white hot metal

White hot MetalWorks™ Ceiling Systems allow you to infuse rhythm and scale into any environment. Working in harmony with other interior selections, MetalWorks design options can turn up the heat — with 3D, curved, flat, linear, mesh, planks, radial, tin, canopies, open cell, and wings. Perforated options enhance design and fleece backing adds killer acoustics. Throw in an endless palette of standard and custom colors and let your creative sparks fly. Visit the MetalWorks website to ignite your imagination today.
Three PNC Plaza.
Architect: Doug Gensler,
Principal, Gensler
Close on time with Oldcastle BuildingEnvelope™

According to a study by the U.S. Department of Commerce, the construction industry has suffered significant productivity declines since the 1960s, while all other non-farm industries have seen large boosts in productivity. Why? Fear of change? At Oldcastle BuildingEnvelope™ positive change is part of our DNA. More than a decade ago, we began to design, engineer, manufacture and manage all aspects of the building envelope. "Oldcastle BuildingEnvelope™ delivered the desired aesthetic we were looking for and met our important performance requirements, all while supporting the critical construction schedule parameters," said Doug Gensler, Principal, Gensler. Call us to discuss your next building envelope project—we'll be there in no time.

1-866-OLDCASTLE (653-2278), oldcastlebe.com.

Due to the complex nature of the curtain wall treatments, Oldcastle BuildingEnvelope™ first designed and engineered the systems, then tested their performance using 3-D simulation programs, allowing the design team to ensure that key performance metrics were achieved.

Origami by Robert Lang
One towel at a time, every time.

ConturaSeries® Dispensers and Receptacles now include unique TowelMates and LinerMates as standard equipment. Towel usage and waste are reduced by more than 20%. And, unsightly trash bag receptacle overhang is a condition of the past. Visit bobrick-koala.com for a demonstration.
CREE® AEROBLADES ARCHITECTURAL AREA LIGHTING
Sleek, modular design allows for 2-6 light blades | Each blade is only 37mm x 770mm
Precision NanoOptic® technology directs light where you want it | Durable DeltaGuard® finish
Self-cleaning design | Ideal for vehicular and pedestrian applications

“FORM FOLLOWS FUNCTION. WE FOLLOW NO ONE.”

LED REVOLUTIONARY
Keith Bradshaw
Director, Speirs + Major

Speirs + Major was approached with a technology that allowed us to throw out all preconceptions of how urban luminaires should appear. The result is Aeroblades™—the revolutionary luminaire that only an LED could produce.

The unique modular light blades deliver beautiful, energy-efficient light and a level of optical control that can’t be achieved using traditional lighting. Aeroblades transcends performance expectations while showcasing an aerodynamic design aesthetic that looks as beautiful during the day as it does at night.

Visit cree.com/aeroblades to learn more about this revolutionary luminaire.
DESIGN LEADERS ENVISION THE NEXT DECADE

ARCHITECTURAL RECORD’S INNOVATION CONFERENCE CELEBRATES ITS 10TH ANNIVERSARY.

This year’s conference will highlight the profession’s top innovators, most influential projects, and achievements in super-tall, super-efficient, and super-smart buildings.

REGISTER NOW & SAVE

CONSTRUCTION.COM/EVENTS 800.371.3238

Featured speakers include:

David Adjaye | Adjaye Associates

Jeanne Gang | Studio Gang Architects

Stephen Selkowitz | Lawrence Berkeley National Laboratory
IF YOU'RE LOOKING FOR MORE DRAMA
CHANGE THE CHANNEL

PILKINGTON PROFILIT™ CHANNEL GLASS

Create a truly unique look for your vision. Pilkington Profilit™ is a linear channel glass system that comes in a variety of colors, textures and finishes. It lets in the natural light without the loss of privacy, or can be back-lit for dramatic effect. Take a closer look by exploring our interactive Texture Module at tgpamerica.com/texture.

Pilkington Profilit™
Complex design. Complete solution.


Whatever the design challenge, PAC Perimeter/Roof Edge Systems achieve the vision.

- High performance roof edge solutions for low slope buildings
- Complete line of fascia and coping systems for wide variety of commercial applications
- Produced in 12’-0” lengths for extra cost savings
- Many PAC roof edge products test to meet ANSI/SPRI ES-1
- Unmatched wind uplift protection
- Superior design for ease of installation
- Pre-fabricated miters and accessories ensure precise fit and eliminate field fabrication
- Reusable and recyclable material
- 38 PAC-CLAD finishes for superior design style in high performing roof edge system

WWW.PAC-CLAD.COM | IL: 1 800 PAC CLAD
MD: 1 800 344 1400 | TX: 1 800 441 8661
GA: 1 800 272 4482 | MN: 1 877 571 2025

PAGREENINFO.COM | YOUR GREEN METAL RESOURCE | twitter | facebook

CIRCLE 46
NEWS
21 ARCHITECTS EMBARK ON NEW CAREERS  
By C.J. Hughes
22 GENSLER RANKS #1 IN TOP 250 FIRMS LIST  
By Laura Mirviss
24 INNOVATION DISTRICT RISING IN BOSTON  
By Fred A. Bernstein

DEPARTMENTS
16 EDITOR'S LETTER: DESIGN IN THE PRESENT TENSE
32 ARCHITECTURAL ANALYTICS
35 COMMENTARY: ARCHITECTS' WEBSITES  
By Fred A. Bernstein
37 HOUSE OF THE MONTH: BROOKS + SCARPA'S YIN-YANG HOUSE  
By Laura Kaskin
39 PRODUCT FOCUS: ICFF ROUNDUP  
By Rita Catinella Orrell
43 PRODUCT BRIEFS: DOORS  
By Rita Catinella Orrell
119 DATES & EVENTS
116 READER SERVICE
124 SNAPSHOT: CLOUD CITY  
By Asad Syrriett

PROJECTS: MATERIAL WORLD

INTRODUCTION

51 EL B AUDITORIUM AND CONGRESS HALL, SPAIN  
SELGASCANO By Laura Martinez de Guereita
62 MUSÉE PARC ALÉSIA, FRANCE  
BERNARD TSHUMI ARCHITECTS  
By Suzanne Stephens
68 K3 FOR KKJJE GALLERY, SEOUL  
SO-IL By Aric Chen
74 BROOKLYN BOTANIC GARDEN VISITOR CENTER, NEW YORK  
WEISS/MANFREDI  
By Clifford A. Pearson
80 MUSÉE JEAN COCTEAU, FRANCE  
RUDY RICCIOTTI ARCHITECT By David Cohn
86 TWILIGHT EPHPHANY, HOUSTON  
JAMES TURRELL By Beth Broome

BUILDING TYPES STUDY 924 MULTIFAMILY HOUSING
97 VIA VERDE, NEW YORK DATTNER ARCHITECTS/GRIMSHAW ARCHITECTS  
By Joann Gonchar, AIA
102 THE Q, SAN DIEGO  
JONATHAN SEGAL  
By Sarah Amclar
106 THE MODULES, PHILADELPHIA INTERFACE STUDIO ARCHITECTS  
By William Hanley

ARCHITECTURAL TECHNOLOGY

110 SITE SPECIFIC  
A NEW SUSTAINABLE RATING SYSTEM AIMS TO PROTECT AND REGENERATE THE ECOLOGICAL CAPACITY OF LANDSCAPES.  
By Joann Gonchar, AIA

THIS PAGE: MUSÉE JEAN COCTEAU, FRANCE,  
BY RUDY RICCIOTTI ARCHITECT. PHOTO BY ROLAND HALBE.  
ON THE COVER: EL B AUDITORIUM AND CONGRESS HALL, SPAIN, BY SELGASCANO. PHOTO BY IWAN BAAAN.

Expanded coverage of Projects and Building Types Studies,  
as well as web-only features, can be found at architecturalrecord.com.

This symbol denotes that enhanced content is available in our iPad edition.
LEARN & EARN

Earn all your continuing education credits free online or at Architectural Record's Continuing Education App!*

NEW ONLINE AT ARCHRECORD.COM

Working Water: Plumbing Fixtures for Conservation, Performance and Design
Credit: 1 HSW/SD
Sponsored by DINOFLEX – Recycled Rubber Surfaces

Introducing the Architectural Record Continuing Education App
Earn Continuing Education Credits Wherever You Are and Whenever You Want

Sustainable Design With Recycled Rubber Surfaces
Credit: 1 HSW/SD
Sponsored by Danze, Inc. & Gerber

Hardwoods in Green Building: Plantation-grown Eucalyptus Makes its Mark as a Versatile, Sustainable Exotic Species
Credit: 1 HSW/SD, 1 GBCI CE Hour
Sponsored by Weyerhaeuser

ALSO ONLINE AT ARCHRECORD.COM

Simplified Steel Stair Design for Commercial and Institutional Buildings
Sponsored by Lapeyre Stair

BIM Interoperability and Relational Databases: Intelligently Linking Drawings and Data
Sponsored by Building Systems Design, Inc. (BSD)

Finishing Gypsum Board: Appearance and Indoor Air Quality
Sponsored by National Gypsum

Color, Perception, and Architectural Interiors
Sponsored by Mondo

Specifying Foundation Flood Vents for Building Sustainability, Durability and Performance
Sponsored by SMART VENT Inc.

Acoustically Enhanced Gypsum Board Designed for High STC Wall Assemblies
Sponsored by National Gypsum

High Performance Gypsum: Protect Against Mold, Moisture and Exposure
Sponsored by National Gypsum

Earn Free Health Safety Welfare (HSW) and Sustainable Design (SD) credits with Architectural Record

*All Architectural Record articles and presentations count toward the annual AIA continuing education requirement. All exams are available at no charge and are instantly processed.
LECTURE HALL.

Introducing the Architectural Record CEU App. The only app that allows you to fulfill credits and track your progress without Internet access.

Download free at iTunes. Sponsored by Armstrong
Design in the Present Tense
Finding the delicate balance between tradition and innovation.

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

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

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

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

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

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

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

Introducing C/S Acrovyn® Panel Doors. Thanks to their extreme durability, C/S Acrovyn Doors have become the architect's choice for hospitals and high abuse environments. To give architects and designers even more aesthetic choices, Construction Specialties is pleased to introduce Acrovyn Panel Doors. These doors not only look great, but feature the same materials and construction that make Acrovyn Doors “virtually indestructible.” They are available in 18 simulated wood and metal patterns and 64 Acrovyn colors. For details, call Construction Specialties at (800) 972-7214, or visit www.c-sgroup.com/door.

Schilthute Masser Bar, Austria
NanaWall Aluminum Framed Thermally Broken SL70 with triple glazing
Elevation 8,038 feet

NanaWall—25 years of engineering excellence with over a million panels installed

• Benefit from a single-source product built as a complete system of unparalleled quality with superior long-term weather performance.

• Choose from over 20 different systems with hundreds of options for configurations, materials, glazing and finishes.

• Contact the NanaWall Dedicated Architectural Support team for concept to completion evaluations and design guidance.

NanaWall
The Leading Provider of Grand Transformations

CIRCLE 41
Showrooms Nationwide 888 868 6643 nanawall.com
Specifying **FIRESIST®** fabric at the beginning of development is a solid decision.

**Visualization**

Drawings are for visual representation only.

**FIRESIST® 33005/0000 REGATTA TWEED**

**Firesist Fabric Certifications**

California State Fire Marshal Title 19
NFPA 701-99, test method II
CPAI-84, Tent walls and roof
PMVSS 302
FAA 25.853 (Aviation)
UFAC Upholstered Furniture, Class I

Specify FIRESIST for an up-to-code fire-resistant awning fabric that looks as good as it performs. Improved strength, colorfastness, and weather-resistance make fabrication with FIRESIST easier than ever.

There has never been a smarter decision when it comes to quality, assurance and safety. For more information, contact Glen Raven customer service at 336.221.2211 or visit [www.glenraven.com/firesist](http://www.glenraven.com/firesist).
Battered by the Recession, Architects Pursue New Careers

BY C.J. HUGHES

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

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

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

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

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

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

“I’m obviously not working in CAD,” she says, “but there’s a huge amount that has translated from my background.”

Some architects (continued on next page)
Gensler Takes the Crown

BY LAURA MIRVISS

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

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

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

TOP 25 U.S. ARCHITECTURE FIRMS OF 2012

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

Rank	Firm, U.S. Headquarters	Type of Firm	Total Architectural Revenue
1	Gensler, San Francisco	Architect	764.08
2	AECOM, Los Angeles	Engineer	445.40
3	Perkins+Will, Chicago	Architect	365.40
4	CH2M Hill, Englewood, CO	Engineer	365.10
5	HDR Architecture, Omaha	Engineer	364.10
6	Jacobs, Pasadena, CA	Engineer	353.71
7	HOK, St. Louis	Engineer	316.28
8	URS, San Francisco	Engineer	294.10
9	HKS, Dallas	Engineer	213.03
10	Skidmore, Owings & Merrill, New York City	Architect	188.90
11	Cannon Design, Grand Island, NY	Engineer	185.10
12	NBBJ, Seattle	Architect	181.64
13	RTKL, Baltimore	Engineer	164.00
14	Kohn Pedersen Fox Associates, New York City	Architect	143.88
15	Leo A Daly, Omaha	Architect	136.36
16	Perkins Eastman, New York City	Architect	130.00
17	Stantec, Irvine, CA	Engineer	128.90
18	Callison, Seattle	Architect	128.48
19	ZGF Architects, Portland, OR	Architect	120.25
20	Rafael Viñoly Architects, New York City	Architect	112.67
21	Bechtel, San Francisco	Engineer	108.00
22	SmithGroup J Kara, Detroit	Engineer	96.50
23	Ingenium International, Detroit	Engineer	90.00
24	HMC Architects, Ontario, CA	Architect	87.97
25	Populous, Kansas City, MO	Architect	86.00

Key to firm types
A Architect
AE Architect Engineer
AP Architect Planner
EAL Engineer Architect Landscape
AC Architect Engineer Contractor

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

JUST GOT CLEARER

SuperLite II-XL™ with Starphire®

Ultra-Clear Glass by PPG
“Innovation District” Rising in Boston

BY FRED A. BERNSTEIN

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

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

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

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

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

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

America’s Most Endangered Sites

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

USGBC Delays Update to LEED Rating System

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

Phifer Unveils Design for Corning Museum Expansion

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

MoMA’s Young Architects Program Expands to Turkey

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

National Gallery Presents Architecture Film Series

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

Significant Drop for AIA

The Architectural Billing Index hit 45.8 in May, down from April’s 48.4 (a number below 50 denotes a billing decrease). All regional and building sectors showed declines. “This should be an alarm bell going off for the design and construction industry,” says AIA chief economist Kermit Baker. The May inquiries score was 54.0.
A beautiful finish inspires extraordinary beginnings.

When you’re working with aluminum, you can create any shape you want. Valspar coatings make it possible to have it in any color you want. Application is smooth and easy. And what goes on so well will look great for the long haul. That’s why thousands of architects, fabricators and applicators the world over trust Valspar above all others. Find out which Valspar product is right for your job. Call us at 1-888-351-6900 or visit valsparextrusion.com.

© 2012 Valspar Corporation

valspar
if it matters, we’re on it.®
The safest installation meets the smartest innovations.

Next-generation LiftMaster® door operators lead the way with groundbreaking innovations that protect your clients.

Our new line of door operators protects your clients’ employees and property with continuously monitored entrapment protection and state-of-the-art safety features, making it easier than ever to incorporate warning lights, bells, and timers.

Plus, they meet tough new UL325-2010 standards, which is critical in complying with state and local building codes. It’s all what you’d expect from the #1 brand of professionally installed door operators. There’s no smarter way to protect what matters most...your reputation.

Specify safe. Specify smart. Specify LiftMaster.
To learn more, visit liftmaster.com or call 800-323-2276.
Performance Architecture

With a tradition of craftsmanship and innovation, Glen-Gery offers style and performance to those who design architecture destined to enrich our environment.

Our extensive line of facebrick, glazed brick, thin brick and paving brick includes a full range of colors, sizes, textures and shapes. Glen-Gery provides high quality data-rich BIM images, including wall assemblies, objects and profiles. We also offer Glen-Gery Landmark Stone and a complete selection of masonry products.

Glen-Gery Brick...Appearing on the finest architecture.

Glen-Gery Brick
An Oldcastle® Company

610.374.4011 • www.glengerybrick.com
Pure in Form, Pure in Function, Defining Performance

Elevate area lighting to a new level

PureForm Specification Grade LED Luminaires
sitelighting.com/PureForm/AR
NOW: One Call Building Envelope Responsibility

No Moisture Intrusion – Guaranteed!

- Factory-Installed Windows
- Factory-Applied Closed-Cell Foam Insulation
- H2Out™ Advanced Sealant System
- Integral Water Repellent

SLENDERWALL®

Award winning performance-oriented, exterior precast cladding contributing up to 28 LEED points with over 2 million sq. ft. installed

See our portfolio of projects online...
www.slenderwall.com • 1.800.547.4045

SLENDERWALL® is a product of Easi-Set® Worldwide, a licensor of precast products, with over 60 licensed producers in 37 states and 8 countries. A subsidiary of publicly traded Smith-Midland, Delaware [SMID.OB] ©2012
SOMETIMES YOU CHOOSE FLOORING BASED ON LOOKS. OTHER TIMES FOR VALUE OR DURABILITY OR, IN THIS CASE, ALL THREE.

EarthWerks™ is the perfect flooring choice based on good looks alone. It offers architectural beauty that clients appreciate. More importantly, it is easy to install, maintain and repair and stands up to spills, messes and a ton of traffic. EarthWerks™ commercial grade vinyl tile and plank flooring are also Earth friendly and recyclable. So, before you take the next step, consider EarthWerks™ – be demanding and get everything in one beautiful product.
Sanitaryware, bathroom furniture, bathtubs, shower trays, wellness products and accessories: Duravit has everything you need to make life in the bathroom a little more beautiful. **Austin** Morrison (512) 928 1110, **Boston** Splash (800) 686 6662, **Chicago** Studio 41 (312) 222 4900, **Dallas** Elegant Additions (214) 745 0088, **Denver** Bella Vie (720) 382 1090, **Long Island** Blackman (631) 283 1500, **Los Angeles** Snyder Diamond (310) 450 1000, **New York** Davis & Warshow (212) 688 5990, **Miami** Decorator's Plumbing (305) 576 0022, **Perrysburg** Waterhouse Bath Studio (419) 874 3519, **Phoenix** Central Arizona Supply (602) 943 3488, **San Francisco** The Bath & Beyond (415) 552 5001, **San Juan** Luis Freire (787) 622 0505, **Seattle** Keller Supply Kitchen & Bath Showcase (206) 285 3300, **South Norwalk** Klaff's (203) 866 1603, [www.duravit.us](http://www.duravit.us)  CIRCLE 26
DODGE MOMENTUM INDEX DIPS IN MAY

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

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

Top 2012 Multifamily Residential Projects

Ranked by Construction-Starts Value through April*

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

**184 M**

**PROJECT:** 388 Bridge Street
ARCHITECT: SLCE Architects
LOCATION: NYC

**164 M**

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

**140 M**

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

**90 M**

**PROJECT:** Crescent Village
ARCHITECT: MVE & Partners
LOCATION: San Jose, CA

**89 M**

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

MULTIFAMILY CONSTRUCTION

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

Multifamily Starts by Region

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

Top Metro Area Markets

Total Multifamily Starts, 2007–2011*

<table>
<thead>
<tr>
<th>RANK</th>
<th>REGION</th>
<th>2007–2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New York City</td>
<td>122,027</td>
</tr>
<tr>
<td>2</td>
<td>Washington, DC</td>
<td>48,112</td>
</tr>
<tr>
<td>3</td>
<td>Dallas</td>
<td>42,448</td>
</tr>
<tr>
<td>4</td>
<td>Houston</td>
<td>39,927</td>
</tr>
<tr>
<td>5</td>
<td>Chicago</td>
<td>36,303</td>
</tr>
</tbody>
</table>

*Multifamily dwelling units

The Dodge Index for Multifamily Construction

The Dodge Index for multifamily construction is based on seasonally adjusted data for U.S. housing starts. The average dollar value of projects in 2002 serves as the index baseline.
“Wood is the defining feature in many of our projects. Our goal is always to take advantage of its beauty and strength, while showcasing the many opportunities for innovation it offers. No other material has wood’s capacity to shelter, support and uplift the human spirit.”

– Bing Thom

With growing pressure to reduce the carbon footprint of the built environment, building designers are increasingly being called upon to balance functionality and cost objectives with reduced environmental impact. Wood can help to achieve that balance.

Wood costs less—economically and environmentally—while delivering more in terms of its beauty, versatility and performance. It meets code requirements in a wide range of low- and mid-rise building types. Innovative new technologies and building systems have enabled longer wood spans, taller walls and higher buildings, and continue to expand the possibilities for wood use in construction.

Wood is more than a building material; it’s a renewable and responsible choice.
CLAD WITH UNLIMITED POSSIBILITIES.

Dri-Design® Painted Aluminum wall panels now cover 11,000 square feet of Chicago Theological Seminary’s newly erected facility. Using panels of various heights, painted assorted shades of Champagne, the architect created an offset staggered pattern for added interest and depth. As with all dri-design pressure-equalized wall panels, the Painted Aluminum is intelligently designed for easy install, cost-effectiveness and almost limitless color options.

WHY DRI-DESIGN?
- No sealants, gaskets or butyl tape mean no streaking and no maintenance for owners
- Not laminated or a composite material, so panels will never delaminate
- Unlike aluminum composites, dri-design panels require significantly fewer fossil fuels for manufacture; they are made with recycled content and are 100% recyclable
- Fully tested to exceed ASTM standards, the latest AAMA 508-07 and Miami-Dade approved
- Available in any anodized or Kynar color on aluminum, plus VMZINC, stainless, copper and titanium

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

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

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

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

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

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

Another trend among young firms is to incorporate blog-style news feeds. That works if you’re BIG, the Bjarke Ingels Group, which seems to make news every day. But if you don’t have that much to announce—and who besides Ingels does?—the format may fail flat. And don’t even try it if you don’t have somebody to keep the site updated.

In early June, the “news” tab at stanallenarchitect.com pointed to a blank screen. (This writer is sympathetic: I haven’t updated my own website in years.)

But the most important thing, in the post-phone book era, is that people be able to reach you. Emulate Antoine Predock, who provides complete contact infor-

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

Protect your projects from the elements, with ZIP System™ sheathing. Our all-in-one structural panels with a built-in water resistive barrier combined with our specially designed ZIP System™ tape guard your buildings from moisture damage during and after construction. This continuous water and air barrier also improves energy efficiency by significantly reducing air leakage. And panels go up quickly for a stronger, drier, faster seal – creating the ideal building envelope.

ZIP up your next project. SwitchToZIP.com.
BY LAURA RASKIN

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

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

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

To visually unify the house, the architect defined horizontal and vertical edges with a steel band that winds without interruption around the exterior. “It pulls all the pieces together; a continuous squiggle,” says Scarpa. ■
Steelscape’s METAL\textsuperscript{fx} decorative process transforms metallic coated steel substrates into exotic looking metals such as Rustic Copper, Antique Copper, Tarnished Silver, Gold Ore, Weathered Zinc, Pewter and more!

These innovative finishes are perfect for roofing, walling, and other pre-painted metal applications in both exterior and interior environments.

Warranties available. Please contact us to learn more.
NY Design Week

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

By Rita Catinella Orrell

Volk Furniture Collection

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

volkfurniture.com CIRCLE 204

CP Lounge Collection

In 1965 Florence Knoll debuted Charles Pollock’s iconic Pollock chair, which became both a best seller and a symbol of the modern office. Bernhardt Design president Jerry Helling sought him out in 2010; by the meeting’s end, the two decided to explore several design concepts for a new product. Introduced at ICFF, the CP Lounge Collection is the 82-year-old designer’s first product for an American company in 47 years. The CP Lounge is available in two versions, both with a polished stainless steel frame. CP1 (shown with Pollock) features a large loop stitch around the perimeter of the chair; hand-quilted panels of leather, suede, or felt upholster the seat and back. The CP2 version comes unupholstered and can be upholstered in custom materials.

bernhardtdesign.com CIRCLE 205

Blueair Sense Air Purifier

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

blueair.com CIRCLE 206

Chroma Wallcovering

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

trovell.com CIRCLE 207

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

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

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

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

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

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

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

Learn more and download our new literature, call (800) 999-5099 or visit www.strongtie.com/strongframe.
Imagine. Design. Create.
Designs come **ALIVE** with Illumination Series panels.

nichiha.com/projectgallery
products

The Latest Doors Entering the Market Feature Integrated Lighting, High Impact Ratings, and Unique Pivot Systems, Among Other Options. Rita Catinella Orrell

Idea Door
TRE-Piu novastudio.com

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

Contemporary Interior Hardwood Door
Urban Front urbanfront.com

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

Folding Door System
LaCantina lacantinadoors.com

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

Sliding Glass Door Systems
Klein USA klein-usa.com

Offering a balance of privacy and openness, the frameless interior sliding doors from Klein can be specified with self-closing, telescoping, or bi-parting features. Openings using the Uniglass 60 system were selected for the law offices of Roy, Shecter & Vocht in Birmingham, MI, by Toledo–based MacPherson Architects (shown above). The ¾”-thick panels have a track at the top to provide a minimalist detail at the jambs and floors. CIRCLE 203

For more information, circle item numbers on Reader Service Card or go to architecturalrecord.com/products.
2012 CALL FOR ENTRIES
Design Vanguard

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

To enter the competition, send a low-resolution PDF (no larger than 8 MB) with a portfolio containing 5-8 projects (both built and unbuilt), CVs of your firm’s partners, and a short statement of your firm’s design approach or philosophy.

SUBMIT YOUR ENTRIES BY AUGUST 10, 2012.
To enter go to: www.wizehive.com/apps/designvanguard2012

2012 CALL FOR ENTRIES
Record Products

The editors of Architectural Record are currently accepting submissions for the 2012 Record Products competition. Manufacturers and designers are welcome to submit new building products for the December issue, which will present the best and most innovative offerings available to architects, specifiers, and designers in 2013. Winning entries will be featured in the December 2012 issue.

There is no fee. For more details and to enter online, visit https://www.wizehive.com/apps/recordproducts2012. E-mail questions and submissions to ARCallForEntries@mcgraw-hill.com.
(Please use Record Products as the subject of the e-mail.) Submissions are due September 7, 2012.
SUPPORTING INSPIRATION.

Truly inspired designs call for performance solutions that are every bit as remarkable. You can count on the support you need to bring your vision to life with the architectural wood door possibilities of VT. From superior acoustics, to enhanced fire ratings, to greater durability, there’s no limit to where you can take things. Because when inspiration hits, VT is there.

VT Architectural Wood Doors
VTDoors.com 1-800-827-1615 (ext. 512)
NO COMPROMISES

HL23 in West Chelsea, Manhattan achieves new heights in luxury urban living. Critics compare the 14-story residential tower to an Italian race car: sculptural, muscular, refined, sexy. Absolute in quality.

Little wonder that two pairs of Ellison balanced doors grant access to this marvel of modernity. Bold, polished, with precision unmatched. Meticulously hand-crafted of stainless steel, bronze and glass. Enter into a world without compromises.

800-665-6445 ellisonbronze.com
CIRCLE 30
NOW CONFIDENCE COMES BY THE GALLON. OR EVEN THE 55-GALLON DRUM.

DuPont™ Tyvek® Fluid Applied WB—the biggest name in the weatherization business engineered for the biggest projects.

The superior performance of DuPont™ Tyvek® CommercialWrap® is now available by the gallon. Tyvek® Fluid Applied WB goes on quickly and easily, making it the ideal solution for buildings from five to fifty stories. And it works on a range of materials from concrete to gypsum board. So when you’re looking for a weather barrier you know you can trust, there’s just one place to turn—DuPont. Learn more at www.fluidapplied.tyvek.com
Floor Covering Failures Can Ruin Your Successful Project

INTRODUCING
ARIDUS® RAPID DRYING CONCRETE
THE ONLY SOLUTION FOR PREVENTING CONCRETE FLOOR COVERING FAILURES, THAT IS...CONCRETE

Aridus® helps prevent moisture problems in concrete floors, providing a reliable and permanent solution

Designing innovative structures and livable spaces is a complex process. Your dream project is one that is aesthetically pleasing, functional, and most importantly, a risk-free, healthy place to live and work. Vapor emission from concrete is often overlooked as a potential cause of floor covering failures (estimated at hundreds of millions of dollars in repair cost annually). Furthermore, sick building syndrome and other indoor air quality issues often start at the floor surface and are aggravated by excessive concrete vapor emission. Aridus® specialty concrete mix is the first and only concrete solution to this industry-wide problem that, unlike costly and late stage treatments, helps prevent moisture problems from the very beginning of your project by accelerating the concrete drying time. The result is a faster flooring installation that helps keep your project on schedule and significantly reduces the risk of liabilities associated with floor covering failures. Specify Aridus® for your next project.

FIND OUT MORE ABOUT ARIDUS® AT WWW.US-CONCRETE.COM/ARIDUS
CALL 1-866-882-6176 OR EMAIL ARIDUS@US-CONCRETE.COM

CIRCLE 57
LaCANTINA DOORS TRANSFORM SPACE AND ENHANCE YOUR CUSTOMER’S LIFESTYLE BY ELIMINATING WALLS AND CONNECTING THE INSIDE TO THE OUTSIDE. OUR INNOVATIVE DESIGNS OFFER UNMATCHED PERFORMANCE AND STYLE.

CUSTOM MADE IN THE USA, LaCANTINA DOORS ARE SUITABLE FOR BOTH COMMERCIAL AND RESIDENTIAL APPLICATIONS IN ANY ENVIRONMENT AND ARE AVAILABLE IN TRADITIONAL WOOD, CLAD, ALUMINUM, ALUMINUM WOOD AND OUR LATEST INNOVATION, THE ALUMINUM THERMALLY CONTROLLED.

TO BEGIN INNOVATING OPEN SPACES, GO TO WWW.LACANTINA DOORS.COM

CIRCLE 37 CALL 888.848.6191
ALPOLIC Natural Metals deliver the elements you need to make your unique vision real. ALPOLIC Copper, which is also available in a post patina finish, adds beauty and depth to any building façade. Other ALPOLIC metals – Stainless Steel, Titanium, Zinc – project an image of high-tech sophistication like nothing else. For both interior and exterior applications, the Natural Metals Series is part of the largest offering of Aluminum and Metal Composites on the market today and, like all ALPOLIC ACM and MCM cladding materials, it’s as outstanding in performance and value as it is in appearance. For more information please visit us at www.alpolic-northamerica.com/naturalmetals-series.
Material World

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

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

BY LAURA MARTÍNEZ DE GUERENÚ

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

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

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

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

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

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

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

The building’s opposing qualities create an interesting spatial tension: An exterior that is an abstract volume, like the nearby generic dockside structures, is juxtaposed with a playful interior, where the architects manipulated HARBOR SIDE A polygonal cutout in the polycarbonate wall of the foyer (first spread) serves as an information window. Outside, selgascano treated El B’s roof (above) as a fifth facade: Multicolored aluminum sheets provide a continuous surface. On the south facade (opposite top), rows of LEDs placed at the base of the methacrylate walls create an illuminated backdrop. Seen from the southwestern corner (opposite bottom), “El B,” the name the architects prefer for the building, is rendered in orange. Seen from the opposite side, “El B” appears blue (foreground in photo above).
CROSS SECTION  The metal scaffolding that supports the methacrylate facade—and the longitudinal line of LEDs at its base—is clearly visible beside the box office window (above). As visitors make their way through the building, they are gradually submerged below the level of the pier, which is marked by the horizontal line that divides the upper methacrylate and the lower concrete retaining walls (left). The orange ETFE plastic sidelight looms above this space, allowing ample light into the building. The expansive foyer (opposite) leads to the main auditorium. Steel staircases—with rubber-lined treads and polycarbonate balustrades—connect the building’s different levels to the auditorium and contrast with the rough concrete of the walls.
credits
ARCHITECT: selgascano; José Selgas, Lucía Cano, principals; Lara Resco, José de Villar, José Jaraiz, Lorena del Río, Blas Antón, Miguel San Millán, Carlos Chacón, Julián Fernandez, Beatriz Quintana, Jae Hoon Yook, Jeongwoo Choi, Laura Cuijaiez, Bárbara Bardín, project architects
ENGINEERS: Fhecor (structural); JG Asociados (m/e/p); Arau Acústica (acoustics)

GENERAL CONTRACTORS: Dragados; Intersa
CLIENT: Cartagena Council
SIZE: 200,000 square feet
COST: $45 million
COMPLETION DATE: November 2011

SOURCES
PLASTIC: Polimer Tecnic
SEATING: Fiqueras (auditorium)
FLOORING: Pialgas
LIGHTING: Ideallux; Talleres Zamora
THE PROMENADE
A sinuous ramp (background in photos above and right) runs the length of El B and is accompanied by colorful benches in irregular shapes. The second-level landing of the steel stair (above) offers an oblique view of the double-layer, pressurized ETFE plastic sidelight that spans the building’s entire width (92 feet). The orange ramp descends from the second level to the first, connecting the exhibition room with the foyer. Eero Aarnio’s plastic bubble chairs (right) hang from the suspended walkway.
the horizontal and vertical spaces to animate the longitudinal section. The long facades produced by this radical design strategy may, at first glance, appear too closed to activate an underused area of the city. But closer observation reveals the opposite. By varying color and layout, the architects achieved an infinite array of light-reflection effects that enhance the visitor’s experience. From one perspective, you see the lines of different colors clearly; then they disappear, and the building seems transparent.

Throughout E1 B, the overall effect of frozen light, of extreme silence and calm, makes you feel as if you were inhabiting a space outside time. Yet you never feel isolated: Whether you are walking in solitude around the building or passing through it, the materials envelop you like a cloak. E1 B shows how a daring architectural proposal, using an economy of means, can enhance this latest chapter of Cartagena’s rich history, sounding a bright and hopeful note in an uncertain time.

Laura Martínez de Guereña is a Madrid-based architect and critic.
Behind the Plastic: Assembling the Shimmering Facade

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

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

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

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

A latticelike steel support structure holds the south and north facades’ methacrylate components (top) in place. It is anchored by a system of stainless steel clamps (right).
MuséeParc Alésia | Alise-Sainte-Reine, France | Bernard Tschumi Architects

AU NATUREL

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

BY SUZANNE STEPHENS

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

For more than a decade, Tschumi, who has offices in New York and Paris, has been exploring curved concrete forms combined with different materials—especially in France. In both the Zénith concert hall and exhibition complex in Rouen [RECORD, June 2001, page 102] and the Zénith concert hall in Limoges [RECORD, January 2006, page 120], he designed the facade and roof as one continuous envelope. While the earlier project probed the notion of wrapping a concrete structure with stainless steel, the second did so with polycarbonate and wood.

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

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

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

View additional images at architecturalrecord.com.
MATERIAL WORLD

GROUND FLOOR PLAN

FIRST FLOOR PLAN

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

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

FACADE DETAIL

SECTION A-A
ROMAN LINES On the 91-acre site in Burgundy, France, the interpretation center echoes the ringed fortifications built by Julius Caesar in 52 B.C. A concrete gangway with wide, deep steps leads out to the partially reconstituted fortifications (above). Behind the larch wood screen, the glass is tinted gray so that the screen is prominent. The lowest floor follows the drop in grade where the architects inserted a glass-enclosed picnic area for children; above it, a terrace adjoins the main-floor restaurant. On the roof, trees loom up jauntily from a terrace (right).
around the oppidum, or fortified hill town, of Alésia. The inner ring, 9 miles in circumference, entrapped the Gauls; the outer one, 14 miles around, prevented external reinforcements from coming to Vercingetorix’s aid. The siege lasted two months, and the rest, as they say, is history.

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

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

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

The attenuated spiraling stair leads visitors up to exhibition and orientation areas and conference rooms. As it winds up and around, PURE ROTUNDA Tschumi wanted to keep the central rotunda of the poured concrete structure free of exhibition elements (below). Some of the columns tilt in order to give the space a slightly less monumental air. The stairs swirl upward, with sidelights and top lights illuminating the space dramatically (opposite, top left). Visitors first encounter the winding rooms of the exhibition space (opposite, bottom) and then arrive at the roof, where they have a panoramic view of the partially reconstituted fortifications (opposite, top right).
daylight, filtering in from glazing at the top and side walls, gives the place a faint Piranesian air: Translucent glass floors at the upper reaches of the spiral add to the interior’s ethereality.

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

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

credits
ARCHITECT: Bernard Tschumi Architects—Bernard Tschumi, Veronique Descharrière, Kim Starr, partners in charge; Rémy Cointet, Antoine Santard, Jean-Jacques Hubert, Joel Rutten, Adam Dayem, Jane Kim, Nefeli Chatzimina, and office teams in New York and Paris
CLIENT: Conseil Général, Côte d’Or, Burgundy
EXHIBITION DESIGN: Scène—Guy-Claude François
ENGINEERS: France Aires (civil); BEA Ingénierie (structural); BET Choulet (m/e/p); Cegelec (electrical)
CONSULTANTS: Michel Desvigne with Société Forestière de la CDC (landscape); J. Natterer (wood)
SIZE: 86,111 square feet
COST: $27 million
COMPLETION DATE: March 2012
SOURCES
METAL CURTAIN WALL: Entreprise Protov
TINTED GLASS: Saint-Gobain
GLASS FLOOR: AGC Glass Europe
PAINTS AND STAINS: Entreprise Bonglet
LIGHTING: Philips, Regent (interior only)
K3 for Kukje Gallery | Seoul | SO - IL
MEDIEVAL ARMOR FOR MODERN ART

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

BY ARIC CHEN

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

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

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

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

“It’s a very diagrammatic building,” says Liu. “Basically we took the optimal gallery proportions and then added a stair, an elevator. Everything just is what it is.”

But having ticked off “austere white cube” on the checklist of gallery design strategies (perhaps with a wink and a nudge), Liu and Idenburg proceeded to, in a sense, undo their work. Best known for their temporary structures, including the recent 225,000-square-foot tent that housed the Frieze Art Fair in New York this
May, the partners demonstrate no proclivity for monumentality. Indeed, they wanted to tone down their impressive concrete box in a way that showed deference to the surrounding urban fabric, to “make it less harsh and singular, to soften it,” Idenburg says.

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

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

The result is intriguing, transforming the structure into an object that’s simultaneously amorphous and geometric, solid and permeable—and seemingly an object at the same time that it appears not to be one. In certain light, the chain
mail turns nearly diaphanous, like an invisibility cloak at half power. In others, it verges on kinky. The sexual connotation is probably not entirely unintentional. (SO – II, after all, is the firm that once named its installation at New York City’s MoMA PS1 Pole Dance.) The one exterior section not covered by the mesh is an elegantly curving glass wall.

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

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

Aric Chen is a Beijing-based writer and curator.
BETWEEN LAYERS The metal exterior stair is the one place where visitors can occupy the space between the mesh and the building.

credits

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

ASSOCIATE ARCHITECT: Jong Ga Architects

CLIENT: Kukje Gallery

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

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

GENERAL CONTRACTOR: Jehyo Construction and Engineering

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

COST: withheld

COMPLETION DATE: April 2012

SOURCES

CLADDING: VIA (chain mail mesh)

LOW-IRON LAMINATED GLASS: Hanglas

LAMINATED FIXED OUTER PANE: Interpane

LAYLIGHT: Barrisol; MechoSystems
Thinking outside the box—to wrap it in rings of steel

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

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

In the end, the 500,000 rings of 316 grade stainless steel—stretched, coiled, scored, linked, welded by hand, and finished, all at V1A in Anping, China—were shipped to Seoul in 15 swaths of 20,000 to 40,000 rings each. Once on-site, each was attached to an I-beam and lifted to the building’s parapet, where special connections along the top edge were slid into a C-channel. This allowed flexibility of movement so the mesh could settle into its own form. Each swath was similarly attached at the bottom, just below the ground pavers, and then hand-linked, ring by ring, to the one next to it. Finally, the entirety was tightened to achieve the right tension. The finish of the rings welded on-site also needed to match that of the bead-blasted rings throughout.

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

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

BY CLIFFORD A. PEARSON
GREEN THRESHOLD The visitor center replaces an old ticket booth and turnstiles, giving the garden an urban presence at its northeast entrance and providing a generous plaza to handle some of the crowds—which can reach 37,000 people a day during cherry blossom season. The green-roof portion of the building pushes up against an existing berm (right in photo left) on top of which runs an aile of ginkgo trees (above).

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

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

“The tension between being in an oasis and being in the city is what makes this project so wonderful,” says Weiss. So she and Manfredi chose to introduce the building to the street with a generous entry plaza and a copper sawtooth roof that will age to the same color as BBG’s 1917 McKim, Mead & White administration building down the block. The
credits
ARCHITECT: Weiss/Manfredi Architecture/Landscape/Urbanism—Marion Weiss, Michael Manfredi, design partners; Armando Petruccielli, project architect; Christopher Ballentine, Cheryl Baxter, Michael Blasberg, Paul Dustan-Muñoz, Hamilton Hadden, Justin Kwok, Michael Steiner, project team
ENGINEERS: Weidlinger (structural and civil); Jaros, Baum & Bolles (m/e/p and IT)
CONSULTANTS: HM White Site Architecture (landscape); R.A. Heintges (glazing); Viridian (sustainability); Langan (geothermal); Thinc Design (exhibits)
GENERAL CONTRACTOR: E.W. Howell

SIZE: 22,000 square feet
COST: $28 million
COMPLETION DATE: May 2012

SOURCES
CURTAIN WALL: Schüco USA
GLASS: Saint-Gobain
GREEN ROOF: Sika Sarnafil, Roofmeadow
GREEN ROOF PLANTING: New York Green Roofs
COPPER STANDING-SEAM ROOF: Firestone, Universal Services Group
jagged roof covers a garden shop that sells plants and books and can operate even when the garden is closed. What at first appears to be a single building addressing the street turns out to be a pair of structures separated by a fritted-glass-covered breezeway. Walk through that breezeway and you can continue along a path to the Cherry Esplanade or duck inside to the second building, this one topped by a 10,000-square-foot green roof planted with 40,000 grasses, spring bulbs, and wildflowers. The building uses earth and plants, along with glass and steel, as essential materials.

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

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

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

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

A plaza outside the atrium (below) offers a place to relax as well as spillover space for weddings and other events taking place inside. The building helps connect the ginkgo allée on its upper level to the rest of the garden.
GARDEN VARIETY A shop (left) selling plants, books, and gardening items can be entered without admission to the garden and can stay open even when the rest of the institution is closed. Exhibits in the gallery (below) were created by Thinc Design to introduce visitors to the many different features of the garden and the ecological strategies behind it. The 2,500-square-foot event atrium (opposite) can hold 200 people and accommodate both talks and parties. Wood panels along the north side of the space were made from ginkgo trees that were cut down to make way for the building.
wanted it to feel like a series of episodic events,” says Manfredi. By slicing views and passages through the buildings—creating a nuanced progression of outdoor, indoor, and covered spaces—the architects neatly threaded the visitor center into the landscape.

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

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

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

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

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

BEAUTY AND THE BEAST

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

BY DAVID COHN

FANCIFUL TRIBUTE The museum stands between the Mediterranean and the market square in Menton, a picturesque resort near Monaco. The building’s glass curtain wall is wrapped with a shallow pergola of writhing columns, which are made of finely molded concrete and are evocative of Cocteau’s dreamlike imagery (above). Seen up close, the columns create interesting frames for views in and out (left).
IF THERE is any corner of the world less in need of a new architectural icon, it’s Menton, a lovely seaside hill town situated 2.5 miles from Italy on the French Riviera. With its gardens, villas, and picturesque historic center, Menton retains the charms that once attracted luminaries such as Aubrey Beardsley, William Butler Yeats, and the French poet, artist, and filmmaker Jean Cocteau (1889–1963). But when municipal officials began to court the American art collector Séverin Wunderman, and offered to build a permanent home for his collection of 990 works by the Surrealist Cocteau, the wheels were set in motion to create a building that, in the words of Deputy Mayor Jean-Claude Guibal, would give Menton “the status of a cultural destination in its own right, where bold projects ennoble the spirit of the site and reinforce its authenticity.”

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

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

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

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

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

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

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

**The Architects** devised nine different column shapes for the building's perimeter, and they flipped these horizontally and vertically to simplify the design and fabrication processes. But, according to structural engineer Eric Vallauri, creating these compound curves was a challenge. The crew built full-size wood mock-ups of the unique columns. Then they used the models to produce steel molds and lined them with resin for an extra-smooth finish, bolstering them from behind with wood props. Although the concrete is not high strength, the mix includes white cement combined with half the amount of gravel typically used for more standard concrete. The reason: to achieve a smooth, brilliant finish.

One of the consequences, however, is extensive surface cracking on columns facing the sea and southern sun—a common problem in work of this kind. Apparently, overheating during the setting process caused a rapid loss of moisture, resulting in the cracks, which stood out clearly during a recent visit, as they have become stained with rust from the rebars. The cracking might have been avoided, Vallauri suggests, if more expensive marble gravel had been used instead of cutting back on the quantity of gravel.

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

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

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

ARCHITECT: Rudy Ricciotti Architect – Rudy Ricciotti, principal; Marco Aridi, project architect
OWNER: Town of Menton
ENGINEER: Sudeco Ingénierie
CONSULTANTS: EDP et Associés (museography); Agence APS (landscape); Lightec (lighting); Thermibel (acoustics)
SIZE: 23,235 square feet
COST: €13.4 million
COMPLETION DATE: November 2011
SOURCES
CEMENT: Lafarge (for white concrete)
FRAMING: La Serrurerie (exterior); Ste Bure (interior)
INTERIOR SURFACES: RPM Bally (wallcovering, paint, flooring)
ELEVATORS: Kone

OPEN CIRCULATION: Pristine temporary and permanent exhibition spaces on the main gallery floor (left) are configured within a free plan around a central core that separates the entrance and lobby from the exhibits.
ANCHORING THE western end of Rice University’s main quad in Houston, James Turrell’s new 118-foot-square Skyspace emerges from the earth (or lands from the heavens, depending on how you see it) in front of the monolithic Shepherd School of Music. “This is architecture that light and space makes,” explains the artist. When the sun illuminates the atmosphere, you can’t see through it to view the stars that are there, he points out. “Light not only reveals, it also obscures—so you can actually build a space with it. I use light and architecture in that way: to limit space and to reveal it, either way.”

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

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

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

ARTIST: James Turrell
TECHNICAL ARCHITECT: Thomas Phifer and Partners; Thomas Phifer, Eric Richey, Anja Turowski
ENGINEERS: Skidmore, Owings & Merrill (structural); Allier/Sebar/Wieber (m/e/p); Ulrich Engineers (geotechnical); Walter P Moore (civil)
CONSULTANTS: Office of James Burnett (landscape); Baltic Studio (lighting); Arup (acoustics/AV)
GENERAL CONTRACTOR: Linbeck
SIZE: 1,820 square feet
COMPLETION DATE: May 2012

SOURCES

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

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

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

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

Authentic, handcrafted tile and stone since 1952.

www.walkerzanger.com

CIRCLE 61
A glazing solution with the look of the original windows’ plate glass but with the level of thermal efficiencies demanded for the headquarters of a multinational energy company. Window elevations with curve-top openings that re-create the historical elegance of the building’s neo-Romanesque design. The Pella Commercial team can help you put the art in smart thinking.
The Best Pavements Are Invisible

For 30 years, Invisible Structures has been manufacturing Grasspave2 - the premier grass porous paver. Often times looking better than normal turf, Grasspave2 may be the invisible pavement you've never seen. Use Grasspave2 for fire lanes, parking lots, access roads, trails, road shoulders, and more.

invisiblestructures.com | 800-233-1510

Cascade Coil Drapery

iPic Theaters
Scottsdale Quarter
Photo courtesy of iPic Theaters
Architect of Record: TK Architects
Interior Design: ID & Design International

Manufacturers of woven wire fabrics for partitions, window treatments, GuardianCoil blast mitigation screening, and other ornamental metal applications.

www.cascadecoll.com | 800-999-2645

Call For Entries

27th Annual Design Competition!

2012 celebrates the 27th anniversary of our leading edge competition for innovative furniture parts, components and accessories.

Over the past two and a half decades we have honored many wonderful new ideas and concepts!

To enter just submit a written description or a drawing or a model; all entries must be received by September 4, 2012.

For more information go to mockett.com/contest or call us at (310) 318-2491.
WHY ARCHITECTS LOVE US TO PIECES

DATA I CAN’T FIND ANYWHERE ELSE

COOL NEW PRODUCTS

GREEN PRODUCTS TO INVESTIGATE

GOOD ADVICE FOR NEXT PROJECT

EARN THESE CEU CREDITS

PRODUCTS IN MY AREA

sweets.com
Introducing the Sweets Mobile App
Download the Sweets Building Products App at the iTunes Store or Google Play.
For Our Design Firm

We’ve developed a reputation for including energy-efficient systems in every project, whether it’s a retrofit or new construction. And being knowledgeable about the incentives available from New Jersey’s Clean Energy Program™ means our clients save money up front and year-after-year on their utility bills.

We’re Building Our Business On A Solid Foundation.

Visit NJCleanEnergy.com/ALLY to learn about incentives available for your clients’ energy-efficient projects.

NJ SmartStart Buildings® is a registered trademark. Use of the trademark without permission of the NJ Board of Public Utilities is prohibited.
sink outside your floor plan. Today’s walls can move, thanks to sliding doors that open for light and close off privacy. Our contemporary frames and finishes add style while maximizing space and letting offices breathe. The only limit is your imagination.
Affordable’s New Look
New York City

With Via Verde—a mixed-use complex in a rapidly changing Bronx neighborhood—Dattner and Grimshaw reimagine city dwelling.
By Joann Gonchar, AIA

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

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

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

That Via Verde isn’t immediately identifiable as affordable is just one indication of the competition’s mission. “It wasn’t a beauty contest,” says Lance Brown, the steering committee’s founding member and a professor of architecture at the City College of New York. The ambition was to establish a financially viable and replicable model, he says. With residents just now moving in, it is too soon to judge how well the built Via Verde satisfies all the aspirations behind the competition. However, the complex has proved highly desirable: The developers received about 7,500 applications for the 151 rental units, and 80 percent of the 71 cooperative apartments—priced from around $79,000 for a one-bedroom to $193,000 for a three-bedroom—have sold.

It is easy to understand the appeal, especially if you walk into Via Verde’s inner courtyard. Here the inventiveness of the Dattner-Grimshaw solution becomes apparent: The stepped profile that begins with the street facade continues with the building hugging the edges of the 1.4-acre trapezoidal former brownfield site. The roofs descend in a series of terraces, eventually meeting the ground in a set of bleacher-like steps. Within this courtyard, elements conspire to create a sense of shelter. Although the facades defining the court are made...
ZIGGURAT The stepped profile of Via Verde provides space for facade-mounted photovoltaic panels—one of many tightly integrated systems that have put the project on track for LEED Gold. Because city-owned athletic fields sit directly to the south of the site, designers felt confident that a building would never obstruct the panels’ solar access.
up of the same types of rainscreen components as those facing the street, and all were assembled off-site in 25-foot-long sections (a time-saving and quality-control strategy), these inner elevations contain more of the colorful wood panels.

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

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

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

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

---

**credits**

**ARCHITECTS:** Dattner Architects/Grimshaw Architects

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

**OWNER-DEVELOPER:** Phipps Houses and Jonathan Rose Companies

**GENERAL CONTRACTOR:** Lettire Construction

**SIZE:** 294,00 square feet

**COST:** $70 million

**COMPLETION DATE:** April 2012

**SOURCES**

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

**GREEN ROOF:** Hydrotech

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

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

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

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

For their part, the architects say that designing and building Via Verde was a rewarding experience. Contractually, Dattner was the architect of record with Grimshaw as its consultant. However, “from the very beginning, we viewed the project as a full design partnership,” says William Stein, Dattner principal. According to Chang, who calls the relationship “synergistic,” the firms have already identified their next collaboration—another urban, mixed-use project they will compete for within the next year.
Housing Fit for 007
San Diego

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

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

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

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

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

Since the overall form and fundamental elements had been in place before the program change, the project became akin to adaptive reuse. Befitting the neighborhood’s modest scale, Segal’s massing suggests a small cluster of buildings, rather than a single 200-by-50-foot megablock. Further lightening the visual impact, he made the building volumes clean-lined and transparent, with wraparound, floor-to-ceiling glass, punctuated by a brise-soleil of projecting concrete floor slabs. While the concrete structure
required 700 new holes to accommodate apartment plumbing, the dramatic office glazing was a plus, offering the 29 residential units layout flexibility and unusual sleekness. To meet code, the number of apartments—all rentals, ranging from 400 to 1,800 square feet—corresponds precisely to the existing underground parking spaces. In the spirit of lofts, many of the tenants both live and work there.

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

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

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

Sarah Amelar is a contributing editor to Architectural Record.

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

credits

ARCHITECT: Jonathan Segal — Guillermo Tomaszewski, Greg Yeatter, Tracy Anderson, project managers; Mark da Cunha, assistant manager/color consultant; Matthew Segal, project assistant.
INTERIOR DESIGN: Jonathan Segal, Wendy Segal
ENGINEER: DCI Engineers
CONSULTANTS: Barner Electric (electrical); Dub Design Consulting (exhaust ventilation); Ideal Mechanical Heating & Air Conditioning (HVAC)
CLIENT: JMAN @ the Q
SIZE: 90 million square feet (gross)
COST: $71 million
COMPLETION DATE: June 2011
SOURCES
MASONRY: RCP Block & Brick
METAL PANELS: Ideal Mechanical
CURTAIN WALL: U.S. Aluminum, Fleetwood
GLAZING: Oldcastle BuildingEnvelope
FLOORING: Cali Bamboo
CONVEYANCE: Kone
CITY SOPHISTICATE
Several units have terraces. Echoing the commercial facades’ black frame, rectangular cutouts in the roof offer some of the exterior decks both sun and shade (left). The lofts combine exposed concrete surfaces with sustainable bamboo flooring. Floor-to-ceiling windows and white kitchen fittings give these fluid spaces a luminous quality (bottom).
Out of the Box
Philadelphia

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

By William Hanley

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

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

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

The firm stacked the boxes, creating a mirrored E shape in plan to maximize access to daylight inside the apartments. Narrow hallways stitch together the component modules along an east-to-west spine, which connects the building’s two entries on the first floor. The east entry leads to a partially below-grade parking lot and a side street that provides a shortcut to campus. The firm used porous paving on sections of the lot, and above, they covered most of the roof with a three-inch sedum bed to comply with
Philadelphia’s stringent stormwater laws. The water management scheme and simple heating and cooling systems—a central chiller plant and a water-source heat pump—that plugged easily into the modular units earned the project LEED Gold. The firm wrapped the bundle of prefab units in a rainscreen covered by fiber-cement panels. “It’s a pretty honest facade,” says Phillips. “You can adapt the entire building system to different conditions without totally reinventing it.”

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

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

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

credits
ARCHITECT: Interface Studio Architects—Brian Phillips, design principal; Daryn Edwards, principal; Viktoria Diskina, project architect
ENGINEERS: Larsen & Landis (structural); Progressive Engineering & Design (mech/p); Cornerstone Consulting Engineers and Architectural (civil)
CONSULTANTS: BEAM (lighting); Blé Creative (graphics); Roofmeadow (green roof)
GENERAL CONTRACTOR: Equinox
CLIENT: Carlisle Street Partners
SIZE: 80,000 square feet
COST: $1 million
COMPLETION DATE: September 2010
SOURCES
MODULAR BOXES: IDBS
RAINSCREEN: Silastre (fiber cement panels); VaproShield (wall shield)
ENTRANCE/STOREFRONT: Kawneer
METAL DOORS: Taylor
WOOD DOORS: Masonite
RESILIENT FLOORING: Toli
INTERIOR LIGHTING: Nullite
We Live.

We Play.

We Pray.

We Learn.

We Work.

We surround ourselves with buildings that last generations and hold strong memories. Brick has long been known as a solid choice for its durability and integrity. For 127 years Belden Brick has been supplying quality brick products to buildings that we trust to last a lifetime.

How can we help you build your next project of a lifetime?

www.beldenbrick.com
info@beldenbrick.com / (330) 456-0031

An ISO 9001:2008 Registered Quality Management System
An ISO 14001:2004 Environmental Management System
Site Specific

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

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

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

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

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

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

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

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

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

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

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

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

### POSSIBLE POINTS

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site selection</td>
<td>21</td>
</tr>
<tr>
<td>Pre-design assessment and planning</td>
<td>4</td>
</tr>
<tr>
<td>Site design: water</td>
<td>44</td>
</tr>
<tr>
<td>Site design: soil and vegetation</td>
<td>51</td>
</tr>
<tr>
<td>Site design: materials selection</td>
<td>36</td>
</tr>
<tr>
<td>Site design: health and well-being</td>
<td>32</td>
</tr>
<tr>
<td>Construction</td>
<td>21</td>
</tr>
<tr>
<td>Operations and maintenance</td>
<td>23</td>
</tr>
<tr>
<td>Monitoring and innovation</td>
<td>18</td>
</tr>
<tr>
<td><strong>TOTAL POSSIBLE POINTS</strong></td>
<td><strong>250</strong></td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

---

**PLAYROOMS**

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

**PHOTOGRAPHY: S. JAMES CORNER FIELD OPERATIONS**
A Nedlaw Living Wall will take your breath away.

But it will return it fresh and purified, Naturally.

Nature is phenomenal. It calms. It energizes. It breathes life. And, as in the case of Nedlaw Living Walls, it truly inspires. We’ve spent years studying how nature cleans outdoor air. So proficient; so perfect. Then we did something almost as amazing. We brought those biological processes indoors. Beautiful and smart. Fully integrated into a building’s own air-handling system, a Nedlaw Living Wall isn’t just a bunch of pretty plants. While a typical plant grouping can’t remove anything, our internationally patented biofilter technology not only captures airborne pollutants, it breaks them down. Off-gases. Odours. Chemicals.

They aren’t just filtered; they’re quantifiably eliminated. So, we can all breathe a little easier. It’s time we changed the indoor landscape. It’s time to talk to Nedlaw Living Walls.

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

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

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

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

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

Continuing Education
To earn one AIA/CES continuing education hour (CEH), including one hour of health, safety, and welfare and sustainable design (HSW/SD) credit, read the extended “Site Specific” article and complete the test at ce.construction.com. Upon passing, you will receive a certificate of completion and your credit will automatically be reported to the AIA. Find additional information regarding credit, reporting and continuing education requirements at ce.construction.com, under “requirements.”

Learning Objectives
1. Explain the goals of the Sustainable Sites Initiative (SITES) and discuss why a rating system specifically tailored to landscapes is needed.
2. Outline the structure and requirements of the current version of SITES.
3. Explain the concept of ecosystem services and describe how a landscape can provide such services.
4. Discuss the strengths and weaknesses of the current version of SITES.

AIA/CES Course #K1207A

For CEU credit, read the extended “Site Specific” story online and take the quiz at ce.construction.com or use our free Architectural Record Continuing Education app available in the iTunes store.
Specify and forget.

Peace of mind. Isn’t that what we all strive for?

Specifying Horton Automatics door systems brings you that. With our design and specification assistance on the front end and our professional certified independent distribution network on the back end, all you have to do is specify and forget. We’ll do the rest.

To learn more, visit hortondoors.com or call 800.531.3111.
### Advertisers Index

<table>
<thead>
<tr>
<th>Reader Service #</th>
<th>Advertiser</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>ALPOLIC / Mitsubishi Plasrics</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Composites America, Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>alpolic-noramerica.com/naturalmetals-series</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Architectural Record Continuing Education App</td>
<td></td>
</tr>
<tr>
<td></td>
<td>construction.com</td>
<td></td>
</tr>
<tr>
<td>8-9</td>
<td>Architectural Record's Innovation Conference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>construction.com</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Amourcoat</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>usa.amourcoat.com</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Armstrong World Industries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cv2-1</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Belden Brick</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>beldenbrick.com</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Bobrick</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>bobrick.com</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Cascade Coil Drapery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cascadecoil.com</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>CertainTeed Gypsum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CertainTeed/Sustainable</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Chamberlain Group, Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>liftmaster.com</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Construction Specialties, Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c-sgroup.com</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>C.R. Laurence</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>usalum.com, crlaurence.com</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Crane Composites</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>craneocomposites.com</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Cree, Inc.</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>CreeLEDlighting.com</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Doug Mockett &amp; Company, Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mockett.com</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Dri-Design</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>dri-design.com</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>DuPont Tyvek</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>fluidapplied.tyvek.com</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Duravit</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>duravit.us</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>EarthWorks®</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>earthworks.com</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Easi-Set Industries</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>slenderwall.com</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Ellison Bronze, Inc.</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>ellisonbronze.com</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Gardco Lighting</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>site-lighting.com/PureFormAR</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Glen Raven</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>glenraven.com/fireisist</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Glen-Gery Brick</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>glengerybrick.com</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Horton Automatics</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>HortonDoors.com</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Huber Engineered Wood</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>huberwood.com</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Invisible Structures Inc.</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>invisiblestructures.com</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>La Cantina Doors</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>lacantinadoors.com</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Lutron Electronics Co., Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lutron.com</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Modern Fan Co., The</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>modernfan.com</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>modularArts</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>modulararts.com</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Nana Wall Systems</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>NanaWallSystems.com</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Nedlaw Living Walls</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>NedlawLivingWalls.ca</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Nichia USA, Inc.</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>nichia.com/projectgallery</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>NJ SmartStart Buildings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NJCleanEnergy.com/ssb</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Oldcastle BuildingEnvelope®</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>oldcastlebe.com</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Pella Corporation</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>pella.com</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Petersen Aluminum</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>pac-clad.com</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>reThink Wood</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>rethinkwood.com</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Rocky Mountain Hardware</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>rockymountainhardware.com</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Rocky Mountain Hardware</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>rockymountainhardware.com</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Simpson Strong-Tie Company Inc.</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>strongtie.com/strongframe</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Skyscraper Museum, The</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>skyscraper.org</td>
<td></td>
</tr>
</tbody>
</table>

Publisher is not responsible for errors or omissions in advertiser index.

To access PDFs of all full-page or larger ads appearing in this issue, go to ArchRecord.com > Products tab > Product Ads

Get more info at www.sweets.com
PRODUCT SPOTLIGHTS

CONCEALED DOOR CLOSER

SSS
Samuel Heath

Perko Power™ concealed door closers deliver benefits in aesthetics, performance, and safety for hotel, healthcare, education, and other applications.

Product Application:
- Aria Resort, Las Vegas, NV
- Hilton Hotel
- Godolphin and Latymer School

Performance Data:
- UL108/107/228
- ANSI/BHMA A156.4

www.perkopower.com
312.599.5277

FIRE-RATED GLASS CERAMIC

WR
Technical Glass Products

FireLite® family of products from Technical Glass Products is UL listed and labeled and offers fire ratings up to 3 hours.

Product Application:
- Post Road Elementary School, White Plains, NY
- Seattle-Tacoma International Airport, Seattle, WA
- Shalikoe Corporate Headquarters, Pleasanton, CA

Performance Data:
- High impact safety ratings
- Clear and wireless

www.girfglass.com
800.426.0279 | Contacts:sales@girfglass.com

IMPACT TRAFFIC DOORS

RubbAir Door


Product Application:
- Cost-effective doors with 250° swing door and 50% thicker; molded shell for stores, supermarkets, other retail facilities; commercial, industrial applications

Performance Data:
- Roto-molded design and patented helical hinge resists impact and liquifies; no bearing or rollers
- Designer colors available

www.rubbair.com
800.966.7822 | Contacts:sales@rubbair.com

DECORATIVE METAL CEILINGS

Gage Corporation, Inc.

The Gage Corporation International has been designing and manufacturing decorative metal ceilings since 1939. Gage ceilings feature more than 50% recycled material and are visually rich, functional, and versatile as a design medium. Custom collaboration is encouraged. Contact the Gage factory for literature and sample requests.

www.gagecorp.net
800.786.4243 | Contacts:info@gagecorp.net

MARBLE LOOK PORCELAIN

SS | G | NEW
Florida Tile

Gallant High-Definition Porcelain.

Product Application:
- Kitchens
- Bathrooms
- Interior living spaces

Performance Data:
- Certified porcelain tile
- Low VOC rating

www.floridatile.com
800.843.3516

INTERIOR FINISHES, FURNISHINGS

ARCHITECTURAL NATURAL STONE

SSS | G
Vermont Structural Slate Company

Quarrier and fabricator offering select slates, quartzites, sandstones, limestones, marbles, granites and basalts.

Product Application:
- LN Residence
Architect: Adjaye Associates
Gunnison Basalt
(photo credit: Lyndon Douglas)

www.vermontstructuralslate.com
800.345.1300 | Contacts:Craig Markcrow

LINEAR DRAIN SYSTEMS

WR
Infinity Drain

Infinity Drain’s Site Sizeable linear drain systems give an architectural aesthetic and limitless possibilities for your outdoor project.

Product Application:
- Pool surrounds; patios, balconies, decks, terraces; driveways, storm drainage

Performance Data:
- Combine length of top grate and channel to achieve any length; suited for both residential and hospitality applications

www.infinitydrain.com
516.762.6576 | Contacts:info@infinitydrain.com

MECHANICAL SYSTEMS, HVAC, PLUMBING

INSULATED METAL WALL PANEL

G | NEW
Met-Span

Ideal for high-profile horizontal applications, INNOVAls is specially designed to provide continuous insulation and exceed ASHRAE 90.1 R-value requirements for steel framed walls.

Performance Data:
- Creates continuous barrier and maximum thermal efficiency
- Flush side joints for high-profile projects

www.metspan.com

All products in this section are accessible on sweets.com. 5SS = Premium cost | SS = Mid-range cost | G = Lower-cost option
WR = Wide range of price points | NC = No charge | G = Product marketed as green | NEW = Released in the past 12 months
PRODUCT SPOTLIGHTS

RAINSCREEN & VENTILATION MATS
$161 NEW
Stuc-O-Flex International, Inc.

Consider the benefits of moisture protection and space that drains water 50 times faster than normal claddings while ventilating your walls.

Product Application:
- Bing Concert Hall, Stanford University
- Hilton, New Orleans, Katrina retrofit
- Stucco, stone, EIFS, siding, metal

Performance Data:
- Create space between your building and the elements; filter fabric functions like additional layer of WRB

www.stucoflex.com
800.303.1045 | Contact: Dan Johnson
Circle 158

SPECIALTY PRODUCTS

MOTORIZED SOLAR SHADES
556 | G
Worldscreen Inc.

Worldscreen Inc. provides motorized interior/exterior solar and blackout shades with a wide variety of control options.

Product Application:
- Bipartisan Center, Washington, DC
- Rumsey Hall School, Washington, CT
- Busch Stadium, St. Louis, MO

Performance Data:
- 44-ft. width and 16-ft. drop with no seams in 3-1/8-in. cassette; exterior shades can reduce cooling cost by up to 60%

www.worldscreeninc.com
866.274.9238 | Contact: Stephen P. Lukos
Circle 159

ARCHITECT PROJECT MANAGER / CAD DESIGNER
Architect Project Manager/CAD Designer reqd at Queens County, Massape, NY. Prep CAD docs in auto CAD & micro station for structural bridge & bldg dist projects; Research, plans, designs, & administers bldg projects for clients, applying knowl of dist, construction procedures, zoning & bldg codes, & bldg materials; Prep detailed drawings of architectural designs & plans for bldgs, according to specs, sketches, & rough drafts provided by architect; Manage projects having multi-disciplinary bldg & construction complexities; Manage project services reqd; Maintains intnl cost control procedures, monitors & docs project process; DVlps & maintains Project Plan for each project. F/T, 8:30am-4:30pm, 40 hrs/wk, salary $52,187/yr. U.S. or Foreign B.S. in Architecture. 2 yrs exp & driver license reqd. Send res Attn: Roger Palabas, Massape Welding Inc., 59-30 54th St., Massape, NY 11378

WWW.SMPSMASSAPE.COM

To view Architectural Record online visit: www.architecturalrecord.com
New and Upcoming Exhibitions

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

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

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

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

Ongoing Exhibitions

News PAPER Spires
New York
Through July 15, 2012
At the Skyscraper Museum, this exhibition chronicles the high-rise headquarters of New York’s great metropolitan dailies from the 1870s through the 1930s in historical prints, films, architectural renderings, photographs, typesetting equipment, and, of course, newspapers, attempting to create a collage of this lost or fading world. Visit skyscraper.org.

The Utopian Impulse: Buckminster Fuller and the Bay Area
San Francisco
Through July 29, 2012
This architecture and design exhibition links the legendary Buckminster Fuller’s radical idealism to local innovators inspired by his visionary thinking. The presentation features some 65 works, including prints, drawings, photographs, documentary video, books, models, and ephemera representing some of Fuller’s most iconic projects. At the San Francisco Museum of Modern Art. For more information, visit sfmoma.org.

Out Spoken: Lectures from the SCI-Arc Media Archive
Los Angeles
Through August 12, 2012
The MAK Center for Art and Architecture Los Angeles has invited four noted architects and...
Armourcoat has led the world developing polished plaster, sculptural effects and high performance surface finishes since 1986.

Now a global brand operating in over 70 countries, we are committed to technical excellence. With an outstanding product range featuring recycled material and low VOCs, Armourcoat remain at the forefront of sustainable decorative surface solutions.

dates & events

scholars to mine the rich history of public presentations hosted by SCI-Arc and stage a preview of the content of the new SCI-Arc Media Archive, forthcoming in fall 2012. At SCI-Arc. Visit sciarc.edu.

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

Inventing the Modern World
Kansas City, Missouri
Through August 19, 2012
This exhibition traces the technological, design, and artistic innovations catalyzed by World’s Fairs. It features furniture, ceramics, jewelry, textiles, and glass. In keeping with World’s Fairs as incubators for technological and stylistic advancements, the Nelson-Atkins Museum of Art has launched a design contest for a temporary pavilion to be constructed on the museum grounds during the exhibition. Visit nelson-kins.org.

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

Judith Turner: The Flatness of Ambiguity
Ann Arbor, Michigan
Through September 2, 2012
Judith Turner is a noted American photographer whose subject is mostly architecture. Her training as a designer allows her to visually understand an architect’s intention and to reveal it in compositions that she constructs and edits through her camera-work. This exhibition will present approximately 40 photographs spanning Turner’s three-decade career. At the University of Michigan Museum of Art. Visit umma.umich.edu.

The Homestead Project—A Residence Reimagined
Rockland, Maine
Through September 23, 2012
This exhibition at the Farnsworth Art Museum features the designs of 10 architectural firms, including Pei Cobb Freed & Partners Architects, who have been charged with creating a home for a growing family in 2012. The homes have been loosely modeled on the Farnsworth Homestead of 1849, which was designed for a businessman, his wife, and their three children. Visit farnsworthmuseum.org.

MADE4YOU: Design for Change
Vienna
Through October 7, 2012
Offering a comprehensive survey of design innovations from corporations such as Amazon, Apple, and more, as well as seminal studies by a young generation of designers, this exhibition at the MAK Exhibition Hall was developed in close collaboration with Hartmut Esslinger, one of today’s most influential designers. It emphasizes the significance of design as a crucial factor in funda-

www.usa.armourcoat.com
CIRCLE 31
mental social and technological transformations in the 21st century. Visit mak.at.

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

Competitions
Rebuild the National Cathedral in Port-au-Prince
Registration Deadline: July 15, 2012
This competition, sponsored by Faith & Form magazine and the Institut de Sauvegarde du Patrimoine National (ISPAH) in Haiti, seeks to engage architects in the design of the National Cathedral in Port-au-Prince, which was almost entirely destroyed in the 2010 earthquake. The ideal design must engage the future, celebrate life, and memorialize. Visit competition.ispan.org.

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

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

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

2012 World Monuments Fund/Knoll Modernism Prize
Nomination Deadline: July 31, 2012
This prize will be awarded in fall 2012 to a design professional or firm in recognition of innovative design solutions that preserved or saved a Modern landmark at risk. The prize was established to raise public awareness of the contribution Modernism makes to contemporary life, the important place it holds in the architectural record, and the influential role that architects and designers play in preserving Modern heritage. Visit wmf.org/modernism.

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

Mental quality, information technology, and energy costs were of little concern when many of today’s buildings were designed. Now they are of vital importance. This ideas competition invites students to share innovative ideas about the future of workplace architecture. The winning student will be awarded a prize valued at $10,000, including $3,000 cash and a paid internship at Fentress. Visit fentressarchitects.com/edge/global-challenge.

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

Silestone Design Contest
Submission Deadline: September 30, 2012
Silestone, a leader in natural quartz surfacing, introduces this new program to recognize independent designers on the forefront of creative and inspiring kitchen design. From bold backsplashes to innovative islands, Silestone is seeking designers who celebrate the influence of color and push the envelope of design possibilities in the foremost room of the home. A panel of high-profile design experts will judge and select three winning projects that feature Silestone natural quartz in a kitchen. The grand prize winner will receive an all-expense-paid, six-day trip to Spain and $2,500. Visit silestoneusa.com/contest.

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

E-mail information two months in advance to recordevents@mccraw-hill.com. For more listings, visit architecturalrecord.com/news/events.
Are you Spec Smart?

SpecShare® 🍁 is a powerful new strategic tool for building product manufacturers 📊 to quickly assess their competitive position and 📊 target the right architectural firms more effectively than ever before.

Introducing Dodge SpecShare® | Take charge. Sell more.
Visit construction.com/specshare or call 888-810-2829 to request a free demo.
Argentinean-born, Frankfurt-based visual artist Tomás Saraceno describes his newest installation, Cloud City, with whimsy and enthusiasm: It is a sundial, a giant solar barbecue, and a spacecraft, he insists. But beyond these conceits, the piece is also a study of the relationship between volume, surface, and perception. "It was really inspired by the Weaire-Phelan structure," he explains, referring to the polyhedral modules of stainless steel and glass that make up the work. Visitors to Cloud City—which is perched atop New York's Metropolitan Museum of Art and looks out to Central Park—are invited to walk in and around the 99-foot-tall sculpture and see how it reflects and refracts views of the skyline beyond and the park below to the point of incomprehensibility. Because it would be occupied, the structure was subject to building code and health and safety regulations, which Saraceno addressed with the help of the local architecture firm Brooklyn Office and engineering consultancy Arup. Vertigo and disorientation were major concerns for the city, but Saraceno hoped to subvert visitors' sense of place as much as possible. "We wanted the sky on the floor," he says. Cloud City will be on view through November 4, 2012. -Aed Seykett
60 dB to 10 dB instantly.

Boisterous classrooms, busy hospitals, loud neighbors – noise is everywhere. SilentFX™ noise-reducing gypsum board is specifically designed for wall systems requiring high STC ratings to keep unwanted sounds out for improved learning, faster healing and enhanced peace of mind. SilentFX™ – The best in acoustic management.

www.certainteed.com/silentfx
The world’s highest performance buildings use Lutron complete solutions

Only Lutron offers complete solutions for light control, shading, and energy management to provide optimal performance and savings.

- A single manufacturer ensures clear accountability and simplifies the design process
- Digitally addressable shades, ballasts, and LED drivers allow for easy reconfiguration of the space without rewiring
- A broad range of wireless devices (sensors, keypads, and load controllers) allows for seamless future expansion

Specify Lutron on your next project – visit www.lutron.com/commercial

SAP America, Inc., Newtown Square, PA
This facility, designed to LEED Platinum standards, utilizes a Lutron Quantum® Total Light Management™ System.
Architect: FXFOWLE