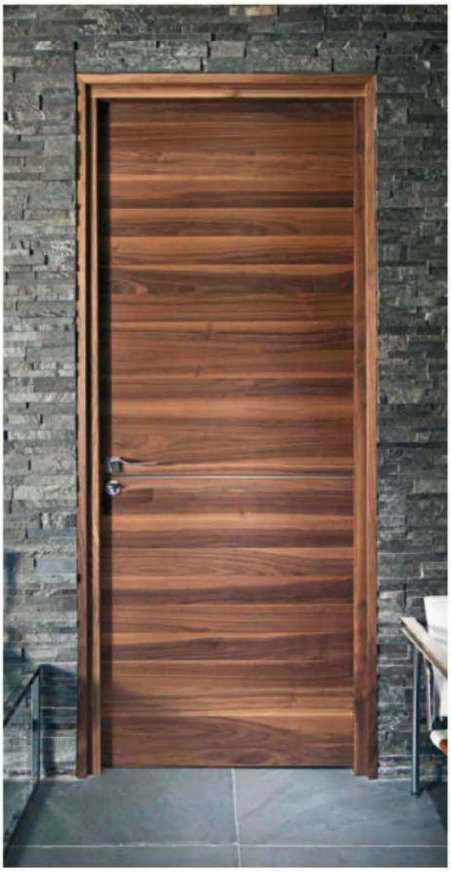

Idea Door

TRE-Piu novastudio.com

Architect Daniel Libeskind unveiled his new design for the Italian door manufacturer TRE-Piu at an event at the manufacturer's showroom in New York in May. Called Idea, the new door offers "significant acoustical properties," says Libeskind, as well as integrated LED lighting, an aluminum frame, certified wood, matte or glossy paints, and a handle with a shardlike form inspired by the architect's design for the Denver Art Museum. Libeskind's son Lev, CEO of Libeskind Design in Milan, is working with his father on other product collaborations, such as an auditorium and restaurant chair for Poltrona Frau that were shown at last April's Salone del Mobile in Milan. CIRCLE 200

Contemporary Interior Hardwood Door

Urban Front urbanfront.com

Urban Front has a new line of contemporary hardwood interior doors. Made in the U.K., these highly sound-insulated doors come with matching frames built with acoustic seals on all sides and with concealed or pivot hinges. Available in sizes up to 9.8' x 4', the doors are available in eight contemporary styles and three hardwoods (European oak, American walnut, and wenge). Hardware choices include clear or sandblasted glass and brushed stainless steel accents. The company's pivot-hinge system allows users to install heavier and wider doors that open and close effortlessly with reduced strain on the hinge and frame. These solid doors are built with highly efficient warp-resistant cores and can be hung on pocket or barn door tracks. Shown here is a hinged double door in American black walnut with a stainless steel detail. CIRCLE 201

Folding Door System

LaCantina lacantinadoors.com

The San Diego–based door manufacturer announced earlier this year that it achieved a hurricane/impact rating of DP70 on its thermally controlled line of aluminum folding doors. The new rating allows the products to be used in areas known for massive storms along the Texas, Louisiana, and Florida coasts. It is offered in a range of configurations, multiple sill types, and two glass options. CIRCLE 202

Sliding Glass Door Systems

Klein USA klein-usa.com

Offering a balance of privacy and openness, the frameless interior sliding doors from Klein can be specified with self-closing, telescoping, or bi-parting features. Openings using the Uniglass 60 system were selected for the law offices of Roy, Shecter & Vocht in Birmingham, MI, by Toledo-based MacPherson Architects (shown above). The ⅜"-thick panels have a track at the top to provide a minimalist detail at the jambs and floors. CIRCLE 203

2012 CALL FOR ENTRIES
Design Vanguard

We're looking for a great group of 10 emerging firms from around the world to feature in our annual Design Vanguard issue. Although there is no age limit, we try to select architects who have had their own practices for less than 10 years.

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


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CIRCLE 59

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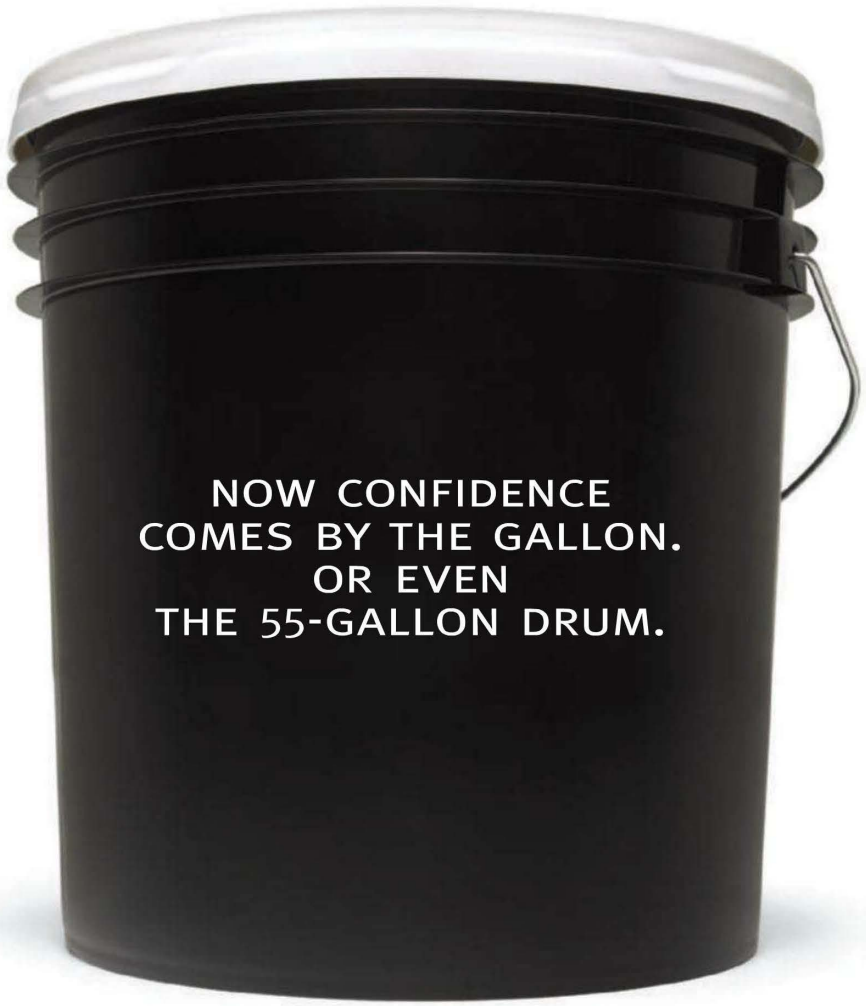

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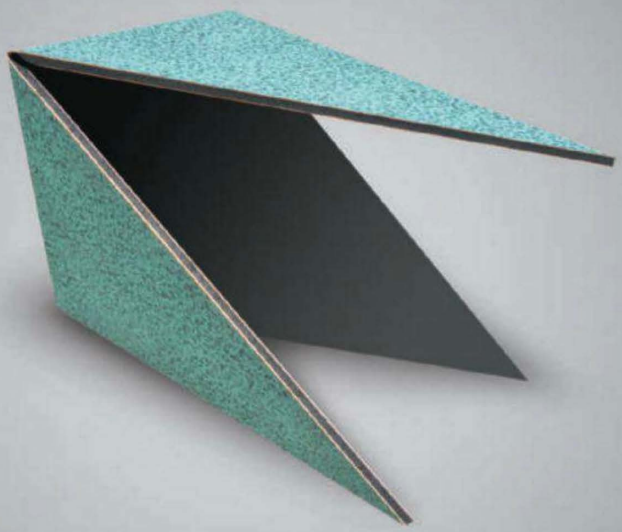

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CIRCLE 39

Material World

"I HAVE just one word for you…plastics," says a middle-aged businessman to a young Dustin Hoffman in *The Graduate*. "There's a great future in plastics." That was 1967, and since then, the maligned material has increasingly made its way into architecture. This month, we look at recent advances in plastic structure, as employed by the innovative Madrid architects José Selgas and Lucía Cano to create a luminous, colorful harborside auditorium and conference center in Cartagena, Spain. We also examine nontraditional material applications. In Seoul, the firm SO – IL wrapped an art gallery in chain mail. Other materials featured in this issue have been part of architects' vocabularies for centuries but are continually improved or used in surprising new ways, such as the curving, fingerlike concrete columns that support Rudy Ricciotti's Musée Jean Cocteau in Menton, France. And designers still turn to some of nature's simplest offerings. Bent wood embraces an interpretation center in France by Bernard Tschumi; earth forms the undulating green roof of the Brooklyn Botanic Garden visitor center by Weiss/Manfredi; and light defines James Turrell's latest work, a pavilion in Houston, made with Thomas Phifer and Partners. While plastic did prove to be the future, this issue shows how old materials and new, as well as those—like light and sky—that are hardly here at all, continue to offer innovative ways to think and build.

PHOTOGRAPHY: © IWAN BAAN

MUSÉOPARC ALÉSIA, ALISE-SAINTE-REINE, FRANCE

El B Auditorium and Congress Hall | Cartagena, Spain | selgascano

PLASTIC FANTASTIC

A city on Spain's Mediterranean coast welcomes a cultural center clad in a symphony of polychromatic synthetics.

BY LAURA MARTÍNEZ DE GUEREÑU

CARTAGENA, SPAIN, has a long, rich history, beginning even before it became an important western Mediterranean port during the Roman Empire. With a natural harbor, it served as a naval base for centuries, its ramparts dating back to the eighteenth-century reign of Charles III. Now the city is reinventing itself as a cultural tourism destination—as shown by the construction of a museum by José Rafael Moneo [RECORD, February 2009, page 70] that celebrates the city's ancient Roman amphitheater and more recently by the opening of the exuberant new El B auditorium and congress hall, designed by the Madrid-based firm selgascano.

Running along the Paseo Alfonso XII, a 3,300-foot-long dock overlooking the Mediterranean, the 690-foot-long building echoes the stacked shipping containers on the neighboring wharfs. Its innovative use of plastic responds to a tight budget yet gives the light, flat-looking cladding over a steel-frame and poured-in-place concrete structure a surprising luminosity. The effect is soft and shimmering, like movement captured by a photograph taken with a long exposure. The roofline, interrupted by vertical cuts that introduce daylight into the interior, adds drama to the building's silhouette. Syncopated variations in color, light, and reflection make the segmented structure distinctive but still blend in with its watery surroundings and the historic city walls behind it.

José Selgas and Lucía Cano, who both graduated from Madrid's Polytechnic School of Architecture in 1992, are well known for their research into materials: With their Badajoz conference center (RECORD, November 2006, page 154), they explored polycarbonate's translucency and acoustic properties, employing standardized panels. In Cartagena, they have taken their investigation a step further, designing asymmetrical, custom-made extrusions in two different plastics, in order to introduce color into the cladding. Pedestrians and joggers on the dock become engaged in the exterior's bright surfaces, which shift and change according to the observer's vantage point—a polychromatic exercise intensified in the hall's interiors.

To achieve the vibrant, colorful surfaces, the architects used transparent methacrylate (with UV protection) for the exterior facades, and transparent and translucent polycarbonate (which is

Watch a video of this project at architecturalrecord.com.

PHOTOGRAPHY: © IWAN BAAN

fire resistant) for the interiors. Both plastic materials are mounted on the structure by stainless steel hooklike extrusions. The transparent methacrylate of the elongated facades is double-layered yet admits daylight into the building. On portions of the exterior walls of the auditorium proper and the stage house, the architects laid polycarbonate tubes in an irregular profile of three layers (see section detail, page 61) to underscore the building's horizontal linearity with flecks of color. Inside, walls of transparent aquatic blue-green polycarbonate, backed by a silver mirrorlike screen, enclose the 1,500-seat concert hall. Opal white polycarbonate, backlit, wraps the 500-seat auditorium, covers the ceilings of both auditoriums, and clads the conference room walls.

As if this exploration of plastics were not enough, selgascano inserted a 92-by-40-foot double-layer pressurized ETFE (ethylene tetrafluoroethylene) plastic sidelight in the building's main foyer. The expansive sidelight's two surfaces are stiffened by vertical cables and anchored to a simple rectangular steel frame to create the largest ETFE single cushion ever made. Its orange color and western orientation create the illusion of an endless sunset in the only vertical space interrupting this longitudinal structure; from this multilevel foyer, stairs take you to different levels of access into the stunning watery blue concert hall. A second smaller ETFE plastic sidelight, oriented to the east, casts a warm glow over the VIP lounge on the second floor.

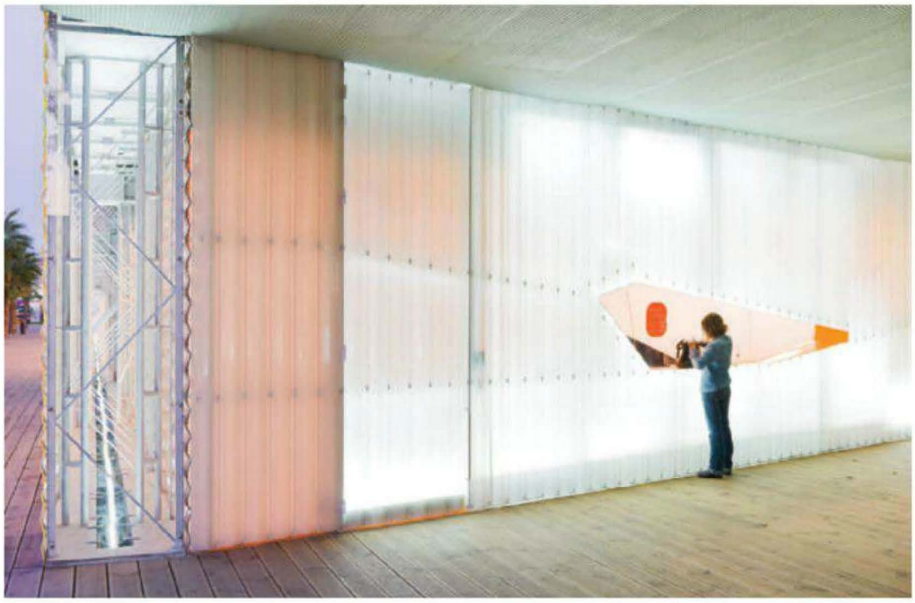
Multicolored aluminum sheets of angular fins cloak the end walls; on the west wall, at the main entrance, the Spanish graffiti artist SpY created a series of overlapping gigantic letters ("El-B"—the name of the auditorium) that shifts from blue to orange as you move past it. Once you enter the building through this short end, a long promenade—which recalls the old ramp to El Batel Beach—takes you down to the main hall, built 49 feet below grade to minimize the height of the exterior volume. You can also climb a sinuous ramp up to the exhibition space on the second floor, or to the restaurant or open-air café.

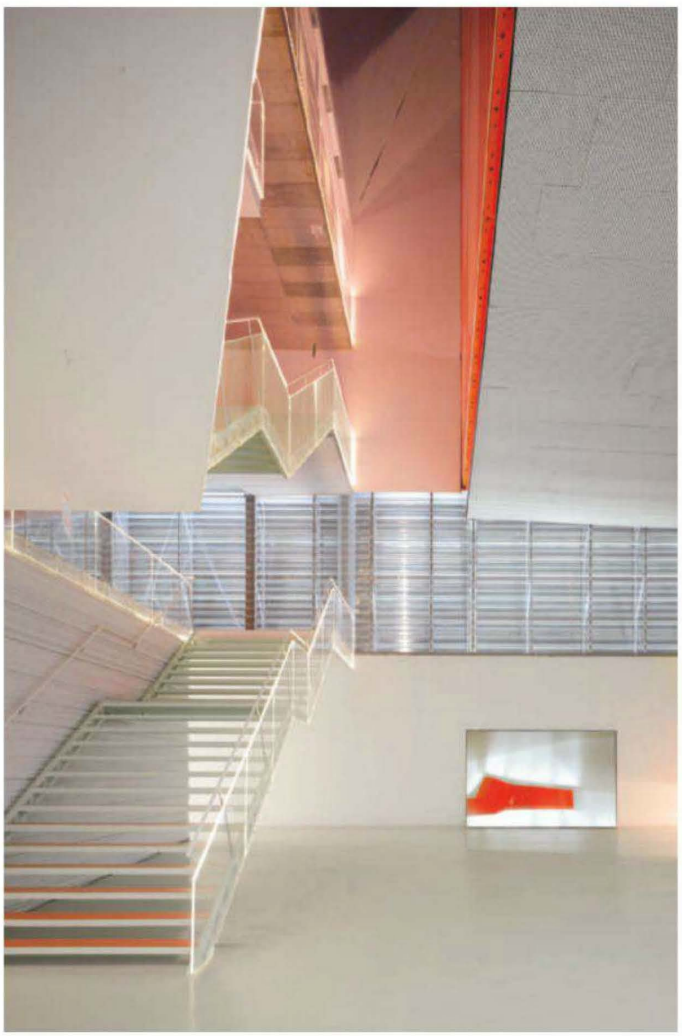
The building's opposing qualities create an interesting spatial tension: An exterior that is an abstract volume, like the nearby generic dockside structures, is juxtaposed with a playful interior, where the architects manipulated

HARBOR SIDE
A polygonal cutout in the polycarbonate wall of the foyer (first spread) serves as an information window. Outside, selgascano treated El B's roof (above) as a fifth facade: Multicolored alumnium sheets provide a continuous surface. On the south facade (opposite top), rows of LEDs placed at the base of the methacrylate walls create an illuminated backdrop. Seen from the southwestern corner (opposite bottom), "El B," the name the architects prefer for the building, is rendered in orange. Seen from the opposite side, "El B" appears blue (foreground in photo above).

PHOTOGRAPHY: © IWAN BAAN

PHOTOGRAPHY: © IWAN BAAN (TOP); ROLAND HALBE (BOTTOM)



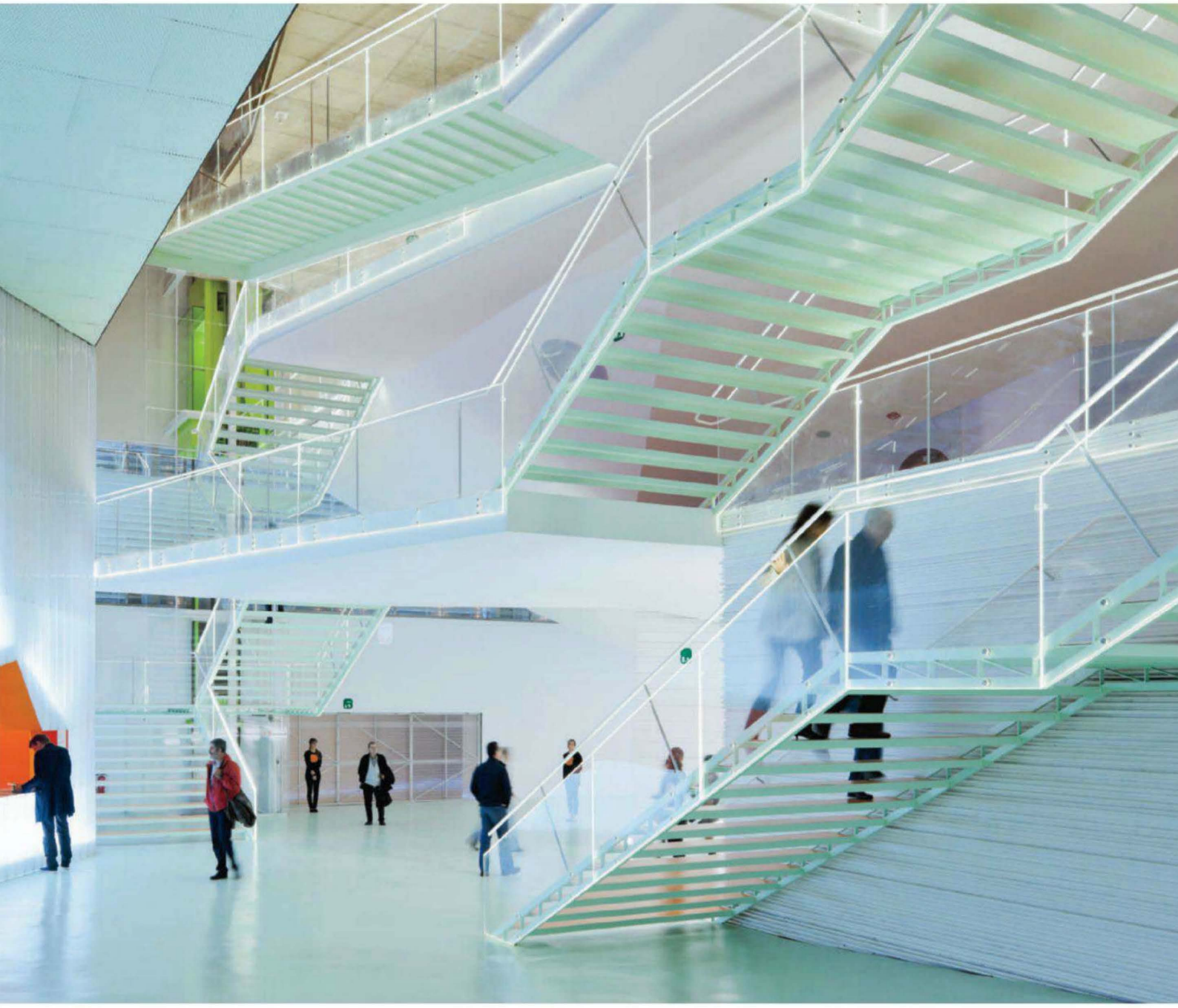


CROSS SECTION The metal scaffolding that supports the methacrylate facade—and the longitudinal line of LEDs at its base—is clearly visible beside the box office window (above).

As visitors make their way through the building, they are gradually submerged below the level of the pier, which is marked by the horizontal line that divides the upper methacrylate and the lower concrete retaining walls (left). The orange ETFE plastic sidelight looms above this space, allowing ample light into the building.

The expansive foyer (opposite) leads to the main auditorium. Steel staircases—with rubber-lined treads and polycarbonate balustrades—connect the building's different levels to the auditorium and contrast with the rough concrete of the walls.

PHOTOGRAPHY: © IWAN BAAN (RIGHT AND TOP LEFT); ROLAND HALBE (BOTTOM LEFT)



credits

ARCHITECT: selgascano–José Selgas, Lucía Cano, principals; Lara Resco, José de Villar, José Jaraiz, Lorena del Río, Blas Antón, Miguel San Millán, Carlos Chacón, Julián Fernandez, Beatriz Quintana, Jaehoon Yook, Jeongwoo Choi, Laura Culiañez, Bárbara Bardín, project architects

ENGINEERS: Fhecor (structural); JG Asociados (m/e/p); Arau Acústica (acoustics)

GENERAL CONTRACTORS: Dragados; Intersa

CLIENT: Cartagena Council

SIZE: 200,000 square feet

COST: $45 million

COMPLETION DATE: November 2011

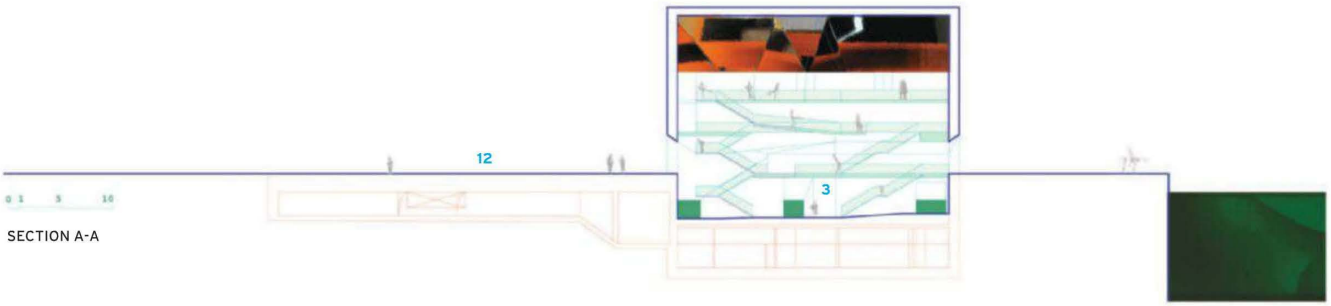
SOURCES

PLASTIC: Polimer Tecnic

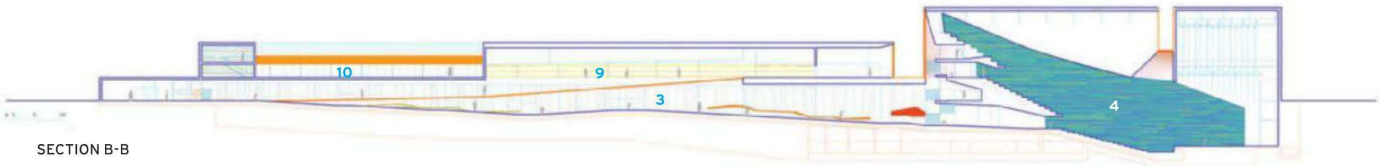
SEATING: Figueras (auditorium)

FLOORING: Prialpas

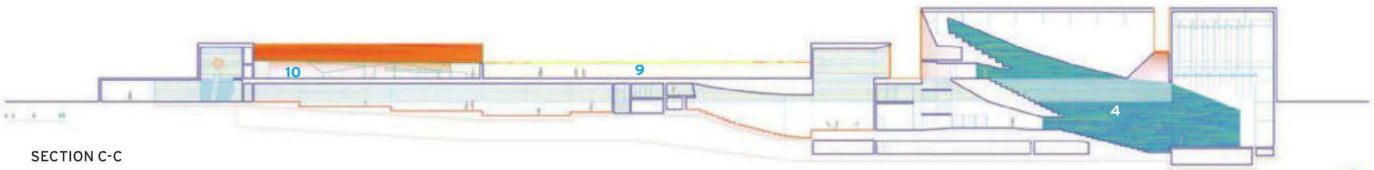
LIGHTING: Ideallux; Talleres Zamora



SECTION A-A



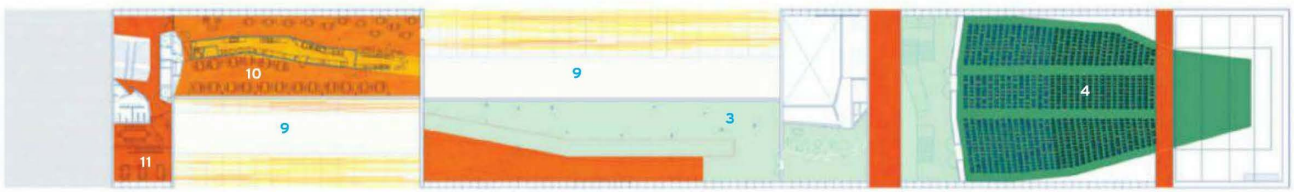
SECTION B-B



SECTION C-C

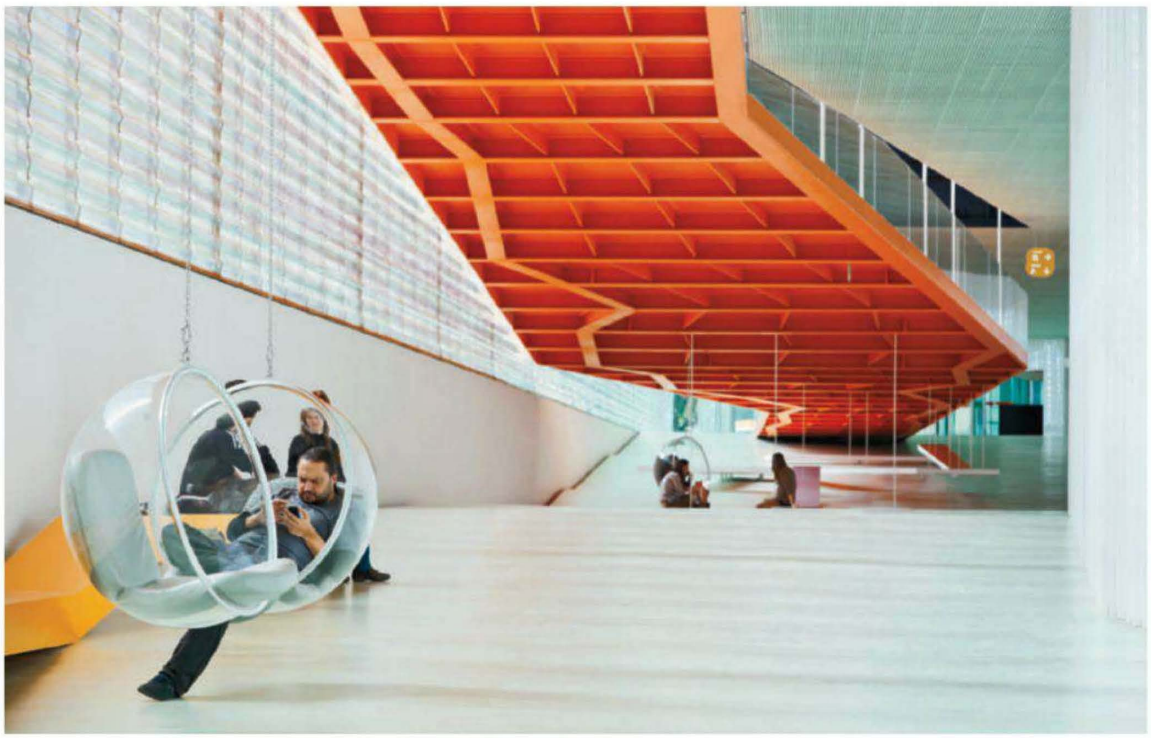
1 ENTRANCE
2 BOX OFFICE
3 LOBBY
4 LARGE AUDITORIUM
5 SMALL AUDITORIUM
6 CONFERENCE ROOM
7 DRESSING ROOM
8 REHEARSAL SPACE
9 OUTDOOR TERRACE
10 CAFÉ
11 OFFICE
12 BOARDWALK

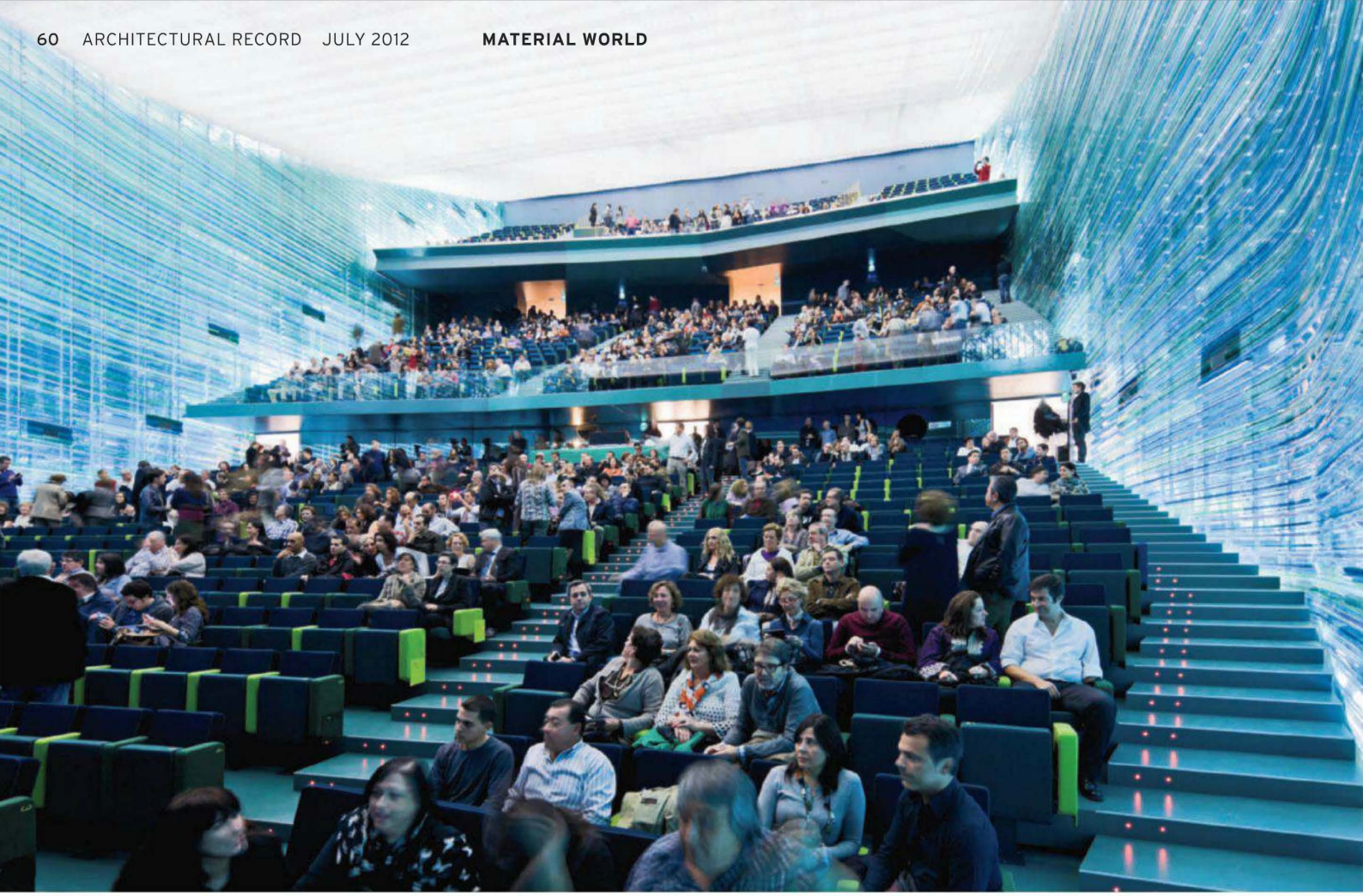
GROUND LEVEL PLAN

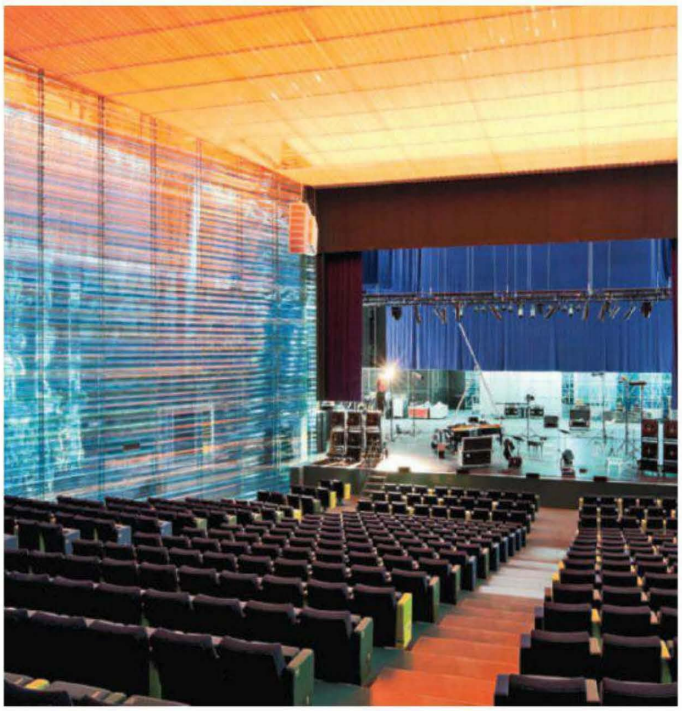


UPPER LEVEL PLAN

THE PROMENADE
A sinuous ramp (background in photos above and right) runs the length of El B and is accompanied by colorful benches in irregular shapes. The second-level landing of the steel stair (above) offers an oblique view of the double-layer, pressurized ETFE plastic sidelight that spans the building's entire width (92 feet). The orange ramp descends from the second level to the first, connecting the exhibition room with the foyer. Eero Aarnio's plastic bubble chairs (right) hang from the suspended walkway.







FULL HOUSE The aquatic blue-green of the 1,500-seat auditorium's polycarbonate walls (above) provides a chromatic contrast to the space's orange skylight (left). A mirrorlike screen behind these walls multiplies and refracts the light.

the horizontal and vertical spaces to animate the longitudinal section. The long facades produced by this radical design strategy may, at first glance, appear too closed to activate an underused area of the city. But closer observation reveals the opposite. By varying color and layout, the architects achieved an infinite array of light-reflection effects that enhance the visitor's experience. From one perspective, you see the lines of different colors clearly; then they disappear, and the building seems transparent.

Throughout El B, the overall effect of frozen light, of extreme silence and calm, makes you feel as if you were inhabiting a space outside time. Yet you never feel isolated: Whether you are walking in solitude around the building or passing through it, the materials envelop you like a cloak. El B shows how a daring architectural proposal, using an economy of means, can enhance this latest chapter of Cartagena's rich history, sounding a bright and hopeful note in an uncertain time. ■

Laura Martínez de Guereñu is a Madrid-based architect and critic.

PHOTOGRAPHY: © IWAN BAAN

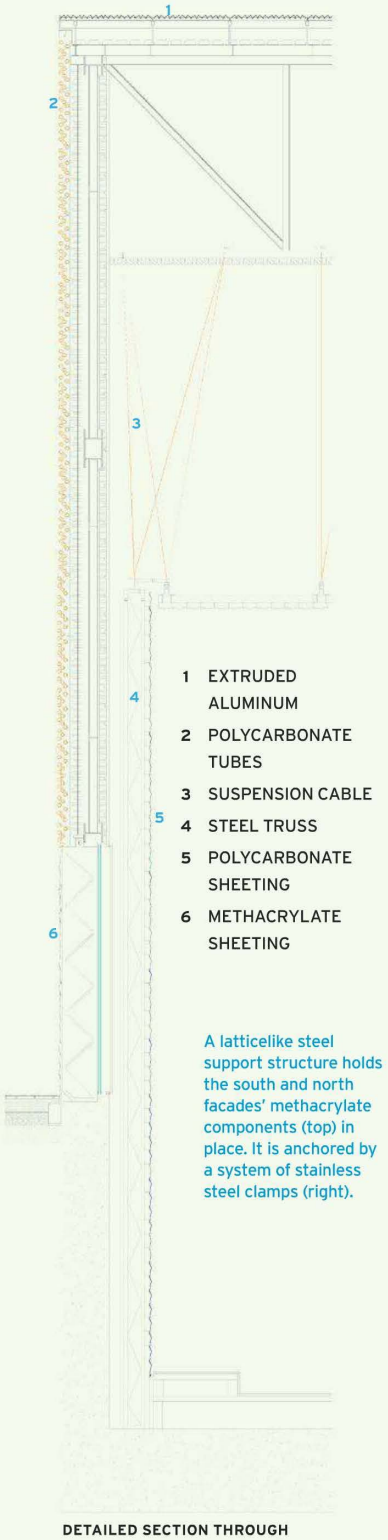
Behind the Plastic: Assembling the Shimmering Facade

THE EXTERIOR walls of methacrylate block UV radiation and yet gleam in the sunlight, thanks to the extruded profile of longitudinal strips. While plastic seems to be cheap and flimsy, with a short life span, the architects argue it will last at least 20 years. The strips are applied like clapboard to the metal armature of exterior walls (right, top and bottom), emphasizing the horizontality of the volumes along the north and south facades.

In order to add variation to the rippling luminosity of the surface, two different asymmetrical components with a slight difference in their curvature are used. The metal framing that holds the double-layer methacrylate facade is revealed at the building's main entrance through its west short end, following the architect's explicit effort to show how the building is assembled.

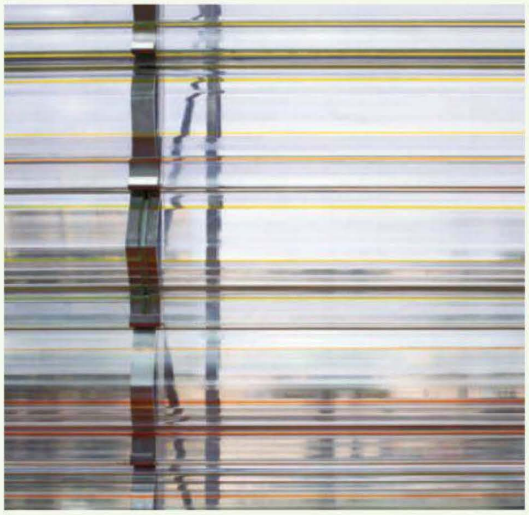
The exterior walls of the stage house and the upper part of the auditorium are opaque and formed of horizontal polycarbonate tubes (section detail, right). Mounted to simple washers on a steel substructure, they create a dense, undulating surface.

The architects argue that the plastic is not only economical ($20 per square foot) but sustainable, since it is 99 percent recyclable, while only 50 percent of the glass can be recycled. While the basic colors in El B range from transparent (no color) for the methacrylate to opal white and green blue for the interior polycarbonate, other colors are interjected to add orange, yellow, and green lines to the palette. The process involves tinting melted plastic, then injecting it by hose into the molds of the profiles. The range of hues camouflage the dust and sand that often streak the facades of other buildings. ■



1 EXTRUDED ALUMINUM
2 POLYCARBONATE TUBES
3 SUSPENSION CABLE
4 STEEL TRUSS
5 POLYCARBONATE SHEETING
6 METHACRYLATE SHEETING

DETAILED SECTION THROUGH AUDITORIUM WALL



A latticelike steel support structure holds the south and north facades' methacrylate components (top) in place. It is anchored by a system of stainless steel clamps (right).

PHOTOGRAPHY: © ROLAND HALBE (TOP RIGHT); DENIS GILBERT (BOTTOM)

MuséoParc Alésia | Alise-Sainte-Reine, France | Bernard Tschumi Architects

AU NATUREL

A concrete drum wrapped in a larch wood screen provides a distinctive orientation center for a historic battlefield.

BY SUZANNE STEPHENS

A CIRCULAR building treated as a monolithic, self-contained volume can be unforgivingly oppressive. The Hirshhorn Museum—a poured concrete donut plopped onto the National Mall in Washington, D.C., in 1974 by Gordon Bunshaft of Skidmore, Owings & Merrill—certainly reminds us of that danger. Yet, using that simple concept (and material), architect Bernard Tschumi recently created a dynamically quirky structure for MuséoParc Alésia's Interpretation Center in France.

For more than a decade, Tschumi, who has offices in New York and Paris, has been exploring curved concrete forms combined with different materials—especially in France. In both the Zénith concert hall and exhibition complex in Rouen [RECORD, June 2001, page 102] and the Zénith concert hall in Limoges [RECORD, January 2008, page 120], he designed the facade and roof as one continuous envelope. While the earlier project probed the notion of wrapping a concrete structure with stainless steel, the second did so with polycarbonate and wood.

But with the Alésia's interpretation center, 37 miles northwest of Dijon, Tschumi has turned to the purer geometry of the concrete drum, which has been around at least since the Coliseum in Rome (82 A.D.), to explore that form's expressiveness. By superimposing a lattice of larch wood onto it, Tschumi has given the drum a sense of scale and detail that avoids the pitfalls of the Hirshhorn. In addition, the planted trees jauntily sprouting from the roof lend the whole composition a mysterious aura.

Inside the center you find a spiraling stair, much like Frank Lloyd Wright's ramp for the Solomon R. Guggenheim Museum, but easier to climb because of the steps. And at Alésia, you end up on an upper-level terrace with a panoramic view of the countryside and the village of Alise-Sainte-Reine.

On this historic site, in a pastoral area of Burgundy southwest of Paris, Vercingetorix, chief of the Gauls, was besieged in 52 B.C. by Julius Caesar, who was busy transforming the Roman Republic into an empire. While the interpretive center appears at first glance to be a romantic ruin, its circular form actually echoes the trenches and fortifications Caesar built to win the final battle over the Gauls. Caesar had devised two circular cordons of trenches and stockades

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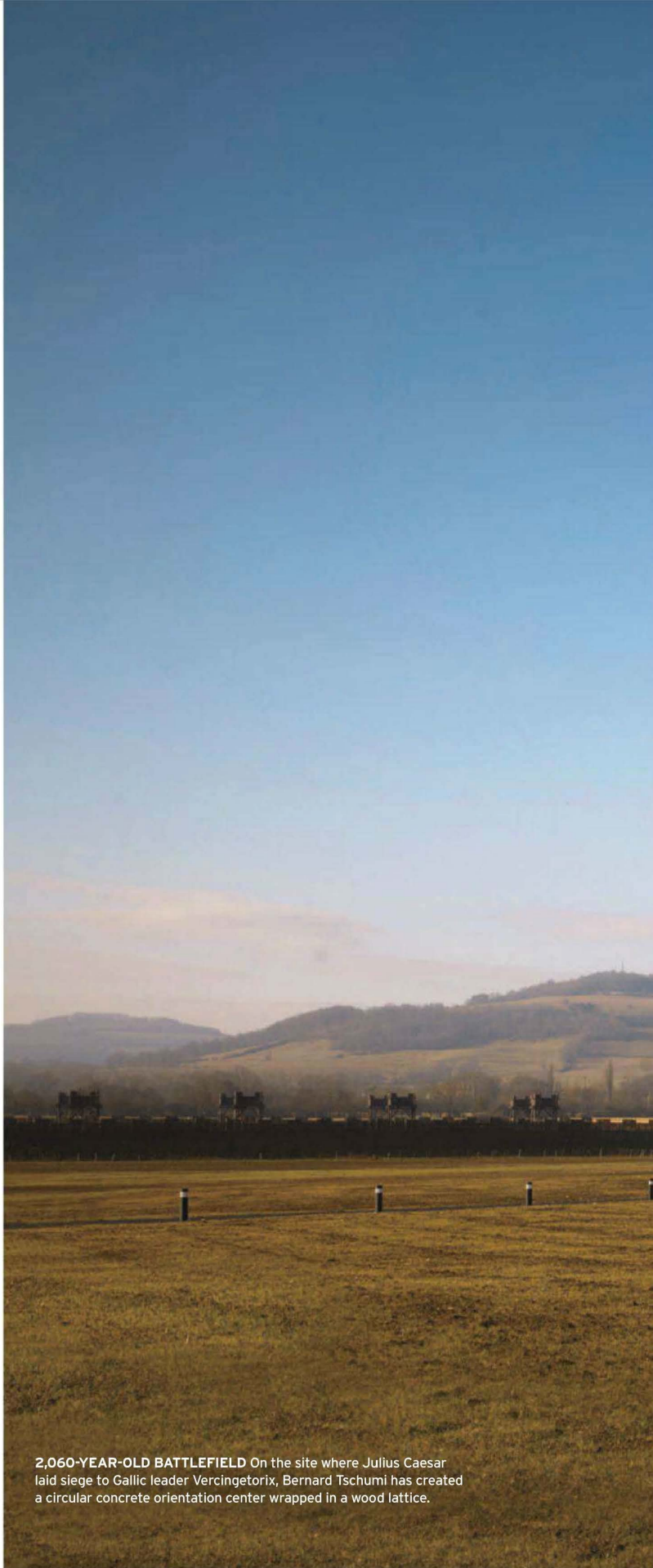
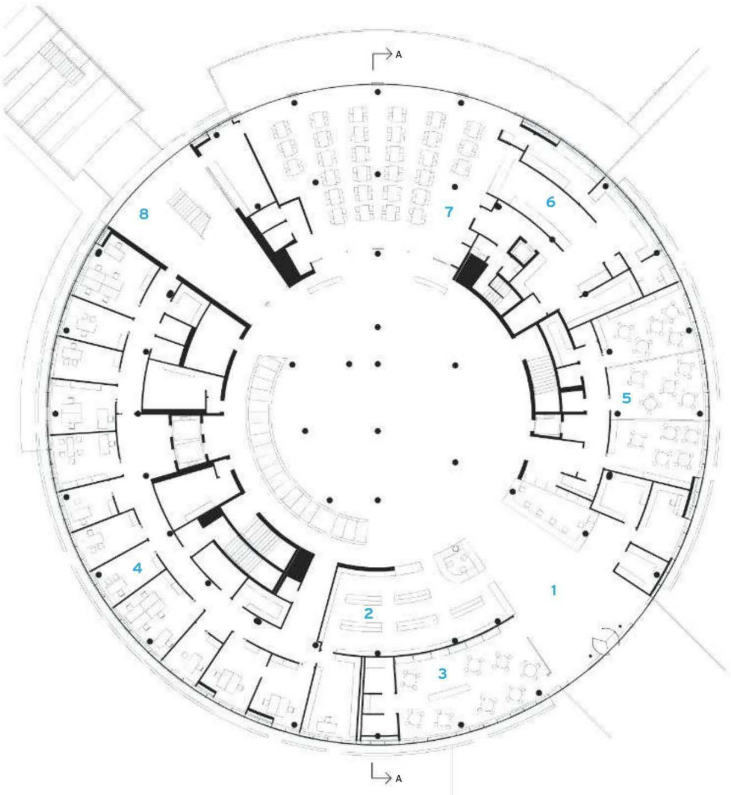
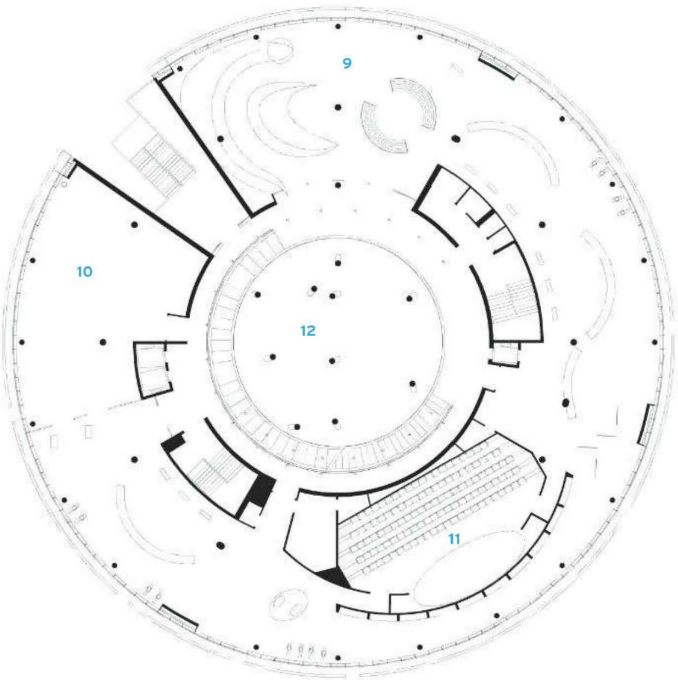


2,060-YEAR-OLD BATTLEFIELD On the site where Julius Caesar laid siege to Gallic leader Vercingetorix, Bernard Tschumi has created a circular concrete orientation center wrapped in a wood lattice.

PHOTOGRAPHY: © CHRISTIAN RICHTERS

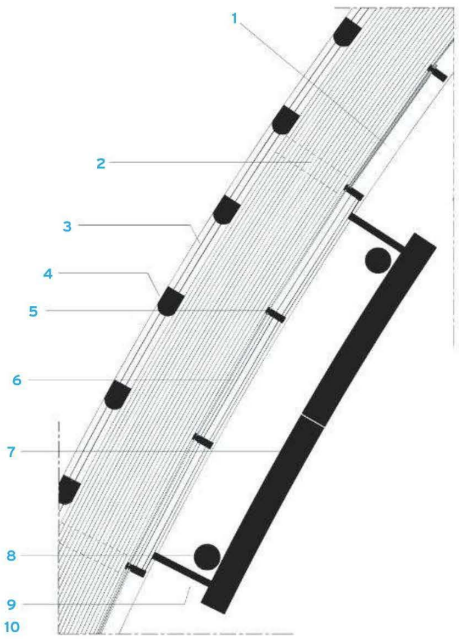


GROUND FLOOR PLAN



FIRST FLOOR PLAN

0 30 FT.
9 M



FACADE DETAIL

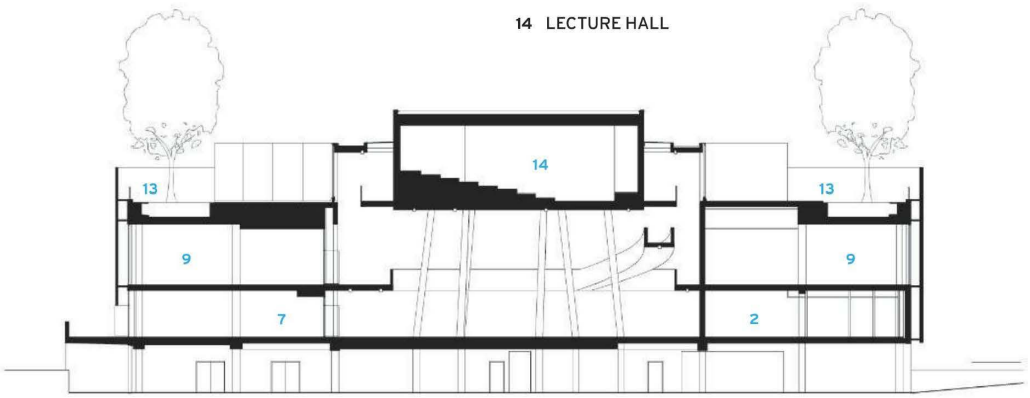
0 3 FT.
1 M.

DETAIL OF WOOD LATTICE

1 CURVED STEEL PLATE FOR MULLION COVER
2 BENT PLANKS
3 WOOD RING
4 WOOD LATTICE MEMBER
5 ALUMINUM MULLION
6 SPANDREL GLASS
7 CONCRETE SHEAR WALL
8 WATER DRAINAGE
9 STEEL PLATE WITH INSULATION
10 DOUBLE GLAZING

PLANS AND SECTION

1 VESTIBULE
2 SHOP
3 PLAYROOM
4 OFFICES
5 CLASSROOMS
6 KITCHEN AND SERVERY
7 CAFÉ
8 VESTIBULE/GANGPLANK
9 EXHIBITION
10 TEMPORARY EXHIBITION
11 AUDIOVISUAL ROOM
12 ROTUNDA
13 ROOF TERRACE
14 LECTURE HALL



SECTION A-A

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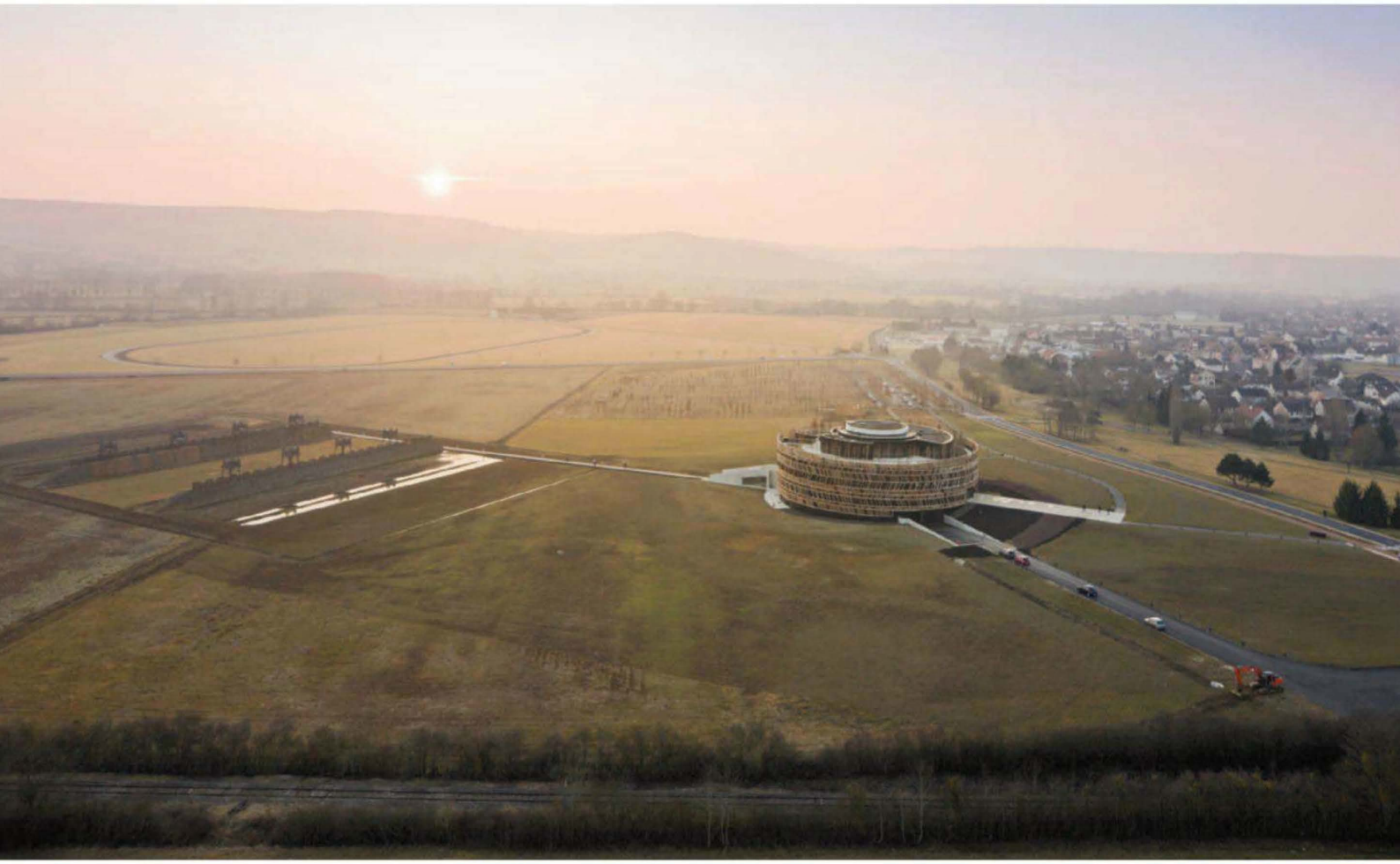
9 M



ROMAN LINES On the 91-acre site in Burgundy, France, the interpretation center echoes the ringed fortifications built by Julius Caesar in 52 B.C. A concrete gangway with wide, deep steps leads out to the partially reconstituted fortifications (above). Behind the larch wood screen, the glass is tinted gray so that the screen is prominent. The lowest floor follows the drop in grade where the architects inserted a glass-enclosed picnic area for children; above it, a terrace adjoins the main-floor restaurant. On the roof, trees loom up jauntily from a terrace (right).

PHOTOGRAPHY: © IWAN BAAN

around the *oppidum*, or fortified hill town, of Alésia. The inner ring, 9 miles in circumference, entrapped the Gauls; the outer one, 14 miles around, prevented external reinforcements from coming to Vercingetorix's aid. The siege lasted two months, and the rest, as they say, is history.

Archaeological excavations initiated in the mid–19th century and bolstered by digs in the 1990s gave Alésia, now Alise-Sainte-Reine, incentive to bring its legendary past to public attention. Tschumi's proposal, which began with a competition in 2002, actually calls for two cylindrical buildings—of which the first to be completed is the four-story, 86,111-square-foot interpretion center that opened this past March near Caesar's fortifications. His second structure, a three-story, 70,000-square-foot archaeological museum, will be completed in 2016 about a mile away, on the slopes of Mont Auxois, where Vercingetorix and his troops were trapped in their stronghold. Unlike the wood-screened center, the round concrete museum will be wrapped in the same local yellow-tinged limestone (Pierre de Bourgogne) as used for the stone walls of the Gallic ramparts. As Tschumi explains, "The two buildings, with the circular configurations, are in a dialogue," which relates to the concentric circles of the battlefield and the *oppidum*.

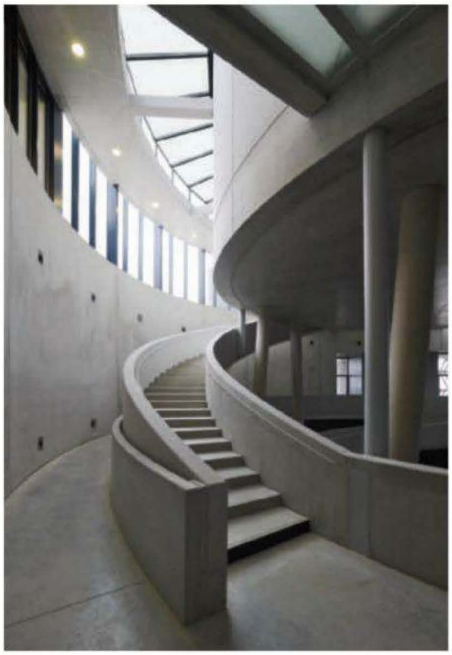
The larch wood for the interpretation center came from Germany—where ringed elements were bent by steam—and was assembled on-site, using galvanized steel pins and sleeve connections. The entrance opens into a large rotunda topped by a concrete disc, which is actually the floor of a 154-seat lecture hall. The disc is supported by slender concrete columns, some perpendicular, others tilting quixotically. "I wanted to keep the rotunda sober and pure," says Tschumi, "but I didn't want the columns to seem too monumental."

The architect had white sand mixed into the concrete for the visible portions of the interior, and he used metal formwork for the walls and columns. The warped surfaces of the ramp, however, demanded a more labor-intensive wood formwork for a smooth pour.

The attenuated spiraling stair leads visitors up to exhibition and orientation areas and conference rooms. As it winds up and around,

PURE ROTUNDA Tschumi wanted to keep the central rotunda of the poured concrete structure free of exhibition elements (below). Some of the columns tilt in order to give the space a slightly less monumental air. The stairs swirl upward, with sidelights and top lights illuminating the space dramatically (opposite, top left).

Visitors first encounter the winding rooms of the exhibition space (opposite, bottom) and then arrive at the roof, where they have a panoramic view of the partially reconstituted fortifications (opposite, top right).



daylight, filtering in from glazing at the top and side walls, gives the place a faint Piranesian air: Translucent glass floors at the upper reaches of the spiral add to the interior's ethereality.

While the 12,917 square feet of exhibition space display models, multimedia terminals, dioramas, films, and reconstructed battle equipment—devices to give visitors an idea of the fateful siege when the Gauls fell to Caesar's *veni vidi vici* mind-set—the actual high point in the processional tour comes when you arrive on the roof terrace. There you look over partially rebuilt battlements (with a narrower gap between the two rings) and an expansive, softly rolling terrain. Landscape architect Michel Desvigne designed a grassy circular bed planted with white birches and oaks on the terraces, where trees grow no more than 25 feet high. (A rainwater recovery and filtering system fits in with the center's energy measures, as does the energy savings of the wood brise-soleil.)

The wood lattice enclosure that swathes the concrete and gray glass structure gives it a protective, timeless quality. Since the thick filigree hides the solidity of the concrete, and the tree limbs and leaves spring up from the roof, its masklike quality is all the more provocative. Here the mask humanizes the architecture (or should we say naturalizes it) with its use of timber and the diagonal pattern of its component parts. It beckons us to enter and become familiar with the contents within—to become part of history and nature. ■

PHOTOGRAPHY: © IWAN BAAN (OPPOSITE); CHRISTIAN RICHTERS (THIS PAGE, TOP 2); COURTESY BERNARD TSCHUMI ARCHITECTS (RIGHT)

credits

ARCHITECT: Bernard Tschumi Architects–Bernard Tschumi, Veronique Descharrières, Kim Starr, partners in charge; Rémy Cointet, Antoine Santiard, Jean-Jacques Hubert, Joel Rutten, Adam Dayem, Jane Kim, Nefeli Chatzimina, and office teams in New York and Paris

CLIENT: Conseil Général, Côte d'Or, Burgundy

EXHIBITION DESIGN: Scène–Guy-Claude François

ENGINEERS: France Aires (civil); BEA Ingénierie (structural); BET Choulet (m/e/p); Cegelec (electrical)

CONSULTANTS: Michel Desvigne with Société Forestière de la CDC (landscape); J. Natterer (wood)

SIZE: 86,111 square feet

COST: $27 million

COMPLETION DATE: March 2012

SOURCES

METAL CURTAIN WALL: Entreprise Protoy

TINTED GLASS: Saint-Gobain

GLASS FLOOR: AGC Glass Europe

PAINTS AND STAINS: Entreprise Bonglet

LIGHTING: Philips, Regent (interior only)

K3 for Kukje Gallery | Seoul | SO – IL

PHOTOGRAPHY: © IWAN BAAN, UNLESS OTHERWISE NOTED

MEDIEVAL ARMOR FOR MODERN ART

Architects Florian Idenburg and Jing Liu mesh an expanding gallery's third building into a tight-knit urban community, creating a singular work in its own right.

BY ARIC CHEN

OUTER WRAPPING The Kukje Gallery has three buildings in Seoul. For its newest and third space, K3, SO – IL designed a concrete box with exterior protrusions housing circulation functions, then "shrink-wrapped" the entirety in custom chain mail mesh.

THE ART world debunked the myth of the neutrality of the white-box gallery long ago. When it comes to displaying art, it's impossible to create an impartial context that will—white walls and concrete floors be damned—silently recede or disappear. That doesn't mean there aren't new and novel ways of trying. For its 13,500 square-foot Kukje Gallery building in Seoul, the New York City firm Solid Objectives – Idenburg Liu (SO – IL) tinkered with the idea of dissolving the gallery envelope—not from within, but from the outside. And they did it using chain mail.

Kukje is located in Seoul's Samcheong-ro area, a part of town it helped transform into the Korean capital's blue-chip gallery district when the space opened there in 1982. Since then, the scale of contemporary works has grown in tandem with the neighborhood's burgeoning art scene, where numerous high-profile galleries and modern art centers are now firmly ensconced. Showing such space-hungry artists as Anselm Kiefer and Louise Bourgeois, Kukje expanded its first building over the years, and added a second one next door in 2007.

All of this growth has taken place not in some former industrial zone with capacious warehouse spaces but in a tight-knit historic neighborhood adjacent to the Joseon Dynasty–era Gyeongbokgung Palace. The area's dense layering of converted *hanok* houses left barely enough room for Kukje to add a third building to its compound, and SO – IL needed to make the most of the plot. "They hoped we could make the biggest box legally possible on the site," partner Florian Idenburg says of the client. Idenburg and his wife, Jing Liu, the firm's other partner, began by responding to the program literally. Hemmed in on nearly all sides by existing, irregularly shaped buildings, they inserted a simple, concrete box—52 feet long by 31 feet wide by 18 feet high—that filled the maximum allowable volume, leaving just enough space around it to not feel cramped. To maintain the purity of the box, a single gallery, the architects pulled out circulation functions so they protrude from the building's exterior: a concrete cylinder for the elevator; a metal stair leading to a roof garden; a swoop of curving glass descending to the basement. "It's a very diagrammatic building," says Liu. "Basically we took the optimal gallery proportions and then added a stair, an elevator. Everything just is what it is."

But having ticked off "austere white cube" on the checklist of gallery design strategies (perhaps with a wink and a nudge), Liu and Idenburg proceeded to, in a sense, undo their work. Best known for their temporary structures, including the recent 225,000-square-foot tent that housed the Frieze Art Fair in New York this

May, the partners demonstrate no proclivity for monumentality. Indeed, they wanted to tone down their impressive concrete box in a way that showed deference to the surrounding urban fabric, to "make it less harsh and singular, to soften it," Idenburg says.

"We also needed something that would do what the rest wasn't doing—tie all the pieces together," Liu adds. "So essentially we shrink-wrapped [the building]."

After stretching a number of materials, including elastic stockings, over models of the gallery during the design process, Idenburg and Liu settled on chain mail. Existing varieties, however, such as those used for butcher gloves, didn't cut it for their purpose. "We needed something that worked at the scale of architecture, not the body," says Idenburg. They found a fabricator in China that could handmake the chain mail at a custom size, with 1.5-inch-diameter rings. They also retained the U.S.- and Hong Kong–based facade-engineering firm Front to help develop an application strategy, using computer modeling, so that the mesh skin would assume the complex curves needed to stretch over the building and its protrusions. In the end, the design team devised a system of 15 panels totaling 500,000 hand-welded rings that would be stitched together, also by hand, into a seamless, all-encompassing veil.

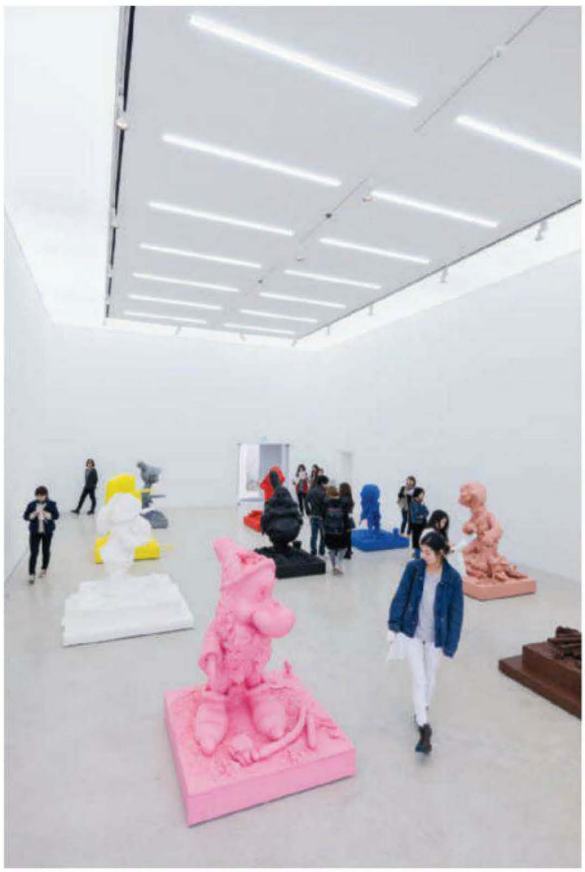
The result is intriguing, transforming the structure into an object that's simultaneously amorphous and geometric, solid and permeable—and seemingly an object at the same time that it appears not to be one. In certain light, the chain

mail turns nearly diaphanous, like an invisibility cloak at half power. In others, it verges on kinky. The sexual connotation is probably not entirely unintentional. (SO – IL, after all, is the firm that once named its installation at New York City's MoMA PS1 *Pole Dance*.) The one exterior section not covered by the mesh is an elegantly curving glass wall.

Kukje's expansion has pushed its small campus—for which SO – IL also designed landscaping and made alterations to the existing buildings—toward a back street, where there is an entrance in the glass facade. The glazing also encloses a stair that descends to a basement level with an office and a 60-seat auditorium, and a subbasement for storage. Meanwhile, the exterior metal stair ascends to a roof terrace with a ring of perimeter skylights that offer views down into the white, column-free gallery below. This stair is "the only place that people can occupy between the mesh skin and the concrete box," says Liu. It's also the most perversely sensual, placing you as it does inside what's possibly the world's biggest fishnet stocking. Perhaps SO – IL's K3 gallery is not so much a dematerialization of the white-box paradigm but a representation of its evolution (and that of contemporary art in general) as something more fetishistic. Which isn't necessarily a bad thing.

"He was very happy with the building," Idenburg says of Paul McCarthy, the artist whose notoriously twisted and hilariously depraved work inaugurated the gallery. "He said it was very suitable." ■

Aric Chen is a Beijing-based writer and curator.



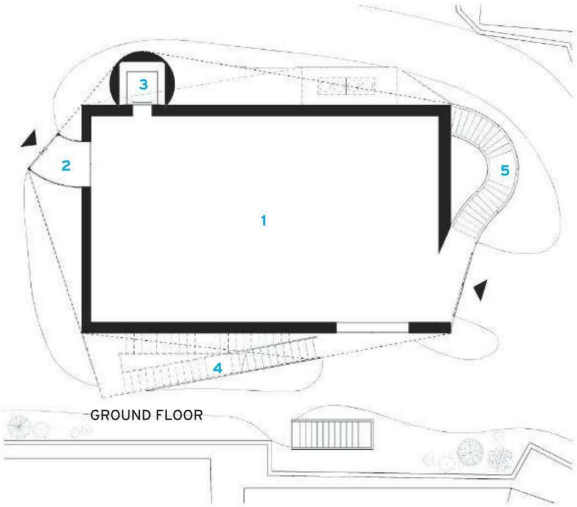
BLENDING IN The building is nestled within a historic urban fabric of converted *hanok* houses, near the Gyeongbokgung Palace (in the background in photo opposite, top left).

A curving glass wall incorporates a back entrance while defining a stairway that descends into the basement (opposite, bottom left).

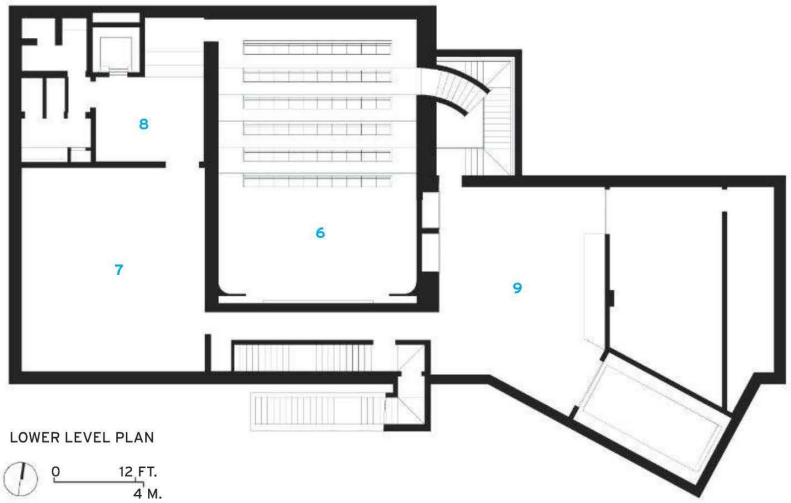
The stairway leads to a basement auditorium and office (opposite, bottom right).

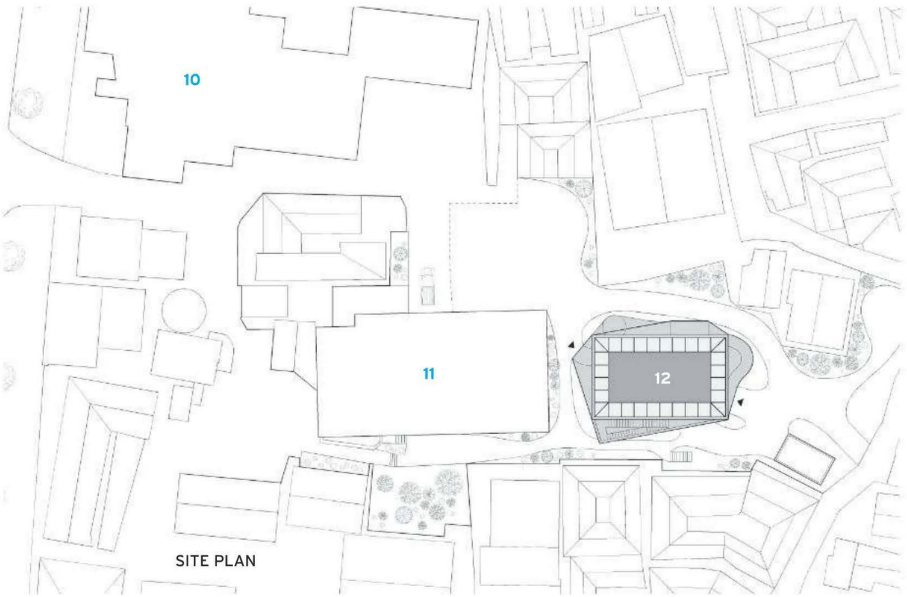
The column-free gallery was inaugurated with a show of works by Paul McCarthy (below left).

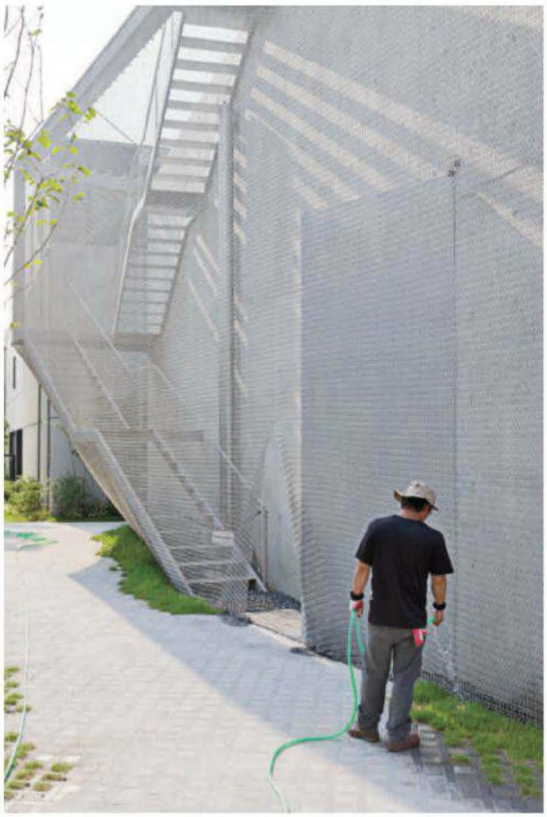
The mesh skin had to be precisely designed to create the necessary complex curves for wrapping the building (below right).



1 GALLERY
2 ENTRANCE
3 ELEVATOR
4 STAIR TO ROOF
5 STAIR TO BASEMENT
6 AUDITORIUM
7 OFFICE
8 HALL
9 PREP SPACE
10 KUKJE 1 (K1)
11 KUKJE 2 (K2)
12 KUKJE 3 (K3)







BETWEEN LAYERS The metal exterior stair is the one place where visitors can occupy the space between the mesh and the building.

credits

ARCHITECT: Solid Objectives–Idenburg Liu (SO – IL)–Florian Idenburg, partner in charge; Jing Liu, partner; Iannis Kandyliaris, Cheon-Kang Park, Sooran Kim, design team

ASSOCIATE ARCHITECT: Jong Ga Architects

CLIENT: Kukje Gallery

ENGINEERS: Dong Yang Structural Engineers (structural); J.K. Technology (mechanical)

CONSULTANTS: Front (mesh system design); Garden in Forest (landscape); VITAMIN Design (theater); 2 x 4 (graphics)

GENERAL CONTRACTOR: Jehyo Construction and Engineering

SIZE: 32,290 square feet (gross) / 13,500 square feet (building)

COST: withheld

COMPLETION DATE: April 2012

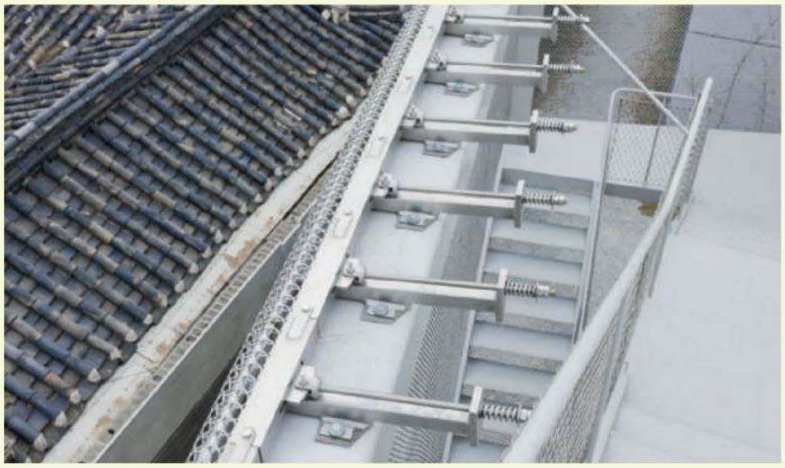
SOURCES

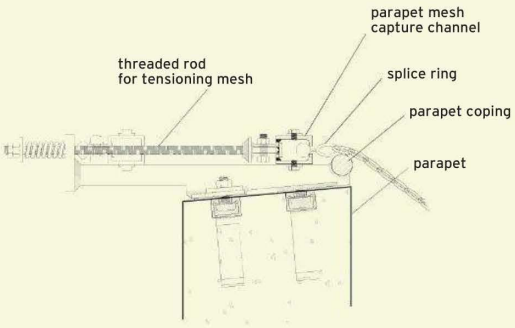
CLADDING: VIA (chain mail mesh)

LOW-IRON LAMINATED GLASS: Hanglas

LAMINATED FIXED OUTER PANE: Interpane

LAYLIGHT: Barrrisol; MechoSystems





CUSTOM FIT A C-channel and special connections above the parapet await the attachment of the chain mail mesh (top).

The mesh was tested numerous times and installed in 15 swaths (right). SO - IL wanted to soften the concrete building, seen here before the addition of the chain mail mesh (bottom).

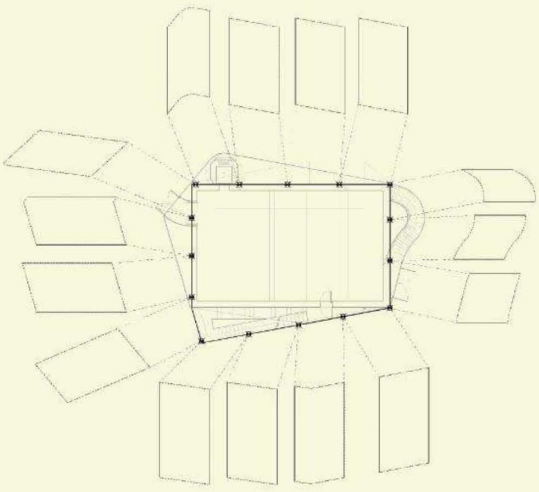
Thinking outside the box—to wrap it in rings of steel

GIVEN THAT wrapping a building in chain mail is not common practice, developing the mesh skin for the Kukje Gallery required essentially starting from scratch. Once a fabricator was found to custom-make and weld the 1.5-inch-diameter rings, the key was figuring out how to ensure that the mesh would always fit precisely and snugly over the building's complex shape.

SO – IL looked to the facade engineering firm Front for help. "It was our first encounter with such a strange and primitive material," says Na Min Ra, a Front partner based in San Francisco. After testing samples, Ra realized the mesh reacted differently depending on its orientation: stiff in one direction, and loose when rotated 90 degrees. Choosing the latter, he developed a computer model using Rhino 5 to determine how the mesh should be fabricated. This required more testing. "We employed a physical/digital feedback process by which studies of [1:1 and 1:10] physical mock-ups, of increasing scale and complexity, would inform the continuous refinement of the working digital model," says Ra.

In the end, the 500,000 rings of 316 grade stainless steel—stretched, coiled, scored, linked, welded by hand, and finished, all at VIA in Anping, China—were shipped to Seoul in 15 swaths of 20,000 to 40,000 rings each. Once on-site, each was attached to an I-beam and lifted to the building's parapet, where special connections along the top edge were slid into a C-channel. This allowed flexibility of movement so the mesh could settle into its own form. Each swath was similarly attached at the bottom, just below the ground pavers, and then hand-linked, ring by ring, to the one next to it. Finally, the entirety was tightened to achieve the right tension. The finish of the rings welded on-site also needed to match that of the bead-blasted rings throughout.

Other elements, such as spherical nodes at corners and individually adjusted turnbuckles, add pliability. When you've got heat, cold, wind, and gravity working against you to induce sagging, wrinkling, and bunching, a little wiggle room helps. *A.C.*



PHOTOGRAPHY: COURTESY SO - IL (BOTTOM RIGHT); © FRONT (CENTER RIGHT)

Brooklyn Botanic Garden Visitor Center | New York City | Weiss/Manfredi

GROUNDSWELL

Earth and plants serve as critical materials in helping a building integrate itself into the landscape.

BY CLIFFORD A. PEARSON

View additional images at architecturalrecord.com.

GREEN THRESHOLD The visitor center replaces an old ticket booth and turnstiles, giving the garden an urban presence at its northeast entrance and providing a generous plaza to handle some of the crowds—which can reach 37,000 people a day during cherry blossom season.

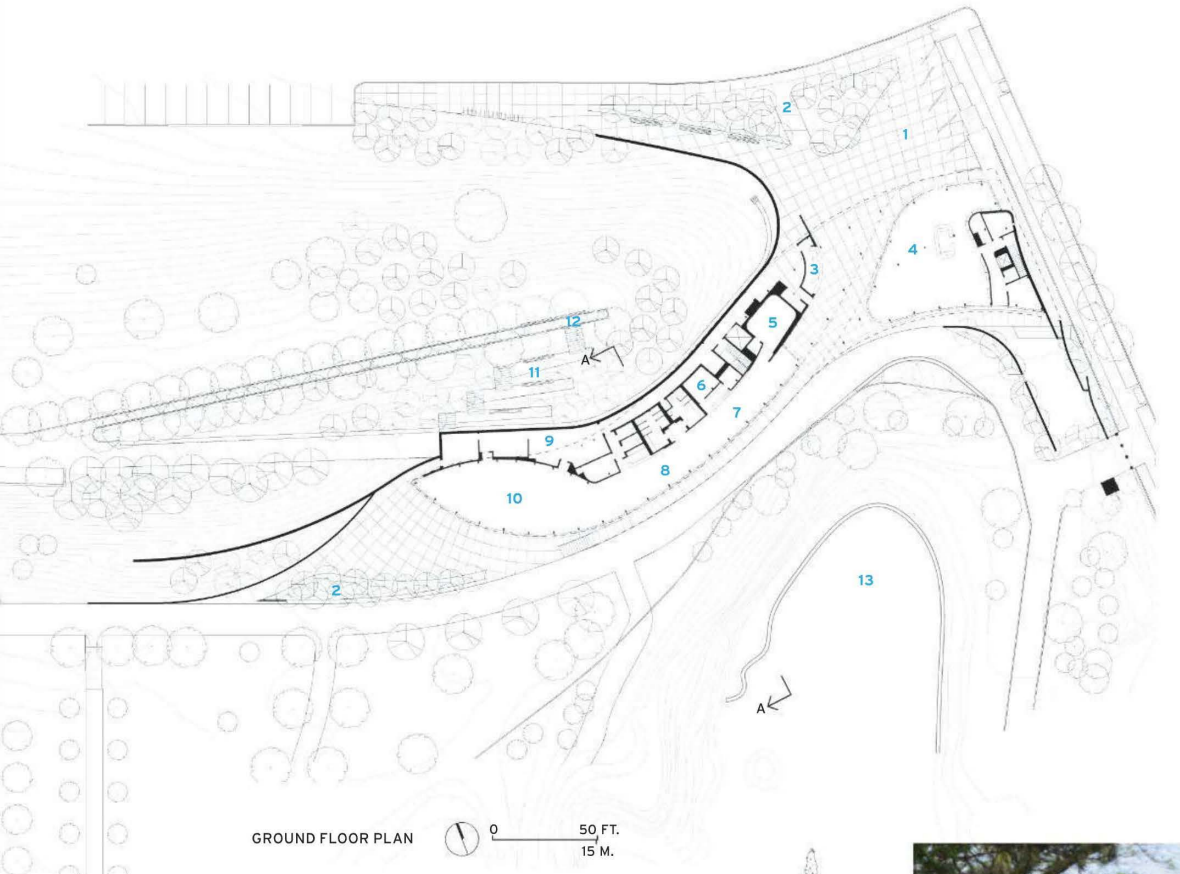
The green-roof portion of the building pushes up against an existing berm (right in photo left) on top of which runs an allée of ginkgo trees (above).

PHOTOGRAPHY: © ALBERT VECERKA / ESTO

AT A TIME WHEN GREEN ROOFS have become a cliché and *landscape* a term used to describe almost anything, how do you design a building for a botanic garden without looking like a wannabe? Marion Weiss and Michael Manfredi—architects who have been fusing structure and site since they built the Women's Memorial and Education Center at Arlington National Cemetery in 1997—might not need to worry about jumping late on the green bandwagon, but in taking on the job of building a visitor center at the Brooklyn Botanic Garden (BBG), they faced the challenge of not repeating themselves.

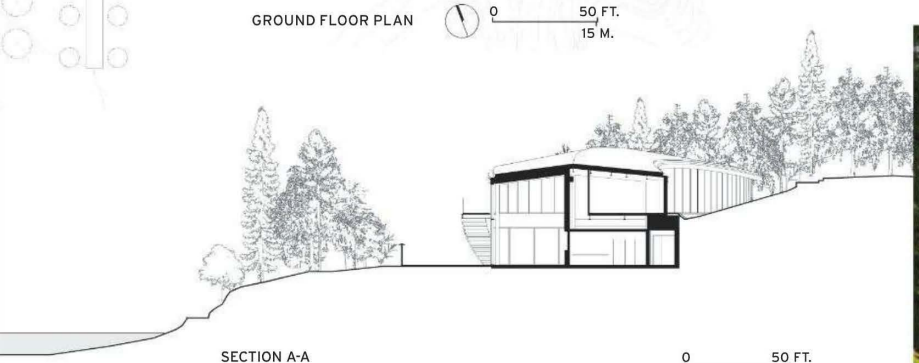
Ironically, the answer for the husband-and-wife team began with an emphasis on the new building's urban character. In their first interview for the job, the architects told the client they wanted to move the proposed site from a leafy spot near the center of the 52-acre garden to one on the northeast side, facing a busy street. The original location placed the visitor center on axis with the garden's Cherry Walk, but Weiss and Manfredi argued that a building there might dominate the cherished esplanade of trees. It also would require visitors to walk along the edge of a large parking lot behind the Brooklyn Museum, BBG's Beaux-Arts neighbor to the north. Bringing the new building to the street would give it an urban presence, provide the chance for a graceful transition from city to nature, and protect the character of the garden itself. The argument immediately convinced the client's building committee, recalls Scot Medbury, president of BBG.

"The tension between being in an oasis and being in the city is what makes this project so wonderful," says Weiss. So she and Manfredi chose to introduce the building to the street with a generous entry plaza and a copper sawtooth roof that will age to the same color as BBG's 1917 McKim, Mead & White administration building down the block. The

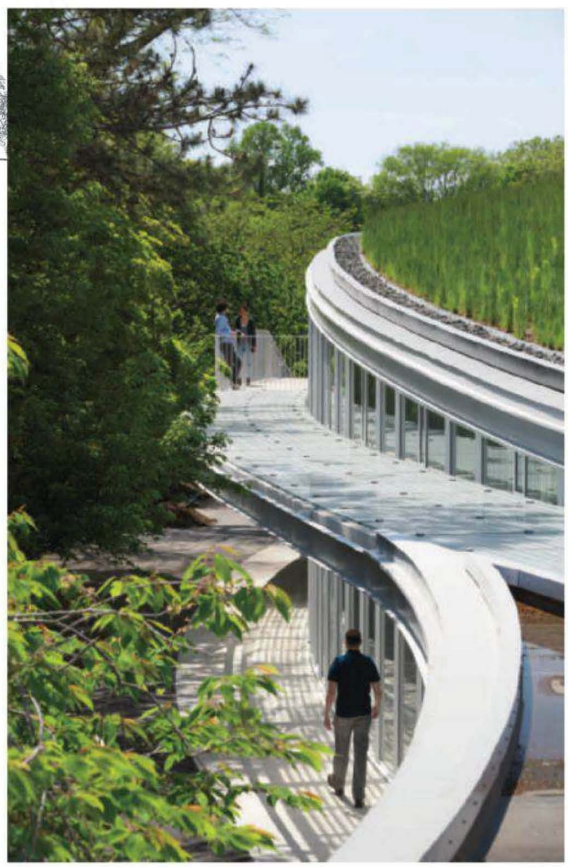


1 ENTRY PLAZA
2 RAIN GARDEN
3 TICKETS
4 GARDEN SHOP
5 ORIENTATION GALLERY
6 OFFICE
7 EXHIBIT GALLERY
8 CAFÉ BAR
9 KITCHEN
10 EVENT ATRIUM
11 GINKGO TERRACES
12 GINKGO ALLÉE
13 JAPANESE HILL-AND-POND GARDEN

GROUND FLOOR PLAN 0 50 FT. 15 M.



SECTION A-A 0 50 FT. 15 M.



credits

ARCHITECT: Weiss/Manfredi Architecture/Landscape/Urbanism—Marion Weiss, Michael Manfredi, design partners; Armando Petruccelli, project architect; Christopher Ballentine, Cheryl Baxter, Michael Blasberg, Paúl Duston-Muñoz, Hamilton Hadden, Justin Kwok, Michael Steiner, project team

ENGINEERS: Weidlinger (structural and civil); Jaros, Baum & Bolles (m/e/p and IT)

CONSULTANTS: HM White Site Architecture (landscape); R.A. Heintges (glazing); Viridian (sustainability); Langan (geothermal); Thinc Design (exhibits)

GENERAL CONTRACTOR: E.W. Howell

SIZE: 22,000 square feet

COST: $28 million

COMPLETION DATE: May 2012

SOURCES

CURTAIN WALL: Schüco USA

GLASS: Saint-Gobain

GREEN ROOF: Sika Sarnafil, Roofmeadow

GREEN ROOF PLANTING: New York Green Roofs

COPPER STANDING-SEAM ROOF: Firestone, Universal Services Group

jagged roof covers a garden shop that sells plants and books and can operate even when the garden is closed. What at first appears to be a single building addressing the street turns out to be a pair of structures separated by a fritted-glass-covered breezeway. Walk through that breezeway and you can continue along a path to the Cherry Esplanade or duck inside to the second building, this one topped by a 10,000-square-foot green roof planted with 40,000 grasses, spring bulbs, and wildflowers. The building uses earth and plants, along with glass and steel, as essential materials.

Pushed up against an existing berm, the visitor center houses a ticket booth, exhibits, a café, and restrooms, while connecting an allée of ginkgo trees on the ridge of the berm to the rest of the garden below. At the far end of the structure, a leaf-shaped atrium provides a double-height space for talks or social events. If you climb an outdoor stair that winds around this space, you come to a covered passage that offers a view down into the atrium and then continues to a terraced hillside at the base of the ginkgo allée.

The visitor center rambles along for 385 feet, nearly two city blocks. But because it unfolds as a set of buildings, it seems much shorter. "We

BETWIXT AND BETWEEN A fritted-glass canopy protects a breezeway from the full effects of the sun, providing a shaded path between the garden shop (right in photo left) and the main building (left in photo left).

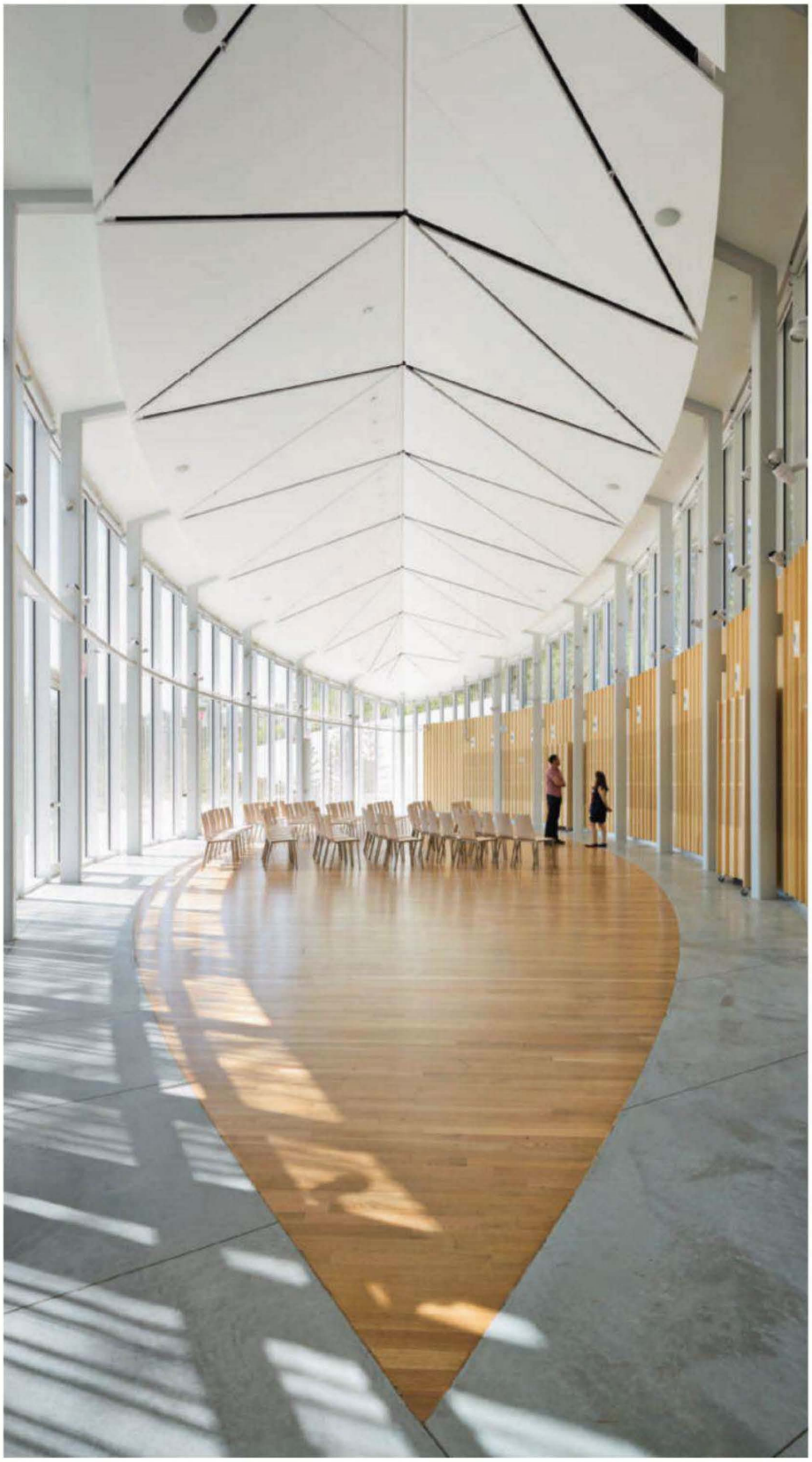
An outdoor stair wraps around part of the glass-enclosed event atrium (below), taking visitors to an upper level (opposite). The 10,000-square-foot green roof supports a mix of grasses, bulbs, and wildflowers that will present a changing palette of colors over the course of the four seasons.

A plaza outside the atrium (below) offers a place to relax as well as spillover space for weddings and other events taking place inside. The building helps connect the gingko allée on its upper level to the rest of the garden.

GARDEN VARIETY A shop (left) selling plants, books, and gardening items can be entered without admission to the garden and can stay open even when the rest of the institution is closed.

Exhibits in the gallery (below) were created by Thinc Design to introduce visitors to the many different features of the garden and the ecological strategies behind it.

The 2,500-square-foot event atrium (opposite) can hold 200 people and accommodate both talks and parties. Wood panels along the north side of the space were made from ginkgo trees that were cut down to make way for the building.



wanted it to feel like a series of episodic events," says Manfredi. By slicing views and passages through the buildings—creating a nuanced progression of outdoor, indoor, and covered spaces—the architects neatly threaded the visitor center into the landscape.

As they have done in almost all their projects, Weiss and Manfredi applied a number of sustainable design strategies to the visitor center. In addition to using the existing berm and the green roof to reduce solar loads, they employed a geo-exchange system of 28 thermal wells to heat and cool interior spaces, specified concrete and steel containing recycled building materials, and fabricated wood paneling in the event space from ginkgo trees cut down to make way for the building. According to the architects, the project is on track to earn LEED Gold certification.

Weiss and Manfredi also worked with landscape architect Henry M. White III to use the green roof and areas around the building to create a series of bioswales that filter stormwater and store it in a pair of rain gardens—one in the entry plaza and the other in the plaza outside the event atrium. "We wanted to show plants as an ecological system and get beyond just their beauty," says White.

What makes the visitor center work so well as a piece of architecture is the way it expresses in glass, steel, and earth the natural and man-made forces shaping the site. Its slithering form and sinuous breezeway respond to the paths, trees, and berm that had long been there. "We tried to bring into view things that had been invisible in the site," explains Weiss. So the circulation through the building offers views back to the city, out to Cherry Walk, and up to the ginkgo allée on the top of the berm—all of which were always there but probably weren't previously noticed by visitors as they walked through this part of the garden.

By alternating spaces that feel compressed—such as the curving gallery with exhibits by Thinc Design and the narrow passage cutting through the building at the upper level—with others that seem to expand, such as the event atrium, Weiss/Manfredi created a rhythmic progression that animates the architecture.

A few elements seem weaker than the whole. The outdoor stair curving around the glass facade of the atrium could have been more elegantly detailed to make it more ethereal. And a stucco wall with a small window facing the ginkgos on the upper level looks cheap. But these are quibbles. The visitor center stands as a remarkable addition to a 102-year-old institution's beloved campus, one that serves as a gracious threshold between the urban context and the gardens within, as well as between one era and another. ■

Musée Jean Cocteau | Menton, France | Rudy Ricciotti Architect

BEAUTY AND THE BEAST

A surreal new home for the Jean Cocteau collection of the late Séverin Wunderman challenges the notion of the Bilbao effect in the South of France.

BY DAVID COHN

FANCIFUL TRIBUTE The museum stands between the Mediterranean and the market square in Menton, a picturesque resort near Monaco. The building's glass curtain wall is wrapped with a shallow pergola of writhing columns, which are made of finely molded concrete and are evocative of Cocteau's dreamlike imagery (above).

Seen up close, the columns create interesting frames for views in and out (left).

PHOTOGRAPHY: © ROLAND HALBE, EXCEPT AS NOTED

IF THERE is any corner of the world less in need of a new architectural icon, it's Menton, a lovely seaside hill town situated 2.5 miles from Italy on the French Riviera. With its gardens, villas, and picturesque historic center, Menton retains the charms that once attracted luminaries such as Aubrey Beardsley, William Butler Yeats, and the French poet, artist, and filmmaker Jean Cocteau (1889–1963). But when municipal officials began to court the American art collector Séverin Wunderman, and offered to build a permanent home for his collection of 990 works by the Surrealist Cocteau, the wheels were set in motion to create a building that, in the words of Deputy Mayor Jean-Claude Guibal, would give Menton "the status of a cultural destination in its own right, where bold projects ennoble the spirit of the site and reinforce its authenticity."

On the long road from the opening of the Guggenheim Museum Bilbao in 1997 to this new endeavor in Menton, the formula of daring destination architecture has lost its fizz. Designed by French architect Rudy Ricciotti, who won a 2008 competition, the Musée Jean Cocteau Collection Séverin Wunderman looks terrific in close-up detail shots and aerial night views, where writhing fingers of finely molded concrete extend around it like "octupus tentacles," "flowing hair," or "chandeliers," in the words of the architect, who drew these images from Cocteau's dreamy 1946 film *La Belle et la bête*. Seen firsthand, however, the building is rather one-dimensional. The architect concentrated all his attention on those fascinating concrete tentacles (though not without technical problems; see box,

opposite page), but they do little to relate the building to the town.

One of the keys to Menton's character is the urban and contextual quality of its architecture. Old resort hotels stand back from the beach behind handsome gardens, directly lining a lively city street behind them. The hill town, with its Baroque church and tower, forms a solid compositional mass in the landscape, and the surrounding villas and terraced gardens are intimately engaged with the precipitous terrain.

The Cocteau Museum, on the other hand, is isolated by surrounding streets and an overscaled entry plaza. It stands as an insular block with a uniform exterior skin on all sides that takes no cues from its urban context; it could be anywhere. The spaces created by its projecting columns are too shallow to produce the shady pergolas for pedestrians that the photographs promise. Even the deep porch over the entry facade disappoints, as the ground falls away under it to give access and daylight to basement-level offices, a classroom, and a document center, instead of offering a cool place to linger – visitors are forced to approach the building over narrow entry bridges.

The museum stands on a point jutting into the water, and its triangular form effectively frames the curving bay of the beach. From here, the rhythms of its columns offer a contemporary interpretation of the arches below the promenade that overlooks the old fishing port. Yet while the promenade follows the cascading topography, making it accessible from above and below, Ricciotti's building offers no such multilevel interplay.

Inside, the museum is a free-plan space, like a floor in a speculative office building. It is enclosed entirely by tinted floor-to-ceiling glass, a dubious solution for exhibiting Cocteau's delicate drawings and projections of his films. The glare dims the projections, and curators have rigged shading curtains in some areas. A central core separates the entrance – housing a café, bookshop, and temporary exhibition space – from the permanent exhibits. The

CULTURE GAPS The museum entrance faces a large plaza. Here, a deep, moatlike porch provides daylight to the lower-level spaces (above).

A pair of bridges span the resulting divide for access to the lobby (opposite, top left). "In formal terms, the building is an archetype of arcades with very strong shadows," says the architect, noting the proximity of the frontier with Italy, where the type is common. These arcades, however, do not lend themselves to strolling or relaxing over a drink.

finishes are uniformly white.

The project's payoff is the energized columns and roof cuts, which frame handsome views from inside. Thrillingly, they seem to challenge the structural integrity of the building, especially at the corners. The formal articulation of the cuts is clumsy, however. Each column has a seemingly unique shape, with undulating curved forms and rounded edges. At their heads, they widen awkwardly into squared-off profiles to meet the projecting fingers of the roof slab, creating prominent knuckles. Conceptually, there are two structures here, a concrete spider that crouches over a glass pavilion, but this is poorly articulated.

Discussing his project, Ricciotti rejects the "terrorist cultural practices of Minimalism" and "the doubtful imperialism of an academic modernism," declaring instead his admiration for "the arrogance of Mr. Cocteau." But one's overall impression of his building is that a single slick gesture stands in for a general lack of focus, rigor, and ambition, and that the design defrauds the expectations it raises. ■

Based in Madrid, David Cohn is an international correspondent for RECORD.

PHOTOGRAPHY: © LISA RICCIOTTI (BOTTOM RIGHT)

Beyond the Surface

THE ARCHITECTS devised nine different column shapes for the building's perimeter, and they flipped these horizontally and vertically to simplify the design and fabrication processes. But, according to structural engineer Eric Vallauri, creating these compound curves was a challenge. The crew built full-size wood mock-ups of the unique columns. Then they used the models to produce steel molds and lined them with resin for an extra-smooth finish, bolstering them from behind with wood props. Although the concrete is not high strength, the mix includes white cement combined with half the amount of gravel typically used for more standard concrete. The reason: to achieve a smooth, brilliant finish. One of the consequences, however, is extensive surface cracking on columns facing the sea and southern sun—a common problem in work of this kind. Apparently, overheating during the setting process caused a rapid loss of moisture, resulting in the cracks, which stood out clearly during a recent visit, as they have become stained with rust from the rebars. The cracking might have been avoided, Vallauri suggests, if more expensive marble gravel had been used instead of cutting back on the quantity of gravel.

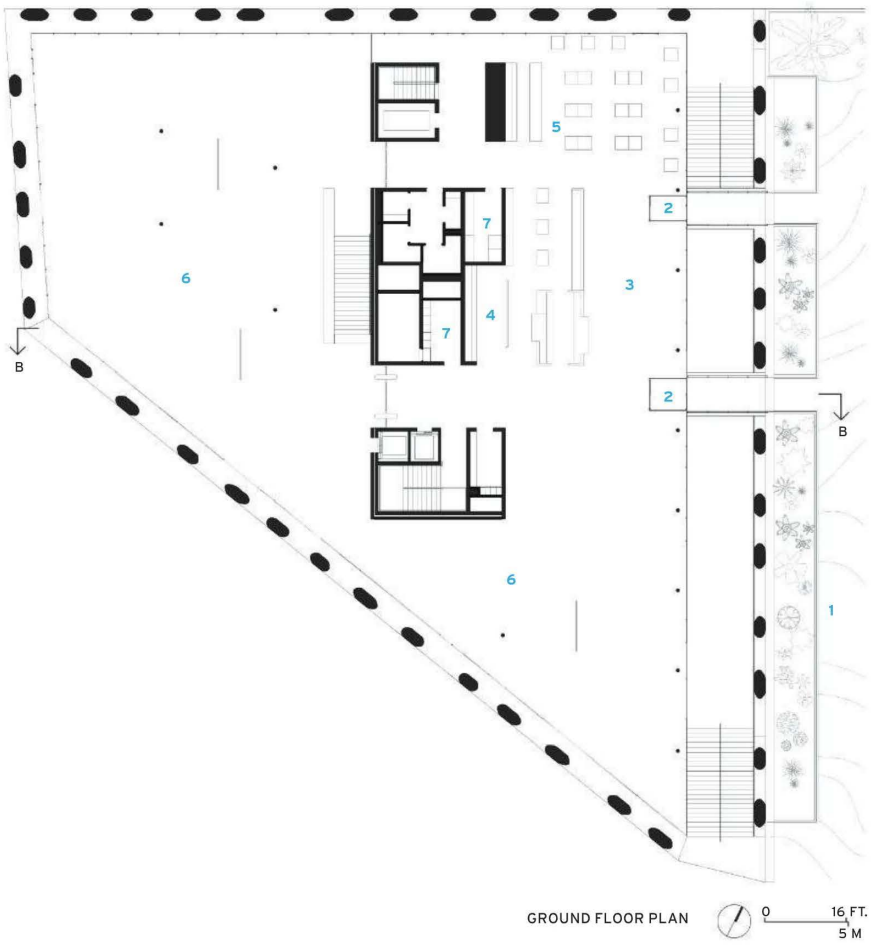
Vallauri says that the structural design and calculation of each column took three weeks, "when the normal time is ten minutes." This, he explains, was due to their unusual shapes, and in response to moderate seismic loads. Additionally, slices cut deep into the edges around the 16-inch-thick roof slab required heavy reinforcing. Formed with laser-cut polyester molds, these amorphous notches are edged by 12-inch-deep-by-2-inch-high grooves that accommodate skylightlike glazing.

Ricciotti emphasizes that "concrete allows one to create projects that are not necessarily complex in technical terms, but rather in terms of their craftsmanship." Despite the effort expended on crafting the concrete, the work is compromised by the extensive cracking, awkward detailing, and gaffs like a seismic joint in the roof slab located directly over a main entry. Such carelessness is surprising, and is perhaps another sign of how tired and lazy the recourse to the one-off architectural icon has become. *D.C.*

TECHNICAL CHALLENGES The horizontal cuts in the roof, as deep as 23 feet, required heavy reinforcing. They were made with laser-cut polyester molds. The columns were cast using a total of nine different resin-backed steel molds.

1 PLAZA
2 MAIN ENTRANCE
3 LOBBY
4 BOOKSHOP
5 CAFÉ
6 EXHIBITION SPACE
7 CLOAKROOM
8 CLASSROOM
9 OFFICE
10 ARCHIVES & CONSERVATION
11 STUDIO
12 DOCUMENTATION
13 PUBLICATIONS LIBRARY
14 STAFF ROOM
15 PARKING

LOWER LEVEL PLAN



GROUND FLOOR PLAN 0 16 FT. 5 M

credits

ARCHITECT: Rudy Ricciotti Architect – Rudy Ricciotti, principal; Marco Arioldi, project architect

OWNER: Town of Menton

ENGINEER: Sudeco Ingénierie

CONSULTANTS: EDP et Associés (museography); Agence APS (landscape); Lightec (lighting); Thermibel (acoustics)

SIZE: 23,235 square feet

COST: $13.4 million

COMPLETION DATE: November 2011

SOURCES

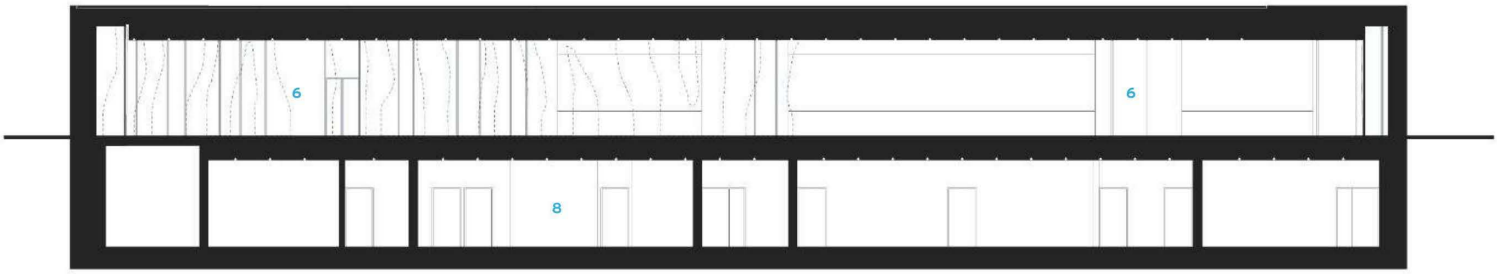
CEMENT: LaFarge (for white concrete)

FRAMING: La Serrurerie (exterior); Ste Bareau (interior)

INTERIOR SURFACES: RPM Bally (wallcovering, paint, flooring)

ELEVATORS: Kone

OPEN CIRCULATION Pristine temporary and permanent exhibition spaces on the main gallery floor (left) are configured within a free plan around a central core that separates the entrance and lobby from the exhibits.



SECTION B-B

0 16 FT.
5 M

Twilight Epiphany | Houston | James Turrell

PHOTOGRAPHY: ©

Watch a video at architecturalrecord.com.

LIGHT CRAFT

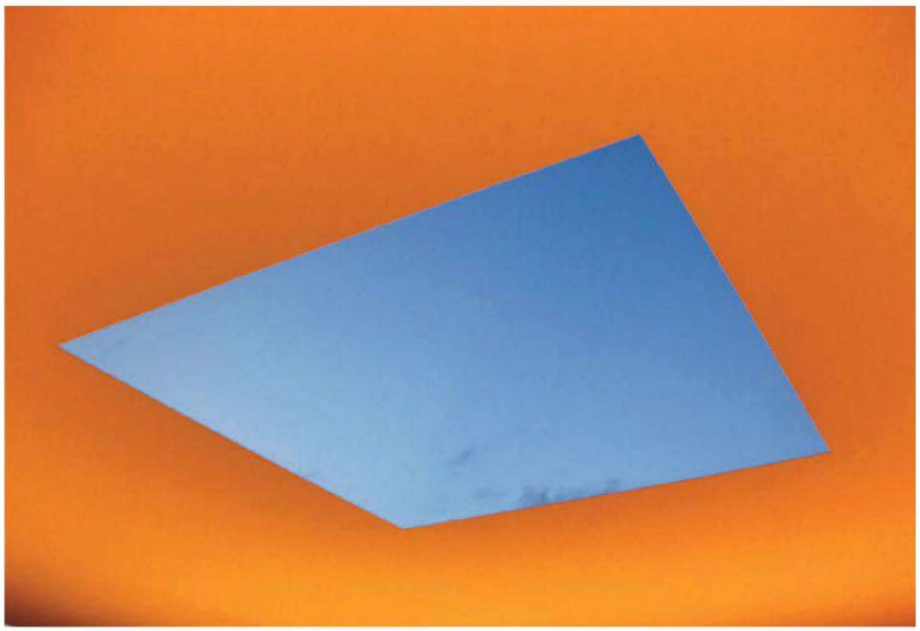
Art and architecture merge for the creation of a new iconic work at Rice University.

BY BETH BROOME

PHOTOGRAPHY: © CASEY DUNN FOR *TEXAS MONTHLY*; BETH BROOME/*ARCHITECTURAL RECORD* (TOP RIGHT)

ANCHORING THE western end of Rice University's main quad in Houston, James Turrell's new 118-foot-square Skyspace emerges from the earth (or lands from the heavens, depending on how you see it) in front of the monolithic Shepherd School of Music. "This is architecture that light and space makes," explains the artist. When the sun illuminates the atmosphere, you can't see through it to view the stars that are there, he points out. "Light not only reveals, it also obscures—so you can actually build a space with it. I use light and architecture in that way: to limit space and to reveal it, either way."

Turrell started his series of Skyspaces—enclosed rooms with an aperture open to the sky—in the 1970s, and to date he has created 73 across the world. In the early days, he would often make his works by cutting through existing buildings, such as his *Meeting* at New York's MoMA PS1. But, to avoid irritating architects, as he says (and perhaps being irritated by them as well), he graduated to creating autonomous structures: buildings with holes designed in them, and no real function, much like a folly or gazebo.

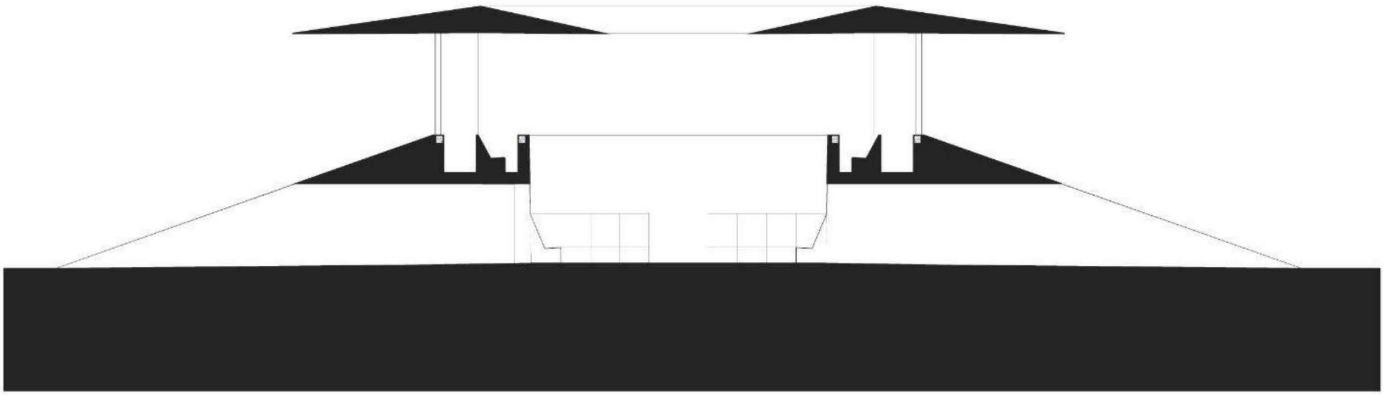


Dubbed *Twilight Epiphany*, Turrell's piece at Rice is composed of a 12-foot-8-inch-high grass berm that rises against the backdrop of the campus's neo-Byzantine brick academic quads. The truncated pyramid form, which employs a concrete structure below and steel columns above, is topped with a 72-foot-square conventional membrane roof with a steel-plate knife-edge and a 14-foot-square aperture at its center. A lower-level seating area accommodates 44 people and features the artist's trademark benches, made of Texas pink granite. Precast-concrete seating for 76 occupies the upper viewing area, where LEDs are installed for the two daily light shows programmed to correspond with sunrise and sunset. Made possible by a gift from Rice trustee and alumna Suzanne Deal Booth, who suggested the university work with Turrell, the Skyspace is the artist's first engineered for sound (he worked with the music school to develop the concept), and it will host a variety of performances, some specially created for the space.

Despite—or perhaps because of—Turrell's adroitness at building with light, the most ethereal of materials, the artist needed to be brought down to earth to actually realize his creation. And though the piece is

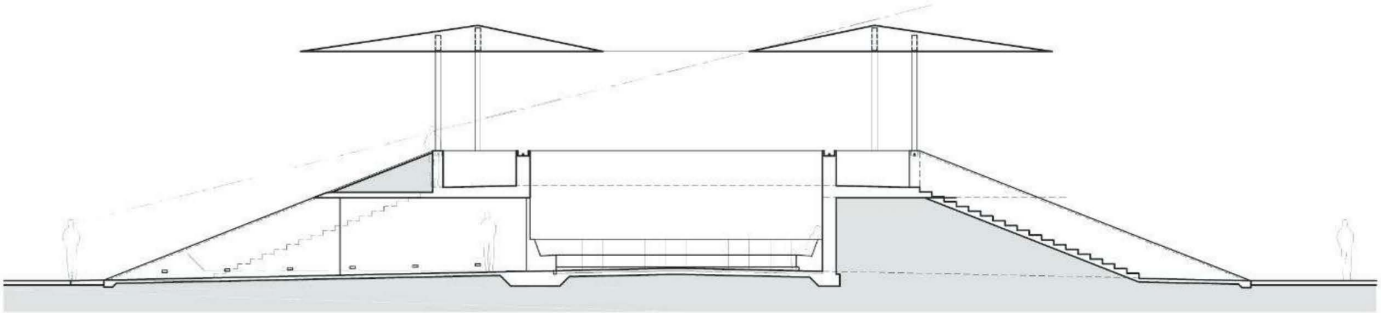
TRUE COLORS The work employs 256 LEDs for its two daily light shows, programmed to correspond with sunrise and sunset. The fixtures are steady at low levels and have the capacity to dim very smoothly. The architect hoped to classify the project as an artwork, but the building department insisted it be formally classified as a building.

The canopy, with its 14-foot-square aperture (above), serves as a frame and, illuminated, alters perception of the sky. "I like to have this work where I give a general reminder that we give the sky its color and, because we do, I can change that for you," says Turrell.



NORTH-SOUTH SECTION

0 10 FT. 3 M.



EAST-WEST SECTION

credits

ARTIST: James Turrell

TECHNICAL ARCHITECT: Thomas Phifer and Partners–Thomas Phifer, Eric Richey, Anja Turowski

ENGINEERS: Skidmore, Owings & Merrill (structural); AltieriSeborWieber (m/e/p); Ulrich Engineers (geotechnical); Walter P Moore (civil)

CONSULTANTS: Office of James Burnett (landscape); Baltic Studio (lighting); Arup (acoustics/AV)

GENERAL CONTRACTOR: Linbeck

SIZE: 1,820 square feet

COMPLETION DATE: May 2012

SOURCES

PRECAST CONCRETE: Dee Brown

EIFS AND STUCCO: Parex

MOISTURE BARRIER: Tremco

PVC ROOFING: Johns Manville

GLASS: PPG

INTERIOR AMBIENT ART LIGHTING: Feno

INVISIBLE SPEAKERS: Amina

SUN TEMPLE Visitors enter the viewing area through a narrow passage that cuts through the grass berm (above). A second-level viewing area is accessed by one of four slender stairs (the two flanking the western passage are mirrored on the east side).

James Turrell provided Thomas Phifer's office with CAD drawings (lower section shown on opposite page), from which the architects produced a set of their own drawings (top section shown on opposite page). The artist chose Texas pink granite for the lower viewing area benches (opposite, bottom). The floors are made of Raven Black granite.

PHOTOGRAPHY: © PAUL HESTER (OPPOSITE); BETH BROOME/ARCHITECTURAL RECORD (TOP)

first and foremost considered an artwork, "you have this thing you enter, so it is an architecture, and it's going to be legally treated as a building—I understand that," says the artist, who admits he does not deal well with such realities as code, and was hoping to dispense with handrails and step lights in this case. Addressing the need for an architect, the university paired up Turrell with New York–based Thomas Phifer and Partners, a natural choice since the university had previous experience with Phifer. The match was not a hard sell for the artist: Turrell, who has worked with many different architects, says he designed *Twilight Epiphany* to respond to Phifer's airy Brochstein Pavilion [RECORD, March 2009, page 84], a few hundred yards down the quad. "I wanted it to have a feeling of mass that came out of its landform, but I also wanted to make this thin plane that floated in the sky," he says. "I wanted to do a piece that offset Tom's—something that had a certain lightness, because *his* structure has this elegant lightness."

"We took James's drawings and we turned them into something," says Phifer, who has worked with numerous artists over the years and was happy to add Turrell to the roster. Not surprisingly, Turrell was very particular about the dimensions and scale of the room, the height the roof rose above the berm, the exact size of the opening, and the precision of the knife-edge, says the architect. "All of those details he's been doing for most of his life—it's a huge part of this work. The result is hypnotic. You're taken to another place."

Phifer, known for the central role of light in his work and the precision of his own detailing, ensured that Turrell's intentions were preserved by finessing the technical aspects, such as stiffening the structure so it can stand up to hurricane-force winds, and preventing the roof's sharp edges from warping in the heat and humidity by using analysis to determine steel plate thickness (as well as specifying radiant barrier paint). And, of course, he tackled the code. It's all about managing these invasions so they do not become the focus. "It takes just one of those little moments to get jerked back to reality in a space like this," notes Phifer. This shared understanding about the transformative potential of the built world underlies the strength of the pairing of artist and architect. "Though my work may not inform architecture, it can inform an architect about how we perceive," says Turrell. "My interest is working in this space that we inhabit, which is not always the physical space that we have built."

During the day, *Twilight Epiphany* gleams, a beautiful object offering an intriguing pause against the columned facade of the aggressively Postmodern Ricardo Bofill music school. As night falls, the colors projected on the levitating white canopy shift in juxtaposition to those in the sky. The frame brings passing objects into surreal focus—a cloud, a plane, a bug—and the walls dissipate, leaving you to consider the multitude of possibilities beyond. ■

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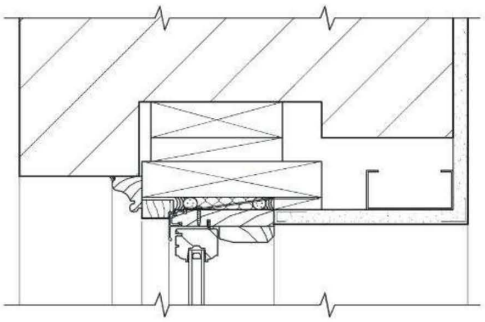
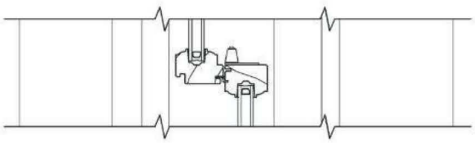
CIRCLE 61

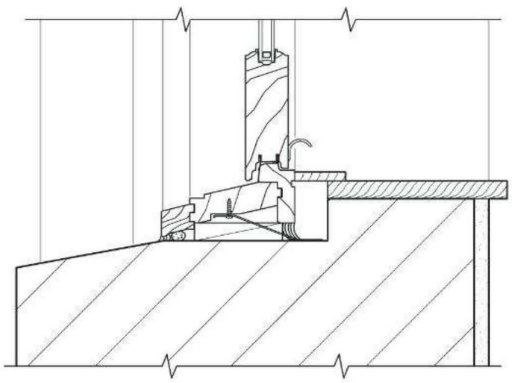
TECHNICAL CAPABILITIES.



HEAD

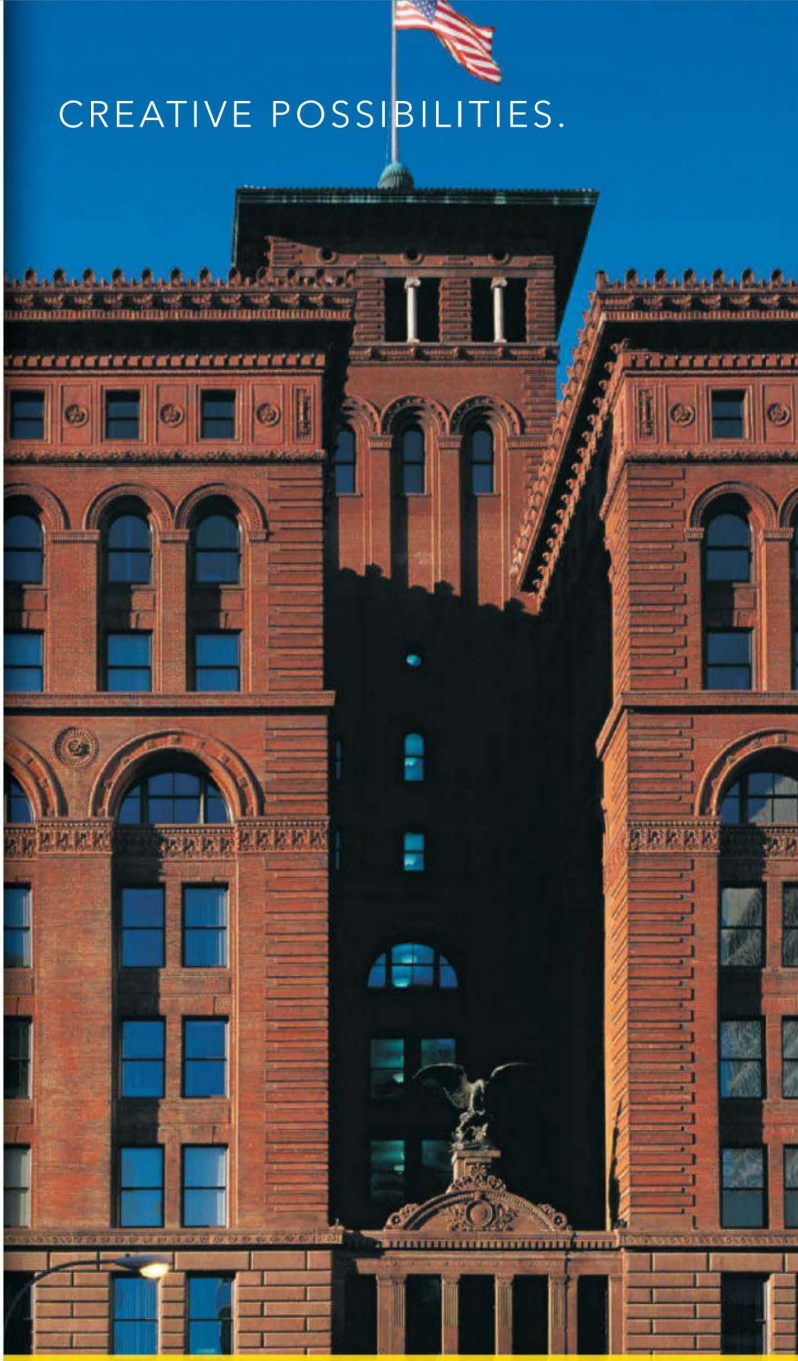


CHECKRAIL



SILL

CREATIVE POSSIBILITIES.



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 CIRCLE 45

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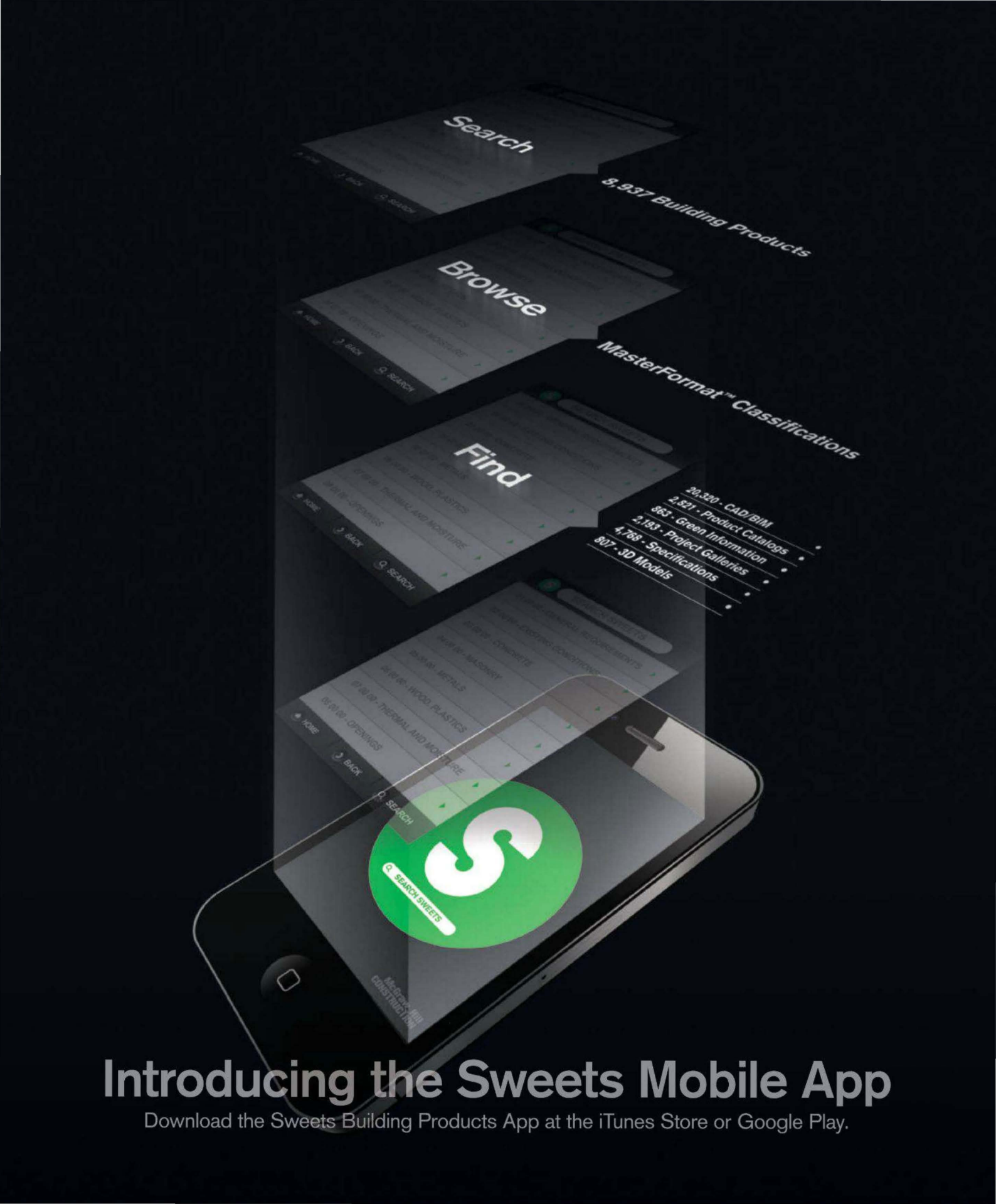

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CIRCLE 55

Affordable's New Look

New York City

With Via Verde – a mixed-use complex in a rapidly changing Bronx neighborhood – Dattner and Grimshaw reimagine city dwelling.

By Joann Gonchar, AIA

PHOTOGRAPHY: © DAVID SUNDBERG/ESTO, EXCEPT AS NOTED

View additional images at architecturalrecord.com.

THE NEWEST sign of the ongoing upswing in the South Bronx, once a national symbol of urban decay, is the dynamic exterior of Via Verde, a just-completed 222-unit apartment complex for households in the low- to middle-income brackets. It has a 20-story tower anchoring one end and terraces that step down toward the other. Projecting sunshades punctuate the street-facing elevation, which is made up of warm-toned wood, matte fiber cement, and silvery aluminum rainscreen panels.

Upon first seeing this project and its lively exterior, many people are surprised to learn that it is subsidized housing. However, its designers think this is an odd response. "There shouldn't be a different lens for evaluating affordable housing," says Vincent Chang, a partner in the New York office of London-based Grimshaw Architects. "Quality should exist at every market sector,"

In early 2007, Grimshaw, the New York firm Dattner Architects, and development partners Phipps Houses and Jonathan Rose Companies won the $70 million Via Verde project as part of a two-stage competition—the first juried competition for affordable and sustainable housing in the city's history. The competition emerged from a collaboration of the local chapter of the AIA, the New York City Department of Housing Preservation and Development (HPD), and a volunteer steering committee made up of 20 experts in housing design, finance, and development. In the competition's final phase, the jury selected the Via Verde scheme over proposals by four teams that included the New York architects Cook + Fox, Kiss + Cathcart, and Rogers Marvel, as well as Stuttgart, Germany–based Behnisch Architekten.

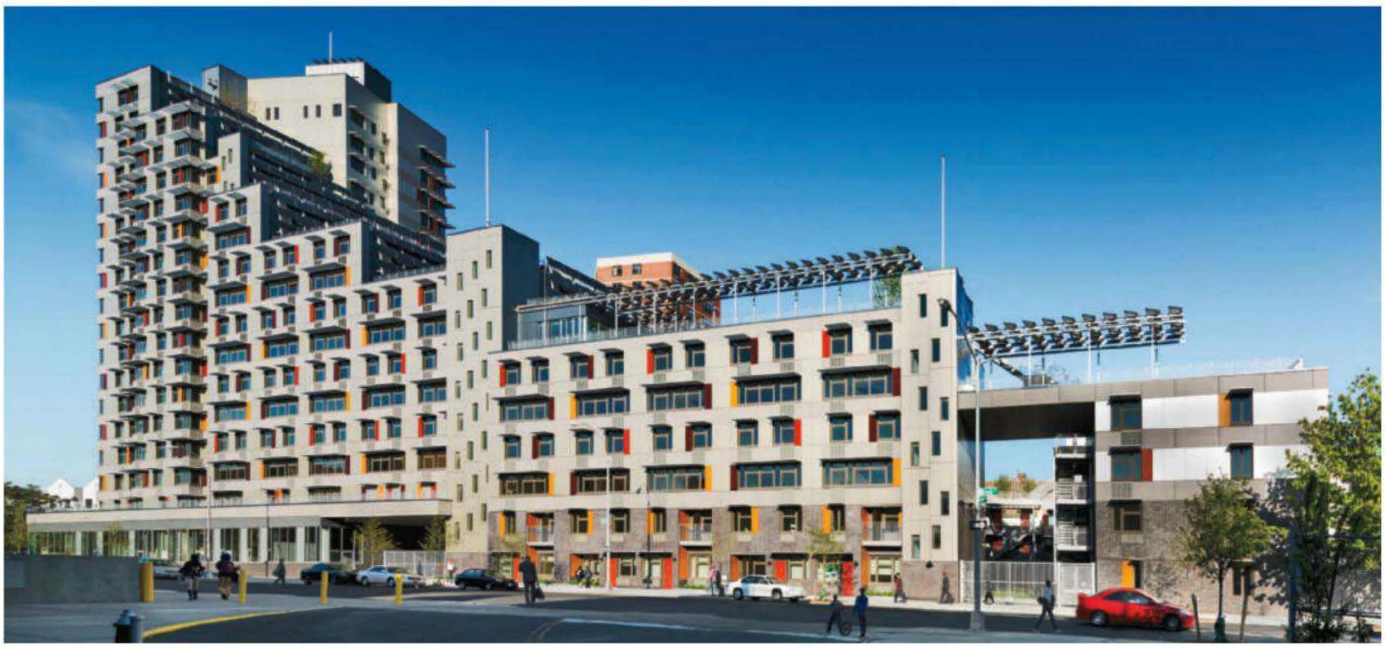
That Via Verde isn't immediately identifiable as affordable is just one indication of the competition's mission. "It wasn't a beauty contest," says Lance Brown, the steering committee's founding member and a professor of architecture at the City College of New York. The ambition was to establish a financially viable and replicable model, he says.

With residents just now moving in, it is too soon to judge how well the built Via Verde satisfies all the aspirations behind the competition. However, the complex has proved highly desirable: The developers received about 7,500 applications for the 151 rental units, and 80 percent of the 71 cooperative apartments—priced from around $79,000 for a one-bedroom to $193,00 for a three-bedroom—have sold.

It is easy to understand the appeal, especially if you walk into Via Verde's inner courtyard. Here the inventiveness of the Dattner-Grimshaw solution becomes apparent: The stepped profile that begins with the street facade continues with the building hugging the edges of the 1.4-acre trapezoidal former brownfield site. The roofs descend in a series of terraces, eventually meeting the ground in a set of bleacherlike steps.

Within this courtyard, elements conspire to create a sense of shelter. Although the facades defining the court are made

HEALTHY HOUSING Via Verde has several features intended to support healthy and active living. A medical clinic will occupy the ground floor. Stairwells, which are expressed on the front facade (bottom), include windows to make them an attractive alternative to the elevators. Residents will be able to grow their own vegetables in rooftop planter boxes (below).



ZIGGURAT The stepped profile of Via Verde provides space for facade-mounted photovoltaic panels—one of many tightly integrated systems that have put the project on track for LEED Gold. Because city-owned athletic fields sit directly to the south of the site, designers felt confident that a building would never obstruct the panels' solar access.

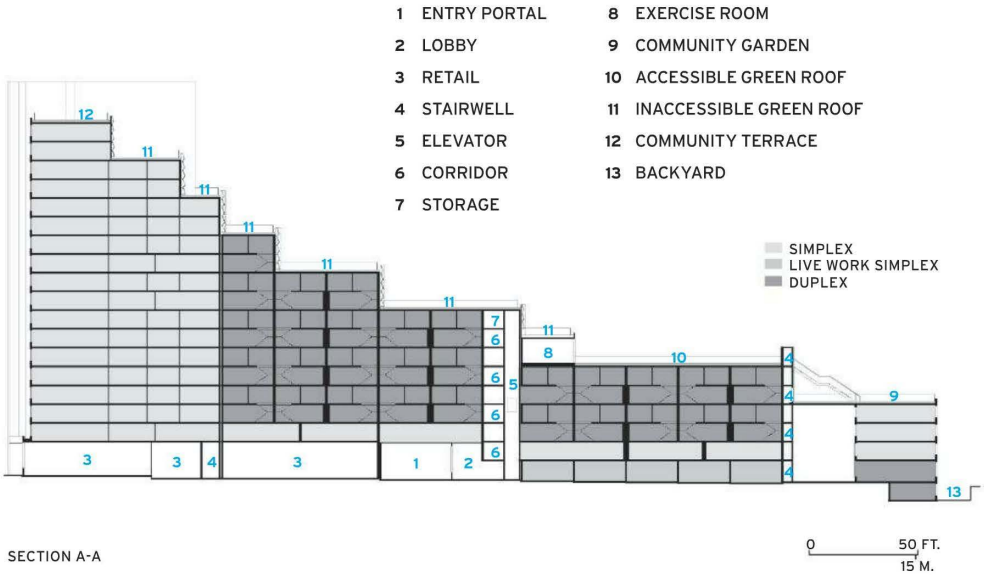
up of the same types of rainscreen components as those facing the street, and all were assembled off-site in 25-foot-long sections (a time-saving and quality-control strategy), these inner elevations contain more of the colorful wood panels.

And of course, there is the greenery that provided the inspiration for the building's name. Although Via Verde was completed only in April, by mid-May the courtyard's triangular lawn was already a thick carpet of grass. The tops of the complex's staggered terraces—many of which are accessible to residents—were also sprouting plantings. These roofs include a grove of about two dozen evergreen trees, a small apple orchard, and plots for growing vegetables.

All of the grass and foliage makes for an inviting series of outdoor spaces. However, the landscape was conceived to do more than just look good. "It also has got to do something," says Lee Weintraub, principal of the eponymous Yonkers, New York–based landscape architecture firm that designed Via Verde's roofscape and courtyard. This "something" includes providing a supply of fresh produce and benefits like stormwater management and heat-island mitigation. In addition, Weintraub predicts that the outdoor spaces will offer a less tangible benefit—a sense of community. With the help of GrowNYC, an environmental organization that builds and supports community gardens, residents will decide how to distribute the orchard's fruit and determine a system for sharing and tending to the garden plots. "Culture will evolve around the open space," says Weintraub.

The roof gardens and the courtyard that they spiral around are not the development's only shared amenity: A seventh-floor fitness room overlooks one of the green roofs; a ground-level laundry room faces the courtyard's play area, allowing parents to keep an eye on their children while washing clothes; and a community room occupying a privileged spot on the tower's top floor offers an adjacent terrace

THE GREEN WAY The planted roofs of Via Verde—many of which are accessible to residents—spiral down from a 20-story tower, meeting the ground with an amphitheater-like set of steps. On the terraced roofs grow an evergreen grove, an apple orchard, and vegetable plots.



SECTION A-A

credits

ARCHITECTS: Dattner Architects/Grimshaw Architects

CONSULTANTS: Robert Silman Associates (structural); Ettinger Engineering Associates (m/e/p); Langan Engineering (civil); Lee Weintraub Landscape Architecture (landscape)

OWNER-DEVELOPER: Phipps Houses and Jonathan Rose Companies

GENERAL CONTRACTOR: Lettire Construction

SIZE: 294,00 square feet

COST: $70 million

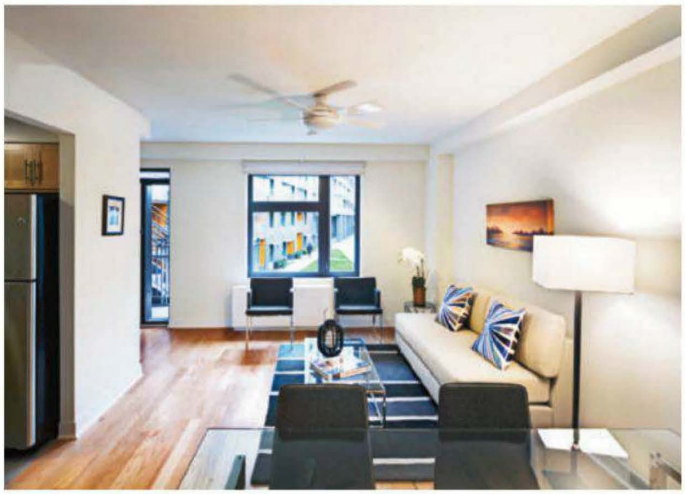
COMPLETION DATE: April 2012

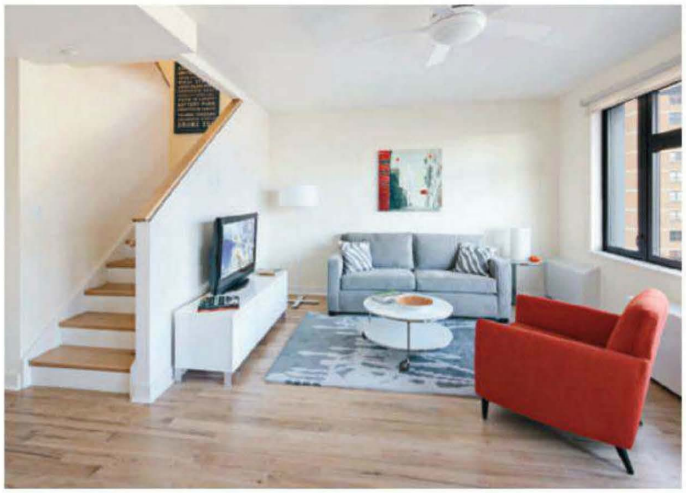
SOURCES

RAINSCREEN: Eternit (fiber-cement panels); Alcoa (aluminum composite panels); Prodema (wood composite panels)

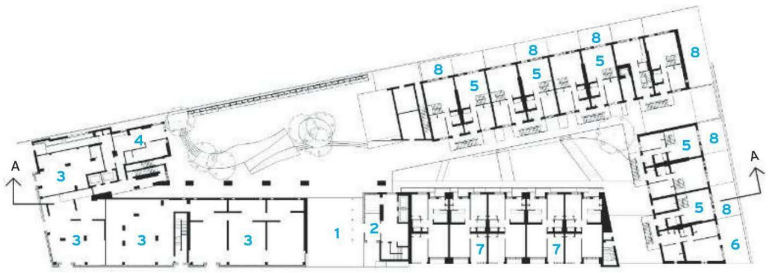
GREEN ROOF: Hydrotech

PHOTOVOLTAIC SYSTEM: SunPower



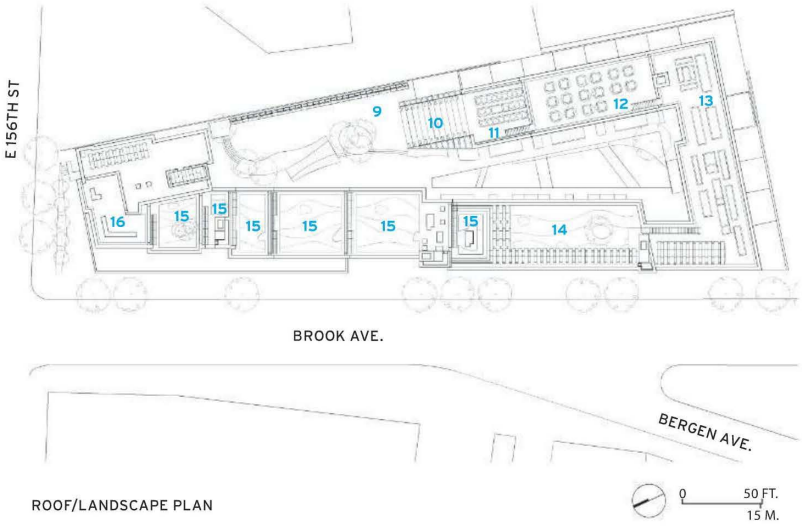


VARIETY Via Verde offers cooperative and rental units for New Yorkers in low- to middle-income brackets and includes simplex (above left) and duplex (above) configurations. About 90 percent of the apartments have dual access. Trickle vents allow residents to make the most of the cross ventilation this layout feature provides, even when windows are closed.



FIRST FLOOR PLAN

1 ENTRY PORTAL
2 LOBBY
3 RETAIL
4 LAUNDRY
5 DUPLEX
6 SIMPLEX
7 LIVE-WORK SIMPLEX
8 BACKYARD
9 PLAY AREA
10 AMPHITHEATER
11 CONIFER GARDEN
12 ORCHARD
13 COMMUNITY GARDEN
14 ACCESSIBLE GREEN ROOF
15 INACCESSIBLE GREEN ROOF
16 COMMUNITY TERRACE



ROOF/LANDSCAPE PLAN

that commands views of both the rapidly transforming South Bronx and the Manhattan skyline.

Paradoxically, it is Via Verde's affordable status that allowed the design and development team to place the shared elements of the program in what would be considered prime revenue-generating locations in a market-rate development, explains Ari Goldstein, a senior project manager at Jonathan Rose Companies. "Since all the units are essentially the same price," he says, "we can put the community room on the 20th floor, instead of putting a penthouse there."

The individual apartments—a mix of duplexes, simplexes, live-work units, and townhouses—are as intelligently laid out as the rest of the complex. About 90 percent have dual exposure, providing cross ventilation and access to daylight while also minimizing the need for faceless corridors. Oak floors, bamboo cabinets, and subway-tiled baths make the interiors feel clean and modern, but not slick.

Arguably, just as important as the finished product is the process that produced it. Although HPD has not conducted another competition, the agency has made some changes to the way it awards projects, modeling it after the Via Verde process. For example, requests for proposals now clearly rank the selection criteria—such as design, sustainability, and financing—according to importance. This new transparency allows applicants to make more informed design decisions "and leads to higher quality proposals," says Beatriz de la Torre, an HPD assistant commissioner.

For their part, the architects say that designing and building Via Verde was a rewarding experience. Contractually, Dattner was the architect of record with Grimshaw as its consultant. However, "from the very beginning, we viewed the project as a full design partnership," says William Stein, Dattner principal. According to Chang, who calls the relationship "synergetic," the firms have already identified their next collaboration—another urban, mixed-use project they will compete for within the next year. ■

Housing Fit for 007

San Diego

Architect-developer Jonathan Segal named his 29-unit apartment building "The Q," after James Bond's resident gadgeteer. The tricks used here, though, are subtler than a shoe dagger.

By Sarah Amelar

WHEN ARCHITECT-DEVELOPER Jonathan Segal named one of his recent buildings "The Q," he says he was looking for "the cool factor, the debonair suaveness" of James Bond. Q is, famously, Agent 007's gadget inventor, creator of dagger-edged shoes and mini–rocket launchers that masquerade as cigarettes. For this building in San Diego's Little Italy, Segal aspired to Bond's sleek sophistication, rather than a tricked-out design. But he did not anticipate the need to perform his own Q-like feat of swift transformation as the program changed, midconstruction, from offices to housing.

Since launching his firm in 1989, Segal has mainly focused on market-rate residential work. Performing simultaneously as designer, client, and builder, he has completed 17 multifamily projects in San Diego, taking on challenging lots and derelict structures in undervalued neighborhoods on the upswing. This time, he says, "I got the idea to do an office building instead. They seemed to get better rents and cost less to construct." And Little Italy is an increasingly desirable downtown district lacking offices. Set along a scenic harbor, it was once a commercial fishing neighborhood that declined with the local tuna industry and the construction in the 1960s of a freeway plowing through it. More recently, galleries, boutiques, and mixed-use residential projects have gentrified the area.

Segal envisioned the 90,000-square-foot Q as a "podium" for his family's return to a neighborhood they loved (and had reluctantly left three years earlier): The offices and street-level commercial space would literally and financially underlie their 5,800-square-foot duplex penthouse.

No sooner was the structure capped than the economy tanked and "the office market evaporated," says Segal. With a nimbleness only possible for an architect-client, he quickly repermitted the building for mixed-use residential.

Since the overall form and fundamental elements had been in place before the program change, the project became akin to adaptive reuse. Befitting the neighborhood's modest scale, Segal's massing suggests a small cluster of buildings, rather than a single 200-by-50-foot megablock. Further lightening the visual impact, he made the building volumes clean-lined and transparent, with wraparound, floor-to-ceiling glass, punctuated by a brise-soleil of projecting concrete floor slabs. While the concrete structure

BLOCK PARTY
Perched on a hill, the Q rises five stories along India Street and seven to the west, along Kettner Boulevard. Projecting concrete floor slabs shade the glass volumes (opposite).

In keeping with the neighborhood's scale, the massing (top) suggests a cluster of buildings, rather than a single megablock.

The Q's west side overlooks a scenic harbor (left of building in photo left).

PHOTOGRAPHY: © JEFF DURKIN (OPPOSITE AND TOP); NIC LEHOUX (BOTTOM)

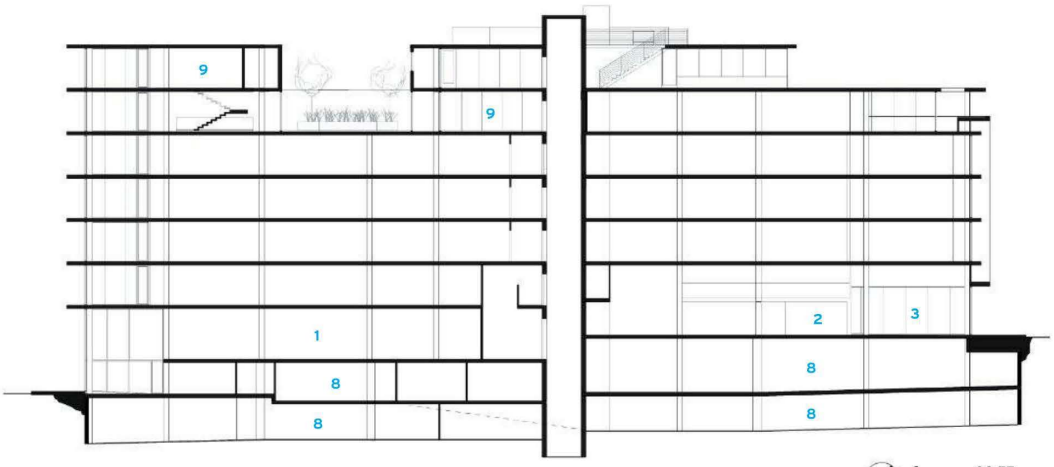
required 700 new holes to accommodate apartment plumbing, the dramatic office glazing was a plus, offering the 29 residential units layout flexibility and unusual sleekness. To meet code, the number of apartments—all rentals, ranging from 400 to 1,800 square feet—corresponds precisely to the existing underground parking spaces. In the spirit of lofts, many of the tenants both live and work there.

Above a street-level restaurant and café, the taut, quasi–International Style skin becomes more solid, framed by a black-painted aluminum shell. At one corner of the building, Segal integrated Little Italy's oldest home, the 1888 A.W. Pray House, a Gothic Victorian, which he relocated from the lot's western to its eastern side. Newly restored, it's now a clothing boutique.

The Q has plenty of green features, though Segal denies being a "tree hugger" or even a proponent of LEED certification. Rooftop solar panels power the common areas, and deep overhangs shade low-E glazing. Operable windows bring air and light through the "gill slits," or angled fins, along the north facade.

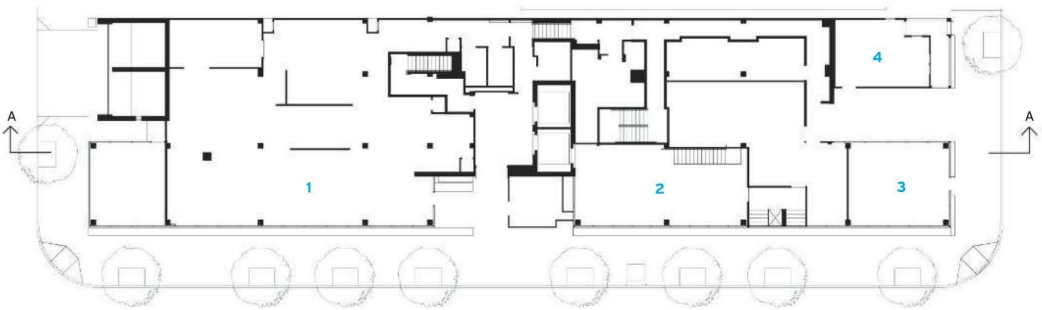
Though the rents, ranging from $950 for a studio to $5,200 for a two-bedroom duplex, exceed the neighborhood average, Segal says he leased everything instantly. So why has the Q succeeded when nearby residential lofts lie partially vacant? "We offered something different," he suggests, "not boxes punched with holes, not transplanted suburban homes, but places that capitalize on the city experience." Indeed, as you look out over the harbor or at the larger-than-life downtown skyline, it all seems stunningly urbane—you half expect your shoe phone to ring. ■

Sarah Amelar is a contributing editor to ARCHITECTURAL RECORD.



SECTION A-A

TYPICAL FLOOR PLAN



GROUND FLOOR PLAN

1 MANELLO RESTAURANT
2 BENCOTTO RESTAURANT
3 CAFÉ
4 RETAIL
5 TWO-BEDROOM APARTMENT
6 STUDIO APARTMENT
7 THREE-BEDROOM APARTMENT
8 PARKING
9 PENTHOUSE

credits

ARCHITECT: Jonathan Segal – Guillermo Tomaszewski, Greg Yeatter, Tracy Anderson, project managers; Mark da Cunha, assistant manager/color consultant; Matthew Segal, project assistant

INTERIOR DESIGN: Jonathan Segal, Wendy Segal

ENGINEER: DCI Engineers

CONSULTANTS: Barner Electric (electrical); Dub Design Consulting (exhaust ventilation); Ideal Mechanical Heating & Air Conditioning (HVAC)

CLIENT: JMAN @ the Q

SIZE: 90 million square feet (gross)

COST: $11 million

COMPLETION DATE: June 2011

SOURCES

MASONRY: RCP Block & Brick

METAL PANELS: Ideal Mechanical

CURTAIN WALL: U.S. Aluminum, Fleetwood

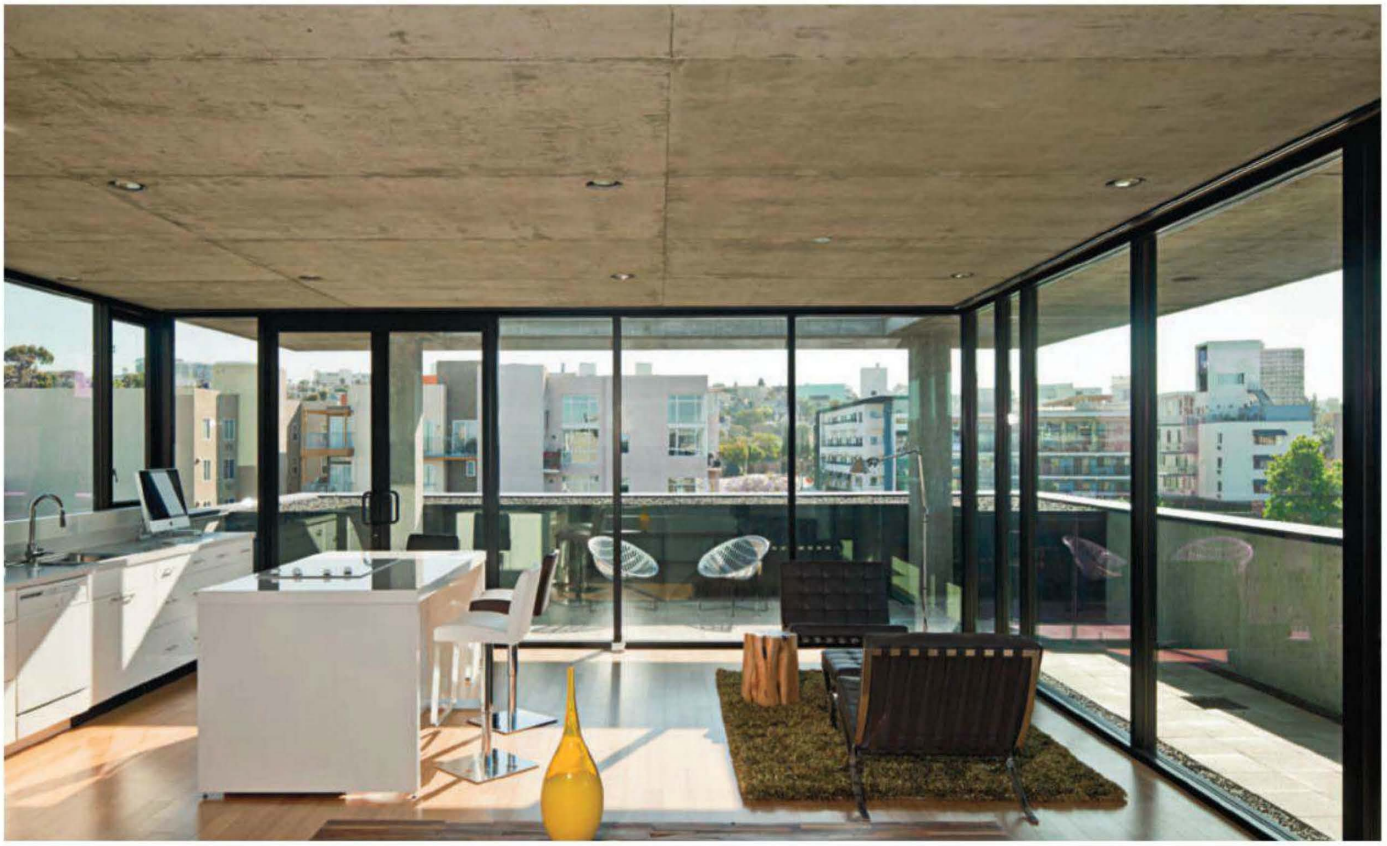
GLAZING: Oldcastle BuildingEnvelope

FLOORING: Cali Bamboo

CONVEYANCE: Kone

CITY SOPHISTICATE
Several units have terraces. Echoing the commercial facades' black frame, rectangular cutouts in the roof offer some of the exterior decks both sun and shade (left).

The lofts combine exposed concrete surfaces with sustainable bamboo flooring. Floor-to-ceiling windows and white kitchen fittings give these fluid spaces a luminous quality (bottom).



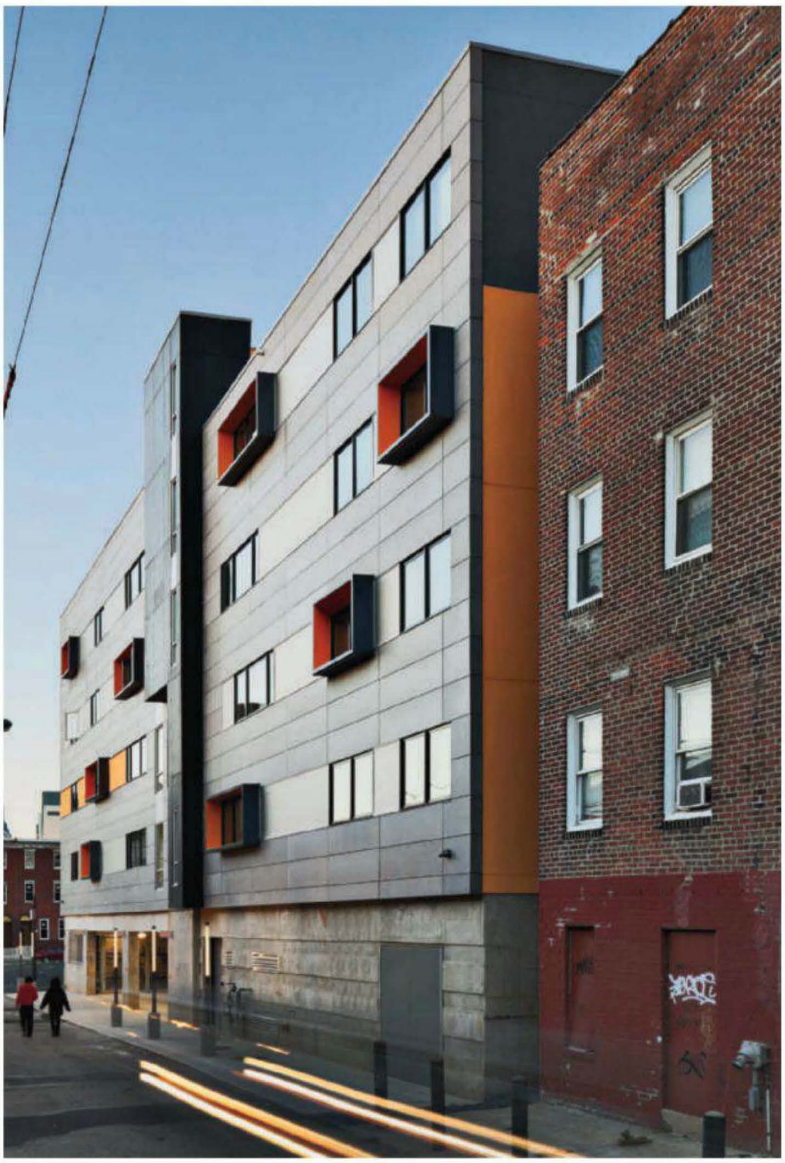
Out of the Box

Philadelphia

The Modules, a student housing development by Interface Studio Architects, flaunts its construction method as it makes a case for well-designed prefab.

By William Hanley

BUILDING BLOCKS The Modules' prefab units took just over four weeks to install (left). The project stands across from a low-rise public housing project and is flanked by brick buildings (below). Signage on the project's west elevation (right) advertises its modular components.



PHOTOGRAPHY: © SAM OBERTER

THE MODULES want you to know how they were built. A privately owned student apartment building a few blocks from Temple University's campus in North Philadelphia, the Modules touts its prefabricated construction in its branding: In its lobby and lounges, photomurals show a construction crane neatly stacking the 90 boxes that house its 72 units. "Prefab isn't something that needs to be invisible," says Brian Phillips of Interface Studio Architects, who designed the project. "It's something that adds real value that people should understand."

The firm and its client decided to celebrate the four-story, 80,000-square-foot building's origins because, they say, it makes a strong case for prefab in urban contexts. Like many cities, Philadelphia has notoriously high construction costs and a soft rental market still reeling from the recession. Manufacturing the Modules' components outside the city saved on labor expenditures, while simultaneously building the structure's concrete-and-steel plinth shortened the time line. The firm went from the early design phase to occupancy in about 14 months, delivering a building that cost $137 per square foot in time for the next academic year. "This is not one of those ornamental modular projects that have intellectual appeal but are very expensive," says Phillips. "We needed efficiencies, so we used the same technology as prefab buildings everywhere."

Interface began by selecting modular manufacturer IDBS and learning the limitations of its timber-frame components. A residential unit with a comfortably sized, if unremarkable, living room, bedroom, kitchen, and bath was 16 feet wide and either 30 or 55 feet in length. The ceiling height capped at 10 feet so the components would fit under bridges along the 136-mile route from the factory in Liverpool, Pennsylvania, to the site. The modules arrived with plumbing and wiring installed and interiors almost completely finished.

The firm stacked the boxes, creating a mirrored E shape in plan to maximize access to daylight inside the apartments. Narrow hallways stitch together the component modules along an east-to-west spine, which connects the building's two entries on the first floor. The east entry leads to a partially below-grade parking lot and a side street that provides a shortcut to campus. The firm used porous paving on sections of the lot, and above, they covered most of the roof with a three-inch sedum bed to comply with

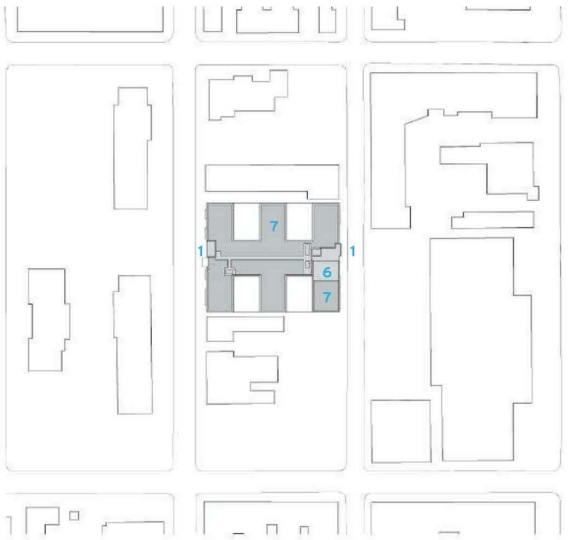
View additional images at architecturalrecord.com.


MODULES
1417

Philadelphia's stringent stormwater laws. The water management scheme and simple heating and cooling systems—a central chiller plant and a water-source heat pump—that plugged easily into the modular units earned the project LEED Gold. The firm wrapped the bundle of prefab units in a rainscreen covered by fiber-cement panels. "It's a pretty honest facade," says Phillips. "You can adapt the entire building system to different conditions without totally reinventing it."

But in the future, he adds, his firm will adhere to a modular orthodoxy: one apartment per prefab box. During the course of the project, combining some units in the field caused delays. The firm did manage to skirt high labor costs by going prefab, and Phillips says the success of their strategy raises questions about the viability of Philadelphia's expensive construction pricing. It also demonstrates that prefab can be an opportunity to bring better design to "background buildings," projects that require speed and economy but aren't necessarily glamorous. "We didn't do this because it's cool to build stuff in a factory," says Phillips. "This project might not have happened if it hadn't been built prefab."■

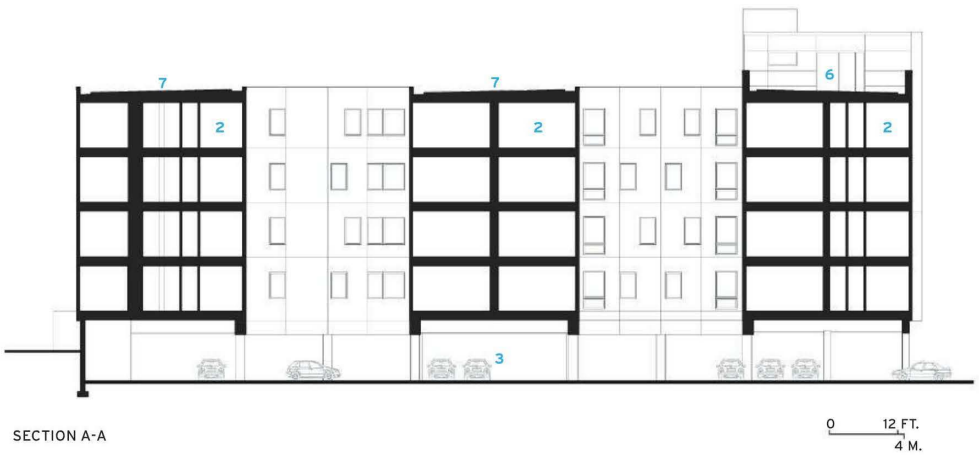
FINISHES FIRST The prefab units shipped with interiors nearly completed. Interface selected from a list of the manufacturer's preferred finishes—custom specifying only the flooring and light fixtures.



SITE PLAN

FIRST FLOOR PLAN

1 ENTRY
2 APARTMENT
3 PARKING
4 LOUNGE
5 ELEVATOR
6 ROOF DECK
7 GREEN ROOF



SECTION A-A

credits

ARCHITECT: Interface Studio Architects–Brian Phillips, design principal; Daryn Edwards, principal; Viktoria Diskina, project architect

ENGINEERS: Larsen & Landis (structural); Progressive Engineering & Design (m/e/p); Cornerstone Consulting Engineers and Architectural (civil)

CONSULTANTS: BEAM (lighting); Die Creative (graphics); Roofmeadow (green roof)

GENERAL CONTRACTOR: Equinox

CLIENT: Carlisle Street Partners

SIZE: 80,000 square feet

COST: $11 million

COMPLETION DATE: September 2010

SOURCES

MODULAR BOXES: IDBS

RAINSCREEN: Silastre (fiber cement panels); VaproShield (wall shield)

ENTRANCE/STOREFRONT: Kawneer

METAL DOORS: Taylor

WOOD DOORS: Masonite

RESILIENT FLOORING: Toli

INTERIOR LIGHTING: Nulite

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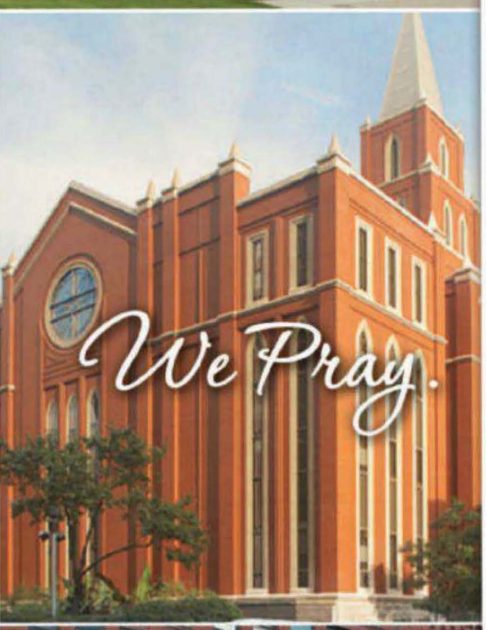
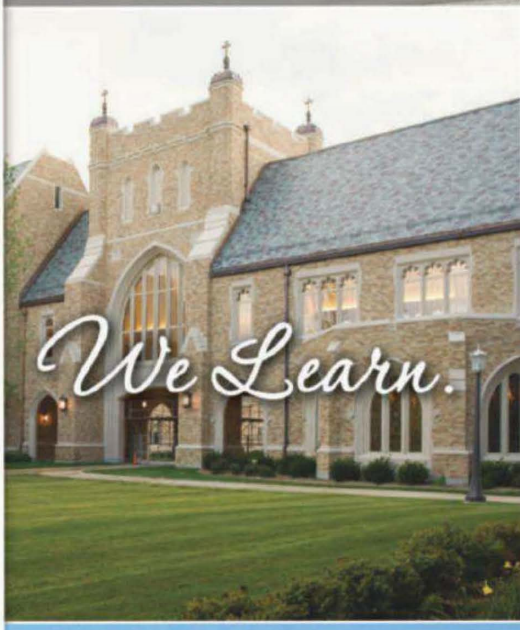
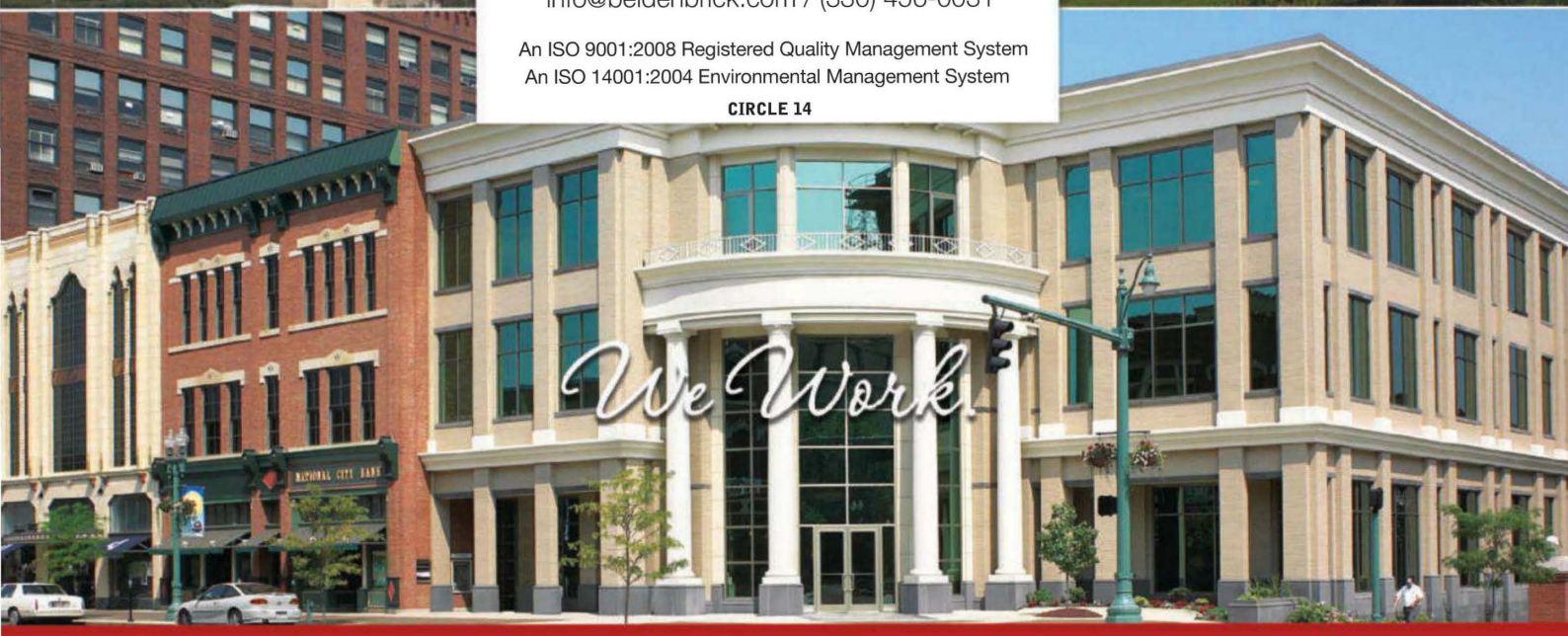






Site Specific

A new sustainable rating system aims to protect and regenerate the ecological capacity of landscapes. By Nancy B. Solomon, AIA

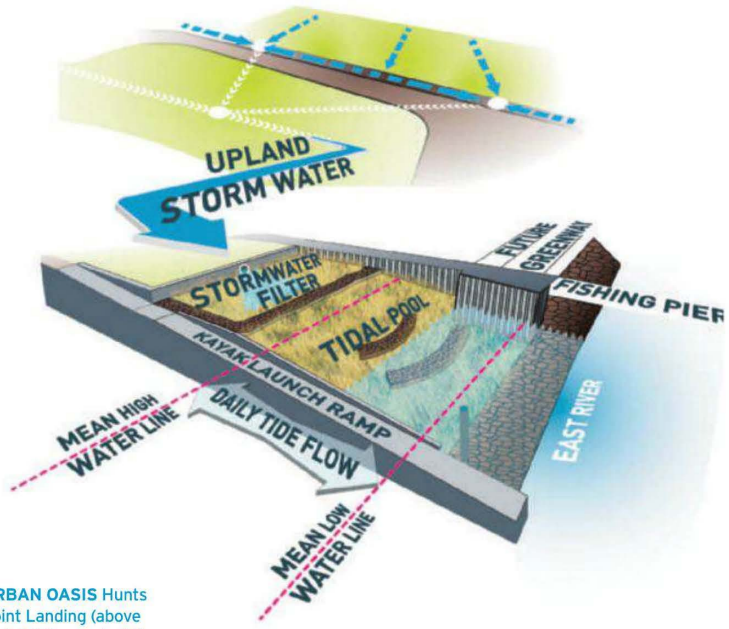
THE BUILDING industry's best-known sustainable rating system has always acknowledged that the design and construction of a man-made structure must consider the surroundings. The earliest versions of the U.S. Green Building Council's (USGBC) Leadership in Energy & Environmental Design (LEED) rating system included categories for sustainable sites and water efficiency at the level of an individual project—and its more recent and less narrowly focused rating system for neighborhood development has greatly expanded LEED's purview in the selection of building sites and enhanced its role in protecting local ecology. Still, the rating system's detailed requirements and recommendations for landscape strategies barely scratch the surface of what should be done to reverse the devastation that decades of poor design, construction, and maintenance practices have wrought on vital natural ecosystems, according to many landscape architects.

While LEED has successfully increased the efficiency of buildings, observes Hunter Beckham, principal of SWT Design, a planning and landscape architecture firm in St. Louis, the rating system "leaves out many opportunities to address and improve the site."

Recognizing this omission, the Lady Bird Johnson Wildflower Center at the University of Texas in Austin hosted the Sustainable Sites Summit in fall 2005. Approximately 50 professionals, including landscape architects, civil engineers, government employees, scientists, and academics, attended the multidisciplinary meeting, from which grew the Sustainable Sites Initiative. Referred to as SITES for short, the initiative is a highly ambitious effort to create voluntary national guidelines and performance benchmarks for the design, construction, and maintenance of landscapes with or without buildings.

TRANSFORMATION Novus International, an animal health and nutrition company headquartered in St. Charles, Missouri, earned a three-star rating from the SITES pilot program for its 9.7-acre campus renovation, completed in 2011. As part of the project, an interdisciplinary team led by SWT Design turned a barren retention pond (left) into an amenity that encourages staff interaction on terraced stairs (above) while supporting wildlife habitats.

PHOTOGRAPHY: © SWT DESIGN



Ecosystem Services

In a healthy ecosystem, natural processes involving the interaction of living and nonliving elements produce goods and services of direct and indirect benefit to humans.

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Local climate regulation
Air and water cleansing
Water supply and regulation
Erosion and sediment control
Hazard mitigation
Pollination
Habitat functions
Waste decomposition and treatment
Human health and well-being benefits
Food and renewable nonfood products
Cultural benefits

URBAN OASIS Hunts Point Landing (above and right), a part of the South Bronx Greenway, will be open later this year. Spearheaded by the New York City Economic Development Corporation, the greenway was designed by Mathews Nielsen Landscape Architects to provide waterfront access, improve air and water quality, reestablish habitat for native plants and wildlife, and introduce alternative modes of transportation to this industrialized area along the East River.

RENDERINGS: © NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION

SITES is spearheaded by the American Society of Landscape Architects and the United States Botanic Garden, both based in Washington, D.C., in addition to the Lady Bird Johnson Wildflower Center, which was established in 1982 by the former First Lady and actress Helen Hayes to protect and preserve North America's native plants and natural landscapes. Many other agencies and organizations, including the U.S. Environmental Protection Agency, the Nature Conservancy, and the USGBC, are supporting the effort. The initiative's overarching goal is to establish a LEED-like rating system that will set in motion a market transformation toward sustainable landscape practices across industry sectors, in much the same way that LEED did for buildings. More than 150 teams, representing projects in 34 states and the District of Columbia plus three other countries, have just completed a two-year pilot study of the SITES preliminary rating system.

It is only natural that some will ask why a rating system specifically tailored to landscapes is needed. SITES developers astutely nipped that question in the bud by preparing the document "The Case for Sustainable Landscapes" (available at *www.sustainablesites.org*). In addition to presenting a general discussion of sustainability and the principles upon which SITES is based, the authors introduce the critical but not well-known concept of "ecosystem services."

The term refers to all the benefits that an outdoor environment in its natural, undeveloped state provides to humans and other forms of life—from producing food and decomposing wastes to cleansing air and water and providing recreation and respite. One of SITES' basic premises is that any parcel of developed land, no matter its size or function, can contribute to these life-sustaining processes if designed, constructed, and maintained properly.

From these concepts, more than 50 experts, divided among five technical subcommittees (hydrology, vegetation, soil, materials, and human health and well-being), developed a set of specific and verifiable strategies that could be applied to any type of site in any bioregion. A report was released in 2007 calling for public feedback, and the development team received hundreds of comments in response. These were reviewed and incorporated as appropriate to create a document that followed the format of LEED. "We didn't want to reinvent the wheel, nor did we want to create any market confusion, so we used LEED as a model," explains SITES director Danielle Pieranunzi. This undoubtedly will make it easier for USGBC to incorporate elements of SITES

Credit Categories

SITES' 15 prerequisites and 51 credits are organized into nine categories that address a range of issues relating to the development of a landscape project.

	POSSIBLE POINTS
Site selection	21
Pre-design assessment and planning	4
Site design: water	44
Site design: soil and vegetation	51
Site design: materials selection	36
Site design: health and well-being	32
Construction	21
Operations and maintenance	23
Monitoring and innovation	18
TOTAL POSSIBLE POINTS	250

into LEED v4, the version of the rating system slated to launch in 2013.

The SITES preliminary guidelines and performance benchmarks are divided into nine categories that address a range of issues relating to the development of a landscape project: site selection; pre-design assessment and planning; water; soil and vegetation; materials selection; human health and well-being; construction; operations and maintenance; and monitoring and innovation. The current version of the rating system consists of 15 prerequisites and 51 credits spread out across these nine categories. Depending on the number of points achieved out of a potential 250, a project can earn a rating of one, two, three, or four stars.

In June, SITES wrapped up its two-year pilot phase, which was designed to test the preliminary guidelines, benchmarks, and certification process. Feedback from the pilot phase will inform the next iteration of the rating system, which is expected to be released in 2013.

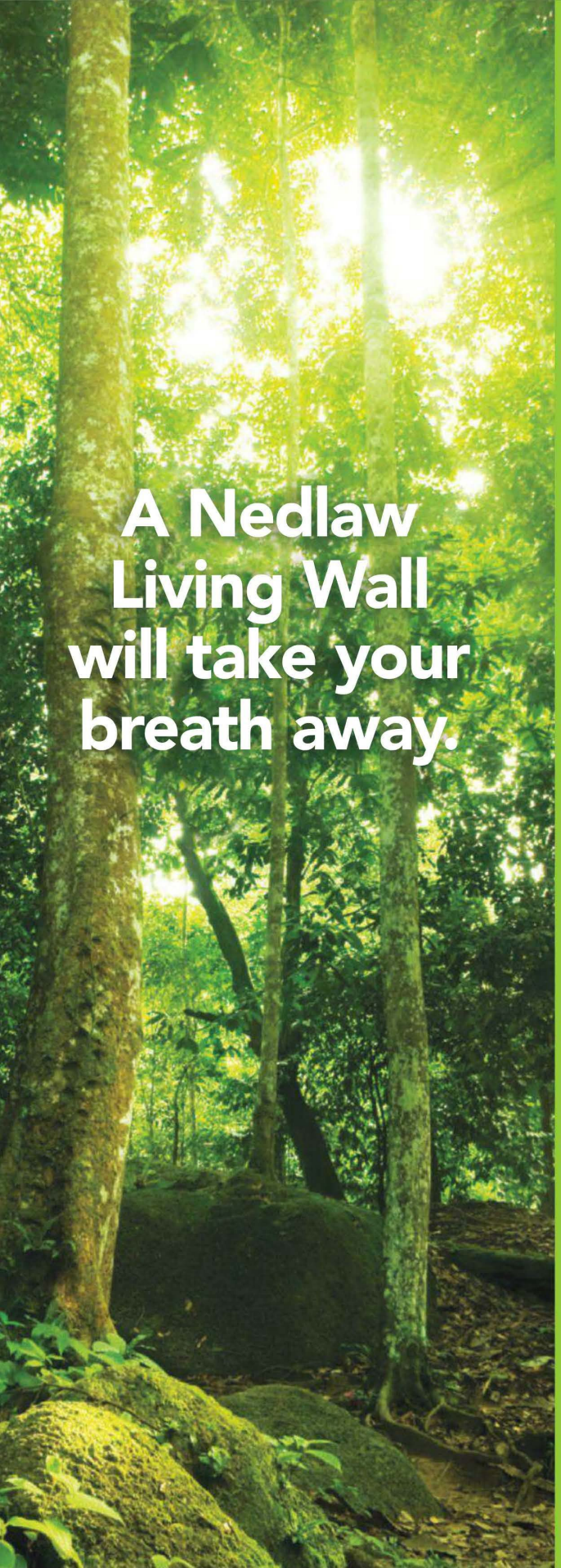
Although participating projects were asked to submit as much documentation as possible by June of this year, the first three were certified this past January: A three-star rating was awarded to the campus of Novus International's headquarters in St. Charles, Missouri, and one-star ratings were awarded to Woodland Discovery Playground at Shelby Farms Park in Memphis and to the Green at College Park of the University of Texas at Arlington. SITES will continue to accept subsequent documentation from yet-unfinished pilot projects as they are completed, at which point they will be assessed according to the 2009 rating system.

Comments from pilot project participants reveal both strengths and weaknesses in the still-evolving SITES. "The guidelines are excellent," says Sarah Weidner Astheimer, senior associate at James Corner Field Operations in New York, the landscape architect on the Woodland Discovery Playground. Astheimer reports that, although her office has long maintained sustainability as an important goal, the firm's internal approach had never been as rigorous as the process developed by SITES. She and her colleagues now use the 2009 guidelines as a tool to assess the sustainability of other projects—even those that are not part of the pilot program.

However, Astheimer and others felt that particular credits in the preliminary rating system were written in such a way that some projects would be denied potential points even though their strategies were environmentally sensitive. Astheimer was surprised that,

PLAYROOMS Designed by James Corner Field Operations, the 4.25-acre Woodland Discovery Playground at Shelby Farms Park in Memphis, was completed last year and earned a one-star rating in the SITES pilot program. An arbor of native woody trees and vines organizes the playground into six outdoor rooms (right), providing children with varied spatial and sensory experiences (above).

PHOTOGRAPHY: © JAMES CORNER FIELD OPERATIONS



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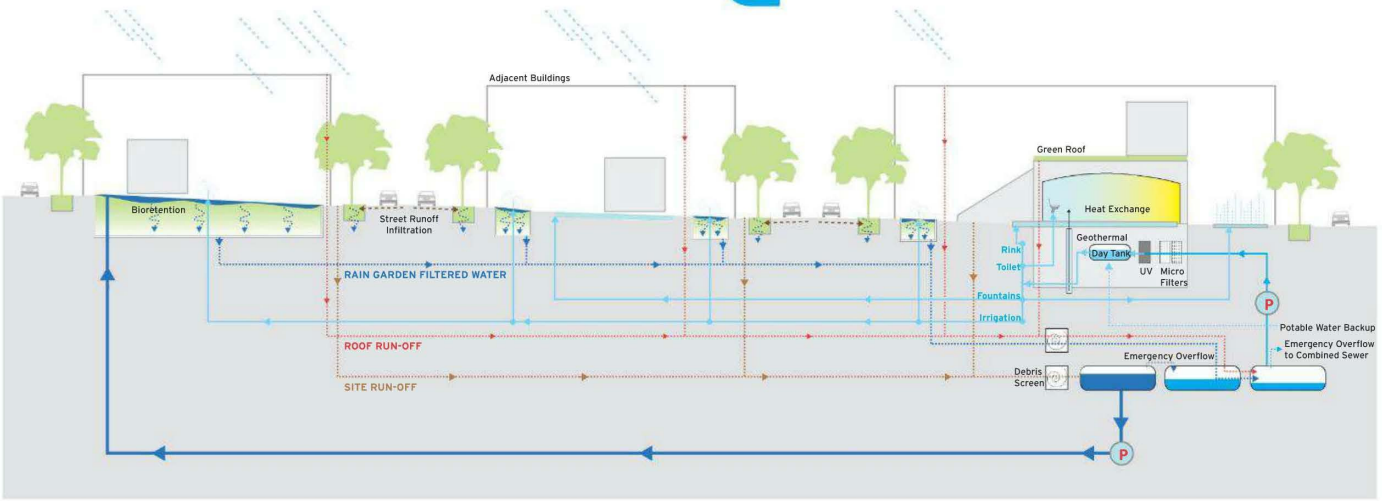

LAYERED SYSTEMS A three-block section of the former Washington, D.C., canal system that more recently served as a school bus parking lot will be remade into Washington Canal Park, another SITES pilot project. The design by OLIN calls for diverse outdoor programming (right). A linear rain garden doubles as a stormwater collection basin (above).

for instance, while a project can earn points for replanting a stream edge, a project that purposefully and thoughtfully avoids any impact on a stream receives nothing. Similarly, Signe Nielsen, principal of New York–based Mathews Nielsen Landscape Architects, points out that Hunts Point Landing—a 1.5-acre park created along the East River in the Bronx, on a site that was once paved over and home to a coal gasification plant—was ineligible for a significant portion of possible points because SITES calls for the "maintenance, preservation, protection, or reuse of water features, plant communities, soils, and on-site materials." According to Nielsen, at Hunts Point these elements either did not exist or were so contaminated that they had to be capped. She concludes that "ultra-urban brownfield sites are effectively penalized [by SITES] because they are wastelands to start with."

Civil engineer Steve Benz, who is a partner in the Philadelphia office of OLIN, a landscape architecture firm, also struggled with this issue on another urban brownfield in the pilot program—the Washington Canal Park in Washington, D.C. A member of SITES' technical core committee, he acknowledges that the initiative has primarily focused to date on the preservation of a site's ecological capacity, which is typically of greater significance on less developed land, rather than on the sustainable challenges and realities of urban density. "It's more difficult to resolve how the current SITES system works in urban settings," says Benz.

A former chair of USGBC's sustainable sites technical advisory group (TAG) who now serves on the organization's water efficiency TAG, Benz hopes that the pilot program will shed light on the usability and practicality of SITES. He believes that LEED has been successful in terms of market penetration because the older rating system is well understood and achievable. However, he worries that the preliminary version of SITES may attract only a small number of projects because it asks for such high performance. To appeal to the broadest possible audience and therefore generate the greatest positive impact, he says, "this highly rigorous rating system may have to lower its sights a bit." ■

Nancy B. Solomon, AIA, editor of Architecture: Celebrating the Past, Designing the Future, *writes frequently about architecture, planning, and sustainable design.*

Continuing Education

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Learning Objectives

1 Explain the goals of the Sustainable Sites Initiative (SITES) and discuss why a rating system specifically tailored to landscapes is needed.

2 Outline the structure and requirements of the current version of SITES.

3 Explain the concept of ecosystem services and describe how a landscape can provide such services.

4 Discuss the strengths and weaknesses of the current version of SITES.

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PHOTOGRAPHY: © RENDERINGS AND DIAGRAMS: OLIN

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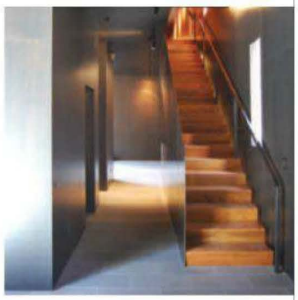

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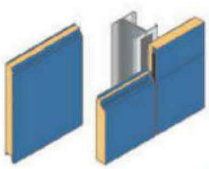

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Stadia: Sport and Vision in Architecture
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July 6–September 22, 2012
This summer, London's Olympic Park will be filled to capacity, but how did the tradition of the sports stadium begin? What are the origins of the thousands of sports arenas that can now be found on every continent? Sir John Soane's Museum traces the evolution of these structures from ancient times to the London 2012 stadium. Visit soane.org.

Unfinished Business: 25 Years of Discourse in Los Angeles
Los Angeles
July 13–August 26, 2012
This retrospective at the WUHO Gallery unpacks the Los Angeles Forum for Architecture and Urban Design's archive, revisiting a history of commentary and debate. In looking backward, the exhibition finds architectural questions, urban design conversation starters, and critical loose ends that are just as relevant now as they've been for the past quarter century. For more information, visit laforum.org.

Now Boarding: Fentress Airports + the Architecture of Flight
Denver
July 15–October 7, 2012
Celebrating the work of Curtis Fentress, this exhibition at the Denver Art Museum examines the delicate balance of innovation and function in the Denver-based architect's designs by bringing together film, digital art, animation, models, drawings, photographs, and full-scale architectural elements. For more information, visit denverartmuseum.org.

Designed to Win
London
July 25–November 18, 2012
This exhibition at the Design Museum explores the ways in which design and sports combine, pushing the limits of human endeavor to achieve victories of increasing wonder. From the design of F1 cars to running shoes, bikes, and carbon fiber javelins, the quest for enhanced function is endless. Visit designmuseum.org.

Ongoing Exhibitions

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New York
Through July 15, 2012
At the Skyscraper Museum, this exhibition 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 features 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.

Henry Moore: Late Large Forms
London
Through August 18, 2012
This major exhibition at the Gagosian Gallery features large-scale sculptures by Henry Moore, some of which are being presented indoors for the first time. Within the controlled environment of the gallery space, the volume and mammoth proportions of the sculptures are more keenly felt. Visit henry-moore.org.

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 has launched a design contest for a temporary pavilion to be constructed on the museum grounds during the exhibition. Visit nelson-atkins.org.

Waterline
Chicago
Through August 31, 2012
A dozen Harvard graduate design students studying with Skidmore, Owings & Merrill (SOM) urban design partner Philip J. Enquist spent a semester investigating opportunities for a stretch of the Chicago River's South Branch, from Wolf Point to Pilsen. This exhibition at the Bridgehouse Museum presents their proposals. The group of students, representing concentrations in architecture, landscape architecture, urban design, and urban planning, developed proposals to use underutilized riverfront land to create a new microeconomy, re-visioning postindustrial properties as a riparian habitat that could leverage public and private investment into a new kind of development, reclaiming Pilsen's vacant industrial corridor as a Chicago Water Institute, and extending the existing River City development into a "Water City." Visit bridgehousemuseum.org.

Judith Turner: The Flatness of Ambiguity
Ann Arbor, Michigan
Through 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 camera-work. 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.

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 Pei Cobb Freed & Partners Architects, who have been charged with creating a home for a growing family in 2012. The homes have been loosely modeled on the Farnsworth Homestead of 1849, which was designed for a businessman, his wife, and their three children. Visit farnsworthmuseum.org.

MADE4YOU: Design for Change
Vienna
Through 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 funda-

mental social and technological transformations in the 21st century. Visit mak.at.

George Nelson: Architect, Writer, Designer, Teacher
Bloomfield Hills, Michigan
Through October 14, 2012
George Nelson is considered one of the most influential figures in American design from the second half of the 20th century. As design director at the furniture manufacturer Herman Miller for more than 20 years, Nelson had his sights firmly focused on Cranbrook, which was also playing a defining role in the development of Modernism. This shared Michigan history comes into sharp focus in this exhibition at the Cranbrook Art Museum. Visit cranbrook.edu.

Lectures, Conferences, and Symposia

First Fridays at Noguchi
New York
July 6, August 3, and September 7
This summer, the Architecture & Design Film Festival will collaborate with the Noguchi Museum to present films about architecture as part of the museum's "First Fridays" program. The museum will remain open until 8 P.M. on the first Friday of the month. At 5:30, there will be free admission and a cash bar with wine and beer. Visitors can attend and participate in "Center of Attention," an extended conversation with a museum educator about a single work of art on view. The discussion starts at 6 P.M., followed by a film screening in the museum's video room. The film program begins at 7 P.M. Visit noguchi.org.

America's Most-Wanted Eco Poster
New York
August 25, 2012
Be a part of history as Ed Morris, the coauthor of Green Patriot Posters, leads a team of designers, thinkers, environmentalists, and audience participants in creating America's Most-Wanted Eco Poster in real time. The program will include a discussion of the history of environmental and activist imagery, the current state of the environmental movement, and the efficacy of art and design. Visit cooperhewitt.org.

Competitions

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

Inspiration Hotel Competition
Registration Deadline: July 24, 2012
OPENGAP organizes this open ideas competition seeking innovative proposals regarding a new concept for artistic inspiration spaces. Participants are invited to design a space that motivates creativity and concentration, allowing users to focus, inspire, and develop their artistic ideas. Visit opengap.net.

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 it holds in the architectural record, and the influential role that architects and designers play in preserving Modern heritage. Visit wmf.org/modernism.

Fentress Global Challenge 2012: Workplace of the Future
Registration Deadline: August 6, 2012
Employee productivity, environ-

mental 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. Visit fentressarchitects.com/edge/global-challenge.

European Architectural Competition
Submission Deadline: September 7, 2012
The main objective of this competition is to reverse the increasing downgrading of the center of Athens and breathe new life into it, through an organizational scheme that will include services, permanent residences, recreation, and culture. For more information, visit rethinkathenscompetition.org.

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.

Architecture at Zero 2012
Submission Deadline: October 1, 2012
Architecture at Zero 2012 is a net zero energy design competition open to students and professionals worldwide. The challenge is to create a net zero energy student housing or administrative office building design for the University of California, Merced. As part of the challenge, entrants will also be asked to create a diagrammatic district energy plan for the Bellevue Gateway development. For more information, visit architectureatzero.com.

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

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snapshot

PROJECT CLOUD CITY
LOCATION NEW YORK CITY
DESIGNERS TOMÁS SARACENO

ARGENTINEAN-BORN, Frankfurt-based visual artist Tomás Saraceno describes his newest installation, *Cloud City*, with whimsy and enthusiasm: It is a sundial, a giant solar barbecue, and a spacecraft, he insists. But beyond these conceits, the piece is also a study of the relationship between volume, surface, and perception. "I was really inspired by the Weaire-Phelan structure," he explains, referring to the polyhedral modules of stainless steel and glass that make up the work. Visitors to *Cloud City*—which is perched atop New York's Metropolitan Museum of Art and looks out to Central Park—are invited to walk in and around the 29-foot-tall sculpture and see how it reflects and refracts views of the skyline beyond and the park below to the point of incomprehensibility. Because it would be occupied, the structure was subject to building code and health and safety regulations, which Saraceno addressed with the help of the local architecture firm Brooklyn Office and engineering consultancy Arup. Vertigo and disorientation were major concerns for the city, but Saraceno hoped to subvert visitors' sense of place as much as possible. "We wanted the sky on the floor," he laughs. *Cloud City* will be on view through November 4, 2012. *Asad Syrkett*

View additional images at architecturalrecord.com.

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