

No Architecture
Danish Kurani
FXCollaborative

Q&A With Riding the Vortex
Redesigning the Classroom
IBS/KBIS Product Showcase

architectmagazine.com
The Journal of The American
Institute of Architects

Designs for a Better Future

THE 69TH ANNUAL
**Progressive
Architecture
Awards**

Hot Heart basin
p. 53

The background is a dark blue gradient with several bright blue, semi-transparent geometric lines. A prominent white line forms a sharp corner, extending from the top right towards the center left. Other blue lines radiate from this corner, creating a sense of depth and perspective. The overall aesthetic is clean, modern, and futuristic.

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Volume 111, number 02. March 2022.

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Houston Endowment
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Luxury wellness design is changing. What's next?

THE IDEA THAT A HOME'S DESIGN CAN PROFOUNDLY IMPACT ITS RESIDENTS' HEALTH AND WELL-BEING IS NOTHING NEW:

Designing for wellness has drawn increasing attention during the past decade. But that interest has understandably skyrocketed during the global COVID-19 pandemic, especially among high-end clients, who want their homes to protect and nurture their families' physical and mental health.

How will luxury residential design morph to create even healthier environments as a result of the pandemic? What existing trends will evolve to contribute to healthy homes?

Watch the on-demand webinar "Redefining the High-End Healthy Home," produced by Hanley Wood University and sponsored by Gaggenau. In this roundtable, recorded during a live virtual event in May 2021, facilitator Jennifer Castenson leads a discussion of the emerging and evolving trends in healthy home design. She's joined by a panel of residential architects.



Kevin Alter
Partner, Alterstudio



Danielle Tillman,
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Takashi Yanai
Partner, EYRC

This webinar is approved for AIA and IDCEC continuing education credit. In addition, course registrants will gain access to a white paper on the same topic.

ON-DEMAND WEBINAR:

REDEFINING THE HIGH-END HEALTHY HOME

How luxury single- and multi-family residential design is responding to a post-pandemic need to maintain and improve the health of inhabitants.

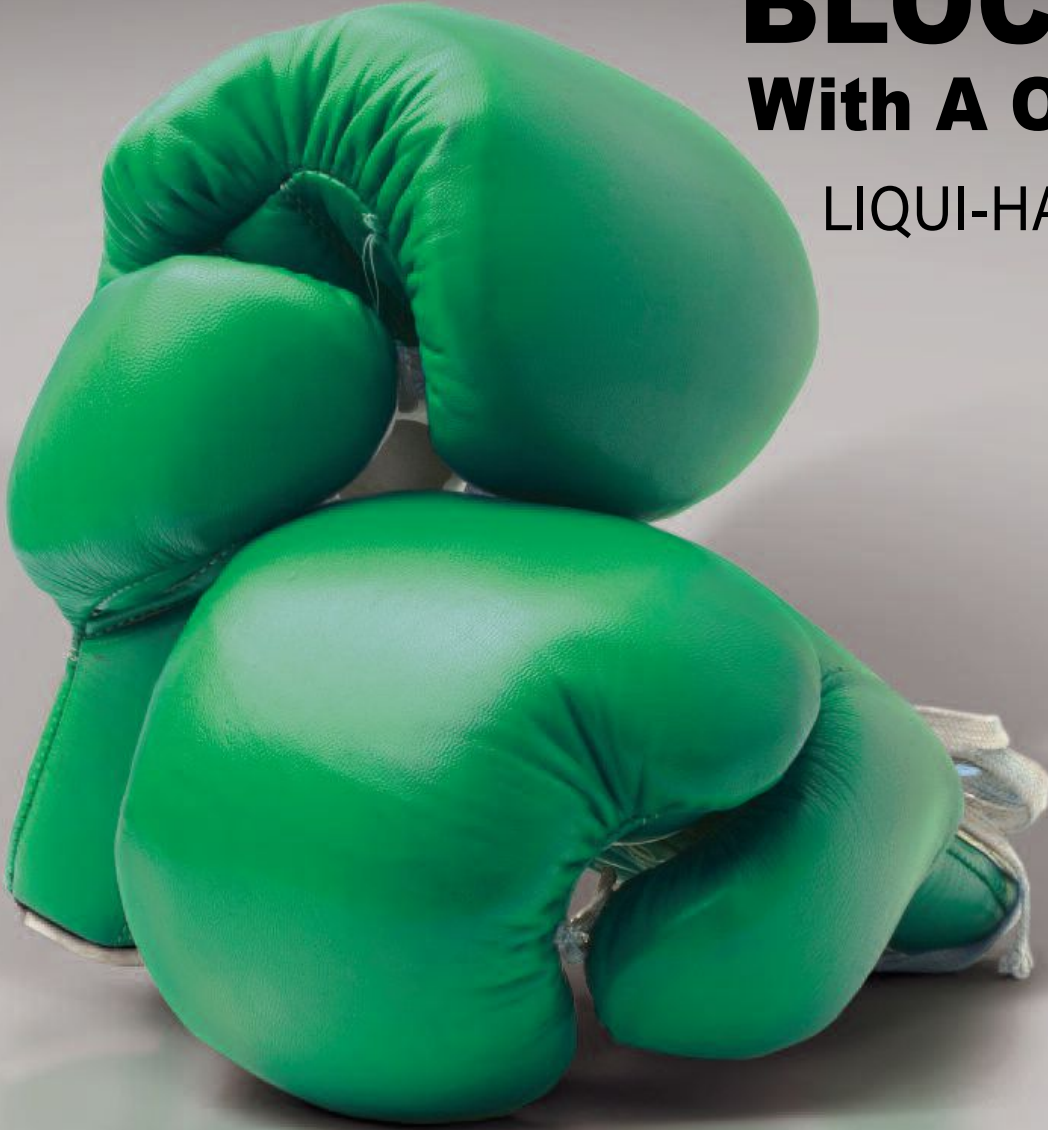
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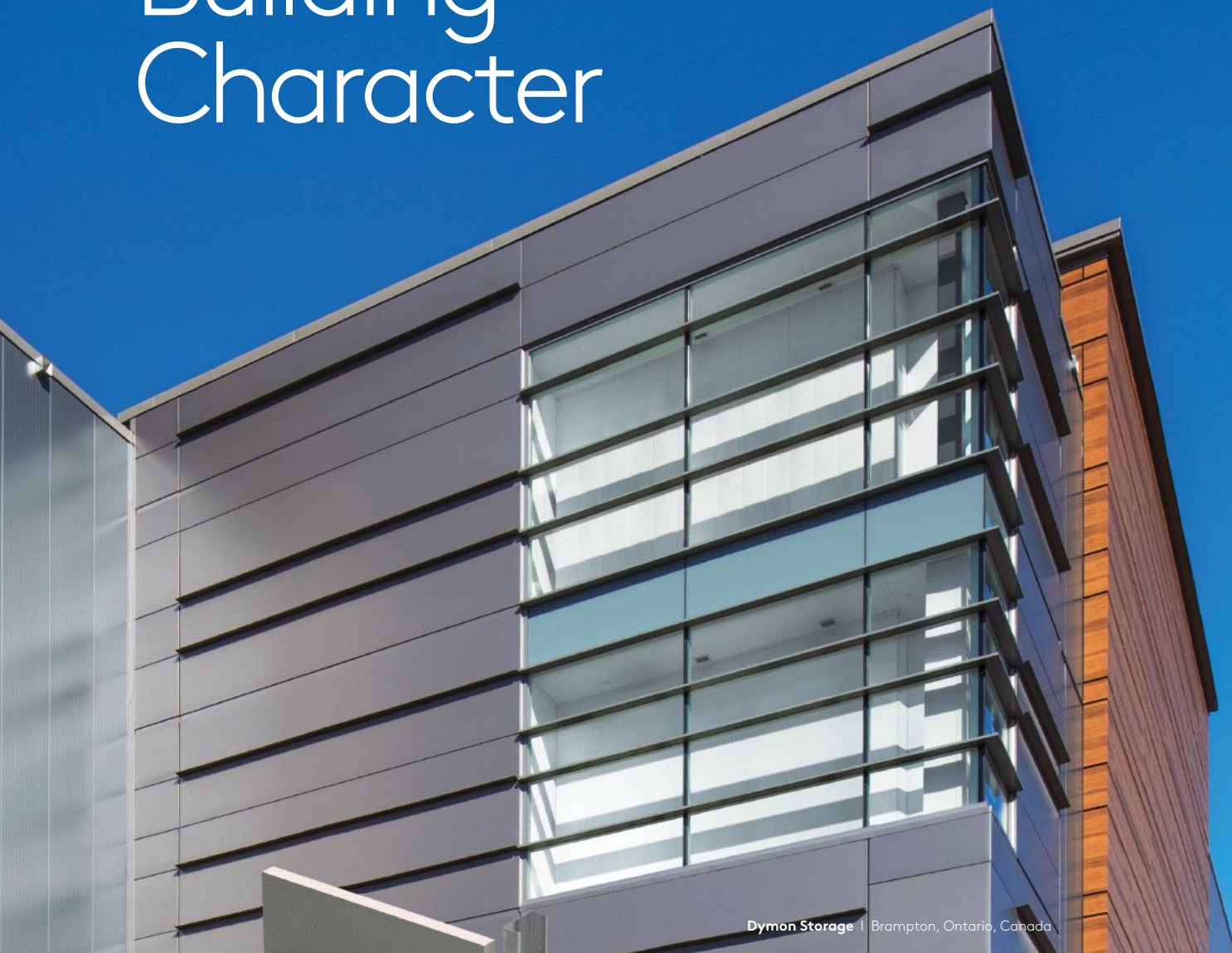
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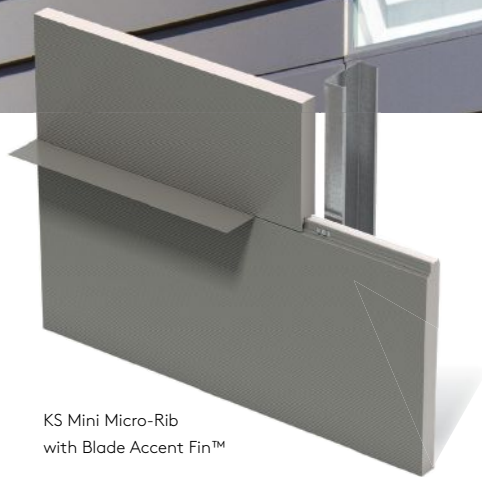
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Next Progressives: No Architecture

EDITED BY PAUL MAKOVSKY

Location: New York

Year founded: 2014



the “glass house” typology into a ring concept comprising six interconnected, petal-like pavilions. Similarly excavated into a hillside, the project’s topography not only offers thermal insulation but also modulates interior atmospheres along spectrums of open to closed, public to private, as well as above and below grade. The project questions notions of transparency not only through its materiality but also from a social dimension. The program flows in a matrix plan that provides multiple flexible configurations of communal and private spaces. Elaborating transparency and landscape as twin strategies for connecting the different programs, the Flower House amplifies the poetic relationship to near and distant landscapes while sponsoring social interaction.

Biggest challenge facing architects today:

How to address the climate crisis while still engaging the intractable problems of the discipline, the fundamental elements of architecture: the façade, the envelope, the structure, the column, the wall, the plan. One way of approaching this challenge is to learn from the Indigenous people and the vernacular, from sustainable settlements predating the Industrial Revolution. To look back at the

Firm leadership:

Andrew Philip Kwai-Hoon Heid

Education:

M.Arch., Princeton University;
B.A., Yale University

Experience:

Adjaye Associates, Eisenman Architects, REX, OMA

Firm size:

Five full-time members

Firm mission:

We’re dedicated to the harmony of nature, ecology, and urbanism through innovative architecture. Our

goal is to break down the barriers between design, development, and sustainability.

First commission:

Courtyard House. It interrogates the “glass house” typology through a dynamic relationship to the native landscape. Burrowing the house into the existing topography created visual and acoustic privacy from the neighbors while increasing thermal insulation.

Defining project and why:

The Flower House advances the spatial propositions we began at the Courtyard House, and reinterprets

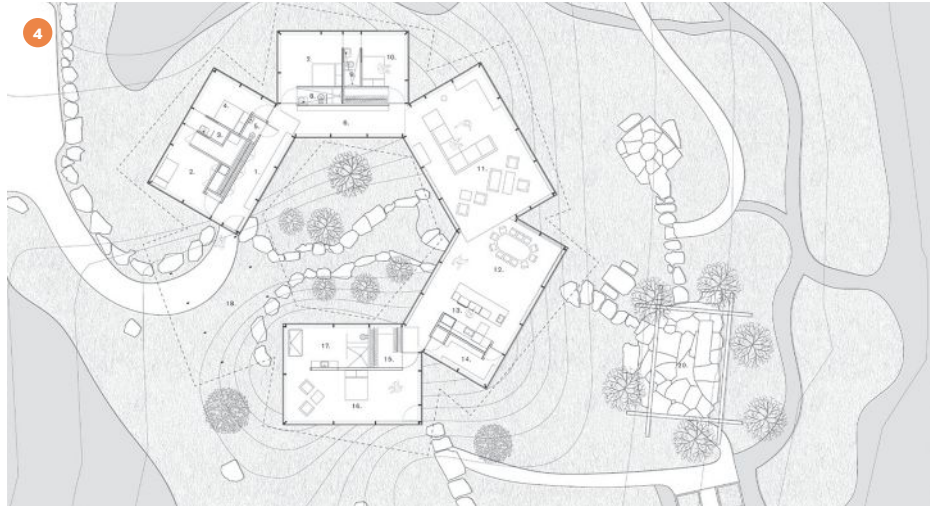
Next Progressives: No Architecture



Hutongs in Beijing, the Medinas in North Africa, etc. That is something we have researched and exhibited at the Shenzhen Architecture Biennale and over the past several years: the science behind the passive cooling, the natural ventilation, and so on. It's not just about energetic propositions but also about formal and spiritual propositions.

What are you reading? What's on your bookshelf?

With my graduate architecture students at Pratt, we're reading the preface to *The Master Builders* by Peter Blake (W. W. Norton & Company | Knopf, 1960), "Figures, Doors and Passages" by Robin Evans (1978), "The Universal Patent Office" in *Content* by Rem Koolhaas/OMA (Taschen, 2004), and *A-typical Plan* by Jeannette Kuo (Park Books, 2013). Outside of class, I've started reading Ilya Prigogine's and Isabelle Stengers' *Order Out of Chaos: Man's New Dialogue with Nature* (Bantam New Age Books, 1984).

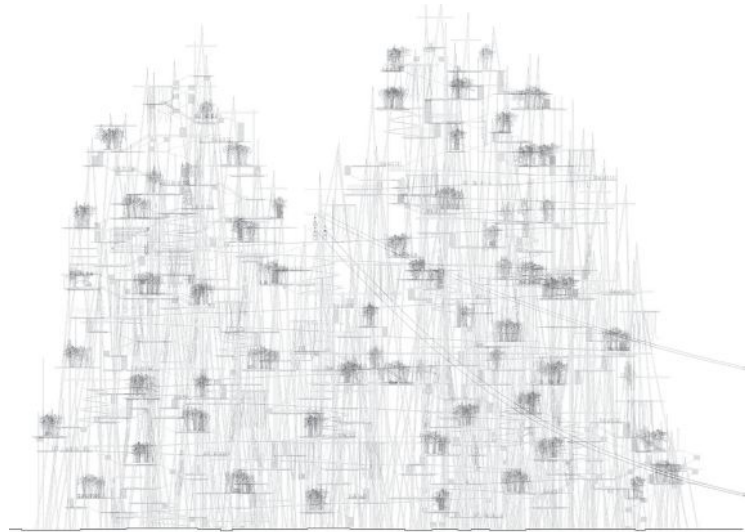




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8



1. Andrew Heid, founder of No Architecture, in front of his Courtyard House project in Aurora, Ore. **2.** The Aurora House reconceives low-density living by rethinking the detached single-family residence as a semi-urban courtyard structure, whereby the client can “age in place” with nature. **3–5.** Six overlapping petal-like pavilions create the Flower House, a flower-shaped weekend home in Massachusetts, which is designed with an octagonal courtyard and interconnected spaces that bring a family together. Each pavilion is optimized for passive heating and cooling, solar access, and natural ventilation, as well as the rituals of daily life. **6–8.** The Cloud Forest competition entry for Qianhai New City Center in Shenzhen, China, proposes 5.75 new hectares of public botanical gardens and a visual and performing arts center dramatically sited almost 500 feet over the Qianhai Bay.

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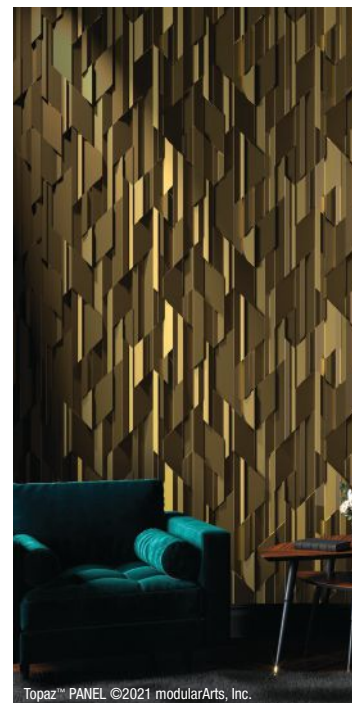
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It's an idea that's been around for thousands of years – think gardens of Babylon – and yet the way it contributes to our health and well-being in modern construction and manufacturing is being emphasized like never before. As architects and designers work on new ways to connect the outdoors with the indoors, new window and door innovations are emerging to support the Biophilic Design approach.

Making more and better use of light. Designers continually discover new ways natural light improves our lives, indoors and outdoors. The changing color of sunlight throughout the day affects our mood, our stress levels, our sleep patterns and even our physical health. Knowing this should lead to an increase in the use of glass and wide open spaces in our built environments. When done right, the approach is beautiful, energy-smart, and beneficial for all.

Creating spaces that invite more of the outside, inside. Opening up spaces to connect with nature and living systems (one of the key tenets of biophilia) delivers amazing benefits to our health and well-being. Studies have also shown slight changes in airflow keep us refreshed and invigorated, more productive, relaxed and generally better off. Large timber curtain walls and door openings that turn entire walls into moving masterpieces are merging the outdoors and indoors in new, forward-thinking ways.

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In this new series on innovative spaces, we ask a designer, **Danish Kurani**, on the thinking behind designing the flexible learning space of the **Khan Lab School**.

Inside Out: Using Space to Unlock Student Creativity

EDITED BY PAUL MAKOVSKY

The Project:

Khan Lab School, Mountain View, Calif.

The Client:

Founded by Sal Khan of the online learning platform Khan Academy, this school is a testing ground for new learning practices where teachers experiment with curriculum and pedagogy and share their findings with educators worldwide. The motto of Khan Lab School is "Everyone's a teacher. Everyone's a student." It was essential for our firm to design a space that embodied that idea.

What made you want to work on designing learning spaces?

Education is a major social issue—it's a life-changer for so many people. That's why there's so much investment and conversation around how to make it accessible and effective. The problem is that a key element is repeatedly ignored and that's the physical space. At my firm Kurani, we decided to take that on and lead the charge for creating better places to learn. It's not just what you learn, but also where you learn.



Danish Kurani is an architect and designer who's been dreaming of redesigning the world since he could pronounce "architecture." By 13, he was designing recreation centers for children on the streets of Pakistan. By 19, industry insiders were comparing him to Frank Lloyd Wright. As a professional,

Kurani began deploying his knowledge to build education spaces around the world, from India to Silicon Valley. He's worked with Khan Academy and Google, and his designs have charted new futures for thousands of students globally. From humble beginnings, living in 10 homes before he turned 18, Kurani has become a renowned thinker and featured TED speaker.

> To read more about this project, please visit bit.ly/ARioDK.

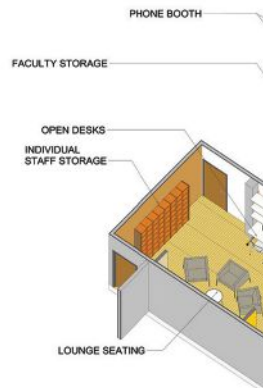
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Our community-centric approach is a hybrid of school and laboratory—one designed to accommodate flexible academic groupings, different levels of independence, and collaboration between mixed-age groups. For example, nearly everything is designed to be mobile and adaptable. To be effective and authentic, the space is designed with change, evolution, and experimentation in mind. For a great learning space, you also have to consider acoustics, color, light, layout, materials, interactivity, graphics, inspiration, technology, and so much more.



INTEGRATE TECHNOLOGY WITH FLEXIBILITY IN MIND.

Technology is integral to this space. Unlike traditional schools with load-bearing walls and tech with heavy infrastructure, this space is designed to adapt as technology evolves. Students use iPads, digital displays, and a rolling TV. When the technology changes, the learning setting can evolve seamlessly.



LARGE INTERIOR WINDOWS FOSTER KNOWLEDGE.

They allow everyone to see the educational experiments live. Breakout rooms, commons, and a café give people places to meet and discuss ideas.

CREATE VISUALLY CONNECTED SPACES.

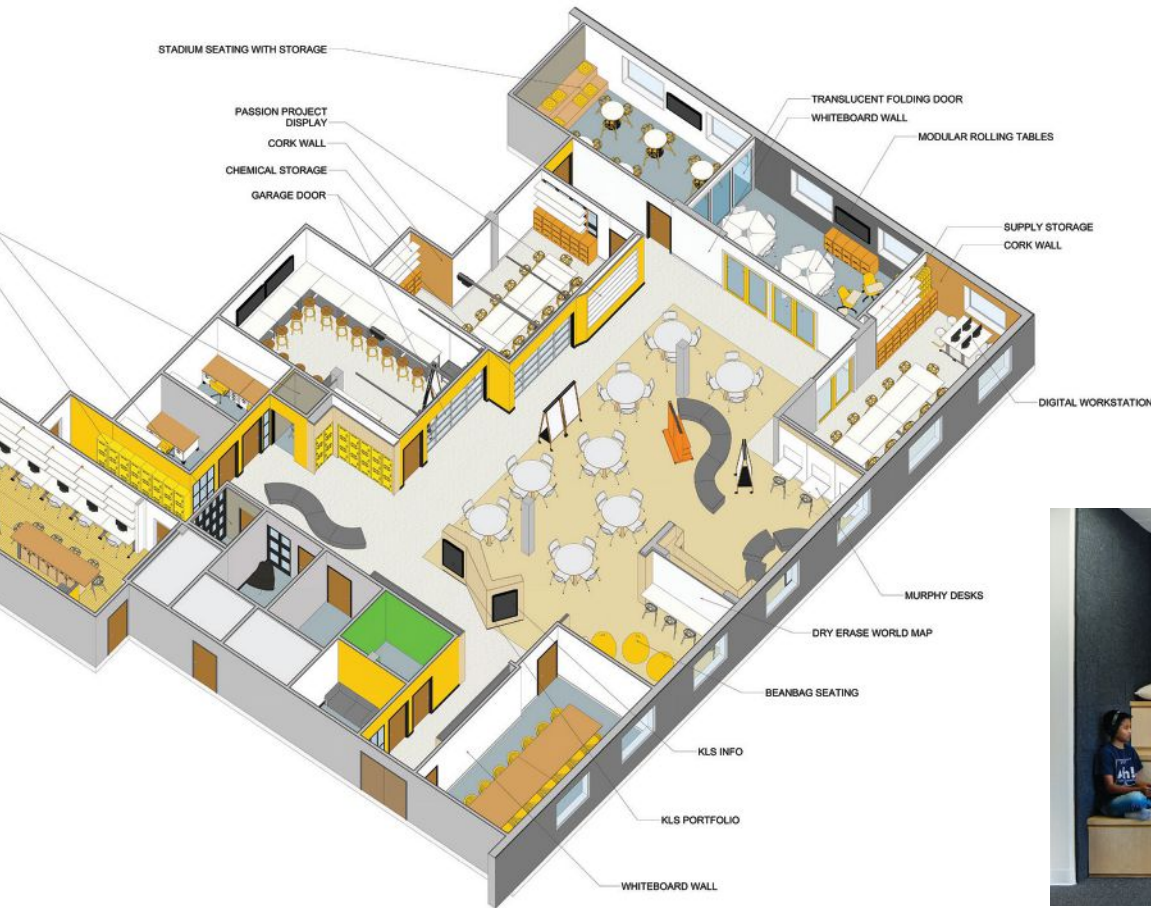
Students are exposed to many ideas through visually connected spaces where students can see others creating and galleries provide displays for student work that provide continual inspiration. Just like a lab where scientists are expected to share the results of their testing, the school is equipped for student and faculty work.





STUDENTS WORK IN SPECIALIZED ENVIRONMENTS

Each area supports different types of learning (such as brainstorming, making, reflecting, and sharing) where students practice being creative and analytical, and working physically and digitally individually and in groups. The diverse environments encourage faculty to text different learning experiences. In the Make Lab, students can design, build, and prototype; in the Ideate Lab, they can brainstorm; and in the Chat Lab, they can discuss ideas and work through problems aloud.



INTERACTIVE WALLS AND DISPLAYS SHOWCASE LEARNING AND CREATIVITY

These include a passion project gallery, a dedicated display for students to showcase passion projects; writable walls that are floor-to-ceiling whiteboard walls for brainstorming and sharing ideas; a public question board, an area where students can post questions as a way to help educators keep a pulse on what needs to be addressed; and a welcome wall—an ever-changing space welcoming guests and educators with information about the KLS model and teachers' experiments in education.



DON'T FORGET ABOUT SPACE FOR PRIVACY.

Library nooks allow students privacy while they read. There are also “phone booths” for students to have acoustic privacy so they can focus, watch online content, or even video conference with experts from around the world. And there are breakout rooms where small groups of students can have privacy away from the whole class.





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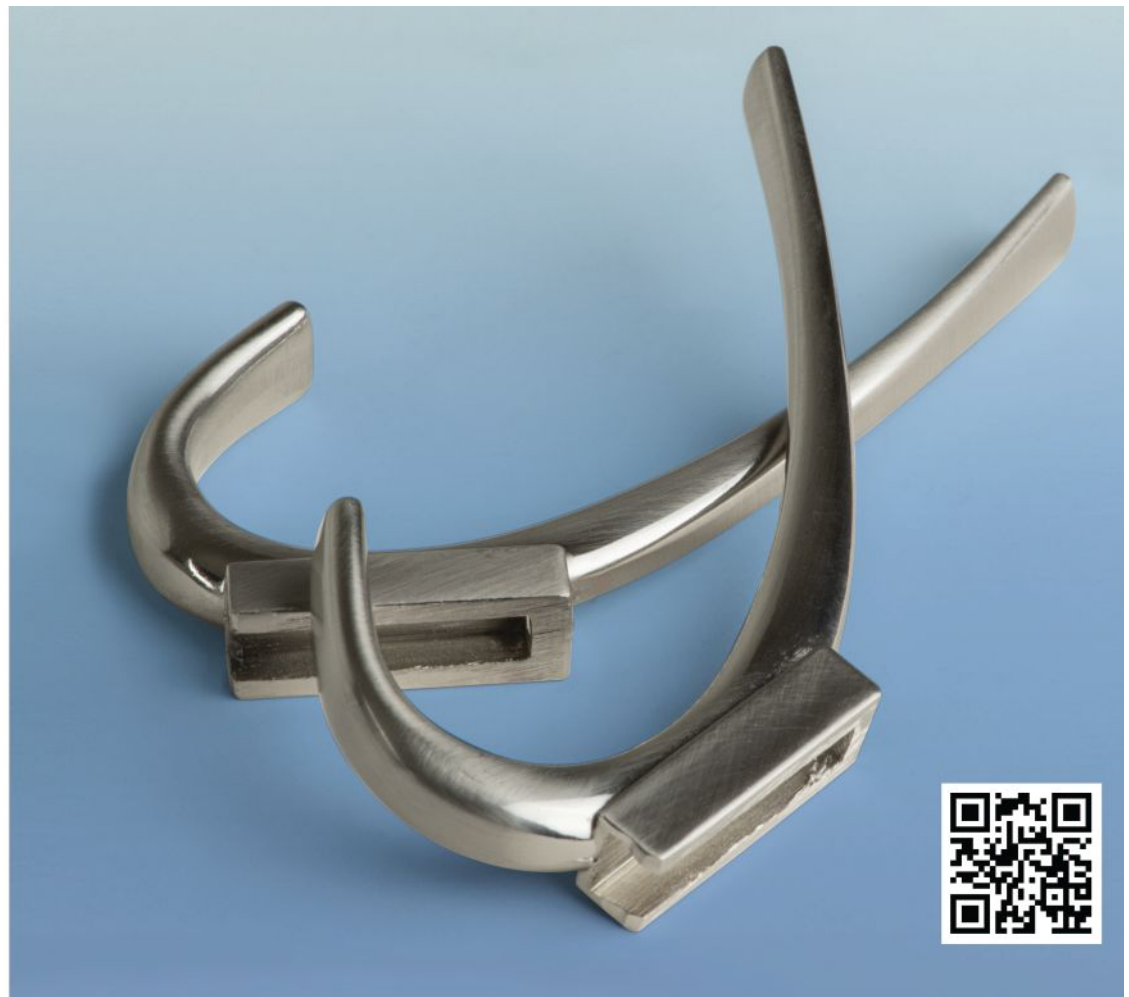
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Products: IBS/KBIS Highlights

More than 45,000 home building professionals turned out for the NAHB International Builders' Show this February in Orlando, Fla. IBS and the Kitchen & Bath Industry Show combined at the Orange County Convention Center for the annual Design & Construction Week, drawing more than 70,000 attendees to see the nearly 1,200 exhibitors. Here we present our editors' top picks.

TEXT BY ALEX CIPOLLE AND PAUL MAKOVSKY



Eldorado Stone, Grand Banks Limestone

As part of Eldorado Stone, the Westlake Royal series of hand-painted stone and brick products that take their aesthetic cues from natural textures, Grand Banks Limestone features a pastel palette. Rust and gray-green accents juxtaposed with cream and silver-blue hues come through on the limestone's rough-hewn rectangular shape. eldoradostone.com



Pabco Gypsum, QuietRock

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Masonite, M-Pwr Smart Door

This residential smart door is a one-stop shop, using a system that integrates power, lights, a video doorbell, and a smart lock by connecting to a home's electrical system and wireless network. All these features can be controlled remotely with a smartphone app, and the system is backed up by a 24-hour emergency battery. residential.masonite.com



Mohawk, RevWood Premier

Designed to be indistinguishable from natural hardwood, RevWood Premier draws on a library of microdata from different wood species to create flooring planks. The high-resolution Premier line also uses an antimicrobial solution and wet guard to prevent damage. mohawkflooring.com



Clopay Modern Steel Garage Door, Lustra Black Matte Finish

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


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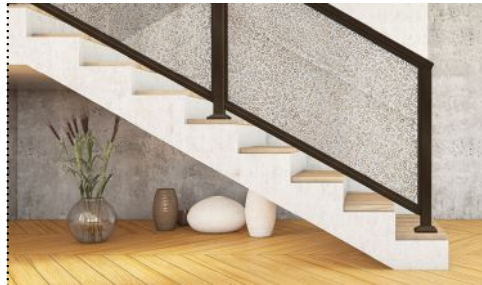
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LX Hausys, Calacatta Collection by Himacs

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MiTek, Visualization Services

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Residential:

Covenant House New York FXCollaborative

TEXT BY ANNE QUITO

On a cool November night in New York, a giddy group streamed through the doors of the newly rebuilt Covenant House New York and saw their new living quarters for the first time. After nine years of planning, designing, and construction, the city's largest shelter for youth in crisis was ready. "Different, clean, cool, new—upgrade, upgrade, upgrade," a resident cooed as she settled into her room.

The heartwarming scene was the culmination of a collaboration between Covenant House, a 50-year-old nonprofit that operates shelters for homeless youth in 33 cities, the Brooklyn-based firm FXCollaborative, and the New York developer Gotham. Undeterred by an onerous RFP process, the team forged through bureaucratic and budgetary hurdles to realize a vibrant 12-story shelter that houses up to 150 residents, each for a maximum of six months.

Until the building was completed in 2021, Covenant House New York made due with a hodgepodge campus consisting of a motel, a library, and a former penitentiary along Manhattan's West Side. In 2016, Gotham negotiated to buy part of Covenant House's lot for \$78 million and build a 47-story mixed-use tower. The deal included delivering a new turnkey building for the nonprofit. "This was more of a chess game because we had to



The newly rebuilt Covenant House New York is a vibrant 12-story shelter that can house up to 150 youths in 60 rooms spread across six floors.



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Residential: FXCollaborative

ensure Covenant House's goals were met as well as ours," says Bryan Kelly, Gotham's president of development. The 110-year-old real estate company was eager to add a building to its Hudson Yards portfolio, and Covenant House wanted a better, gender-inclusive environment for the more than 1,400 youths who show up at its doors each year.

Apart from the 60 bedrooms across six floors, Covenant House offers communal spaces, including classrooms, computer rooms, and a walk-in closet filled with professional attire for resident use. The facility also provides places for recreation—a subterranean basketball court—and contemplation—a nondenominational prayer room, a garden, and a music room. There's also a floor dedicated to an in-house clinic and a mental health center.

"The difference is night and day," says Angela Howard, senior vice president of facilities and real estate at Covenant House. "We spent a lot of time with the architects and they spent a lot of time being thoughtful about designing a space based on what we needed."

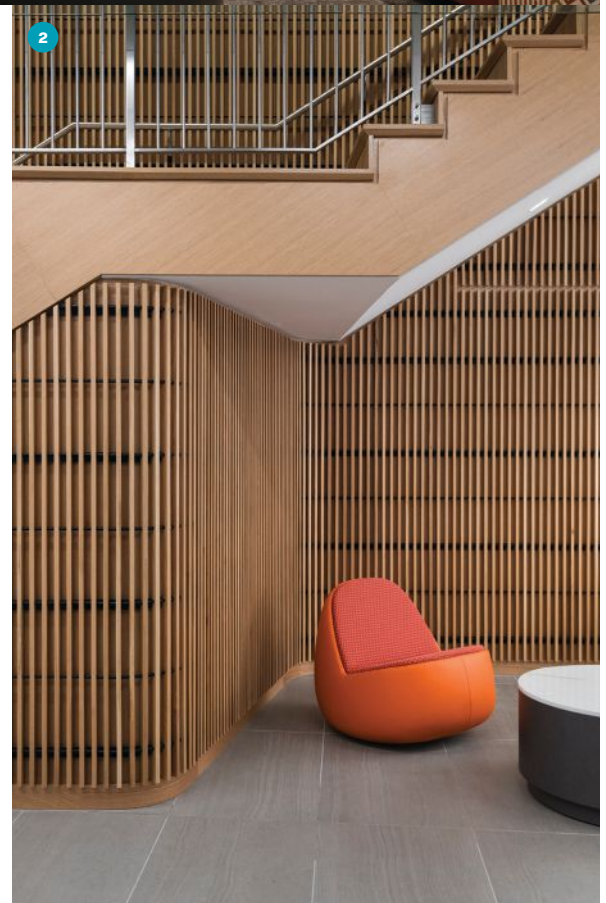
For one, the design team embraced Covenant House's mission to provide a dignified haven for young people regardless of sexual orientation or gender expression, especially LGBTQ youth. Bathrooms were a key issue for this population who experience significantly more discrimination and abuse in and out of homeless shelters compared to cis-gendered youth. "One of the earliest things we decided on was to avoid ganged bathrooms and showers," explains Heidi Blau, FAIA, a partner at FXCollaborative who oversaw the project. "We decided early on that this would be helpful so the youth don't feel that they're in juvenile detention," Howard adds.

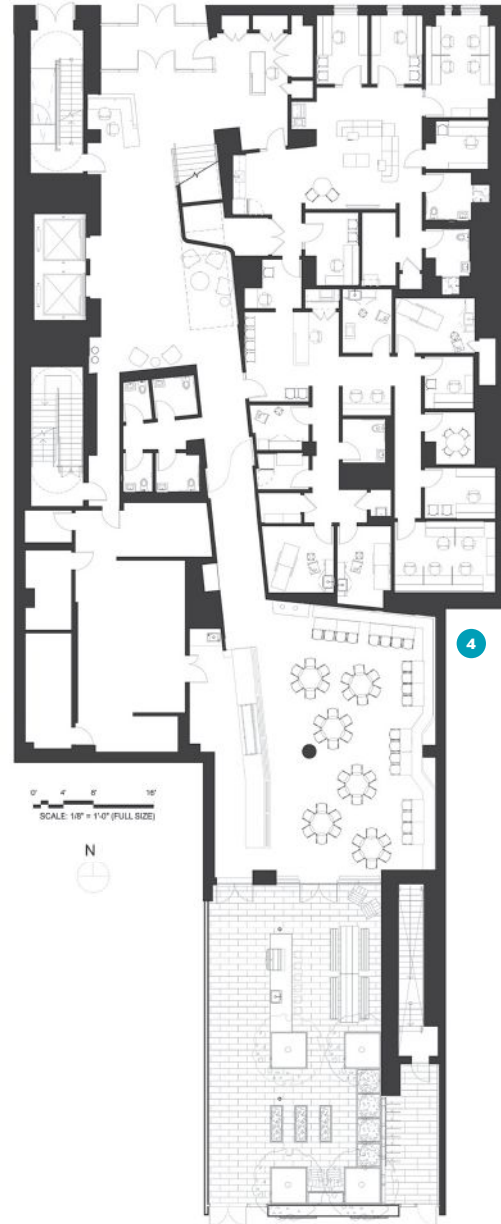


The sense of welcome is also reflected in the choice of materials, which didn't compromise beauty for durability. Eschewing the dispiriting brutality of similar public housing facilities, FXCollaborative selected graffiti-proof Equitone fiber-cement wall panels, sturdy porcelain floor tiles, and hard-wearing carpeting. "Everything has to stand up [to all sorts of stress]," Blau says.

For all the new touches, Covenant House's history is coded in the building's color scheme. Shades of blue, yellow, lavender, and lime green were color-matched from a beloved mural in the former residence building. Sections of the painting also reappear as decor throughout the project.

Ultimately, thoughtful architecture can have a profound effect on residents who may be in crisis, says Nick Garrison, FAIA, FXCollaborative's design director. "I see it as respect," he explains. "The idea that kids who were sleeping on the pavement coming to a welcoming place can be completely transformative, I hope."





1. The airy lobby includes ample seating space and a central security point to maintain resident safety.
2. A sinuous wood accent wall in the lobby features white oak panels that soften the space.
3. FXCollaborative relied on natural materials and a gray brick façade to lend the project warmth and solidity, setting it apart from the surrounding glass towers.
4. In addition to the lobby, the first floor includes a welcome center, a wellness center, and a café that opens directly onto a landscaped patio.

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AIA Architect



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From left to right: Kathryn Tyler Prigmore, FAIA; Melissa Daniel, ASSOC. AIA; Katherine Williams, AIA; Kathy Denise Dixon, FAIA

Collective Success

Riding the Vortex, this year's Whitney M. Young Jr. Award winner, is setting up Black women architects for excellence.

By Stephen Hicks

Riding the Vortex is a collective of Black women architects who provide professional development resources and support to women of color. Riding the Vortex fosters networking and collaboration well beyond its target audience. The nucleus of the collective includes Kathryn Tyler Prigmore, FAIA; Kathy Denise Dixon, FAIA; Katherine Williams, AIA; Melissa Daniel, ASSOC. AIA, and Barbara G. Laurie, AIA, who passed away in 2013. Riding the Vortex launched in 2007, and most recently, the group was awarded AIA's 2022 Whitney M. Young Jr. Award, named after the late civil rights hero and director of the National Urban

League. We talked to Prigmore, Dixon, Williams, and Daniel about the impact of their work.

Prigmore: My mother was active in the civil rights movement. Names from the forefront such as Dr. Martin Luther King Jr., Andrew Young, Shirley Chisholm, and Whitney M. Young Jr. loomed large in our household. As early as middle school, I knew that if I was going to pursue architecture—primarily a profession of the privileged—I had to find a way to contribute to the movement.

Dixon: Mr. Young was a role model and a conscience for our society. His 1968 speech

at the AIA conference kept the social aspect of architecture alive, and the idea that fairness and equity need to be involved in everything we do. It's certainly been important to the profession. It's an honor to be awarded, an honor to be associated with his name and legacy. We were all ecstatic when we found out. We knew there was going to be some tough competition, but we know what we've been doing—a lot of good work and contributing as much as we can to the cause.

Vortex aims to extend beyond its original mission, into all communities disenfranchised by the profession.

Prigmore: Riding the Vortex uses the power of storytelling to engage the profession in open and safe dialogue and to resolve difficult issues facing our profession. Vortex recognizes African American women architects. That's first. Vortex programming gets licensed women at different levels in the profession out in front of the architecture world, so others in the profession can see our contributions. Second, we make connections. Our huge, diverse networking community continues to evolve. Third, we include a young woman—either a student or a recent graduate—as a panelist in each typical program. Their contributions are inspiring for everyone pursuing architecture.

Williams: Vortex provides a safe space for Black women architects to speak about their professional and personal lives without being ridiculed or being dismissed. We don't always get that. Initially, we highlighted our stories because there weren't magazine articles and websites telling our stories. Even for us here in the Washington, D.C., area, even though there's a large concentration of Black women in architecture, so many of us work in places where we may be the only Black woman, and we don't always see other Black women in our day-to-day work.

Dixon: Vortex is a labor of love because it's all volunteer work. We also provide mentorship and encouragement for older professionals who may be stuck and not licensed yet. These are the realities of our society in a field that mostly doesn't look like African American women. We're providing a crucial resource in helping people move along in their careers in architecture.

At the time Vortex was founded in 2007, 175 Black women were registered in the Directory of African American Architects. As of 2022, that number ballooned to more than 539 currently licensed out of a total of 2,445 members. Vortex has been a major catalyst in the 254% growth in African American women architects.

Dixon: Membership organizations in architecture should take note of what organizations in medicine and law did to increase their numbers of minorities. Architecture is way behind in that regard.

Daniel: What makes Vortex so great is that Black women see themselves being celebrated, while uplifting other Black women. We share strategies in surviving architecture school; how to navigate professors, colleagues, and clients who

are using microaggressions and who are exhibiting implicit bias towards us. The space also goes into schools sharing advice in design as well as in applying to the first job at a firm.

Daniel: I went to the School Without Walls high school [in Washington, D.C.], which allowed me to explore whatever I wanted to be. Through the Marion Barry Summer Youth Empowerment Program, I attended an architecture program at Howard University. That's where I met Barbara Laurie. She worked at a Black-owned firm—Devroux + Purnell Architects-Planners, PC—where I interned in high school. Both Paul Devroux, FAIA, and Marshall Purnell, FAIA, were presidents of the National Organization of Minority Architects. Later, Purnell became AIA president.

I was living in two different worlds: being the majority and being the minority. Growing up in public housing, the main reason why I wanted to become an architect is so other kids didn't experience the living conditions I experienced. Being exposed to Black architects and how we shaped D.C. was inspirational. There's been a disappearance of the black firm. Thankfully, Devroux + Purnell, now known as DP+Partners LLC, is still around.

Williams: Architects need to be aware of and equipped to tackle the systematic barriers within the built world. It goes beyond architecture and involves financing and government as far as municipal zoning and approvals. This includes serving on boards and commissions in your municipality or being aware of how people are treated and speaking up when you can. It goes back to providing good design for all of your clients. Recognize that your client, your direct client who's paying, may not be the end user. Make sure that not only are you listening to the client who's paying you, but also thinking about the people who are actually going to use the building, the space. Howard University College of Engineering and Architecture has been the epicenter for each collaborator in some capacity.

Dixon: Being a Howard graduate, they teach you early on: "Give back to the community." That's something that's been ingrained in my career.

Williams: Howard was a place where my architecture career was nurtured. The professors cared about what I was doing. They cared about my career. Many of

them have remained in contact. They're people that I can call to this day. Howard professors emphasized how our work was shaping the communities around us. And it wasn't always some random design at some random location. We had some of those as well, but we also had projects where we were directed to "Think about the community that's around it and how your project is going to affect [them]." I learned that there and carried that forward. The students that were there with me, even though we were competitive, we all supported each other and wanted the best for each other. I think it fostered the passion that I already had in me for service.

[The following observations were in answer to a question about how former colleague Barbara G. Laurie, who laid much of the groundwork for the collective, would have responded to the award.]

Daniel: She was a mentor and she knew how the game works in this industry. She made sacrifices. Humble in nature, she didn't walk around saying, "Hey, I walked 20 miles to school." She was never that person. How do you describe a person who has carved a trajectory for your career? It's hard.

Dixon: She was an architect's architect. She was very highly regarded, just a wonderful person and mentor. She and Kathryn Prigmore are pretty much the reason I'm a part of Vortex because they came to me to join them as they started this effort in the beginning. She was always at the forefront of anything related to mentoring or helping other people's careers. She was a very good architect herself, and she's just one of those people you would want to be proud of you. Vortex continues her passion and her striving for excellence, and we should all continue to do that in her honor.

Prigmore: Barbara would be elated. She was an amazing person. I met her when she was a student. She put 100% of herself into everything she did. She was an amazing architect. She was an educator. She was one of the founders of OBD, Organization of Black Designers. She was an astounding individual and it's so sad that she passed so early. I was one of her mentors and we were working on her fellowship application when she passed. All of the Vortex collaborators share Barbara's desire to break down all barriers to people of color and women in our profession. **AIA**

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Mental Health Design and the COVID Classroom

Research shows that students are struggling due to COVID-19-induced disruptions. How can architects help?

By Patrick Sisson

When the roughly 500 elementary students at Hawthorn Elementary in Vernon Hills, Ill., a suburb about 40 miles northwest of Chicago, return to classes next fall, they'll be warmly embraced by a building sporting new floor-to-ceiling glass art, colorful hallways, and abstract artificial tree canopies hovering over the schoolyard.

They'll also be returning to an educational environment challenged,

changed, and re-imagined due to the once-in-a-generation pandemic that will continue to resonate throughout classrooms and hallways for years. In December, American Academy of Child and Adolescent Psychiatry president Yiu Kee Warren Ng said the nation's children were "in the deep end of a mental health crisis," an alarming escalation of the organization's October declaration of a national

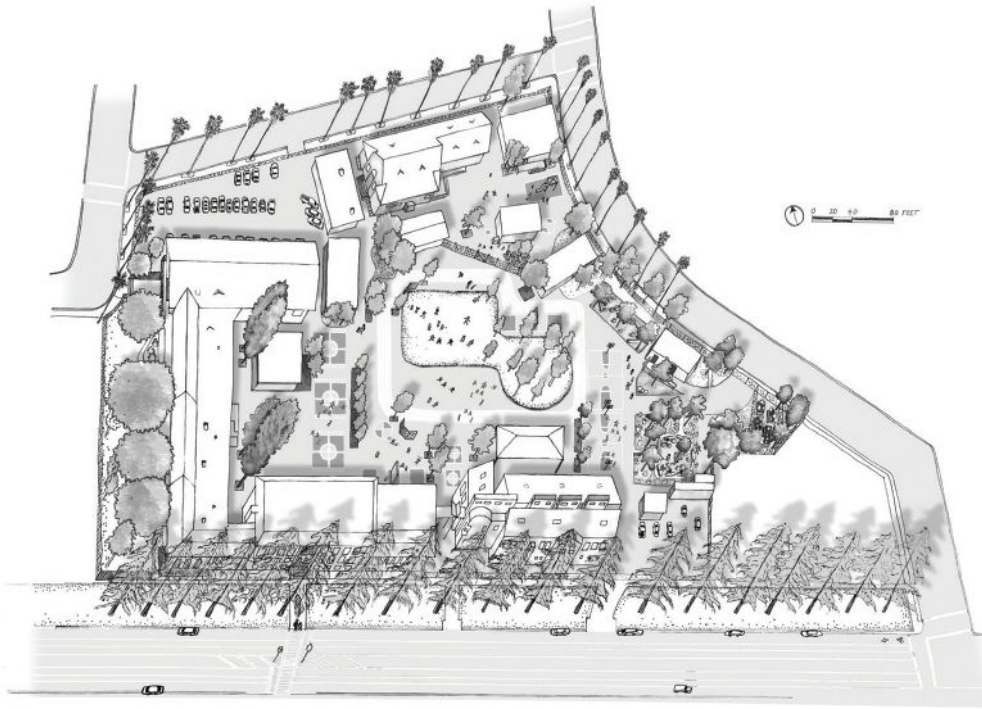
emergency for children's mental health.

Hawthorn Elementary, redesigned in the midst of the pandemic, is the first of many attempts to alter the built environment to address this crisis. The updated layout and look, designed by Legat Architects, is the first of many pandemic-era redesigns the district will undertake with the lessons of COVID-19 and classrooms top of mind, according to LeeAnn Taylor, assistant



CREDIT: EDMUND BARR

This elementary school playground in the Eagle Rock neighborhood of Los Angeles was redesigned to include grassy knolls and oak trees, increasing prosocial behavior by 40% to 50%.



The Eagle Rock playground redesign was completed in 2016.

superintendent of finance and operations for the local school district. Educators, architects, and parents focused on color theory, flexible space, sensory space, and the need for areas where students can step away for a moment and regroup.

“We’re definitely thinking about how our spaces can support kids and what they need to be successful,” Taylor said. “Some of them are fearful of coming to school, and some of the kindergarten students didn’t have preschool, so they’re really coming here and learning to play and interact with each other, after a lack of interaction with other students.”

Few spaces in society went under the microscope of pandemic-era public opinion like schools. And while in many cases battles over masks and mandates will persist, perhaps the most lasting long-term impact will be how the stresses and challenges of remote learning will contribute to a rethinking and reshaping of what schools look like in the future.

Cost-effective, innovative interventions, like those sweeping the hospital and mental health care fields, are in high demand, according to architects and school officials involved in planning and executing renovations and designs for new schools. The once-in-a-generation experience with COVID-19 may create a similarly unique opening to rethink the physical dimensions of education.

“Before the pandemic, during design workshops, teachers and administrators would say, ‘Oh, no way, we can’t do that, we

can’t change this,” said Robin Randall, AIA, director of Legat’s pre-K-12 education team. “Then the pandemic happened, and boy, did we have to change. But now we know we can change, and it’s been dramatic.”

Changes in attitudes, and appropriations, may overlap at a crucial moment. California alone is spending billions of dollars to improve and expand mental health facilities in schools, expanding the network of wellness centers found in some cities, and the American Rescue Plan Act of 2021 includes roughly \$4 billion that can be spent on mental health. While many classrooms likely will receive new HVAC systems or overdue capital investments, Taylor and others say that going forward, a focus on student mental wellness will more directly influence design and architectural decisions, even for previously budgeted projects (the Hawthorn renovation was approved in 2018).

Expanding schools of thought around wellness, as well as trends toward more open and inclusive classrooms, have been advancing similar adjustments and additions to educational buildings for years. The larger hope for advocates is that the mental health strain of the pandemic and remote learning will result in a greater appreciation for the value of well-designed facilities for students, as well as a social commitment to fund and refurbish often poorly maintained facilities.

“We’ve learned how important school is for socialization,” Randall said. “Kids

started falling through the cracks when it was all virtual. People are much more aware of their environment and how it affects them. In the past, athletics has driven a lot of decisions about the educational environment. And now we’re seeing more prioritization of emotional learning and wellness.”

Currently engaged in numerous designs and redesigns for educational clients, Legat has been advocating for a number of updates and alterations to reflect the lessons of recent years. Library design focuses more on hangout space, leaning more toward a hands-on classroom, creative studio, and even STEM lab, with areas for private and small-group interactions.

Across classrooms and activity spaces, more room is being made for pullout spaces to allow kids to withdraw or have spontaneous socialization. Social service spaces have received more emphasis as part of broader circulation plans. Legat has found a consistent demand from schools asking for sleep pods, or additional space for cots in nurses’ offices, as areas to rest or escape ever-present screens.

Outdoor learning, which emerged, often ad-hoc, as a key element of pandemic-era health and safety adjustments, has also been emphasized, with budget-friendly projects such as embellished courtyards providing fast-and-easy new learning environments.

Taylor, of the Hawthorn district, said there’s been a sense of whiplash as design trends have conflicted with health and safety requirements. Prior to the pandemic, the movement was toward eliminating desks and introducing flexible furniture; Taylor recalls conducting a study a few years ago that found the average second grader was at their desk just 30% of the day. Today, while adaptability remains a focus, there needs to be a new focus on spacing and separation.

The new Hawthorn Elementary, originally built in 1986, has been reworked by Legat to include more abundant natural light via clerestories and window walls, and a focus on healing spaces, including a new fitness area and sensory therapy space. Taylor said a key request was less institutional common spaces.

“We need to make our community spaces feel more welcoming,” she said. “In the libraries, we have little nooks for people to read a book quietly. We can’t assume everybody wants to be socializing all the time. We need to meet kids where they’re at. We’re looking beyond the class.”



CREDIT: EDMUND BARR

A greater connection to the outdoors is proven to improve mental health in students. [Pictured: Eagle Rock Elementary]

These types of changes ultimately benefit the equity mission inherent in education. Throughout the pandemic, as altered routines changed commutes and access to schools and socialization, existing inequities around class and income were amplified, according to Layla McKay, director of the Centre for Urban Design and Mental Health.

“During the pandemic, people went from vaguely thinking that perhaps mental health might be linked in some way to the built environment to having this real personal sense of how that came about. And that gave permission for innovation.”

For many architects and designers focused on education, a greater connection to the outdoors and renewed focus on indoor-outdoor spaces and functional landscapes have become not just battle-tested means of continuing education during the pandemic, but proven ways to improve mental health and connection for students. Simply opening schools to more views of the outdoors can have significant impacts; researchers at the University of Illinois have collected voluminous evidence that rooms with views of trees and the outdoors increase student performance and decrease anxiety.

In many ways, landscape architects have long led the charge for this kind of design, especially during the pandemic. In 2020, a cadre of Bay Area organizations—Green Schoolyards America; The Lawrence Hall of Science at University of California, Berkeley; the Ten Strands nonprofit; and the San Mateo County Office of Education—created the National COVID-19 Outdoor Learning Initiative, which has garnered national media attention and become a

clearinghouse for ideas and innovations. Sharon Danks, who runs the Green Schoolyards America program, estimated interest in outdoor learning exploded by a factor of 20 during the last two years.

“Most schools across the country are underperforming in terms of their campus grounds and buildings,” said Claire Letane, a landscape architect and author of *Schools That Heal*. “And it’s not strictly an urban issue, or an issue at one level of schools. Elementary schools, middle schools, high schools: they all could do so much better in terms of bringing nature into children’s lives on a daily basis.”

Letane spearheaded a redesign of her child’s elementary school playground in the Los Angeles Eagle Rock neighborhood, completed in 2016, replacing a completely paved landscape with grassy knolls and oak trees. The comparatively modest \$350,000 investment increased prosocial behavior by 40% to 50%, according to a Occidental College study. The results follow decades of research into the potential for healing spaces, such as Roger Ulrich’s pioneering research into hospital rooms in the 1980s. But the pandemic, and the sounding of alarm bells by teachers and psychiatrists around student mental health, may fast-track such design thinking into schools. Letane hopes pioneering examples, such as Environmental Charter School in Lawndale, Calif., which boasts a living stream and native fruit trees, will become more commonplace.

“With skyrocketing levels of student anxiety and stress and depression, and increasing suicide rates, the need for healing environments that bring them

together and provide a sense of belonging and a sense of community is just way overdue,” Letane said.

Traditionally, it’s been a challenge turning plans into action at schools, since work tends to happen on a multiyear timeframe. But Letane believes that can work to advocates’ advantage now, with billions of dollars funneled toward schools and relatively small, cost-effective solutions offering extensive benefits. The “programmatically and scheduling nightmares” handed to schools during COVID-19 have left teachers and principals overwhelmed and burnt out. Governments and architects need to step in with plans and funding and consider turning schools into better community hubs.

“We’re looking for a quick fix to upend a hundreds-year-long academic system,” Letane said. “How do you start changing that overnight? The more we can provide places that are meaningful and promote a sense of ‘this is my school, a beautiful, healthy, nurturing environment,’ the more connected those students will feel to these places, and they’ll keep that connection throughout their lifetimes.”

Taylor believes adaptability will always be at the center of school design, both in anticipation of future pandemics or events that may require great flexibility, and to meet the needs of teachers and emerging technology.

“It’s important within this mental health discussion that we make sure facilities are supportive of teacher needs,” she said. “We need to do things to attract people to this profession. What will education look like in the future? We need to think of school outside of school, so to speak.” **AIA**



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The Matrix Feminist Design Co-operative Was Ahead of Its Time

The reissue of a 1984 text on women in architecture is starting a new conversation.

By Annie Howard

In 2021, at England's Newcastle University, architecture professor Katie Lloyd Thomas was working with a group of second-year university students in a reading group. Lloyd Thomas's choice for the group was *Making Space: Women and the Man Made Environment*, a 1984 book written by Matrix Feminist Design Co-operative, a collaborative of women who came together in the late 1970s to imagine what a feminist architecture practice might look like. For Lloyd Thomas' students, the experience was transformative: Through the text, they began to see how gender shaped the built environment that surrounded them, uncovering deep-rooted features of patriarchal placemaking that *Making Space* helped to defamiliarize.

"The students started reading it thinking that there wasn't discrimination around gender and space, and maybe even that they weren't really experiencing discrimination in their lives, but they came out with all kinds of questions," Lloyd Thomas says. "A lot of the students were surprised at how similar [their experiences] were to the 1980s."

Lloyd Thomas was once herself a young student shaped by the book. Having

discovered it as an undergrad, she later worked with several original Matrix members in a group called Taking Place, and says that the book has repeatedly played a critical role in her career.

As these students' experiences suggest, *Making Space* contains an enduring relevance that still captures the need for a feminist understanding of space today. It's a work that has impacted several generations of architects, urban planners, and feminists who want to transform their surroundings.

Now, with the creation of a digital archive housing Matrix's efforts, a retrospective exhibit hosted at London's Barbican center, and the reissue of *Making Space* by Verso in March, Matrix will have more opportunities to reach a wider audience, a trend that its founding members reflect upon with gratitude. While their initial work is now four decades old, the collective's process-oriented approach, rooted in lessons learned from the feminist movements that inspired its creation, retains its relevance today.

"I've seen a campaign called 'Make Space for Girls,' which is about teenage girls in male-dominated public spaces, and another about sex workers and their use

of city streets," says Francis Bradshaw, a founding member of the collective. "It's so pleasing to know our work is still useful for campaigning activities and is being taken in many different directions."

What Is Feminist Architecture?

Rather than prescribing a fixed, immutable form of feminist architecture, Matrix, which formed in London in 1981, insisted that all architects needed to understand the needs of their building's users, incorporating their perspectives at every stage of the design process. In the *Making Space* chapter "Women, Architects and Feminism," writer Jane Darke argued "that architects are out of touch with those who use their buildings, and that their professional training is part of the process that removes them from many of the people they design for." Merely getting more women to become architects does nothing if those women are still trained in male-dominated methodologies. Instead, Darke wrote, "The possibility of women architects adopting a different attitude depends in part on the existence of a feminist movement, and on whether the movement stresses the problems of women



From left to right: Matrix Design Co-operative members Barbara MacFralane, Anne Thorne, Susan Francis, Julia Dwyer, Cath Taylor and Kate Baker



The Jagonari building in East London was Matrix Design Group's first full-scale project. It still stands today.

in general or only those of a limited group.”

If a resurgent interest in Matrix is partially a marker of a burgeoning feminist consciousness that's bubbled up in the past few years, its origins are firmly nested in leftist and feminist organizing of the 1970s and 1980s. The group grew out of the New Architecture Movement, a collective of left-wing architects founded in 1975. According to Spatial Agency, an online encyclopedia of architectural movements, NAM “set out to criticize the conventional notions of professionalism and the internalized structure of the profession, and in particular the system of patronage where the designer of a building has little contact with its user.” These values were extended by Matrix, whose emphasis on the design process led to some of its most enduring influences on architectural practice.

Matrix members began organizing together in 1978 under the name Women's Design Collective, moving beyond NAM due in part to the shortcomings in its analysis of gender issues. (Another offshoot of the Design Collective, the Mitra group, emphasized getting more women into the profession.) Almost immediately, its members began projects that expressed this dissatisfaction, like the curation of the “Home Truths” exhibition in 1980, which sought to question the “natural” qualities of the home as a domestic space. These projects set the stage for the creation of *Making Space*, a book that was written and reworked over the next four years, synthesizing the group's divergent interests

in critiquing existing architectural norms while exploring the ways in which the built environment could better serve women.

While it doesn't appear in the text of *Making Space*, the early years of Matrix were also significantly influenced by the practice of squatting that was prevalent in '70s and '80s leftist urban organizing. Several members of the group lived in London squats during the group's early years. For architect Jos Boys, who lived in a communal home for five years and worked around the corner in a cooperative office space, squatting created the necessary preconditions for her work with Matrix to emerge. As she told *Field Journal* in 2017: “Squatting meant that I had access to this other space that was free and was very easy to rent, and so we used to have our meetings there, and Matrix, both the practice and the book, grew out of it.”

Jagonari, 'Rise Up, Women'

While *Making Space* serves as Matrix's enduring philosophical document, the group was able to complete several building projects together—funded primarily through government grants—before disbanding in 1994. The group's first full-scale project, the Jagonari Women's Educational Resource Centre, is still their best-known. Built in East London in 1987, Jagonari (which means “Rise Up, Women” in Bengali) emerged at the behest of a community of Bangladeshi women who sought to build a community center capable of serving a diverse set of needs. What began as a request for a modest, one-room portacabin soon became plans for a full-fledged community center. A feasibility study led Matrix and

the Bangladeshi women's group to ask for more resources, and the project was funded by the Greater London Council.

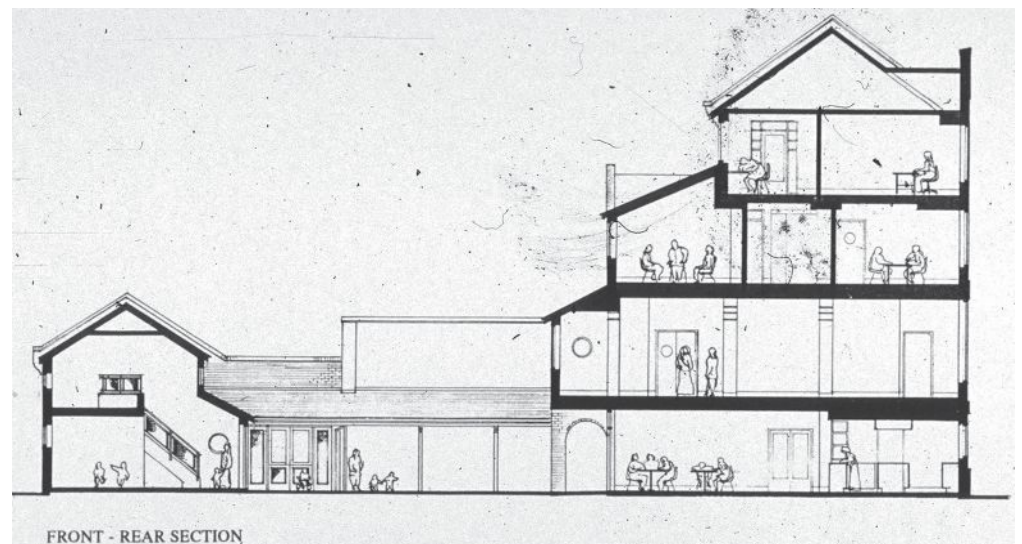
“We realized pretty quickly that they needed more than a portacabin, but when we asked them about their request, they said that they didn't expect that they could get anything else,” Thorne says. “We said, ‘Well, why don't we just put together all of the things that you've talked about?’ and to everyone's amazement, they said ‘yes.’”

The resulting building was a four-story structure, with a secluded, mosque-style courtyard at the building's rear. Jagonari's users helped Matrix choose its bricks by going on a “brick picnic” to look for inspiration around London, while designing the interior to offer flexible uses centering around childcare, support for domestic abuse survivors, language classes, and other resources. Due to concerns about racist violence against the building's inhabitants, Matrix incorporated narrow windows covered with South Asian-inspired window grilles. Thorne also notes that the building was likely the first in London designed both by and for women, and was among the first to incorporate accessibility features not mandated until the Disability Discrimination Act of 1995.

Unfortunately, the center closed in 2015 due to financial problems. Efforts are underway by the British preservation organization The Twentieth Century Society to preserve the building as an important piece of architectural history.

Matrix's impact on architecture, and its vision for a process-oriented, inclusive, self-reflexive design practice, resonates today in an environment in which the built environment remains hostile to

An elevation view of the Jagonari building in East London.



large portions of society. Those ongoing concerns make Matrix's resurgence that much more impactful, as its founding members continue to offer guidance to younger generations battling similar conditions.

The effort to bring together the cooperative's archives picked up steam in 2017 when founding member and *Making Space* co-author Sue Francis passed away. (Another member, Julia Dwyer, passed away in early 2020.) Other members, particularly Boys, sprang into action, pulling together photos, promotional materials, texts, and retrospective videos that stretch across the group's lifespan. Tied together, the archives reveal an intimate, caring community of curious thinkers whose ambitious efforts to

remake their profession never came at the cost of sacrificing each other's wellbeing, always working in pairs so that group members felt supported and not overworked.

"Some of us had children, or other responsibilities, and we made sure there was always somebody who could pick up your work and knew what you were doing, if you needed to be somewhere else," Thorne says. "There's also this idea that if you can keep going [into] the middle of the night, you're going to be the best architect, but we wanted people to go home, foster their relationships, and do what they needed to support themselves."

Official recognition for the group's impact is still lacking, but its recent revival has served as a reminder to the profession

of its influence. The contemporary feminist design collective Part W included Matrix's members in a list of women who merited consideration for the 2020 Royal Institute of British Architects Gold Medal, which has been given to only one solo female architect, Zaha Hadid, since its inception in 1848. Still, the group's merit is apparent, whatever their status is within the profession's male-dominated hierarchy. As Solma Ahmed, former chair of the Jagonari center, wrote in a letter in support of the group's nomination: "[Women] work hard, quietly mostly, dedicated to the core without any recognition. I sincerely hope this time they are recognized and rightly given the award for their pioneering, groundbreaking work." **AIA**

A I A P E R S P E C T I V E

Planting the Seeds

By Dan Hart, FAIA, 2022 AIA President

"So deep is the environmental crisis; so urgent is the demand for change, that architecture must become not only a profession ... but a form of public service."

That's first lady Claudia "Lady Bird" Johnson, addressing the 1968 AIA convention. Although she wasn't an architect, Johnson's legacy as an environmentalist and champion of the built environment is second to none.

I wish I could say the crisis is less urgent now, but we know that's not the case. We also know another sad fact: The barriers Johnson faced as a woman working for change remain all too familiar to women today.

As first lady, she set out to make the nation's capital, and the nation, more sustainable and equitable.

Starting locally in Washington, D.C., Johnson convened a group of public officials, architects, business leaders, and philanthropists in 1965 to kick off her "Committee for a More Beautiful Capital." She planted trees and flowers; installed park benches, fountains, and playground equipment; and took barren stretches of ground in D.C.'s traffic circles and medians and made them beautiful and welcoming. She took the same approach nationwide through the 1965 Highway Beautification Act.

Lady Bird did truly groundbreaking, transformative work—only to be dismissed as inconsequential.

When critics said what she was up to was no more than "beautification," it bothered her. But she didn't back down. In fact, she doubled down—pointedly stating her work wasn't "merely cosmetic." She would say, "If I can get people to care about the beauty of flowers, maybe I can get them to care about the earth through which they grow."

Today, we might call Johnson's experience "prove-it-again bias"—a dynamic under which women and people of color are stereotyped as less competent, so they are forced to prove themselves more to get the same respect and recognition as white men from elite backgrounds.

According to "The Elephant in the (Well-Designed) Room," a joint study conducted by AIA and the University of California, Hastings College of the Law, 50% of white women in the architecture field have experienced prove-it-again bias. And the number is even higher for women of color: 56.3% compared to 25.4% for white men.

Another sobering statistic: 70.9% of white women and 61.2% of women of color reported experiencing sexism in their workplaces.

This is obviously unacceptable, and the study confirms we have work to do. It asks hard questions, and we don't have all the answers. But I'd like to highlight a few of the steps AIA is taking to get us headed in the right direction.

In 2021, we launched a new program

called Next to Lead. Aimed at removing barriers to AIA leadership positions for women from ethnically diverse backgrounds, the two-year program just kicked off, and 17 talented women are participating—gaining leadership skills and networking opportunities. One of the best ways to describe this initiative is that it not only helps participants identify pathways to leadership; it is a pathway to leadership.

Additionally, our AIA Women's Leadership Summit is the largest professional gathering of women architects and designers in the country, and it offers a variety of opportunities and events focused on women architects moving into leadership roles at architecture firms and beyond.

To support firms in their own diversity progress, I'm proud of AIA's Guides for Equitable Practice. The guides are a series of research-based, but practically oriented, resources for firms and organizations. We updated them in 2020, and more updates are coming this year.

As Lady Bird said, "Where flowers bloom, so does hope." By asking tough questions and taking action, we're planting the seeds for a profession that is more fair, more equitable, and—ultimately—more effective. **AIA**



CREDIT: PAT STEWART

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Natural light enhances the design of this Houston hospital.

The VELUX Pinnacle System brings daylight to Houston Methodist The Woodlands Hospital



The 187-bed, 470,000-square-foot facility offers The Woodlands community a full-service, acute care hospital. The building was designed with VELUX Commercial skylights to maximize natural light and to promote a healthy healing environment for both patients and hospital staff.

DESIGN CHALLENGE

Natural light is important in health care facilities to make healing spaces feel more inviting and relaxing. Plus, studies have shown that natural light has benefits to healing. With elements from the outdoors, spaces can achieve an enhanced sense of comfort and hospitality.

SOLUTION

To provide an ample supply of sunlit views throughout the day, Page architects used VELUX Pinnacle Structural Ridge Skylights in the entrance drop-off/loading area and two interior atriums. "The large skylights were incorporated into the design to allow access to abundant daylight and to the quiet night sky, providing a relaxing atmosphere which changes throughout the day and seasons," said Page Principal/Senior Project Manager Brian Gray, AIA.

VELUX Commercial provided a custom glazing system for the entrance and atriums, incorporating Admiral Glass and a bright custom silver finish. Designed as a metal-framed skylight structure with a 6/12 pitch, the three ridges measure 96 feet by 44 feet, 85 feet by 35 feet, and 53 feet by 44 feet to extend nearly the entire length of the building's roof. VELUX Pinnacle Series provides buildings with optimal light distribution and can accommodate multiple insulated glass panels that prevent heat gain in warm temperatures and reduce heat loss in cold temperatures.

Through their bright and vibrant facility, the Houston Methodist team can continue to share their enduring history of leading medicine and providing exceptional programs and services to The Woodlands community.

Project
Houston Methodist
The Woodlands Hospital

Project Type
New construction

Location
The Woodlands, Texas

Architects
Page

Year
Constructed in 2015;
opened in 2017

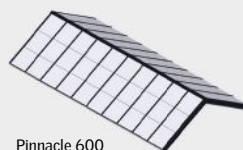
Daylighting Products
Pinnacle 600 Structural Ridges



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Product used in project

The Pinnacle Series structural ridge is a metal-framed skylight structure capable of wide spans and unlimited design possibilities.



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2022 **jury**



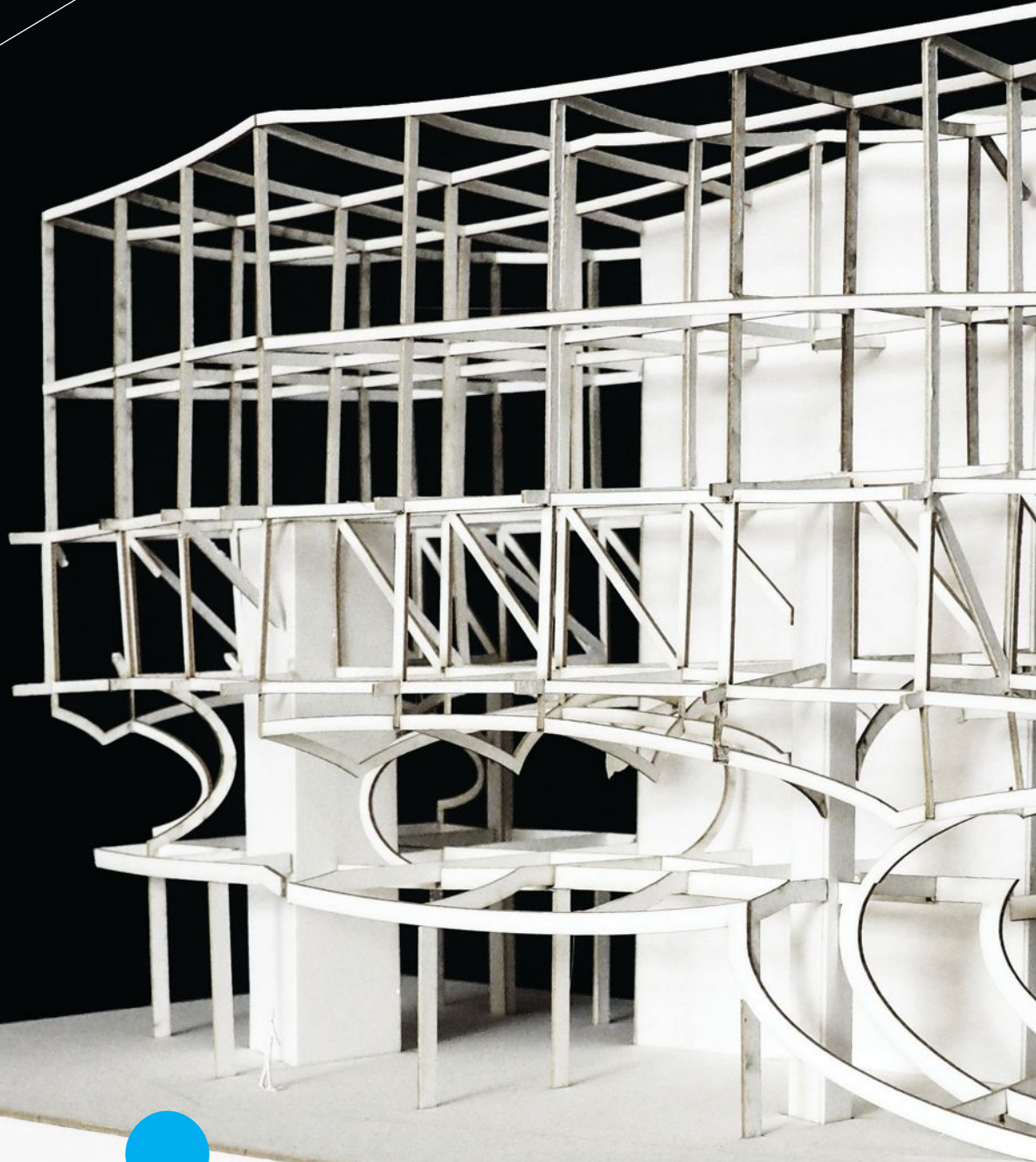
Patricia Saldaña Natke
FAIA, founding partner and president, UrbanWorks, Chicago



Kutan Ayata
founding partner, Young & Ayata, Los Angeles



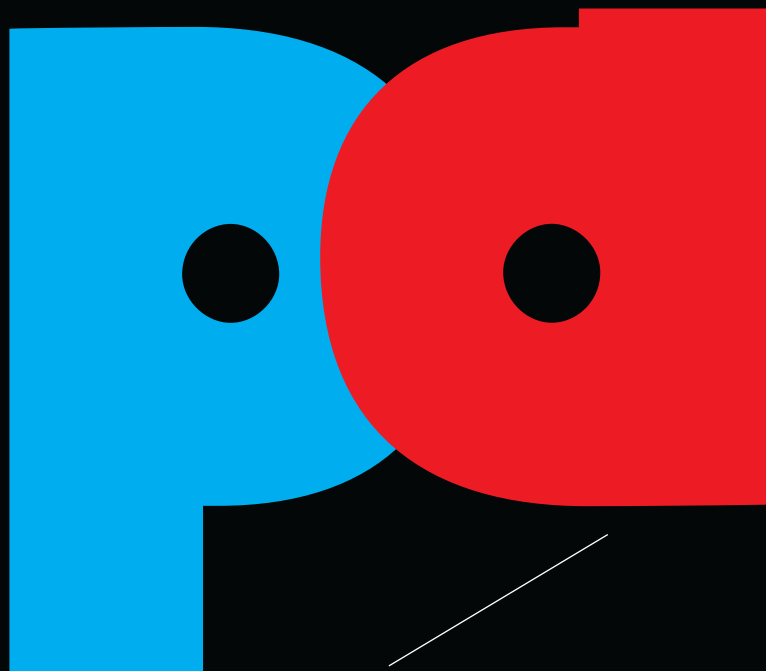
Kai-Uwe Bergmann
FAIA, partner, Bjarke Ingels Group, New York



Lithos Wellness Center p. 47



The 69th Annual Progressive Architecture Awards



MODERATED BY
MADELEINE D'ANGELO
AND **PAUL MAKOVSKY**

TEXT BY **IAN VOLNER**

Of nearly 200 unbuilt submissions, this year's jury—Kutan Ayata, Kai-Uwe Bergmann, FAIA, and Patricia Saldaña Natke, FAIA—selected nine international winners, sited across the globe, from Ghana and Helsinki to Colorado, showcasing design excellence and innovation from emerging practices and established heavyweights. Whether addressing equity through hybrid community spaces and cost-effective, low-rise housing or creating breathtaking, climate-sensitive proposals, these winning projects look beyond mere site and program, demonstrating how architects use design challenges as a launching pad for unexpected solutions that make our communities a better place to live, work, play, and breathe. —*Paul Makovsky*

houston endowment

KEVIN DALY ARCHITECTS + PRODUCTORA • Houston

"This deals with its environment and the current moment we are in as a projection. It's clearly not about office efficiency, it's clearly not about making the most of budget and footprint; it tries to do more."

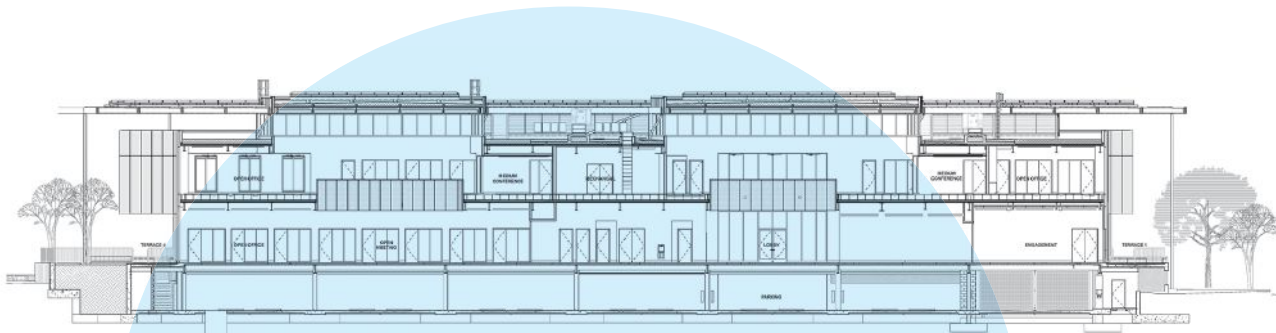
—KUTAN AYATA



Situated on a 1.5-acre parcel, Houston Endowment is framed and shaded by a grove of oak trees.

With its winning proposal for the future home of the Houston Endowment—one of the largest grant-making organizations in the Southwest—Los Angeles firm Kevin Daly Architects and Mexico City firm Productora allow the over-80-year-old nonprofit to move out of rented offices for the first time. The new headquarters will occupy a prominent site inside historic Houston's Spotts Park, a scenic yet central locale that inspired a design that feels equal parts organic and urbane. Key to the scheme is an enormous, semi-freestanding canopy that shelters the entire complex. Supported by columns, the white metal awning is topped by raked louvers with

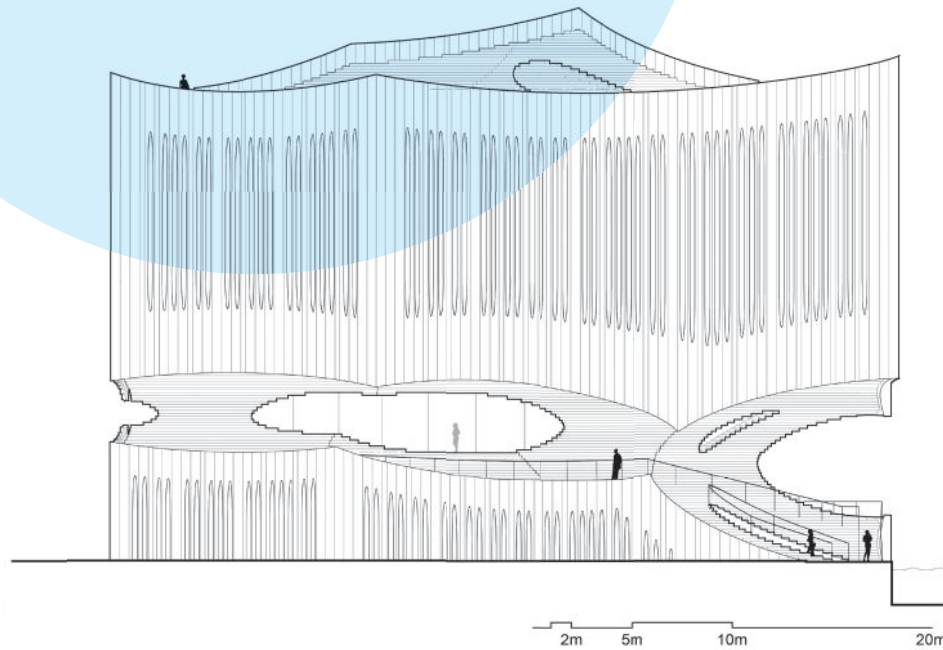
embedded photovoltaics that both screen the harsh Texas sun and harness its energy, substantially reducing the building's net carbon output. Tucked beneath the vast superstructure, the offices occupy a sequence of boxy volumes faced in glass and white steel, partially framed in structural wooden panels that further enhance the building's sustainable bona fides. Within the airy interior, employees can move from meeting rooms to event spaces by way of light-filled, spacious corridors, continuing to landscaped grounds that make the building feel like a natural extension of the existing public space.



Below the office space lies a naturally ventilated parking garage.

> To see more images of the 2022 P/A winners, visit bit.ly/PAAR22.

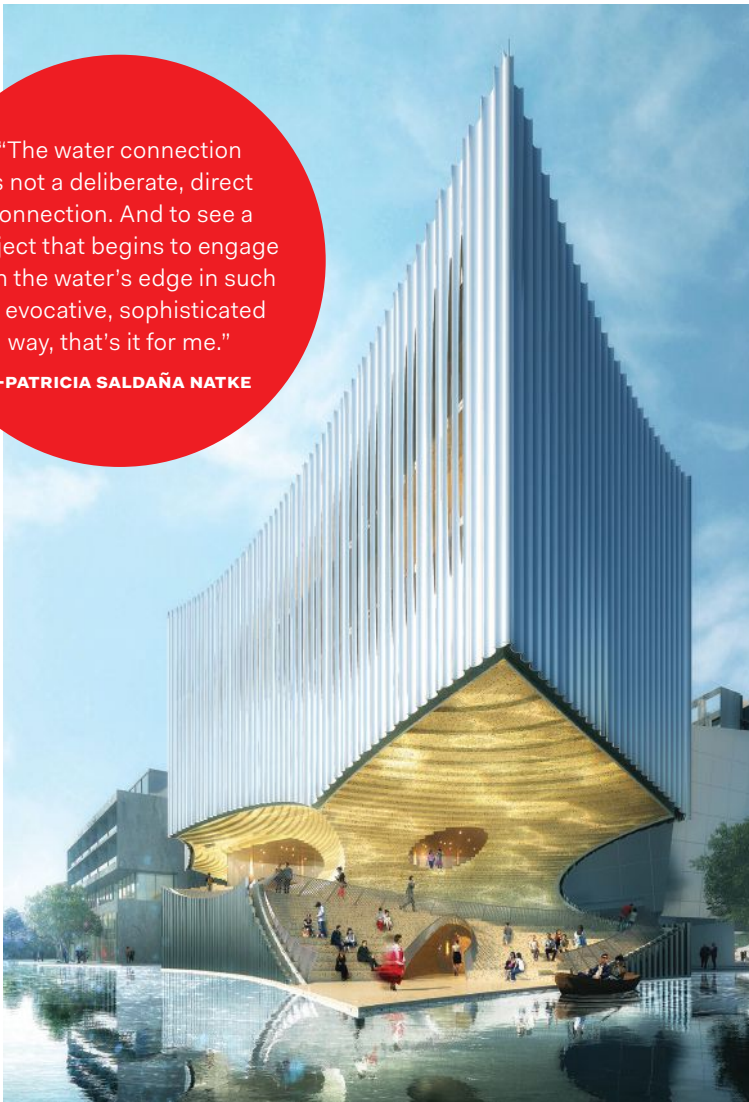
Guests arrive under a 15-meter-long cantilevered dock before ascending steps that double as an outdoor amphitheater.



The façade's curved, sculptural form creates dynamic shadows, natural lighting, and pleasing views.

"The water connection is not a deliberate, direct connection. And to see a project that begins to engage with the water's edge in such an evocative, sophisticated way, that's it for me."

—PATRICIA SALDAÑA NATKE



lithos wellness center

HÖWELER + YOON ARCHITECTURE • Chengdu, China

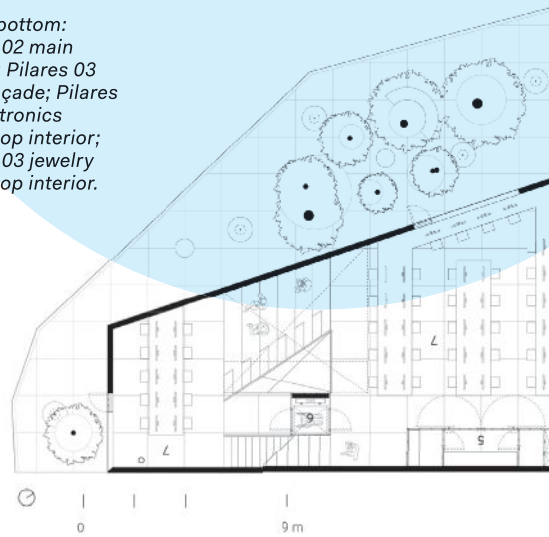
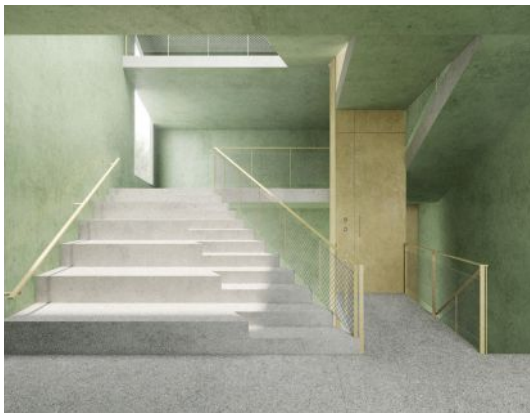
Höweler + Yoon Architecture of Boston has taken its sharp, analytical approach to the burgeoning western Chinese city of Chengdu, producing a hospitality project that promises to become a local landmark. More than just a high-end guest house, the Lithos Wellness Center is slated to be a full-service yoga and wellness retreat, an oasis in the center of the bustling megalopolis. Availing themselves of the lakefront site, the designers created a building that marks a formal and functional break in the quotidian operations of the urban environment. In a fantastic, almost dream-like scene, visitors arrive by boat to find themselves at a plaza-cum-dock seemingly carved out of one corner of the structure. They are then conducted upward via a sweeping staircase to the above-grade lobby, a wide-open bowl of a space unencumbered by interior supports, with the hotel rooms and spa contained in the cantilevered volume overhead. Topped by a garden roof with views over the lake and cityscape, the building wears its meditative heart on its architectural sleeve by way of a cladding system of composite aluminum strips, the vertical ribs giving the façade a steady, soothing rhythm interrupted only by the contoured void of the arrival and reception suite.

Top to bottom:
 Pílares 02 main
 façade; Pílares 03
 main façade; Pílares
 02 electronics
 workshop interior;
 Pílares 03 jewelry
 workshop interior.

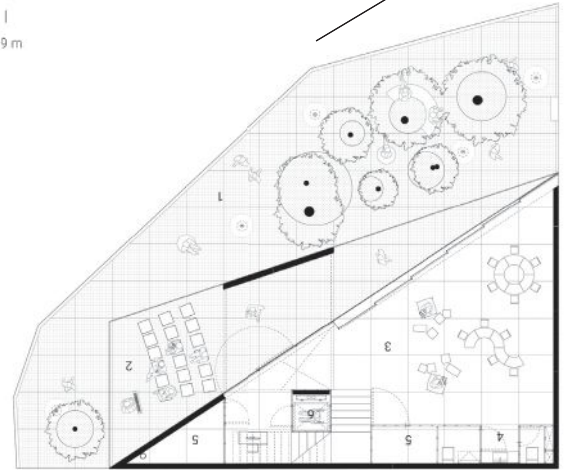


"Pílares is just a striking solution. It's wonderful because it brings cultural aspects and pure architectural form into underserved parts in Mexico City."

—PATRICIA SALDAÑA NATKE



Left: The first floor of Pílares 03 houses a screen printing workshop and jewelry workshop. Below: The Pílares 03 ground floor offers a lobby and bathrooms.



pílares 02 and 03

WORKAC AND IGNACIO URQUIZA ARQUITECTOS • Mexico City

For its first projects south of the border, New York firm WorkAC partnered with the Mexico City firm Ignacio Urquiza Arquitectos and embraced the rich architectural vocabulary of Mexico while adding its own cosmopolitan accent to produce a pair of civic buildings that speak in a compelling urban lingua franca. Commissioned by the municipal government of Mexico City in conjunction with architect Carlos Zedillo, Pílares 02 and 03 are part of a series of structures sprouting up around the sprawling capital to provide a range of civic services in areas long deprived of public or private investment. WorkAC's and IUA's two contributions to the Pílares program take advantage of

their shared proximity to small public gardens, integrating the buildings with the landscape to make them feel truly a part of their respective communities. Broad, glazed entrances open to each of the mini-parks, and the buildings' blocky forms are precisely cut to fill their irregular oblong sites, rising to three stories with over-scaled windows affording views to the surrounding neighborhoods. Clean and contemporary in outline, the buildings also do proper homage to traditional Mexican Modernism by way of their raw concrete materiality and dreamy, green-and-blue polychromy, hearkening back to the works of Midcentury geniuses Pedro Ramírez Vázquez and Luis Barragán.

table cabin

KEVIN HIRTH CO. • Buena Vista, Colo.

Combining the functional stringency of Bauhaus-era Modernism, the conceptual daring of 1970s-style “paper architecture,” and modern ecological sensibilities, Table Cabin revitalizes the single-family house as a vehicle for avant-garde design. Intended as a shared country home for two Denver-based families, the design from the Colorado office of Kevin Hirth Co. defies almost every convention of the typology: no cooling or heating, save for a pair of wood-fired stoves; no plumbing, just a cistern-fed outhouse; no kitchen; not even a bedroom, just an improbable-looking series of indoor hammocks strung above the first story. The formal solution likewise confounds expectations with a stepped, almost loaf-like volume, composed of six mechanically milled timber layers stacked one atop the other and wrapped in rough, weatherproof tar paper. Entered via any one of seven narrow doors, the house unfolds as a sequence of nearly identical non-rooms, separated only by a narrowing in the felt-clad walls and distinguished by nothing except a dining table in one, a lounge chair in the next. With almost no carbon footprint to speak of, Hirth’s design puts Existenzminimum in the service of sustainability, then pushes both toward an abstraction that seems, in the words of Charles Gwathmey, “beyond accommodation.”

A framing diagram illustrating the stacked plate strategy used for Table Cabin, which will be built up using a series of framed platforms rather than conventional walls.

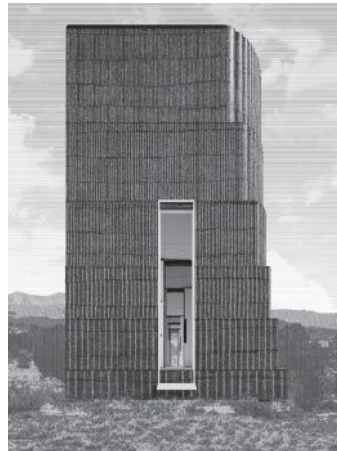
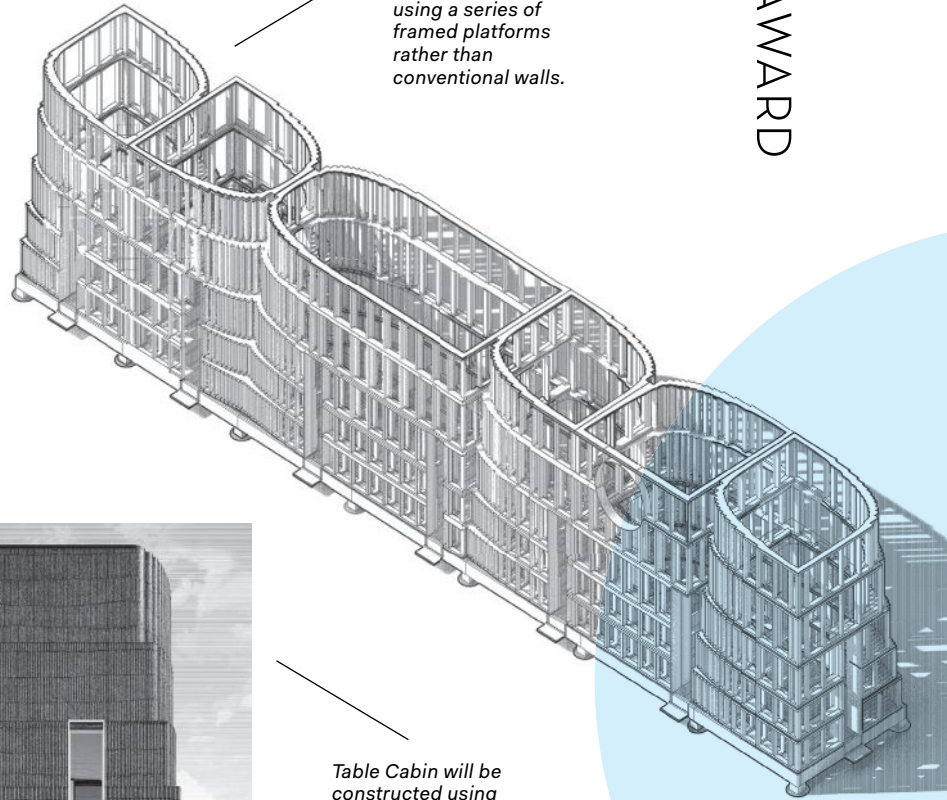
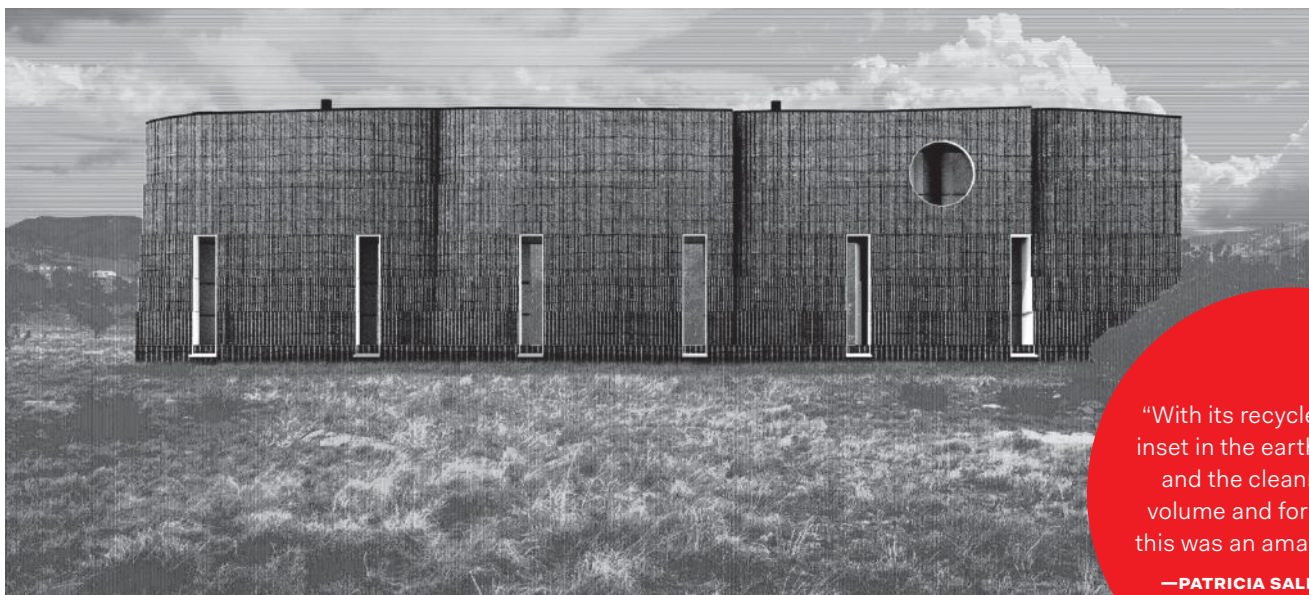


Table Cabin will be constructed using offcuts of 2x4 and 2x6 lumber salvaged from construction sites and purchased through a recycling yard in nearby Denver.



“With its recycled materials, inset in the earth, materiality, and the cleanness of the volume and form, I thought this was an amazing project.”

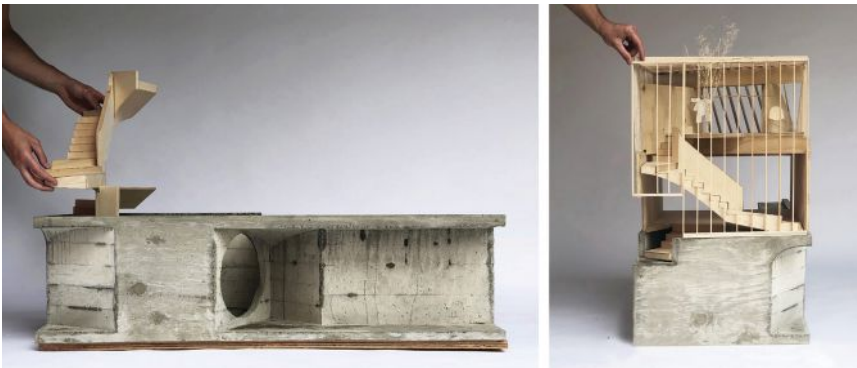
—PATRICIA SALDAÑA NATKE

"Spatially, it was rich, it didn't fall into the traps of over expression. It's disciplinary in some way, in the way it deals with geometry and the spacial nuances that came about."

—KUTAN AYATA

one and a half

JA ARCHITECTURE STUDIO • Toronto



A provocative statement on the contemporary domestic scene, One and a Half is a modestly scaled addition to a free-standing home in Toronto that tackles a range of hot-button issues including the COVID-19 crisis and the culture of work. Designed by hometown firm Ja Architecture Studio for the partners' own use, the new structure is not a true extension of the existing house but rather a discrete outbuilding linked to its predecessor via an underground passage, a variety of accessory dwelling made possible by a recent change in Toronto's municipal building code. In a radical break from the gabled building they began with, the architects gave their new extension a formal profile that all but defies description—L-shaped in elevation, One and a Half rises from a horizontal base to a two-story, tower-like mid-rise, the envelope stretched taut over the irregular spaces within. Those spaces, and their irregularities, signal the programmatic gambit at the heart of the project: With provisions for sleeping, working, and lounging, the amorphous interior scheme makes no firm distinction between any of these activities, allowing them to flow over and through each other, provoking an open-ended inquiry into life, work, and the connections between.

Diagram

1. Skylight
2. Winter garden
3. Dining space
4. Kitchen
5. Bedroom
6. Passage
7. Walk-in closet
8. Guest suite

Ja Architecture Studio used a 1:10 physical model to conceptualize the hybrid construction system of concrete, mass timber, and wood framing.



Top: Shimmer floor plan. Below right: Utility areas are embedded into the ground below the project, as shown in the section.



shimmer

KOIS ASSOCIATED ARCHITECTS • Drama, Greece

Located in the rolling, piney uplands of northeastern Greece, the aptly named Drama region is the setting for a private dining facility with its own sense of theatrics. Shimmer, as the restaurant is called, was commissioned by electronics maker Raycap for its sprawling woodland campus, a place for rest and refreshment for staff and visitors alike. With that simple brief in hand, the team at Athens-based Koīs Associated Architects pared its design to essentials: a four-square pavilion, its flat roof supported by slender pilotis of gleaming metal and its structure bound in a bubble of glass that makes it appear to hover over the landscape. The sharp juxtaposition of natural surrounds and pure geometric form is blurred by the sudden eruption at the pavilion's center of a lushly planted mound of earth, pierced by a tunnel that leads into—and effectively conceals—the restaurant's primary service and mechanical core. With technical know-how and a feel for the picturesque, Koīs conjures a striking architectural image, one that seems to take the famous formula of critic Leo Marx and double it—a machine in a garden, inside a machine in a garden.



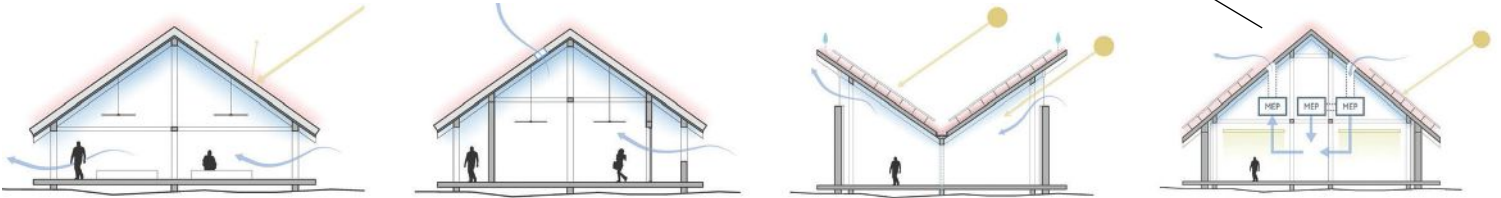
Shimmer provides a protected personal space for visitors while offering an uninterrupted view of the horizon.



"I was really drawn to this. I'm happy to see representation taking an active role. Both from its abstraction to these images, one cannot really deny [the project's] visceral quality."

—KUTAN AYATA

In addition to using passive ventilation strategies to optimize thermal comfort, District Hospitals rely on a locally manufactured insulated roofing system to reduce heat transfer.



district hospitals ghana

ADJAYE ASSOCIATES • Ghana

Flexible, economical, and deeply rooted in place, the District Hospitals proposal for Ghana from the Accra studio of Adjaye Associates marks a new chapter in the firm's commitment to creating high-quality design in sub-Saharan Africa. The hospital scheme imagines a network of more than 100 new health centers constructed throughout the country, each a self-sustaining one-story complex containing all the necessary facilities to provide modern medical care in cities, towns, and countryside alike. Three features in particular bear out the design's suitability to both the material and cultural conditions in Ghana: First, the use of prefabricated components, assembled Erector Set-fashion, makes the program adaptable to any site and any community; next, an intelligent response to climate, focusing on rainwater collection, shading, and courtyard gardens, ensures that each hospital provides a cool and comfortable environment for patients and staff; and lastly, a surprising symbolic element—evidenced in the plan's central spine and branching arms—connects the project to the Denkyem, a crocodile figure that frequently appears in regional mythology in association with resilience and tenacity. Enhancing the design's legibility and accessibility to its intended users, the formal gesture once again demonstrates Adjaye Associates' keen, artistic approach to building in West Africa.



A public garden and easy circular path encourage visitors and patients to spend time outdoors.

"There's an emphasis on outdoor space and that you gain your health by being outdoors, feeling the sun on your skin, and getting fresh air. It's doing a lot with minimal means."

—KAI-UWE BERGMANN



Located off the coast of Helsinki, Hot Heart comprises 10 cylindrical basins, each measuring approximately 740 feet in diameter.

CITATION

hot heart

CARLO RATTI ASSOCIATI • Helsinki, Finland

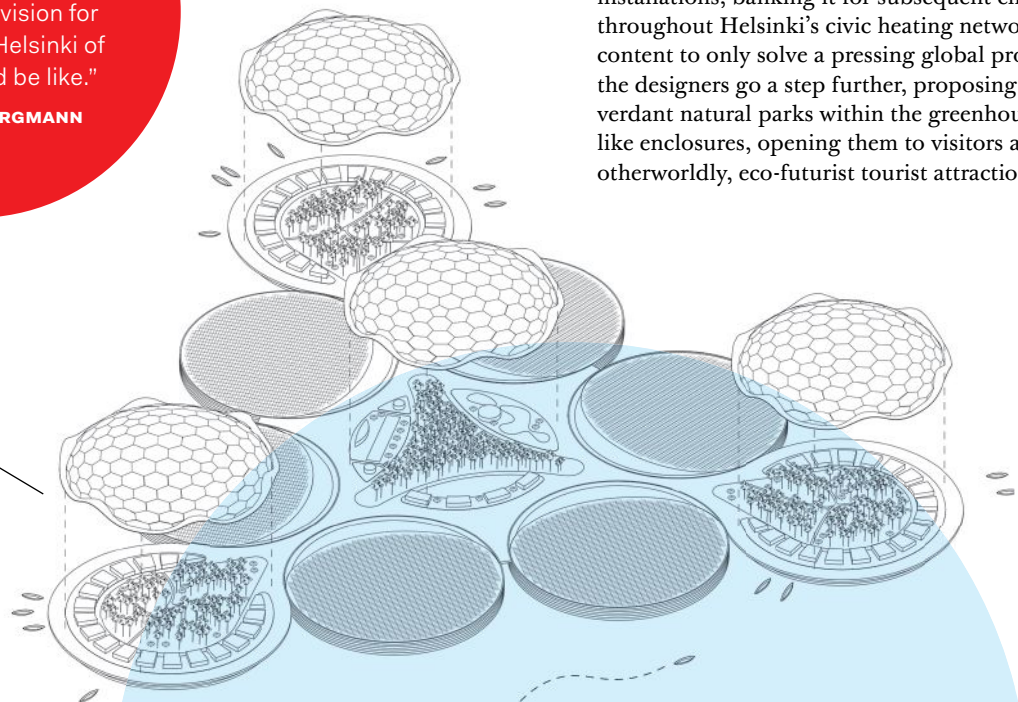


"This may be science fiction, but you've got to start somewhere and this is providing a vision for the people of Helsinki of what life could be like."

—KAI-UWE BERGMANN

There are transformative green technology ideas, and then there's Carlo Ratti Associati's Hot Heart. With offices both in Europe and the United States, the Italian-born architect and engineer decided to train his multidisciplinary practice on a singularly daunting problem: how to provide a zero-carbon heat source for one of the world's coldest capitals. The city in question is Helsinki, where the challenge is made all the more vexing by Finland's traditional reliance on coal-fueled power plants, their heated runoff water traditionally used to keep residents warm during the lengthy subzero winters. To cut this Gordian knot, Ratti and company have devised a suitably ambitious infrastructural sword: a series of lily pad-esque, glass-topped domes, each as wide as two football fields, set afloat off the city's waterfront. There, they would serve to trap thermal energy produced by seawater heat pumps as well as wind and solar installations, banking it for subsequent circulation throughout Helsinki's civic heating network. Not content to only solve a pressing global problem, the designers go a step further, proposing to install verdant natural parks within the greenhouse-like enclosures, opening them to visitors as otherworldly, eco-futurist tourist attractions.

Each of the domed islands houses one of four tropical ecosystems: the Amazon rainforest, the Central America rainforest, the Congo rainforest, and the Southeast Asia rainforest.

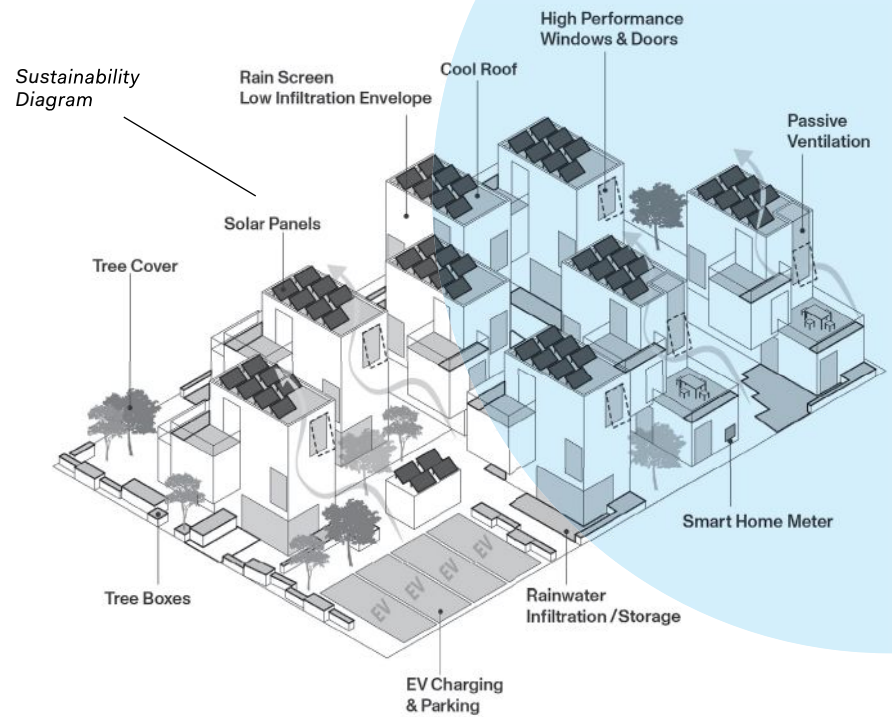


low rise housing

KEVIN DALY ARCHITECTS • Los Angeles

In Los Angeles' ongoing battle against rising housing costs, the city's own Kevin Daly Architects has furnished policymakers and fellow designers with a potent new weapon. The firm's Low Rise Housing concept attempts to fill what has long been a glaring gap in LA's approach to the housing problem: Despite planners' persistent efforts to encourage higher-density residential development, the endemic low-density character of the local urban fabric has stymied reformers, throwing up logistical and political obstacles.

Confronting this predicament head-on, Daly and his team devised a cost-effective, easy-to-build housing typology that uses the existing low-rise scale of the city while maximizing the potential units per area—all while activating the ground plane for the purposes of social interaction and ecological conservation. Imagined as a series of semi-detached two- and three-story mini-towers, the Low Rise Housing scheme creates infill blocks that can slip almost unnoticed into any conventional single-family neighborhood, subtly transforming it into a pedestrian-friendly cityscape with outdoor areas enlivened by plantings and pathways. Deploying simple, off-the-shelf materials, the structures themselves make the most of the Southern California climate, boasting floor-level arbors and upper-story balconies to provide optimal comfort with minimal energy consumption.



The microtowers preserve existing vegetation and allow for sustainable planting.

"I thought the scale and the composition were quite well done and that indoor-outdoor space-making was quite well done."

—KAI-UWE BERGMANN

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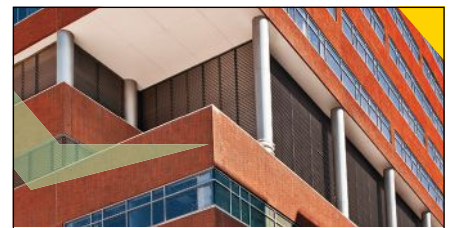
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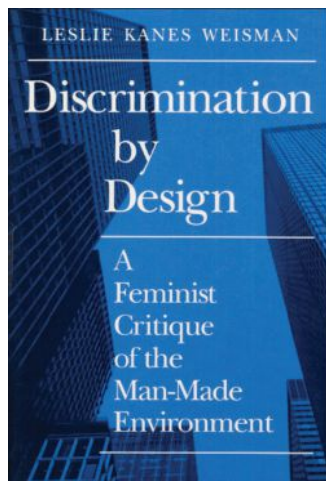
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Editorial: The Power of Space

TEXT BY PAUL MAKOVSKY



Three decades later, Leslie Kanes Weisman's book still offers a vital framework for understanding the spatial dimensions of gender, race, and class.

On the 30th anniversary of the groundbreaking book *Discrimination by Design: A Feminist Critique of the Man-Made Environment* (UI Press, 1992), it's important to consider the work of its author Leslie Kanes Weisman, a pioneering feminist architecture educator, activist, and zoning board official on Long Island. Not only was Weisman a founding faculty member and former associate dean of the New Jersey Institute of Technology School of Architecture in New Jersey, she also helped found in 1974 the Women's School of Planning and Architecture—an educational program for women, by women, interested in architecture, planning, and environmental design.

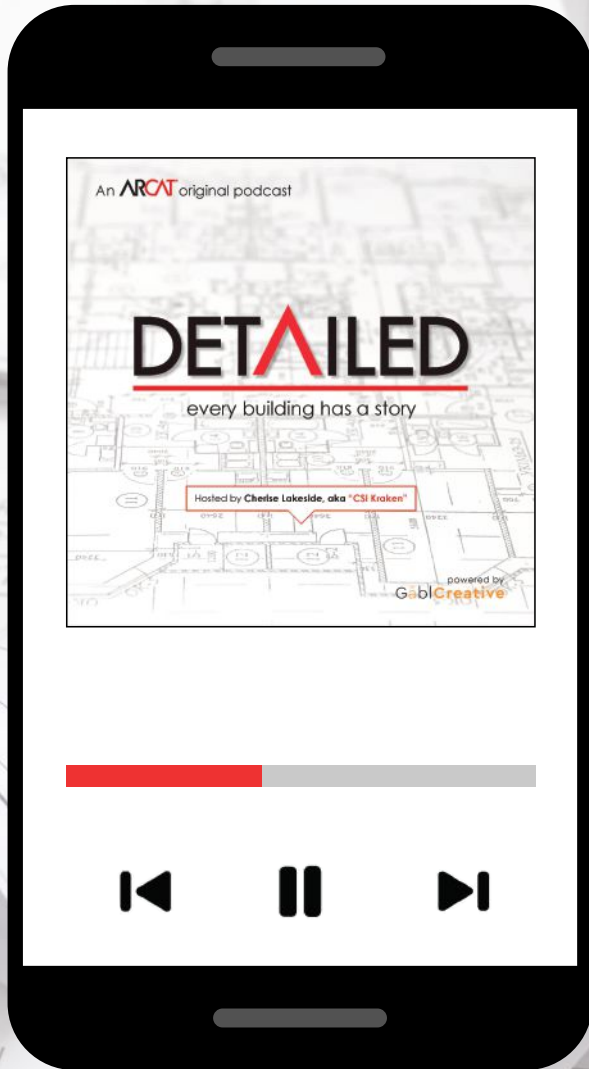
As an educator and planner, she's been instrumental in promoting universal and inclusive design as integral to design practice and as a model for teaching. Over her career, she often highlighted the work of other feminist practitioners who were focused on building communities that went beyond the Modernist glass box—readapting buildings and transforming underutilized spaces into women's shelters, day care centers, or community gardens.

Discrimination by Design explores the complex social processes and power struggles in building and controlling space, while also offering a better way of building, by understanding the spatial dimensions of gender, race, and class. The arguments she developed over 40 years ago around issues of institutionalism, classicism, racism, and gender inequity are still relevant today.

Throughout her book she offers innovative examples of the built environment. Take a look at the work of Kimi Gray, a public housing advocate who fought fiercely for policies to convert inner-city public housing projects into resident-owned and -managed properties, such as Kenilworth-Parkside projects in Washington, D.C. Or there's the concept of Ena Dubnoff and Dolores Hayden for Willowbrook Green Apartments in South Central Los Angeles that was eventually built as a housing development where the program included child care, intergenerational living, and on-site tutoring.

As we ask ourselves how to design better cities, workplaces, and housing, we must remember that Weisman's feminist spatial consciousness and the work of the pioneering design advocates she highlighted can guide the quest to achieve social justice and environmental sustainability, serving as models for building healthier communities.

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