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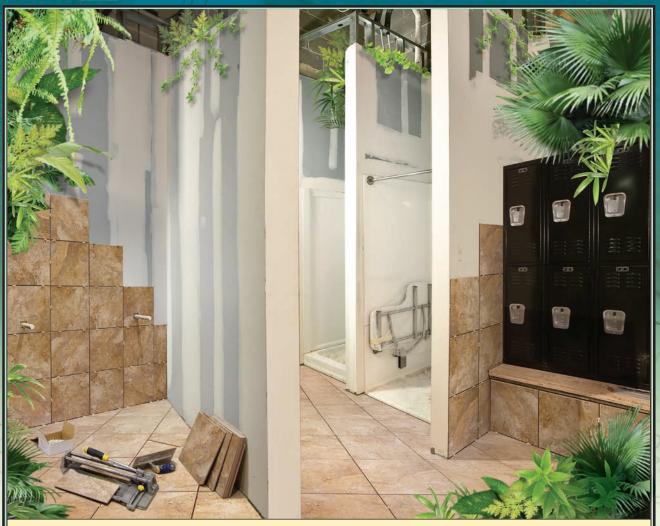
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The Architect 50

The second annual ranking by ARCHITECT measures firms of all sizes according to their profitability, commitment to sustainability, and caliber of design. Which 50 firms are pulling ahead despite the down economy? Plus a listing for firms 51–100. AMANDA KOLSON HURLEY, WITH KARLIN ASSOCIATES

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RICHARD LEO JOHNSON/ATLANTIC ARCHIVES



Joe Pugliese "The Architect 50," page 40

Los Angeles-based portrait photographer Joe Pugliese is a regular contributor to Wired, Money, Time, and People. To shoot our ARCHITECT 50 feature, Pugliese traveled to four cities in five days. Each location had a different number of subjects and different space logistics to contend with, and timing was tight. "The majority of [the] schedule was: fly, sleep, shoot; fly, sleep, shoot," says his studio manager, Kerensa Thompson, who coordinated things from L.A. She adds, "I really can't believe we pulled it all off in time, on time."

ON THE COVER BOB MIKLOS, SAM BATCHELOR, AND SCOTT SLARSKY OF DESIGNLAB, FROM THE ARCHITECT 50. PHOTOGRAPH BY JOE PUGLIESE

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Far Right Cooper Eckstut won a P/A Awards citation in 1984 for their plan for New York's Battery Park City.

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IN THESE POLITICALLY DIVIDED TIMES, AND WITH NEA FUNDING YET AGAIN UNDER SIEGE, SCHUPBACH MUST BRING TO THE JOB A BOTTOMLESS WELL OF ENTHUSIASM AND THE CAPACITY TO IMPART HOPE. **"WHO?"** That was my initial reaction, upon learning the name of the new director of design at the National Endowment for the Arts (see the news story, page 14). It's one of the top government design posts, up there with chief architect of the GSA, and I've been accustomed to the job being held by a known commodity, a highprofile academic, museum curator, or firm principal—in brief, by a design insider. It's my responsibility, as the editor of an architecture magazine, to know (or at least know of) the big cheeses in the field. How did the NEA gig go to someone I'd never heard of?

Then I read the new guy's bio.

My second reaction was, "Wow!"

Jason Schupbach, the new NEA design director, is a wonk. He comes to the NEA from Boston, where he was the creative economy industry director at the Massachusetts Office of Business Development—the first such position at a state development agency. I think it's safe to say that Schupbach will be the first creative economist to hold his new post, as well.

The hire exemplifies a big strategy shift at the NEA. Rocco Landesman, the new chairman, is rebranding the arts endowment and reorienting its mission around a new tagline: "art works." That's a lovely expression, but what does it mean? Here's the explanation Landesman gave at a recent grantmakers' conference in Brooklyn:

"Art works" is a triple entendre ... a noun, which encompasses the very stuff of what we do, the achievements of artists. Great artworks is the objective of every grant we make.

Secondly, "art works" ... describes [how] art works on and within people to change ... and inspire them. ...

And finally, and maybe most importantly, art works because arts jobs are real jobs. The 5.7 million people who have full-time arts-related jobs in this country are a part of the real economy. They pay taxes and spend money. Obviously. But we're going to be making a point beyond that. Any discussion of policy for coming out of this recession, any plan that addresses economic growth and urban and neighborhood revitalization has to include the arts. We know, and we can prove, that when you bring art and artists into the center of town, that town changes.

Landesman has clearly bought into the concept of the creative economy—the burgeoning discipline championed most famously by Richard Florida, author of *The Rise of the Creative Class*—and he is using it to promote cultural policy in a penny-pinching, risk-averse political climate. The idea, at its most basic, is that art and culture (including the design fields) can boost local business, and that they have a positive impact at even the largest economic scale. For architects, the most obvious example would be the much-touted Bilbao Effect, in which investment in blockbuster arts facilities promotes tourism, builds a more positive brand identity for the city, and, further down the line, encourages smart people and competitive businesses to set down roots there. It worked for Bilbao, it's working for Pittsburgh, and now even cities like Detroit are beginning to think creative.

Schupbach has more than drunk the "art works" Kool-Aid. Apparently, he helps mix it. His credentials are impressive, albeit unprecedented for the NEA design post. In addition to his groundbreaking Massachusetts gig, Schupbach has worked for the mayor's office and Department of Cultural Affairs in Chicago, and he was the staff urban planner and capital projects manager for the New York City Department of Cultural Affairs. He has a bachelor's in public health from UNC Chapel Hill and a master's in city planning from MIT, with a certificate in urban design.

With economic growth in the near future tied so explicitly to government stimulus ("Show Us the Money," page 18), especially in the design and construction industry, it's hard to argue with a cultural economist as the right man for the NEA design directorship at this moment in time. Schupbach certainly will have his work cut out for him.

One major challenge headed Schupbach's way is suggested by a major report from the Cultural Policy Center at the University of Chicago, which argues that U.S. arts organizations have taken on more than they can handle by building so many echo-Bilbaos. Some institutions have delayed or cancelled expansion projects, while many of those that opened their doors during the recession are struggling to pay for the upkeep on the new facilities. The report hasn't even been released yet, but *The New York Times* has already covered it. I'm surprised that the conservative media hasn't added the story to its propaganda arsenal.

In these politically divided times, and with NEA funding yet again under siege, what Schupbach must bring to the job, beyond his impressive résumé, is a bottomless well of enthusiasm and the capacity to impart hope. I haven't had a chance to meet him yet, but I'm already rooting for him. When asked to describe himself in five words or less, in a recent NEA blog post, Schupbach replied, "Innovative, Dedicated, Gregarious, Creative, and Nerd-tastic." That nerd-tastic bit won me over, big-time. Schupbach may be a wonk, but he's a wonk with a sense of humor. He'll need it.

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A U.S. District Court judge sided with the **Recent Past Preservation Network** in its lawsuit to save Richard Neutra's **Cyclorama Center**, which sits on the Gettysburg battlefield, from the National Park Service's wrecking balls.



School of the Art Institute of Chicago president **Wellington "Duke" Reiter** (above) announced he was stepping down "for personal reasons." And **Joseph Rosa**, the Art Institute's chief curator of architecture and design, will depart in July to lead the University of Michigan Museum of Art.

AIA executive vice president and CEO **Christine McEntee** will leave the institute in July to become executive director of the American Geophysical Union.

SANAA Receives 2010 Pritzker



THIS YEAR'S Pritzker Architecture Prize has been awarded to the Japanese architecture duo of Kazuyo Sejima (above right) and Ryue Nishizawa, who lead the firm SANAA. The award—bronze medallions and \$100,000—will be presented to Sejima and Nishizawa at a May ceremony in New York.

Sejima (born in 1956) and

Nishizawa (born in 1966) are among the youngest Pritzker winners, although their built portfolio is larger than those of some previous winners at the time of the award. SANAA's buildings are generally clear, simple, and refined. The Glass Pavilion in Toledo, Ohio, makes earlier glass structures by Ludwig Mies van der Rohe and Philip Johnson look downright heavy, while New York's New Museum shakes up the boxlike form of lower Manhattan's buildings by expressing each gallery as a discrete form.

This is only the second time architectural partners have received the prize; the first were 2001 laureates Jacques Herzog and Pierre de Meuron. Speculation at the time was that multiple winners might become the norm as practices evolved into more-collaborative ventures. The gap of nine years leaves that trend possible, but hardly a certainty.

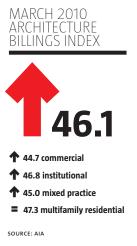
Two U.S. institutions have proved prescient in their choice of future laureates. The Toledo Museum of Art hired both Frank Gehry (the 1989 winner) and SANAA for projects in advance of their honors. And the Illinois Institute of Technology held a 1997 competition for a new campus center, which resulted in future laureate Rem Koolhaas' (2000) first American building. The also-rans included Zaha Hadid (2004) and SANAA. EDWARD KEEGAN



Jason Schupbach, Next NEA Director of Design

THE NATIONAL ENDOWMENT FOR THE ARTS (NEA) announced that Jason Schupbach will be the agency's new director of design. Currently the creative economy industry director for the Massachusetts Office of Business Development, where he has been instrumental in coordinating efforts that promoted design as a force for economic development, Schupbach will assume his new role in May. "I was interested in this position because [NEA chairman Rocco] Landesman and President [Barack] Obama are doing really creative thinking about placemaking," he says.

Prior to his position at the Office of Business Development, Schupbach was the director of ArtistLink, a Massachusetts nonprofit that advocates for artists' needs. From 2003 to 2004, he was the capital projects manager and staff urban planner–designer for the New York City Department of Cultural Affairs. Schupbach has a master's in city planning with an urban design certificate from the Massachusetts Institute of Technology. "What I'm most exited about is that design has an intrinsic value, not just to designers, but to the business community," he adds. "We've done a little bit of that here in Massachusetts, and I want to bring that conversation to the national level." BRAULIO AGNESE



CLOCKWISE FROM TOP LEFT: DON WILES; TAKASHI OKAMOTO/COURTESY SANAA; COURTESY NATIONAL ENDOWMENT FOR THE ARTS; DANNY HSU

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BUSINESS



INTERVIEW BY EDWARD KEEGAN PHOTO BY TRACY POWELL

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decade. "I've always been fascinated with architecture," she says, noting that Feeley & Driscoll had a large construction practice before she expanded the firm's services into these related professions.

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How large a line of credit should a firm have? Three months of working capital.

Should the partners' credit cards ever be considered as part of their line of credit?

The bank wants to know that you have money at risk. A credit card could be an expensive way to bootstrap or start your business. I don't think that option should be off the table, but there are better options than your personal credit card.

What should firms use a line of credit for?

You have to meet payroll first. Often, you don't get paid by your clients for 30, 60, 90 days—and, unfortunately, sometimes even longer. That's a lot of up-front money.

What should firms not use a line of credit for?

It's a revolving amount of money to be used for shortterm financing needs. I don't view it—nor will your bank—as permanent capital. For instance, if you're going to purchase a \$100,000 accounting software system, I wouldn't put that on your line of credit. You're going to realize the benefit over multiple years, so try to obtain a long-term lease or financing for it. You want to match your financing over the life of the equipment.

In today's economic climate, many firms are trying to make it to that next big project without laying off people. Can a line of credit help here?

You don't want to fund recurring losses with your line of credit, unless you know it's temporary and you'll become profitable enough to repay those. More often than not, the principals of a firm personally guarantee a line of credit. If things are tight, and you're not going to be able to absorb some losses—well, people have to make tougher decisions now than they ever have.

When do you tell the bank you're looking at problems? There are two schools of thought. One is to not tell the bank anything because you're afraid of what they may do. I feel the more you communicate with your bank, the more they trust you. Keep them in the loop. Send them quarterly, or even monthly, numbers, so they can't say they're surprised.

Are there any tricks or hints for gaining and using a line of credit in today's fiscal environment?

Try to come up with some money on your own. Then go to a bank. Be clear about what you need, with a dollar amount. The bank's not going to provide you the answers. They'll help you, but they want to know that you understand how to run the business before they'll be your partner in the business. □

ightarrowstimulus

Show the Ma

THE AMERICAN RECOVERY AND REINVESTMENT ACT WAS SUPPOSED TO HELP ARCHITECTS CLIMB BACK FROM THE RECESSION. SO FAR, MOST FIRMS AREN'T SEEING ANY BENEFITS.

TEXT BY MARGOT CARMICHAEL LESTER

ALMOST 15 MONTHS have passed since President Barack Obama signed the American Recovery and Reinvestment Act (ARRA) into law. Within the massive \$787 billion funding package, the AIA identified about \$98 billion as available for the built environment (see "Follow the Money," June 2009). How has ARRA played out? If you're an architect, the answer depends on whether or not you've seen any work from it.

"For a number of firms that have gotten commissions for federal buildings, transit facilities, housing, etc., it has meant the difference between staying in business and laying off staff," says Andrew Goldberg, the AIA's senior director of federal relations. Yet it's difficult to measure in dollar amounts how much has gone to architects, he notes, because the reporting mechanisms don't track this explicitly. "We do know, based on an AIA firm survey [last] August, that 15 percent of firms had received billable work from [the] stimulus, a number we expect to go up as more money hits the streets," Goldberg says. "But a lot of firms, particularly those in the commercial sector, say they haven't seen any real benefit."

"The stimulus was a really good idea," says Kurt Rockstroh, president and CEO of Boston-based Steffian Bradley Architects, which specializes in healthcare. "It's ironic that it slowed work down and had a negative impact

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US Onev

on 2009." This April, many of the firm's clients were still waiting to learn if their funding requests were approved, he says, adding, "Being left in limbo is a daily conversation."

Research by Onvia, a provider of private-sector and government procurement information, bears this out. Its February report said that most stimulus funding hadn't left Washington, D.C., but Onvia did project that \$76 billion in funds will reach the infrastructure marketplace this year, resulting in 480,000 new construction-industry jobs.

In this realm, the U.S. General Services Administration (GSA) is among the largest awards-makers, with more than \$5.5 billion for the High Performance and Sustainable Buildings program to fund renovations and new buildings at LEED Silver standards. In early April, the GSA announced it had infused more than \$4 billion into 391 projects in all 50 states, two territories, and Washington, D.C. Among the beneficiaries: 4240 Architecture, with offices in Denver and Chicago, was awarded \$2.1 million for design, modernization, and performance improvements to Chicago's 10 West Jackson Federal Building.

Another major source is the U.S. Department of Housing and Urban Development, which has \$4 billion available for energy-efficient retrofits and new affordablehousing projects. San Francisco's Paulett Taggart Architects is working on the Turk/Eddy affordable housing building, which received about \$11 million, and two blocks of the Hunters View redevelopment, which received \$6 million.

Yet other firms aren't feeling the love. John Hrivnak, principal of Hrivnak & Associates, in St. Charles, Ill., says his billings have decreased more than tenfold since the downturn began. He urges the Obama administration to create more stimulus activities aimed directly at the private sector. "Private-sector jobs create real wealth ...

and new tax revenues. JFK did that and it worked. Reagan did that and it worked. It's not a party thing, it's prudent economic policy. If the government wants to really stimulate the economy, they need to get architects busier."

Indeed, most in the industry *aren't* busier. A January report by the President's Council of Economic Advisors noted that 94,000 construction jobs had been created through ARRA. However, unemployment for the entire construction industry was 24.9 percent in March, according to the U.S. Department of Labor, which doesn't track unemployment among architects specifically.

Local firms are definitely feeling the pinch. The situation is especially dire in Nevada. "Currently, in Las Vegas, unemployment in the design and construction industry is at 65 percent and continuing to rise. And in Reno, the rate is 50 percent and rising," said Randy Lavigne, executive director of AIA Nevada and AIA Las Vegas, in March. "Many architecture and related industry firms have closed or downsized significantly due to the fact that there are no jobs on the drawing boards. And when planning and design stops, all work in the industry stops."

Adds the AIA's Goldberg: "Nobody expected the stimulus bill to be a panacea when it was passed, and while it has helped, it certainly has not cured the underlying problems in the credit markets and consumer demand, which have kept projects from moving forward."

On March 18, President Obama signed a \$17.6 billion jobs bill that provides tax breaks for businesses and additional infrastructure spending in hopes of jumpstarting hiring. Given the lag between the signing of ARRA and any significant impact on jobs and projects, it's hard to say when architects will begin to see true benefits from the latest legislation. □

U.S. CONSTRUCTION SPENDING, FEBRUARY 2010



PRIVATE



PUBLIC







↓ 16.2%

SOURCE: CENSUS.GOV

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TALK TO ENOUGH PEOPLE in the Motor City, and you start to believe the buzz about a comeback. There's a renewed sense of purpose in Detroit, ushered in by the return of beloved Mayor Dave Bing and a new City Council. To be sure, there is also gloom in Wayne County, Detroit's home, which has led the nation in out-migration every year since 2006. By some estimates, the vacant land in Detroit equals the size of San Francisco. And unemployment remains high, hovering around 15 percent (at press time, the national rate was 9.7 percent).

Despite the challenges, though, residents believe they can turn this baby around. Developers are using tax credits—for preservation, green renovations, workforce housing, and more—to leverage Detroit's incredible stock of architecture. And over the past 10 years, more than \$15 billion has been invested in the city.

Young people, drawn by a thriving arts scene and low cost of living, are infusing Detroit with new energy. "There's a great momentum among the post–baby boomers, who really do want to make things happen," says native Michael Poris of McIntosh Poris Associates. The younger set is jump-starting the small business sector. And the New Economy Initiative for Southeast Michigan is driving growth in the aerospace and alternative energy industries.

In March, the Kresge Foundation announced it would pay the undisclosed salary of urban planning expert Toni Griffin. Griffin, who directed Newark, N.J.'s revitalization effort, will spearhead the shrinking of Detroit's urban footprint. "The solutions—urban agriculture, intensifying certain areas, allotting resources for others—aren't from left field," says Archive Design Studio principal Mark Nickita. "It's not a new idea, but this time it feels more formal."

Alan Cobb, senior vice president at Albert Kahn Associates, expects the city to leverage its past as it plans its future. "Detroit has been a place for significant innovation in the last century," he says. "It's going to be a difficult decade. However, I'm still optimistic." □ A. Alfred Taubman Center for Design Education ARCHITECT: Albert Kahn Associates, Detroit.
 COMPLETION: 2009. BRIEF: 76,000-s.f. historic rehab for the College for Creative Studies; received \$65 million in incentives, credits, and grants.

2. Globe Trading Building ARCHITECT: Archive Design Studio, Detroit. COMPLETION: 2012. BRIEF: \$8 million rehab of 19th century manufacturing plant into mixed-use property on the RiverWalk.

3. Westin Book Cadillac

ARCHITECT: Kaczmar Architects, Cleveland. COMPLETION: 2008. BRIEF: \$180 million renovation of a Louis Kamper–designed building, the world's tallest hotel when it was built in 1924.

4. Woodward Garden Venue

ARCHITECT: McIntosh Poris Associates (design), Detroit; Quinn Evans Architects (architect of record), Ann Arbor, Mich. COMPLETION: 2011. BRIEF: \$6 million rehab (theater) and new construction (mixeduse apartment building) to revitalize a midtown block.

POPULATION/EMPLOYMENT

Population: 912,062; January 2010 unemployment: 15.4%.

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The 9.2 million s.f. of Class A space in the central business district is 80.5% occupied; average asking rate: \$23.27/s.f.

RESIDENTIAL MARKET

Median home sale price, October 2009: \$55,000.

MARKET STRENGTHS

- New city government
- Engaged citizenry
- Vibrant city center

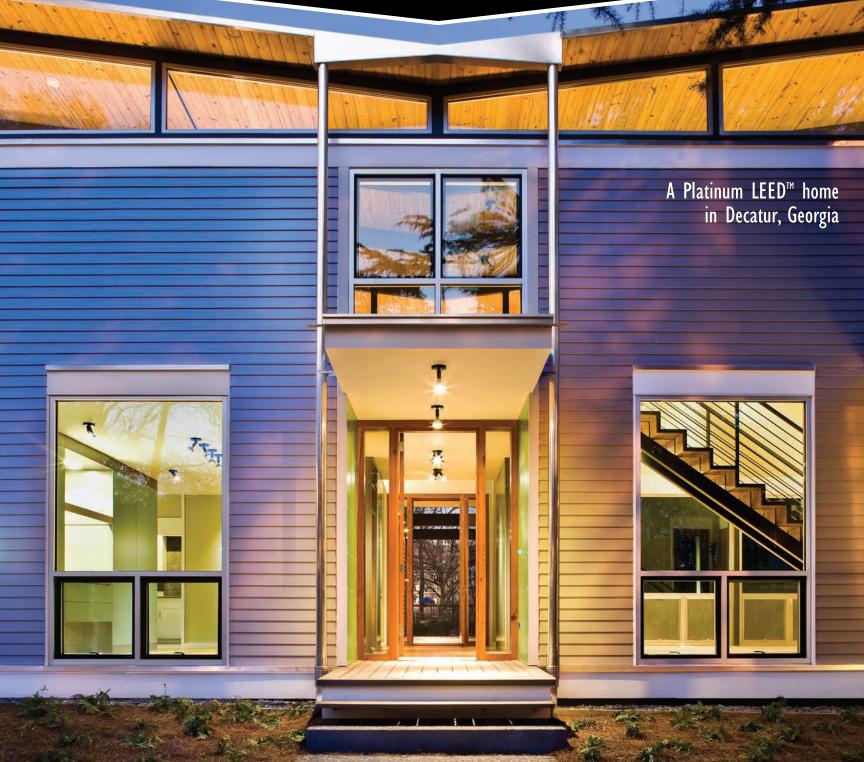
MARKET CONCERNS

 Lingering bad reputation
 Local and state economy among nation's worst
 High unemployment

FORECAST

"Getting [Mayor] Dave Bing back into place is a huge win," says Archive Design Studio principal Mark Nickita. "The young politically and culturally minded people want to make the city more accountable. I'm very encouraged by that. We have our problems, but we have a lot to build on. We're not going away."

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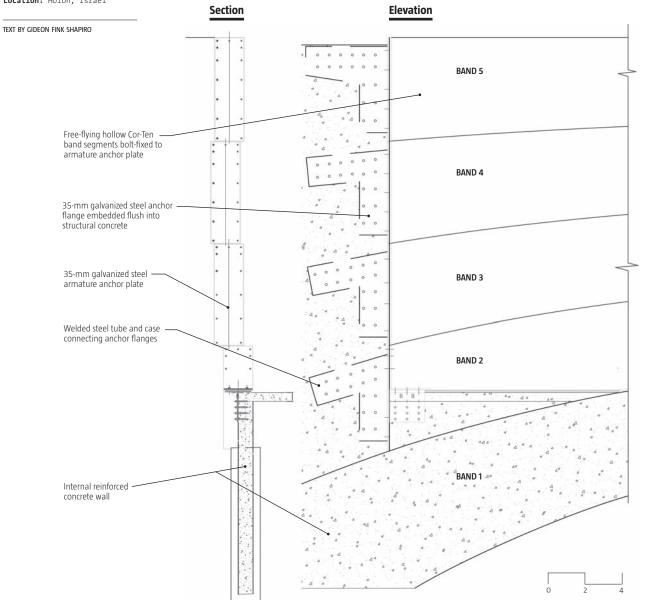


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TECHNOLOGY

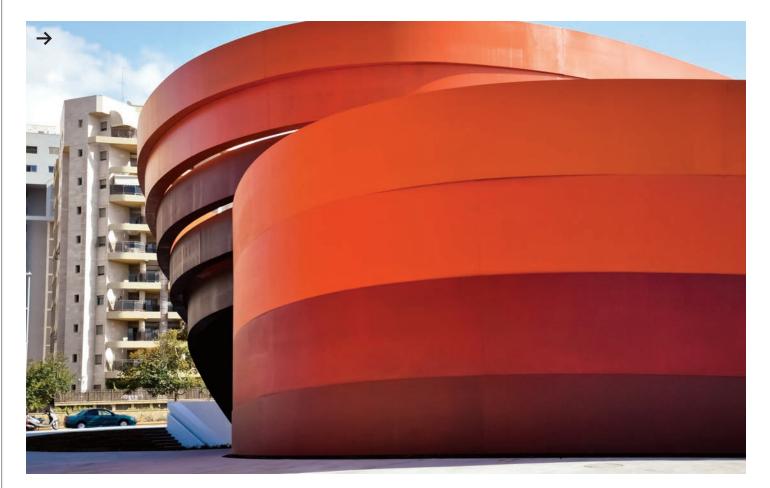
Cor-Ten Skin, Design Museum Holon

Architect: Ron Arad Associates Location: Holon, Israel



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24



The largest architecture project yet undertaken by London-based Ron Arad Associates, the 44,000-squarefoot Design Museum Holon was four years in the making. The undulating Cor-Ten ribbons of its façade are part ornament, part structure.

Cor-Ten Bands Diagram



THE TWO SIMPLE CONCRETE BOXES that serve as gallery space for Israel's new Design Museum Holon, designed by Ron Arad Associates (RAA), are enveloped in a massive, 300-ton sculpture that is itself a kind of building.

Known for pushing materials to their limits, RAA enlisted the help of former Arup engineer Giacomo Sordi to wrap five bands of Cor-Ten steel around and between the galleries in the whimsical manner of the London firm's furniture. "We work seamlessly between the disciplines of architecture and product design without distinguishing between them," says Asa Bruno, codirector of the 10-person architecture group within RAA. The \$16 million, 44,000-square-foot project—located in Holon, just south of Tel Aviv—opened in January 2010.

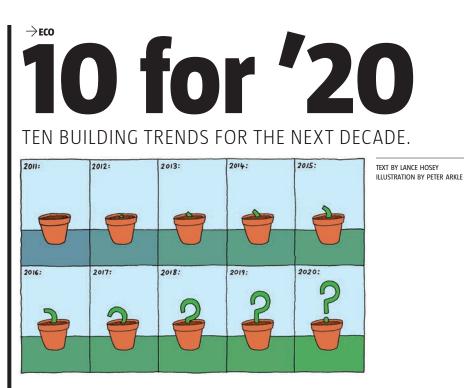
Fabricated in Bergamo, Italy, the Cor-Ten bands were shipped in 40-foot-long segments that filled 99 shipping containers. The total combined length of the bands exceeds half a mile, while the height of each band ranges from 4 feet to 8 feet. Unlike the solid steel sheets used by the artist Richard Serra, the Holon bands are for the most part 20-inch-wide hollow ducts welded together from ¼-inch-thick panels. ("The welder," notes Bruno, "was a very thin guy.")

A variety of structural solutions enables the bands to twist and turn with elastic continuity. Internal crossribbing stiffens the hollow segments, which account for two-thirds of the total band structure. Peeling away from the galleries, these free-flying spans and cantilevers enfold outdoor circulation spaces. The spectacular central loop, for example, soars 100 linear feet before touching down to connect with the foundation. Disappearing momentarily underground as it hugs hidden concrete anchors, the bottom band re-emerges and lifts off, once again hollow, several yards further along.

Where the self-supporting segments blur invisibly with those on the ground—which in some areas are pure surface ornament bolted to both sides of a concrete wall—smooth, factory-cast concrete armatures mediate the discrepancy between the steel bands' low dimensional tolerance (1/10 of an inch) and the tenfold higher tolerance of the site-poured concrete. "When you stare at the building," says Bruno, "there is no way to know what is cladding and what is not."

In addition to form, color and texture define the steel's expressive character. After sandblasting to clean the bands' surfaces, the Cor-Ten was left outdoors to weather for up to three months and periodically soaked with hydrochloric acid, which accelerated the process. Specially formulated oil-based weathering paints that soak into the depth of the steel, in earth tones from rusty orange to dusky purple, differentiate the bands like layered rock strata. A final coating, applied on site, heightened color definition.

The RAA team embraces the inevitability of further weathering as well as the traces of internal welds that remain visible. "The idea was not to imply a state of finished perfection," says Bruno. "We like all the marks and scars and history inherent in the material."



IN AN EARLY MARCH cover story, *Time* outlined "10 Ideas for the Next 10 Years: A thinker's guide to the most important trends of the new decade." This got me wondering about the next decade in green building—a thinking architect's guide to the most important ideas.

The first decade of the new millennium was a watershed period for sustainable design. Since LEED was introduced in 2000, the U.S. Green Building Council arguably has exceeded its original goal to mainstream green. Now that sustainability, at least in some baseline form, is standard practice for the building industry, what's next? Instead of predicting what will happen, I'll focus on what could—or should happen. How would I like to see green grow?

1. Technology: Buckminster Fuller's concept of "ephemeralization"—that technology gets smaller as it gets more sophisticated—could go extreme, and energy systems could appear to disappear. Green buildings would no longer wear technology on their sleeves.

2. Construction: More automated processes, such as robotic construction, could become more common in conjunction with a growing demand for better building craft, leading to smarter, faster, tighter, richer architecture.

3. Manufacturing: The building materials industry could concentrate less on individual parts and pieces and more on whole assemblies and components. On the other hand, factories could begin to disappear as on-site manufacturing becomes more common.

4. Economics: Smarter building products and systems could become both cheaper and more effective, finally killing the misperception that sustainable design has to cost more.

5. Metrics: Subtler tools for evaluating building performance could find clearer links between quantitative factors (energy, water, etc.) and elusive quality-of-life indicators.

6. Practice: Architects could expand their scope of services to guide clients well before predesign and well after occupancy. As a result, the profession could become more financially stable and more essential to business.

7. Operation: Smart monitoring of buildings and the global sharing of performance statistics could become standard practice, creating unprecedented feedback loops and richer networks of information.

8. Education: Ecological literacy could reform education at every level and transform design schools around more aggressively interdisciplinary curricula.

9. History: The scholarly history of architecture could focus less on monuments of wealth and power (temples, churches, museums) and more on the interaction of people and place over time.

10. Culture: The glamorization of the individual architect could become less and less appealing as design becomes valued more for how it serves communities. Death to starchitecture. \Box

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Let's Get Physical

ON THE SCENE AT THE SEVENTH ANNUAL SMARTGEOMETRY CONFERENCE, WHERE A HANDS-ON APPROACH TO DESIGN WAS THE ORDER OF THE DAY.



TEXT BY BRAULIO AGNESE

For four days in March, SmartGeometry Conference 2010 workshop groups took digital design beyond the computer screen, fabricating a variety of prototypes to discover how parametric models behave in real life. **"WE MADE A RADICAL SHIFT** this year," said Xavier De Kestelier, an associate partner in the London office of Foster + Partners and a longtime member of the SmartGeometry Group, to a roomful of journalists before leading a tour at the fabrication building of Barcelona's Institute for Advanced Architecture of Catalonia (IAAC).

Indeed, the racket on the far side of the door indicated that it was anything but business as usual for the workshop portion of the annual SmartGeometry Conference, which in previous years had consisted of small groups in hotel rooms, hunched over computers, discussing computational design.

Here, in a former toilet-manufacturing facility that is now part of the Massachusetts Institute of Technology's Fab Lab network, students and nascent architects and engineers from around the globe were busy working in 10 clusters under the guidance of SmartGeometry Group members and leading lights in the computational design and fabrication world. (The SmartGeometry Group is a nine-year-old partnership between industry, academia, and practitioners that is focused on advancing the use of computational—aka parametric—design within architecture and engineering.)

The effort, said De Kestelier, was to give attendees, many of whom spend most of their time in front of computers or working on building-scale projects, some experience in the design, fabrication, and testing of working prototypes, the conference's theme. For four days—and with the help of laser cutters, CNC routers, sewing machines, hand tools, and more—people were converting algorithmic models into physical objects.

Walking around the IAAC, it was clear that the prototypes for some clusters—such as "Nonlinear Systems Biology and Design," led by architectural

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researcher Jenny Sabin and biologist Peter Lloyd Jones, recipients of a 2007 AIA Upjohn Research Initiative grant—were more abstract and conceptual than practical. Others, however—including "Explicit Bricks" (CNCsliced blocks that, when laid in the right order, form an intricate, compression-only structure) and "Rapid R&D to Rapid Assembly" (snap-together architecture)—had more immediate implications for construction. The general din was punctuated every 15 to 20 minutes by a loud crash, followed by cheers, indicating that the "Design to Destruction" cluster had broken another laser-cut wood cantilever. Waving his hand around the IAAC space, SmartGeometry member Jonathan Rabagliati, whose day job is in the computational design department of Foster + Partners, said, "Everybody's learning."

The two-day conference that followed the workshop was broken into two parts. During "shop talk" day, rotating panels of SmartGeometry members, cluster leaders, and guests riffed on the "working prototypes" theme as it applied to such things as design education, sustainability, manufacturing, and practice. The day rounded out with the announcement that De Kestelier and Shane Burger, a New York–based associate at Grimshaw Architects, would become directors for the SmartGeometry Group. Although both have played increasingly integral roles for the group in recent years, the addition of new blood to the founding leadership of Lars Hesselgren (director of research, PLP Architecture), J Parrish (global practice leader for sports architecture, Arup Sport), and Hugh Whitehead (partner, Foster + Partners) suggests the future of the SmartGeometry Group could include more radical shifts.

The second day featured presentations by leading researchers and practitioners. Among them: Royal Melbourne Institute of Technology professor Mark Burry, a longtime consultant and researcher for Barcelona's Sagrada Familia, who described recent design and construction successes at Antonio Gaudi's unfinished masterpiece; and Enrico Dini, whose company, D_shape, is developing a method of printing full-scale buildings out of sand and inorganic binders.

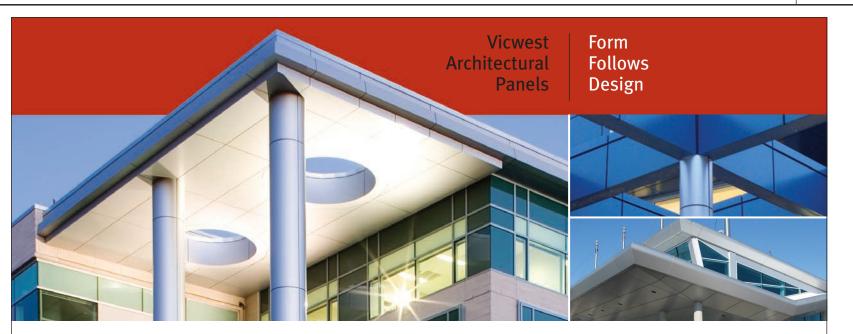
During his scheduled end-of-event appearance, Huw Roberts, global marketing director, building, for software maker Bentley Systems (the event's premier sponsor), made the surprising announcement that Bentley's GenerativeComponents software—among *the* go-to tools for the SmartGeometry set—would now be available as a free, stand-alone download (generativecomponents.com). In other words: Let a thousand clusters bloom. □

 \rightarrow Learn more about the SmartGeometry workshop's leaders and design objectives at smartgeometry.org. Videos of all conference presentations can be found at smartgeometryconference.com.

NOTEWORTHY TALKS

→ Engineer Hanif Kara's keynote focused on the financial and technical gaps he sees in the building industry. Fixing most, said the principal of Adams Kara Taylor, will require "heavy computer use." The engineer also offered the quote of the conference. Gesturing at the screen behind him, which showed Pritzker Prize laureates, Kara said, **"I look forward to the** day when we can replace one of these with a robot."

→ University of Bath professor
Adrian Bowyer roused attendees
with his energy, but it helped that
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ARCHITECT MAY 2010

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Lightfair Preview

TEXT BY KIMBERLY R. GRIFFIN

The **TORI** linear luminaire from **Birchwood Lighting**, made of machined aluminum components, houses a single T5 or T5HO fluorescent lamp. Different socket covers are available-bullet, concave, round, and square-and users can choose from many lens and finish options, including a frosted acrylic round cover and direct and indirect reflectors. Fixtures are available in 2', 3', 4', and 5' lengths, and are UL listed for dry and damp locations. • *birchwoodlighting.com* • Circle 100

Gotham's ALED direct LED downlight includes a 6" aperture with an open reflector, and an LED engine with a 3,500 K or 4,100 K color temperature and 50,000-hour rated life span. The housing accommodates a maximum $1^{1}/2$ " ceiling thickness. Five colors-clear, pewter, wheat, gold, and white-are available for the $7^{1}/2$ "-diameter overlapping trim. • gothamlighting.com • Circle 101

29

The Roccy series of luminaires from Solavanti Lighting offers textile lampshades in red, cypress, brown, and custom colors. The ROC320 (shown) comes in a conical shape, but other geometric shapes are available. All 13 luminaires contain a frosted mineral glass cylinder. • solavantilighting.com • Circle 104

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> The eW Cove MX Powercore developed by Philips Color Kinetics is an LED replacement for high-output fluorescent cove lights. The lamp comes in four color temperatures, four solid colors, and with a widebeam angle. It offers 52.7 lumens per watt and 600 lumens per square foot; dimming down to 1%; Energy Star approval; and Title 24 certification. • colorkinetics.com • Circle 103





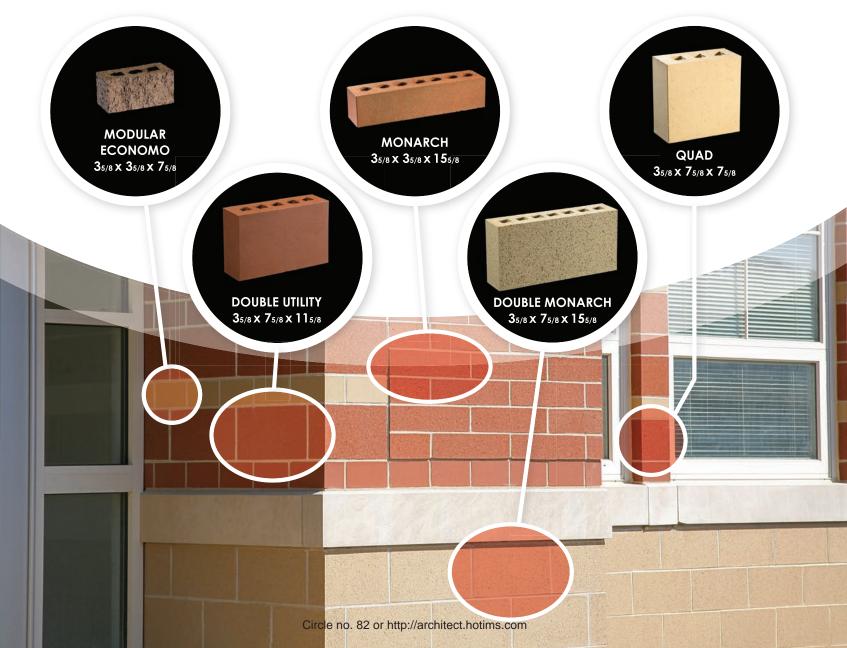
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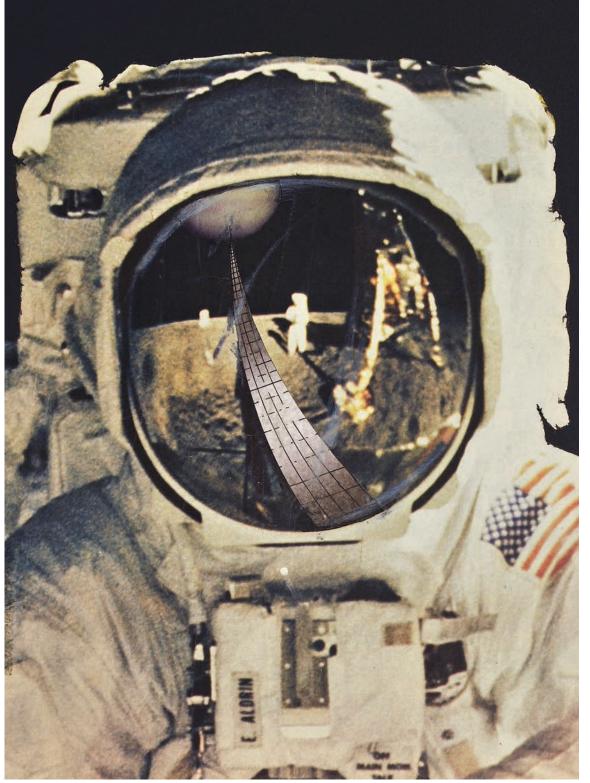
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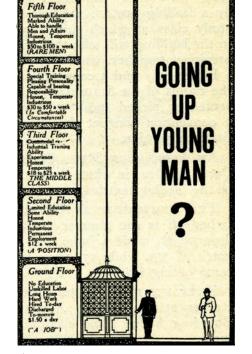


ightarrowexhibit

The big summer show at the Canadian Centre for Architecture is Other Space Odysseys: Greg Lynn, Michael Maltzan, Alessandro Poli. What good timing: The White House just announced its plan for NASA to outsource manned space flight. The exhibit includes Poli's Self-portrait with reflection of Earthmoon highway (left), a 1973 photomontage dating to the architect's stint as a member of the otherworldly Italian design group Superstudio. Through Sept. 6. cca.qc.ca

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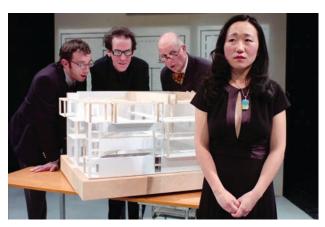
ightarrowbook

Every frat boy knows that the YMCA is a fun place to play. But historian Paula Lupkin isn't fooling around. Her book **Manhood Factories: YMCA Architecture and the Making of Modern Urban Culture** takes a sober look at the moralizing intentions and architectural manifestations of the institution that inspired the Village People's 1978 party anthem. \$27.50; University of Minnesota Press

ightarrowOBJECT

Proof that abstraction can speak volumes, Danish designer Hans Wegner's iconic midcentury Ox chair epitomizes the toreador obsessions of early modernists like Picasso and Hemingway. Grab these two by the horns at **Wright's Scandinavian Design** auction in Chicago, on preview May 17-24. The estimate is a mere \$20,000 to \$30,000. wright20.com





ightarrowTheater

AIA New York's Center for Architecture is broadening its mission: hosting the world premiere of a play by Oren Safdie, Moshe Safdie's son. **The Bilbao Effect** revolves around a celebrity architect grappling with accusations that his design for a public housing project provoked a resident to commit suicide. Through June 5. *cfa.aiany.org*

ightarrowbook

It's not often that a dead man publishes a new book. Historian Nikolaus Pevsner died in 1983, but his unfinished 1940s manuscript, Visual Planning and the Picturesque, is finally seeing the light of day. In the words of the book's editor, architect Mathew Aitchison, Pevsner calls from the grave for a return to aesthetics in planning, a process that should be "additive, and tactical," rather than "preformulated." \$35; Getty Research Institute

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CELEBRATING THE BEST IN AMERICAN ARCHITECTURE

ARCHITECT

ARCHITECT'S Annual Design Review is a juried competition of the best U.S. architecture completed in the past 12 months. Judging is blind, to give every project an equal opportunity to win, and awards will be given in six project-type categories.

ELIGIBILITY

Projects must have been completed after June 30, 2009, and must have been built in the United States or designed by a U.S. firm.

Winners in each category (selected by a jury) will be published in the November 2010 issue of ARCHITECT.

PUBLICATION

CATEGORIES WORK Office, Government, and Commercial Mixed-Use

PLAY Sports, Hospitality, and Retail

LIVE Multifamily Housing, Single-Family Housing, and Residential Mixed-Use

GROW Education, Science, and Healthcare

MOVE Infrastructure and Transportation

BOND Institutional, Cultural, and Religious

DEADLINES

July 9, 2010: regular submission deadline (postmark) July 14, 2010: late submission deadline (postmark, additional fee required)

FEES First entry: \$250 Additional entries: \$175 per entry Late entries: \$50 additional fee per entry by July 17

For more information, visit architectmagazine.com/adr or e-mail adr@architectmagazine.com.

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Bill Moggridge and Caroline Baumann

INTERVIEW BY BRADFORD MCKEE PHOTO BY NOAH KALINA

THE NEWLY APPOINTED DIRECTOR OF THE COOPER-HEWITT AND HIS ASSOCIATE DIRECTOR OFFER A GLIMPSE OF GALLERIES TO COME.

IN JANUARY, the Smithsonian Institution chose Bill Moggridge to run the Cooper-Hewitt, National Design Museum, as it undertakes a major renovation and expansion of its premises, a mansion built by Andrew Carnegie on New York's Upper East Side. British-born Moggridge wasn't plucked from the international carousel of roving museum curators and directors; rather, he is known as a working designer and as a talker about design. He designed the first laptop computer, the Grid Compass, in the early 1980s, and co-founded the design firm IDEO in 1991.

ARCHITECT recently caught up with Moggridge and with associate director Caroline Baumann, who was the museum's acting director after Paul Thompson's departure last year for the Royal College of Art in London. Here's an edited version of the conversation.

What intrigues you about running the Cooper-Hewitt, and what has best prepared you for working in the Smithsonian bureaucracy? MOGGRIDGE: For me it feels like a natural next step. Since 2000, when Tim Brown took over IDEO as president, I haven't had to worry about running a design firm. And I've been trying to tell stories and write books about design. When I heard about this opportunity, I thought, "Aha, national!" The museum is not just interested in being a museum but in being a national design resource. I don't know what [working with the Smithsonian] is going to be like. From my point of view, the Smithsonian does have a very powerful brand.

BAUMANN: Working within the Smithsonian is excellent. We [have programs that] go into small towns and neighborhoods. The name "Cooper-Hewitt" does not resonate, but the Smithsonian brand opens people's eyes about the impact of design.

You [Moggridge] have said you enjoy explaining design. What needs explaining, and to whom?

MOGGRIDGE: Design is so much a tacit, learning-by-experience type of activity. A lot of designers are not good at explaining design, are they? "Could you just explain design?" You get a kind of embarrassed silence. [But] when you ask them about the work they've done, they can explain it in a very engaging way.

I'd like to see every child in America know what design is before they have to choose a career. And at the other end of the scale, it would be wonderful if all the leadership of all the companies knew. I don't think we've got to the point where every CEO understands how to use design.

You're known as a guru of next-wave technology, but there you'll be, presiding over a huge collection of decorative arts collected by a set of Victorian sisters. How can those collections be presented to 21st century visitors?

MOGGRIDGE: On the first floor, we're thinking of a permanent collection, "What Is Design?," to answer that question, using parts of our collection which are historic with things that are contemporary.

BAUMANN: The galleries are not solidified yet, so Bill's expertise is invaluable. [The first-floor] galleries will be showing design-thinking and managing the design process. The second and third floors will be temporary exhibitions.

Recently, the museum got \$600,000 from the Rockefeller Foundation to continue its "Design for the Other 90%" series. There's been a groundswell in the past few years in the design world's awareness around social and economic betterment. What do you make of that? MOGGRIDGE: I think of design in three concentric circles: stuff for individual humans; then the environment they live in, the built environment; and then the planet. There seems to be a big expansion in the ways designers are thinking. We used to think of a beautiful iPhone. Now we're thinking more about health and well-being. It used to be about architecture, and now people are thinking about it in terms of social innovation. \Box





TEXT BY CLAY RISEN ILLUSTRATION BY LAUREN NASSEF IN ANNOUNCING that Kazuyo Sejima and Ryue Nishizawa, the duo behind SANAA, had won the 2010 Pritzker Architecture Prize, the jury noted the firm's "deceptively simple" design, imbued with "a muchappreciated straightforwardness, economy of means, and restraint" that "stands in direct contrast with the bombastic and rhetorical." Sejima and Nishizawa may well deserve the award for their talent. But it seems they also won because, at least for the jury, SANAA embodies the supposed new ethos of architecture: the New Modesty.

Alternately called the New Puritanism or Radical Traditionalism, the movement is a recession-fueled reaction to the post-Bilbao era of high-tech, highprice, hypertrophied design. "Values are changing," wrote London *Times* critic Tom Dyckhoff in late 2009, in response to Caruso St John Architect's austere Nottingham Contemporary museum. "Two years ago you could propose a revolving skyscraper bedecked in golden columns and purple unicorns and be taken halfway seriously. Now, like long-haul flying, architectural excess is sniffed at with a disdain approaching distaste."

Perhaps. But is the New Modesty really all that modest? No, because it assumes that the ideas swirling within the architectural profession define the world beyond it, that just because a bunch of designers and critics have grown tired of iconic structures, real estate developers and the public will follow suit, dooming our cities to a decade of SANAA's unadorned boxes.

After all, who does Dyckhoff think is doing the sniffing? Certainly not the many who swooned, during a recession fueled by overleveraged debt, at the opening of Dubai's Burj Khalifa, the very embodiment of excess. A reporter for *The Christian Science Monitor*, echoing thousands of blog posts and comments, called it "an exuberant architectural triumph." The public loves a blockbuster, whether it's a movie or a skyscraper.

Indeed, movies make a useful comparison. For all the praise that critics heap on edgy directors and low-budget indies, movies are an industry, guided not by theory but by popular taste. The same goes for buildings. The Burj, Beijing's CCTV tower—these megaprojects weren't built because critics said big was beautiful; they were the result of new economic power in the Persian Gulf and China, places whose leaders and titans saw iconic architecture as the best way to announce themselves.

During the 1990s, critic Herbert Muschamp waged war against Donald Trump, lambasting the developer's penchant for the gaudy and the pompous when he could have been engaging thoughtful designers. But while Trump may not have liked being attacked in *The New York Times*, he didn't stop building big, brash towers, and people didn't stop buying space in them. In fact, the whole exercise proved just how little the critic's voice mattered. Nor did the barbs aimed by Muschamp's successor, Nicolai Ouroussoff, at mogul Bruce Ratner's Barclays Center, in Brooklyn, N.Y., delay its construction or alter its design. What did? A collapsing market, which forced Ratner to bag a Frank Gehry scheme for a more moderate one by Ellerbe Becket and SHoP Architects.

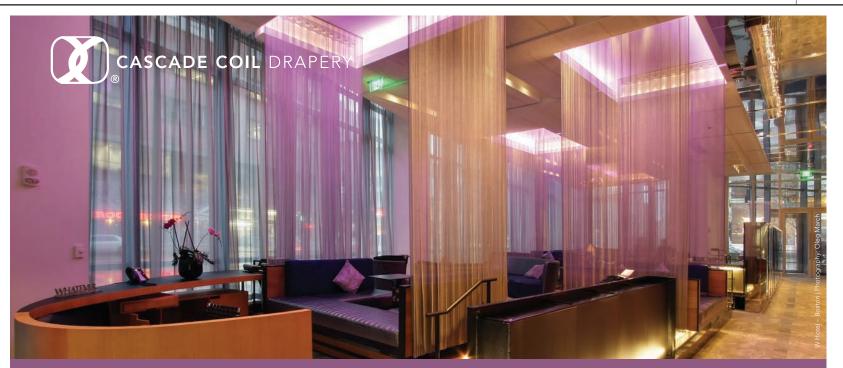
Over the coming decade, what determines the size and rough shape of architectural output won't be hair-shirted critics and designers, but the course of the global economy. If nothing big is commissioned in Dubai next year, it won't be because the local elite have found religion. It will be because they can't get the funding.

The public and the real-estate sector aren't the same thing, of course, and it's possible that some day people will turn against blockbuster architecture. But that's unlikely, if only because public attitudes toward design skew heavily to the pragmatic. Barclays Center will be a public success as long as fans can easily get in and out of its arena. Aside from grumbling neighbors, most people won't give much thought to its massing, lines, and style.

Sure, there will be buildings that seem to speak to a new sense of modesty, and the design press will laud them as such. But don't expect the public to follow suit. Daniel Burnham may have been referring to urban planning, but his words still apply: "Make no little plans. They have no magic to stir men's blood and probably themselves will not be realized." Nor will the New Modesty. □



Clay Risen is a New York-based journalist who has written about architecture for *Metropolis*, *The New Republic*, and *Slate*.



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THE CULTURAL HERITAGE OF THE U.S. RESIDES IN MANY PLACES, NATURAL AND MANMADE.



TEXT BY ELIZABETH EVITTS DICKINSON PHOTO BY PAUL KLINE

"The goal was to build something that was robust, that was more than just an Excel spreadsheet, that was actually a way to communicate with the public and broaden our constituency," says Cultural Landscape Foundation president **Charles Birnbaum**. **FOR 16 YEARS,** Charles Birnbaum worked for the National Park Service (NPS), helping to identify significant cultural landscapes that were not a part of the park system. He dreamed of creating a comprehensive and searchable database to celebrate these places. After leaving the NPS, Birnbaum founded the Cultural Landscape Foundation (TCLF) in 1998, and today he has realized that vision.

Last fall, TCLF's website launched What's Out There, a database with several hundred landscapes from around the country. Highlighted places are categorized using a precise glossary of terms, including type (e.g., amphitheater), subtype (Depression-era theater), and style (Mission Revival). Each entry includes a succinct summary accompanied by carefully selected images that illustrate key design characteristics. For some entries, there are also oral histories of the places and the pioneers who developed them.

What's Out There is the culmination of a decade's worth of planning, research, and countless volunteer hours—not to mention seed funding from the Richard H. Driehaus Foundation and the NPS's National Center for Preservation Technology and Training. The database is searchable by type, style, region, state, or pioneer (think Frederick Law Olmsted Jr.). Soon, visitors will be able to use Google mapping technology to home in on landscapes contained within a specific geography.

In addition to generating entries in-house, TCLF encourages submissions from the public. What's Out There is not, however, a Wikipedia-esque site of self-edited data. Every entry is thoroughly vetted and edited by a team of experts. (There are about 3,000 additional entries being readied for the site by staff and a corral of volunteers, he says.) Birnbaum hopes the database will support the creation of new nationally designated historic sites. "In many cases, there are iconic landscapes that lack designation because we don't have the context. What this project is going to do is allow a state preservation office to be able to create their own Russian nesting dolls of how these places stack up," he says. \Box

LINKS

thingiverse.com

If you're a DIY-hacker type with access to 3D printers, laser cutters, CNC machines, and the like, Thingiverse offers a growing archive of user-generated designs—from the functional to the whimsical—just waiting to be downloaded and realized.

mapfrappe.com

Which is larger, the Millennium Dome or the Pentagon? How much of Europe would fit in Hudson Bay? Does Golden Gate Park offer more green space than Central Park? Kelvin Thompson's nifty MAPfrappe tool, which lets users trace outlines on one Google map and overlay the shapes on a second Google map, helps answer such cartographic conundrums.

flavorwire.com

Over three years, James Welling photographed the Glass House using homemade color filters. The resulting images—a dozen of which can be seen at this Flavorwire post—offer a trippy, occasionally blissed-out take on Philip Johnson's iconic abode. • bit.ly/aEOjrH

tineye.com

Created by Idée, which develops image-recognition and visualsearch software for high-profile clients such as Adobe Systems and the Associated Press, TinEye launched in 2008. The free tool is a reverse search engine: You upload the image or provide a URL, and TinEye scours the Internet to discover if that image is being used elsewhere, what resolution versions exist, etc. Now it's available as a plug-in for Firefox, Chrome, and I.E. that lets you search by right-clicking on any image.

blueprintchicago.wordpress.com

Caroline Stevens, a docent for the Chicago Architecture Foundation, offers brief histories on local buildings that have piqued her curiosity.

stairdismount.com

An iPhone/iPod Touch game for the passive-aggressive set, Stair Dismount has a simple premise: players give a stick figure (Mr. Dismount) a shove, and points accumulate as he tumbles down a series of staircases. There is a social-networking aspect to the game, but we're more excited by the architectural mashup possibilities.

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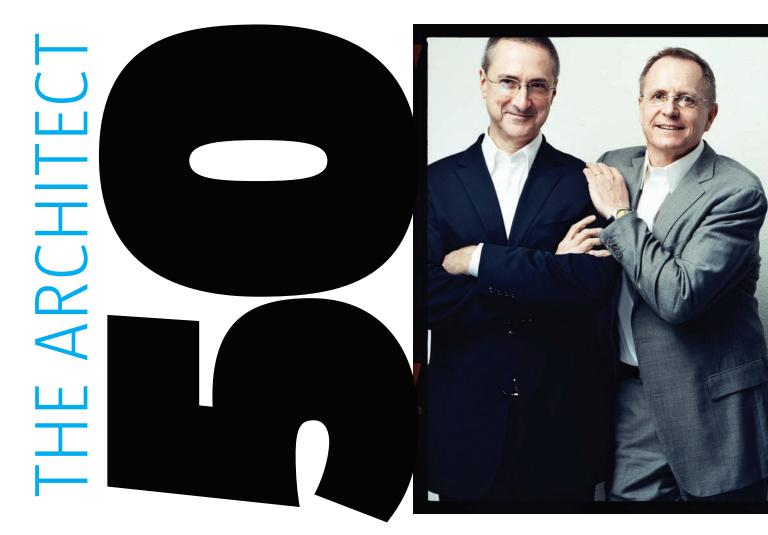
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TEXT BY AMANDA KOLSON HURLEY RESEARCH BY KARLIN ASSOCIATES PHOTOS BY JOE PUGLIESE LAST YEAR, THIS MAGAZINE launched the ARCHITECT 50, our twist on a top firms ranking—one that recognizes ecological commitment and design quality as much as profitability when measuring the country's very best A, AE, and AEC firms. And what a year we chose for the debut.

Esteemed firms—including, but not limited to, the global "alphabets"—had seen their revenues fall sharply and responded with layoffs. Capital was scarce; new projects were exceptionally tough to win, and pencilsdown orders on projects in hand became all too common. Somehow, though, we were able to produce a robust ranking our first time out. It helped that firms were being assessed on their revenues from 2008, a year that a lot of firms started (at least) with a backlog.

Embarking on our research for the second annual ranking, we were not sure what to expect. Would firms want to take part in a year when competition is especially fierce? Would partners worry about revealing weak financials, or that the ranking would just yield more bad



news? In the end, some firms did decline to participate but not many. Firm leaders had been enthusiastic about the ARCHITECT 50 on its launch, and most seemed eager to repeat the experiment.

The differences between last year's ranking and this year's are not dramatic. Three of our top five firms (overall) are holdovers. Some commercially focused firms that were prominent last year have dropped off the list; conversely, this year's biggest upward movers tend to be those with a bedrock of public-sector and infrastructural projects, like Denver's Fentress Architects and Chicago's Epstein (see profile on page 45).

The ARCHITECT 50 survey was administered from early January through mid-March to 161 firms, most of which were invited (a small number applied to the editors; all firms are welcome to). They completed a short entry form, which our research consultant, entered into a database before performing a thorough analysis. Although we tried to be as systematic as possible, the ranking is less than perfectly scientific, and it comes with a couple of caveats:

 \rightarrow We asked firms to indicate a range for number of staff and for revenue. This was meant to allay any worries that firms had about disclosing their exact revenue; it also provides some "wiggle room" to accommodate small fluctuations in staff size. However, this year, employee numbers dropped precipitously at many firms. Readers should bear this in mind.

 \rightarrow Last year, we asked respondents to check boxes indicating which major awards they had won; this year, in order to be more comprehensive, we asked firms to submit full lists of awards and honors. However, this meant that minor recognitions crowded out prestigious awards, even when weighted appropriately. We weighted the scoring strongly in favor of awards that carry national distinction—chief among them, AIA Honor and COTE awards and P/A Awards.

Congratulations to the firms that made the cut. AMANDA KOLSON HURLEY

SKIDMORE, OWINGS & MERRILL



THE TITANS OF WALL STREET are back. No, not the TARP-drunk, mortgage-swapping bankers who got us into the present economic quagmire. I'm talking about Skidmore, Owings & Merrill—SOM on the architectural stock ticker—for nearly 75 years the bluest chip in the American design portfolio.

You'll find its New York headquarters in the former Bankers Trust tower (suppress that laugh), a perch with views over a Financial District landscape for which it, more than any other firm, is responsible. Those skyscraping pylons may have been built for bankers no longer worthy of our trust, but SOM remains its cool, reliable self, the profession's great bastion of corporate strength, the Brooks Brothers of glass and steel.

Which is not to say SOM hasn't suffered like every other firm in this brutal economic environment. Billings are down 25 percent from where they were two years ago. Staff was cut in equal measure. "It was definitely a hard year," says managing partner T. J. Gottesdiener. Nevertheless, he is sanguine about the firm's prospects. "We're starting to look to hire. A few at a time, here and there. We're feeling good about the direction of things."

Artistically, at least, the firm has every right to a sense of satisfaction. In January, SOM reclaimed for itself authorship of the

World's Tallest Tower with the opening of Dubai's Burj Khalifa, though the euphoria was perhaps offset by the earlier departure of Adrian Smith, the partner in charge of the project. The Burj, in any case, serves as a testament to the firm's historic ability to fuse advanced engineering and modernist aesthetics.

That technical rigor reached a level of transcendence, both literal and figural, with design partner Craig W. Hartman's Cathedral of Christ the Light, a glass-wrapped drum for Oakland, Calif, completed in 2008. The firm that got its start building Oak Ridge, home of the Manhattan Project, remains expert at complex planning projects, as its award-winning master plans for Foshan Lingnan Tiandi (in China) and Treasure Island (in San Francisco Bay) demonstrate.

"One of the strengths of SOM is it supports [technical] experimentation," says design partner Roger Duffy. "We're open to criticism and we try to react to it." That ruthless quest for innovation applies also to SOM's management. "When I was made a partner, I was pulled into a room and I was told" — by David Childs — "now you start a new job. Your job is to look for your replacement," says Gottesdiener. "I was really struck by that. The best way to make the best firm is to find the best people." MARK LAMSTER

1	-10		
RANK	FIRM		
1	SKIDMORE, OWINGS & MERRILL • New York • Revenue (range): \$200-\$349.9 million • Employees: 500-999 • SOM's exceptional haul of awards in 2009—including four AIA Honor Awards— helped launch them into the top spot, despite a dip in revenue. SCORING: Revenue per employee: 202; Sustainable practices: 232; Awards: 394		
2	PERKINS+WILL • Chicago • Revenue: \$350 million or more • Employees: 1,000 or more • Once again, Perkins+Will proves that its blood runs green. Its commitment to sustainability and design chops earn green, too. Revenue per employee: 187; Sustainable practices: 363; Awards: 271		
3	DLR GROUP • Omaha, Neb. • Revenue: \$70–\$99.9 million • Employees: 250–499 • DLR has parlayed its K–12 and justice expertise into a rising national profile, one enhanced by its recent acquisition of WWCOT. Revenue per employee: 125; Sustainable practices: 299; Awards: 351		
4	FENTRESS ARCHITECTS • Denver • Revenue: \$100-\$199.9 million • Employees: 100-249 • Now that government and infrastructure work are the name of the game, few firms are better positioned than Fentress, an aviation and public-sector expert. Revenue per employee: 471; Sustainable practices: 232; Awards: 38		
5	HOK • St. Louis • Revenue: \$350 million or more • Employees: 1,000 or more • Despite the split from its former subsidiary, HOK Sport Venue Event (now Populous), in late 2008, HOK is holding steady in our top five. Revenue per employee: 187; Sustainable practices: 315; Awards: 224		
6	VJAA • Minneapolis • Revenue: \$2.5–\$4.9 million • Employees: 10–19 • Vincent James and colleagues had a terrific 2009, scooping major awards for projects in Beirut, New Orleans, and their home state of Minnesota. Revenue per employee: 138; Sustainable practices: 115; Awards: 400		
7	ZGF ARCHITECTS • Portland, Ore. • Revenue: \$100–\$199.9 million • Employees: 250–499 • ZGF is as green as its Pacific Northwest roots would suggest, while its strength in healthcare, infrastructure, and government work has kept it chugging through the recession. Revenue per employee: 220; Sustainable practices: 299; Awards: 133		
8	EPSTEIN • Chicago • Revenue: \$100-\$199.9 million • Employees: 100-249 • Employee-owned Epstein rocketed up the list from 63rd place last year. Want to know why? See the firm profile on page 45. Revenue per employee: 471; Sustainable practices: 81; Awards: 73		
9	ADRIAN SMITH + GORDON GILL ARCHITECTS • Chicago • 2009 revenue: \$100-\$199.9 million • Employees: 100-249 • Since hanging their shingle in 2006, SOM veteran Smith and partners Gill and Robert Forest have pushed high-square-footage projects toward greater energy efficiency through technological innovation. Revenue per employee: 471; Sustainable practices: 95; Awards: 13		
10	GENSLER • San Francisco • Revenue: \$350 million or more • Employees: 1,000 or more • The executive architect of Las Vegas' CityCenter, 2,000-person-strong Gensler proves more every year that designing interiors is just one of its many diverse talents.		

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Revenue per employee: 187; Sustainable practices: 278; Awards: 108

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Possibly the largest school-design firm in the world, **DLR Group** gained entree into the large California market—and into China—earlier this year when it acquired WWCOT, which had four offices in California and one in Shanghai.

Next up for **ZGF Architects**: The firm will be lead architect on 2.1 million square feet of office space within a federal megaproject, the new Department of Homeland Security campus in Washington, D.C. The contract is worth \$61 million. EYP Architecture & Engineering (22) is on the design team.

→ The scores cited here were generated by our research consultant from firm data, and do not correspond directly to that data. (For example, an awards score of 38 does not signify 38 awards won.) All firm data was self-reported and could not be independently verified. For more on scoring and methodology, go to architectmagazine.com.

11 - 30

RANK	FIRM		
11	HKS • Dallas • Revenue: \$200–\$349.9 million • Employees: 500–999 Revenue per employee: 202; Sustainable practices: 259; Awards: 108		
12	NBBJ • Seattle • Revenue: \$200–\$349.9 million • Employees: 500–999 Revenue per employee: 202; Sustainable practices: 238; Awards: 128		
13	FRANK HARMON ARCHITECT • Raleigh, N.C. • Revenue: \$1–\$2.4 million • Employees: 2–4 Revenue per employee: 321; Sustainable practices: 121; Awards: 114		
14	MARK CAVAGNERO ASSOCIATES • San Francisco • Revenue: \$5–\$9.9 million • Employees: 20–49 Revenue per employee: 118; Sustainable practices: 174; Awards: 262		
15	PAYETTE • Boston • Revenue: \$50–\$69.9 million • Employees: 100–249 Revenue per employee: 189; Sustainable practices: 198; Awards: 163		
16	SMITHGROUP • Detroit • Revenue: \$100-\$199.9 million • Employees: 500-999 Revenue per employee: 110; Sustainable practices: 198; Awards: 235		
17	LORD, AECK & SARGENT • Atlanta • Revenue: \$30–\$39.9 million • Employees: 100–249 Revenue per employee: 110; Sustainable practices: 254; Awards: 168		
18	TATE SNYDER KIMSEY ARCHITECTS • Henderson, Nev. • Revenue: \$10–\$14.9 million • Employees: 20–49 Revenue per employee: 196; Sustainable practices: 254; Awards: 68		
19	ANSHEN + ALLEN • San Francisco • Revenue: \$50–\$69.9 million • Employees: 100–249 Revenue per employee: 189; Sustainable practices: 302; Awards: 21		
20	EHDD ARCHITECTURE • San Francisco • Revenue: \$10–\$14.9 million • Employees: 50–99 Revenue per employee: 92; Sustainable practices: 288; Awards: 125		
21	DESIGNLAB • Boston • Revenue: \$2.5–\$4.9 million • Employees: 10–19 Revenue per employee: 138; Sustainable practices: 236; Awards: 114		
22	EYP ARCHITECTURE & ENGINEERING • Albany, N.Y. • Revenue: \$50–\$69.9 million • Employees: 250–499 Revenue per employee: 88; Sustainable practices: 339; Awards: 60		
23	ESKEW+DUMEZ+RIPPLE • New Orleans • Revenue: \$10-\$14.9 million • Employees: 20-49 Revenue per employee: 196; Sustainable practices: 142; Awards: 148		
24	CANNON DESIGN • Grand Island, N.Y. • Revenue: \$100–\$199.9 million • Employees: 500–999 Revenue per employee: 110; Sustainable practices: 184; Awards: 187		
25	SERA ARCHITECTS • Portland, Ore. • Revenue: \$10-\$14.9 million • Employees: 50-99 Revenue per employee: 92; Sustainable practices: 339; Awards: 44		
26	PGAL • Houston • Revenue: \$40–\$49.9 million • Employees: 100–249 Revenue per employee: 141; Sustainable practices: 331; Awards: –		
27	GOODY CLANCY • Boston • Revenue: \$20-\$24.9 million • Employees: 50-99 Revenue per employee: 165; Sustainable practices: 272; Awards: 36		
28	TSOI/KOBUS & ASSOCIATES • Cambridge, Mass. • Revenue: \$20-\$24.9 million • Employees: 50-99 Revenue per employee: 165; Sustainable practices: 230; Awards: 76		
29	FXFOWLE ARCHITECTS • New York • Revenue: \$25–\$29.9 million • Employees: 100–249 Revenue per employee: 86; Sustainable practices: 310; Awards: 73		
30	RDG PLANNING & DESIGN • Des Moines, Iowa • Revenue: \$25–\$29.9 million • Employees: 100–249 Revenue per employee: 86; Sustainable practices: 190; Awards: 192		

Mark Cavagnero Associates makes its ARCHITECT 50 debut at 14th place, due in large part to the San Francisco headquarters it designed for Chronicle Books, which won an AIA Honor Award for Interior Architecture last year.

Now 50 years old, **Tate Snyder Kimsey Architects** renovated its Henderson, Nev., headquarters to achieve LEED-EB certification in 2005, making their office the first LEED-certified building in the state of Nevada.

Cambridge, Mass.—based **Tsoi/ Kobus & Associates** is one of the biggest movers this year, vaulting up from 127th place in 2009.

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ARCHITECT MAY 2010



EPSTEIN

CHICAGO-BASED Epstein topped the ARCHITECT 50 calculation of most profitable firms in 2009—an unexpected distinction during the worst economy in memory. The 220-person firm today has offices in Chicago, New York, Warsaw, and Bucharest: one fewer than at the start of 2009. The firm closed its Los Angeles office when work there dried up. "It was the perfect time for that type of decision," says executive managing director Michael Damore.

One of the older firms in the country—it was founded in 1921—Epstein offers a wide spread of services, including architecture; interiors and graphics; civil, M/E/P, and structural engineering; and construction. "Diversity is our culture," Damore says. It's been a fully employee-owned firm since 2006, through an employee stock ownership plan. Which means, Damore says, that "all our employees have some skin in the game."

Commercial, industrial, and public-sector projects have formed the core of Epstein's work since its founding. "You get an interesting mix of voices," says Noel Abbott, vice president and director of marketing and public relations. "You can [try to] do it with consultants, but they're not here." The 2009 passage of the American Recovery and Reinvestment Act (ARRA; see article on p. 18 of this issue) helped fuel the firm's recent revenue. "Infrastructure has given us a boost," Abbott says. He points to the firm's work for the U.S. Department of Veterans Affairs (VA) as a direct result of ARRA. "We're a great firm for an entity like the VA, that doesn't want to get bogged down with all the consultants. We do it all—architecture, interiors, civil, structural."

Andrew Metter of Epstein | Metter Studio is the firm's go-to architect for the more high-end designs that regularly bring accolades. His Serta International Headquarters in Hoffman Estates, Ill. (featured in ARCHITECT, September 2009, and honored with a citation in our Annual Design Review, November 2009), played a role in Epstein's overall ranking of eighth place. "Andy's work is front and center when we're in the news for design," Abbott says. Damore notes that Epstein gets awards from collaborations with other firms as well. "Architect of record services are a large part of Epstein's business," he says. And not just for the award recognition: "It's profitable."

The future looks bright, too. Epstein is currently working with Murphy/Jahn on a fully financed condominium tower in Warsaw — a rare residential project in a still unsteady American and European economy. A new runway at O'Hare International Airport is moving ahead as well. These are all part of a diversified approach that's helping Epstein glide through bumpy times. EDWARD KEEGAN



PERKINS+WILL

FOR THE SECOND YEAR running, Perkins+Will has earned the ARCHITECT 50's top slot for sustainable practices. When you look at the numbers, it's easy to see why. The firm—which moved from the fifth overall place last year to second this year—can claim 72 LEED-certified projects. Of its own 20 North American offices, eight are certified at LEED Silver or higher, and three more have LEED certification pending. More than 60 percent of Perkins+Will's 1,500 employees are LEED accredited.

Principal Robin Guenther, a sustainable healthcare design expert, says the firm achieves such high green performance because sustainability is inculcated into the very fiber of the firm. "We have a strategic plan that we started in 2004. It covers everything from measurable objectives to our own green operation and carbon emissions," Guenther says.

This initiative is advanced by designated leaders in each office who help green both their own workplaces and client projects. A healthy competition has grown as staff try to make their office the most energy-efficient, Guenther says. "More employees bike to work. Many do composting. The culture of sustainability really permeates everything we do."

With revenues of \$405 million last year, Perkins+Will has the muscle to impact the green building market. At Greenbuild 2009, the firm released a list of 25 noxious chemicals commonly found in buildings and named alternatives that it is substituting in its specifications. The list was posted on its website. "As a large firm specifying billions of dollars of materials, we have an obligation to drive the market to healthier [ones]," Guenther says.

Peter Busby, a principal and managing director of the Vancouver, B.C., office (Busby Perkins+Will), says the firm will not rest on its recent laurels—and there are many, including a 2009 AIA/COTE Top Ten nod and being the first multioffice firm to commit to the 2030 Challenge. The goal is to move beyond energy neutrality for individual buildings. "We're looking at the regenerative building that actually benefits ecological systems," Busby says. "We're pretty confident that we can produce an extremely advanced green building, and what's even more exciting is what we can do when we look at entire community systems." ELIZABETH EVITTS DICKINSON

31-50

BRPH isn't the most familiar name in AEC—yet. A leader in the aviation, industrial, and government markets, it recently opened offices in Charleston, S.C., and Washington, D.C.—the latter to better serve federal clients such as the U.S. Navy and the U.S. Department of Commerce.

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McLarand Vasquez Emsiek &

Partners cracked the Top 50 with ease, but the past year hasn't been painless: A former employee was arrested this February and charged with embezzling more than \$1.9 million from the firm.

Westlake Reed Leskosky was

founded by Abram Garfield—son of President James A. Garfield—in 1905. Today the Cleveland-based firm offers a distinctive combination of specialties: healthcare, historic preservation, BIM, and acoustic, A/V, and related technologies.

RANK	FIRM
31	BRPH • Melbourne, Fla. • Revenue: \$50–\$69.9 million • Employees: 100–249 Revenue per employee: 189; Sustainable practices: 278; Awards: –
32	HDR ARCHITECTURE • Omaha, Neb. • Revenue: \$200–\$349.9 million • Employees: 1,000 or more Revenue per employee: 121; Sustainable practices: 259; Awards: 84
33	WEBER THOMPSON • Seattle • Revenue: \$2.5–\$4.9 million • Employees: 20–49 Revenue per employee: 59; Sustainable practices: 262; Awards: 142
34	COOK+FOX ARCHITECTS • New York • Revenue: \$2.5–\$4.9 million • Employees: 20–49 Revenue per employee: 59; Sustainable practices: 318; Awards: 82
35	GUND PARTNERSHIP • Cambridge, Mass. • Revenue: \$5–\$9.9 million • Employees: 20–49 Revenue per employee: 118; Sustainable practices: 264; Awards: 76
35	ELLERBE BECKET, AN AECOM COMPANY* • Minneapolis • Revenue: \$100–\$199.9 million • Employees: 250–499 (*Ellerbe Becket entered the ranking separately from AECOM, its parent company as of October 2009.) Revenue per employee: 220; Sustainable practices: 184; Awards: 54
37	SASAKI ASSOCIATES • Watertown, Mass. • Revenue: \$50–\$69.9 million • Employees: 250–499 Revenue per employee: 88; Sustainable practices: 190; Awards: 179
38	MCLARAND VASQUEZ EMSIEK & PARTNERS • Irvine, Calif. • Revenue: \$40–\$49.9 million • Employees: 50–99 Revenue per employee: 330; Sustainable practices: 95; Awards: 23
39	CO ARCHITECTS • Los Angeles • Revenue: \$30–\$39.9 million • Employees: 50–99 Revenue per employee: 257; Sustainable practices: 166; Awards: 21
40	EHRLICH ARCHITECTS • Culver City, Calif. • Revenue: \$5–\$9.9 million • Employees: 20–49 Revenue per employee: 118; Sustainable practices: 166; Awards: 159
41	STUDIOS ARCHITECTURE • San Francisco • Revenue: \$30–\$39.9 million • Employees: 100–249 Revenue per employee: 110; Sustainable practices: 198; Awards: 133
42	AYERS/SAINT/GROSS ARCHITECTS AND PLANNERS • Baltimore • Revenue: \$30–\$39.9 million • Employees: 100–249 Revenue per employee: 110; Sustainable practices: 272; Awards: 49
43	ANN BEHA ARCHITECTS • Boston • Revenue: \$2.5–\$4.9 million • Employees: 10–19 Revenue per employee: 138; Sustainable practices: 134; Awards: 148
44	PAGESOUTHERLANDPAGE • Houston • Revenue: \$70-\$99.9 million • Employees: 250-499 Revenue per employee: 125; Sustainable practices: 214; Awards: 79
45	SPECTOR GROUP • Woodbury, N.Y. • Revenue: \$20–\$24.9 million • Employees: 50–99 Revenue per employee: 165; Sustainable practices: 160; Awards: 91
46	TRO JUNG BRANNEN • Boston • Revenue: \$40-\$49.9 million • Employees: 100-249 Revenue per employee: 141; Sustainable practices: 224; Awards: 41
47	GOETTSCH PARTNERS • Chicago • Revenue: \$20–\$24.9 million • Employees: 50–99 Revenue per employee: 165; Sustainable practices: 174; Awards: 63
48	WESTLAKE REED LESKOSKY • Cleveland • Revenue: \$25–\$29.9 million • Employees: 100–249 Revenue per employee: 86; Sustainable practices: 192; Awards: 117
49	HANBURY EVANS WRIGHT VLATTAS & CO. • Norfolk, Va. • Revenue: \$20–\$24.9 million • Employees: 50–99 Revenue per employee: 165; Sustainable practices: 134; Awards: 97
50	WILLIAM RAWN ASSOCIATES • Boston • Revenue: \$5-\$9.9 million • Employees: 20-49 Revenue per employee: 118; Sustainable practices: 214; Awards: 63

.

TOP 10: PROFITABLE

RANK	FIRM

EPSTEIN • Chicago • Revenue range: \$100-\$199.9 million • Revenue per employee score: 471	
ADRIAN SMITH + GORDON GILL ARCHITECTS • Chicago • Revenue range: \$100-\$199.9 million • Revenue per employee: 471	
FENTRESS ARCHITECTS • Denver • Revenue range: \$100-\$199.9 million • Revenue per employee: 471	
MCLARAND VASQUEZ EMSIEK & PARTNERS • Irvine, Calif. • Revenue range: \$40-\$49.9 million • Revenue per employee: 330	
FRANK HARMON ARCHITECT • Raleigh, N.C. • Revenue range: \$1-\$2.4 million • Revenue per employee: 321	
CO ARCHITECTS • Los Angeles • Revenue range: \$30-\$39.9 million • Revenue per employee: 257	
7 ELLERBE BECKET, AN AECOM COMPANY • Minneapolis • Revenue range: \$100-\$199.9 million • Revenue per employee: 220	
ZGF ARCHITECTS • Portland, Ore. • Revenue range: \$100–\$199.9 million • Revenue per employee: 220	
9 HKS • Dallas • Revenue range: \$200-\$349.9 million • Revenue per employee: 202	
NBBJ • Seattle • Revenue range: \$200-\$349.9 million • Revenue per employee: 202	

TOP 10: GREEN RANK FIRM

1	PERKINS+WILL • Chicago • % LEED projects: 80–90; % LEED APs: 60–79; Green culture rating: 6 (out of 6)	
2 EYP ARCHITECTURE & ENGINEERING • Albany, N.Y. • % LEED projects: 60–79; % LEED APs: 60–79; Green culture		
3 SERA ARCHITECTS • Portland, Ore. • % LEED projects: 60–79; % LEED APs: 60–79; Green culture: 6		
4	4 PGAL • Houston • % LEED projects: 80–90; % LEED APs: 60–79; Green culture: 5	
5	5 COOK+FOX • Chicago • % LEED projects: 80–90; % LEED APs: 60–79; Green culture: 5	
6	HOK • St. Louis • % LEED projects: 40–59; % LEED APs: 60–79; Green culture: 6	
7	7 FXFOWLE • New York • % LEED projects: 60–79; % LEED APs: 80–99; Green culture: 5	
8	8 ANSHEN + ALLEN • San Francisco • % LEED projects: 80–90; % LEED APs: 40–59; Green culture: 5	
9	OLR GROUP • Omaha, Neb. • % LEED projects: 40–59; % LEED APs: 40–59; Green culture: 6	
10	ZGF ARCHITECTS • Portland, Ore. • % LEED projects: 40–59; % LEED APs: 40–59; Green culture: 6	

TOP 10: AWARD-WINNING

RANK FIRM

	1	VJAA • Minneapolis • Award of note: AIA Housing Award (Saint John's Abbey and Monastery Guesthouse)
	2	SKIDMORE, OWINGS & MERRILL • New York • Award of note: AIA Honor Award for Architecture (Cathedral of Christ the Light)
	3	DLR GROUP • Omaha, Neb. • Award of note: AIA Orlando Built Honor Award (Vista Del Lago Phase III)
•••••	4	PERKINS+WILL • Chicago • Award of note: AIA Healthcare Design Awards (Oregon Health & Science University— Peter O. Kohler Pavilion)
•••••	5	MARK CAVAGNERO ASSOCIATES • San Francisco • Award of note: Architectural Foundation of San Francisco, Kirby Ward Fitzpatrick Prize (Sava Pool)
	6	SMITHGROUP • Detroit • Award of note: AIA DC Award of Excellence (Performing Arts Center, Montgomery College)
	7	HOK • St. Louis • Award of note: ASID Design for Humanity Award
•••••	8	RDG PLANNING & DESIGN • Des Moines, Iowa • Award of note: AIA Nebraska Honor Award (Union Pacific Childcare)
•••••	9	CANNON DESIGN • Grand Island, N.Y. • Award of note: Boston Society of Architects Design Excellence Award (University of Maine Student Recreation and Fitness Center)
	10	SASAKI ASSOCIATES • Boston • Award of note: AIA Honor Award for Regional and Urban Design (Southworks/Lakeside Master Plan)





RECENTLY, MINNEAPOLIS HAS BEEN hailed by the mainstream media as an architectural hotbed, a snap portrayal sparked by the near-concurrent completion of projects by Jean Nouvel, Cesar Pelli, Michael Graves, and Jacques Herzog and Pierre de Meuron. Hometown favorite VJAA might not be getting spreads in *Newsweek* or *USA Today*, but its work has earned the firm local celebrityhood and abundant accolades from the profession.

In the 15 years since Vincent James started the firm, VJAA has completed about 30 projects (most of them regional), and these have collected an impressive 12 honor awards from AIA Minnesota, six P/A Awards, and eight national AIA awards. These accomplishments are even more extraordinary considering the firm's size: 14 staffers right now, led by James and partners Jennifer Yoos and Nathan Knutson.

James started his career working for former instructors—first Malcolm Holzman at Hardy Holzman Pfeiffer Associates in New York and later Joe Valerio in Chicago—before being recruited by a large Minneapolis firm, where he was kept busy working on big cultural projects. Yoos, too, logged her share of large-firm experience, first in London, then in Minneapolis. This common background contributed to their interest in "forming responses that strive to deepen the context of a work, and exploring [things] more profoundly than you're allowed to in a corporate setting," as James puts it.

Left to right: Vincent James, Jennifer Yoos, and Nathan Knutson

Their open-ended approach privileges research over form-making. For such a small firm to commit to a prolonged research phase—where the designers study materials, context, culture, use, building typology, environmental performance, and whatever else they deem relevant before producing images of any kind—is a considerable investment, but has clear payoffs. Says Yoos: "When you have a research-based process, you cast a big net and you don't know what you're looking for, but you know when you see good content."

In 2008, VJAA completed its first project outside the United States, the Charles Hostler Student Center at the American University in Beirut, which received an AIA Honor Award last year and a P/A Award in 2006. Rather than deliver the monolithic facility called for in the brief, VJAA broke the program down into five smaller buildings that frame outdoor gathering spaces and are oriented and linked to maximize views and breezes from the adjacent Mediterranean Sea. The partners naturally hope the project leads to other international work. CATHY LANG HO



DESIGNLAB

CONSIDERING THE ECONOMY'S dire state, that any firms experienced upward mobility may come as a surprise. But Boston's DesignLAB picked up sizable projects, hired new staff—and rocketed up to 21st place in the ARCHITECT 50, up from 114th last year. And at a fledgling five years old, DesignLAB is just getting started.

The firm's design for the International Fund for Animal Welfare (IFAW) headquarters, completed in 2008 on Cape Cod in Massachusetts, explains some of this momentum. According to partner Scott Slarsky, "IFAW is a typical DesignLAB project—it began with an idea or attitude about the landscape as much as the architecture." Collaborating closely with landscape architect Steven Stimson, the group positioned buildings around a restored landscape, mindful of existing site conditions and regional precedents. The project won an AIA Honor Award for Interior Architecture and an AIA/COTE Top Ten Green Projects Award last year.

"How does sustainability manifest itself at IFAW?" asks partner Bob Miklos, who previously worked at Ann Beha Architects, Schwartz/Silver Architects, and Machado and Silvetti Associates (where he was the first paid employee). "Not at all—it's completely integrated into the design." Slarsky adds, "We are entirely committed to sustainability, but to us, it's about understanding the environmental context." That sort of research-intensive approach defines the firm's ethos (and explains its name). "Research and analysis is how we approach our work," explains Slarsky, a former Ann Beha and Sasaki Associates staffer.

DesignLAB's success isn't simply a function of design methods, though. Miklos has a knack for business—"He's the consummate entrepreneur," says Slarsky—and he fashioned the firm as a horizontal business model, to maximize design innovation but also profitability.

The 10- to 12-person team has no full-time administrative or marketing personnel on staff. Instead, such tasks are distributed across the firm. "We're nimble enough to deal with challenges," explains partner Sam Batchelor. "Everyone can quickly pivot into a different role. We work [on] four to six large projects [at a time], which enables us to do fewer of them, and which brings down the threshold of management."

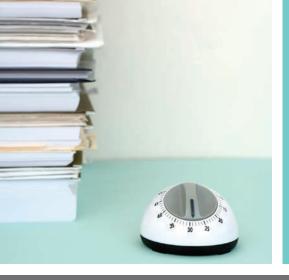
This approach keeps the firm lean but profitable. "Last year, we brought in \$90 million of construction pretty astounding for 10 to 12 people," says Miklos. "Our overhead model is so small, it allows us to spend more time on projects," he says. "Last year, our gross revenue was up 85 percent, and our profit up 45 percent." Miklos was the firm's sole owner until this April, when Slarsky and Batchelor were elevated to ownership partners.

The partners credit the firm's design process— "unpredictable, but never chaotic," says Miklos—for much of their success. Likening the firm to a jazz ensemble, the partners work to find the best emerging talent, then allow the team members to forge an improvised, organic relationship with one another. The hope is that everyone, from the partners to the most recent hire, designs with equal stakes in the project, and feels free to develop and critique ideas. JOHN GENDALL



51-100

RANK	FIRM		
51	MOSELEY ARCHITECTS • Richmond, Va.	76	VENTURI, SCOTT BROWN AND ASSOCIATES • Philadelphia
52	COOPER CARRY • Atlanta	77	HGA ARCHITECTS AND ENGINEERS • Minneapolis
53	WWCOT ARCHITECTS • Santa Monica, Calif.	78	GROUP 4 ARCHITECTURE, RESEARCH + PLANNING • South San Francisco, Calif.
54	ROBERT A.M. STERN ARCHITECTS • New York	79	POLK STANLEY WILCOX ARCHITECTS • Little Rock, Ark.
55	RBB ARCHITECTS • Los Angeles	80	HMC ARCHITECTS • Ontario, Calif.
56	AC MARTIN PARTNERS • Los Angeles	81	3T ARCHITECTS • Albany, N.Y.
57	GOULD EVANS • Kansas City, Mo.	82	MHTN ARCHITECTS • Salt Lake City
58	SIEGEL & STRAIN ARCHITECTS • Oakland, Calif.	83	BLT ARCHITECTS • Philadelphia
59	SORG ARCHITECTS • Washington, D.C.	84	PERKINS EASTMAN • New York
60	THE FREELON GROUP ARCHITECTS • Durham, N.C.	85	KAPLAN MCLAUGHLIN DIAZ • San Francisco
61	KTGY GROUP • Irvine, Calif.	86	RATCLIFF • Emeryville, Calif.
62	BEATTY • HARVEY • COCO ARCHITECTS • New York	87	JEFFREY M. KALBAN AND ASSOCIATES ARCHITECTURE • Los Angeles
63	NAC ARCHITECTURE • Spokane, Wash.	88	ASTORINO • Pittsburgh
64	RTKL ASSOCIATES • Baltimore	89	RIOS CLEMENTI HALE STUDIOS • Los Angeles
65	SHW GROUP • Plano, Texas	90	SHEPLEY BULFINCH RICHARDSON & ABBOTT • Boston
66	CORGAN ASSOCIATES • Dallas	91	DILLER SCOFIDIO + RENFRO • New York
67	IKON.5 ARCHITECTS • Princeton, N.J.	92	FLAD ARCHITECTS • Madison, Wis.
68	OFFICE DA • Boston	93	OZ ARCHITECTURE • Denver
69	JOHN RONAN ARCHITECTS • Chicago	94	BELAY ARCHITECTURE • Tacoma, Wash.
70	CUNNINGHAM QUILL ARCHITECTS • Washington, D.C.	95	MACKEY MITCHELL ARCHITECTS • St. Louis
71	LITTLE • Charlotte, N.C.	96	THE S/L/A/M COLLABORATIVE • Glastonbury, Conn.
72	CUNINGHAM GROUP ARCHITECTURE • Minneapolis	97	WIGHT & CO. • Darien, Ill.
73	ROSS BARNEY ARCHITECTS • Chicago	98	GRAY ORGANSCHI ARCHITECTURE • New Haven, Conn.
74	WILLIAM MCDONOUGH + PARTNERS • Charlottesville, Va.	99	BWS ARCHITECTS • Tucson
75	BNIM ARCHITECTS • Kansas City, Mo.	100	STEVENS & WILKINSON • Atlanta



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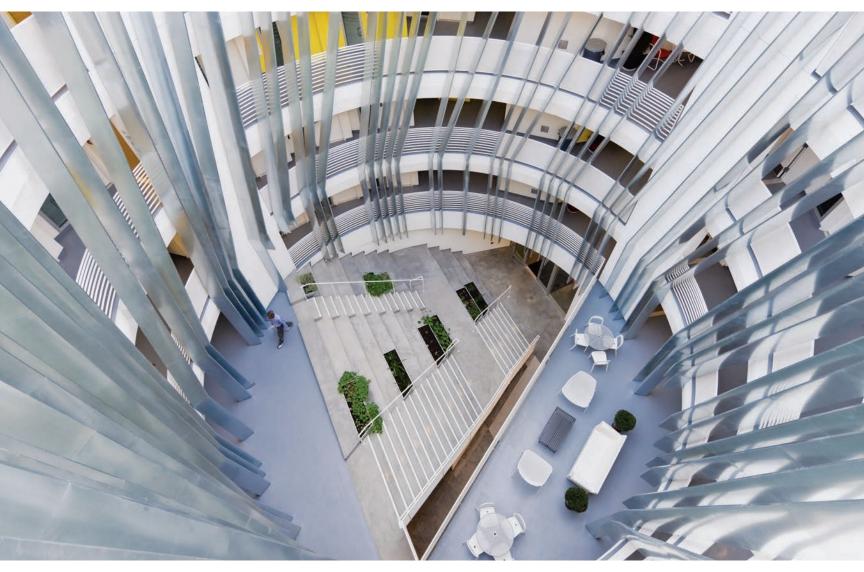
Weather Shield Windows and Doors

Woodharbor Doors & Cabinetry

Sherwin-Williams The Tapco Group Temple-Inland

WR Meadows

→BUILDING 1 2 3



Text by Mimi Zeiger Photos by Iwan Baan

NEW CARVER APARTMENTS

LOS ANGELES MICHAEL MALTZAN ARCHITECTURE

AT SIX STORIES TALL, the New Carver Apartments doesn't exactly tower over the Santa Monica Freeway that zips past its windows. Yet the drumlike structure is impossible to miss, even at 65 miles per hour. Los Angeles–based architect Michael Maltzan's design is as formally iconic as the cylindrical Capitol Records building, which makes the fact that it was built for one of L.A.'s neediest populations—the chronically homeless—even more surprising than the novel architectural expression.

The client was the Skid Row Housing Trust, a nonprofit that has spent more than two decades building supportive housing—first by renovating dilapidated hotels near downtown L.A., then by embarking on new construction. The Rainbow Apartments

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(completed in 2006), Maltzan's first building for the organization, is adjacent to Skid Row (otherwise known as Central City East), but the New Carver Apartments is farther afield, sited in South Park, a rapidly developing neighborhood near L.A. Live and the Staples Center.

The location is strategic on two levels. It houses residents in an area with access to transit and grocery stores, and it is a statement to Los Angeles: Affordable housing is not a blight that needs to be hidden away.

"It is a controversial concept. When we first showed [Maltzan's design] to the investors, they wondered why we were making such a dramatic building," says Molly Rysman, the Trust's director of special projects and external affairs. "We had to convince them that it doesn't need to be bland. Affordable housing improves the neighborhood and creates an anchor in the community. It's not about blending in, but about having an impact."

The interplay between urban fabric and the community that is fostered inside the 53,000-squarefoot building begins with the ground floor, which hosts gathering spaces and tenant support services: a communal kitchen and garden, counseling rooms, and staff offices. There, Maltzan expressed the public character in exposed concrete, a choice inspired as much by the elevated freeway just outside the lobby doors as by the material's economy and durability. The concrete continues into the central courtyard, forming a dramatic stairway (that also doubles as stadium seating).

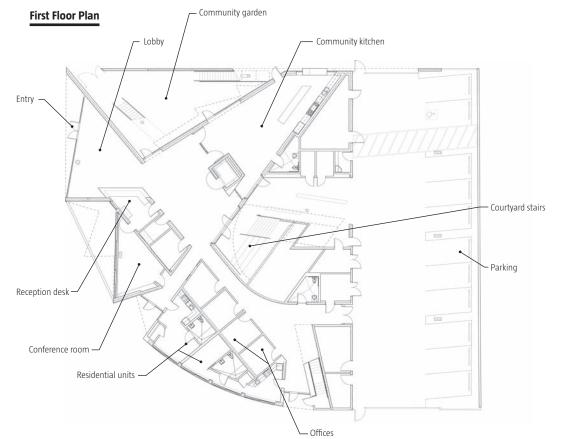
The New Carver's 97 units loop around the central courtyard. Fins of custom-made bent galvanized sheet metal form a privacy screen around the 40-foot-diameter void and disguise the structural steel columns, roof drains, and guardrail posts. Individual apartments are efficient: At 304 square feet, they're monastic studios with small kitchens—so residents rely on the shared spaces. They gather on the sixth-floor deck to smoke and take the occasional yoga class. Painted bright yellow, the space offers residents a sweeping view of the city.

However, it takes a lounge and laundry room on the third floor to see Maltzan's design at its most polemic. A window looks out over the freeway, and L.A. drivers can see through the thick, acoustic glass into the all-yellow space where the formerly homeless fold laundry, check e-mail, and watch TV. "The excruciating irony of the homeless is that because they are so much in the public view, they are shut off from the world. The building creates opportunities for public interactions, and gives them a chance to re-emerge," explains Maltzan. "It is important that people see that [the residents] are part of the greater community—it's not to put them on display, but to see them as real." It's a charged, eye-to-eye situation, a risky attempt to humanize an outcast group.

And Maltzan's employees take pride in having a quick and direct impact. "I've found that many of the people in the office are clamoring to be involved," he says. "These projects have just as much potential to be 'architecture' as any of the projects we do. And because they are such a fundamental part of the urban, social, and political fabric of the city, architecture is even more necessary."

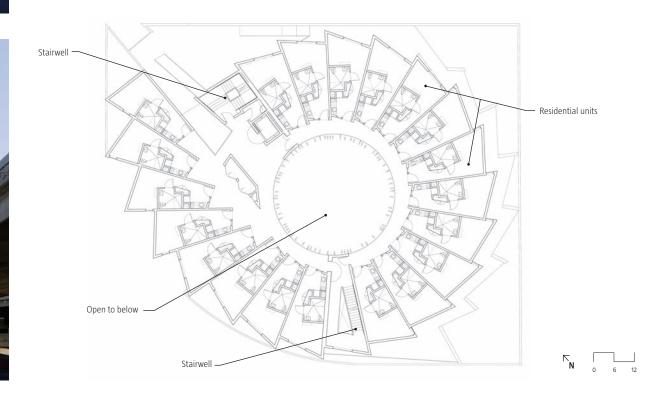






1-2. Alongside the Santa Monica Freeway, the New Carver Apartments brings color and form to an otherwise gritty part of downtown Los Angeles. The ground floor is topped by a wood and steel carousel of five residential stories. The building's serrations increase in depth as they move counter clockwise around the building-the shallowest being to the immediate left of the ground-floor entry and the deepest to the right.

Typical Residential Floor Plan



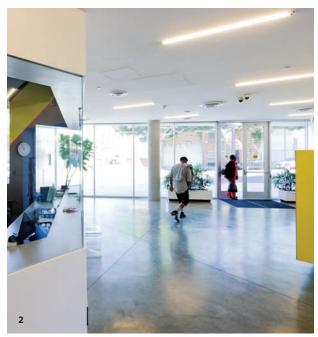
1. A community room opens onto the louvered central courtyard. Painted yellow to identify it as a public space and set it apart from the surrounding units, the room provides space for residents to relax, watch television, and take part in group activities. Next door is a laundry center that serves the entire complex.

2. The entry lobby sets the stage for the materials palette used throughout the building: concrete floors, white walls with yellow accents, and ceiling-mounted linear light fixtures.

3. Where possible, circulation stairs are open to the outdoors, providing views out for the residents and peeks in for passers-by.

4. On the top floor is an open-air lounge accessible to all residents. One of the goals of the New Carver Apartments design was to create a supportive space for the residents, many of whom are older adults with chronic illnesses or disabilities. Open lounges promote social interaction and help bring the formerly homeless residents out of isolation.







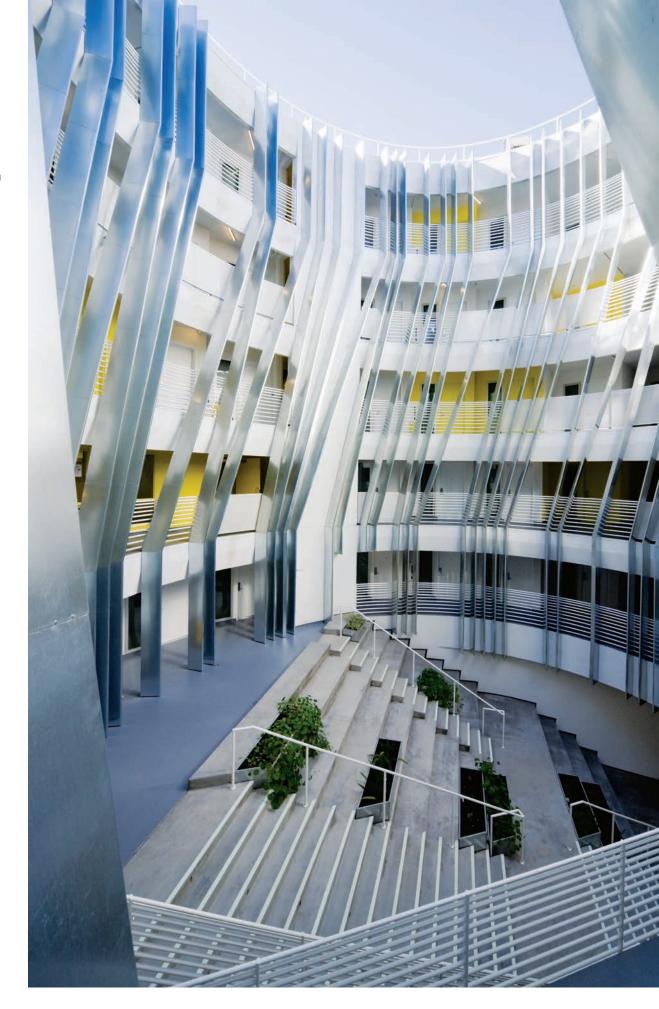


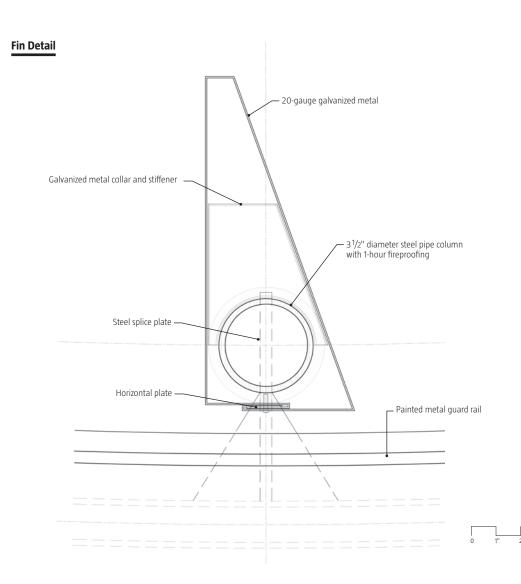


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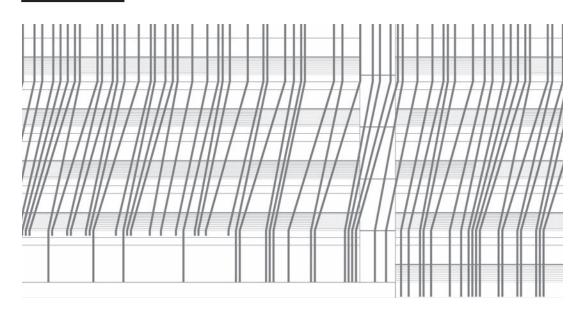
ARCHITECT MAY 2010

All of the building's 95 residential units open onto a circular central courtyard. Bent galvanized metal fins stretch up to the roof, and a set of concrete stairs has seating-height risers, allowing the space to be used for casual gatherings or community meetings.





Fin Elevation Diagram



Project Credits

Project New Carver Apartments, Los Angeles

Client/Owner Skid Row Housing Trust Architect Michael Maltzan Architecture, Los Angeles—Michael Maltzan (design principal); Peter Erni (project director); Kristina Loock (project manager); Steven Lee, Wil Carson (project designers); Sahaja Aram (job captain); Hiroshi Tokumaru (senior technical coordinator); Christophe Plattner, Sevak Karabachian, Yan Wang, Carter Read, Mark Lyons, Christian Nakarado (project team)

Mechanical/Electrical Engineer

IBE Consulting Engineers Structural Engineer B.W. Smith Structural Engineer Baller-Roberts Engineering Geotechnical Engineer Geocon Construction Manager Dreyfuss Construction General Contractor Westport Construction Landscape Architet [place] Acoustical Newson Brown Acoustics Fire & Life Safety Engineering Arup Size 53,000 gross square feet

Construction Cost \$18.4 million

Materials & Sources

Structural System Concrete (groundfloor podium); Wood and steel (residential floors 2 through 6) Exterior Cladding Omega Products International (plaster) omegaproducts.com; Dunn Edwards Paints (paint) dunnedwards.com; Arcadia (storefront) arcadiaincorporated.com Windows Fleetwood Windows & Doors (aluminum windows) fleetwoodusa.com Glazing Oldcastle Glass oldcastleglass.com Doors Fleetwood (sliding doors) fleetwoodusa.com; Cornell Iron Works (coiling doors) cornelliron.com; **Construction Specialities Group** (louvers) c-sgroup.com Hardware Ingersoll Rand Security Technologies securitytechnologies .ingersollrand.com Interior Finishes Dunn Edwards Paints (paints and stains) dunnedwards.com; Daltile (floor and wall tile in all restrooms) dal-tile.com; Johnsonite (rubber tile resilient flooring) iohnsonite.com Lighting Birchwood Lighting (interior ambient lighting)

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→BUILDING



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MERCHANTS MILLPOND VISITOR CENTER

GATESVILLE, N.C. FRANK HARMON ARCHITECT

NATURAL BEAUTY IS WHAT DRAWS PEOPLE TO Merchants Millpond State Park in Gatesville, N.C. Its 760-acre lake and adjacent swamp are home to towering bald cypress and tupelo gum trees, primitive species of fish, and a countless variety of birds. Helping visitors understand the park's unique ecosystem is a challenge, fostered by a new 7,500-square-foot visitor center, which demonstrates that even small buildings can have an important, and positive, environmental impact.

Curtain-Wall Section

Designed by Frank Harmon Architect, of Raleigh, N.C., the modest, wood-framed structure incorporates a lowtech approach to sustainable design and recalls a historic mill that once occupied the site. "I promised the client our building would have the feel of the old mill," says design principal Frank Harmon. "It wouldn't look like the old building, but it would have the qualities of a rustic, wooden structure with rafters and deep overhangs."

The park's steady flow of visitors and its popularity among school groups of all ages—coupled with the fact that, for years, the park's staff of seven had been shoehorned into a 700-square-foot building near a campground—begged for a modern facility. Of particular importance was room to house a new exhibition about the site's four primary habitats. The staff also asked for lecture and activities spaces.

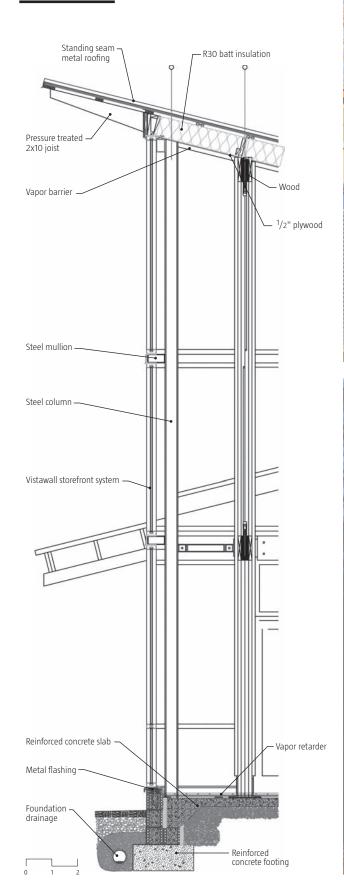
Harmon placed the visitor center on the brow of a low hill—parallel to the bank of the pond—so that every space in the building enjoys southeast views of the natural surroundings. This solar orientation works hand-in-hand with the center's broad shed roof, which angles upward to the northwest and fills the rooms with soft daylight spilling through clerestory windows.

Visitors enter beneath a low roof into a lobby whose ceiling slopes upward to frame a vista of the tall trees. "That was our big gesture," Harmon says. "It seemed the right thing to do." The southwestern end of the building houses a 6o-seat auditorium and a classroom outfitted with microscopes and kid-sized lab tables. Outside, a long, shady porch stretches along the sunniest exposure.

Harmon envisioned the visitor center as "a big, well-lighted tent" with lots of flexibility. The building is not only economical—constructed simply with 2x6s, 2x10s, and prefab wood trusses—but also green, with a target of LEED Gold. The exterior rainscreen wall is cypress, reclaimed from the nearby Great Dismal Swamp National Wildlife Refuge after Hurricane Isabel ravaged many old trees. Flooring in the lobby and exhibit area is recycled heart pine. Other materials include recycled steel structural members, concrete block with high fly-ash content, and a standing seam metal roof, whose high solar reflectivity reduces heat gain.

The building systems are sustainable, too. A groundcoupled heat pump provides heating and cooling. Daylight sensors contribute to energy savings by allowing only certain lights to come on when needed. Outside, a corrugated steel cistern captures rainwater from the roof—reducing stormwater runoff from the site while providing water for irrigation and hosing down canoes.

Park superintendent Jay Greenwood notes that environmental education is a top priority for the North Carolina Division of Parks and Recreation. While the Merchants Millpond Visitor Center is the North Carolina park system's first LEED-rated building, all new facilities in the division are being designed with LEED certification as a goal. "We talk a lot about the importance of managing habitats, so anything that we can do to protect the environment is important to us," Greenwood says. "That's our main theme."







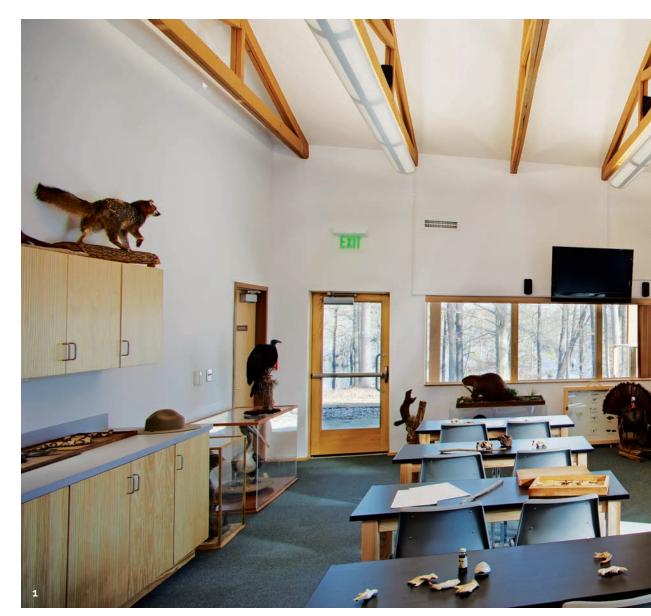
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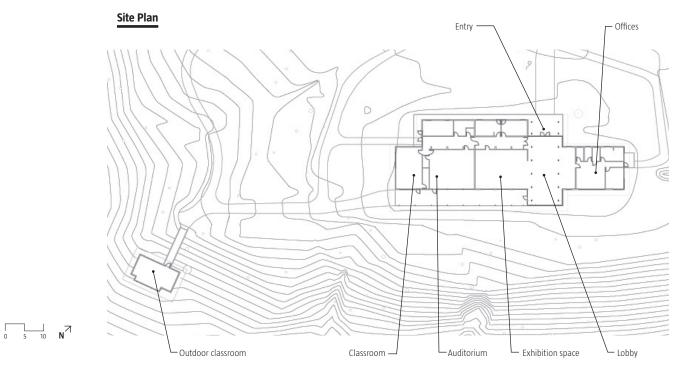
1. The entrance is located strategically on the building's northwest façade. A double-height glazed wall opposite the front door frames a view down to the pond. To the left of the entrance is a corrugated rainwater cistern, fed by a gutter system that channels roof runoff. The water collected is used primarily for site irrigation.

 ${\bf 2.}$ The sharply canting roof structure of the lobby is emphasized by the fact that the roof on either side of it-over offices on one side and classrooms and exhibition space on the other-slopes at a shallower angle and in the opposite direction. The lobby's stout, post-and-beam structure lends a barnlike character to the space, and the vocabulary of natural materials is maintained in the outdoor classroom structure visible though the trees.

1. The classroom in the main building is outfitted with microscopes, video equipment, and lab tables for chemistry experiments and water testing. A Polygal awning over the windows helps to mitigate glare from the southwestern sun, and the interior continues the vocabulary of exposed wood structure and white walls found throughout the building.

2. The exhibition space features dioramas and display boards arranged on a wide-plank floor made from reclaimed heart pine. Light filters into the space through translucent Kalwall clerestory windows on the northwest wall.







Project Credits

Project Merchants Millpond Visitor Center, Gatesville, N.C. Owner/User North Carolina Department of Environment and Natural Resources—David Bateman (project manager and park engineer, Division of Parks and Recreation); Merchants Millpond State Park—Jay Greenwood Architect Frank Harmon Architect, Raleigh, N.C.—Frank Harmon (principal architect); Erin Sterling (project manager)

Landscape Architect Swanson and Associates Landscape Architecture— David Swanson

Mechanical Engineer Consider Design—Isaac Panzarella Structural Engineer Tim Martin Civil Engineer CMS Engineering Size 7,500 square feet

Materials & Sources

Ceilings Exposed, painted plywood ceilings in lobby Exterior Wall Systems Local cypress wood siding Finishes Daltile (tile in restrooms)

daltile.com

Flooring Reclaimed heart pine flooring in lobby and exhibits; Exposed concrete slab in corridor, mechanical, storage; Increte Systems (stain on exposed concrete slab) increte.com; Shaw Contract Group (carpet tile in classroom, auditorium, reception, offices) shawcontract.com

Green Energy Geothermal heat pumps Plumbing and Water System BRAE (rainwater cisterns) braewater.com; Comtec Industries (toilet partitions) scrantonproducts.com; Toto USA (toilets) totousa.com

Roofing Standing seam metal roof; 5V metal roof (open-air classroom) Site and Landscape Products Victor Stanley (bike racks)

victorstanley.com Structural System Exposed CMU foundation walls (open-air classroom); Exposed wood columns and beams (porches and lobby); Exposed steel tube columns (lobby) Walls Exposed plywood walls (openair classroom)

Windows, Curtainwalls, Doors Rockwood Manufacturing (door hardware) rockwoodmfg.com; Polygal (polycarbonate awning on classroom and officia) polycal com; Victawall

(storefront windows in lobby, exhibits, auditorium) oldcastleglass.com; Eagle Windows & Doors (aluminumclad wood windows in offices, restrooms, classroom) eaglewindow .com; Kalwall (clerestory windows in offices, exhibits, auditorium, classroom) kalwall.com; Hunter Douglas (rollershades in auditorium) hunterdouglas.com



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\rightarrow BUILDING

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SAP AMERICAS HEADQUARTERS EXPANSION

NEWTOWN SQUARE, PA. FXFOWLE ARCHITECTS

IF, IN THIS ERA of declining print subscriptions, executives at the *Harvard Business Review* want proof that their articles have a direct impact on business, they need look no further than the SAP Americas Headquarters Expansion. An article in that vaunted journal about Renzo Piano and FXFowle's collaboration on the ultra-green New York Times Building caught the eyes of SAP executives and spurred the German company—a manufacturer of workplace software—to shortlist FXFowle for an invited competition to design a new building at its North American headquarters. As the creators of programs such as SAP Carbon Impact (a software tool that records and manages carbon consumption across business operations), going green was the only option. "This is

-

concrete evidence of our commitment to sustainability," says Brian Barrett, facilities project manager for the company.

The RFP for the 210,000-square-foot building in Newtown Square, Pa.—15 miles outside Philadelphia included a requirement for LEED Silver compliance. One of the reasons SAP chose FXFowle was that the New York–based firm said: What about going for Platinum?

Also in the RFP was a request that the new building integrate well with the site—a bucolic expanse, speckled with old-growth chestnut trees. In 2006, when FXFowle won the commission, the plot contained only a threestory tract office building, which held roughly half of SAP's Pennsylvania workforce. The other half was housed in rented office space not far away; the expansion was intended to bring everyone together in one complex.

The serpentine curve of the new building was designed and sited to create a Wi-Fi-enabled courtyard, a work and break-out space for employees, while maximizing views from the open office floors. To maintain the scale of the existing building, the site was excavated and the first floor of the new headquarters building sunk down into the ground, with a substantial light trough to ensure daylight still reaches the interior. Separated into four floors, the bulk of the new building is open-plan office space. Conference rooms and private offices are organized into corridors across the width of the floor plates, to keep views unobstructed.

But getting to LEED Platinum takes more than just careful siting. The building doesn't employ any systems that are new to FXFowle, but "it does combine them in ways we have not before," says Guy Geier, partnerin-charge of the project. To minimize heat gain and control heat loss during the winter, the team wrapped the structure in a triple-glazed curtain-wall system (see page 70). This intense insulation is paired with an HVAC system that includes underfloor air distribution, geothermal wells for heating, and ice chillers and evaporative cooling towers. There are electric HVAC diffusers embedded in the ceiling plane, but design partner Bruce Fowle describes them as backup. "They are there in the event of an extreme condition, but would rarely be used," he says. Site plantings manage stormwater runoff, while green roofs help to limit the heat island effect and provide an accessible outdoor space. Sharing the roof plane is an array of solar panels.

These individual systems are all brought together by a sophisticated Building Management System (BMS). Barrett describes a necessary learning curve — the running of exhaust fans had to be tweaked to reduce the static pressure in the building, for example — but the BMS allows Barrett to drill down to how much energy is being used by each system, and to predict the results of any changes. Energy usage is just over 1 kW per square foot, a reduction of 60 percent over the old building. SAP's corporate parent in Germany is so impressed that it is looking at installing a similar BMS in the older building. And if green begets green, look for other sustainable projects from this corporation in the future.



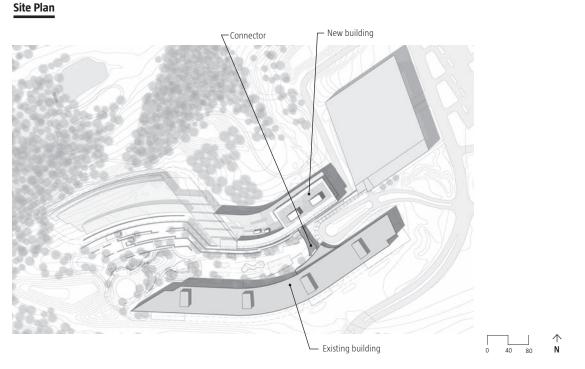




1. Behind the south façade of the new SAP Americas Headquarters is an atrium that serves as a circulation spine. Facing an existing building across a landscaped courtyard, the triple-glazed façade provides a visual connection to the goings-on in the office space. The proximity of the new and old buildings has allowed SAP to buildings has allowed SAP to streamline operations, such as having one central IT hub instead of the three required to support the staff when they were separated into rental spaces. The courtyard is Wi-Fi enabled, allowing employees to work outside on warm days.

2. The fourth floor houses executive offices in a smaller footprint, leaving room for an extensive green roof and rainwater collection system. To maximize the outdoor spaces available to employees, the volume is wrapped on two sides with a terrace for al fresco meetings and lunches.





TOOLBOX

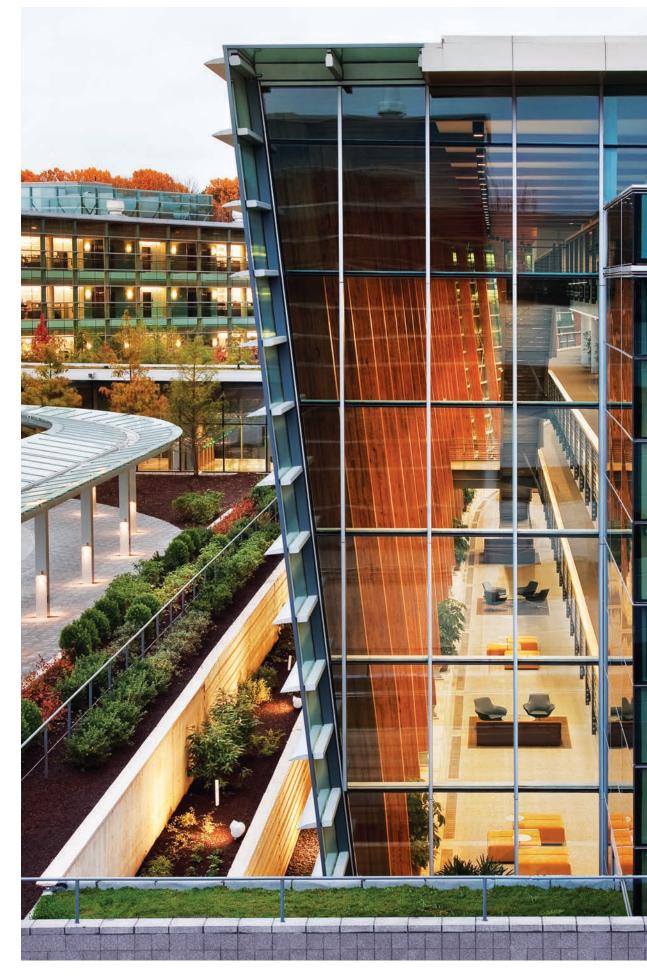
Unitized Aluminum Curtain Wall Schüco schuco-usa.com

Triple-Glazed IGUs Viracon viracon.com

One of the largest sustainable systems in the new SAP Americas headquarters building is, ironically, one of the least obvious to the naked eye: a triple-glazed curtain-wall system. First suggested for the project by engineers WSP Flack+Kurtz, who had experience working with the product overseas, the glass skin looks like that on many modern structures. But within each insulated glass unit, there are three glass panes instead of two, radically improving the heat-gain coefficient. The extra width of the units (which are 13/4 inches thick instead of the standard 1 inch) was accommodated by the aluminum curtain-wall system. Thin mullions—roughly 2 inches wide—and large module widths and heights minimize the disruption of the glazing.

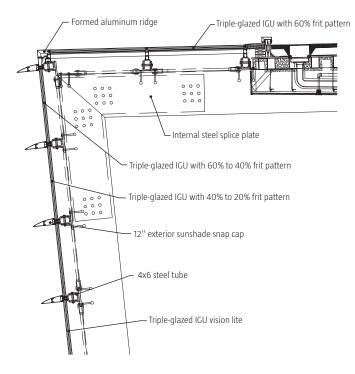
The curtain wall's thermal performance eliminates the need for perimeter heating that wouldn't be supported by the building's underfloor air distribution and radiant heating systems. The cost savings of eliminating the perimeter HVAC helped cover the more expensive glazing system. In addition to the cost savings of avoiding a fully customized system, "there wasn't a lot of time to develop custom dies," says project director John Schuyler, "so we challenged ourselves by using off-the-shelf systems." Still, some things had to be specially designed, including customized connectors to attach the snap-on 12-inchdeep horizontal sunshades. One downside to a triple-glazed system, the extra weight, wasn't an issue here because of low overall height.

The color of the glass had to complement the existing building while still meeting efficiency requirements. "We ended up using a so-called 'clear,' " Schuyler says, "but it actually picks up a little bit of color. We were looking to set up the right relationship with [the glazing] on the existing building." On-site mock-ups helped the color selection process, which resulted in the architects choosing slightly bluer and greener tints for the east, north, and west façades.



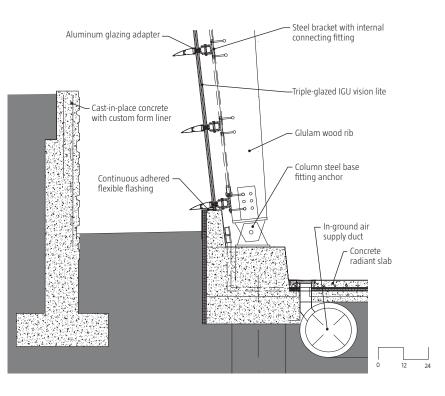


Curtain Wall Section



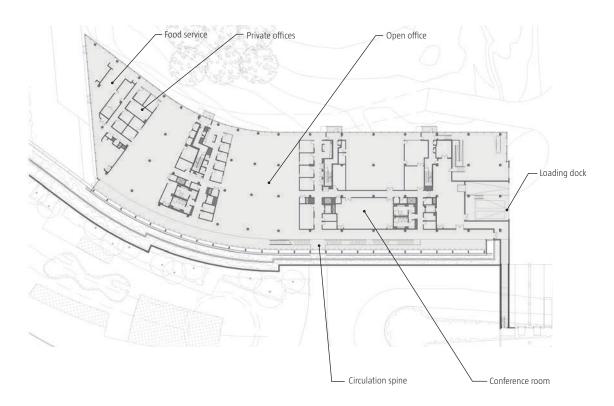
The triple-glazed curtain wall was engineered to maximize energy savings, and includes a graduated frit pattern to help mitigate glare. On the skylight and at the top of the atrium façade, the frit pattern covers 60 percent of the glass, fading to 40, then 20, and finally into clear vision glass. The articulated shape of the spine's curtain wall (which juts out at the top and tapers down to meet the base) was calculated to help minimize glare, heat gain, and also bird strikes, an important consideration in the wooded area says design partner Bruce Fowle.

Curtain Wall Section at Base

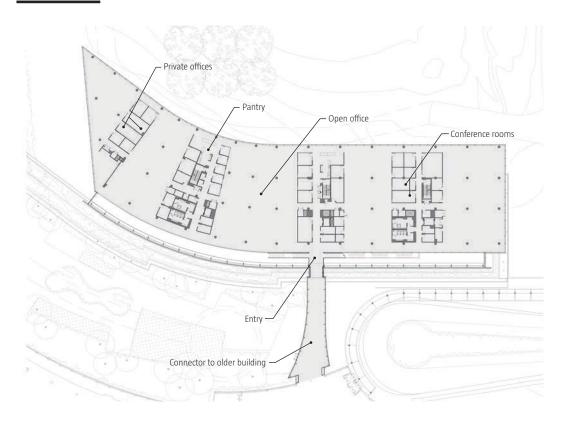


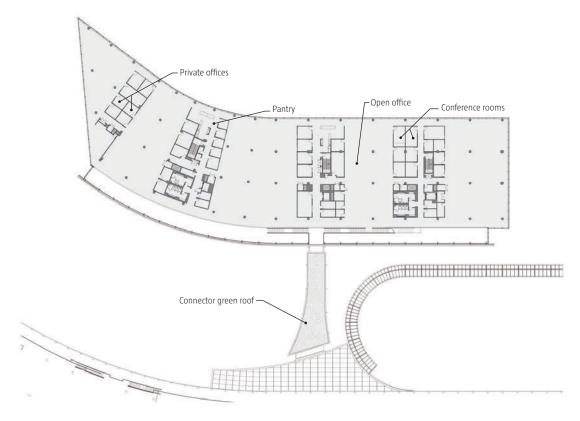
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First Floor Plan

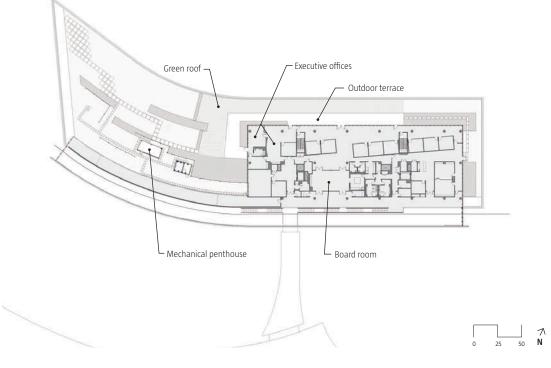


Second Floor Plan





Fourth Floor Plan



Project Credits

Project SAP Americas Headquarters Expansion, Newtown Square, Pa. **Client/Owner** SAP Americas Architect FXFowle Architects, New York—Guy Geier (senior partner, partner-in-charge); Bruce Fowle (founding principal, design partner); John Schuyler (associate principal/ project director); Gustavo Rodriguez (senior designer); Sara Agrest (senior designer); Frank Lupo, Kimberly Garcia, Raphael Pereira (competition design team); Alvaro Quintero, Robert Lanni, Ervin "Dash" Hirsan, Woo-Hyoung Lee, Nick Tocheff, Louise Smith, Nathan Herber, Max Carr, Toby Snyder (core and shell design team)

Interior Designer FXFowle Architects, New York—Joseph White, Auddy Banny, Lisa Cheung, Nina Kinoti-Metz, Tom Scarda, Stephanie Schreiber, Robert Hills (interiors design team)

Mechanical Engineer WSP Flack+Kurtz Structural Engineer Severud Associates Electrical Engineer WSP Flack+Kurtz Civil/Site/Geotechnical Engineer Advanced GeoServices Corp. **Construction Manager** Gilbane Building Co. Landscape Architect Wallace Roberts & Todd Green Roof Roofscapes Cistern Design Rainwater Recovery Geothermal Gipe Associates Lighting Designer S+S Lighting Design Wayfinding Ex;it Parking Structure Architect of Record AECOM

Size 210,000 square feet

Materials & Sources

Ceilings Armstrong armstrong.com; ACGI (80% recycled content ceiling tiles) acgiwood.com

Curtain Wall Schüco (unitized aluminum curtain-wall system) schuco-usa.com

Fabrics and Finishes Corian (Bamboo cabinetry) dupont.com Flooring Roman Mosaic and Tile Co. romanmosaic.com; Johnsonite johnsonite.com Glass Viracon viracon.com HVAC Trane (ice storage tanks) trane

.com; Air Zone International (raised floor air system) airzoneinc.com; Tate Access Floors tateaccessfloors.com Lighting Gammalux Systems gammalux.com; Lightolier

lightolier.com
Lighting Controls Lutron lutron.com

Paints and Finishes Sherwin Williams (low-VOC paints) sherwin-williams.com Plumbing Vola (waterless urinals) vola.com; Kohler (dual-flush toilet valves) kohler.com; Sloan Valve sloanvalve.com

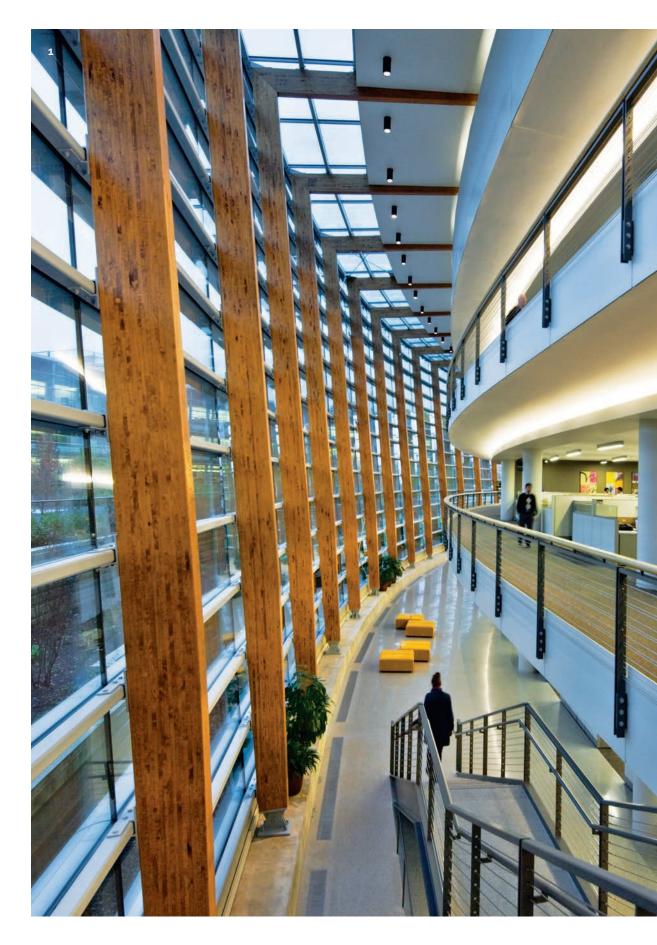
Structural System Unadilla Laminated Products (glulam ribs) unalam.com

→ Full materials & sources at architectmagazine.com

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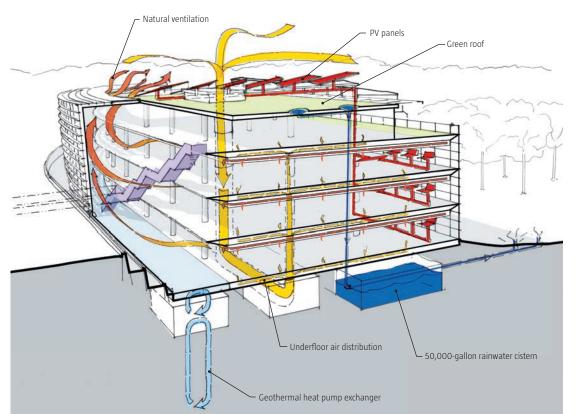
1. Inside the circulation spine, structural glulam ribs add warmth to the space and help to visually define the limits of the atrium. The second, third, and fourth floors open directly into the atrium, allowing the maximum light transmittance into the open office spaces. Lounge furniture creates break-out spaces on the first floor.

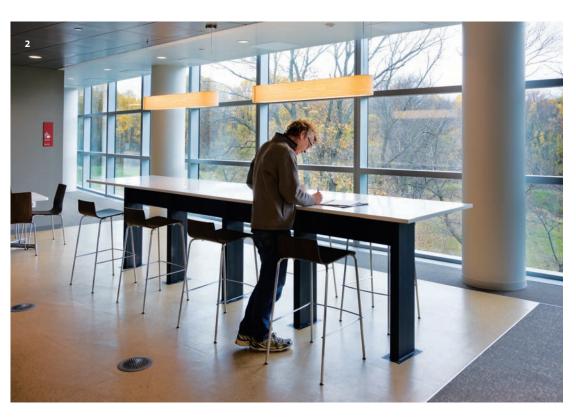
2. With SAP's corporate focus on collaboration, casual work and meeting spaces were incorporated throughout the project. The view out of this space on the north side of the building encompasses a grove of old-growth chestnut trees, which have become an endangered species.





Sustainable Systems Diagram







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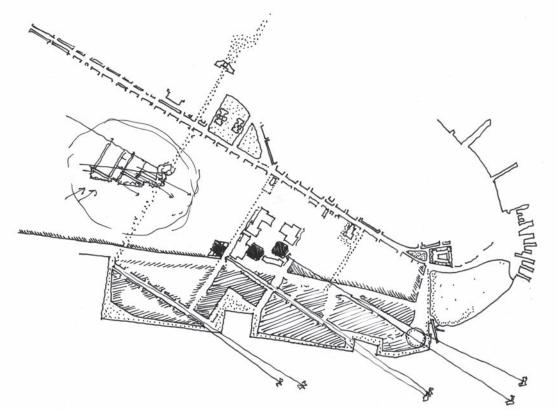
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\rightarrow 1984 P/A AWARD CITATION

NEW OLD NEW YORK A PRAGMATIC PLAN BY COOPER ECKSTUT FOR BATTERY PARK CITY'S 92 ACRES OF LANDFILL PROPOSED INCREMENTAL DEVELOPMENT THAT IS JUST NOW BEING COMPLETED.



1984 P/A Awards Jury John Cable Sam Davis Jonathan King J. Michael Kirkland James Stewart Polshek Roger Schluntz Julia Thomas Oswald Mathias Ungers

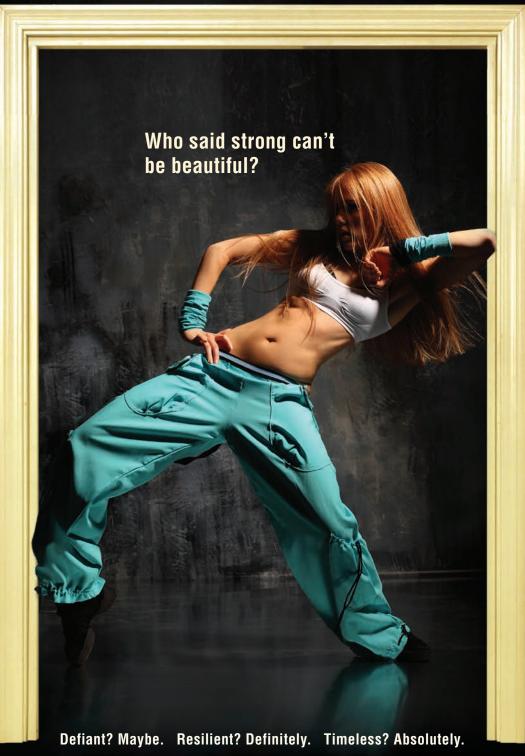


NEOTRADITIONAL PLANNING, AKA New Urbanism, is sometimes derided as little more than picket fences and period lamp posts, but there are pragmatic virtues to urban patterns that date back to prehistory. In the case of Battery Park City, a 1969 plan for the 92-acre Lower Manhattan landfill had envisioned megastructureinspired residential structures on superblock parcels, but after one such complex was built, developers couldn't be induced to build more. In the 1980s, the Hugh L. Carey Battery Park City Authority – a public corporation that oversees the development of the site-turned to the architect-planners Cooper, Eckstut Associates, who came up with a grid of streets, interspersed with intimate squares, along which developers could build and market apartment buildings of familiar form and scale. (All of the post-1984 housing is market rate, with the authority promising over \$1 billion of its revenues to date for low- and moderateincome housing elsewhere in the city.)

The deliberately incremental build-out of the development-reflecting economic cycles-is now reaching completion. At its center is the massive World Financial Center office and retail complex designed by Cesar Pelli. Community facilities include public schools, a branch library, a cineplex, and a boat basin. Lining the 1.2mile waterfront is a well-designed esplanade, punctuated effectively by sculptures at environmental scale by such artists as Mary Miss and Martin Puryear. Infilling the precinct are residential buildings, with some street-level retail, by many nationally known architects. The 1980s buildings display rather historicist exteriors; more recent ones are sleekly modern, with some masonry or terracotta cladding to meet design guidelines.

While the archetype of New Urbanist planning is often considered to be Seaside, Fla., largely a second-home community (also a 1984 P/A Citation winner), Battery Park City has demonstrated the effectiveness of time-tested development patterns at the metropolitan core. \square

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