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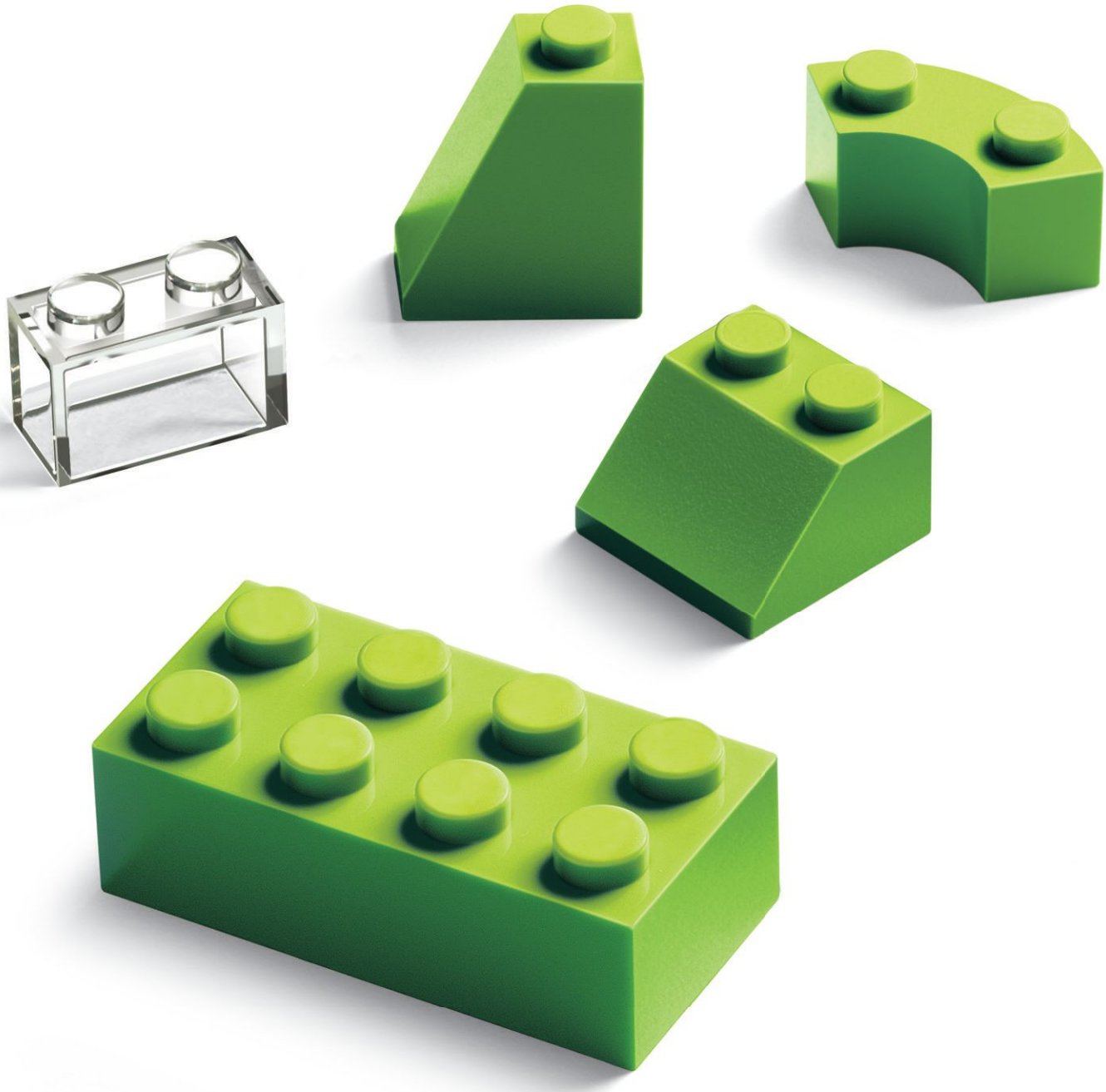

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COVER: NEW ROME-EUR CONVENTION CENTER AND HOTEL, BY MASSIMILIANO AND DORIANA FUKSAS. PHOTO BY ROLAND HALBE.

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SECOND HOME LONDON BY SELGASCANO

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Everyone's a Winner!

As architecture and design awards proliferate, how much do all these honors matter?

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IN ARCHITECTURE, it's always awards season. The field now has dozens of programs, bestowing hundreds of prizes each year, many of them online only. You have to wonder if the glory of winning isn't diminished in such a crowded arena of supposedly superlative architecture.

Some prizes continue to carry a special distinction. The Pritzker Prize, just announced this month, is still the most prestigious, despite coming under fire in the past (including here on this page) for the lack of diversity among its winners. Initiated in 1979, it comes with a $100,000 check and a nice bronze medal. The independent jury that chooses the winning architect each year—under a shroud of secrecy the FBI could only envy (leaks are rare)—actually visits the contenders' projects, which gives the prize unusual credibility.

The AIA Gold Medal remains a major accolade, too, and can be a career booster, except when it's awarded to someone who is already dead. Two recent deceased honorees—both prolific California architects—seem to have been chosen as recompense for the historic maleness and whiteness of the award: Julia Morgan (1872–1957) was the first woman to win, in 2014, and Paul Revere Williams (1894–1980), this year's winner, is the first African-American to be honored.

While all the AIA awards are the profession's means of celebrating its own, prizes from other organizations often reflect a specific mission. The Aga Khan Award for Architecture, for example, is given every three years to recognize built work that serves Muslim populations around the world. Short-listed projects are visited and rigorously vetted, and winners are well rewarded: in 2016, a prize of $1 million was shared among those behind the six top designs. The Richard H. Driehaus Prize at the University of Notre Dame, known for its especially generous $200,000 award, goes to an architect each year whose work embodies classical ideals. The biannual Berkeley Rupp Prize, for an architect who has helped the advancement of women, comes with a $100,000 award and a visiting professorship at the University of California at Berkeley.

Some architecture prizes not only connect to an organization's purpose, but help support it. That's true for the Cooper Hewitt National Design Awards, which honors an architect or firm at its annual fundraising gala, and the Chicago Athenaeum's American Architecture Awards for projects in the U.S. or those by American architects.

But now the number of honors handed out each year is exploding, thanks to the Web and a global audience for architecture and design. In 2012, Architizer, the site devoted to buildings and products, launched its annual A+ Awards, with a cast of famous jurors and a lengthy roster of winning projects. Last year, the Architizer awards actually had more judges (over 400) than honorees (245)—not counting the 400,000 respondents who voted online for their favorite projects, according to the website.

Add to the flood of awards the new American Architecture Prize (AAP), which sounds confusingly like the Chicago Athenaeum's prize. The AAP gave three top honors its first year, 2016, while, according to its website, "hundreds" of other projects in more than 40 categories were "awarded titles of platinum, gold, silver or bronze along with honorable mentions from our many distinguished submissions." Like the Architizer A+ Awards, AAP recruited some well-known judges from the world of architecture. And, like several other award programs, it doesn't give cash awards but does collect fees. Architects are solicited to submit projects for $300 each, which can add up to a tidy sum, if firms enter more than one work.

Such prizes, casting a wide net, reflect a populist, democratic approach to design, and that's not necessarily a bad thing. New architectural work can be discovered, and emerging firms can get a leg up. But because many of these awards are only possible because of the Web—through which work is submitted, judged, and ultimately publicized—the image of architecture, not the experience of architecture, becomes the basis for recognition. And if your project—whether built or just a rendering—is honored along with hundreds of others, it dilutes the potency of a prize. When everyone's a winner, how big a deal can that be?

Cathleen McGuigan

Cathleen McGuigan, Editor in Chief


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perspective

Cities give birth to social movements not only because of the kinds of people who live in them, but also because of the public spaces available and essential to their configuration.
—New York Times *columnist Ginia Bellafante writing about recent protests and public space.*

MCA Renovation Aims to Bring Chicago into the Museum

BY ZACH MORTICE

A RENOVATION of Chicago's Museum of Contemporary Art (MCA) is intended to reintroduce the museum to a wider public, just when the project's designers, the Los Angeles firm of Johnston Marklee, will be reintroducing themselves as artistic curators of the Chicago Architecture Biennial, set to open a few months after the renovation's completion. Now under construction, the $16 million project will convert 12,000 square feet of interior space into free and publicly accessible cultural and social venues. It's scheduled to be complete this June, in time for the museum's 50th anniversary.

The renovation will reshuffle three programmatic elements of the building, designed by Josef Paul Kleihues in 1996. (The museum, when established in 1967, first occupied a space on East Ontario Street, four blocks south.) The plan will install a new ground-floor restaurant designed by Johnston Marklee and dominated by an immersive art installation by British painter Chris Ofili. On the second floor, the emerging Mexico City–based practice Pedro y Juana will create a flexible art and social space called "the commons." Finally, the third floor will host new education and meeting spaces.

Throughout, Johnston Marklee's plan aims to make more fluid connections between art, the museum, and the city with the intention of turning one of the city's most formally imposing cultural buildings into a convivial and friendly place. "The entire renovation is meant to up-tick our welcome and hospitality factor," says MCA director Madeleine Grynsztejn.

The second-floor commons area is most emblematic of the renovation's approach. It aims to create a social "third space," says Johnston Marklee principal Sharon Johnston—something between a white-box gallery and a hangout space, with programming such as workshops, performances, and artist-in-residence studios.

Grynsztejn first came across the work of Pedro y Juana at the 2015 Chicago Architecture Biennial and felt the MCA could use something a bit like the designers' Dear Randolph installation, a playful array of circular lamps connected via ropes and pulleys, begging passersby to fuss with them. She called it an "interactive way station," believing that the commons could "communicate warmth and embrace." Renderings of this space show a dense hanging-garden greenhouse of geomet-

The MCA in Chicago will wrap up a redesign in June by the firms Johnston Marklee and Pedro y Juana. The renovation includes a new first-floor restaurant as well as a commons space on the second floor (above).

PHOTOGRAPHY: © PETER MCCULLOUGH/MCA CHICAGO (TOP); TOM HANCOCKS (BOTTOM)

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ric forms and plantings. "We imagine the commons as an egalitarian space in constant motion," said Pedro y Juana's cofounder Ana Paula Ruiz Galindo in a statement.

Johnston Marklee's design, meanwhile, picks up on cues from Kleihues's original building, like the existing barrel-vaulted ceiling in the fourth-floor galleries, which they are echoing in the ceilings of the new restaurant. But an important part of Johnston Marklee's responsibilities is coordinating programmatic shifts and creating a context in which fellow artists and designers can experiment. Johnston says it's "like a chess game, where one person makes a move, and then somebody else makes a move in response."

Mexico City–based firm Pedro y Juana devised a new flexible space for the MCA's second floor. The design includes playful geometric fixtures as well as hanging plants.

PHOTOGRAPHY: © PEDRO Y JUANA

This focus on an enhanced public realm within the museum, Grynsztejn says, comes from a recent NEA study, which revealed that more than 70 percent of museum patrons are looking for a direct and engaged social experience, not so much a monastic journey through a temple of culture. In a presentation about the museum's planned renovations, Grynsztejn called it transforming the museum from a "treasure box" to a "toolbox."

And there's certainly precedent for contemporary museums' investing in large, flexible spaces, like MoMA PS1's Young Architects Program summertime space or Herzog and de Meuron's recent expansion of the Tate Modern, 40 percent of which, Grynsztejn says, is new social and cultural space.

But can these interior space improvements resolve problems of the museum's public persona that are largely tied to its stark, severe exterior?

That's a question raised by the museum's initial critical reception and current assessments of its faults. In Blair Kamin's 1996 review for the *Chicago Tribune*, he praised the interiors but knocked the building's "fortress-like" perch on top of a steep staircase, its "brute monumentality" derived from Classical proportions, and a lack of recognizably human-scale detailing.

Chicago architect Stanley Tigerman has seen the building—which he calls a "missed opportunity" and "an embarrassment"—age over time. Though he praises both Grynsztejn and Johnston Marklee, he says "the problem is too large for a Band-Aid."

But Johnston is confidant that a few thoughtful interventions will bring new life to the building. "Despite the heaviness and seeming rigidity of the [Kleihues] building's architecture," Johnston says, the renovation will add "levity and lightness." ■

AS+GG's Massive Astana Expo City Nears Completion

BY ANNA FIXSEN

International pavilions will occupy large curved structures surrounding the fair's central glass sphere (above). The site will be connected by greenways and later converted into a new neighborhood, as shown in a rendering (right).

FROM THE glimmering Crystal Palace that Joseph Paxton built for London's Great Exhibition in 1851 to the diaphanous Seed Cathedral Thomas Heatherwick designed for the Shanghai Expo in 2010, world's fairs have offered nations the chance to showcase innovation while flaunting some serious architectural mojo.

This year, Astana, the capital of Kazakhstan, is up to bat with the theme "Future Energy." It's a prime opportunity for the former Soviet republic to make an impression on an international stage. But the Expo, set to open June 10, has faced several daunting hurdles, chief among them corruption, economic woes, and just four years to complete a $3 billion, 18 million-square-foot city by Adrian Smith + Gordon Gill (AS+GG).

Remarkably—with just three months until opening day—construction on the Expo grounds is nearing completion. And, says AS+GG founding partner Gordon Gill, the contractors "have fought really hard for the integrity of our design and have maintained the quality of the architecture."

The Chicago-based firm, which is also working on the world's tallest tower, in Jeddah, Saudi Arabia, beat out more than 100 firms in a 2013 open international competition, with a short list that included designs by Zaha Hadid, Snøhetta, UNStudio, and other offices.

AS+GG was given a parcel nearly 62-acres for the Expo, just outside downtown Astana, situated within a larger 433-acre site. One of the main challenges was to buffer the buildings from the steppe's extreme climate. The architects also needed to embrace the sustainable theme by incorporating renewable energy sources. Crucially, the architects also considered the life of the project post Expo.

"We wondered what was going on with the rest of the 433-acre site," says Gill. "So we designed a two-phase legacy master plan for the city, as opposed to designing an Expo that would be used for only 13 weeks."

From above, the AS+GG-planned Expo site appears as a wheel, with pathways radiating from a central spherical structure. This 260-foot-diameter glass sphere proved to be one of the most technically challenging elements of AS+GG's design, due to its complex grid-shell structure and large double-curved, insulated glass panels. The sphere also relies on technologies such as photovoltaics and wind turbines, and has a geothermal system to supplement heating and cooling.

Whereas past expositions have focused on stand-alone national pavilions (like Milan in 2015), this year's fairgrounds will feature four "neighborhoods" to accommodate up to 120 nations' pavilions. These four wedge-shaped neighborhoods circle the central sphere in a horseshoe array. The first phase also includes extensive parkland, a 3,000-seat auditorium, a hotel, housing, and retail space. Phase II will convert the grounds into an extension of Astana itself, with office space in the former exhibition halls, and developer-led mixed-use parcels, complete with housing and schools.

In spite of the promising progress, the architects' enthusiasm is tempered by caution. From construction photos and a recent site visit, the plan seems "primarily intact" says Gill, "but we don't know everything." The architects intend to return to Astana this spring for a final walkthrough.

"Walking through it is a humbling experience," says Gill. "Everywhere you turn, you can see something you did, and you want to make sure it's working together. Right now, I think we're in pretty good shape." ■

IMAGES: © BAZIS CONSTRUCTION COMPANY (TOP); ADRIAN SMITH + GORDON GILL ARCHITECTURE (MIDDLE); JENNY SABIN STUDIO (BOTTOM, 2).

Jenny Sabin to Design PS1 Pavilion

FOR ATTENDEES of MoMA PS1's annual outdoor music series Warm Up, a new summer season means a new, quirky installation in the Long Island City museum's urban courtyard. Last month, Jenny Sabin Studio was announced the winner of the Young Architect's Program for a canopy of recycled photo-luminescent textiles, to open this June. The competition, now in its 18th iteration, challenges emerging architects to come up with site-specific designs that provide shade, seating, and water. The short list included designs by Bureau Spectacular, Ania Jaworska, Office of III, and SCHAUM/SHIEH.

Sabin's scheme, *Lumen*, was informed by the architect's research in material science. The canopy's highly responsive fabric, initially developed by Sabin for Nike, absorbs, collects, and releases sunlight, causing it to glow; it also holds the shape of passersby's shadows. "The experience will be different from day to night," says Sabin, a director at Cornell University's architecture school and also a 2016 recipient of RECORD's Women in Architecture Awards. The high-tech material, which is digitally knit in 3-D, will be held in tension from the courtyard's concrete walls and supported by three 20-foot-tall steel structures. Hanging forms, like stalactites, will be programmed to release mist as visitors walk by.

Jenny Sabin has designed *Lumen*, a glowing canopy for MoMA PS1's annual summer pavilion.

Alex Klimoski

Mackintosh Debris Turned to Art

BY ANNA FIXSEN

IT'S BEEN nearly three years since a fire ravaged Charles Rennie Mackintosh's 1909 masterpiece, the Glasgow School of Art. Though 90 percent of the building was spared, the blaze left the school's treasured Art Nouveau library a heap of charred wood and ash. More than half of the $40 million needed to complete restoration work has been secured. But to conclude the campaign, the school has partnered with an advertising firm and an auction house to host—quite literally—a fire sale.

This month, Christie's will auction original works created by a roster of 25 notable British artists. The medium? The library's scorched remains.

The artists include Turner Prize winners such as Antony Gormley, Rachel Whiteread, and Anish Kapoor, as well as Jenny Saville, Tacita Dean, and the Chapman Brothers. The resulting objects—relic-like sculptures, photographs, drawings—will be auctioned off March 8 in a sale titled *Ash to Art*. Proceeds will be donated to the Mackintosh Campus Appeal. "It places the future of the School firmly in the hands of the UK's creative community," said a statement from Bill Hartley and Giles Hepworth, who devised the campaign at J. Walter Thompson, the international agency.

Twenty-five well-known British artists were tapped to turn pieces of the ruined Mackintosh Library (shown in its original condition, right) into objects, to be auctioned at Christie's. The *Ash to Art* sale includes works by Grayson Perry (bottom, right) and Douglas Gordon (bottom, left).

Each artist was sent a piece of debris from the destroyed library, a description, and a request for an art object. Many of the resulting works are like liturgical objects or reliquaries. Douglas Gordon cast fragments of wood into a bronze cross. Kapoor, meanwhile, enclosed his cinders in a red acrylic box.

Grayson Perry said he is frequently asked to create charity works, with requests ranging from coffee mugs to underpants. But the Turner Prize recipient was intrigued and made an urn to house the library's ashes, which, according to the artist, "was the obvious thing to do." ■

PHOTOGRAPHY: © MCATEER PHOTO (TOP); GRAYSON PERRY (BOTTOM, RIGHT) STUDIO LOST BUT FOUND/DOUGLAS GORDON/VG BILD-KUNST BONN (BOTTOM, LEFT).

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CIRCLE 35

[NEWSMAKERS]

Michael Schwarting and Frances Campani

BY SUZANNE STEPHENS

ARCHITECT MICHAEL SCHWARTING probably had little idea of the years he would devote to the future of a Modernist prefab prototype when he first came in contact with the Aluminaire House 30 years ago. Nor did Frances Campani, his wife and business partner, who soon found herself involved in a major salvaging effort.

The metal-skinned, steel-frame structure was designed in 1931 by Lawrence Kocher (RECORD, April 2016, page 46) and the Swiss émigré Albert Frey for a show held at the Grand Central Palace exposition hall in New York. Philip Johnson and Henry-Russell Hitchcock included the design in their International Style exhibition at the Museum of Modern Art in 1932. The residence also caught the attention of architect Wallace Harrison, who bought it for the grounds of his Long Island estate. But by the late 1980s, Harrison's property had changed hands, and the new owner planned to demolish the structure.

Enter Schwarting, chair of the architecture department at the New York Institute of Technology's (NYIT) Central Islip campus. Through his efforts, NYIT was able to dismantle and move the house in 1987. Over the next decade, Schwarting, Campani, and their students slowly rebuilt the house on the school's campus. When it was closed in 2004, however, the house was again orphaned. Schwarting and Campani created the Aluminaire House Foundation [AHF], to which NYIT gave the structure. After looking for a location, the two now plan to reassemble it in Palm Springs, California. RECORD spoke with Schwarting and Campani after the parts and pieces were trucked across country, just in time for the city's annual Modernism Week.

How did the Aluminaire House end up going to Palm Springs?

Schwarting: We were hoping the house would be rebuilt in Queens—across from the Sunnyside Gardens and Phipps Gardens housing—and stay in New York. But the community was wary about its fitting in, and it did not get a New York City Landmarks Commission approval. Around that time, Frances and I gave a lecture in Palm Springs, where houses by Albert Frey are plentiful because he moved there in the mid-1930s. When we mentioned the problems of the Aluminaire House's future, people in the audience said, "Bring it to Palm Springs!"

In 2012, we had already dismantled the house and put the contents into a 45-foot-long tractor-trailer, which we stored on Long Island. All we had to do was get a truck driver.

Where will it land there?

Schwarting: In the downtown—near the Palm Springs Art Museum—there is some city land where a mall was torn down. We have been talking to the city about giving the land to the Aluminaire House Foundation in California, created two years ago. Negotiations with the city are still going on, but the $600,000 reconstruction will be paid by the foundation, which has been organizing fundraisers.

Campani: We were so struck by the deep interest in the Aluminaire House, and the location of this desert site, it seemed worth the risk. We have an agreement with the California AHF that, if the arrangement doesn't work, the Aluminaire House will return to New York.

What will be your roles if it is rebuilt in Palm Springs?

Campani: We will be involved as the architects for the reconstruction. We have construction drawings we made based on archival material, and lots of hands-on familiarity.

So how long should we wait before seeing this reincarnation?

Schwarting: Once the site situation is solved, we hope to construct it within a year. If Kocher and Frey could build the Aluminaire House within Grand Central Palace in 10 days, we should be able to do this. For now, it's a big pile of bolts and parts.

You are now the parents for this "house without a home." Will you be able to say good-bye?

Schwarting: Never.

Campani: It will be sent off to another mother.

PHOTO: COURTESY MICHAEL SCHWARTING

10 Teams Shortlisted for UK Holocaust Memorial

David Adjaye, Foster + Partners, Daniel Libeskind, John McAslan and MASS Design Group, and Anish Kapoor and Zaha Hadid Architects are among the 10 design teams for a new holocaust memorial and education center in London. The memorial is planned for a site near the Houses of Parliament.

Denise Scott Brown Wins 2017 Jane Drew Prize

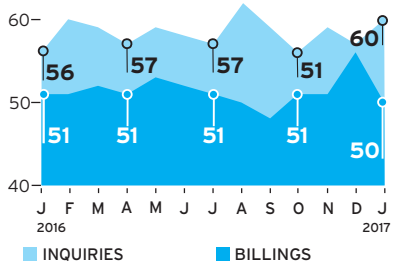
Architect Denise Scott Brown, who was not included in her husband Robert Venturi's Pritzker Prize, received the Jane Drew Prize from *The Architects' Journal* and *The Architectural Review* in tandem with their annual Women in Architecture Survey. The prize seeks to honor female architects who have made significant contributions to the profession.

BIG to Design Flagship San Pellegrino Factory

Bjarke Ingels and his firm have won an international competition to develop a new $95 million headquarters in Lombardy, Italy, for San Pellegrino, the sparkling-mineral-water company. Construction on the facility, which will be characterized by vaulted ceilings, arcades, and a central piazza, is expected to begin in 2018.

Farnsworth House Heads to the Silver Screen

Oscar-winning actor Jeff Bridges (best known for his role as "the Dude" in *The Big Lebowski*) and Maggie Gyllenhaal will reportedly star as Mies van der Rohe and the doctor Edith Farnsworth in a forthcoming movie about their relationship and the famous glass Farnsworth house in Kendall County, Illinois. A release date has not been set.



ABI Dips in January

After finishing 2016 on a strong note, the January Architectural Billings Index (ABI) dropped slightly, scoring 49.5, down 6.1 points from December's score (any mark above 50 indicates an increase in billings). The new projects inquiry index, however, experienced an uptick, up to 60 points from a mark of 57.6 in the prior month. But AIA economist Kermit Baker says the shifts aren't cause for concern: "The fundamentals of a sound . . . market persist."

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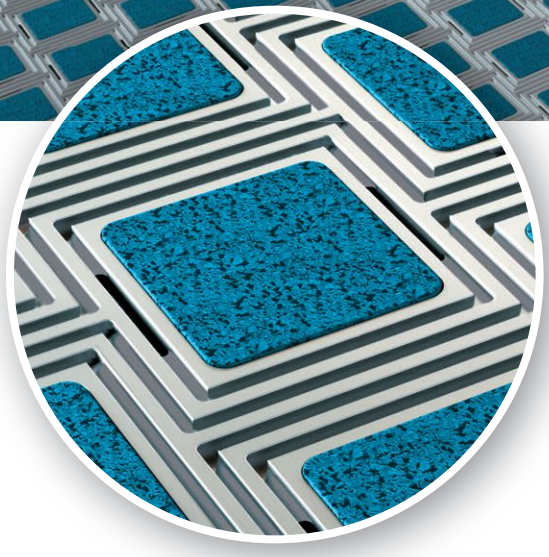

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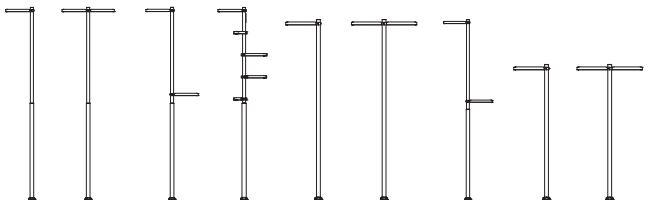

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perspective **house of the month**

A VIBRANTLY COLORED HOUSE IN SUBURBAN MILWAUKEE PROJECTS SHADES OF SUMMER ALL YEAR LONG. BY MIRIAM SITZ

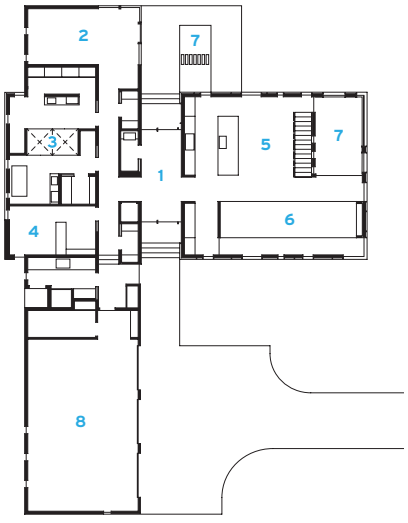
JUST A stone's throw from Lake Michigan, in a neighborhood of post-war single-family homes, Johnsen Schmaling Architects has designed a vibrant house for a couple that enjoys entertaining but also values privacy and serenity. Nestled into a sloped site, the split-level structure's interlocking volumes separate public and private wings, defining several outdoor spaces.

A deeply recessed entrance leads directly to the center of the T-shaped house. On one side is the open living, dining, and kitchen area, its ceiling and walls wrapped with white oak. A glass-walled staircase leads up to the fireplace-centered observatory and down to the guest suite and a sunken patio. On the opposite side of the entrance, a linear, one-story, cedar-clad wing contains the master bedroom, a large double bath, a secluded garden, and the garage. The architects chose the furnishings and worked with the clients to select, frame, and hang art from their collection.

"Much of our discussion with the clients focused on how to create a mood-enhancing space," says Sebastian Schmaling. Organized around perpendicular axes of activity, the home's layout contributes to a sense of order and peacefulness, while material and color choices help the building harmonize with its forested context.

"The site is lush and verdant in the summer," Schmaling explains, "but things change very dramatically with the seasons. Winters here are harsh, and there's a long period when everything's just gray, brown, and white." As a result, the Milwaukee-based design team infused the public volume with different shades of green, matching the interior walls to the painted fiber cement panels of the facade, which are interspersed with floor-to-ceiling glazing between layers of white brick. "It lifts your spirits when you look outside during the winter," says Schmaling. The wavelength of visible green light, 510 nanometers, became the house's namesake.

While some sustainability choices, like high-efficiency glazing and geothermal heating and cooling, are functional but not readily evident, the green roof, which reduces stormwater runoff and increases insulation, also improves the occupants' living experience. "Environmentally, it's great," says Schmaling. But visually and functionally, he adds, it's a boon for the couple—and for their two dogs. "They look out from the observatory at grass instead of just roof and membrane, and have another point of access to the outdoors from their home." ■



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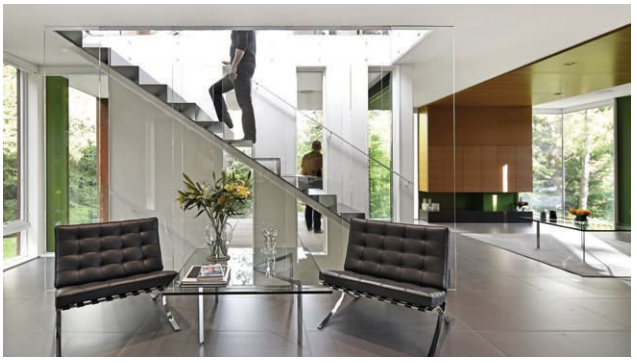
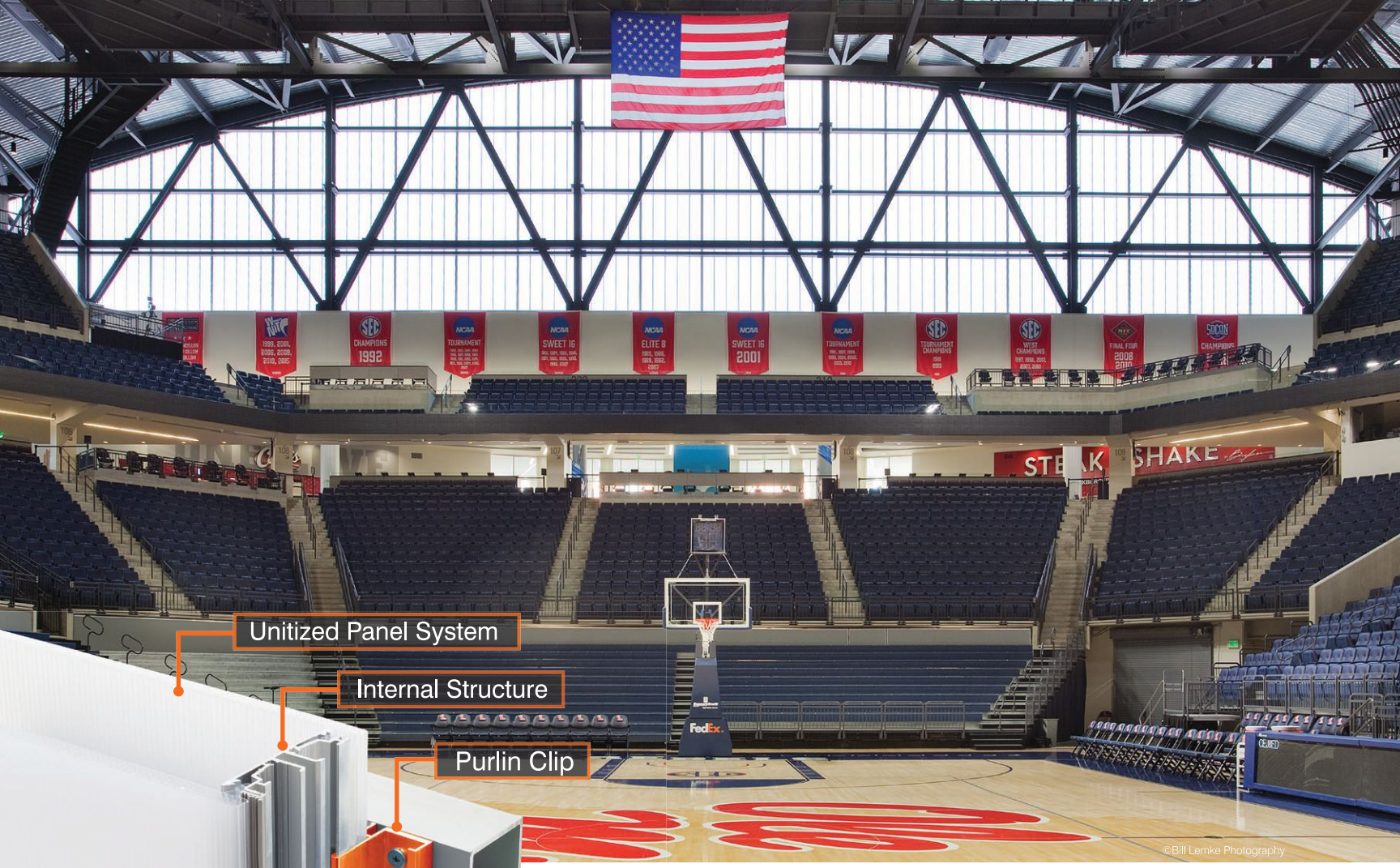


A sunken patio attached to the lower-level guest suite (top) contains a fire pit. A couch, designed by the architects, anchors the main entertaining space (middle). The glass-walled staircase separates a covered patio from a sitting area facing the kitchen island (above).

PHOTOGRAPHY: © JOHN J. MACAULAY



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perspective **interiors**

SELGASCANO CREATES FLUID ENVIRONMENTS FOR THE WORKSPACE ENTERPRISE SECOND HOME. **BY CAROLINE ROUX**

DESIGNED TO foster visionary work and attract a community of start-ups and well-established businesses, an innovative workspace dubbed Second Home has just opened in Lisbon. It occupies 12,000 square feet on the second floor of the city's Mercado de Ribeiro, a handsome early 20th-century open-span structure where a food market still functions daily. From one side of the space, Second Homers look out over the busy Cais do Sodre station where trains glide in and out. From the other, they see stalls piled high with fruit and vegetables in the market's central hall.

This is the second space opened by entrepreneurs Rohan Silva and Sam Aldenton, who launched their first Second Home in 2014 on two levels of an art-supply warehouse in the Spitalfields area of London's East End. The young partners wanted to turn the building into a different kind of creative epicenter, providing flexible work studios with easy come, easy go rental agreements. A place that could bring together fast-growing small businesses and the odd heavy hitters (Volkswagen has an innovation studio here) and where a bit of serendipitous cross-pollination might happen. "We're old-fashioned," says Silva. "We believe in people meeting in the real world, but with ultra-fast broadband."

Their choice of name, Second Home, indicates its noncorporate nature, as does their choice of architect for both locations: SelgasCano, a thoughtful practice based outside Madrid that believes in the joy of color and the practicality of low-cost materials. The firm's 2015 Serpentine Pavilion (RECORD, August 2015, page 56) was made with

Occupying the second floor of the Mercado de Ribeiro (above), the large, open work studio of Second Home Lisbon (top) is filled with daylight from clerestories and windows overlooking the street and market. Abundant plants support well-being, reduce noise, and improve air quality beneath the cheerful hues of the newly painted existing structure.

PHOTOGRAPHY: © IWAN BAAN

In Lisbon, a rich blue reception area (left) welcomes visitors with cozy banquettes for small groups, transparent meeting rooms, and a bar. In London's East End, the original Second Home (below, left and right) features bold enclosures of curved acrylic on the facade and throughout its colorful, plant-filled interior.

iridescent ETFE stretched over a barrel-shaped frame. To insure that London Second Home has presence on the street, coprincipals Jose Selgas and Lucia Cano installed a dazzling yellow acrylic tube on the structure's facade, then organized the interior with curving, clear acrylic walls and festooned it with plants.

Like its London counterpart, where every studio slot was rented before it opened, the Lisbon space—which accommodates 250 working members (who opt for varying levels of access to Second Home's real estate and programs)—has a full complement of businesses, including one that extracts helium from the ground in Tanzania, a surf school headquarters, and a digital marketing agency. "Twenty per cent of members are business support people, like accountants and lawyers," says Silva. "We don't care what people wear or what they look like, but we want everyone to have something unique to contribute to the mix."

The building's upper zone had been used for storage. "I thought, all we need to do is clean and restore the trusses," says Cano, pointing to the striking structural ironwork above the vast, white work studio, which they painted shades of yellow, pale green, and tangerine.

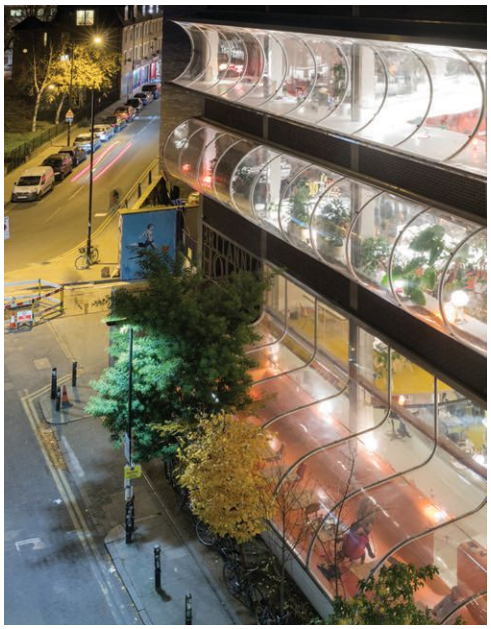
You reach the reception area via wooden stairs surrounded by panels of translucent acrylic in juicy shades of yellow and orange. "Transparency is important," says Lucia Cano. "It brings lightness." The walls and ceiling of of this area have been transformed by a rich Yves Klein blue paint, and the mechanical systems are hidden behind a curtain made of blue plastic rope. A curving banquette, upholstered in a durable plastic-coated yellow fabric, snakes beneath generous windows along the south wall—the perfect place for casual meetings. A central bar made of shiny white laminate serves excellent coffee.

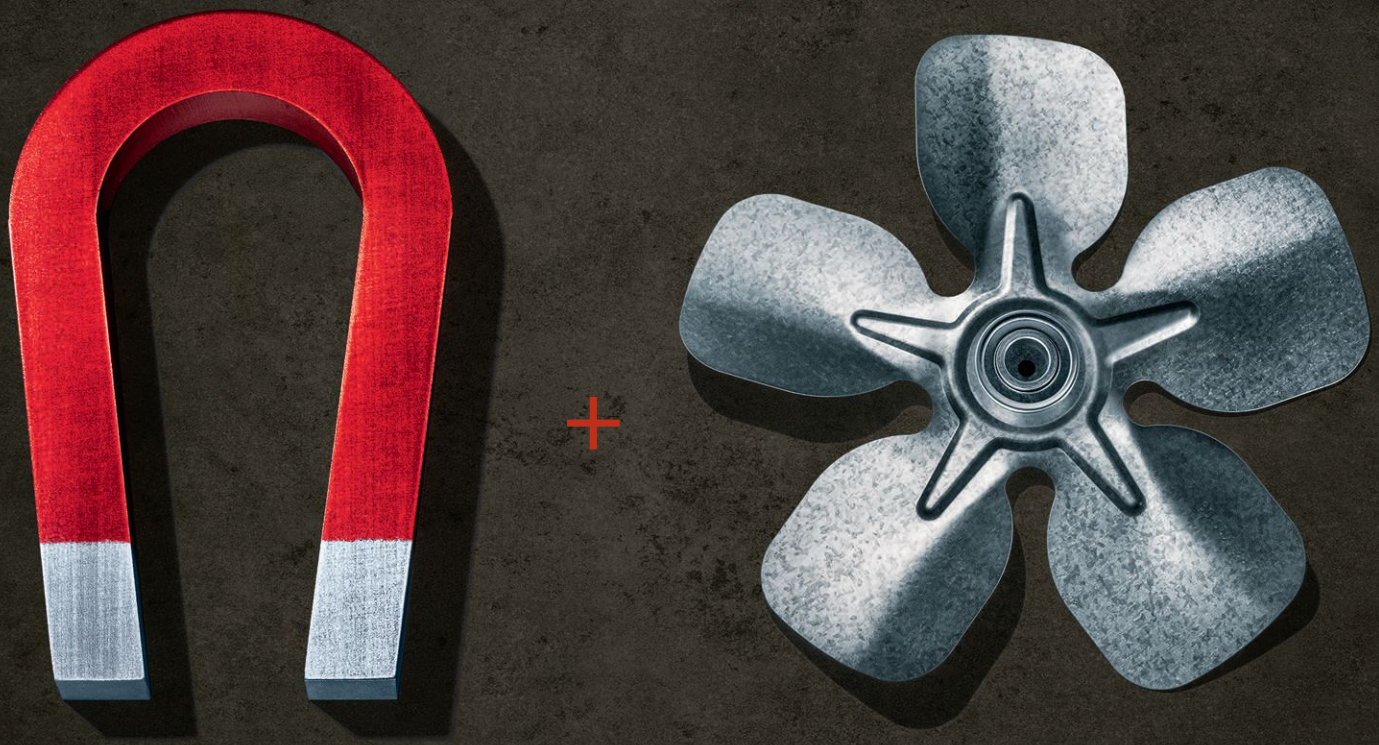
The use of curves in SelgasCano's architecture evokes the ethos of the brand: to offer a fluid environment where connections are to be made. Meeting rooms are formed by undulating, clear acrylic walls, and there's not a sharp corner to be found on the contiguous desk hubs in the open-plan workspace.

As in London, this is a dense landscape of plants and chairs—over 1,000 of the first and 500 varieties of the second, many 20th-century classics. "I enjoyed weekends in Brussels, picking up vintage pieces at the flea market," says Cano, who has also decorated the desks with residential and task lights from the past 80 years. The plants provide privacy and sound absorption, and also filter the air.

The architects are now turning their attention back to London, where the company acquired two more spaces, and created 45 extra studios in its original building on two additional floors. There are also plans to open in Los Angeles, with one secured property and one under discussion. "The weather is so good in L.A.," says Silva. "We'll be doing the opposite of London and Lisbon—taking the building outside instead of bringing nature indoors." But the objective—to put design at the heart of this novel studio model—will remain. ■

Caroline Roux is based in London and writes about contemporary art and architecture.





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The architect of the Church of Santa Maria Novella in Florence (1470) is **Leon Battista Alberti**, who established his reputation with theoretical treatises about art, sculpture, and architecture (*De Re Aedificatoria*). His inventive polychromatic facade for this medieval religious building paid homage to Roman Classicism and helped set a standard for Renaissance architecture.

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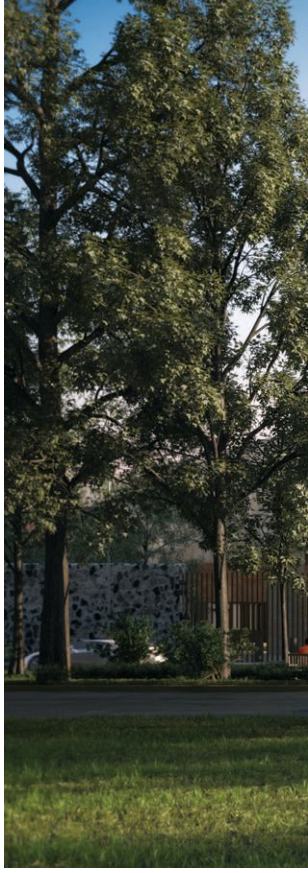
Diplomacy in Design

The new administration inherits an impressive roster of embassies, planned or under construction, thanks to the State Department's program for architectural excellence.

BY CATHLEEN MCGUIGAN AND ALEX KLIMOSKI



IN THE mid-20th century, after the United States emerged triumphantly from World War II, the State Department launched an ambitious architecture program for new U.S. embassies that expressed the nation's forward-looking role on the world stage. Leading American architects were tapped for these commissions, including Eero Saarinen, who designed the chancery on Grosvenor Square in London; Edward Durell Stone, who created what may be his finest work in New Delhi; and Richard Neutra, who built the embassy in Karachi, Pakistan. Other architects in the program included Walter Gropius (Athens), John Johansen (Dublin), Marcel Breuer (the Hague) and Jose Luis Sert, whose elegant mission in Baghdad was decommissioned; a new embassy complex was eventually built in 2007—a massive $750 million fortified compound on 104 acres designed by the Kansas City firm Berger Devine Yaeger. It is the largest embassy in the world.

As the century wore on, State Department buildings were often more utilitarian than innovative, and security concerns became paramount. The attacks on U.S. properties abroad, particularly the simultaneous 1998 suicide truck bombings of the embassies in Tanzania and Kenya, which killed more than 200 people, had demonstrated the new dangers of diplomacy. After 9/11, security demands became even more urgent.

But in 2010, a new State Department initiative, Excellence in Diplomatic Facilities, sought to bring superior design once more to America's global outposts, without compromising safety. That year, KieranTimberlake won the much-publicized competition to replace Saarinen's outmoded embassy with a new one elsewhere in London. The design incorporates sustainability and security measures without turning the complex into a walled fortress. Scheduled to open this summer, the embassy employs a moatlike feature (as part of a landscape designed by OLIN) among elements to thwart attacks.

Casey Jones, who had led the Design Excellence Program at the General Services Administration (GSA), moved to the State Department as Deputy Director of the Bureau of Overseas Buildings Operations (OBO). In helping supervise the program, he engaged contemporary American architects such as Morphosis, Tod Williams Billie Tsien, and Ennead to design new embassies and consulates. Though both Jones and Lydia Muniz, director of the OBO, left the State Department in January during the transition to the new administration, the legacy of design excellence remains for now. What follows are many of the current designs, which have been approved and are in the process of implementation. Such projects, as Muniz said in a Congressional hearing, "are symbols of American culture and values." We hope that they inspire the State Department to continue to seek the best in architecture when building for the future. ■

U.S. Embassy Compound | London

KieranTimberlake

With plans to transform the current Eero Saarinen–designed U.S. Embassy (1960) into a hotel by David Chipperfield, a new facility in London's Nine Elms district is nearing completion. The 550,000-square-foot cube—which holds offices, ceremonial spaces, residences, and support facilities—sits at the center of a five-acre site at the edge of the River Thames and is surrounded by a public park. A range of features here, such as a large pond and garden walls with bench seating, form integrated barriers, helping to meet stringent security requirements. Sitting atop a two-story colonnade, the steel-frame building employs an envelope of extruded aluminum and glass, which is screened with ETFE to mitigate solar heat gain and glare. Aiming for LEED Platinum and BREEAM certifications, the building is scheduled to open this summer.

IMAGES: © KIERANTIMBERLAKE/STUDIO AMD (OPPOSITE); MARCH/TOD WILLIAMS BILLIE TSIEN/DAVIS BRODY BOND JV (TOP, BOTTOM)

U.S. Embassy Compound | Mexico City

Tod Williams Billie Tsien Architects | Davis Brody Bond

Construction will soon begin on the embassy's 15-acre site in Mexico City's Nuevo Polanco neighborhood, a rapidly developing area with residential, government, and cultural buildings. Once completed in 2021, the new premises—a complex of low-slung rectilinear buildings—will replace the current outdated base at nearby Paseo de la Reforma, becoming one of the largest U.S. embassies ever constructed. With a nod to the materials and architectural traditions of Mexico, the exterior will be clad in sandstone. Muntz metal shading devices adorn the facades, reducing energy use and giving scale to the monumental compound. On the top floor, small interior courtyards open up into a larger central courtyard that is covered by a canopy with two large openings, bringing light and air into the facility while promoting a sense of community among staff. Sunken gardens surrounding the buildings incorporate native plant species and offer tranquil gathering areas. The project is targeting LEED Silver certification.

U.S. Embassy Compound and Housing | Beirut, Lebanon

Morphosis

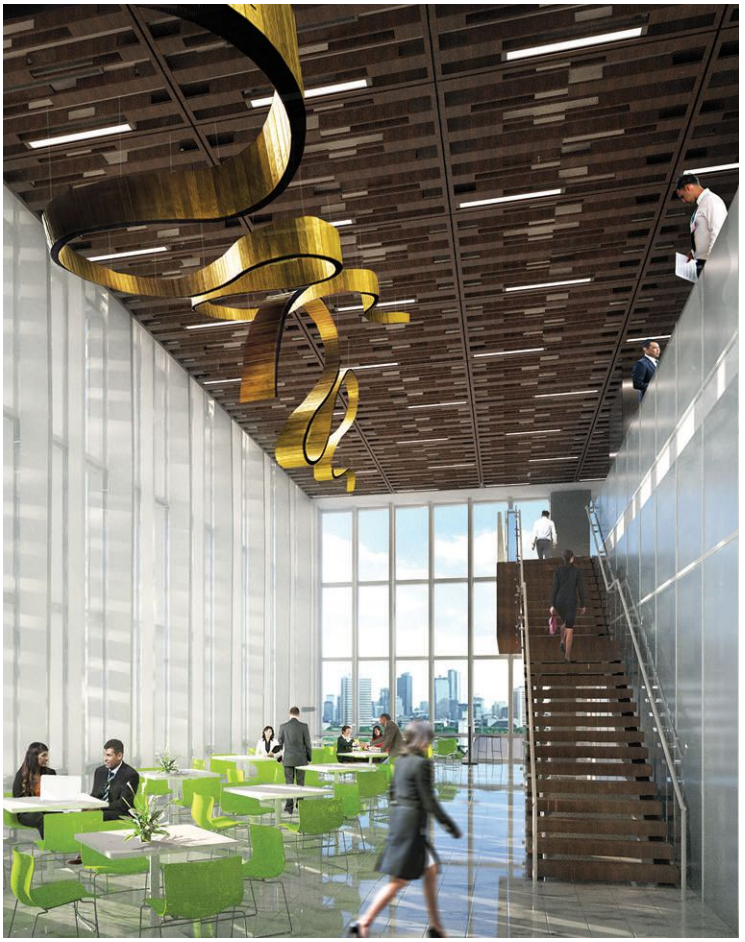
Described by the architects as a small city, the 1 million-square-foot Beirut complex will include a hotel, offices, residences for Marines, and a host of support services for the 800 people living and working here each day. The compound, a series of interconnected cast-in-place concrete volumes, is being built adjacent to the current facility in the suburb of Awkar, the second time that the U.S. Embassy has moved since it was bombed in 1983. In response to the site's sloping topography, the buildings take the form of sinuous ribbons that undulate along the rises and dips in the landscape. A curvaceous chancery building, which is expected to achieve LEED Platinum certification, is situated at the property's highest point, serving as a beacon to the complex. The project is slated for completion in 2022.

IMAGES: © MORPHOSIS (TOP; MIDDLE); ENNEAD ARCHITECTS (BOTTOM)

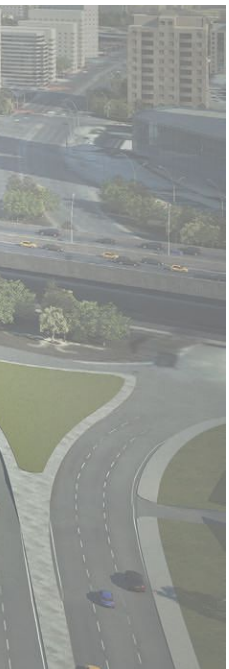
U.S. Embassy Compound | Jakarta, Indonesia

Davis Brody Bond

On the U.S. Embassy's prominent site in Jarkata's Merdeka Square, where many of the capital city's civic buildings and monuments converge, a new complex is rising, phasing out the collection of ad hoc structures that the embassy has occupied since shortly after World War II. The campus will include offices, public spaces, and housing for Marine guards, and is to be anchored by a 10-story, 40,000-square-foot glass chancery building. Surfaced with a system of perforated-metal louvers, the chancery's woven-looking facade responds to the site's equatorial position while alluding to local textiles. Due to the monsoon climate and the prevalence of groundwater pumping, the buildings are designed so that rainwater, wastewater, and condensate from chillers can be treated and used. The first phase of the project is scheduled for completion next year.



IMAGES: © DAVIS BRODY BOND



U.S. Embassy Compound | Ankara, Turkey

Richard Olcott/Ennead Architects

The new Ankara embassy, scheduled for completion in 2020, will be located among the skyscrapers and shopping malls of the still-developing central business district of Sögütözü. A modern interpretation of traditional Turkish courtyard architecture, the 400,000-square-foot compound is defined by a series of walled gardens that offer secure outdoor spaces and define paths of circulation around the site. The chancery itself reflects the region's rich material palette with its stone-clad facade and stone window screens. Three courtyards within the building create gathering areas in the temperate climate while supplying daylight to interiors. In response to the deforestation resulting from Ankara's development, gardens will be lushly planted with native landscaping.

U.S. Consulate General Compound | Matamoros, Mexico

Richärd+Bauer

The design for the eight-acre campus's main chancery building responds to its location at the edge of Olympic Cultural Park, a major civic space in this border city less than a mile from the Rio Grande. The 65,000-square-foot volume opens directly out to the park and its amphitheater, museum, and public artworks as a gesture to the community, while its coral stone veneer relates to local stonework. Embracing traditional responses to the hot climate, the chancery employs a Teflon latilla that sits atop the structure; its fabric is woven onto a white-steel frame that extends from the atrium to serve as a canopy for outdoor circulation, most prominently at the main entrance, which faces the central thoroughfare for traffic coming in and out of the country. The complex, which also includes residential quarters for Marines, a warehouse, support buildings, and a series of entry pavilions, is currently under construction, with completion expected in 2019. It is designed to be LEED Silver–certified.

U.S. Consulate General Compound | Dharan, Saudi Arabia

Skidmore, Owings & Merrill

The U.S. Consulate Complex's new site, at the boundary of the oil-rich city of Dhahran and the denser coastal city of Al Kohbar, will allow it to have a greater presence, in a location more central than its current, more inland one. The compound's massing and organization echo those of nearby towns with a tight clustering of structures separated by courtyards and narrow streets. The campus also makes use of numerous energy-saving features, including an array of 13 wind towers atop the community center that will capture prevailing winds, to deliver conditioned air throughout the facility. Vernacular architectural elements, such as shading screens, are reinterpreted and reengineered to create a synthesis of American innovation and technology with Saudi design and culture. The consulate is expected to reach completion in 2020.

U.S. Embassy Compound | Maputo, Mozambique

YGH with Allied Works

The new 10-acre Mozambique embassy campus—scheduled for completion in 2020—sits along the capital city's rapidly developing coastal zone, overlooking the Indian Ocean. The compound includes offices, support services, residences, and recreational space. The site's board-formed-concrete perimeter walls—inspired by a rich local heritage of midcentury concrete structures—unify the campus's edifices. Its three interconnected glass-and-metal office buildings employ ultra-high-performance concrete screens, which minimize heat gain and glare while framing views to the city and ocean. Entry pavilions flank the central volume, and other structures on either side of the site further define and buffer major open spaces. The surrounding landscape will feature native plantings modulating from an oceanfront dune environment to a lush forest at the site's interior.

IMAGES: © RICHARD+BAUER (TOP); SOM (MIDDLE); YGH WITH ALLIED WORKS (BOTTOM)

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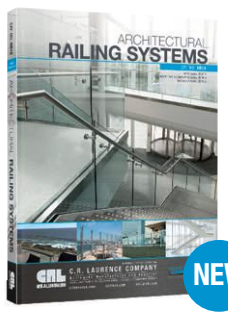

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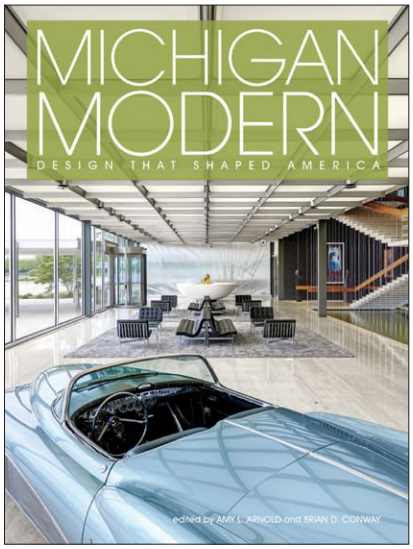
CIRCLE 310

Industrial Evolution

Michigan Modern: Design That Shaped America, *edited by Amy L. Arnold and Brian D. Conway. Gibbs Smith, 352 pages, $50.*

Reviewed by Wendy Moonan

THIS WELL-ILLUSTRATED compendium is a detailed history—fascinating and, to some, unfamiliar—that makes the case that Modernist architecture and design was developed in Michigan, not imported from Europe between 1900 and 1970. As California critic Alan Hess says in the foreword, "Modernism grew directly from the state's indigenous industries and the population they served."



The case is built by the nearly 30 essays in the book, which grew out of a symposium at the Grand Rapids Art Museum in 2014. The editors—Amy L. Arnold, preservation planner for the State Historic Preservation Office, and architect Brian D. Conway, Michigan State's Preservation Officer—had organized the three-day conference.

Much of the story, of course, has to do with the auto industry.

Prussian-born architect Albert Kahn came to America with his family in 1881, started working in a Detroit architecture firm as a teenager, and opened his own firm in 1895. His five younger brothers, obsessed with engineering, all worked with him; one of them, Julius, invented a "trussed-bar" system of steel-reinforced concrete construction that revolutionized modern factory design.

In 1905, when the Packard Motor Car Company hired Albert Kahn to build a new factory, he integrated these new systems. By using a steel-reinforced concrete structural frame, instead of walls of load-bearing masonry supporting wood floors, he could install huge windows, allowing natural light to flood the factory floors. He placed skylights in the concrete roofs and introduced industrial steel sash windows to America (they originated in England).

Henry Ford quickly adopted Kahn's systems for the Highland Park Ford Plant (1908) and the Ford River Rouge Complex (1917), where each piece of the manufacturing process was housed in a separate building. As Arnold and Conway explain, the factories he designed for Henry Ford "became an inspiration for architects around the world who were looking for a 'modern' approach to design; most notably European architects Le Corbusier, Walter Gropius, and Ludwig Mies van der Rohe."

At the same time, in 1906, the University of Michigan hired architect Emil Lorch to head its new architecture program, one of the first modern-oriented ones in America. Lorch, who followed the ideas of the Prairie school and eschewed traditional Beaux Arts training, invited Finnish architect Eliel Saarinen to be a visiting professor in 1923. There Saarinen met newspaper publisher George Booth (the father of a student), who enlisted Saarinen to help run the new Cranbrook Academy, which came to be known as architecture's "cradle of Modernism." Saarinen not only designed the campus but also created a program that incorporated philosophies of both the Arts and Crafts movement and the Bauhaus. The school attracted such students and teachers as Alvar and Aino Aalto, Harry Bertoia, Niels Diffrient, Charles and Ray Eames, Florence Knoll, Bill Moss, Harry Weese, and, of course, Eliel's son Eero Saarinen—designers who would shape and define modern design in midcentury America.

The furniture companies in Grand Rapids took note. After Herman Miller lured George Nelson to its company in 1947, he brought in the Eameses, Alex Girard, and Isamu Noguchi. And Florence Knoll commissioned Eero Saarinen, Bertoia, and Mies to contribute pieces. The list goes on. The book demonstrates how Michigan's industries, educational institutions, and businesses employed the most innovative architects and designers of the day, who in turn lured the best and brightest to come and work with them. In this way, Modernism and Michigan were inextricably tied. ■

Wendy Moonan is a New York–based journalist who writes frequently on design and architecture.

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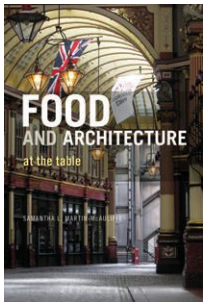
CIRCLE 99

Tasty or Tasteless?

Food and Architecture: At the Table, *edited by Samantha L. Martin-McAuliffe. Bloomsbury, 2016, 298 pages, $40.*

Reviewed by Clifford A. Pearson

SHARED CONCERNS shape our thinking about both sustenance and shelter, as this book intriguingly demonstrates. Editor Samantha L. Martin-McAuliffe, who teaches at the School of Architecture, Planning, and Environmental Policy at University College, Dublin, organized the study according to key issues of regionalism, craft, sustainability, and authenticity to highlight the connection between food and architecture.



In each section she provides a good overview of the subject, but you should dig into essays by chefs, architects, designers, historians, and anthropologists too. My favorite is "Open Kitchen: Tracing the History of the Hearth in the Home," by Fanny Singer. Despite its dry title, it's a lively and insightful look at the way we cook and dine both at home and in restaurants. Singer, an art historian and curator (and daughter of Alice Waters, of the trailblazing Berkeley, California, restaurant Chez Panisse), uses her own childhood as a lens to examine our relationship to food.

She remembers crawling under the tables and behind the stairs at her mother's restaurant set in a repurposed 1930s house that evolved along with Waters's ideas about food. Singer describes the Arts-and-Crafts touches added to the original stucco cottage when the restaurant opened in 1971, as well as later changes that brought a large cooking hearth to the main dining area on the ground floor and an open kitchen to the upstairs café.

These modifications reflected a growing desire for visual transparency in the culinary world and the blurring of domestic and commercial dining experiences. Singer expands her perspective to chronicle the evolution in dining from the role of the sacred hearth in ancient Roman homes to the upstairs-downstairs bifurcation in Victorian England and the mass-produced "Frankfurt Kitchen" designed by Margarette Schütte-Lihotzky in 1926.

Some of the other essays in the book dive deeply into one specific topic—for example, butchering pigs on the Greek island of Kéa in the Cyclades. Cooking teacher and author Aglaia Kremezi points out the social role that animal slaughter plays in bringing together a rural community (lots of eating and drinking go along with the work) and the way Greek farmhouses are designed to accommodate such activities. As Kremezi writes, "the preparation of consumables fuses with the spatial contexts: food and architecture become one."

Contributions to this collection that try to make direct connections between food and architecture tend to be the weakest. For example,"Cuisine and Architecture: Beams and Bones—Exposure and Concealment of Raw Ingredients, Structure and Processing Techniques in Two Sister Arts," by Ken Albala and Lisa Cooperman, makes simplistic comparisons between trends in the two fields. Equating postmodern architecture, for example, with the fusion cuisine of the 1980s and 90s doesn't really tell us much about either development.

The book's other weakness is its graphic design, which is as dull as a textbook with mediocre black-and-white photographs. This is a shame, because most of the essays are engaging and deserve better illustrations. But many of them alone make for a satisfying repast. ■

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CIRCLE 311

Water, Water Everywhere

Durable, compact solutions and sustainable efficiencies mark these latest kitchen and bath releases.

By Aileen Kwun

Real Rain

In place of a pressurized spray, Kohler's Real Rain showerhead uses a gravity-reliant water reservoir that simulates the sensation of a summer rainstorm—at a flow of 2 gallons per minute in compliance with CALGreen requirements. The ceiling-mount panel measures 19" x 19" and features 775 concave nozzles that randomize the size and rate of each drop.

kohler.com

CIRCLE 101

VergeLVQ WashBar

Paired here with the company's Verge sink in a natural quartz material, Bradley's WashBar stands in for a typical commercial faucet with three touch-free-activated functions—clean, rinse, and dry—all in a single chrome-plated stainless-steel fixture. LED lights indicate its use, as well as low levels for the gallon capacity of liquid or foam soap.

bradleycorp.com

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viega.us

CIRCLE 102

Stealth Phantom Toilet

Combining air and water, each flush of this two-piece single-flush toilet uses just 0.8 gallons, making it the most efficient model on the market. Skirted sides conceal the trapway system and make for a minimal, easy-to-clean base.

niagaracorp.com

CIRCLE 103

Unigo Bathtub/Shower System

With the addition of eight modular, movable slats made from high-pressure laminate, this versatile fixture easily converts from tub to standing shower. Made from KoraKril, a hygienic, light- and stain-resistant material comprising acrylic resins and natural minerals, the unit comes in two versions: floor mount (72" long x 35" wide x 22" high) and semi-recessed (72" long x 35" wide x 10" high).

rexadesign.it

CIRCLE 104

products **kitchen and bath**

Itai Bar-On Collection

Named after its Israeli designer, this handcrafted concrete tile collection—suitable for interior drywall applications or fireplace surrounds—features sculptural details that can be illuminated from behind to enhance their form. There are four styles available, in white, gray, or black. Kwa (four tiles shown) measures 16" x 16", which comes with the option of a single upturned corner.

annsacks.com

CIRCLE 106

Transform

No demolition is required for this new line of custom quartz surfacing from Caesarstone. The heat-, stain-, and scratch-resistant slabs—measuring just ½" thick—have been designed to be placed atop existing counters and come with a lifetime warranty. Edges are available in three styles: ogee, beveled, and rounded.

caesarstoneus.com

CIRCLE 105

Geoluxe

Newly launched to the North American market, Geoluxe uses a patented GeoMimicry technology to create a durable, mineral-based surface that mimics the look of natural stone. Each of the seven debut options—which include Aliveri (shown), inspired by Greek calcareous marble—are stain-, chemical-, scratch-, heat-, and frost-resistant, making them suitable for both indoor and outdoor use.

geoluxe.com

CIRCLE 107

CBS 1360

Measuring just 24" wide, the slim profile of this Liebherr model makes it ideal for condos, small dwellings, and galley kitchens. It features LED light columns and a scratch-resistant SmartSteel exterior, and can be installed as a freestanding or semi built-in unit.

liebherr.com

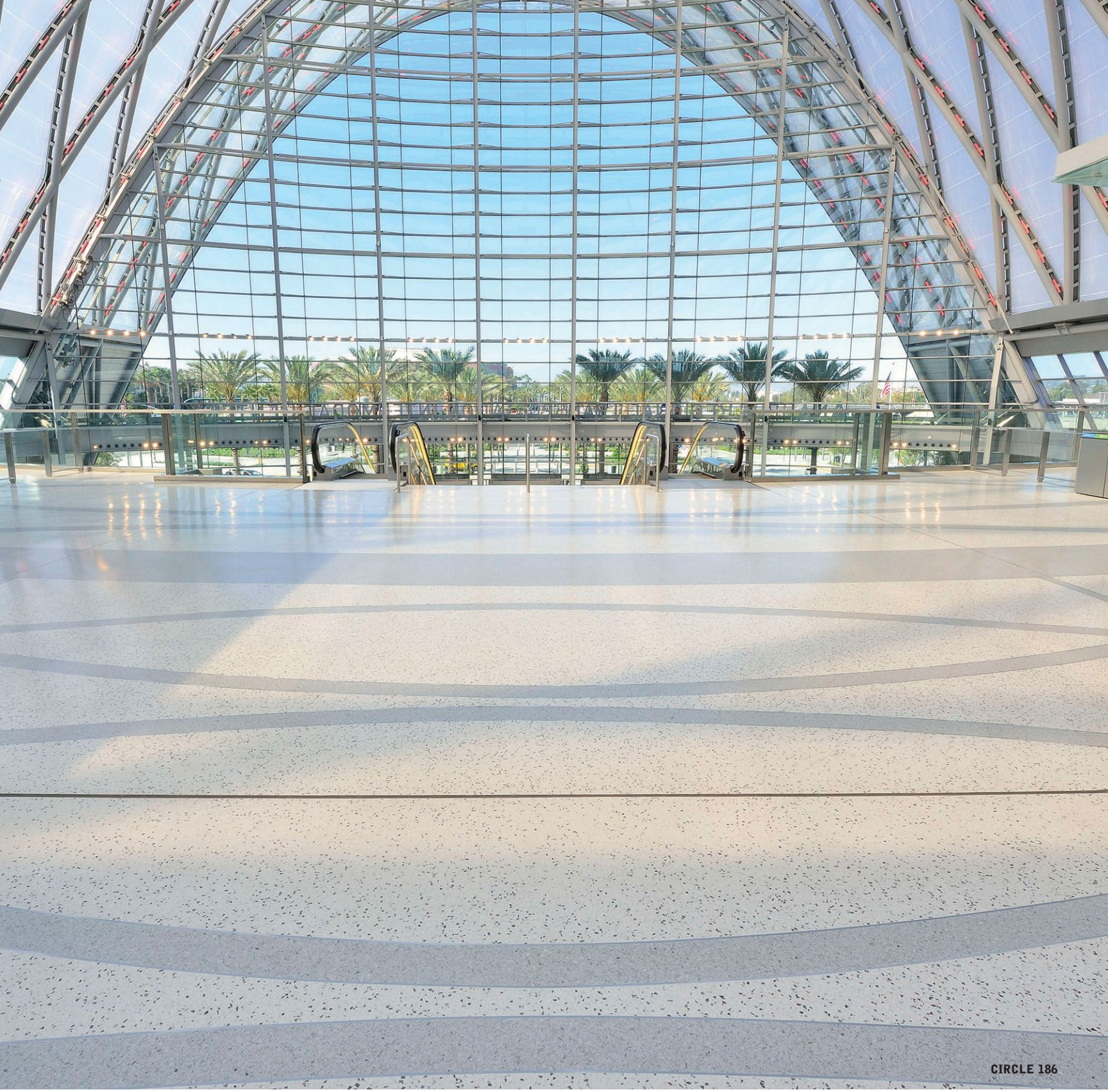
CIRCLE 108

Fine Fireclay

Elkay's durable Fine Fireclay collection includes two models with a single or double bowl. Both are glazed at high temperatures to a smooth finish with baked-in chip resistance. The reversible Equal Double Bowl Apron Front Sink (shown) measures 33" long x 19 15/16" wide x 10 1/8" deep; the brand will launch three additional models to the line this June.

elkay.com

CIRCLE 109



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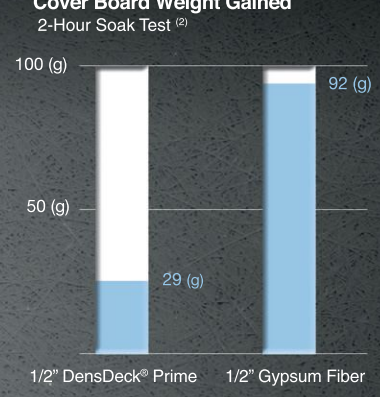

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CIRCLE 37

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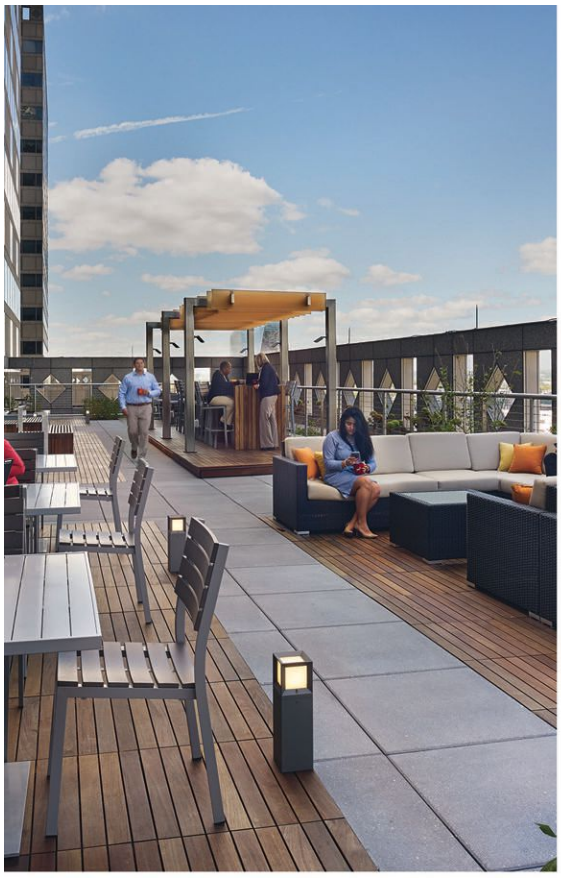

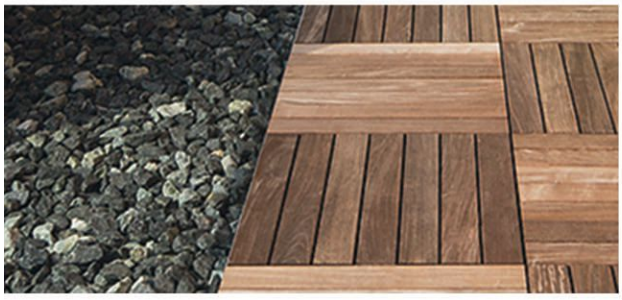

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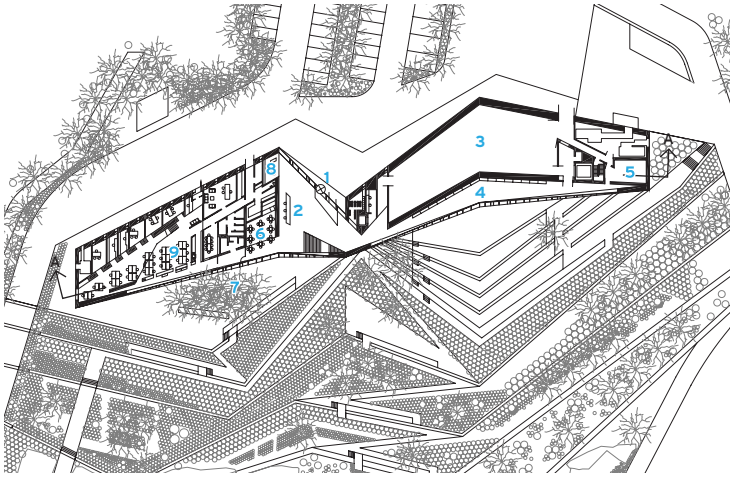
A museum near Jerusalem, dedicated to Palestinian culture, offers a glimmer of optimism in troubled times.

BY ESTHER HECHT

PHOTOGRAPHY BY IWAN BAAN

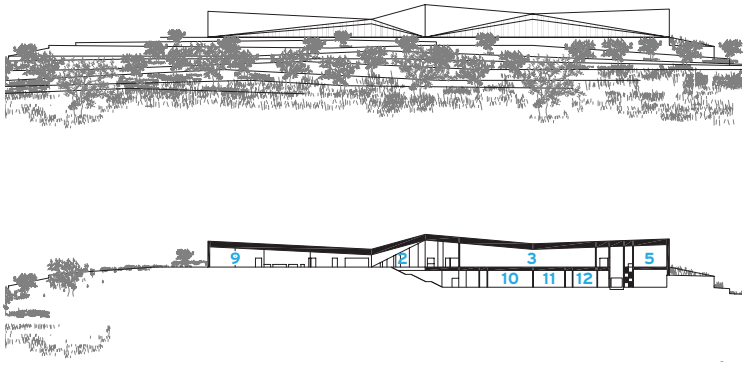
North of Jerusalem, reached by roads that are often narrow and winding, the Palestinian Museum first appears as a low-lying beacon set amid the surrounding hills. Composed of two shardlike limestone volumes joined above a low, triangular expanse of glass, the building crests a cascade of landscaped terraces. With its crisp geometries and its integration with the undulating topography, it is the striking response of Dublin-based Heneghan Peng Architects to the client's desire for a sustainable, contemporary structure that nods to the area's vernacular architecture while emphasizing a deep connection to the landscape.

GARDEN VARIETY Twenty miles north of Jerusalem, the Palestinian Museum crowns a hilltop ajacent to Birzeit University in the West Bank. Jordanian landscape architect Lara Zureikat designed the dramatic terraced gardens filled with fragrant shrubs and fruit trees.



GROUND-FLOOR PLAN

0 60 FT.
20 M.



SECTION A - A

0 60 FT.
20 M.

1 ENTRANCE
2 RECEPTION
3 MAIN GALLERY
4 GALLERY
5 SCREENING ROOM
6 CAFÉ
7 TERRACE
8 SHOP
9 ADMINISTRATION
10 WORKSHOP
11 CLASSROOM
12 PHOTOGRAPHIC ARCHIVE

STEP BY STEP The architects wanted the museum to blend with the surrounding terrain, so they incorporated a variety of outdoor spaces including an amphitheater (above) and a landscaped café terrace (opposite, top).

The $17.5 million museum is the flagship project of Taawon, a nonprofit that provides development and humanitarian aid to Palestinians. Originally, it was intended as a space of memory, focusing on the Nakba, the displacement of Palestinians resulting from the 1948 Israeli-Arab war. Later, the founders decided that instead of being limited to a single event, it should connect Palestinians around the world to their shared culture and history. The museum will showcase contemporary art, historical images, and traditional crafts, with a focus on their contribution to contemporary Palestinian culture. (Though the building opened last May, it will not mount its inaugural show until the fall.) Says museum director Dr. Mahmoud Hawari, "We would like to speak to the youth of Palestine with a view for a better future."

Birzeit University, near the West Bank city of Ramallah, donated 10 acres of its land for the project. Heneghan Peng's design was chosen from more than 40 submissions in an invited international competition in 2011. Firm cofounder Róisín Heneghan had never visited the area before the competition. Her first encounter left her with strong impressions of the site. "I became much more aware of the importance of the plant life and its textures and smells," she says, "and its power to evoke memories."

It was clear, then, that a network of gardens would become a focal point of the design. "Rather than thinking of the museum as a building surrounded by landscape, we considered the entire site to be the museum, with some space inside and some outside," says Heneghan. The architects' master plan includes the 38,000-square-foot building and about nine acres of gardens, as well as a forthcoming second phase that will include an additional 67,000 square feet for galleries and a lecture theater. Beds of fragrant herbs like lavender and sage are among the plantings in a series of zigzagging gardens designed by Lara Zureikat, a Jordanian landscape architect. These variegated plots skirt the building, its outdoor amphitheater, and its triangular terrace, linking indoor and outdoor spaces. The gardens themselves, equipped with power, data, and wi-fi coverage, can serve as exhibition space.

Heneghan Peng also drew on the area's traditional architecture for their design, specifying small windows to counter the intense sunlight and employing stone construction. Cladding the roof in the same limestone as the exterior walls creates visual unity—though the choice of heavy material here, says Heneghan, proved to be demanding for the construction. The firm took inspiration as well from the topography: the crystalline geometries were informed by the contours of the site. Because of the building's significance, the architects proposed placing it at the top of the site so that its folded roof would create a distinct profile—a "crown" for the hill.

NEW HEIGHTS
The museum will not be installed until the fall, but it is already hosting student tours (left). Inside, the cool interiors echo the building's folded form (below). To limit solar heat gain yet maintain stunning views to the west, the architects added aluminum fins to the café's glass walls (opposite, right).

Built into the slope, the museum is entered at the upper floor. The central lobby, suffused with daylight, houses a café and opens to the terrace. The northern half of this level is devoted to offices, while the southern half holds the principal gallery and an adjacent narrow exhibition space. Classrooms on the lower floor open to the amphitheater. Inside, the building is an exercise in lightness and strength. The sandy-hued stone floors provide a sense of solidity and keep the spaces cool, while concrete walls provide thermal mass, also helping to modulate interior temperatures. Dramatic ceiling lines echo the concrete roof's folded geometries and soar to 16 feet in the main gallery, making it feel larger than its 5,000 square feet.

To additionally counter the area's hot, dry summers, the architects insulated the building and selected the pale limestone in part for its reflective properties. Despite minimizing window size to limit solar heat gain, the team did make concessions, says Heneghan. "We wanted to take advantage of that amazing view to the west—the rolling hills falling away to the coastal plain." So the café and the narrow gallery have insulated, reflective glass walls, which are shaded by dramatic exterior aluminum fins. While the main gallery employs standard air-conditioning, the offices are naturally ventilated and largely daylit. (All electric illumination is LED.) Further responding to the client's demands for sustainable construction, the team installed solar panels for hot water as well as specified gray- and black-water treatment and a rainwater-collection system for irrigation. The museum—in addition to being the first Palestinian-funded building of its kind—is to be the first LEED Silver–certified building in the West Bank and Gaza. "Palestine wants to be part of the international community at all levels and to educate our youth on issues of global environment and preservation of natural resources," Hawari, the museum director, says.

Paradoxically, the museum that aims to be a worldwide cultural hub is physically accessible almost exclusively to Palestinians living in Jerusalem and the West Bank, in part because of travel restrictions related to the Palestinian–Israeli conflict. To overcome this, next month the museum will launch an online platform spanning Palestinian history, but with a focus on the modern era. Simultaneously, it will begin work on an open-access digital archive of documents, photographs, and films. And, in its first phase, the museum is creating partnerships with existing institutions in cities with large concentrations of Palestinians. Its first exhibition—opening this September—will focus on Palestinian representations of Jerusalem. It will include commissions and programs with artists and collectives, both within the museum and at other locations, particularly in Jerusalem.

For now, when Palestinian schoolchildren arrive on organized visits, they participate in art programs and are taught about the building's sustainable strategies as well as preservation of the environment. Conceived and built in troubled times in the region, the museum is, in Hawari's words, "a statement of optimism." ■

Esther Hecht is a Jerusalem-based journalist who reports on social, cultural, and political developments.

credits

ARCHITECT: Heneghan Peng Architects

LOCAL PARTNER: Arabtech Jardaneh

LANDSCAPE ARCHITECT: Lara Zureikat

ENGINEERS: ARUP (civil/structural/building services/fire)

PROJECT MANAGER: Projacs International

CLIENT: Taawon

SIZE: 38,000 square feet (building); 430,000 square feet (gardens)

COST: $17.5 million

COMPLETION DATE: May 2016

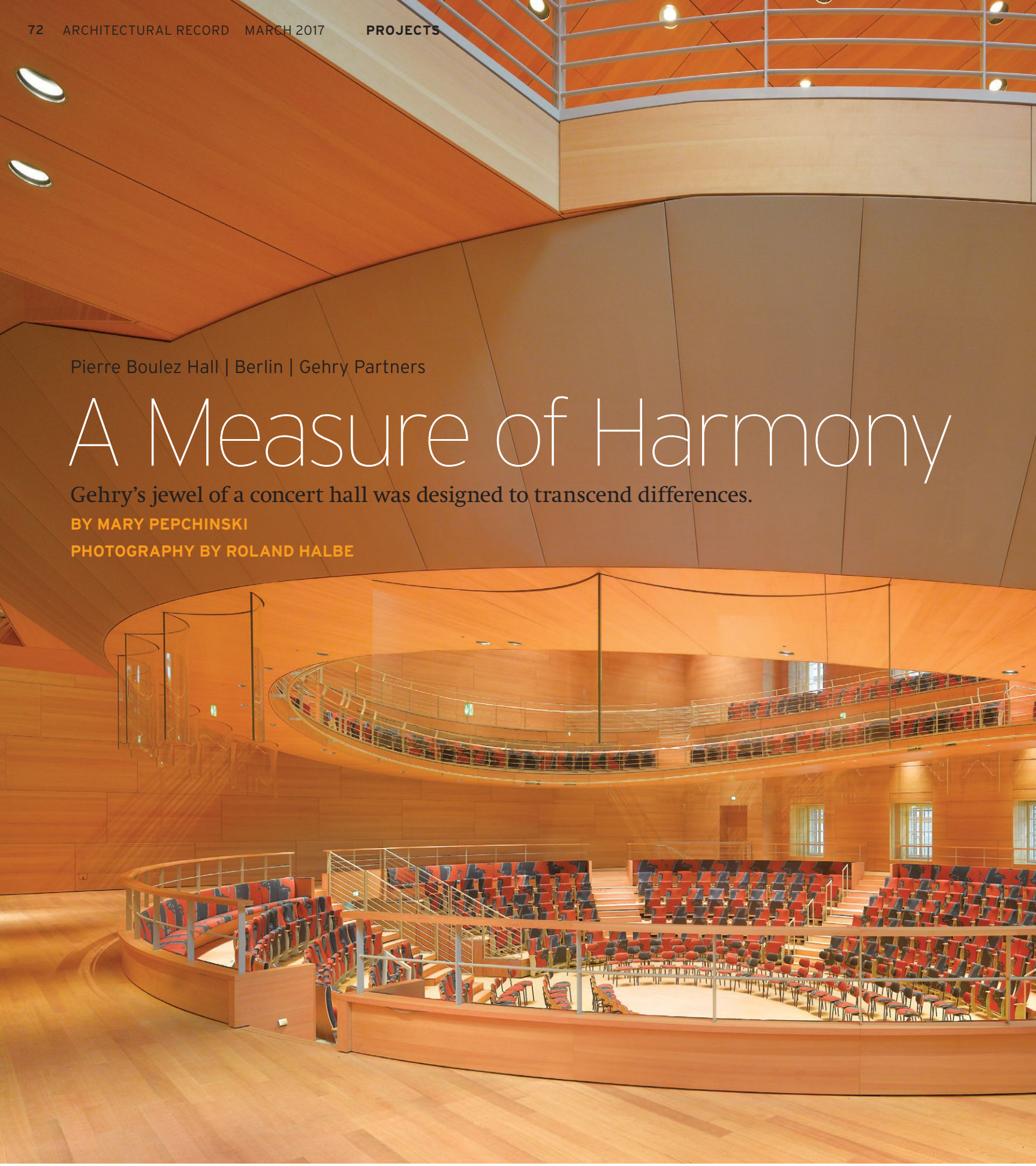
SOURCES

DOLOMITIC LIMESTONE: Nassar Stone

CURTAIN WALL & BRISE SOLEIL: Schüco, ALICO

LIGHTING: ERCO

CARPET: Tretford



Pierre Boulez Hall | Berlin | Gehry Partners

A Measure of Harmony

Gehry's jewel of a concert hall was designed to transcend differences.

BY MARY PEPCHINSKI

PHOTOGRAPHY BY ROLAND HALBE

Berlin is home to what is arguably the most influential concert hall of the 20th century, designed by Hans Scharoun for the city's philharmonic orchestra and inaugurated in 1963. Smaller in scale than that 2,440-seat auditorium, Berlin's newest music venue, Pierre Boulez Hall (a tribute to the late French composer and conductor) may be nearly as impressive in form and context.

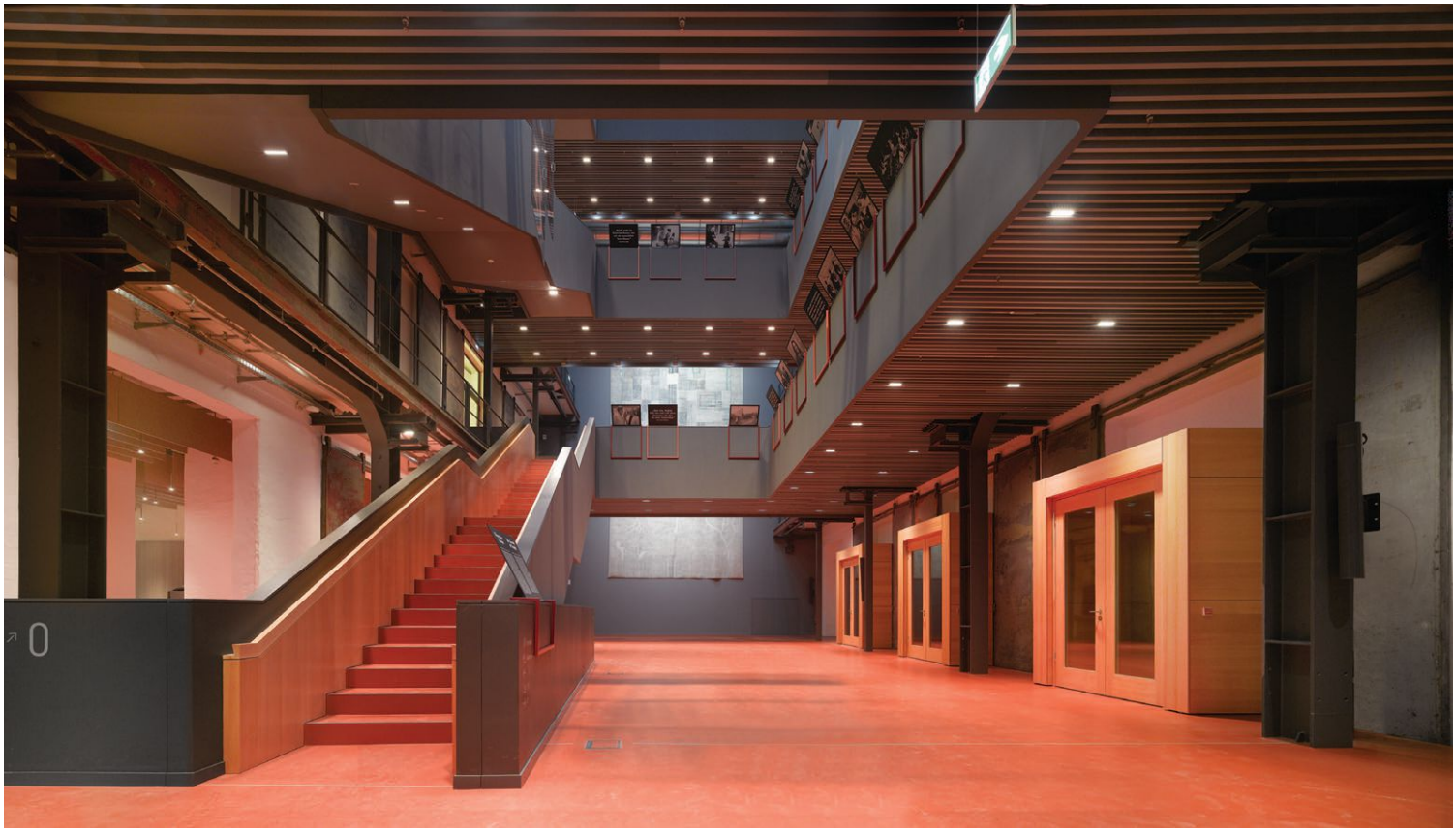
Designed by Frank Gehry, the 683-seat hall is part of the Barenboim-Said Academy (BSA), a new conservatory founded by maestro Daniel Barenboim to foster communication through music. The school, which trains young musicians from the Middle East, North Africa, and around the world, was named for Barenboim and his colleague Edward Said, the late American-Palestinian scholar, with whom he established the West-Eastern Divan Orchestra in 1999 to enable young Palestinian and Israeli musicians to play together.

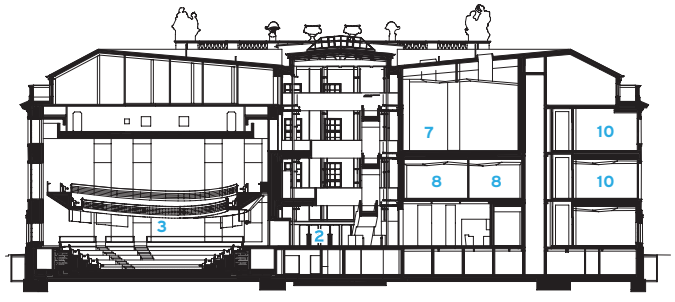
In 2012, when Barenboim invited Gehry to design the venue in the building that houses the school, the architect accepted—and waived his fee. A friend of Barenboim and Said, as well as Boulez, he too wanted to help people overcome their differences and connect, sensing that a performance space was the perfect staging place to help accomplish this. "People talk more easily to one another through the arts," says Gehry, noting how he has observed this at meetings in the Gulf region with people from diverse backgrounds when the subject turns to culture.

The BSA, which opened in the fall of 2016, occupies the former scenery warehouse of the Staatsoper (State Opera House) Unter den Linden, a landmarked Neobaroque monument rebuilt in the early 1950s after being destroyed during World War II. The building, refurbished by the German firm HG Merz, fronts a side street in the Mitte district, now a hub of government, educational, and cultural institutions. The entry leads to a small central atrium, raised 3 feet above street level. From there, visitors can access both the school and Pierre Boulez Hall.

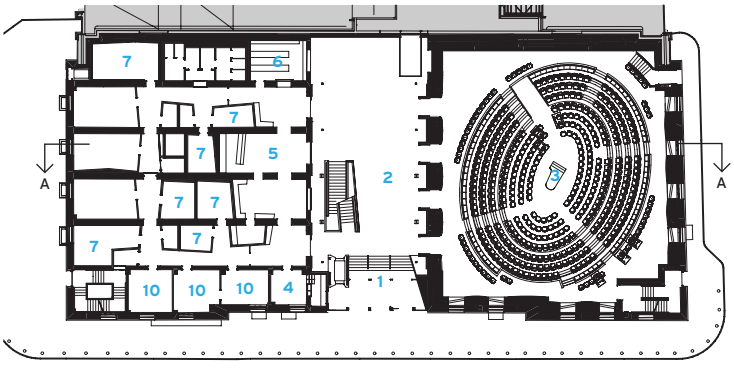
Located within the building's east wing, the concert hall features a flexible stage for performances by soloists and ensembles, and rehearsal space for the 90-member West-Eastern Divan Orchestra. According to Gehry, during the design phase, he initially "kept drawing an oval" within the regular plan, a square box with walls measuring about 80 feet in length. While he eventually rejected this idea for a more conven-

GEHRY'S RING Pierre Boulez Hall occupies the east wing of the Barenboim-Said Academy (above), housed in the former scenery warehouse of the State Opera House Unter den Linden, a landmarked building. Inside, the floating balcony hovers over the arena-like seating surrounding the stage (left), located 9 feet below entry level.



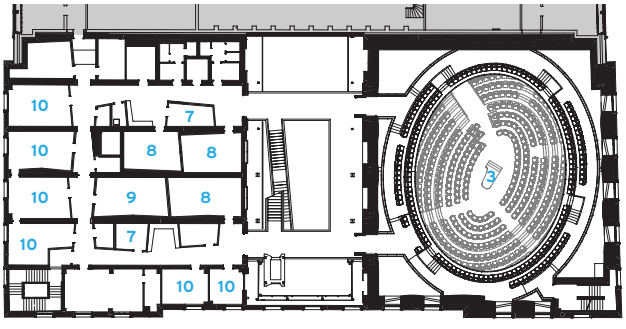


SECTION A - A



LEVEL-ONE PLAN

1 ENTRANCE
2 LOBBY
3 PIERRE BOULEZ HALL
4 BOX OFFICE
5 BAR
6 COAT CHECK
7 PRACTICE ROOM
8 SEMINAR ROOM
9 RECORDING STUDIO
10 OFFICE



LEVEL-TWO PLAN

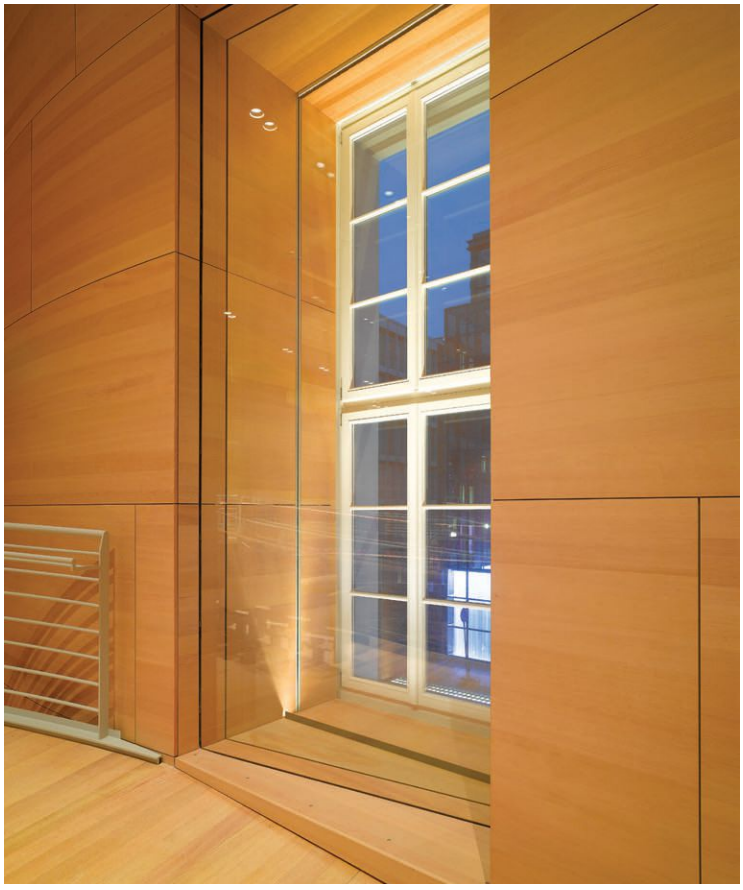
BUILDING ON THE PAST Renovated by Berlin-based architect HG Merz, the lobby atrium of the Barenboim-Said Academy displays the existing steel structure and leads to the school (opposite) and Pierre Boulez Hall (above). Lower-level seating retracts to allow for different stage configurations or to accommodate orchestra rehearsals.

tional layout, with sloped seating on risers facing performers on a stage, Barenboim urged him to return to the oval.

The resulting structure contains two distinct elliptical elements. The axis of the lower level roughly aligns along the hall's northeast–southwest diagonal. Five rows of concentric seating step down 9 feet from the hall's entry level to an arena-like floor. The bottom four rows can retract to accommodate a full orchestra; freestanding chairs and a compact conventional platform can also be added when smaller groups perform. The axis of the upper level shifts slightly and is almost parallel to the east and west facades. Designed as a "floating" balcony, the elliptical ring has an undulating section and is largely independent of the walls. Audience members, either seated on the two rows in the balcony or throughout the lower level, are at a maximum of 46 feet from the center of the stage.

The concert hall is akin to a "building in a building," says Gehry partner Craig Webb, project designer. The existing interior walls and slabs were gutted, new foundations were laid, and a steel-and-reinforced concrete structure was inserted on the periphery. Four beams, one on each side, tie the floating balcony, constructed as a hollow, reinforced-concrete truss with a trapezoidal section, to the new structure. Douglas fir panels cover the ceiling, walls, and balcony.

Other decisions marry design elements with the need to optimize sound quality. Los Angeles–based acoustician Yasuhisa Toyota, who worked with Gehry on the Walt Disney Concert Hall, suggested an interior height of 46 feet to create enough volume for a full orchestra. Unlike a balcony in a typical concert hall, the one here is detached from the walls, so bowed glass sheets were hung beneath the eastern and western edges to return sound to the musicians. Because the architects

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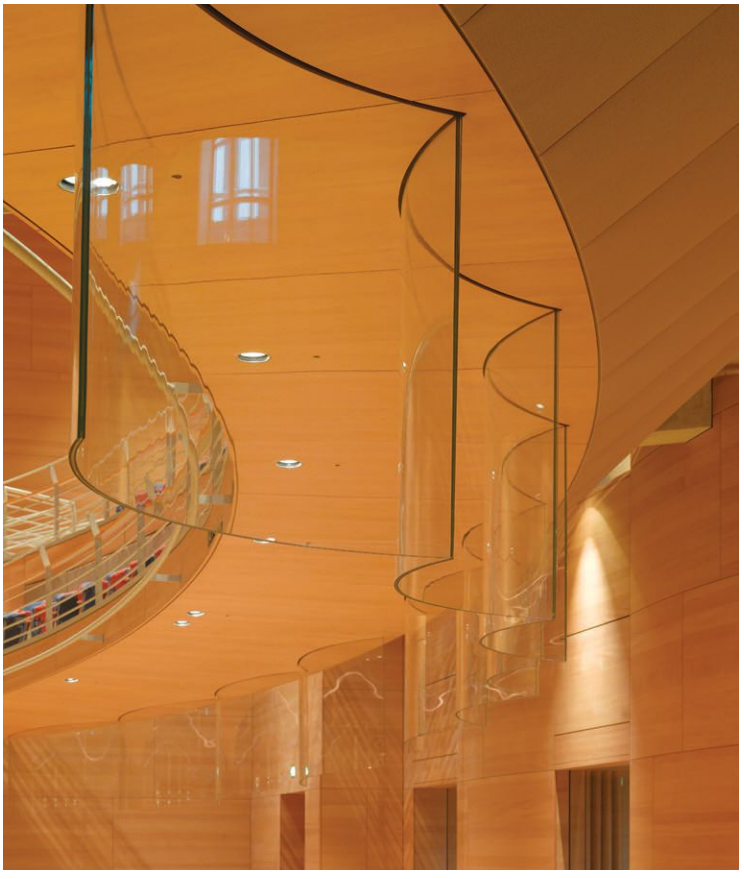


HIGH NOTES Views to the street were retained (right). The windows of the landmarked facade are triple glazed to insulate against noise (opposite, top left). HG Merz exposed structural elements in the atrium (opposite, top right), which contrast with Douglas fir doors by Gehry Partners (opposite, bottom left). Bowed acoustic glass panels hang from the balcony (opposite, bottom right).

insisted on keeping the windows transparent to insure seamless views to the city, three layers of glass in the deep window casings provide sound isolation. The creamy Alaskan yellow-cedar stage floor was selected because it is extremely resonant and enhances the sound of instruments that touch it, like cellos or pianos. When the light from the adjustable-LED Tungsten fixtures bathes the surface, "the whole room glows from this central focus" says Webb.

For all its technical finesse and adventurous form, Pierre Boulez Hall is an unexpectedly emotional and atmospheric place. The balcony hovering above the columnless volume directs one's gaze toward the windows, out to the city. There is a sense of freedom and of endless possibilities, even hope. Moving closer to the center, the design recalls a clearing in the forest, the stage being a luminous pond with the floating balcony as a ring of treetops, imparting an aura of security and enclosure.

"It is a special place," says Ole Baekhoej, the hall's artistic director. "It has a community feeling, with everyone seated together around the musicians. It is not a 'them versus us' layout, but all of us together." ■

Mary Pepchinski is a writer and educator based in Berlin and Dresden, Germany.

credits

ARCHITECT: Gehry Partners (Pierre Boulez Hall) – Frank Gehry, design principal; Craig Webb, project designer; Laurence Tighe, managing partner; Gesa Buettner, project architect. HG Merz (Barenboim-Said Academy)

EXECUTIVE ARCHITECT: RW+ Architekten

ENGINEERS: GSE Ingenieur-Gesellschaft (structural)

CONSULTANTS: Nagata Acoustics America (acoustics); L'Observatoire (lighting design); Ingenieurbüro Schaller (theater); Teamproject (project manager)

CLIENT: Barenboim-Said Academy

SIZE: 10,660 square feet

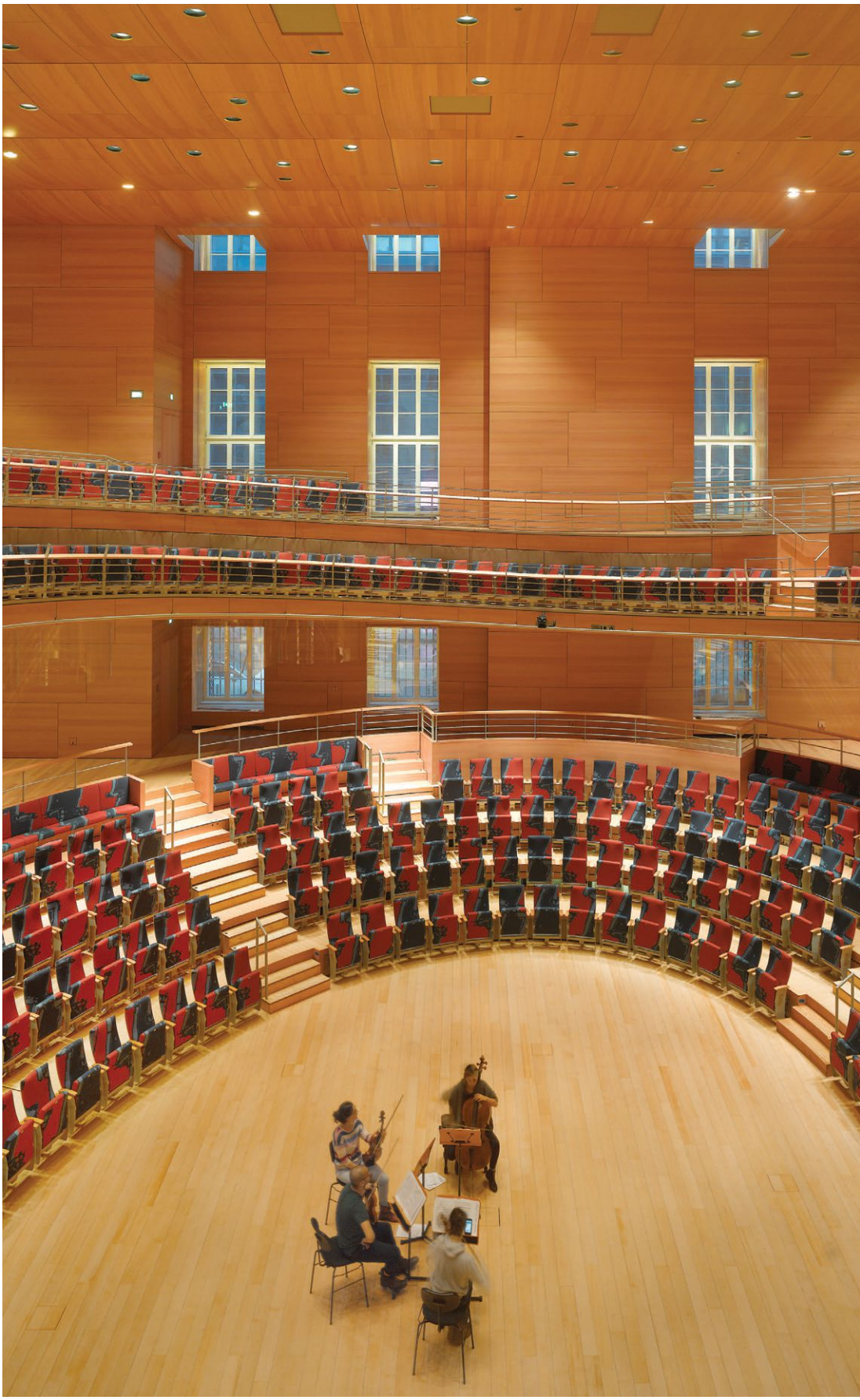
COMPLETION DATE: March 2017

SOURCES

GLASS: Guardian Glass (curved acoustical fins)

SEATING: Seda Sport (fixed audience seats designed by Gehry Partners); Wilde Spieth (freestanding chairs)

TEXTILES: Serge Ferrari (acoustical); Maharam, Kvadrat (custom fabric for audience seats designed by Gehry Partners)



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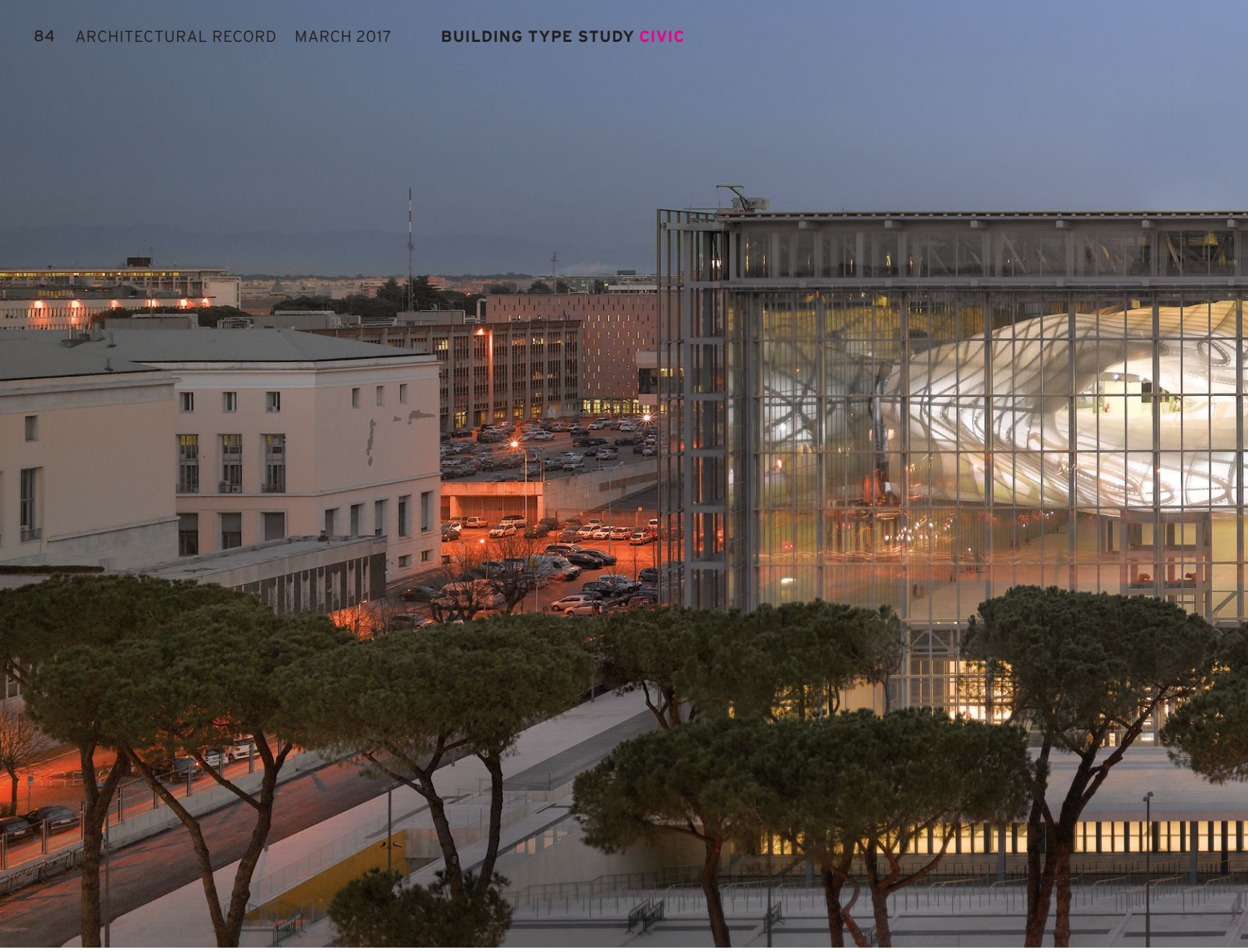
CIRCLE 237

CIVIC BUILDINGS

The essential challenge of any civic building is to strike the delicate balance between conveying a level of gravitas while also remaining welcoming on a human level. The projects on the following pages—a convention hall, two courthouses, two libraries, and an emergency medical services station—demonstrate how scale, form, and innovative material use yield structures that make bold statements while sensitively responding to their diverse contexts and serving their communities.

UNITED STATES COURTHOUSE, LOS ANGELES, BY SKIDMORE, OWINGS & MERRILL



New Rome-EUR Convention Center and Hotel | Rome | Massimiliano and Doriana Fuksas

In the Cloud

A monumental framework encloses a surprising diaphanous form.

BY SUZANNE STEPHENS

PHOTOGRAPHY BY ROLAND HALBE

Rome's visitors flock incessantly to its ancient ruins and monuments and its thick urban mass of Renaissance and Baroque architecture, out of which piazzas and narrow alleys are carved. But the Eternal City's urbanistic antithesis lies about 20 minutes by car or metro to the south: it is Esposizione Universale Roma, more familiarly EUR, a 99-acre area of massive, modern-classical buildings arranged along broad, axial streets. Benito Mussolini intended this suburban area to open in 1942 as a world's fair celebrating his totalitarian reign, but World War II got in the way. Nevertheless, the monumental architecture and planning conceived by Marcello Piacentini and others laid the groundwork for Rome's expansion into what is now, decades later, a bustling office and residential district.

Over the years, EUR's Fascistic architecture, captured evocatively on film by such postwar directors as Fellini and Antonioni, has made it a cult tourist destination, with the haunting de Chirico-esque Palazzo della Cività Italiana as the dominant landmark. (Ironically, this former political symbol has now become a fashion statement, since Fendi, the luxury goods company, purchased and renovated it for offices in 2015.)

Last fall, the most assured vote of confidence in the neighborhood's future sounded with the opening of the New Rome-EUR Convention

THE GLEAMING
The double-glazed steel structure called the Theca, or case, sits on a reinforced-concrete base (above). Within its cagelike armature floats a large diaphanous cloud (*nuvola*) wrapped in a fiberglass and silicone tensile covering. At the rear (right), the frame provides an open porch with an expansive travertine terrace.

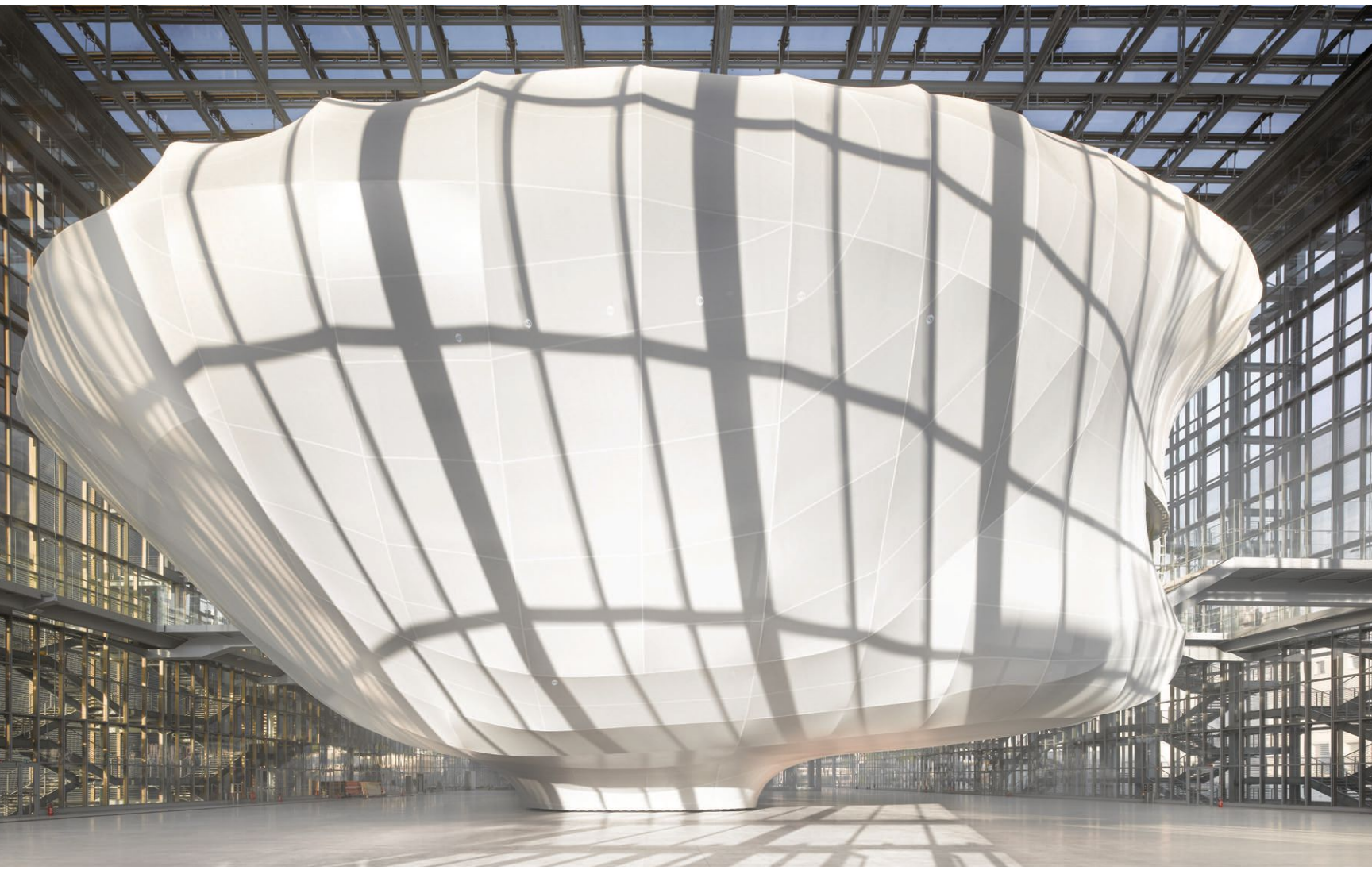
Center and Hotel designed by Massimiliano and Doriana Fuksas. The 439-room, 17-story hotel (and a one-story restaurant), occupying two black-glass volumes along the south wall, still await fit-out, furnishings, and a hospitality manager. But the 592,000-square-foot convention center is open for business. (The marble-clad Palazzo dei Congressi by Adalberto Libera, designed in 1938 and completed in 1954, was deemed too small for larger conferences, and is rented out for cultural events.)

The arresting new, transparent steel-and-glass block, 100 feet high and 655 by 245 feet in plan, sits on a travertine plinth, its scale and proportions fitting in well with the mid-rise stripped classical scenography surrounding it. Within the giant double-glazed steel cage of portal-like frames called the Theca (or case), you see a looming diaphanous cloud or *nuvola* (now the actual nickname for the building). This nebulous construct, wrapped in a white membrane of fiberglass and silicone held by swirling curvilinear steel ribs, contains three levels of conference spaces and cafés, and an auditorium with 1,800 seats. The nimbus-like form hovers over the main lobby level, itself elevated above the street. Beneath it, depressed 30 feet below grade, is the 84,000-square-foot exposition hall, edged along its north side by a wide concourse and ancillary facilities. Underground parking for 615 cars is provided as well.

Massimiliano Fuksas first came up with the concept in 1998 as a response to an open competition that attracted hundreds of entries. Although he and his wife and partner, Doriana, were living in Paris, he had grown up in Rome with his Lithuanian father and Italian mother. "I felt I had to do this," says the architect. "Since I had been an immigrant, I thought, if I don't build in my hometown, I will be an immigrant all my life." Massimiliano won the commission out of a short list of seven. But the $255 million project had to weather changes in Rome's mayors and other political roadblocks. "Finally, in 2008, the mayor of Rome said, 'Build!'" he recalls. EUR SpA, a development company formed by the Italian Ministry of the Economy and the municipality of Rome, did just that. The splashy arrival of the Fuksases' dramatic Milan Trade Fair (RECORD, August 2005, page 92), with its mile-long, organically flowing glass spine, may have helped this project gain momentum.

The basic scheme for the convention center heightens the architectural dichotomy between the container and the contained—a majestic Euclidean cubelike frame contrasting strikingly with its blobular innards, made possible by parametric design tools. "I wanted to put the cloud and the cube together to see what would happen to the space in between," Massimiliano says as a hint to the experiential quality conveyed in moving around the center.

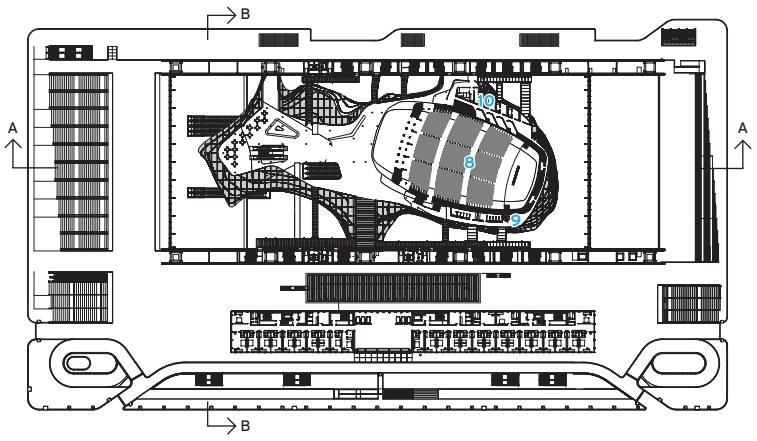
The entrance is on Via Cristoforo Colombo, the broad road linking Rome's center to the EUR enclave. Straight away, you take a wide travertine stair down, instead of up, to the exposition level (which may make you think of Fellini's finale in *8½*, where the cast gaily descends an



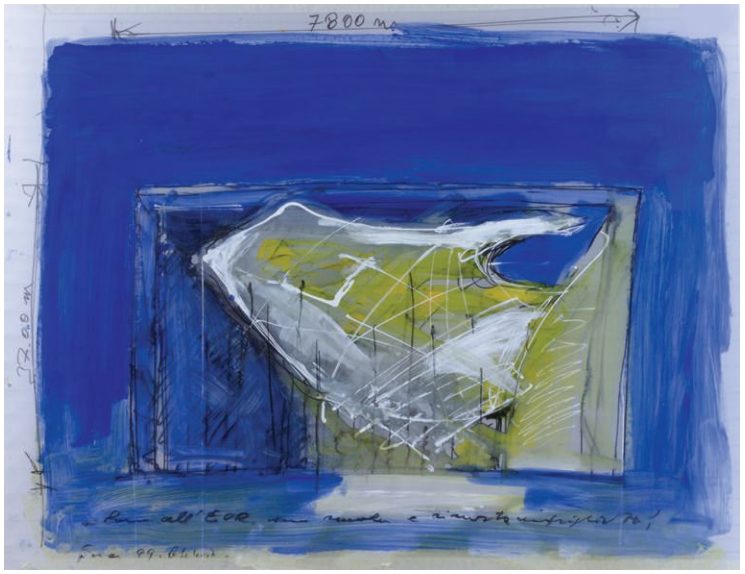
CUMULOUS CONDITION On the main level, visitors walk from the front of the building toward the cloud, where a large steel-frame box pier acts as one of its key supports (above). At the rear, the cloud touches down on another box pier concealed by the white translucent fabric. Bridges connect the upper levels to stairs on the north and south sides of the framework (right).

open stairway within the fairground scaffolding). You can linger in the subterranean exhibition hall or take escalators up to the main level, where you find yourself in the vast, daylit interior volume with the white membranous apparition hovering above. Then you ascend gradually into the cloud—by escalators—to find yourself in a luminous space enclosed by the translucent fabric. At some point, the door to the auditorium opens, and you walk into a warm, reddish, curvilinear cocoon. You seem to have entered the heart of the building, where Doriana Fuksas's choice of cherrywood panels, orange-red seats, and rust-colored oak floors underscores the association with this vital organ. This indeed is a surprising journey.

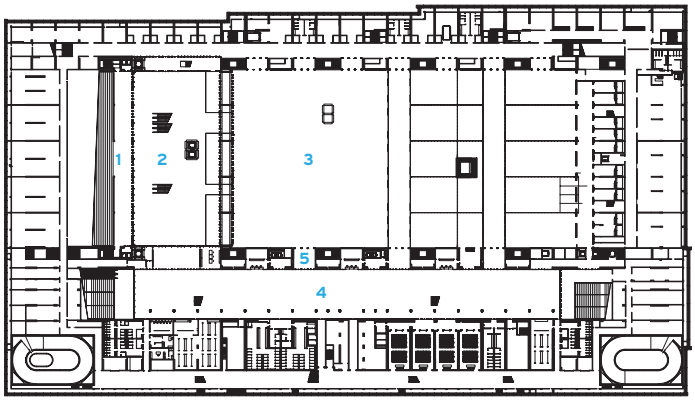
Solving the technical problems of the complex structure required a host of engineers including Massimo Majowiecki of Studio Majowiecki, who helped Fuksas with the shape of the *nuvola*, where translucent fabric panels would be attached with brackets to the welded, boldly undulating steel armature. However evanescent and lightweight in appearance, this nebulous entity needed to be structurally propped up: three megalithic steel-frame box piers provide major points of support,



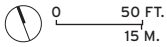
LEVEL-THREE PLAN



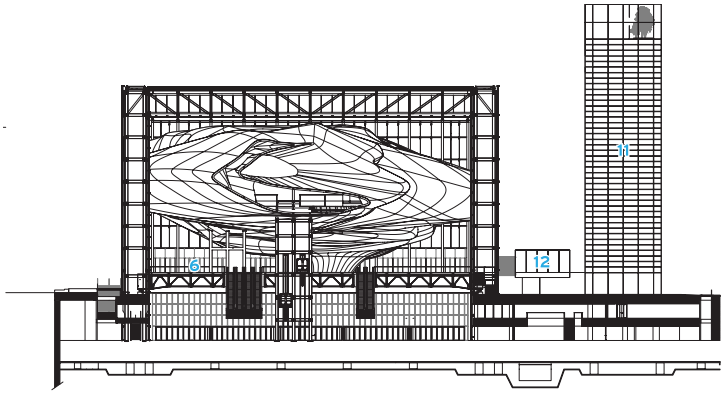
INCHOATE APPARITION Massimiliano Fuksas works with sketches (above) before turning to the computer and models to advance his initial concept. Inside the cloud (opposite), white cement resin decks capture the luminosity of the fiberglass enclosure.



BELOW-GRADE PLAN



1 ENTRANCE
2 FOYER
3 EXPOSITION HALL
4 CONCOURSE
5 OFFICE
6 MAIN LEVEL
7 EAST PORCH
8 AUDITORIUM
9 SERVICES
10 DRESSING ROOMS
11 HOTEL
12 RESTAURANT



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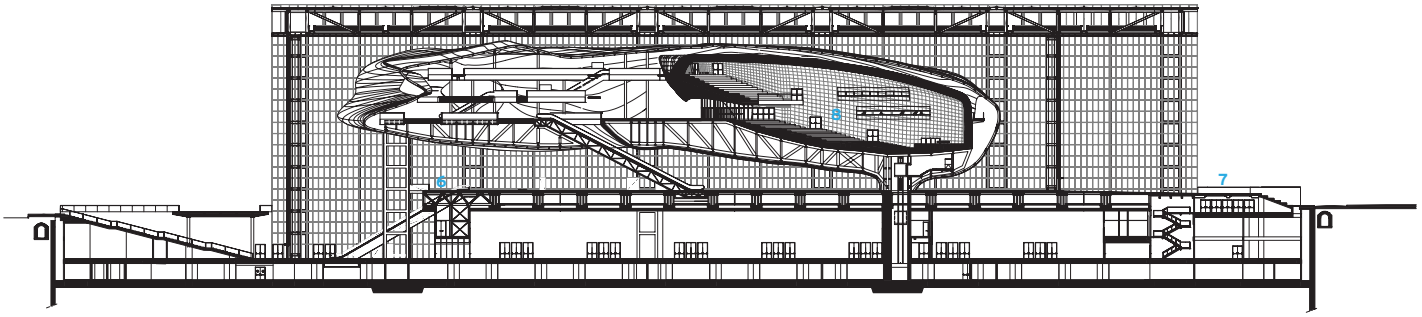

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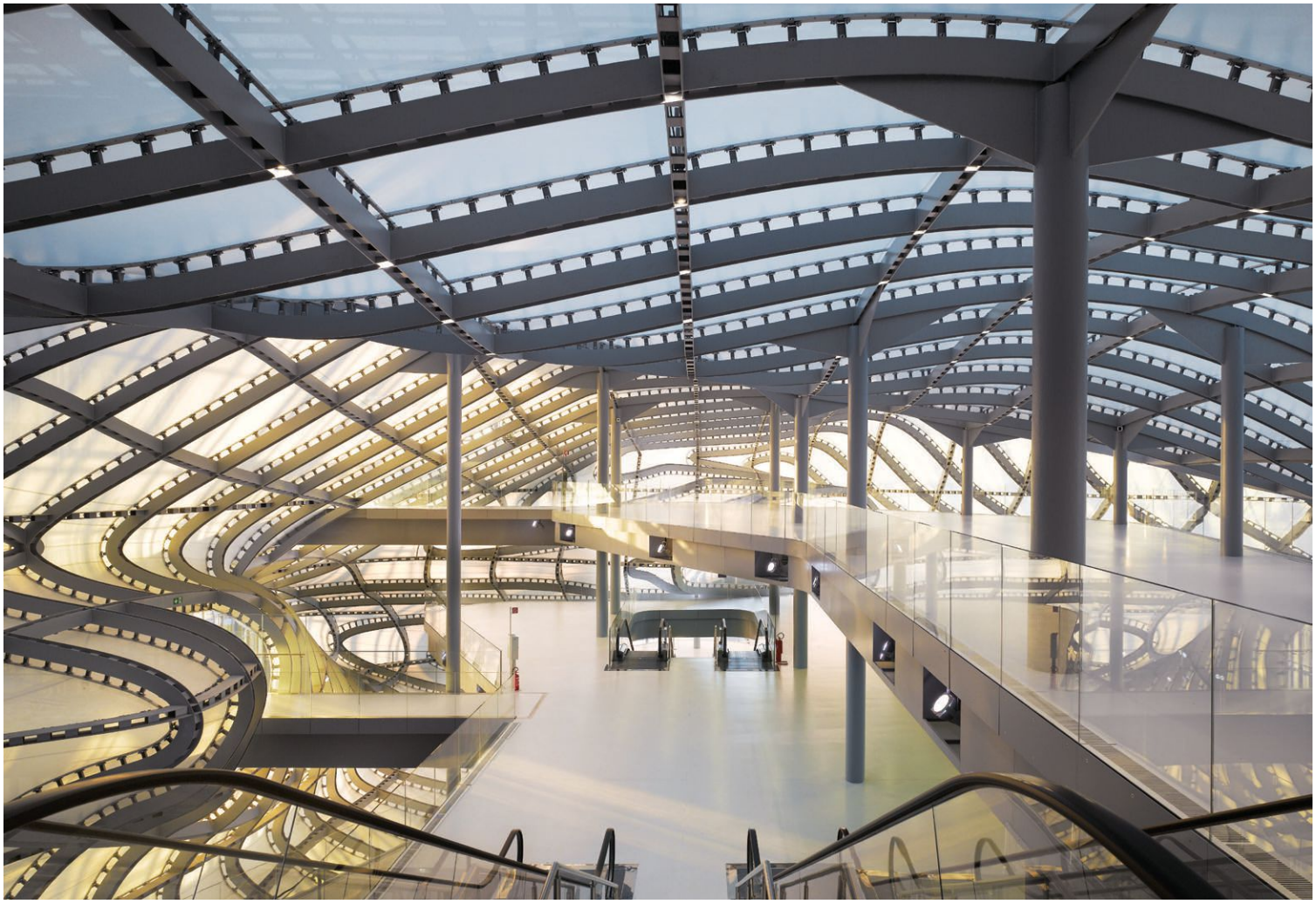
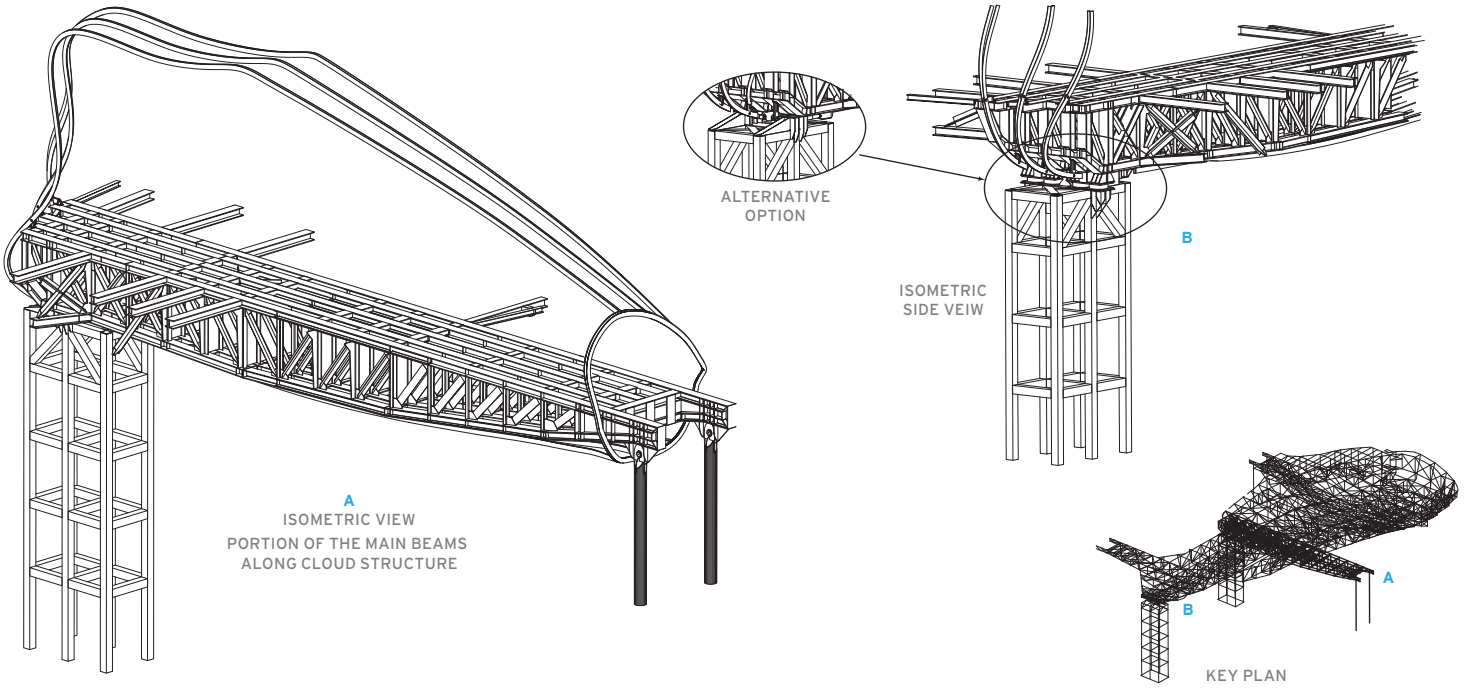
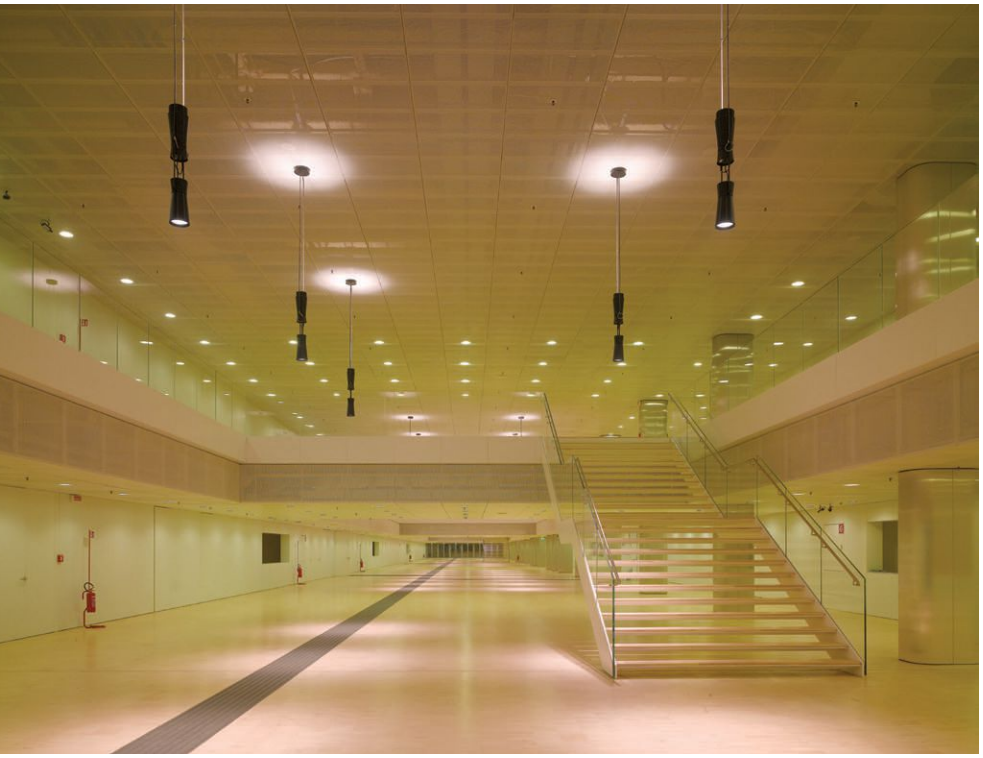




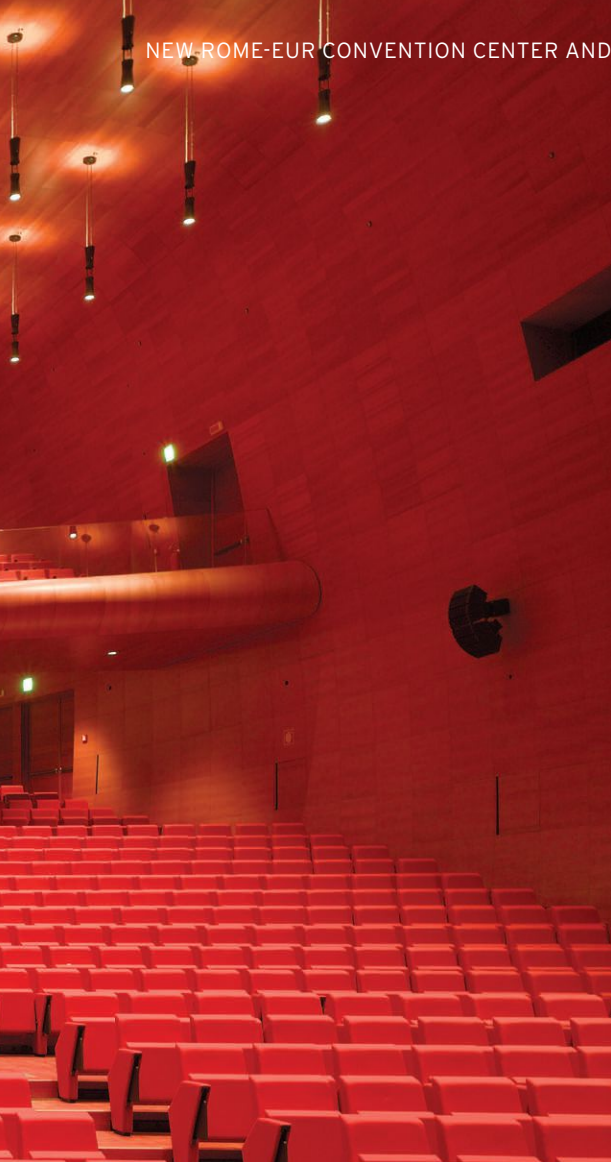
STRUCTURAL DETAILS



two of which easily hold elevators. In addition, three reticulated trusses direct the gravity loads and lateral forces to slender columns at the periphery.

In spite of the center's ethereal ambience, certain seismic considerations confronted the design team, owing to central Italy's history of earthquakes. Special bearings isolate the foundation from the structure so that the building, in effect, doesn't wobble when the ground below oscillates. Energy savings were also a concern: on the roof, a 154.4-kilowatt system of 264 photovoltaic panels provides 20 percent of the electricity for average use in the building. Elsewhere, the team installed radiant heating in the floors, with cooling dependent on reversible heat pumps. Solar gain on the all-glass skin of the Theca is mitigated by a 17-foot-deep double facade that is vented to allow warmer air to escape through the top.

Once the hotel and restaurant are in place, the entire project will offer one more impressive attraction in Rome's alternate universe. While the Fuksas office has pursued more futuristic parametric experiments recently, such as the biomorphic Shenzhen Bao'an International Airport in China (RECORD, March 2014, page 84), this Boullée-like frame combined with an inchoate contemporary form achieves a timeless "both/and" quality. It is at once modern and classical, without any political overtones. ■



credits

ARCHITECT: Massimiliano and Doriana Fuksas

ENGINEERS: A.I. Engineering (initial planning); Studio Majowiecki, Studio Sarti (structural)

CONSULTANTS: Form-TL (cloud membrane); Gruppo Industriale Tosoni (steel-and-glass facade); XU-Acoustique (acoustics); Speirs & Major Associates (lighting)

CLIENT: EUR SpA

SIZE: 592,000 square feet

COST: $255 million

COMPLETION DATE: October 2016

SOURCES

GLASS: AGC Glass Europe

MEMBRANE COATING: Cannobia

ELEVATORS: Maspero Elevatori

ESCALATORS: Schindler

GLASS DOOR ACCESSORIES: Dorma

LIGHTING: iGuzzini; Philips Lighting

AUDITORIUM SEATING: Poltrona Frau

STEEL-FRAME WINDOWS AND DOORS: Palladio

RESIN FLOORING: Sika Italia

SHOW TIME An industrial-baroque armature supports the evanescent white membrane (above). Within this structure is the auditorium, where the cherrywood panels, oak floors, and reddish-orange seating (opposite, top) give a warmth and intimacy to the space. On a level belowground, a wide concourse runs alongside the exposition hall (opposite, bottom).

United States Courthouse | Los Angeles | Skidmore, Owings & Merrill

Day in Court

A light-filled civic building animates and engages a rapidly urbanizing downtown.

BY CATHLEEN MCGUIGAN

PHOTOGRAPHY BY BRUCE DAMONTE

The modern courthouse is a paradoxical building type—it is part of the city but should also be apart from the city—magisterial and imposing, yet also a public place where almost everyone ends up eventually, even if just for jury duty.

The architects behind the new United States Courthouse in downtown Los Angeles were acutely aware of the challenges they faced in creating a major civic presence while engaging with a rapidly changing neighborhood, one that is increasingly used by pedestrians and dotted with a constellation of high-profile cultural and public buildings. The courthouse, on a sloping site facing 1st Street, is two blocks down from Frank Gehry's 2003 Walt Disney Concert Hall, with its silvery furls crowning the hilltop, and two blocks up from Morphosis's 2004 CalTrans Center, with its tough facade and expansive plaza. While it is quieter than either of those neighbors, its strong, simple form—a floating ice cube, wrapped in gleaming vertical pleats of glass—make it a dramatically faceted gem in a still-evolving urban realm.

The project had a somewhat tortured history, with the Los Angeles office of Skidmore, Owings & Merrill (SOM), led by Craig Hartman, competing for it twice. Under the General Services Administration (GSA) Design Excellence program, the firm lost a first competition to Perkins+Will, which had designed a 17-story tower that would have cost a reported $1.1 billion. A Congressional budget slash killed that scheme;

FLOATING ICE CUBE Anchoring a key downtown site, with the Walt Disney Concert Hall nearby (below, at right), the courthouse is a shimmering presence, its pleated glass skin changing with the weather and time of day. The 10-story atrium (opposite), ringed by walkways and crisscrossed by bridges, is filled with natural light.

CIVIC ENGAGEMENT The cantilevered "porch" (left and above) mediates between the public realm and the courthouse, while the light-filled atrium imparts a sense of calm (opposite). Catherine Opie's series on Yosemite Falls (partially visible) is among the featured art.

after a period of languishing, the GSA announced another competition, this time for design/build proposals for a somewhat smaller structure. Partnering with Clark Construction, SOM won the second time around, and after just 40 months from schematic design, officials began moving into the $317 million courthouse late last year.

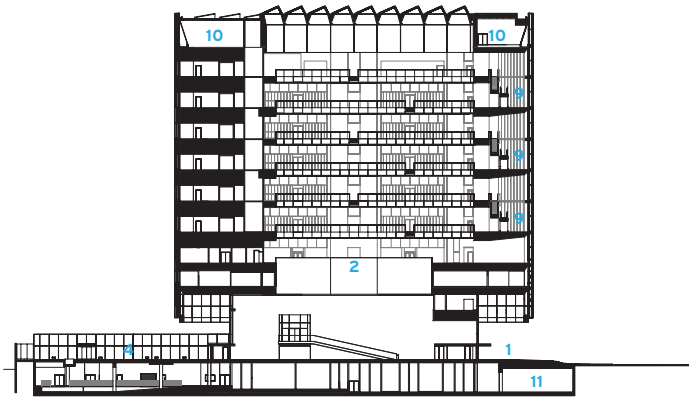
According to Hartman, the almost perfect cube—it measures 230 feet by 230 feet by 200 feet—was not a preordained form but resulted

from a careful analysis of the site and the demands of the program. Elevating the cube on the columnless recessed base was especially brilliant: it helped resolve the sharp slope—there is about a 27-foot drop from the high end of the site to the low—and bolstered security requirements that otherwise might have meant a big setback. Instead, the courthouse has a friendly urbanity on the street, with the cantilevered entrance "porch" and wide steps. The move also left more room for a garden with switchback ramps that allow a wheelchair user to navigate around the steep public sidewalk. And the cube form, lifted up, imparts a civic gravitas—what Hartman calls "a Euclidean clarity befitting a courthouse."

The vertical folded glass exterior also sprang from the site analysis. While the street plan of downtown L.A. is a grid, it is 38 degrees off the points of the compass. The pleats of the glass skin, set so that they face due north–south or roughly east–west, allow the building to be tuned to the sun, by shading certain faces of the triangles (see sidebar, page 98).

The concrete-and-steel composite structure is anchored by enormous concrete cores that contain elevators and services, while vertical steel hangers, suspended in tension from a hat truss at the top, are attached to beams, which support the slabs, which in turn support the curtain wall. The strategy eliminated the need for perimeter columns. Adding to the drama of the floating cube is its shimmering skin, which shifts from silver and gray to pink and lavender, depending on the weather, time of day, and the viewer's vantage point.

You enter the 630,000-square-foot courthouse under the hovering wings of an American eagle and the seal of the United States, etched subtly into the glass facade, while the Indiana limestone of the exterior base is carried into the walls of the lobby. The material palette inside is minimal—the pale stone, the white marble floor—but the architectural elements that really count are space and light: daylight pours into the soaring 10-story skylit light court, or atrium, creating a luminous, serene grandeur. Ringing the atrium are walkways with glass balustrades; criss-



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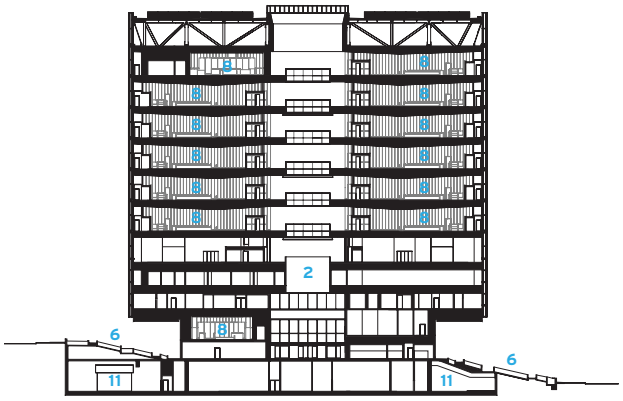

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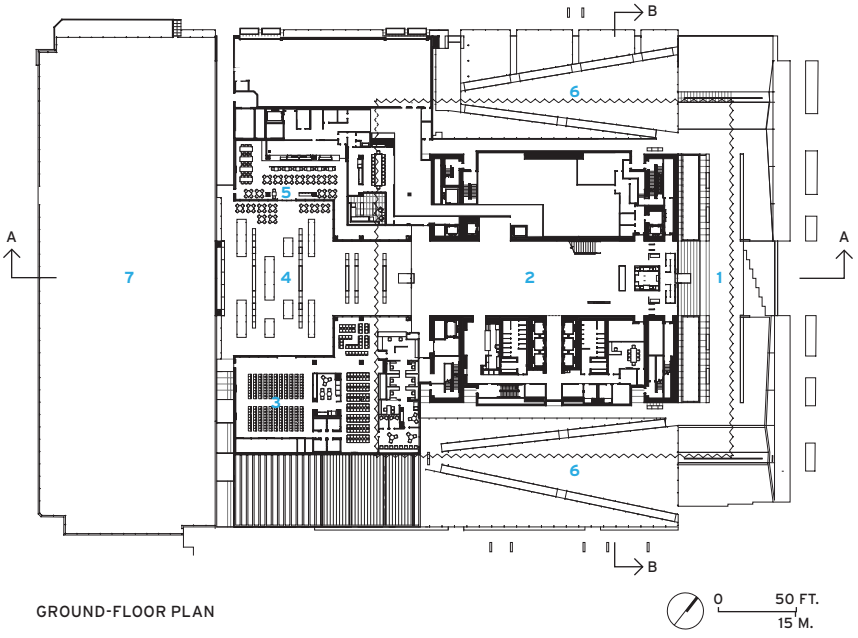
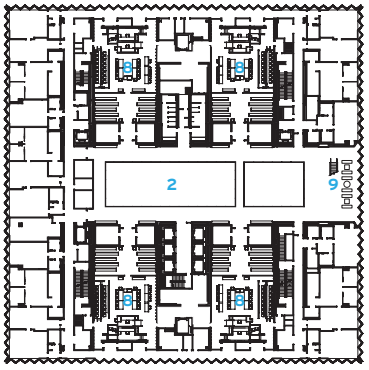


GROUND-FLOOR PLAN



TYPICAL FLOOR PLAN

1 ENTRY PLAZA
2 LIGHT COURT/ATRIUM
3 JURY ASSEMBLY
4 TERRACE
5 CAFÉ
6 SLOPING GARDEN
7 FUTURE FEDERAL BUILDING SITE
8 COURTROOM
9 RECONCILIATION SPACE
10 MECHANICAL
11 PARKING

crossing the lofty void are bridges that are not stacked directly above each other but staggered, creating a dynamic, and less vertiginous, space.

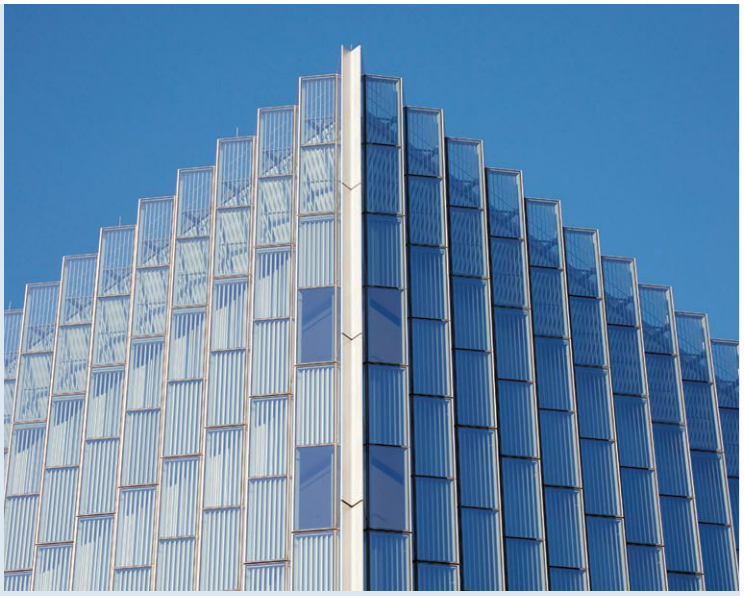
"Light is at the very core of the design concept," says Hartman. "It is a metaphor for judicial fairness and is meant to create an atmosphere of calm and equanimity, in spaces that are often highly charged for people who come here. And, equally important, the natural light radically reduces the need for artificial light and is key to the building's high-performance environmental strategy." From 900 solar panels on the roof to recycled graywater for irrigating the garden, the courthouse is expected to be certified LEED Platinum.

While administrative and federal marshal facilities occupy the first few floors, the courtrooms begin on the fifth level, with two pairs on opposite sides of each floor, for a total of 24 courtrooms in the building. Those upper reaches of the courthouse include light-filled lounge areas linked by staircases, at the front end of the building, overlooking the city.

American white oak millwork brings warmth to the fairly traditional courtrooms, but the architects have ingeniously brought in daylight via interior clerestories at the back of each room—drawing light from the atrium—and above and behind the judge's bench, where sunlight spills in from a private corridor. Those corridors run along the interior perimeter of the curtain wall and lead to the judges' chambers and their dedicated elevators. The courtroom ceilings are canted out, at front and back, to further disperse the light, while the walls of cast

LIGHTING THE WAY The courtrooms' design includes strategies to bring in light via clerestories off the atrium (above) and behind the judge's bench (top), from the private corridors that ring the perimeter of the building and have a flexible shading system (right).

Pleats, Please



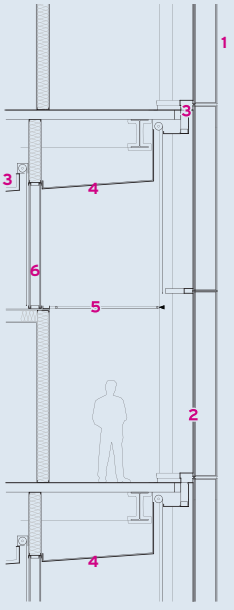
SOM CONCEIVED the new U.S. Courthouse in Los Angeles as a glass cube cantilevered from a solid base. The idea was that the transparency of the building's glazed facade, and the sunlight that would stream through it, would serve as metaphors for the justice system. But there was one major obstacle: the urban grid in this part of the city is 38 degrees off the north-south axis, offering a less than optimum solar orientation for control of heat gain and glare, explains Jose Palacios, an SOM design director.

The architects' solution was a pleated facade made of 6-foot-wide components that are triangular in plan and span the building's unusually tall (20-foot) floor-to-floor height. The typical curtain wall module, divided into lower and upper portions by an intermediate mullion, has two stacked insulated glazing units (IGUs) that face north or south—depending on the orientation of the facade—and two that face roughly east or west. The bottom half of each module comprises one vision panel and a second panel that Palacios describes as a "shadow box." Here vertical aluminum louvers and an insulation layer are inserted behind the IGU in order to mitigate the undesirable effects of the sun. The upper part of each unit essentially repeats the lower half, but includes an aluminum back panel in order to conceal a mechanical plenum.

This curtain wall approach, which cuts incident solar gain almost in half compared to a more conventional glass facade, is slightly adapted throughout the building to achieve different interior effects. For instance, at perimeter corridors just behind the courtrooms, where the ceilings are high and the mechanical plenum shallow, the upper aluminum back layer is omitted. This allows daylight to pour into the corridors, bounce off stretched fabric lightshelves, through interior clerestory windows, and into the courtrooms. Automated roller shades at the facade diffuse sunlight when it is at its most intense, while a second set of motorized shades at the clerestories gives each judge control over the environment in his or her courtroom.

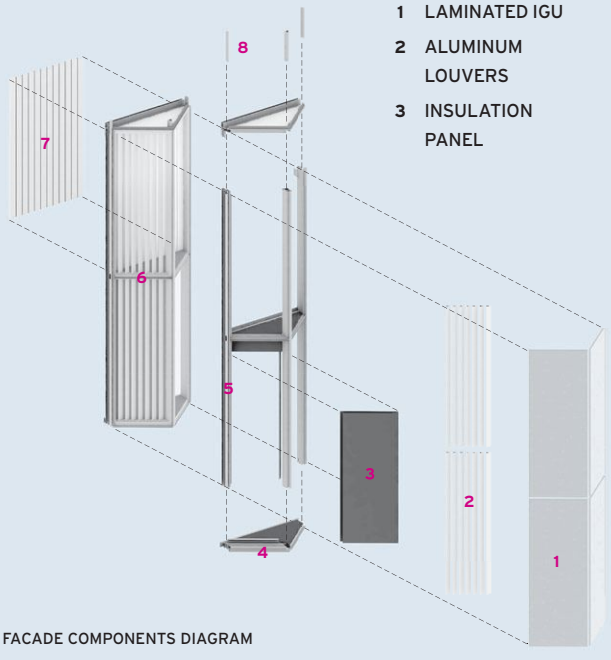
In addition to helping modulate daylight and reduce solar gain, the facade strategy offers other benefits. The triangular shape, which has an inherent structural stability, allowed the designers to keep the mullions relatively thin despite stringent requirements for blast resistance and seismic drift, says Palacios.

What's more, because the curtain wall was unitized and made up of a kit of parts, it could be installed quickly and efficiently. Speed was critical because of the courthouse's unusual structure, with slabs suspended from a hat truss at the roof. The configuration prevented installation of the curtain wall before the building had been topped out and meant that the project could not employ a typical construction sequence, where facade work follows closely behind pouring of the floor slabs. The highly repetitive nature of the curtain wall was key to keeping courthouse construction on track, despite the project's "blistering pace," says Palacios. —*Joann Gonchar, AIA*



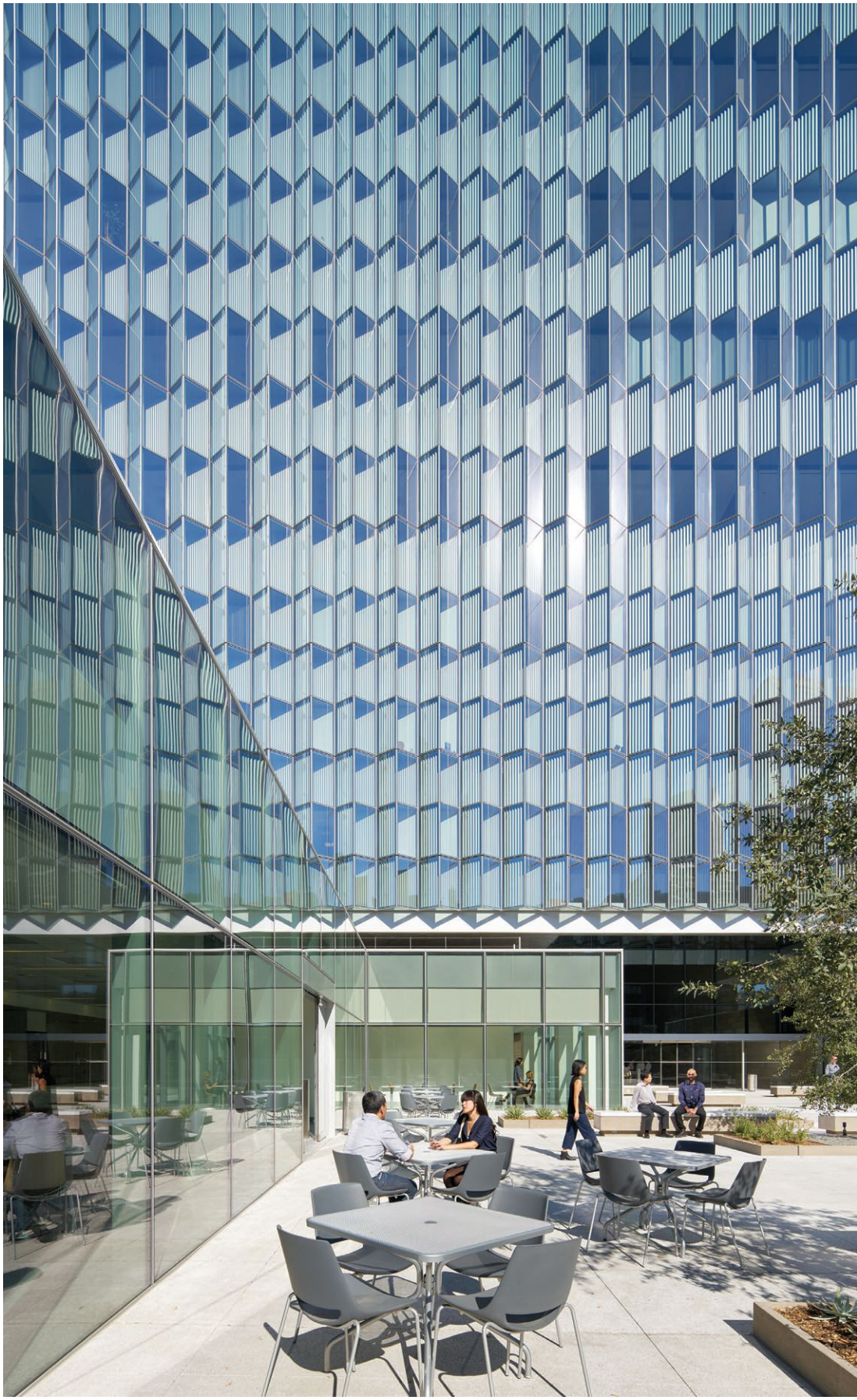
1 ALUMINUM CURTAIN WALL SYSTEM
2 LAMINATED IGU
3 ROLLER SHADE
4 DRYWALL FASCIA AND CEILING
5 FABRIC DAYLIGHT REFLECTOR
6 ACOUSTICAL GLAZING

FACADE SECTION AT COURTROOM



1 LAMINATED IGU
2 ALUMINUM LOUVERS
3 INSULATION PANEL
4 STACK JOINT
5 VERTICAL MULLION
6 INTERMEDIATE MULLION
7 EXTRUDED ALUMINUM BACK PANEL
8 BLAST SPIKES

FACADE COMPONENTS DIAGRAM



COURT IS ADJOURNED Court officials and other visitors have access to a terrace at the back of the atrium, which is flanked by a pair of elegant glass pavilions—one for dining and one for the jury room.

gypsum, with soft vertical folds, also enhance the light. "Before, I was in a very dark courtroom, with low ceilings, and always felt as if I was sort of in a dungeon," says Margaret Morrow, the former U.S. District judge who represented her fellow judges throughout the design process. "It just improves the mood in the courtroom to have it be so light and airy."

When SOM won the commission, Morrow presented the architects with a list of 10 essential principles, including "High Sustainability" and "Bring Best Value for Taxpayer!" Two goals especially stand out: "Must Fit the Community" and "21st-century and Timeless Design." These are not easy benchmarks to attain in any design, but the verdict is in. The L.A. courthouse has more than met the court's high standards of proof on all counts. ■

credits

ARCHITECT: Skidmore, Owings & Merrill – Craig Hartman, design partner; Paul Danna, Jose Palacios, design directors; Michael Mann, managing director

DESIGN BUILD PARTNER: Clark Construction Group – J. Marc Kersey, senior vice president; M. Marshall Singh, project executive; Greg Groleau, vice president

ENGINEERS: Skidmore, Owings & Merrill (structural); Syska Hennessy Group (m/e); Southcoast Engineering Group (plumbing)

CONSULTANTS: AA Architecture Interior Planning (accessibility); AECOM (courts planning, LEED, security); Applied Research Associates (blast resistance); HLB Lighting Design (lighting); Newson Brown Acoustics (acoustics); Mia Lehrer + Associates (landscape)

CLIENTS: United States General Services Adminstration (GSA); Pacific Rim Region United States District Court; California Central District United States Marshals Service

SIZE: 630,000 square feet

COST: $317 million

COMPLETION DATE: August 2016

SOURCES

WATERPROOFING/GREEN ROOF: Henry Company

CURTAIN WALL: Benson Industries, C&C Glass, Larson Engineering

STONE CLADDING: Indiana Limestone, Carrara Marble

CURTAIN WALL AND SKYLIGHT GLASS: Viracon

GLASS RAILINGS: C.R. Laurence

LIGHTING: Spectrum, Cooper Lighting Metalux (downlights); Juno Lighting, Birchwood (task lighting); Bega, Zefiro, Efficient Tec, BK Lighting, Boca Flasher, Lithonia (exterior); Lumini (specialty); Lutron (dimming system)

ENERGY: Siemens (building automation system); Solar World, GLO/Helix, Belco (photovoltaic system)

Waterdown Library and Civic Centre | Hamilton, Ontario | RDHA

Ramped Up

A slablike building offers multilevel spaces that combine a traditional library with local government offices and community rooms.

BY JOSEPHINE MINUTILLO

PHOTOGRAPHY BY TOM ARBAN

Following its award-winning renovation and addition to the historic Bloor Gladstone Library in central Toronto in 2009, RDHA finds that libraries have become something of a calling card. The nearly hundred-year-old architecture firm, based in Toronto, has completed five more libraries in and around the provincial capital since then, with two others currently under construction—including one that will be entirely without books.

Waterdown is a small community in the city of Hamilton, 50 miles southwest of Toronto. Its location along the Niagara Escarpment—a massive rock ridge overlooking Lake Ontario—inspired RDHA's design for the new 23,500-square-foot Waterdown Library and Civic Centre, which replaces a much smaller municipal building. The new building reads as a one-story structure, and it is essentially just that, but one that skillfully incorporates six levels. Within those levels, spaces for traditional library functions exist side by side with community recreation rooms, offices for a heritage society archive, and local government and police service outlets.

Whether entering at the street-facing facade or from the parking lot at the rear of the building—landscaped with a flowering orchard and bioswales as part of the building's sustainable strategies—the interior's design, with its sequence of ramps, offers an "architectural promenade," according to RDHA principal and design director Tyler Sharp. It culminates in an elevated reading atrium with south-facing views that, on a clear day, extend to the lake beyond. During summer months, an outdoor reading terrace, linked to a small, sloping green roof, offers similar views and connection to the site.

The topography of the building, which is situated at a high point

FLAT OUT The main floor cantilevers slightly over the sloping site (opposite). The west facade is clad in 4-inch-thick panels of locally sourced limestone, installed at an angle over select portions of the exterior wall to shade windows of staff offices and a reading room (above).

where the ridge begins to drop down toward the lake, reflects the geography and is marked by a series of stepped program areas. The architects enhanced the site—it slopes over 8½ feet from the back of the building to the street—with engineered fill to lift the slablike structure. Its southwestern corner cantilevers over 10 feet in two directions like a rocky outcrop. Large 4-inch-thick locally quarried limestone panels clad the exterior wall on one side of it, punctuated by 16-foot-high fins, suspended at an angle to provide shade to the fenestration behind them. "The language of facets and heavy stone came from the escarpment," says Sharp.

Despite that monolithic presence, most of the rest of the building—constructed to be both energy-efficient and economical—features long swaths of floor-to-ceiling glazing that, along with three generous sawtooth-type skylights above the open stacks and reading atrium, create an expansive, daylight-filled interior. (Light-harvesting keeps the slim-profile fluorescent tubes that are artfully incorporated throughout the ceiling turned off for much of the day.) A ceramic frit pattern on the double-glazed, argon-filled, low-E glass facade panels provides some solar shading, while long planks of solid Douglas fir mounted like baffles on the interior side of the curtain wall provide additional sun protection along the south facade.

The Douglas fir was repurposed from the now demolished Hamilton Central Library. (Recycled, low-VOC, and local materials are thoughtfully integrated throughout the building, as are off-the-shelf products

MAIN LEVEL

0 30 FT.
10 M.

1 ENTRANCE
2 MUNICIPAL SERVICES
3 CHILDREN'S AREA
4 MULTIPURPOSE ROOM
5 CIRCULATION DESK
6 OFFICES
7 BOOK-SORTING ROOM
8 COMPUTER LAB
9 STUDY CARRELS
10 QUIET STUDY ROOM
11 READING ATRIUM

LIGHT FILLED The street-facing side of the building is completely glazed and features an outdoor terrace above the entrance. Inside, a series of large scooped skylights bathe the stacks and reading areas in sunlight (opposite, bottom and below).

credits

ARCHITECT: RDH Architects (RDHA)

ENGINEERS: WSP Halsall (structural); Jain and Associates (m/e); Valdor Engineering (civil)

CONSULTANTS: NAK Design Group (landscape)

GENERAL CONTRACTOR: Bondfield Construction

CLIENT: The City of Hamilton

SIZE: 23,500 square feet

COST: $6.1 million

COMPLETION DATE: August 2016

SOURCES

STRUCTURAL STEEL: Gensteel

LIMESTONE: Betz Cut Stone

GLASS PARTITIONS, RAILINGS, AND ENTRANCES: C.R. Laurence

CURTAINWALL: Aerloc Industries

SKYLIGHTS: Slimlite Slylights

ACOUSTICAL CEILINGS: Armstrong

FURNITURE: Teknion; Vitra; Artifort; Nienkamper; Plan B

LIGHTING: Bocci (downlights); Bartco (interior ambient); Philips (exterior)

CARPET TILE: Interface

that the architects customized for specific uses.) The same wood was also used to clad select interior walls, including the one lining the staff offices and reading room along the west side of the building, and to create the bookcases and custom benches. More than that, its orange hue determined the distinctive color palette for the interior finishes.

The cheery furnishings, which were selected by the architects and include classic pieces designed by Pierre Paulin and Verner Panton, dot both the adult and children's areas. The playful children's section, closest to the rear entrance, offers child-friendly technology and activities, but is not enclosed or physically separated from the rest of the library. It is, however, acoustically isolated by the ceiling that dips above it. Its dramatic pyramidal form not only conceals material that dampens sound but scales the space to the kids.

Within the large, open main space, RDHA has carved out a number of intimate areas. The children's section represents the first of four

SOUND OFF Most visitors to the library enter from the parking lot at the rear of the building, where an atrium offers seating and access to the library on one side and municipal offices on the other (opposite). The children's area is acoustically separated from the rest of the library's open spaces by a pyramid-like ceiling (above).

terraces, each slightly higher than the last. The remaining three, for the teen collection, the adult collection, and the reading atrium, at the highest point, are punctuated by the scooped skylights above them. Quiet study rooms in both the teen and adult terraces have load-bearing, laminated glass walls that support seemingly heavy ceilings, which block sound while preserving sight lines.

People of all ages mingle within the building—whose various spaces are reached through accessible, sloping walkways, covered in polished concrete like the rest of the floors. A multipurpose room (which features a demountable glass partition) beside the children's area, a computer lab at the opposite end of the building, and a large, flexible community room at the lower, street-level entrance, are mainly occupied by seniors, who come to read, socialize, or even take a yoga class.

The number of visitors to the library has, in fact, increased significantly since the new building opened last year. "Membership has already grown by 3,000," according to Dawna Wark, the manager of this and nearby branches. The collection, too, grew slightly when the library acquired the materials of a rural branch that closed. A state-of-the-art book sorter, located beside the staff offices but controlled remotely by the manufacturer in Germany, keeps all the circulating books in order.

Libraries have become places that contain much more than books—and in some cases, no books at all. The Waterdown branch, by combining a variety of functions—educational, civic, and social—within a bright and welcoming space, has become a significant center for its small community, and the greater region. ■

Supreme Court of the Netherlands | The Hague | KAAN Architecten

Grounds for Justice

A grand, gracious courthouse is a fitting base for the Dutch judicial system.

BY HUGH PEARMAN

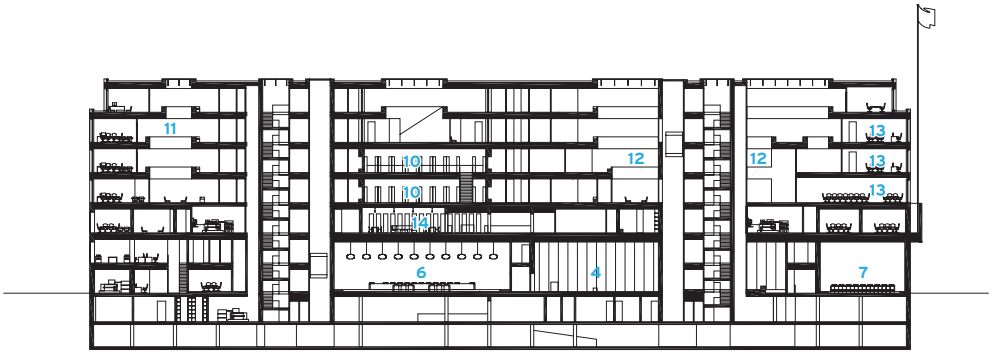
PHOTOGRAPHY BY FERNANDO GUERRA

The Hague (Den Haag) is the administrative core of the Netherlands—though not the capital, which is Amsterdam. The Dutch government and king are based in The Hague, as is the International Criminal Court of the United Nations. But there is another important court in town, one that is the culmination of the country's own legal system: the new Supreme Court of the Netherlands designed by KAAN Architects.

The firm was part of a contractor-led consortium—which also maintains the $63 million courthouse—that won the 2012 competition to design and build the judicial building. In a city full of important structures, many historic, this one had to have presence. The court, explains architect Kees Kaan, who runs his firm with partner Vincent Panhuysen, had been housed in a variety of buildings since its founding in 1838, and, more recently, in particularly unsuitable ones, largely invisible to the public. Not anymore. Completed in January 2016, its first purpose-built home in decades is on a broad tree-lined street close to the historic center, backing onto a canal. It stands on an ancient route between the Nordeinde Palace in town and the Huis Ten Bosch

MODEL EDIFICE The delicacy of the buildling's facade speaks to the tall trees along the street, locally nicknamed "green cathedral" (above). Six 19th-century statues of famous Dutch legal scholars are situated outside of the lobby (right), where a wall proclaims the Supreme Court's Latin motto in large stainless-steel letters; it warns of war when law breaks down.


A DEFICUNT INCIPIT BELLUM



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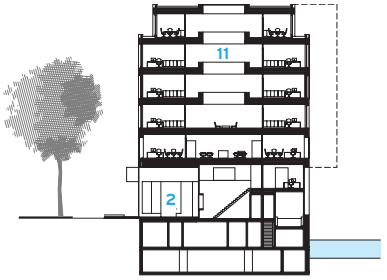
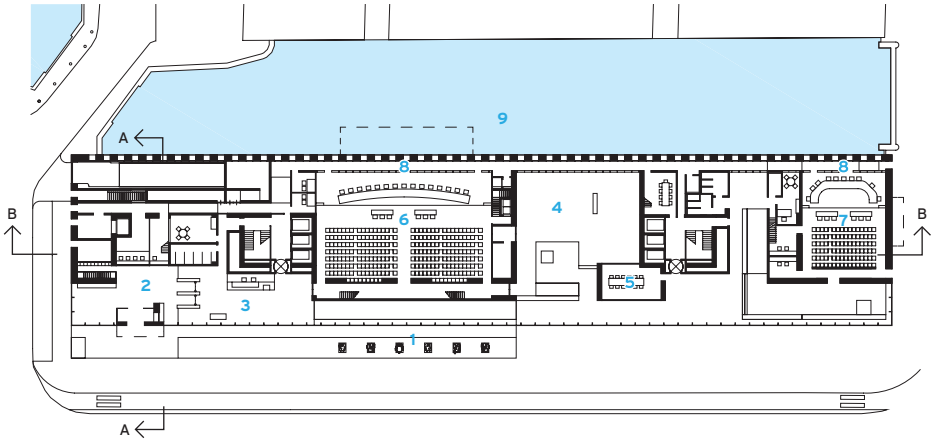
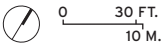


SECTION A - A



GROUND-LEVEL PLAN



FOURTH-LEVEL PLAN

1 HISTORIC LAWMAKERS' STATUES
2 ENTRANCE HALL
3 RECEPTION DESK
4 RECEPTION HALL
5 PRESS ROOM
6 MAIN COURT ROOM
7 SMALL COURT ROOM
8 MAGISTRATES CORRIDOR
9 REFLECTING POND
10 LIBRARY
11 HOUSE OF PROSECUTOR GENERAL
12 HOUSE OF SUPREME COURT JUSTICES
13 COUNCIL CHAMBER
14 RESTAURANT

country palace, which is now in an extensive urban park. Due to its location, the size and overall shape of the building was pre-determined by city planners: a long rectangular building where previously there had been three 1960s office blocks.

How did the architects manage to think outside this box—one that measures 341 feet wide by 72 feet deep by 89 feet tall? The solution begins with the beautifully detailed exterior divided into three horizontal bands with full, double-height glazing at the ground level, followed by a single floor of pale limestone with punched windows, then four floors above that of tall, narrow double-glazed units framed in white painted steel. The top floor steps back as an attic story. The elegant fenestration pattern of the upper floors was designed to harmonize with the trees along the verdant street, which is locally nicknamed the "green cathedral."

The entire length of the front facade is structurally "scooped out" at grade. There are no columns, just the enclosing glass, thick and laminated for security and braced from behind by structural glass fins. This band of reflective, transparent glass is broken by high-security steel entrance doors, which are necessary but visually clumsy.

A double-height limestone colonnade runs along the rear facade, which faces the canal. This is not a walkable portico but rather the expression of deep-set windows. The only public access along the back is by canal boat from the waterway. Here the bulk of the building breaks out of the box with what Kaan calls a "backpack"—a rearward projection providing larger floor plates to accommodate a library, restaurant, and administrative offices for 350 employees on the upper floors.

STRUCTURAL INTEGRITY A cantilevered box-frame construction above the double-height lobby (right) enables its long public gallery to be open and column-free. The large main courtroom (bottom), with its rich oak floor and judges' bench, is bathed in gentle daylight through a translucent-alabaster rear wall.

The lobby runs along the length of the front elevation, with public areas and two courtrooms behind. These halls of justice—one large, one small—are largely surfaced in a warm oakwood and enjoy diffused north light transmitted through an alabaster wall that backs the bench in each. Circulation for the judges and lawyers is behind this. What makes all these clear-span spaces possible is revealed on the floor above, a box frame of one-story-high steel girders running transversely. Most are hidden in the crosswalls, but one, a full Vierendeel type with vertical stanchions, marches proudly right across the restaurant from side to side. This floor forms the structural "tabletop" that allows for the deep cantilever above the ground-level lobby and the large column-free spaces of the courts. There are two parking sublevels.

Above the mighty girders, from the third floor to the sixth, the building is divided into what Kaan calls "houses" for the administrative sections of the court. Four skylights illuminate atria in the houses, each daylit

MATERIALS RULE One of the atria (left) is clad in striped Turkish marble. Etched marble tile over the Council Chamber entrance depicts a historic map of The Hague (above). The staff restaurant is surfaced in oak (bottom); the rear facade faces a canal (opposite).

space clad with a different patterned or hued marble to create a unique identity. Surrounded by traditional glass-doored offices and conference rooms, which line the window walls and are necessary for privacy, these voluminous atria provide a welcome relief, with casual breakout areas and meeting places for employees and visitors. Kaan sees them as being similar to the Dutch "Golden Age" tradition of grand top-lit staircases.

The institutional importance of the building is signified out front by a row of 19th-century bronze statues of Dutch legal scholars, which had been preserved from the previous locations. Raised on a low plinth along the edge of the street, the six sculptures align with the main courtroom inside, as well as with a wall in the lobby that contains the Latin motto of the Supreme Court in large stainless-steel letters. It translates as, "Where legal justice falls short, armed struggle begins."

The extensive use of limestone, marble, and wood, along with other high-quality materials, gives a sense of tradition, gravitas, and longevity to the clean-cut Dutch modernist aesthetic. That, combined with audacious structural engineering, sends a clear message. Never mind the uncertainties of the world—this place is here to stay. ■

credits

ARCHITECT: KAAN Architecten – Kees Kaan, Vincent Panhuysen, Dikkie Scipio, architects

ENGINEERS: ARUP (structural and mechanical); BAM Bouw en Techniek (electrical and plumbing)

CONSULTANTS: DGMR (fire, comfort, security); Level Acoustics (acoustics); CBB (building control)

GENERAL CONTRACTOR: Consortium Poort van Den Haag; BAM Bouw en Techniek

CLIENT: Central Government Real Estate Agency

SIZE: 194,000 square feet

COST: $63.4 million

COMPLETION DATE: January 2016

SOURCES

STONE: Bateig (limestone); Kolen Natuursteen (floor and wall tile, and marble)

GLAZING: Scheuten (glass); Oskomera (metal framing)

LIGHTING: Philips; Flos; Luceplan; ETAP; Modular

DOORS: Boon (entry); MHB (interior)

HARDWARE: FSB; Dorma

INTERIOR FINISHES: Baswaphon (acoustic ceilings and stucco); HC KP (climate ceilings); Technoplanning (wood); Interface (carpet tiles); Van Besouw Tapijt (carpet); Vitra, Arper, Arktis (furniture)

Bibliothèque Alexis de Tocqueville | Caen, France | OMA

The X Factor

A crisscrossing library marks the spot for a regional center along a redeveloping riverfront.

BY JOSEPHINE MINUTILLO

PHOTOGRAPHY BY IWAN BAAN

"Books are over," Rem Koolhaas asserted slyly at the opening of the Bibliothèque Alexis de Tocqueville in Caen, France, on January 13. "That's what everyone kept saying. Happily, on the contrary, books will probably exist forever."

As speculation over the future of books mounted with the dawn of the digital age, Koolhaas's OMA was involved in the design of a dozen libraries—"one of the oldest typologies," Koolhaas called it, "a pure hybrid of ancient and modern." Many of the firm's library designs went unrealized, including its 1989 competition entry for the Bibliothèque National de France, in Paris, where public spaces were represented as voids carved out of a solid block of information. On the other hand, the Seattle Central Library, completed by OMA in 2004, with its intensely researched organizational system and faceted form, is arguably among the best buildings anywhere in the last 20 years.

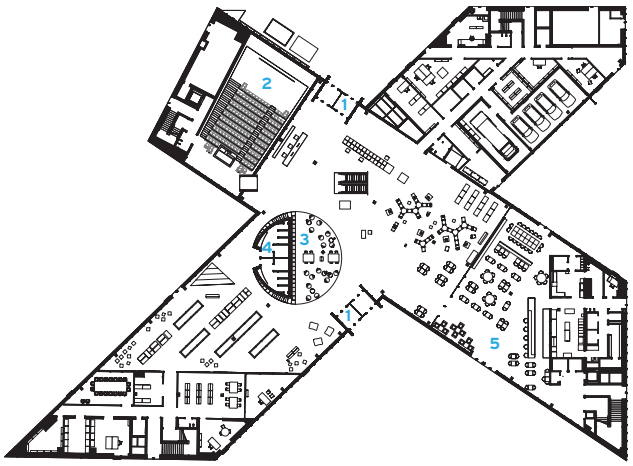
As architecture, the library in Caen, in Normandy, hardly lives up to its American sibling. As part of a larger development, it is meant to be a monumental presence where the Orne River meets the Canal de Caen. That area has been undergoing a transformation since 2010, long after port activities were abandoned. A master plan by Dutch firm MVRDV provides the framework for the waterfront regeneration, and several striking buildings have risen recently against the backdrop of the city's traditional structures. Among them, a cubic courthouse designed by Hauvette/Baumschlager Eberle (2016) and a cupola-topped research and innovation center by Bruther Architecture, called Le Dôme (2015), sit just across from OMA's X-shaped assembly.

GLASSY-EYED The heavily glazed three-story building (above) features a 20-foot-tall second floor that acts as the social hub of the library. The windows on that level comprise enormous curved-glass panels that slightly distort views in all directions to the outside.

The X parti, according to OMA, responds to the urban context, with each of the four protruding arms pointing to a landmark in Caen: the historic sites of the Abbaye-aux-Dames to the north and the Abbaye-aux-Hommes to the west, the central train station to the south, and the area of new construction to the east. In reality, that directional emphasis gets lost in the experience of the building as each wing culminates in small rooms rather than vast city views.

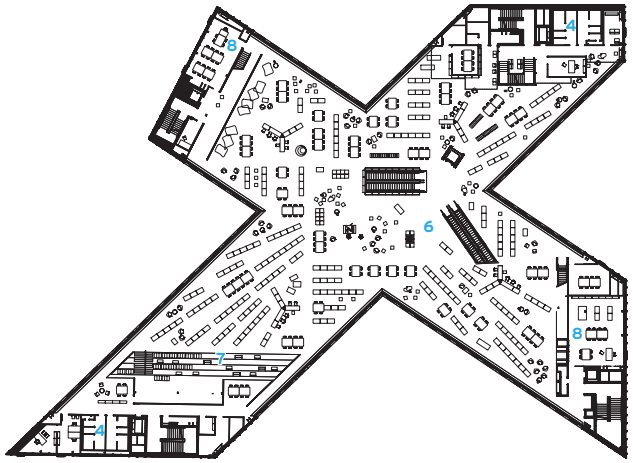
Where the geometry of the two intersecting axes does succeed is in the main space carved out of its center. A 20-foot-high second floor—sandwiched between the reception area, restaurant, and 150-seat auditorium on the ground floor, and the children's area and offices of the top floor—is a hub of activity, of the traditional and digital variety. Here the majority of the circulating books are housed side by side with multimedia resources, within movable cases made of a translucent resin. (Of the library's 1 million physical volumes, 90 percent are out of sight but still accessible, stored in compact shelving in the basement, which is protected from river flooding by an innovative waterproof membrane applied on the inner side of its concrete walls.)

A nearly 200-foot-long truss on the floor above allows the main central space—what OMA partner and project leader Chris van Duijn calls the "beating heart of the building"—to be vast and column-free. Floor-to-ceiling windows make it bright and expansive, but also a

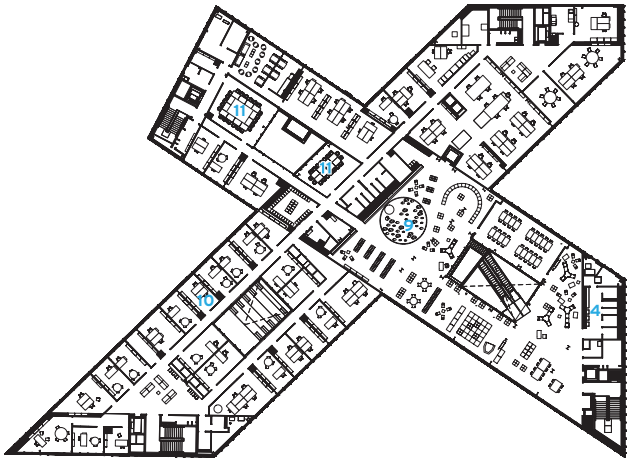


GROUND-FLOOR PLAN

0 30 FT.
10 M.



SECOND-FLOOR PLAN



THIRD-FLOOR PLAN

1 ENTRANCE
2 AUDITORIUM
3 PRESS KIOSK
4 BATHROOM
5 RESTAURANT
6 CENTRAL READING ROOM
7 BLEACHERS
8 BREAKOUT ROOM
9 CHILDREN'S AREA
10 OFFICES
11 CONFERENCE

touch unexpected. The glazed panels are as wide as 7 feet and span the full 20-foot height without mullions, pushing the limits of glass technology. Rather than going with extremely thick glass to withstand loads, the architects opted for thinner, curved glass, giving a somewhat distorted view to the outside, like subtle fun house mirrors in reverse. The windows are actually composed of two panes of glass—the inner one flat and the outer concave. The air space between them can be as wide as 15 inches at the center of the bulge.

Above the windows, a slick perforated-metal ceiling adds to the drama of the space while concealing acoustic insulation. Throughout, long tables mingle with comfy lounge seating and large floor pillows to provide visitors extra relaxation while perusing a book. Private reading areas, bleachers, and breakout rooms occupy the ends of the four wings, each of which represents separate disciplines—social sciences, science and technology, literature, and the arts.

The 126,000-square-foot library had the unfortunate timing of opening in the dead of winter, with none of the landscaping for the surrounding park and waterfront, designed by Michel Desvigne, completed. One can only imagine how that will help mitigate the awk-

credits

ARCHITECT: OMA

ASSOCIATE ARCHITECTS: Barcode Architects, Clement Blanchet Architecture

CONSULTANTS: Elioth (sustainability and facade); Robert-Jan van Santen, VS-A group (facade); Iosis, Egis Bâtiments (engineering); RHDHV (acoustics)

CLIENT: Communauté d'agglomération Caen La Mer

SIZE: 126,000 square feet

COST: $70 million

COMPLETION DATE: January 2017

SOURCES

CONCRETE STRUCTURE: Zanello

STEEL FRAME & CONCAVE GLASS: Gagne

FACADE: Seralu

ELEVATOR: Otis

AUDITORIUM SEATING: Quinette Gallay

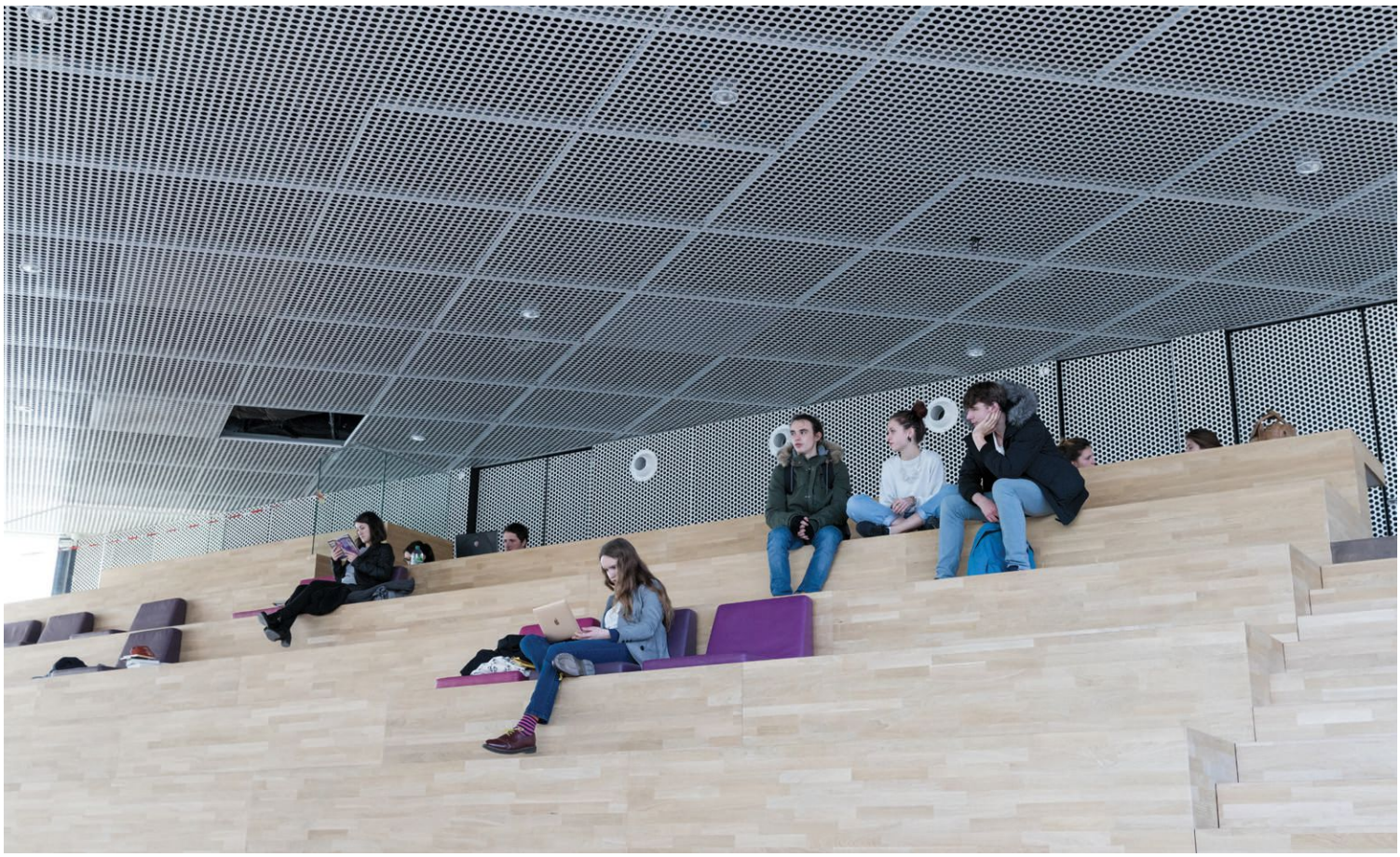
CURTAINS: Inside Outside

MOBILE BOOKSHELVES: Tixit

FURNITURE: Vitra

METAL CEILING: Volutique

HIT THE BOOKS Located at the tip of a peninsula where the Orne River meets the Canal de Caen, the X-shaped building contrasts sharply with Caen's traditional Norman architecture (above). Bleacher seating provides casual areas for reading and socializing, and views over the vast second-floor space (opposite, top and bottom).

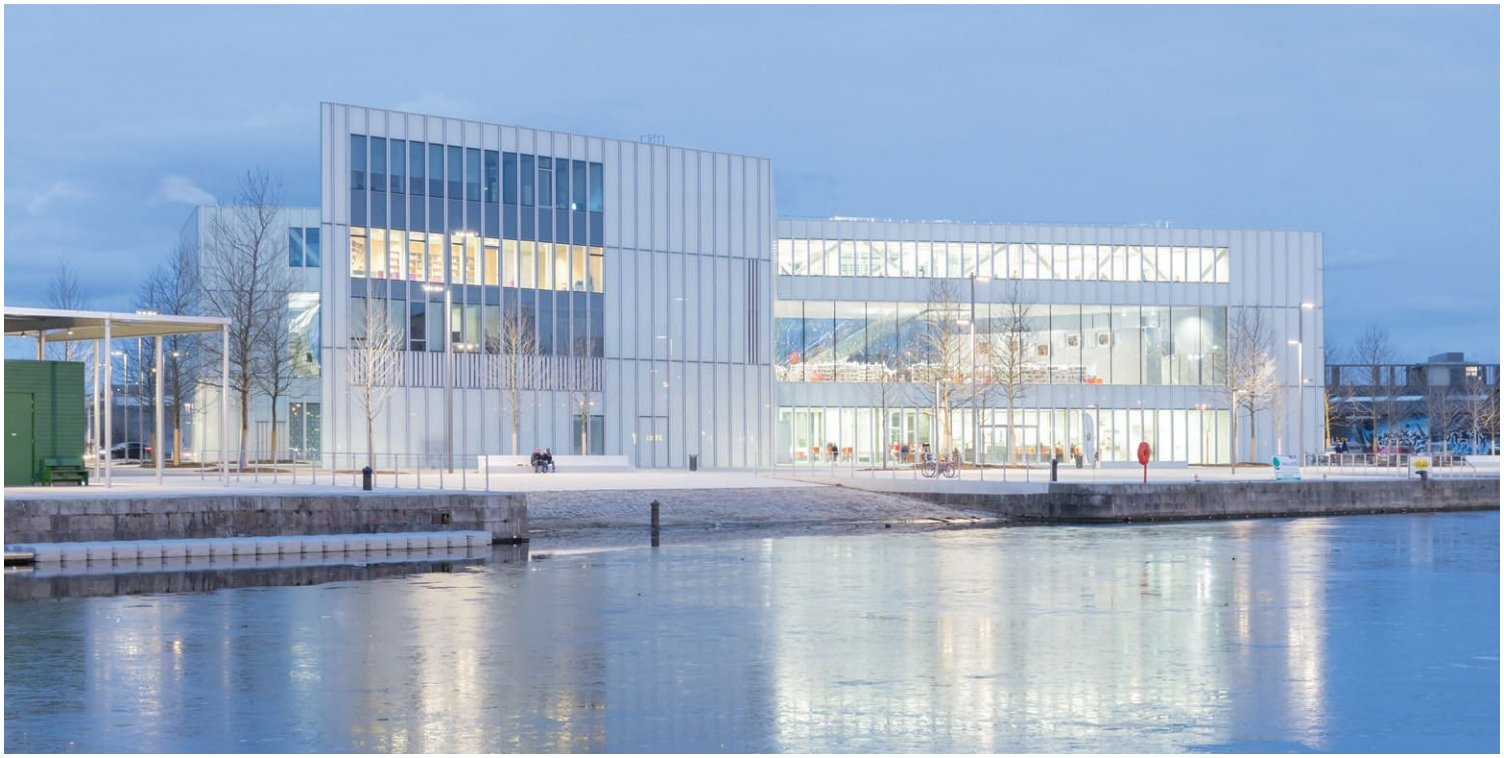


OLD AND NEW A "curiosity wall" features reading nooks along with portraits of historic figures (left). Movable resin shelves house books and digital resources (above). The new building is a landmark along the waterfront within the center of the city (opposite).

wardness of the triangular voids between wings when it grows in. Regardless, the X shape feels more like an early gesture that was never fully developed rather than an optimum solution for this particular site or program.

"Libraries reflect society in that moment," van Duijn commented. The namesake for this one, the 19th-century diplomat and writer Viscount de Tocqueville, was an ardent supporter of liberty, best known for his work *Democracy in America* (1835). In the short time since it opened, the building that bears his name has quickly become a social condenser, uniting people of all backgrounds and education levels. "This was never thought to be just a library to house books, but a building that was truly public and did not exist in this city before," says van Duijn.

OMA's next library, the Qatar National Library, opens later this year in Doha. ■



Emergency Medical Service Station 50 | Queens, New York | Dean/Wolf Architects

To the Rescue

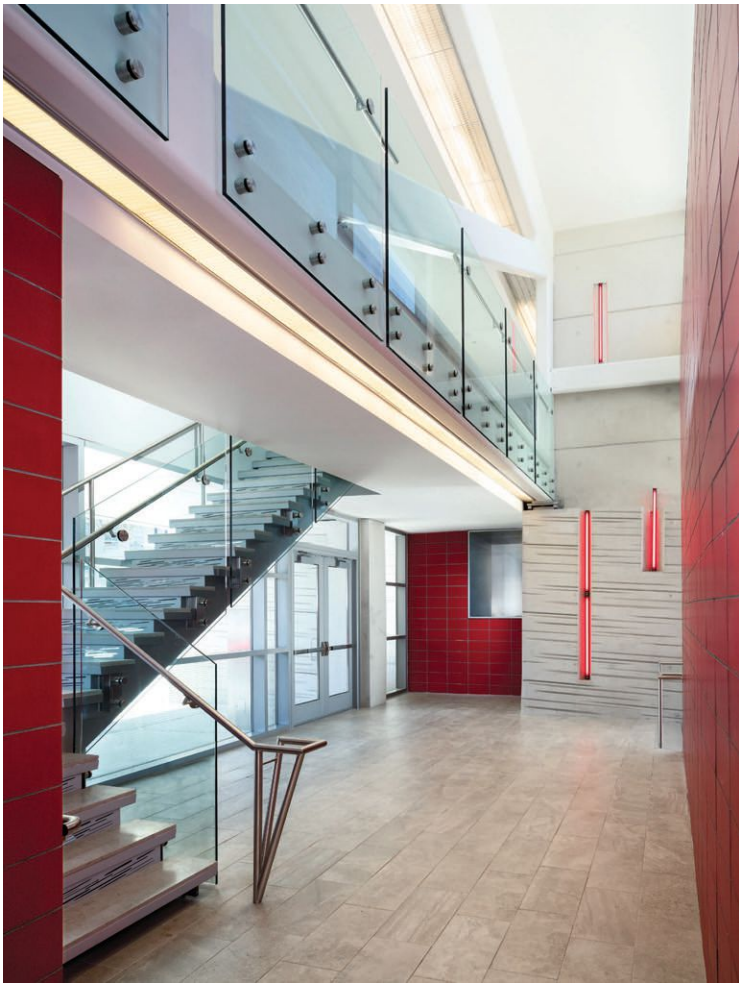
An EMS station brings innovative design to a quiet residential neighborhood.

BY MIRIAM SITZ

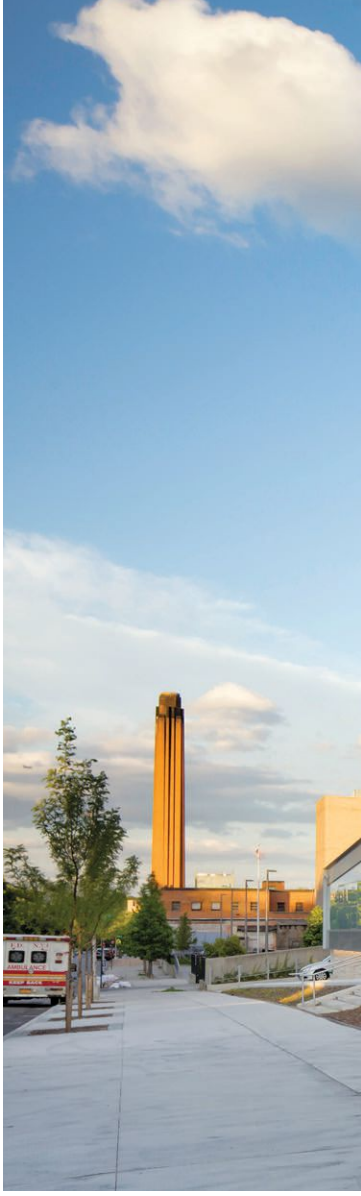
PHOTOGRAPHY BY PAUL WARCHOL

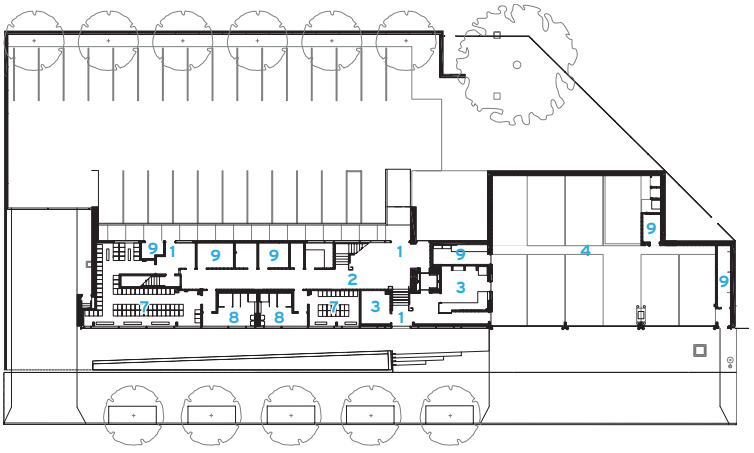
With its gleaming reflective surfaces and sleek, low-slung form, Emergency Medical Service Station 50 in Queens, New York, cuts a powerful figure within the surrounding enclave of modest single-family houses. Unlike the city's other stations—utilitarian in nature and not notable for intrepid design—EMS 50 is in a class of its own. Planned over 10 years ago by New York's Department of Design and Construction (DDC), the 14,000-square-foot facility was designed to house not just the standard team of emergency medical technicians and paramedics but also EMS's district office. Thanks to this dual purpose, and a generous $22 million budget, EMS 50 would be the borough's largest station and a showpiece of the DDC's Design and Construction Excellence 2.0 program.

Aiming to upgrade the quality of major municipal capital projects, the Design and Construction Excellence program preselects a group of firms every three years, inviting them to submit qualifications and mini-proposals for public building and infrastructure projects. According to the DDC's chief architect, Margaret Castillo, the department often includes firms with no prior municipal experience, which can bring fresh perspectives to city projects. The year that the EMS 50 project was ready to launch, one such firm was Dean/Wolf Architects —a New York practice doing primarily high-end residential work. "The

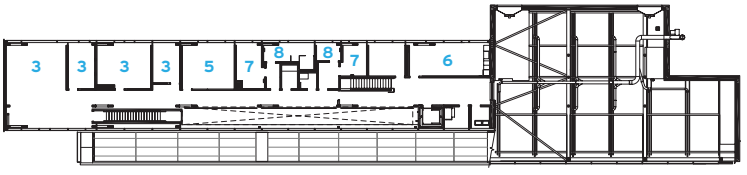


SWEET RELIEF Form liners allowed the architects to create embossed patterns on the cast-in-place concrete, which is used on both the interior (above) and exterior (left) walls of EMS 50.





GROUND-FLOOR PLAN



SECOND-FLOOR PLAN

0 30 FT.
10 M.

1 ENTRY
2 LOBBY
3 OFFICE
4 GARAGE
5 CONFERENCE ROOM
6 KITCHEN
7 LOCKER ROOM
8 RESTROOM
9 STORAGE

DRIVE IN Staff members park in a lot behind the building, protected by a deep overhang (opposite). A loud alarm sounds throughout the facility each time the giant, FDNY-red garage doors open, revealing the emergency-vehicle bays (above).

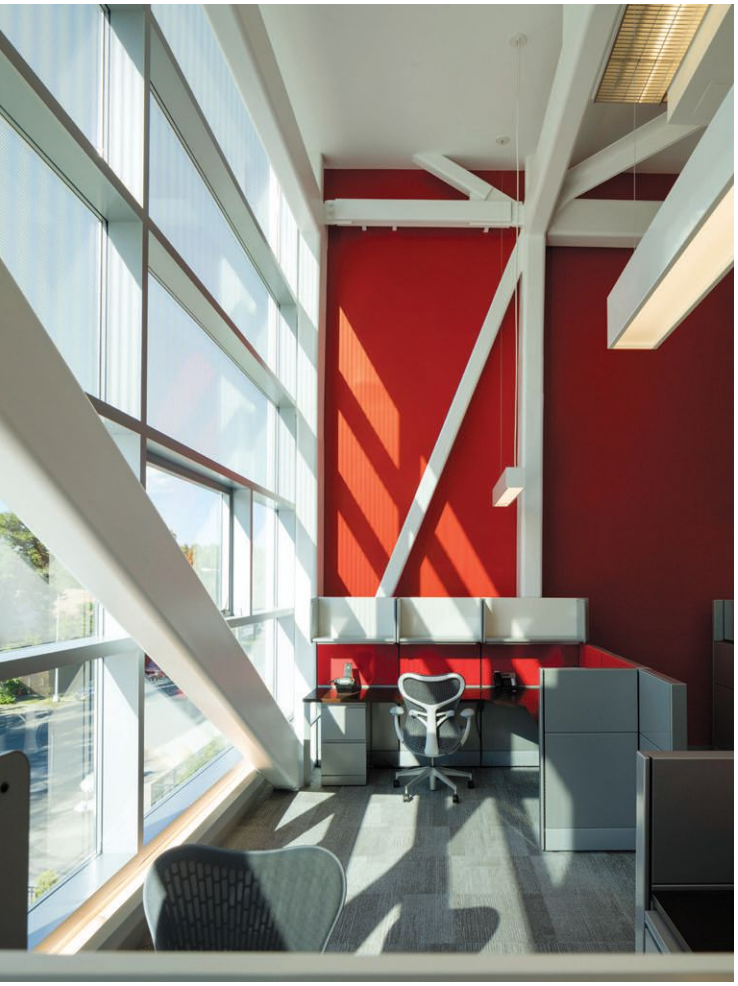
scale and complexity of the project was really exciting," remembers partner in charge and project director Kathryn Dean. "And the site had topography, which is unusual in an urban situation." The firm won the commission in 2005, and, though the project was put on hold during the financial crisis, by the summer of 2016 the station was up and running.

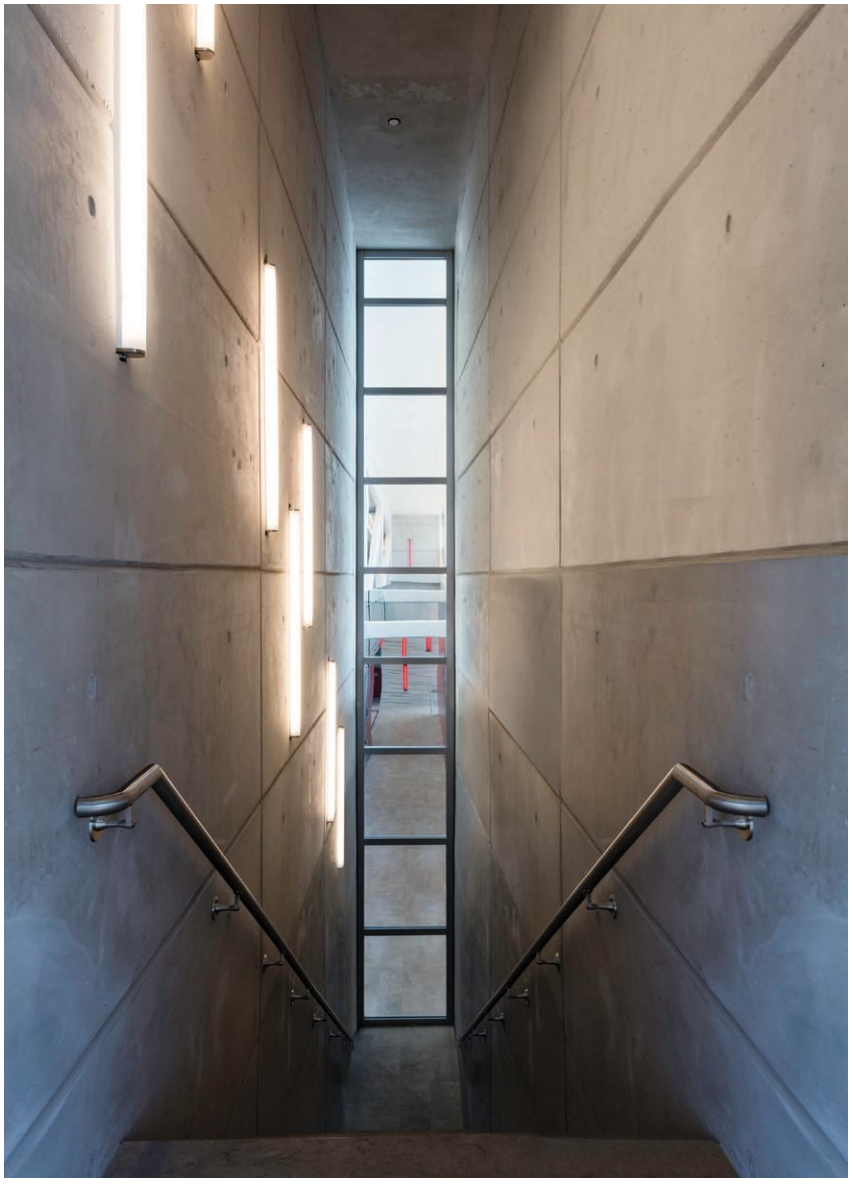
The sloping site in the residential Jamaica neighborhood presented a slew of challenges. The team's design had to relate not just to the wood-frame houses, but also to a nearby high school and a large, decrepit hospital. "You had things face-to-face that didn't belong together," says Dean. "There was an opportunity for us to heal that." The team also learned that the site was contaminated and required abatement. On top of all this, two underground utility tunnels—one active and serving the adjacent hospital, the other asbestos-laden and abandoned—run beneath the lot, restricting the buildable area. "It had every problem in the world," says Dean.

In order to reconcile the different scales of neighboring buildings, while working around the utility tunnels, says Dean, "we had the idea to create a sort of dam: a building that was long in plan, like the hospital, but small in section, like the houses." The architects stacked and offset two bar-shaped volumes on top of each other and slightly pitched their shed roofs toward each other, riffing on the slope of the adjacent street and the roofs of the nearby houses. "I think of it as reversing the entropy of the site," says Dean of the building.

The station's epicenter is the garage—a space bustling with workers restocking ambulances and hosing down gear. The "apparatus floor" (as it's called in EMS-speak) anchors the northwest corner of the 165-foot-long building and has space for 10 vehicles. Around its perimeter are storage rooms, as well as a windowed workspace for the EMS staff on duty. "The officers are able to see all the comings and goings," says division chief Christine Mazzola, who runs the borough's EMS operations, "and have a bird's-eye view on the narcotics," stored in a cabinet just outside the office. Locker rooms and bathrooms on the first floor are dedicated to station staff, who also have access to an upper-story kitchen and lounge on the garage side of the building. The second floor's northeast side, containing the offices of the Queens district staff, forms a 30-foot cantilever that serves as a canopy over the driveway leading to parking at the back. White-painted trusses, visible through the glazing from outside, zigzag through the interior.

To elevate the building type while still meeting the department's functional requirements, Dean/Wolf brought the same occupant-focused approach to EMS 50 that it brings to its private residential projects. "We try to understand the client's identity and form the design around that," says Dean. "Here, we took our cues from the ambulances." In the entry hall, standard fluorescent tubes are oriented vertically and tinted red, recalling streaks of light made by emergency





BIRD'S-EYE VIEW In the upper story's cantilevered portion, district office staff work in an open-plan area (above) with views of the neighborhood streets. A concrete stair with a double-height window (right) looks out to the main lobby.

vehicles as they race down the street. And throughout the building, FDNY red ("They have a particular hue, so we had everything custom matched," explains Dean) is used to accent the concrete block walls, hallway flooring, and the large garage doors.

The building's double-bar form echoes through many aspects of the station's detailing. "We used the basic geometry of the building to create form liners for all the concrete," says Dean. Cast-in-place concrete walls, found on both the interior and exterior, bear a repeating pattern of diagonal and horizontal lines. This same motif is laser-cut into the main stair's metal risers and the elevator ceiling, as well as replicated as a frit on the upper volume's glazing. Four different versions of the frit vary in density, providing more sun-shading at the building's top without compromising transparency. "At night, when the building glows, it's a beacon for the neighborhood," says Dean.

"Dean/Wolf may have been new to this typology, but they were able to understand the needs of the project and this part of New York," says Castillo. As their first public commission, EMS 50 appears to have been the start of something new for the firm, which is now working with the city on a new library in the Bronx. ■

credits

ARCHITECT: Dean/Wolf Architects – Kathryn Dean, partner in charge; Christopher Kroner, associate partner; Charles Wolf, technical partner

ENGINEERS: Hage Engineering (structural); Charles G. Michel Engineering (m/e/p)

CONSULTANTS: Reg Hough Associates (concrete); Lumen Architecture (lighting); Aggleton & Associates, LynStaar (security)

GENERAL CONTRACTOR: Calcedo Construction Corporation

CLIENT: New York City Department of Design and Construction

OWNER: Fire Department of New York

SIZE: 14,000 square feet

COST: $22 million

COMPLETION DATE: May 2016

SOURCES

EXTERIOR CLADDING: Kawneer

MOISTURE BARRIER: WR Grace

GLASS: Viracon

PAINTS & COATINGS: Benjamin Moore; Sherwin-Williams; PPG

PLASTIC LAMINATE: Wilsonart

SPECIALTY METALWORK: Maloya Laser

TILE: Stone Source; American Olean

RESILIENT FLOORING: Armstrong

CARPET TILE: Interface

FURNISHINGS: Herman Miller; Geiger

ELEVATOR: ThyssenKrup

PLUMBING: American Standard; LG

WINDOW SHADES: Draper

VEHICLE EXHAUST: Nederman

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A Thirst for More

Forward-thinking project teams regard water as a precious resource.

By Joann Gonchar, AIA

PHOTOGRAPHY: © PRAKASH PATEL

DRINKING IT IN SmithGroupJJR's Brock Environmental Center in Virginia Beach, Virginia, is the first commercial building in the country permitted to capture and treat rainfall as drinking water.

SOME HAVE declared California's water woes over. As of early last month, precipitation in many parts of the state was on track to make this winter one of the wettest on record. Reservoirs were filling up—so much so that one dam in Northern California seemed on the verge of collapse.

But others say not so fast. As of press time, much of the middle and southern part of California was still considered in moderate to severe drought. And, in fact, the state's Water Resources Control Board announced an extension of its existing conservation regulations on February 8, with prohibitions against practices such as watering lawns after rainstorms and hosing down sidewalks and driveways, citing still-depleted groundwater supplies and the lingering effects of the drought on agriculture, fish, and wildlife.

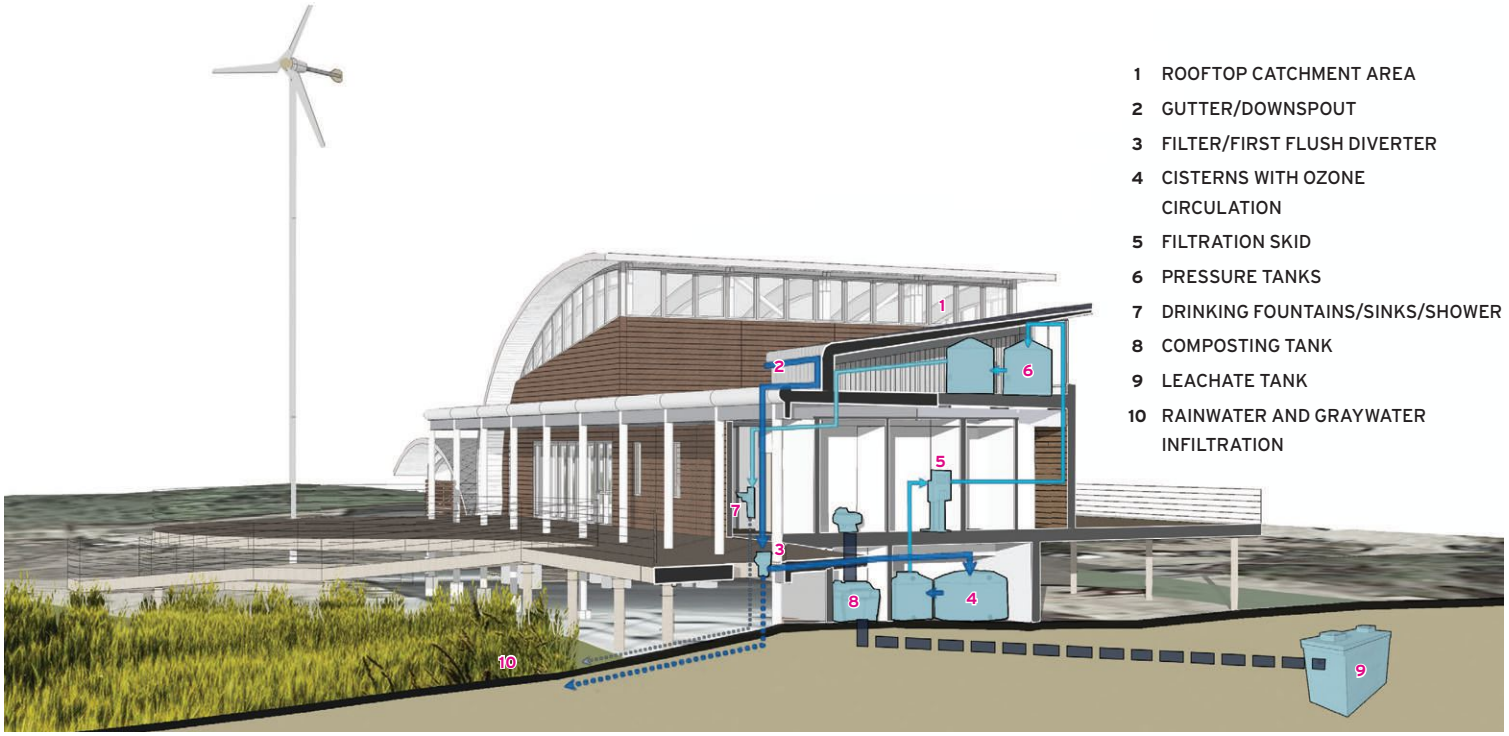
Those who follow water-use issues closely, however, say that conservation is not just for drought-plagued regions or arid places. Rob McDonald, the lead scientist for the Global Cities program at the Nature Conservancy, points to the effects of climate change. Water supplies all over the world will see the effects of warming temperatures, shifting precipitation patterns, and more extreme weather.

Other sources make the case that conserving water means saving energy. They point to a relationship known as the "energy-water nexus." The term is used to describe the interdependence of the water used for energy production and the energy consumed to extract, purify, heat, or cool water, and then clean and dispose of wastewater. "Treating and moving water around has a substantial energy footprint," says Justin Stenkamp, a senior associate in the Seattle office of engineering firm PAE. The amount of energy expended on water varies greatly by region, but nationwide it accounts for about 4 percent of electricity consumption, according to a 2002 Electric Power Research Institute Report.

Using less water also means improved water quality. Amy Vickers, an independent water planning-and-policy consultant based in Amherst, Massachusetts, cites the problem of algae growth in waterways caused by runoff from farms and yards.

But what can architects and their consultants do about these problems at the scale of individual buildings? With so much water policy set at the state and regional levels, it is only natural for design teams to assume that there is little they can do beyond selecting efficient plumbing fixtures or specifying native landscaping. However, architects can help drastically reduce water use by looking at their projects holistically. One possible road map is offered by the water-conservation ambitions of the stringent Living Building Challenge certification program (LBC), which requires "net-positive" water performance. This means, according to the International Living Future Institute (ILFI), the nonprofit organization that oversees the LBC, that a project's water supply must come from captured precipitation or from recycled water and that stormwater and wastewater should be managed on-site through reuse, a closed-loop system, or infiltration. The idea is that a Living Building is one that "has a positive impact and restores the ecosystem around us," says Amanda Sturgeon, ILFI CEO.

Those familiar with the standard will know that water is only one of its many aspects. Achievement of "living" status entails satisfying 20 imperatives organized into seven performance areas: place, energy, health and happiness, materials, equity, and beauty—in addition to water. Full certification has proved tough to attain, with only 12 projects, so far all in the U.S., certified as full Living



BROCK ENVIRONMENTAL CENTER – WATER CYCLE DIAGRAM

Buildings since the program's launch in 2006.

The small number of certified projects is not surprising, given that one of the aims of the LBC program is to transform the design and construction industry and challenge established practices. The net-positive water imperative is no exception: many of its recommended strategies conflict with building codes and health department regulations in some jurisdictions. In cases when these conflicts can't be resolved, ILFI does grant exceptions, as long as a project team can demonstrate that it has been an advocate for change.

Lately, however, LBC projects have had some success implementing progressive water strategies. One such project is the Chesapeake Bay Foundation's Brock Environmental Center in Virginia Beach, Virginia, designed by SmithGroupJJR. The 10,000-square-foot structure hosts the nonprofit's educational and outreach programs and houses offices for its staff. Completed in late 2014 and LBC-certified in the spring of 2016, Brock is the first commercial building in the continental U.S. permitted to capture and treat rainfall for use as drinking water.

The toughest part of realizing this rain-to-potable-water system, according to Greg Mella, SmithGroupJJR's director of sustainable design, was devising a waterworks that would satisfy the requirements of Virginia's Department of Health and its Office of Drinking Water, but was scaled appropriately for the building's modest size and would be easy to maintain. In the resulting system, rainfall is captured from about half of its 10,000 square feet of arced and sloped standing-seam roofs and stored in two 1,650-gallon cisterns. The water then undergoes numerous filtering and disinfecting steps, including treatment with UV light and ozone, and—at the insistence of local authorities—chlorine, before it is supplied to the low-flow fixtures, including bathroom and kitchen sinks, water fountains, and a shower. (Instead of conventional toilets, Brock has composting ones.) Once used, the relatively clean wastewater from the plumbing fixtures, known as graywater, along with excess runoff from the roofs, is piped to rain gardens. These landscaped depressions naturally filter the water and allow it to slowly infiltrate into the ground.

The Brock project team was not the first to try to permit a potable-rainwater system in a commercial building. Several years before, the Bullitt Center in Seattle (RECORD, June 2013, page 217) covered the same ground. But the Miller Hull–designed 52,000-square-foot, six-story office building, completed nearly four years ago, does not yet have the necessary regulatory approvals to begin using the rainfall collected from the structure's roof and stored in a 56,000-gallon basement cistern to supply showers, sinks, and drinking fountains. In the meantime, the center has an exemption from ILFI allowing it to rely on the municipal utility for its potable water and still satisfy the certification system's water requirements (the building received LBC certification in 2015).

The foundation has made progress toward obtaining the permissions needed to make Bullitt's rainwater system operational, but one problem has yet to be resolved: the lack of National Sanitation Foundation (NSF) certification of the already installed rooftop photovoltaic (PV) panels as part of the drinking-water-catchment system. Because of its commitment to the concept of rainwater reuse, the client continues to work with the PV manufacturer on a retroactive NSF designation, even though the building has already earned its LBC designation, says Jim Hanford, a Miller Hull principal. The foundation has been "pugnacious" in pursuing net zero water, he says. "It's pretty impressive."

Regardless of the outcome of the Bullitt's efforts to obtain a permit for its rainwater system, the building can claim several water-related innovations, including the world's first six-story composting system. The building's overall water consumption is also remarkably low—only 1.1 gallon per square foot over the past 12 months, compared to a 14-gallon-per-square-foot average for Seattle office buildings. But more important, the project has spurred significant regulatory changes. One "triumph," says Sturgeon, is a set of new city- and state-approved standards for graywater established as a result of the project. These allow the water from the showers, drinking fountains, and sinks to be treated by a constructed wetland on one of the building's terraces and then infiltrated through a street-level planting strip instead of being drained to the sewer. If widely adopted, the approach could help relieve pres-

IMAGE: COURTESY SMITHGROUPJJR

ARCHITECTURAL RECORD

RECORD ON THE ROAD

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SAVE THE DATE

Architectural Record's Record on the Road event in Atlanta will bring together some of the leaders in design who will showcase their recent work and then they will be joined by a Record editor who will lead a panel discussion and Q&A on **Buildings in the Public Realm: Innovations in Civic and Commercial Architecture**. The conversations can then continue during our cocktail reception.

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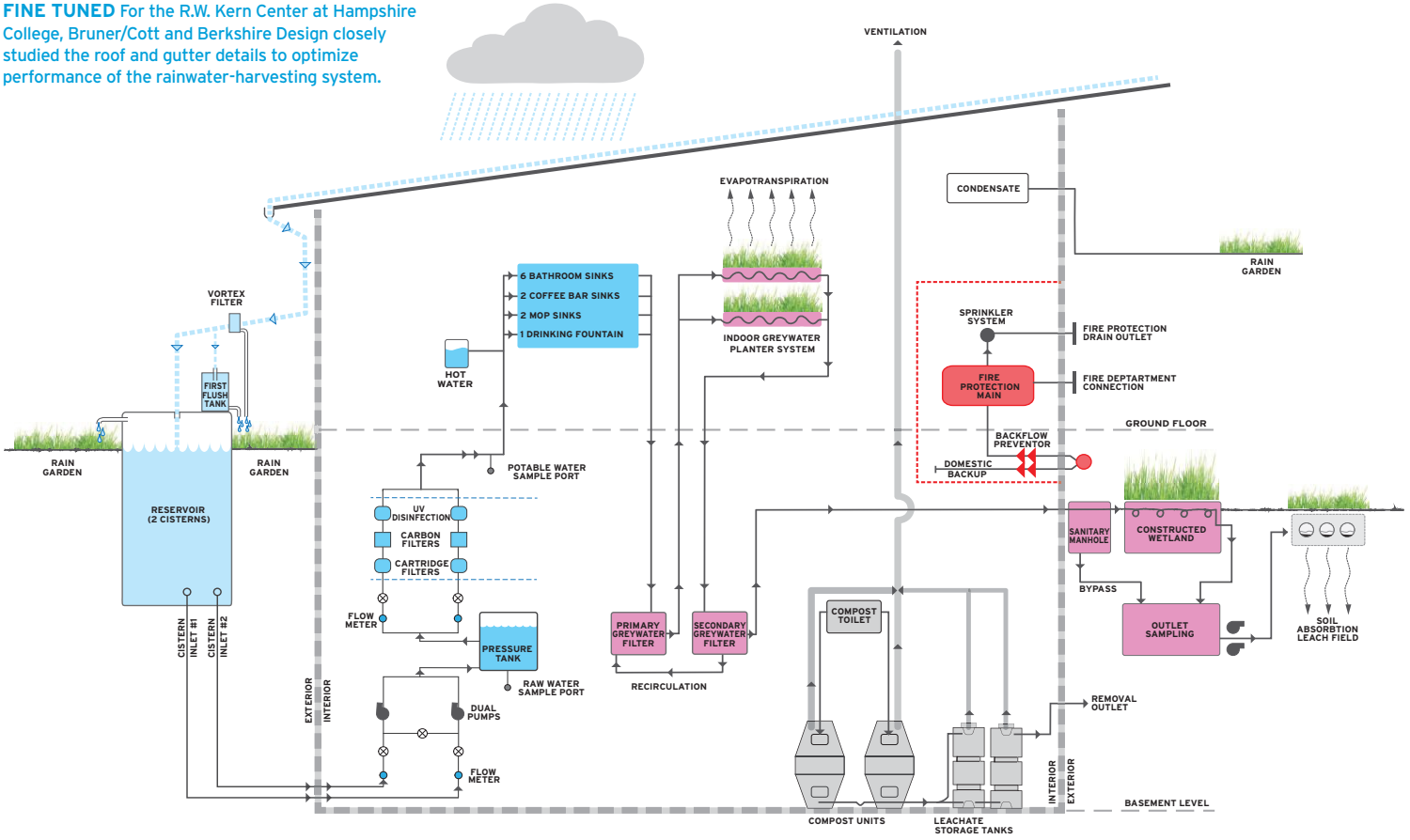

R.W. KERN CENTER – WATER CYCLE DIAGRAM

sure on the city's infrastructure, in addition to helping replenish groundwater aquifers.

Some regions seem especially receptive to the LBC and its water-conservation imperative. In Western Massachusetts, there are four completed projects pursuing certification or already certified: Smith College's off-campus Bechtel Environmental Classroom, in West Whately; the Class of 1966 Environmental Center, at Williams College in Williamstown; and the Hitchcock Center for the Environment and the R.W. Kern Center, both on the campus of Hampshire College in Amherst. Each building benefited from the regulatory successes of the previous project. "By the third one, the permitting process was almost routine," says Christopher Chamberland, a civil engineer with the Northampton, Massachusetts–based Berkshire Design Group, which has been involved in some aspect of the water systems of all the area's projects.

The four projects in Western Massachusetts depend on a handful of core strategies: all but Bechtel, which has a well, collect and treat precipitation for their potable-water supply; all purify graywater with devices such as constructed wetlands or rain gardens before reintroducing it into their sites' natural hydrological system; and all have composting toilets.

In addition to being similar to each other, these projects' water-conserving features are of course remarkably similar to those deployed at both Bullitt and Brock. But that doesn't

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WATER MISER Tozer Design's residential project Desert Rain (above and left) in Bend, Oregon, captures precipitation from its butterfly roofs for all potable uses. It is designed around a daily water budget of 42 gallons per occupant.

mean that the water systems are interchangeable. They must be tailored to the site and the climate, the program, and, especially, the architecture, says Chamberland. He points to the 17,000-square-foot Kern project, designed by Cambridge, Massachusetts–based Bruner/Cott and dedicated in September. Almost every aspect of the concrete, stone, and timber structure, which serves as a campus social hub and houses administrative offices and classrooms, was the product of intense examination by both the architects and Berkshire Design.

Just one example of the many scrutinized elements are those relating to Kern's roof, which is a critical part of the rainwater-harvesting system. The two firms studied details such as the optimal slope, the relationship between the overhang and the gutters, and how best to attach screens that help keep leaves and other debris out of the water. "The performance criteria can't be separated from the architecture," says Chamberland.

Such functional elements are important in any locale, but in dry climates, they take on heightened relevance. This was the case for Desert Rain, a recently LBC-certified single-family residential project in Bend, Oregon, designed by local firm Tozer Design. As the name of the compound of five wood-framed buildings with butterfly roofs implies, the project depends on precipitation for its potable supply and was one of the first in Oregon to take advantage of new state guidelines for rainwater harvesting.

Since Bend averages only 12 inches of precipitation per year, and in some years gets as little as 7, the Desert Rain team needed to capture every drop—even with a miserly water budget of 42 gallons per occupant per day, says Morgan Brown, president of Whole Water Systems, the firm responsible for design of the project's water technology. (A typical budget is more than twice that, he says.) One innovation was the substitution of a device known as a first flush diverter, or FFD, which disposes of the initial runoff from a roof surface and any contaminants that come with it. Instead, Brown devised ground-level gravel filters positioned under each roof downspout. These remove unwanted debris while capturing up to 15 percent more water, he says.

In addition to rainwater harvesting, Desert Rain also took advantage of a rule for graywater reuse issued while the project was already under way. The system directs the water from sinks, showers, and washing machines through a constructed wetland for remediation before it is used for irrigation. Partly because of the newness of all the regulations and officials' unfamiliarity with the proposed systems, the project took almost seven years to complete. "Normally we could have designed something like this in a few weeks," says Brown. But he's pleased to have been part of a project that broke new ground and takes its cues from nature's water cycle, he says. "It's the ultimate example of biomimicry." ■

Continuing Education

To earn one AIA learning unit (LU), including one hour of health, safety, and welfare (HSW) credit, read "A Thirst for More," review the supplemental material at architecturalrecord.com, and complete the online test. Upon passing the test, you will receive a certificate of completion, and your credit will be automatically reported to the AIA. Additional information regarding credit-reporting and continuing-education requirements can be found online at continuingeducation.bnpmedia.com.

Learning Objectives

1 Explain why water conservation is important even in regions not prone to drought.

2 Describe the goals and the structure of the Living Building Challenge.

3 Identify the elements in a potable rainwater-harvesting system.

4 Discuss some of the regulatory challenges sometimes encountered by projects trying to implement ultra water-conserving strategies.

AIA/CES Course #K1703A

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p134

Photo courtesy of LEVER Architecture

Mass Timber in North America

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PM ST SU

CREDIT: 1.5 AIA LU/HSW; 1.5 GBCI CE HOURS; 0.1 IACET CEU; 1 PDH

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p135

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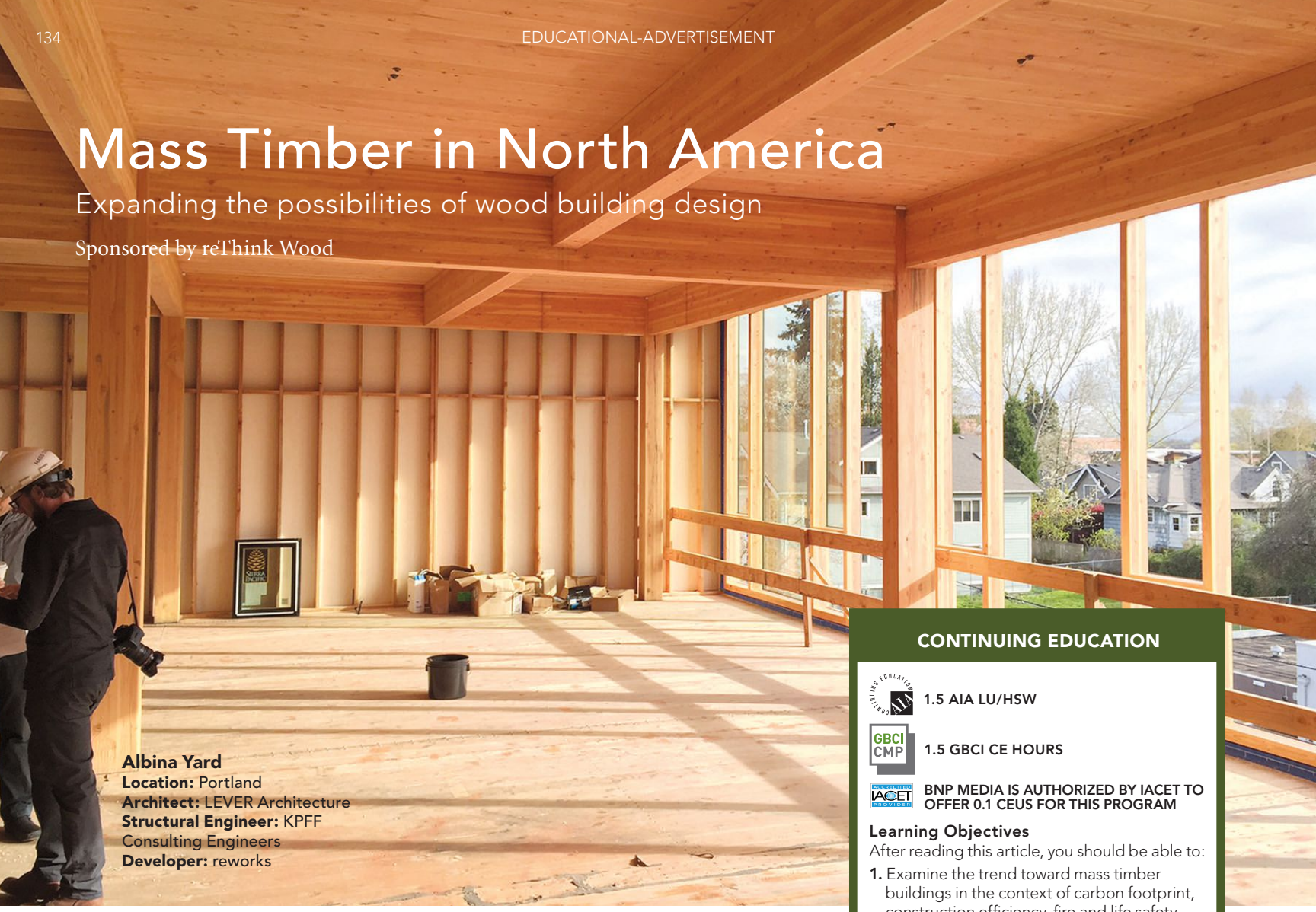

Albina Yard
Location: Portland
Architect: LEVER Architecture
Structural Engineer: KPFF Consulting Engineers
Developer: reworks

Photo courtesy of LEVER Architecture

It's been a while since a major category of building materials inspired the kind of widespread enthusiasm currently being shown for mass timber. Around the world, designers are leveraging the strength, stability, and design flexibility of products such as cross-laminated timber (CLT) to push beyond wood's perceived boundaries, achieving building heights and spans that would have once required concrete, steel, or masonry for structural support.

For many, it's the combination of aesthetics, structural performance, and opportunity for innovation that have proven irresistible. But mass timber also offers a host of other advantages:

Lighter carbon footprint: Mass timber products allow the use of a renewable and sustainable resource as an alternative to more fossil fuel-intensive materials. Designers of 'tall wood' buildings have been especially focused on the reduced carbon footprint achieved by using wood, which aligns with the goals of Architecture 2030. Reducing carbon is also a priority for many public buildings and schools.

Construction efficiency: Mass timber construction is fast, and speed correlates to revenue, whether the project is an office, school, student residence, condominium, or hotel. Bernhard Gafner of structural engineering firm Fast + Epp says that, in his firm's experience, a mass timber project is approximately 25 percent faster to construct than a similar project in concrete. Noting the advantages for urban infill sites in particular, he says it also offers 90 percent less construction traffic (trucks delivering materials) and requires 75 percent fewer workers on the active deck, making for a much quieter job site.

Continues at ce.architecturalrecord.com

CONTINUING EDUCATION

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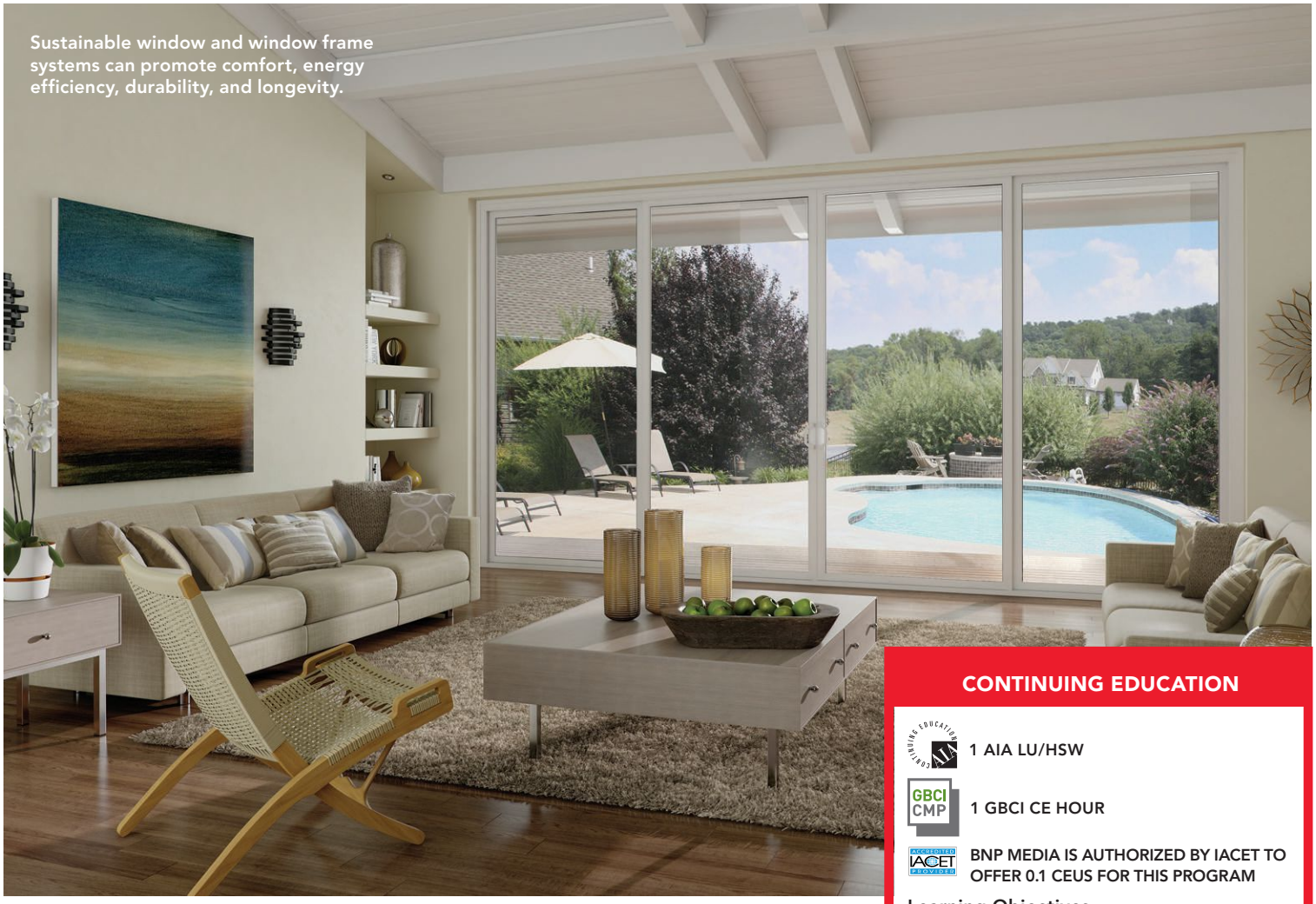
Learning Objectives

After reading this article, you should be able to:

1. Examine the trend toward mass timber buildings in the context of carbon footprint, construction efficiency, fire and life safety, occupant well-being, and other potential advantages.
2. Identify a range of mass timber products available to North American building designers.
3. Discuss research and resources related to the structural performance and fire/life safety of mass timber products.
4. Based on examples of mass timber buildings either built or under construction, describe how all-wood and hybrid systems are expanding the options for wood design.

To receive AIA credit, you are required to read the entire article and pass the test. Go to ce.architecturalrecord.com for complete text and to take the test for free. This course may also qualify for one Professional Development Hour (PDH). Most states now accept AIA credits for engineers' requirements. Check your state licensing board for all laws, rules, and regulations to confirm.

AIA COURSE #K1609D
GBCI COURSE #0920010233



Sustainable window and window frame systems can promote comfort, energy efficiency, durability, and longevity.

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CONTINUING EDUCATION

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1 GBCI CE HOUR

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Learning Objectives

After reading this article, you should be able to:

1. Explain how windows promote healthy living conditions for the occupants by improving indoor air quality and increasing natural daylight in the living space.
2. Describe why sustainable building products and materials need to be durable and how they can satisfy universal design strategies.
3. Describe how building form, energy modeling, and an ENERGY STAR-rated window can lower heating and cooling costs for the occupants and create a more sustainable environment.
4. Describe how windows can contribute toward points in the LEED for Homes credit categories.

To receive AIA credit, you are required to read the entire article and pass the test. Go to **ce.architecturalrecord.com** for complete text and to take the test for free.

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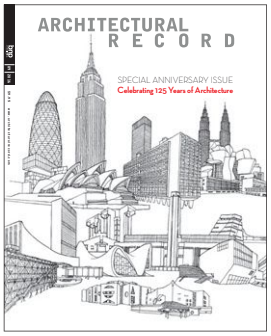
CALL FOR ENTRIES

Architectural Record Traveling Fellowship 2017

ARCHITECTURAL RECORD is awarding two traveling fellowships to architecture students and young professionals to commemorate the magazine's 125th anniversary.



The purpose of the fellowship is to engage with significant architecture and/or urbanism outside the United States – to pursue greater general knowledge of design or to study closely, for example, a single typology, historic period, or place/region.

Who's eligible: U.S. citizens currently enrolled in or graduates of an accredited U.S. architecture program.

- One fellowship will be awarded to a candidate who will have completed a B.Arch. degree or at least the first year of an M.Arch. program by summer 2017.
- One fellowship will be awarded to a candidate who graduated with a B.Arch. or M.Arch. within the last five years (since 2012).

Entry is free. Find details of the fellowship and submission requirements at **architecturalrecord.com/call4entries**. Email questions to arcallforentries@bnpmedia.com and indicate Traveling Fellowship in the subject line.

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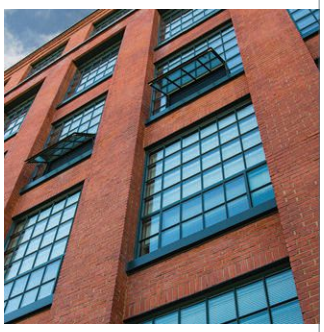

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New and Upcoming Exhibitions

Mies van der Rohe and James Stirling: Circling the Square
London
March 8–June 25, 2017
Comparing the design methods of two of the most highly recognized architects of the 20th century, this exhibit at RIBA offers a renewed look at their respectively iconic architectural schemes proposed for the same London site. The exhibition features newly restored models and materials and other items that provide insight into the workings of the Stirling office, from initial sketch ideas to Stirling's famous "worm-eye" axonometric views. For more information, visit riba.org.

Ongoing Exhibitions

Pierre Chareau: Modern Architecture and Design
New York City
Through March 26, 2017
Showcasing French designer and architect Pierre Chareau's rare furniture, lighting fixtures, and interiors, as well as designs for the extraordinary Maison de Verre—the glass house completed in Paris in 1932—the exhibition brings together more than 180 rarely seen works from major public and private collections in Europe and the United States. For more information, visit thejewishmuseum.org.

Lectures, Conferences, and Symposia

BEING MATERIAL
Cambridge, Massachusetts
April 21–22, 2017
This symposium will explore new and unexpected meetings of the digital and material worlds such as programmable matter, self-assembling structures, 3-D/4-D printing, wearable technologies, and bioinspired design. It will showcase recent developments in materials systems and design, placing this work in dialogue with kindred and contrasting philosophy, art practice, and critiques. At the MIT Samberg Conference Center. For more information, visit arts.mit.edu.

Competitions

HERE+NOW: A House for the 21st Century
Registration deadline: March 29, 2017
Intended to provide architecture students—working individually or in teams—with a platform on which to explore residential architecture and practice, this Association of Collegiate Schools of Architecture competition challenges entrants to envision a house informed by context, culture, and vernacular, but fully embracing 21st-century technology and ideas of domesticity. Visit acsa-arch.org.

Modernism in America Awards
Nomination deadline: April 14, 2017
This awards program celebrates the documentation, preservation, and reuse of modern structures and landscape design in the United States. It recognizes those building owners, design teams, and preservation organizations that have made significant efforts to retain, restore, and advocate for the aesthetic and cultural value of such places. For more information, visit docomomo-us.org.

E-mail information two months in advance to recordevents@bnpmedia.com

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2017 CALL FOR ENTRIES
Record Kitchen & Bath

The editors of ARCHITECTURAL RECORD are currently accepting submissions for the **2017 Record Kitchen & Bath** competition. Entry is open to any registered architect, as well as any designer working in collaboration with architects, who has completed an innovative residential and/or commercial kitchen or bath project in the last year. We are looking for projects that feature unexpected materials, address unique client needs, or are designed in a manner that allows these utilitarian spaces to be functional, sustainable, and beautiful. Winning projects will be featured in the September 2017 issue.

The fee is US$75 per entry. To enter, visit: architecturalrecord.com/call4entries. E-mail questions to ARCallForEntries@bnpmedia.com. (Please indicate **Record Kitchen & Bath** as the subject of the e-mail.) **Submissions are due June 1, 2017.**

2017 CALL FOR ENTRIES
Record Interiors

The editors of ARCHITECTURAL RECORD are currently inviting submissions for the **2017 Record Interiors** issue. All architects registered in the United States or abroad, as well as interior designers working in collaboration with architects, are welcome to submit interiors-only projects that have been completed in the last year. The projects may be new construction, renovation, or adaptive reuse; commercial or residential; domestic or international. Special consideration will be given to works that incorporate innovation in design, program, building technology, sustainability, and/or materials. The winning projects will be featured in the September 2017 issue.

The fee is US$75 per entry. To enter, visit: architecturalrecord.com/call4entries. E-mail questions to ARCallForEntries@bnpmedia.com. (Please indicate **Record Interiors** as the subject of the e-mail.) **Submissions are due June 1, 2017.**

snapshot

PROJECT ***PLAYGROUND***
LOCATION **ALESSANDRIA, ITALY**
ARTIST **GUE**

WHEN THE organizers of an arts and illustration festival collaborated with local officials to revitalize a decaying park in the Italian city of Alessandria, results were nothing if not colorful. As part of its initiative, the team commissioned Sicilian street artist Marco Mangione, known as "Gue," to bring an aging basketball court to life. Gue, whose animated murals adorn urban facades around Italy, was granted full artistic freedom to embellish the court's asphalt surface. So he chose a color palette that reflects hues seen in conventional indoor basketball facilities, and designed a geometric pattern inspired by the rhythm and dynamics of the sport. "The perception of the mural's shapes changes through the game's movement," Gue explains. "The curves and lines exalt the players' actions, leaving a visual echo of what happens on the court." Artistic interventions for the recreational grounds—a popular destination for the city's youth—are to continue with the restoration of a skate park and a soccer field. "Our efforts to redevelop a neglected area have triggered a lot of interest in the community," says the artist. "It shows that these types of projects have great resonance." *Alex Klimoski*

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