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WINNER'S CIRCLE

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NOVEMBER/DECEMBER 2017



NEWS

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Danish designer Cecilie Manz collaborates with Duravit on a series of floor-standing vanities.

DURABLE GOODS

Seating Stones (shown) by Walter K. is one of Architectural Record's Products of the Year. New York eatery 'Wichcraft (left) serves up an inviting experience thanks to a design by Mapos. A series of vanities for Duravit by Cecilie Manz integrates style and function (above).

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<text>

The Votes Are In

ARCHITECTURAL RECORD,

SNAP's parent magazine, just published its annual *Record* Products of the Year awards (*Record*, December 2017, page 107). I'm so excited to have organized the 2017 competition that I decided to let the announcement take over SNAP's Editor's Letter. (Note the group photo showing this year's amazing judges with me.)



Few design publications nowadays—on and offline—conduct such a deep dive into how architectural building products actually perform. And the hard-won results of *Record*'s annual contest are really important to working architects because they are decided by industry peers. The 2017 jury of architects and designers met at *Record*'s office and whittled down a list of more than 250 entries to 57 winners. They include *Record* editors' favorites, based on stringent reporting.

RECORD'S BEST PRODUCTS' JURY Standing, left to right next to me: Jamison Guest, D.B. Kim, and Carrie Moore. Seated from left: Anne Fletcher, Erin Dreyfous, and Sheila Bridges.

You'll see a sampling of this year's Best in *SNAP*'s New Products Roundup (page 15), which is always selected based on the same high standards: What's the sound transmission class (STC)? What about the noise reduction coefficient (NRC) rating? Are the lamps available with a high color-rendering index (CRI)? Will it help lower a project's energy use?

You'll find that same level of reporting in our retail-design case study on **Mapos**'s new concept for 'Wichcraft, Tom Colicchio's chain of gourmet sandwich shops (page 20); in "The Alexa Factor," a trend report on the array of products that employ **Amazon**'s voice-control technology (page 36); and in an enlightening retail-design Q+A with Gregory R. Mottola, FAIA, a principal for **Bohlin Cywinski Jackson**, the firm behind several Apple stores as well as other award-winning retail outlets (page 19).

We trust that each article will broaden your view of what's possible, when specifying the best building components available.

Kelly L. Beams

KELLY L. BEAMON Editor



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WARRANTY	Manufacturer's 20 Years Leak-Proof Performance		
INSTALLATION	Overly provides a "complete" system package to include hardware, flashings, closures, etc. Custom shop drawings are standard and "Overly On-Site" mechanics assist with initial layout and start-up.		
	 Install starter base materials and continuous internal drain channels to a suitable substrate. HD Infill Board is set in place between drain channels prior to the metal roof panel. Install the panels between drain channel extrusions and anchor to substrate as required. Install the gasket to the compression cover and secure the assembly to the drain channel. Install & seal the cover cap securely over the compression plate to complete standard installation. Complete installation by installing perimeter covers and flashings. Can anchor to 3/4 plywood and a minimum 18GA metal substrate. 		
TEST DATA	 UL-580 Class 90 (Uplift Resistance) ASTM E 330 (Structural Performance) ASTM E 283 (Air Infiltration) ASTM E 331 (Water Penetration) 		
	Testing is not applicable to all substrates, materials, and dimensions. Additional testing and analysis is available upon request.		
COVER CAP	The width of the cover cap is 2 ¾ inches.		
PANEL SIZE	Width: Maximum extrusion center is 4 feet in select materials and gauges Length: Maximum panel length is 30 feet in select materials and gauges		
MATERIALS & FINISHES	MATERIAL	PANEL THICKNESS / WEIGHT	FINISHES
	Aluminum	18 GA (0.040") / 16 GA (.050")	Painted (PVDF) finishes include: Standard, Custom Metallic, Mica, Exotic, Weathered Patina Prints, Woodgrain Prints, Embossed
	Stainless	24 GA (0.024") / 22 GA (0.029") 20 GA (0.036")	2B, 2D, Matte, Custom Directional & Non-directional
	Titanium Zinc	26 GA (.018") / 24 GA (.024") 0.7 mm / 0.8 mm / 1.0 mm	(Grade 1) Mill and Matte Back Coated Natural, Pre-Weathered, Colored
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mbrief



landscapes and architecture."

Dr. Alawadi's training extends to the United States, including earning his doctorate in community and regional planning from the University of Texas at Austin and a working as visiting assistant professor at MIT's Center for Advanced Urbanism.

"I am honored to have been selected as the curator for 2018," Alawadi said of being the first Emirati selected for the role.

Art That's Fit To Print

The art of 3D printing—in the form of musical instruments built using the process—is the focus of a new exhibit by the founders of MONAD Studio. It's now on view at the Jewish Museum of Florida–FIU.

Already known for making string instruments with 3D printing, the founders of MONAD, architects Eric Goldemberg and Veronica Zalcberg, used the process to create vertebrae-like ceiling panels for the museum show. These filter overhead light while sonic transducers emit melodic sound. The sonic element was created and managed by composer Jacob Sudol. The architects previously designed a series of six musical instruments; of these, their 3-D printed violin and monovioloncello were played by musicians Michael Klotz and Jason Calloway at the show's opening reception. The installation, on display through February 25, 2018, is the first in the museum's new series called Subject to Interpretation by rotating artists and designers.



Emirati Architecture Has a Homegrown Emmisary

NEXT YEAR, FOR THE FIRST TIME since the United Arab Emirates began participating in the Venice Architecture Biennale, an Emirati national will curate its exhibit there.

Two previous curators were long-time UAE residents. Architect Khaled Alawadi is a native son and a Masdar Institute professor whose teachings focus on sustainable urban design.

To address the Biennale's 2018 theme "Freespace," Alawadi says he'll provide visitors with a look into "under-celebrated parts of the UAE's social and physical landscape." His intention is to take the architectural and planning discourse in the UAE outside of the confines of spectacle," he says.

Khulood Al Atiyat, a spokesman for the foundation, which chose Alawadi for the honor, has called him "one of the region's pre-eminent thinkers on urban

FUTURE PERFECT Dr. Khaled Alawadi (above) is the UAE's 2018 choice for curator of its national pavilion at the Architecture Biennale in Venice. These ceiling panels (right) and a piezoelectric monovioloncello (top, right) are among the art by MONAD Studio, on view at the Jewish Museum of Florida-FIU through February 25, 2018



<u>in brief</u>

ITSY BITSY CITIES Arckit releases three model making kits for children.

TOWN

40+pc

Vitra Holiday Offerings Include A Rare Eames Toy

A 1945 prototype toy elephant by Charles and Ray Eames is now on sale from Vitra. Large enough for a child to climb on, a bent plywood version retails for \$1,520 and measures 16 ffi" high x 16 ff" wide x 31" long. Plastic versions come in multiple colors and in two sizes (16 ffi" H x 16 ff" W x 31" L and 8 ff" H x 8" W x 15 ffi" L) for \$300 and \$105, respectively.

The elephant was a by-product of the husband-and-wife team's experimentation with molded plywood in the early 1940s. Although their plywood chairs would become iconic, the wood animal's tight compound curves were too costly to mass produce at the time. The prototype toy belonged to Charles' daughter and was first glimpsed by the public in 1946 Museum of Modern Art exhibit, one of the Eameses' first showings. Vitra issued a limited edition of the cherry plywood creature in 2007. Now, Vitra has begun serial production of the elephants along with several other never-built products by wellknown designers.

Pro-Style Building Kits for Kids

A company known for its professional model-making tools has launched two new lines of its kits for children.

The Arckit Play kits, designed by Irish architect Damien Murtagh, come in new Tiny Town and Cityscape versions targeted to kids ages 5 and 6, and in a Masterplan kit aimed at builders 12 and older.

Although the company has begun to target the LEGO audience by introducing the kits in schools and universities that teach STEM skills, its original sets became a hit with firms because of the plastic parts' ease-of-use and cost-effectiveness compared with other model-making materials. The new lines for children and adult hobbyists retail for \$24, just the right price for aspiring architects.

America's Next Roche Bobois

This month, Roche Bobois is anointing a winning product design in its first-ever U.S.based competition. The winning student concept will be prototyped and possibly sold in the French furniture retailer's 225 showrooms worldwide as part of its 2018 fall/winter collection.

This is the fifth time that the retailer has administered the contest, in which a newcomer could have his or her product sold alongside furnishings by such names as Kenzo Takada, Christian Lacroix Maison, and Jean Paul Gaultier. The contest is held every two years in a new country with a different partnering institution. This year's partner, The New School at Parsons, will see one of its students land the prize for the submission that nails the theme "Seating for Eating." "Helping young designers emerge is one of our 'natural' missions," says Roche Bobois' creative director Nicolas Roche in a statement. "We expect the designing force of Parsons will enrich our brand with their creativity and innovation."

Dean of Parsons School of Constructed Environments, Robert Kirkbride, says the students' research has focused on "cultural approaches to sharing a meal," but always with the imperative that their solutions needed to be financially viable.

Final designs will be presented to a panel that includes Roche Bobois' CEO Gilles Bonan and Rockwell Group principal and studio leader Barry Richards.

– Briefs were written by Erin Hudson.



MASTER CRAFTSMAN

A student at Parsons School of Design at The New School (above) is focused on developing a prototype as part of Roche Bobois' first U.S. competition for marketable designs.

OGR

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POWERS OF EAMES An elephant toy belonging to Charles Eames' daughter is newly available from Vitra.

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NEW PRODUCTS ROUNDUP



The best new products of 2017 put performance first.

1. SEATING STONES

MANUFACTURER: Walter K. PERFORMANCE: These triangular lounge chairs (33" high x 63" wide x 33" deep) are one version of the brightly designed seating.

PRICE RANGE: \$\$

APPLICATIONS: Available with Teflon glides for use on stone and carpeting, and felt glides for wood floors, chairs can be grouped for a modern, geometrical sectional. WALTER-K.COM/PRODUCTS (SNAP #200)

2. ALPHABET OF LIGHT

MANUFACTURER: Artemide PERFORMANCE: Suspended or wall-mounted, these fixtures designed by Bjarke Ingels Group (BIG) provide shadow-free 3000K illumination.

PRICE RANGE: \$\$-\$\$\$

APPLICATIONS: Comprises curved and linear LED tubes that can be connected to create a variety of graphic shapes, including letters and numbers. ARTEMIDE.NET (SNAP #201)

3. HYDRAULIC PATCH FITTING

MANUFACTURER: CRL-U.S. Aluminum

PERFORMANCE: Features a hydraulic self-closing mechanism integrated into a sleek, minimal patch fitting.

PRICE RANGE: \$\$

APPLICATIONS: Requires a simple anchoring of the base plate to the substrate, which speeds up the door-installation process, and reduces visible hardware. CRL-ARCH.COM

(SNAP #202)

4. STUDIO

MANUFACTURER: Sistemalux PERFORMANCE: LED track lights designed with a proprietary heat sink for optimum output performance up to 5000 lumens.

PRICE RANGE: \$\$

APPLICATIONS: The die-cast aluminum series features filed interchangeable optics, lockable on-axis aiming, and a range of warm-to-cool color temperatures.

SISTEMALUX.COM (SNAP #203)

KEY \$=value, \$\$=mid-range, \$\$\$=high-end

NEW PRODUCTS ROUNDUP





5.

BUZZICHANDELIER

MANUFACTURER: BuzziSpace PERFORMANCE: This 30 ³/4" x 29 ¹/2" LED pendant casts a gentle play of light and shadow around a space, while offering acoustic properties.

PRICE RANGE: \$\$\$

APPLICATIONS: The soundabsorbing shade made of a dual layer of eco-felt is available in plain or perforated Emperador (above), Carrara, and Gold versions. BUZZI.SPACE.COM

(SNAP #204)

SOUNDSTAR

6.

MANUFACTURER: Arktura **PERFORMANCE:** Defined by hexagonal coffers, this ceiling system consists of 12"- or 24"-deep modules made of a propriety acoustical felt composite.

PRICE RANGE: \$\$

APPLICATIONS: Its flexible, modular configuration can adapt to a range of spaces and design visions to create a spectacular visual effect. ARKTURA.COM (SNAP #205)

7.

HOUDINI UNLOCKED

MANUFACTURER: Bendheim PERFORMANCE: This architectural glass can be specified in hundreds of colors and styles, including several with an added acoustic privacy benefit of 4 Sound Transmission Class points.

PRICE RANGE: \$\$

APPLICATIONS: Available in panels up to 23' high, the micro-fluted, privacy glass bends light to obscure objects. BENDHEIM.COM (SNAP #206)

8. ENTRADA

MANUFACTURER: Creation Baumann for Carnegie PERFORMANCE: While this hanging panel appears to be wool felt, it is actually made of polyester fabric that passes stringent fire codes.

PRICE RANGE: \$\$\$

APPLICATIONS: Installed over windows, Entrada uses its 3-D structure of laser-cut woven fabric to create an interplay of light and shade. CARNEGIEFABRICS.COM (SNAP #207)

KEY \$=value, \$\$=mid-range, \$\$\$=high-end

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Gregory R. Mottola, FAIA, Principal Bohlin Cywinski Jackson

WHAT'S YOUR SECRET TO RETAIL DESIGN THAT ALSO HELPS YOU TELL A BRAND'S STORY?

There really isn't a 'secret' here. Our approach has always involved careful listening, finding solutions that address comfort, and designing projects that are a pleasure to experience. These retail spaces need to be engaging and foster curiosity, while at the same time, stir the soul. We've never thought of ourselves as 'retail architects.' We are architects in a broad sense; we are inquisitive and don't rely on pre-conceptions.

WHAT HAVE YOU LEARNED WHEN DESIGNING A SERIES OF RETAIL STORES FOR A SINGLE BRAND?

Our firm has had the good fortune to collaborate with some really great, innovative companies that have strong brands with loyal customers. With companies like Apple and now Blue Bottle Coffee, we helped develop, scale, and evolve their retail strategy using individual store design opportunities. Blue Bottle, in particular, has offered us a great chance to think about the elements of a café that reinforce the brand and customer experience. It's also been satisfying to create spaces using simple materials.

HOW HAS TECHNOLOGY CHANGED THE DESIGN OF BRICK AND MORTAR RETAILERS?

In some ways, the impact is significant. As more customers engage with brands, comparison shop, and do research online, the in-store experience has become much more important. Customers are more informed than in the past, and their expectations are much higher. They care more about the stories behind the brands. On the other hand, the fundamental needs of accommodating and delighting people remains the same regardless of technology.

POP-UPS ARE NOW BEING REPLACED BY POP-INS. WHAT'S NEXT IN RETAIL?

It's hard to say, for sure. When we've been asked to design retail spaces, it's typically for companies that want to keep the human experience for their customers at the forefront, designing spaces that are both comfortable and engaging. The use of technology in the retail experience will grow and become more sophisticated, but it needs to be integrated in a way that does not impede the engagement.





The number of daily visitors to Apple's Nanjing East store in Shanghai, China—its busiest worldwide. The store was designed by Bohlin Cywinski Jackson. **Gregory R. Mottola** is a principal at Bohlin Cywinski Jackson in San Francisco. The firm has created award-winning commercial, workplace, hospitality, academic, and retail buildings across the country, ranging from technology companies to retail spaces.



WICHCRAFT, MANHATTAN

Selling Sandwiches

CHALLENGE: Build a branded design for a chef-owned string of eateries, which is strong enough to roll out across the chain. **SOLUTION:** Use the materials palette inspired by the farmer's market—wood, metal seating, and plants—to echo the farm-to-table menu offerings.

> WHEN TOP CHEF JUDGE Tom Colicchio and his business partner Sisha Ortuzar decided to freshen up the design of 'Wichcraft, their New York City-based premier sandwich shop, they enlisted architecture firm **Mapos**.

> As part of Colicchio's Craft Hospitality restaurant group, 'Wichcraft, which

became known for its organic seasonal offerings, caught fire early among foodies drawn to the locally sourced ingredients. Yet, the restaurant chain lacked a cohesive brand experience.

"Wichcraft has been around since 2003, so they grew organically," says Colin Brice, principal at Mapos, a New York-based design and architecture studio, who worked with the company previously. "They didn't spend much time thinking about a brand concept, the logo, or the design of the spaces." Now the company is investing in a unified experience for consumers.

Over nine months, Mapos's team of innovators worked with the client to define the "Wichcraft experience." The resulting design is brightly colored with the laid-back materials and seating arrangements of a farmer's market: counters are paneled in white oak by **Rex Lumber** and flanked by painted steel stools and Habitus Chairs by **Industry West**, while columns are clad in colorful terra-cotta tiles. Gone are the old random colors and signage. "They wanted an atmosphere that parallels the food," says Brice. To achieve that, the team employed sustainable materials, communal seating, a bolder menu board and some retail offerings like cookbooks by Colicchio and other chefs.

The first location to get the overhaul was 'Wichcraft's newest, a flagship that opened in August on the ground floor of an office tower in New York's historic Garment District. In contrast to its farm-inspired finishes and furnishings, the 900-square-foot space sits neatly behind a modern glass front on a busy Manhattan corner.

GRAND OPENING

Inside 'Wichcraft's new flagship in midtown Manhattan, finishes and furnishings recall the homey welcome of a farmer's market stall in contrast to the building's modern glass entrance(above).



"The owners wanted to communicate that 'Wichcraft offers good, healthy food, and they're serious about working with local farmers to produce creative menu items," Brice explains. The farm-to-table approach is a commitment Colicchio and his team embrace.

To help with that, "the first thing we did was create a very large community table surrounded by stools," says Brice. In the center of the table is a lush variety of plants meant to communicate the message that **everything** at 'Wichcraft is organic. In addition to the community table, there are also standard two-tops, four-tops, and banquet seating throughout.

AND

ROWL

PHOTOGRAPHY

The Handmade Terra-Cotta line by **Solistone** wrapping a center column is the same material used to build the oven, which is used to bake fresh artisanal breads daily—a reminder that bread is at the core of 'Wishcraft's menu.

Then there are farm references that run throughout the store. For instance, hanging overhead is the Mapos-designed barn-style pendant by **Boch Lighting** specified by lighting design firm **Villa Lighting**.

The space also features what the architects call a special Market Wall, a place where 'Wichcraft can display its own branded coffees, jams, and spreads visible from the sidewalk. "Taking a cue from our past retail designs, we built a large and flexible system that could be easily updated," says Brice.

MADE TO ORDER

'Wichcraft's customers can dine solo at two-tops (above), or in group settings at high-top tables (top right), after placing an order from the menu, which is marked by large easy-to-read tiles (right).





CASE STUDY: RETAIL DESIGN



IN THIS PROJECT



15" CUSTOM LAMP

MANUFACTURER: Boch Lighting PERFORMANCE: Decorative custom light fixture utilizes any variety of LED screw-in lamp (E26 socket) to gently spread the light around or a tighter beamed lamp to create a light punch.

PRICE RANGE: \$\$

APPLICATIONS: Used for general lighting applications over a booth or cashier areas in retail stores. BOCHLIGHTING.COM

(SNAP #208)



NATURAL HUES

MANUFACTURER: Quarry Tile Company for Daltile

PERFORMANCE: This glazed tile is suitable for customizing murals, borders, and patterns. Further personalize by choosing between a smooth finish or abrasive surface.

PRICE RANGE: \$\$\$

APPLICATIONS: Can be installed on interior floors, shower floors, walls, backsplashes, countertops, and pool linings. DALTILE.COM

(SNAP #209)



HABITUS CHAIR

MANUFACTURER: Industry West PERFORMANCE: Comfortable seating solution made of commercial grade industrial steel with finely shaped walnutcolored veneer surfaces.

PRICE RANGE: \$

APPLICATIONS: Ideal for residential or commercial use. Specified in bars and restaurants across North America. INDUSTRYWEST.COM (SNAP #210)

SNAP #210)

Mapos has designed a second 'Wichcraft space in Tribeca using the same materials palette. In total, there are eight locations around New York City that could end up with the rebranded look.

One aspect to copy is the flagship's floor plan. During the lunch rush in the Garment District location, people order and move easily and quickly through the space.

'Wichcraft was conceived to put customers first, Brice explains. In the new shop, for example, "an initial challenge was creating more space near the ordering and dining areas where people wouldn't feel like they were bumping into each other," he says. In fact, the main cashier counters are placed at the back of the space.

The menu board, too, is designed to be user-friendly, inscribed on large colorful tiles against Natural Hues' white ceramic tile that the architects specified from **Quarry Tile Company for Daltile**. Meanwhile, adding an oak framework around it further enhanced legibility.

As Mapos collaborates on its next 'Wichcraft location, it now has a working model it can adapt to a variety of spaces and possibly employ far from the company's New York roots.

GOOD EATS

'Wichcraft offers a full menu of sustainable proteins, artisanal breads, housemade condiments, balanced flavor combinations, and seasonal produce for patrons wanting fresh, farm-to-table dining options (left).

KEY \$=value, \$\$=mid-range, \$\$\$=high-end



WHITE OAK

MANUFACTURER: Rex Lumber **PERFORMANCE:** Wood is extremely durable and aesthetically pleasing. Perfect for use in high-traffic commercial areas. **PRICE RANGE: \$**

APPLICATIONS: Can be applied on ceilings, walls, floors, counters, and benches. Also, various widths and lengths are avaialble to suit the design.

REXLUMBER.COM (SNAP #211)

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CASE STUDY: RETAIL DESIGN

BY ALEX KLIMOSKI



JOSEFINAS, MANHATTAN

Shoe Dazzle

CHALLENGE: Translating a shoe label's digital presence into a chic boutique infused with superior craftsmanship. **SOLUTION:** Soften up the space and minimize its linearity with a series of curved walls that flow seamlessly throughout the space.

> WHEN MARIA CUNHA, one of the three founding partners of the fledgling women's shoe company Josefinas, contacted New York-based designer **Christian Lahoude** to create a flagship store in Manhattan, she thought he would pass. The company had purveyed their brand online only. This would be Josefinas's first brick-and-mortar presence, with a significantly limited budget, compared to Lahoude's high-end clientele, which includes brands such as Jimmy Choo, Gucci, and Tiffany & Co. But after researching Josefinas's merchandise, Lahoude knew that he wanted to be involved. "There was

PRETTY IN PINK

A rose-copper cast of a tree (above) serves as the store's primary focal point. Designers incorporated the ceiling's existing wood slats into the interior to emphasize a feeling of lightness. Located on a quaint street in Manhattan's NoLita neighborhood, the storefront's blue-gray exterior (right) is a cool contrast to its coral and ivory interior.

something there," he says, "superior craftsmanship and quite luxurious qualities."

After Cunha and cofounder Sofia Oliveira scouted a number of potential locations throughout the city, they settled on a long, narrow 540-square-foot storefront on a boutique-lined block in the NoLita neighborhood.

The challenge of translating the label's digital identity into its first physical setting offered Lahoude an opportunity for creative freedom. "I really had a blank slate," he says. "There was no precedent, no hundred years of history."



CASE STUDY: RETAIL DESIGN





Conceived in 2013 as a business run by women for women, Josefinas's partners were brought together through a network of entrepreneurs in Portugal. "When we started, we didn't have any money, we didn't know anything about shoes," says Oliveira. "But we wanted to create a brand that could empower women." Since their first collection—a series of ballet slippers—Josefinas has grown to include over 40 different styles of flat shoes only, including a line endorsed by legendary feminist Gloria Steinem. "We don't think that women need high heels to feel like a better version of themselves," Oliveira says.

From the beginning, the three entrepreneurs knew that pink—the color of Josefinas's shoeboxes and its signature ballet flat—had to be incorporated into the store design, but they didn't want it to be "overly girly," says Oliveira. "We wanted something that would embody a strong female character."

"This brand isn't about glitz or bling," adds Lahoude, "so we tried to stay subtle."

To soften up the space and minimize its linearity, Lahoude broke up the south wall by creating a series of curves that begins near the entrance with a sinuous cotton velvet sofa that flows to meet a concave alcove; there the collection is displayed (the space behind is used for storage). Opposite, a white brick wall lined with floating mirrored panels—some tinted a soft shade of peach—extends the length of the store to give an illusion of spaciousness while accentuating its ivory and coral pink hues. Concealed lighting below and above the mirrors lends an ethereal quality to the room.

The curvilinear surfaces also create a meandering circulation path through the store. According to Lahoude, evoking a journey was important to the Josefinas experience. Upon entering the shop, customers are introduced to a parlor-style setting: alongside the sofa and an accompanying lounge chair, a sparse array of shoes is presented on rosy copper stands. Just beyond, they discover the primary display of footwear, tucked into the arc of the recessed wall and arranged on lacquered semicircular shelves along its surface, which is textured with a mother-of-pearl wallcovering.

The copper reappears in the form of custom light fixtures and, most prominently, as a central artwork: a sculptural cast of a tree made by a Portuguese artist, Jorge Direito—that encourages visitors to pause within the main display nook to peruse the collection. "The idea was to have a focal point—an organic element—that could be seen from the street, pulling people into the space," says Lahoude. Because of the project's budgetary constraints, a piece of curved plexiglass was placed above the sculpture in lieu of a light cove.

The path narrows to accommodate a closed employee area and restroom, only to open up again at the back of the store, revealing a "VIP area" articulated by a blush banquette, also cotton velvet, with views to a modestly furnished back garden. The journey culminates in this outdoor space, used as both an area of respite for customers and employees and an event venue.

According to Oliveira, the NoLita outpost, open for just over a year, operates as an extension of the online site. Since many of Josefinas's shoes are custom-made for their patrons in Portugal, visitors to the boutique can place orders here but don't necessarily walk out with their purchases. "We created an exclusive experience where the brand is made tangible," she says.

Establishing the physical location has also proven to be a launchpad for new ideas: "We feel that the store could evolve into another concept, like a social club," Oliveira says. "I imagine a mix of shoe shopping and conversations with other women."

TOUCH OF BLUSH

The rose copper used for the signage and door handle is a unifying material, and was also fashioned into custom-made shoe stands and a tree-inspired mirror frame (top). A VIP salon (bottom), articulated by a supple blushcolored banquette, is tucked away at the far end of the space, providing a place for shoppers to relax and take in views to the garden out back.



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EXTERIOR LIGHTING



Brilliant Beacon

EXUBERANT, ANIMATED architectural lighting plays a central role in the branding of this lakeside performance venue, the Han Show Theatre, designed by **Stufish Entertainment Architects**. Inspired by the indirect glow of paper lanterns, the lighting design devised by **Bume Perfect Illumination** melds history and high technology.

The exterior of the building is covered with 18,665 red aluminum-alloy roundels. Red LED lamps in the center of the circles reflect onto the roundels' surface, forming four gentle spots of light. The LEDs are tuned to a wavelength of 620-635 nm, so when the light overlays the tinted roundels, the result is a vibrant Chinese red. Each ray pixel can be controlled by a single DMX system. The video images created by this approach can move fluidly across the faceted facade of the building or can be programmed to remain static, giving the "lantern" an understated steady glow.

The aluminum curtain also houses 2500K floodlights; yellow light glows from the "wick" of the lantern, forming a gradation of light and shadow. Underneath, 3000K floodlights balance the rhythm of the lantern's "fringe."

The large-scale media wall displays are powered and controlled by products such as **Lutron**'s Graphik series, the Color Kinetics line from **Philips**, and the DMX RGB drivers by **Osram**.—*Leslie Clagett*



RED LIGHT DISTRICT The Han Show Theatre in Wuhan City, China, uses state-of-the-art lighting technology to deliver a culturally relevant design that's based on a relatively primitive luminaire: the flame-lit lantern.



LP CAPSULE

MANUFACTURER: Louis Poulsen PERFORMANCE: Both driver and electronic control components are located in the wet-rated fixture's die-cast aluminum housing. The reflector and diffuser work to reduce contrast. 3000K and 4000K options, as well as high- and low-output. Designed by Carsten Fischer of Henning Larsen.

PRICE RANGE: \$\$\$

APPLICATIONS: The head of the fixture encircles the post, giving the design an architectural character and visual presence day and night.

LOUISPOULSEN.COM (SNAP #212)

KEY \$=value, **\$\$**=mid-range, **\$\$\$**=high-end



TOLOMEO OUTDOOR LANTERN WITH HOOK

MANUFACTURER: Artemide

PERFORMANCE: The 20 watt, 3000K dimmable LED lamp is enclosed in a diffusing cap fitted inside a transparent IP65 plastic lens. The aluminum housing measures 5¾" x 6⅓". Designed by Michele De Lucchi. PRICE RANGE: \$\$

APPLICATIONS: Suited for accent

= ECO-FRIENDLY ATTRIBUTES

landscape lighting and commercial use. For residential applications, it is available with an optional plastic shade that resembles jute. **ARTEMIDE.NET**

(SNAP #213)



TORRES

MANUFACTURER: Landscape Forms PERFORMANCE: LED lamp is an eco-friendly warm white (3000K-4000K) that offers superior visibility, high-color rendering, and minimal glare. Cast aluminum housing is rust-resistant.

PRICE RANGE: \$\$\$

APPLICATIONS: Available in a family of fixtures—area, path, wall, and catenary lights—the collection offers a minimalist look. Area lights feature single or double luminaries and four pole heights.

LANDSCAPEFORMS.COM (SNAP #214)



GREGG OUTDOOR SUSPENSION

MANUFACTURER: Foscarini PERFORMANCE: Wet-rated, with a neoprene-covered cable and polyethylene shade that produces a diffused quality of light. Uses a compact fluorescent lamp. PRICE RANGE: \$\$

APPLICATIONS: In three sizes, and also available as table, floor, wall, and ceiling fixtures.

FOSCARINI.COM (SNAP #215)

Bright Lights, Big City

THE SOULLESS, SECURITY-ORIENTED lighting that has long lined the Chicago River is being replaced as part of an ongoing renovation of the city's Riverwalk. Working with local **Ross Barney Architects**, **Schuler Shook**'s lighting design is focused on three blocks of the passage, each with its own character and function: the Marina Plaza, the Cove, and the River Theatre.

Faced with a site located in a flood zone and with just a 25-footwide build-out area, the designers specified robust fixtures rated for submersible applications, low maintenance, and low glare. The team also had to negotiate with many city stakeholders on issues of safety, visibility, and energy savings.

The solutions create a welcoming and distinctive scenario. In the Cove, patterns of projected tree branches are achieved with weatherproof, theatrical metal halide T6 fixtures fitted with glass gobos and pole-mounted at street level. Arcade piers and ornamental capitals are illuminated with in-grade fixtures, and handrails are brightened by 3000K IP68 LED tape with a frosted lens to protect and diffuse the light source. Linear LED fixtures used throughout the project use five watts per linear foot to delineate the paths and highlight the ramps in the River Theatre. Bridges linking the three areas were aglow with linear LED fixtures with opal white lenses. To provide safety and comfort and improve facial recognition, fixtures were angled five degrees.

The Riverwalk renovation brings vitality and excitement to the waterway both day and night, creating a recreational amenity in the middle of downtown Chicago for all its residents and visitors to enjoy. -LC



RISING WATERS Shortly after opening, Schuler Shook's new lighting design for the Chicago Riverwalk project passed a test by Mother Nature; when the banks flooded, the fixtures remained fully functional and in place.



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Cool Science

AT POINT LOMA NAZARENE UNIVERSITY'S science center in San Diego, biology, chemistry,

and anatomy students are looking for evidence of the next Big Bang. Lab work can involve potentially toxic fumes and chemicals. Consequently, the 13 new classrooms and laboratories completed in 2016, which comprise the ground-up complex, had to be equipped for maximum air-quality and climate control.

To keep labs safe, local firm **Carrier** Johnson + CULTURE installed an Aircuity system, which utilizes intelligent building technology to sample ambient air from the labs and detect contaminants. "Once the system determines a safe level of contaminants, it will decrease or increase the quantity of air changes," explains Dan Grammier, a principal for **MA Engineers**. "That saves a tremendous amount of HVAC energy compared with a traditional lab's system," Grammier says.

Additionally, architects installed a **Phoenix Controls** valve system, a high-efficiency **Strobic** **Air** exhaust fan, and a custom air handler to maintain proper pressure and provide better airflow. "The valve system allows the HVAC system to react quickly to changes in the building," says Grammier.

Due to height restrictions at PLNU, the exhaust fan was installed in a mechanical well, requiring the team to balance the project's aesthetics with safety needs.

Maintaining a comfortable temperature was also important. So, architects began addressing at the entrance: students enter the 36,000-square-foot complex via a walkway marked by 14- to 16-foot-high stainless-steel screens that reduce heat gain.

Ultimately, savings from the HVAC solutions contributed to the \$28-million, LEED-Goldcertified status of the complex. The center's energy use is 10.46 percent better than required by Title 24, resulting in 20 percent lower energy costs. Now, everyone can breathe easy. — *Tanisha A. Sykes*



CLASS IS IN SESSION

The Point Loma Nazarene University science center is a new, two-story complex with a retrofitted energy-efficient HVAC system equipped for maximum air-quality and climate control (top), making the environment both safe and comfortable for lab students (bottom).



ALPHA1 CIRCULATOR

MANUFACTURER: Grundfos **PERFORMANCE:** An energy-efficient,

variable-speed circulator built with reliable, electronically controlled Grundfos permanent magnet motor (ECM) technology. Features three, constant pressure-control modes, an LED display, and push-button controls.

PRICE RANGE: \$\$\$

APPLICATIONS: Suitable for hydronic heating and hot water recirculation systems with constant or varying flow. US.GRUNDFOS.COM

(SNAP #216)

KEY \$=value, \$\$=mid-range, \$\$\$=high-end



ECO

MANUFACTURER: Hunter Industrial PERFORMANCE: High-volume, low-speed fans with airfoils ranging in diameter from 8' to 24'. Utilizes a custom direct drive motor that effectively moves air in places up to 14,400 sq ft.

PRICE RANGE: \$\$

APPLICATIONS: From warehouses to bars and restaurants to hotel lobbies, these fans help improve everything including product integrity, employee safety, and patron satisfaction.

HUNTERINDUSTRIALFAN.COM (SNAP #217)

= ECO-FRIENDLY ATTRIBUTES



AIRCUITY

MANUFACTURER: Aircuity, Inc. PERFORMANCE: Creates smart airside solutions through its intelligent building platform, which reduces energy costs by 15%-30% and improves the indoor environmental quality for occupants.

PRICE RANGE: \$\$-\$\$\$

APPLICATIONS: System can be applied in life science labs, universities, commercial office buildings, public assembly spaces, hospital campuses, and k-12 schools. AIRCUITY.COM

(SNAP #218)



RUNTAL PANEL RADIATORS

MANUFACTURER: Runtal Radiators PERFORMANCE: Durable, aesthetically pleasing, easy-to-install product that provides both radiant and convective heat with outputs up to 4500 BTU per linear foot. PRICE RANGE: \$\$

APPLICATIONS: Ideal for use in schools, corporate offices, hospitals, and residential installations.

RUNTALNORTHAMERICA.COM (SNAP #219)

Heat Wave

WHEN SNEAKER GIANT Converse decided to relocate its headquarters to the historic Lovejoy Wharf next to Boston Harbor, it was clear there would be the usual challenges retrofitting energy-efficient ventilation into an old building.

Originally the Hoffman Building, the neglected early 20th-century industrial building was being redeveloped for mixed-use, so the renovated 237,000-square-foot, \$60-million building needed to support luxury residential units and offices in addition to the retailer.

"Converse had a lot of ideas for what the space should be, including wanting to keep the brick and existing columns exposed," says Tom Schultz, senior project manager for **The Architectural Team** in Chelsea, Massachusetts.

The retailer wanted a new high-efficiency HVAC system, but not at the expense of an open floor plan that kept some of the existing industrial details intact. "There's a lot of heat gain through the glass so the system on the top two floors is different from the one on the lower floors," says Schultz. "Plus, the amount of air needed on the lower floors wasn't as significant, so we used **Trane** Vertical Packaged Units for heating and cooling, which don't require a large shaft that eats up a ton of floor area."

But equipment that size comes with acoustical challenges, so architects integrated sound attenuators—a line of duct silencers—by **IAC Acoustics** to deaden the noise. To reduce energy demand and consumption throughout, technicians for local JM Electrical Company installed automated heating and cooling control systems by **Gwynn Systems**' American Automatrix System, to enable individual control serving the core of the building.

Now, when consumers enter the Converse HQ, they are greeted by a warm, cozy feeling thanks to the friendly staff and the **Runtal** panel radiators that sit below the windows. "It is important with new residential buildings to provide advanced controls for the utmost comfort, while at the same time ensuring cost and energy efficiency," says Niall Black, project manager at JM Electrical Company. —*TAS*





HAPPY FEET

At Converse's heaquarters in the historic Lovejoy Wharf in Boston, architects installed automated heating and cooling control systems in the open-concept space, reducing energy demand and consumption throughout (above).



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AUTOMATION/CONTROLS



The Alexa Factor

SINCE ITS LAUNCH IN 2014, Amazon's voiceoperated personal assistant has added thousands of skills, enabling a growing variety of manufacturers to adapt it as a control feature on their products. And now more established brands are as likely to feature Alexa as technology upstarts such as Nest and Ring.

Thermostat brand **Carrier**, for example, has announced that users of its Infinity Touch Control can call on Alexa to adjust HVAC settings. "The smart home environment is undergoing a major shift as brands like Amazon change the way homeowners think about being connected to their homes and appliances," says Matthew Pine, Carrier's vice president.

Meanwhile, IKEA's Smart Lighting products

(see "Lighting Done Lite," opposite page) and **Legrand**'s updated Radiant Collection RF and Adorne Wi-Fi enable both Alexa and Google Home voice control to operate their lights.

Alexa has also been integrated with **Lutron**'s Caséta Wireless, HomeWorks QS, and RadioRA2 systems. Users can ask Alexa to turn on lights, dim or brighten lamps, and (depending on the system) raise or lower connected window shades. The conveniences amount to more than ambiance on demand. "For people with limited mobility, voice technology can restore some freedom," says Ed Blair, Lutron senior vice president and general manager. "Smart home products are not just about the wow factor. They're changing peoples' lives."—*Sheila Kim*



LET'S TALK

Among the latest products to jump on the Alexa voice-control bandwagon are Legrand's Adorne Collection and Carrier's Infinity Touch Control.



LG MULTISITE REMOTE CONTROLLER

MANUFACTURER: LG Electronics

PERFORMANCE: This touchscreen can be configured to control each installation of LG Multi V, Multi F, and select single-zone HVAC systems. It also displays room temperature and humidity and can be programmed with occupied and unoccupied cooling and heating set points.

PRICE RANGE: \$\$

APPLICATIONS: A suitable product for multi-family buildings, offices, and small commercial properties.

LGHVAC.COM (SNAP #220)

KEY \$=value, \$\$=mid-range, \$\$\$=high-end



PALLADIOM THERMOSTAT

MANUFACTURER: Lutron

PERFORMANCE: A minimalist face plate design with backlit buttons in a range of matte, metal, or glass finishes distinguish this thermostat. Its LED display indicates operation using animated heating and cooling icons.

PRICE RANGE: \$\$\$

APPLICATIONS: The product is ideal for residential buildings because it works with conventional five-wire, forced-air systems and fan-coil units.

LUTRON.COM (SNAP #221)

= ECO-FRIENDLY ATTRIBUTES

THERMATOUCH 8.0

MANUFACTURER: ThermaSol PERFORMANCE: The creator of the first bath and steam shower for the home has released an updated in-shower LCD touchscreen that controls everything from temperature settings and steam duration to light and sound effects. It even streams live TV and music through apps and Bluetooth connected devices.

PRICE RANGE: \$\$\$

APPLICATIONS: The 7" touchscreen is compatible with ThermaSol's Serenity Light, Sound, and RainHead systems. THERMASOL.COM (SNAP #222)



HOME SITTER

MANUFACTURER: Wink

PERFORMANCE: The home security and automation system's app now has a function to simulate occupancy by switching connected smart lights on and off in realistic living patterns to fool would-be intruders. PRICE RANGE: \$\$

APPLICATIONS: The Home Sitter function will power on specific room lights at logical hours via the mobile app to provide residential clients added security. WINK.COM

(SNAP #223)

Lighting Done Lite

RESIDENTIAL LIGHTING CONTROL KITS have become simpler than ever to use and install. Among the latest examples are ones from household brand **IKEA** and an upstart called **Noon**.

IKEA's TRÅDFRI Gateway device lets homeowners control settings across groups of the company's Smart Lighting via a smartphone app. A new update also makes it easy to integrate with devices made by Apple and Amazon, including those using Alexa voice control. "Our developers worked hard to make our Smart Lighting range compatible with other products," says business leader for IKEA Smart Home, Björn Block. A streamlined TRÅDFRI dimming kit can add that lone feature to any fixture using the company's E26 2700K LED and remote.

Market newcomer, Noon, provides a more complex (but DIY-friendly) system made up of a hardwired switch plate that has one switch designated as the control. Once installed, the control switch, or Room Director, will automatically detect existing fixtures and bulb types—LED, incandescent, or CFL—then layer and blend the available lighting to create one of three scenes (Relax, Everyday, and Bright). In addition to the presets, Noon can be programmed to turn on a nightlight when it senses movement and to run a program of learned lighting patterns for tricking burglars when no one is home.

A starter kit includes the Room Director, two extension switches, and three wall plates designed to replace standardsize switch plates. Professional installation is also available. —*SK*



TWO IN THE HAND From top: IKEA's TRÅDFRI smart lighting system offers a non-hardwired option for ultimate simplicity. Newcomer Noon communicates with wired lighting to automatically create three presets.







Hardly There Hardware

IN THE GENSLER-DESIGNED Metropolis, a mixed-use complex in downtown Los Angeles three residential towers, retail shopping, dining, and a luxury hotel with interiors by **Hirsch Bedner Associates**—glass features as prominently in the design as location. From public areas to guestrooms, the material accentuates the spaces.

To ensure that the architectural hardware and fixtures for these glass systems would complement rather than interrupt the sleek urban aesthetic—plus maintain safety and function—the project team turned to local manufacturer **CRL-U.S. Aluminum**.

Starting with the main entryways, the architects specified clean-lined DRS Door Rails to frame the doors without interrupting the glass spans. Slim, tubular Blumcraft Panic Handles on the entrances complete the design while meeting the demands of high foot traffic. Guests entering the lobby encounter an intriguing light installation of prism-like pendants as they head to a grand glass staircase. Here, the team installed CRL's GRS Laminated Guardrail System with LEDintegrated handrails, increasing safety, but also transparency and daylight penetration.

Meanwhile, select amenities and accommodations also benefit from glass expanses. In the pool area, for instance, a custom CRL windscreen encloses the zone with steel posts and large glass panels affording views of the city. The hotel's executive suite even features a glass wall that divides the sleeping and living areas. The manufacturer's Top-Hung Sliding Glass Door System enables guests to open the dividers with ease. Closed, the glass walls reveal inscriptions taken from movie scripts while still maintaining transparency. Bathrooms in select suites also have the manufacturer's hardware. What better way to complement the frameless glass showers?—*Sheila Kim*



ARRESTING DEVELOPMENT

A glass wall mounted onto CRL-U.S. Aluminum's Top-Hung Sliding Glass Door System divides the sleeping and living spaces in the executive suite of Hotel Indigo (top). Part of the Metropolis mixed-use project in Los Angeles, the hotel is designed by Gensler with interiors by Hirsch Bedner Associates (bottom).



6300 SERIES LOW ENERGY OPERATOR

MANUFACTURER: Norton

PERFORMANCE: This door operator activates at the push of a button, hands-free, or using programmed RF devices. Additional functions include latch boost, latch retraction, and obstruction detection.

PRICE RANGE: \$\$\$

APPLICATIONS: Ideal for use in theaters, schools, corridors, hospitals, and department stores, this ADA-compliant low-energy operator has a slim profile to blend in with its surroundings.

NORTONDOORCONTROLS.COM (SNAP #224)

KEY \$=value, \$\$=mid-range, \$\$\$=high-end



DT 750 DOOR TERMINAL WITH DIALOCK

MANUFACTURER: Häfele

PERFORMANCE: The new handleset utilizes RFID technology (compatible with MiFare, Tag-It, and BLE), which allows simple operation with a key card and tracks up to 1,000 events. An LED light indicates lock status as it's being operated.

PRICE RANGE: \$\$

APPLICATIONS: DT 750 is available in matte stainless steel or polished brass with a lever handle in a choice of three designs. It is suitable for interior doors only. HAFELE.US

(SNAP #225)

= ECO-FRIENDLY ATTRIBUTES

INOX BARN DOOR LOCK

MANUFACTURER: Unison Architectural Hardware

PERFORMANCE: Though popular in today's interiors, barn doors often don't lock or instead use hooks or chains. This design is discreet as the lock bolt installs in the door jamb as opposed to the door itself.

PRICE RANGE: \$\$\$

APPLICATIONS: Suitable for residential or hospitality interiors, hardware includes a thumb turn for operation (with ADA options available) in six designer finishes ranging from satin brass to graphite black. UNISONHARDWARE.COM (SNAP #226)



ELECTRONIC BUILT-IN LOCKER LOCK

MANUFACTURER: Master Lock PERFORMANCE: This built-in locker lock sports display screens that show vacancy status, lock status, and low-battery warnings. Its bolt mechanism responds to jams such as obstructions with visual and audible alerts. PRICE RANGE: \$\$

APPLICATIONS: Created for high-moisture environments, the unit is well suited to most locker rooms. Its sleek design consists of a high-gloss keypad and a body available in a range of metal finishes. MASTERLOCK.COM

(SNAP #227)

Luxe Locks

AS MORE DOOR hardware companies delve into the smart-lock market, they're also looking to address the aesthetic issues of bulky components such as electronic keypads and sensor attachments. Fortunately, advancing technology is aiding in the development of more compact and streamlined products.

A recent example is **Baldwin Hardware**'s Evolved collection: 18 handle sets that appear to be high-end escutcheon handles, but actually integrate and conceal smart technology. For the interior-facing side of the door, three different deadbolt models are designed to coordinate with the handlesets and are approximately 60 percent smaller than competing products.

Users can lock and unlock doors with standard keys, fobs, and smartphones that have the Kevo mobile app. Homeowners can additionally issue "eKeys" (a unique encrypted electronic key) to guests who have Kevo-compatible phones for a designated period of time. This also enables the homeowners to monitor who has entered and when.

A variety of handleset styles are available, from a more traditional brass turned handle with a rustic arch escutcheon to a minimalist brushed metal design with squared edges. Best of all, these systems are DIY friendly, since they're AA-battery-operated, not hardwired, and will warn of low battery life with an indicator light. Now, that's a breath of fresh air.—*SK*

LOCK, STOCK, AND BARREL

The Baldwin Evolved collection (right) conceals smart features within luxury door lock, handleset, deadbolt, and key fob styles including Soho escutcheon, Manchester escutcheon, and the Traditional deadbolt.







Redefining Retail

THE RETAIL MARKET is ever-changing. As a result, successful brickand-mortar stores must focus on selling products, while building a brand experience.

Storefronts—the first line of contact with shoppers—are the brand ambassadors, pushing design to the edge. At Topgolf, a golf entertainment complex and sports bar in Austin, Texas, the owners upped the ante with the addition of **Assa Abloy**'s Besam automatic storefront doors at its three-level, 65,000-square-foot facility. "The Besam SL500 system automatic sliding door package creates a welcoming and functional entryway that sets the stage for an inviting shopping experience," says Karen Maslow, vice president of marketing for Assa Abloy Entrance Systems, North America. For the upscale Tumi storefront in downtown Chicago, designers went a step further, applying custom, brandmatched panels from **3form**'s exterior specific product, Koda XT.

Thanks to companies like **Skyline Design**, the marketplace is bursting with custom solutions. At NeoCon last June, the firm released a collection of architectural glass, done in collaboration with **Suzanne Tick**. "The collection is a flexible kit of six patterns that can be used individually or overlapping, giving the designer an option to create a myriad of spatial transitions," says Tick. And since retail spaces are often transitory in nature, other cost-effective solutions, such as **3M**'s Fasara Glass Finishes—work rather nicely. The decorative films for glass surfaces come in over 30 new patterns. Success is in the details. —*Paul Wong*

EXPERIENCE Assa Abloy's Besam automatic sliding doors—designed to function in hightraffic, demanding environments—were specified in Topgolf, a three-level, 65,000square-foot sports and driving range in Austin, Texas.



TRANSCEND ARCHITECTURAL GLASS

MANUFACTURER: Skyline Design

PERFORMANCE: This collection allows six etched and printed patterns on clear tempered safety glass to intersect, overlap, or fade, facilitating a fluid experience of interior environments.

PRICE RANGE: \$\$

APPLICATIONS: May be executed using transparent, translucent, and opaque options. Available in sizes up to 60" x 120" and in standard glass thicknesses. SKYDESIGN.COM

(SNAP #228)

KEY \$=value, \$\$=mid-range, \$\$\$=high-end



KODA XT EXTERIOR POLYCARBONATE TRANSLUCENT PANELS

MANUFACTURER: 3 form

PERFORMANCE: These panels boast over 100 times the impact strength of glass and over 60 times the impact strength of acrylic. The panels are made with 40% preconsumer recycled content, and perform well in high-service temperature situations. **PRICE RANGE: \$\$\$**

APPLICATIONS: Can be used on a variety of external applications, including retail, canopies, exteriors, and transit shelters. 3-FORM.COM

(SNAP #229)



FASARA GLASS FINISHES

MANUFACTURER: 3M

PERFORMANCE: This collection of cost-effective polyester, decorative films for glass surfaces showcases over 30 new patterns of fabric, natural, stripe, geometric, and gradation options, as they provide light control and privacy.

PRICE RANGE: \$

APPLICATIONS: On applying, the films function as permanent solutions, but can be repositioned as needed. Complements diverse and eclectic architecture, whether in retail, healthcare, hospitality, or commercial spaces.

3M.COM (SNAP #230)

AORTON WILLIAMS WINE & SPIRIT

ENTICE SERIES PREMIUM ENTRANCE

MANUFACTURER: CRL-U.S. Aluminum PERFORMANCE: The first premium storefront that exceeds the industry's building codes and ideal for building owners that want to reduce energy costs. Available in four models, with door stile widths as narrow as 11/8" to 25/8", and depths as shallow as 21/2". PRICE RANGE: \$\$

APPLICATIONS: Storefront heights up to 12' at 25 PSF wind loads are possible. Additionally, the top sidelite and fin support base can be recessed into the ceiling for a flush appearance. Ideal for retail spaces. CRLAURENCE.COM (SNAP #231)

Bringing the Shop to the Shopper

AT FOSSIL RETAIL SHOPS located on the Third Street Promenade in downtown Santa Monica, California, **MBH** Architects wanted to enhance the customer experience for the 30,000 pedestrians who stroll by daily.

The solution? Five panels of **NanaWall** SL70 operable glass walls for the storefront created a wide opening: 17 feet 3 inches wide and 10 feet tall. The design immediately established a seamless transition between the street and the store for the watchmaker known for its modern designs with vintage details.

Environmental consideration was paramount, especially in sunny California, with its strict state and local building codes, such as California Title 24 Building Energy Efficiency Standards and Seismic codes, which mandates that contractors use sustainable building practices and products.

"Since the Fossil brand is masculine

with larger watches, wearables, and accessories, they chose to go with the SL70 because its aluminum frames could be color-matched with an eco-friendly powder coat finish in their particular brand palette," says Matt Thomas, marketing manager at NanaWall Systems. "Powder coatings only emit ultra-low volatile organic compounds (VOCs), and also require less manufacturing time and transportation costs."

To date, Fossil has included NanaWall products in 16 separate projects, and because of the flexible options available for instance, all opening dimensions, stacking layouts, glazing options, and powder-coating colors are already in the NanaWall system—this solution makes it a more seamless process for the brand. —*PW*

OPEN FOR BUSINESS

A Santa Monica, California, retail store by MBH Architects uses the NanaWall Systems to create a better brand experience.



The Fast Track

In the Midwest, manufacturing is heating up by J. MICHAEL WELTON



IN 2017, MIDWEST MANUFACTURING appeared to be catching up to China. "Their cost of labor and land has increased over the past 10 years. Ours is stable,"

says Eric Burkland, president of the Ohio Manufacturers' Association.

Meanwhile, Ohio companies added new technology and lean management techniques and shortened their supply chains. "In addition, the [local] university system is willing to work as partners [with companies]."

Indiana companies are enjoying similar collaborations. Earlier this year, The Hoosier State, Rolls-Royce, and Purdue University announced plans to establish a turbine lab for compact gas turbines.

In Illinois, Caterpillar is seeing an increased need for parts and calling its workers back. "That means more machines in two to three years," says Jim Nelson, vice president of external affairs at the Illinois Manufacturers' Association. "Housing starts have picked up too, so we'll likely see an increase in durable goods as new homes get built."

In Wisconsin, manufacturers such as Banker Wire are thriving by adding new equipment and capacity. "We just commissioned a new loom and have another coming," says Harrison Horan, a vice president at Banker Wire.

New Millennium Building Systems in Indiana has been booming for three years. "Our plant has a capacity of about 82,000 tons of steel joists and 73,000 tons of steel deck per year," says Kevin Disinger, sales manager. "We've been running that way for the past few years."

And things look bright at CPI Daylighting, also in Indiana, says Rafael Rivero, vice president of sales. "We're not in every building, but we've learned that architects want to focus on natural light, and our products are aimed at that," he says.

Illinois, Indiana, Ohio and Wisconsin



1 MANUFACTURER: Rytec Corporation LOCATION: Jackson, WI PRODUCTS: Doors for commercial, industrial, manufacturing, warehousing and distribution environments FOUNDED: 1985 EMPLOYEES: 200 PRICE RANGE: \$-\$\$\$ RYTECDOORS.COM



Architectural Systems LOCATION: Milwaukee PRODUCTS: LED-illuminated architectural handrail systems, fabricated from stainless steel and aluminum. FOUNDED: 1955 EMPLOYEES: 150 PRICE RANGE: \$\$ WAGNERARCHITECTURAL.COM



MANUFACTURER: Banker Wire LOCATION: Mukwonago, WI PRODUCTS: Architectural woven mesh, industrial woven mesh and welded wire mesh. FOUNDED: 1896 EMPLOYEES: 133 PRICE RANGE: \$-\$\$\$ BANKERWIRE.COM



MANUFACTURER: CPI Daylighting
 LOCATION: Lake Forest, IL
 PRODUCTS: Translucent wall lighting systems, skylights, daylighting, canopies and walkways.
 FOUNDED: 1983 EMPLOYEES: 70
 PRICE RANGE: \$\$ CPIDAYLIGHTING.COM





MANUFACTURER: USG Corporation 5 LOCATION: East Chicago, IN **PRODUCTS:** Wallboard and other gypsum products, including joint compound. founded: 1901 employees: 6,600 PRICE RANGE: \$-\$\$\$ USG.COM



MANUFACTURER: Owens Corning 7 LOCATION: Tallmadge, OH **PRODUCTS:** Foam insulation FOUNDED: 1977 EMPLOYEES: 66 PRICE RANGE: \$-\$\$\$ OWENSCORNING.COM/ INSULATION/COMMERCIAL/ENCLOSURE

MANUFACTURER: New Millennium **Building Systems** LOCATION: Butler, IN **PRODUCTS:** Steel joists, joist girders, metal decks **FOUNDED: 2000** EMPLOYEES: 252

PRICE RANGE: \$-\$\$\$ NEWMILL.COM



MANUFACTURER: 8 The Belden Brick Company LOCATION: Canton and Sugarcreek, OH **PRODUCTS:** Face brick, pavers, acid brick, thin brick, oversized brick, structural brick, and special shapes **FOUNDED:** 1885 EMPLOYEES: 480 PRICE RANGE: \$\$-\$\$\$ BELDENBRICK.COM



SNAPSHOTS

ILLINOIS

Foreign Direct Investment accounts for nearly





Illinois' **\$693 billion** economy makes it an international center for global commerce.

SOURCE: LIVABILITY.COM

INDIANA

530,500

The number of Hoosiers employed in manufacturing jobs in Indiana, the largest concentration in the nation.

Indiana added 103,000 $manufacturing \, jobs \, since \, the \, low$ point of the Great Recession in July 2009.

SOURCES: U.S. NEWS + WORLD REPORT, INDIANA ECONOMIC DEVELOPMENT CORPORATION

OHIO

More than

1 OUT OF EVERY 10

of Ohio's workers was employed in manufacturing in 2015.



Chemical, transportation equipment, and computer and electronic products manufacturing support the **highest average** annual manufacturing wages in the state.

SOURCE: THE OHIO MANUFACTURERS' ASSOCIATION

WISCONSIN

Wisconsin ranked 1st in the Midwest and 11th in the nation in manufacturing growth compared to November 2016.



Wisconsin's unemployment rate is

4%

slightly lower than the national unemployment rate of 4.1%.

SOURCE: STATE OF WISCONSIN DEPARTMENT OF WORKFORCE DEVELOPMENT

CONTINUING EDUCATION: TALL BUILDINGS

FROM ARCHITECTURAL RECORD



A New York residential tower presents a new take on the city's classic skyscrapers. By JOANN GONCHAR, AIA

FOR QUITE A WHILE, it seemed as if Herzog & de Meuron's 56 Leonard Street project—a 57-story residential tower in the Tribeca neighborhood of Lower Manhattan—would never get built. For four years during the financial crisis, construction was at a total standstill. But now, nearly a decade after ground was broken, the structure, made up of stacked glass-enclosed volumes and projecting terraces, is almost finished, and residents are starting to move in.

Ascan Mergenthaler, a Herzog & de Meuron partner, says that the idea behind the unusual cantilevering geometry was not to defy gravity, but to design the units from the inside out and then express the individual apartments and their generous outdoor spaces in the form of the architecture.

Although 56 Leonard has been referred to as "Jenga-like" countless times in the press, the result is an assemblage that appears carefully balanced in equilibrium rather than on the verge of toppling over. Its protruding elements recall the famous image of a disembodied hand sliding one apartment into a model of Le Corbusier's Unité d'habitation in Marseilles, France. This sensation of pushing and pulling, together with its reflective glass envelope, give the building a compelling chimera-like quality, with features that seem to change depending on one's vantage point, the weather conditions, or the time of day.

The 831-foot-tall reinforced concrete structure (see sidebar, page 56) contains only 145 condominiums, ranging from 650-squarefoot studios to penthouse apartments of more than 6,000 square feet. Although no two floors within the building are exactly the same, the unit types are organized into seven zones that can be discerned from the outside if one carefully studies the shift in the patterns of the extending balconies. The most exuberant projections occur near the top.

But even if the expressive crown refers to an earlier time of New York's classical sky

HIGH LIFE

56 Leonard Street, in the Tribeca neighborhood of Lower Manhattan (left), is an assemblage of glass-enclosed volumes and cantilevering terraces, with the most exuberant projections occurring near its top (opposite).



CONTINUING EDUCATION: TALL BUILDINGS

FROM ARCHITECTURAL RECORD



NORTH ELEVATION

- 1 LOBBY
- 2 RETAIL
- 3 GARAGEENTRY
- 4 ANISH KAPOOR SCULPTURE

20[']M

- 5 GYM/SPA
- 6 POOL
- 7 TERRACE
- 8 FOYER
- 9 LIVINGROOM
- 10 KITCHEN
- 11 BEDROOM



10 M.

BASE: LEVEL-ONE PLAN



BASE: LEVEL-SEVEN PLAN



ZONE 2B: LEVEL-25 PLAN



ZONE 7: LEVEL-49 PLAN



scrapers with silhouetted spires, Herzog & de Meuron's building, which has a width-to-height ratio of about 1:10.5, is also representative of an emerging New York typology. This is the tall, slim, luxury residential tower with spectacular city views. In the case of 56 Leonard, depending on an apartment's position and orientation within the structure, occupants look out over the surrounding neighborhood and toward the Hudson and East rivers, Wall Street and the World Trade Center, and, in the distance, Midtown. These vistas—as well as views of the tower from elsewhere in Manhattan—could actually remain unobstructed due to the peculiarities of the 12,500-squarefoot parcel, which is surrounded by a mostly low-rise, heightrestricted historic district. The 56 Leonard lot, previously owned by the New York Law School, was exempt from these limits. And when the developer, Alexico Group, purchased it in 2006, it also acquired the air rights transferred from the school's adjacent properties.

It should be noted that Leonard Street's peers in slenderness, such as the completed 432 Park by Rafael Viñoly, or under-construction towers like SHoP's 111 West 57th and Jean Nouvel's 53 West 53rd, have

BACK IN BLACK

 ${\tt Views\,of}\,{\tt 56\,Leonard}$ should remain unobstructed from the nearby streets (opposite) since it is surrounded by a height-restricted district. Residents and visitors enter the building through a sober lobby with walls clad in lozenge-shaped black granite tiles (right). The amenity spaces continue the dark palette. The pool (bottom) has black terrazzo floors, treated to make them slip resistant.





FROM ARCHITECTURAL RECORD



CLOSE-UP: THE SKINNY ON THE STRUCTURE

The basic structural elements for 56 Leonard sound conventional enough: the building has a concrete core and concrete flat-plate slabs supported by concrete columns and shear walls. But though it sounds typical, it was highly challenging to engineer and construct. Its scheme of stacked and shifting volumes meant that no two consecutive floors are the same. "It's a monumental sculpture," says Silvian Marcus, director of building structures at WSP USA, the project's structural engineer.

Because the columns don't align from level to level, Marcus and his team designed "walking columns." These are one- or two-story structural walls that transfer loads between floors. To support the building's many cantilevers, in most cases the engineers used the thickness of the slabs, but for some they added beams. The longest cantilevers—which project as much as 25 feet—required Vierendeel trusses extending over two stories.

To significantly increase the rigidity of the structure, the engineers connected the columns to the core at mechanical floors 32 and 46 with outriggers and belt walls that wrap the perimeter.

Despite such measures, the slender tower—with an aspect ratio of about 1:10.5—still has a tendency to sway. But it includes a liquid slosh damper at the top. This tank, measuring 32 by 36 feet by 10 feet tall, is filled with water that moves to counteract the sometimes perceptible wind-induced "acceleration." The device is not a safety or code requirement, says Marcus—it is purely for occupant comfort. "The code does not care about feelings," he says. —JG





sparked criticism on many fronts. One complaint is that the apartments' uber-wealthy investors will rarely occupy them, leaving the buildings—most of which are concentrated around the southern end of Central Park—empty and lifeless.

Both Herzog & de Meuron and Alexico take pains to distinguish their tower from their uptown super-skinny cousins. The apartments at 56 Leonard "are not safe deposit boxes in the sky," says Mergenthaler. "The majority of the owners are really living there." Many of the buyers are moving from elsewhere in Tribeca, says Izak Senbahar, Alexico's president. He points out that the neighborhood has a paucity of buildings with amenities like those at 56 Leonard, which include parking, a 75-foot-long lap pool, and a movie screening room. Though construction is still not entirely complete, about 45 apartments are already occupied.

Most of these residents may well be actual New Yorkers, but they are without question very affluent ones. All except two of 56 Leonard's units have been sold, fetching an average of \$3,250 per square foot, according to one local real estate publication. All that remains is a 15th-floor one-bedroom, with an asking price of just over \$3 million, and a 3,700-square-foot penthouse listed at \$17.75 million.

To reach the apartments, residents and visitors travel through a very sober lobby. It has walls clad in lozenge-

shaped black granite tiles, exposed concrete slab as the ceiling, and a light gray terrazzo floor. But once 56 Leonard's denizens ascend, daylight and the dramatic views take command. Inside the units, the ceilings are a minimum of 11 feet high, while some penthouses have almost 19-foot ceilings. Finishes are primarily soft-toned and lightreflective, including white oak floors, acid-etched mirrored kitchen cabinets, and bathroom walls covered in white marble. The insulated glazing, which stretches from slab to slab and around the entire perimeter, includes two different coatings to help control heat gain and glare. (It is up to the owners to install the window treatments they will presumably want for privacy.)

One of the project's rare missteps is a planned public art piece by Anish Kapoor. As shown in renderings, the sculpture will be an unfortunate adaptation of his beanlike Cloud Gate at Chicago's Millennium Park. The aim is to help anchor the building to the ground, says Senbahar. But it is hard to imagine how the mirrored sculpture will accomplish that: the piece will be awkwardly lodged under one corner at street level, appearing as though it is slightly deflated from the weight of the structure above.

Fortunately, most people will be able to avoid the Kapoor sculpture and admire the building as an arresting addition to Lower Manhattan's skyline.

Continuing Education



To earn one AIA learning unit (LU), including one hour of health, safety, and welfare (HSW) credit, read all six of the "Tall Buildings" project stories online and complete the quiz at

continuingeducation.bnpmedia.com/courses/ multi-aia/tall-buildings/1 or use the Architectural Record CE Center app available in the iTunes Store. 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 at continuingeducation.bnpmedia. com.

Learning Objectives

- 1 Describe unusual approaches to tall building structures, including exoskeletons.
- 2 Discuss the potential performance benefits provided by a double facade.
- 3 Describe some of the structural and human comfort challenges presented by especially slender tall buildings.
- 4 Discuss resilience strategies suitable for tall buildings and new urban districts, such as co-generation.

AIA/CES COURSE #K1705A

MANUFACTURERS' SPOTLIGHT SECTION

In these pages are products brought to you directly from manufacturers. You'll find price, application, performance data, and contact information–the facts needed to make the right decisions. Use the reader service card in the issue or go online at architecturalrecord.com to request further details.



CPI Daylighting's translucent wall lighting systems provide glare-free diffused light and enable architects to create striking building envelopes. (SNAP #232)

TABLE OF CONTENTS

Doors, Windows

Page 51

Doors, windows, storefronts, entrances, skylights, framing systems, glazed curtain walls, and translucent wall and roof assemblies.

Equipment

Page 51

Page 51

A broad range of electrical and tech goods, among them audiovisual, multimedia, and control systems. Also covers elevators and appliances.

Interior Finishes, Furnishings

Products for finishing and furnishing building interiors, including flooring, wallcoverings, ceilings, furniture, shelving systems, and window treatments.

Materials

Basic products used in construction, among them lumber, concrete, and masonry units. Includes paint, coatings, and structural materials and fittings.

Mechanical Systems, HVAC, Plumbing Page 52

Products for conditioning, moving, holding, and controlling air, water, and other fluids. Examples include fans, ventilators, and boilers.

Roofing, Siding, Thermal & Moisture Protection

Page 52

Page 52

Goods for constructing the building envelope, such as exterior wall and roof panels, sheathing, thermal insulation, and waterproofing.

Specialty Products

Pages 53, 59

Products for special applications or that apply to more than one category, such as gates, ladders, columns, signage, awnings, canopies, and railing systems.

WR

DOORS, WINDOWS

AZON SAVES ENERGY

GREEN Azon

Structural thermal barrier technologies, energy efficiency and high strength for aluminum fenestration products.

Product Application:

• Storefront and curtain wall applications • Commercial aluminum, windows, doors and skylights Thermal barriers for framing

Performance Data:

Intelligent technologies reduce overall U-factor • Higher CRF (Condensation Resistance Factor)

www.azonintl.com 800.788.5942



SNAP 233

DOORS, WINDOWS

DOORS, WINDOWS

TRANSFORM SPACE

WR I GREEN

Raydoor®

Sliding doors & walls that permit light into a room, while being a functional & flexible solution to divide interior space.

Product Application

- Residential
- Hospitality
- Commercial

Performance Data

- Lightweight, No Floor Track & FSC Certified
- Fully customizable solutions for any application

ravdoor.com | info@raydoor.com 212.421.0641

ADJUSTABLE CONCEALED HINGES ŚŚŚ

SIMONSWERK North America, Inc.

The TECTUS 3-way adjustable concealed hinge series for doors offers designers and architects an entire range of hinges for different architectural openings. **Product Application**

- Hospitality Armani Hotel, Burj Khalifa, Dubai, U.A.E. • Residential – 2012 Olympic Village, London, U.K.
- Retail Apple Retail Stores, global
- **Performance Data**

• Maintenance-free slide bearings for doors up to 300 kg/660 lb

• Designed for high-frequency use (not limited to lowfrequency applications)

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SERIES 3000 DOCK LIFT- UPDATED & EXPANDED

Advance Lifts, Inc

Advance Lifts Inc. The nations #1 dock lift builder has recently updated and expanded their 3000 series of pit mounted dock lifts.

Product Application

• This newly expanded line brings lower lowered heights and a significant cost reduction to dock lifts with capacities between 8,000 and 20,000 pounds.

Performance Data

• With the industry's leading warranty and most complete lines of surface and pit mounted dock lifts, every dock needs and Advance Lift.

www.advancelifts.com 1.800.843.3525 | michaelr@advancelifts.com



EQUIPMENT

SNAP 239

TIMES-2 ROTARY CABINETS ŚŚ

Aurora Storage Products, Inc.

Times-2, the modern, dual-sided alternative to lateral filing cabinets, stores more in a smaller footprint and can easily go around spaces that are normally not used for storage. **Product Application:**

- Interconnect Units from tall to low to make one unique storage system.
- Use wasted space under low windows, building controls or logo in corporate lobby. • Guest coffee service and corporate promo items.
- **Performance Data:**
- Stores more in less space than lateral files or standard cabinets
- 10 Unit Sizes, 31 Beautiful Eco-Friendly Colors

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SNAP 234

SNAP 236

SNAP 238

SNAP 240

DOORS, WINDOWS

DOORS, WINDOWS

SIMULATED DOUBLE-HUNG, HURRICANE-RESISTANT WINDOW

Graham Architectural Products

Fixed window with offset lites and a historic beveled sash design simulates the appearance of historic hung windows. Graham's HIS1400 Offset is a hurricane impact-resistant version of this product. **Product Application**

LIFT-STRAP BIFOLD DOORS AND ONE-PIECE HYDRAULIC DESIGNER DOORS

Schweiss Doors manufactures unique custom designer doors, one-piece hydraulic doors and patented lift-strap

Schweiss Doors, Moving Walls

• Custom designed storefronts and more...

• Superior design that keeps working!

507.426.8273 | schweiss@bifold.com

opening/closing bifold doors.

Product Application:

Performance Data:

WR

 Moving doors and walls • You think it, we build it

Faster, safer operation Zero lost headroom

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DATES + EVENTS

material made from rock and reprocessed waste plastics; Matter Design, testing prehistoric approaches to installing large stone statues; and APTUM Architecture, with a pavilion built using high-performance concrete. Visit designingmaterialinnovation.org.

Albert Frey and Lina Bo Bardi: A Search for Living Architecture PALM SPRINGS, CALIFORNIA

Through January 7, 2018

Part of a Getty Foundation-led initiative to explore the connection between Latin America and Los Angeles, the Palm Springs Art Museum presents an exhibition that shows parallels between the work of architects Albert Frev and the Italian-born Brazilian Lina Bo Bardi, who also designed furniture. For more information, see psmuseum.org

Chicago Architecture Biennial CHICAGO

Through January 7, 2018 The second edition of the Chicago Architecture Biennial features works by over 141 architects and designers on the theme of Make New History. Consisting of six community anchor exhibitions, two special-project sites, installations, performances, talks, and films, the Biennial is a citywide event that encourages visitors to explore Chicago with an architectural eye. For more information, visit chicagoarchitecturebiennial.org.

Scaffolding NEW YORK CITY

Through January 18, 2018

Curated by Greg Barton with installation design by OMA New York director Shohei Shigematsu and graphic design by MTWTF, the exhibition explores the different forms and applications of scaffolding, as well as its relationship to architecture. At the Center for Architecture. Visit centerforarchitecture.org.

No. 9 NEW YORK CITY

Through January 19, 2018

Designed and curated by architect Frida Escobedo, the exhibition examines the history of a public sculpture series in Mexico City, La Ruta de la Amistad, commissioned for the 1968 Olympic Games. Escobedo focuses the exhibit on the ninth sculpture, by American artist Todd Williams. At Columbia University's Arthur Ross Architecture Gallery. For more information, visit arch.columbia.edu.

Ai Weiwei: Good Fences Make Good Neighbors NEW YORK CITY

Through February 11, 2018

The citywide exhibit by artist and activist Ai Weiwei creates a series of installations using the security fence to examine themes of displacement and migration. Sites in New York include the Washington Square Arch in

NEW AND UPCOMING EXHIBITIONS

Design Miami/ міамі

December 6–10, 2017

The annual global forum features exhibitions of furniture, lighting, and "objets d'art" along with lectures, panels, and other events. Special commissions for the 2017 fair include Swiss firm Christ & Gantenbein's wood-furniture series designed for hardware-free assembly in a Zambian school. More information at miami2017. designmiami.com

Georgetown GLOW WASHINGTON, D.C.

December 8–January 7, 2018

The fourth annual outdoor light exhibition features a series of illuminated installations on display each evening from nightfall to 10 p.m. Designed by a mix of architects and artists, both local and internationally-based, the 11 exhibits are spread throughout the historic neighborhood next to the university. Visit georgetownglowdc.com.

Howardena Pindell: What Remains To Be Seen CHICAGO

February 24–May 20, 2018 Spanning the multidisciplinary artist's five-decadeslong career, the exhibit features paintings,

photography, film, and performance from various stages of her life. The underlying theme of the exhibition, co-curated by Naomi Beckwith and Valerie Cassel Oliver, reflects the shift from Modernism to contemporary art practices. At the Museum of Contemporary Art Chicago. For more information, visit mcachicago.org.

ONGOING EXHIBITIONS

Living in America: Frank Lloyd Wright, Harlem & Modern Housing NEW YORK CITY

Through December 17, 2017

This exhibit examines racial segregation and socioeconomic inequality through two housing projects designed by Wright—one occupied mainly by black residents, the other predominantly white. Curated by Columbia University's Temple Hoyne Buell Center for the Study of American Architecture, the exhibition relates to the Museum of Modern Art's ongoing Frank Lloyd Wright exhibition. For more information, visit arch.columbia.edu.

Designing Material Innovation SAN FRANCISCO

Through December 22, 2017

The exhibit at California College of the Arts' San Francisco campus consists of five full-scale prototypes built using new materials, fabrication techniques, and/or design approaches. Participating firms include T+E+A+M, using a



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DATES + EVENTS

Greenwich Village, the Unisphere at Flushing Meadows-Corona Park in Queens, and Doris C. Freedman Plaza in Central Park. Presented by the Public Art Fund, the exhibit also features images on lampposts and other spaces usually reserved for advertisement. Visit publicartfund.org.

Never Built New York NEW YORK CITY

Through February 18, 2018

Co-curated by architecture critics Sam Lubell and Greg Goldin, the exhibition features original prints, drawings, models, and installations of unbuilt projects developed by architects including Robert Venturi and Denise Scott Brown, Rem Koolhaas, and Zaha Hadid. The Queens Museum exhibit was designed by Studio Christian Wassmann. For more information, visit queensmuseum.org.

Obdurate Space: Architecture of Donald Judd NEW YORK CITY

Through March 5, 2018

The exhibit looks at completed and unbuilt architectural work by artist Donald Judd between 1984 and 1994. Featuring drawings, models, and photos, the display was curated by Claude Armstrong and Donna Cohen, who were both assistants to Judd. At the Center for Architecture Visit centerforarchitecture org

Frau Architekt FRANKFURT

Through March 8, 2018

Presented by the German Federal Cultural Foundation, the exhibition features portraits of 22 women who have influenced German architecture. Beginning in 1907 with Emilie Winkelmann, the first female founder of a German architecture studio, personal stories and projects showcase the role each woman played in shaping the profession in Germany. At Deutsches Architekturmuseum. For more information, visit dam-online.de.

Found in Translation: Design in California and Mexico, 1915–1985 LOS ANGELES

Through April 1, 2018

Displaying over 250 objects including drawings, photos, models, and film, the exhibition examines Modern and anti-Modern design movements in California and Mexico, along with their connections to each other, Richard Neutra, Luis Barragán, and Clara Porset are some of the architects and designers whose work is on display at the Los Angeles County Museum of Art exhibit. Visit lacma.org.

Gordon Matta-Clark: Anarchitect NEW YORK CITY

Through April 8, 2018

Known for artwork that cuts through the facades of derelict and historic buildings, Gordon Matta-Clark's exhibit at the Bronx Museum of the Arts uses the artist's work in the borough as a jumping-off point for a display that includes 100 pieces, film, and rarely shown materials from his archive. For more information, see bronxmuseum.org.

Alex Schweder and Ward Shelley: **Your Turn**

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Through April 22, 2018 For this combined architecture and performance-art piece, Alex Schweder and Ward Shelley will build a 24-foot-high living environment that they will then inhabit, negotiating the shared use of nine basic amenities as an interactive performance for audience members. At the Aldrich Contemporary Art Museum. Visit aldrichart.org.

Floating Cube: 10 Years 10 Artists 10 Works GIUSSANO, ITALY

Through May 31, 2018 (by appointment)

Curated by Cristiana Colli, furniture company Molteni&C's exhibition looks back on 10 years $of photography \, published \, by \, its \, in-house$ magazine, M&C. The photos are displayed inside Ron Gilad's Floating Cube, a square white structure to which the photos are affixed. It appears to float atop about an inch $of water-\!-both \, the \, cube \, and \, water \, are$ enclosed by glass. At the Quadreria Contemporanea picture gallery. More information at molteni.it.

LECTURES, CONFERENCES, **AND SYMPOSIA**

In Our Time: A Year of Architecture in a Day NEW YORK CITY

December 9, 2017

The one-day symposium will feature project presentations, a panel discussion led by the Met's architecture and design curator, Beatrice Galilee, and a keynote presentation by Pritzker Prize-winner Wang Shu. Other participants include architects such as David Adjaye, Go Hasegawa, and Philippe Rahm, along with a creative leader at IKEA and artist Julie Mehretu. At the Metropolitan Museum of Art on Fifth Avenue. For more information, visit metmuseum.org.

Steven Holl-AIA/RIBA Keynote Lecture 2017 LONDON

December 12, 2017 Jointly hosted by the AIA UK and the Royal Institute of British Architects, architect Steven Holl will speak on his recent work, including Maggie's Centre Barts, which is slated to open in London by the end of the year. See aiauk.org.

IES Research Symposium 2018: Light + Human Health ATLANTA

April 8–10, 2018

The Illuminating Engineering Society is calling for papers that examine how light affects circadian, biological, and behavior responses. Posters showing research on or applications of lighting approaches will be featured in a dedicated session. Deadline to submit abstracts is December 15, 2017. For more information, visit ies.org/research/ research-symposia-workshops/.

New to New York: A Brighter BAM NEW YORK CITY

December 16, 2017

Architectural historian Matt Postal will lead a tour in the neighborhood around theBrooklyn Academy of Music, exploring housing projects as well as civic spaces that have transformed the vicinity. Highlights include work by SHoP Architects, Cook + Fox Architects, and TEN ARQUITECTOS' Enrique Norten. Organized by the Municipal Art Society of New York. Visit mas.org.

Unlocking Public Space: Placemaking in Brownsville NEW YORK CITY

December 18, 2017

A panel discussion moderated by The New York Times's Ginia Bellafante on how the Brownsville Community Justice Center used urban planning tools to create new public spaces. At the Brooklyn Historical Society. More information at brooklynhistory.org.

COMPETITIONS

Beyond the Centerline

Registration deadline: December 15, 2017 This privately funded design competition run by Fisher Brothers is calling for proposals to reimagine Park Avenue in Manhattan by creating installations for the medians between 46th Street and 57th Street. Up to 10 designs will be selected to be built and displayed in February 2018. See fbdesigncom.com.

Reimagine the Canals

Submission deadline: January 5, 2018 The New York Power Authority and New York State Canal Corporation are inviting design proposals for infrastructure and new structures to further establish the state's 524-mile canal system as a tourist and recreation destination while simultaneously implementing sustainable and financially viable systems. Submissions for the two-stage competition are open to international and multi-disciplinary teams. Details at canals.ny.gov/reimagine/overview.html.

Folly/Function 2018: Seats

Submission deadline: January 8, 2018 This edition of the Architectural League's annual design-build competition asks designers and architects to submit design proposals for movable single or double outdoor seating, which will be installed in Socrates Sculpture Park in Queens, New York. Proposals must seat a minimum of 25 people, using a \$6,000 budget to fabricate, assemble, and install the project. The winning design will open to the public in June 2018. More information at archleague.org/folly18.

Architecture at Zero

Registration deadline: January 10, 2018 Open to students and professionals, Pacific Gas and Electric Company's competition invites design proposals for San Francisco State University's estuary and ocean science center in Tiburon, California. Proposals should include a site plan for the 53-acre plot and designs for two buildings, the university's education facility and visitors' center, both of which must meet zero net energy performance requirements. Details at architectureatzero.com.

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TRADE SHOW NEWS





Sizing Up Cersaie

At the international tile show in Bologna, Italy, the slabs are getting bigger, along with the crowds

TILES AND CERAMIC SLABS boasted a bump in size at Cersaie, the International Exhibition of Ceramic Tile and Bathroom Furnishings held September 25–29, in Bologna, Italy. And the show's attendees did, too.

Since 2016, visitors increased to 111,604, a jump of nearly 5 percent. International participants—from nearly every nation on the planet—rose by 4.3 percent, to 53,182. What's more, Italian visitors grew by 5 percent—for a total of 58,422. Among the attendees were 7,508 architects and 1,977 interior designers. Press representation was strong too, with nearly 1,000 journalists present. They all came to see products from 869 exhibitors, including 323 companies from 41 countries. The ceramic tile industry was in full force, representing 457 companies, followed by bathroom furnishings firms that showcased 197 exhibitors.

If larger slabs were a major trend at Cersaie this year, so were diminishing thickRECORD BREAKING More than 110,000 people attended the Cersaie International Exhibition of Ceramic Tile and Bathroom Furnishings Show in Bologna, Italy, from September 25-29 (above). Black and white picturesque tiles were a consistent theme at the show (right).







nesses. "Any discussion of big-picture trends must begin with the innovative large sizes produced by **ABK Group**, in a thickness of just .28 inches," says Cristian Nizzoli, Marketing Manager at ABK Group.

ABK has been researching two particular trends in product aesthetics. The first is hyperrealism, with products enhanced by three-dimensional reproduction on smooth, soft touch surfaces. For instance, there's the hyper-realistic concrete effect of **LAB 325** and the ceramic fragments of **Flaviker**'s River collection.

Other ABK research involves enhancing the large panels (up to 63 by 126 inches) with geometric and floral patterns and luxury motifs. Its Wide & Style large-format tiles are transformed from a conventional tile into a seamless surface onto which designers can create a landscape, a fresco, a play of geometries, or a color pattern.

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SAPHY:

PHOTOG

Barbari cites 2017 trends like realism, beauty, endurance, sustainability, and the unlimited possibilities that accompany reproGRAND GESTURE ABK Group's Wide & Style collection provides a seamless surface where designers can create a landscape, a fresco, a play of geometries, or a colorful pattern (right). The Flaviker River collection in Lead and Ecru offers extremely high-resolution 3-D effects (top). Its Ecru and Silver panels are large—up to 63 by 126

inches (above).



TRADE SHOW NEWS







SPECIAL EFFECTS

The Marazzi Group's Mineral collection of porcelain stoneware casts an iridescent, reflective, metallic, and tactile look (above). Oak inspires the new Marazzi Treverklife wood-look collection (top left). The Emilceramica Tele di Marmo collection's surfaces offer alternative installations of marble slab portions (left).

ducing rare and precious stones, as well as wood veins. Despite the innovations, costs are becoming more affordable in both residential and commercial surfaces, he says.

Meanwhile, Ceramiche Piemme is betting on elegance with Incipit Valentino, a new collection for all areas, including living rooms, bedrooms, baths, kitchens, and even spas and hotel lobbies. "Fabric is a trend in ceramic design, and after extensive studies and collaboration with the Valentino fashion house, we've decided to launch this new line to mark the 40 years of the Valentino by Ceramiche Piemme brand," Barbari says.

The **Marazzi Group** is working with similar themes. The ceramics company, acquired in 2013 by U.S.-based Mohawk Industries, Inc., introduced a number of new collections at Cersaie, including Fabric, Fresco, Material, and Mineral.

Debora Laterza, marketing director at **Emilgroup**, also sees size as the overall trend in commercial applications, especially in the design of concrete, resin, cultured marble, and metal effects reproduced on big slabs—with lowered thicknesses of .12 and .24 inches.

In addition, the use of digital technology means companies can replicate the effect of natural materials like stone, marble, wood, and concrete. Still, other emerging trends exist. "Lots of companies are going back to ceramic material highlighted with patterns and designs, making it look like a handmade product even if it's produced on a large scale," says Laterza. "Furthermore, new pastel colors have been introduced to satisfy the need of modern interior designers."

So while it may be true that size matters, colors and design are playing significant roles, too. — *J. Michael Welton*

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PARTNERS IN DESIGN



Vanity Fare

WHILE BATHROOM DESIGN is Duravit's expertise—the Germany-based company celebrates its 200th anniversary this year—it is a new experience for Danish designer Cecilie Manz. Her reference point in creating the Luv series was a bowl filled with water on a table, which she describes as "perhaps the most simple and universal reference to daily grooming in front of a mirror." The collection launched earlier this year and includes washbasins, vanities, mirrors, and tubs in a slew of sizes.

Duravit partnered with the award-winning designer because her work represents Scandinavian elegance at its best. "We discovered a strong connection between her understanding of design and our vision: pure, sustainable, and useful," says Tim Schroeder, president of Duravit USA. "The unusual design of Luv effortlessly overcomes the apparent contradiction between purism and timeless, emotional elegance."

Manz's biggest challenge was creating a collection that thoughtfully integrated a plethora of materials and textures such as ceramics, matt glazes, lacquered woods, and stone. "It is a process to get the right tuning at the right time," she says. "I'm very happy we succeeded in getting the matt glaze for instance. It might sound like a small detail, but the details are imperative."

Manz begins her design process by drawing very quick sketches. Later, she converts them into computer drawings, creating one-to-one, full-size mock-ups and models whenever possible. "Even the bathtub was made in a 1:1 model," she explains. "Duravit conducted test sessions, pouring water in it, and actually staging baths."

Achieving the minimal curvature of the Luv washbasin was a complex task for Duravit. "We used our proprietary DuraCeram material to cast the ceramic washbasins because the material has the strength and robustness to have a very slender edge," says Schroeder. Luv distinguishes itself from many of Duravit's other collections, in part, because of the cool Nordic colors and the use of floor-standing vanities. "However, it fits in perfectly as an iconic, unique interpretation of the bathroom," he says.—*Paul Wong* (SNAP #270)



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