Between us, ideas become reality.
escape convention

When you want to stand out from the crowd, make a splash with unconventional texture, shape and material. Our portfolio of ceiling products can give you exactly what you need to express yourself in a way that’s as unique as your vision. Escape to booth 1094 on the 8th floor at NeoCon and leave conventional thinking behind.
Now available: the impossibly impressive Solarban® 70XL Solar Control low-E glass.

Architects have always demanded more from energy-saving flat glass. More solar control. More visible light. More of a clear glass appearance. The scientists at PPG have finally created a product that's up to their standards.
New Solarban 70XL is the first vision glass that gives architects exactly what they want by delivering a previously impossible set of features. It blocks over 75% of total solar energy while delivering 63% visible light transmittance – and does it with the look of clear glass. After all, looks are still everything. For a Solarban 70XL sample and a white paper detailing the unbelievable energy savings it can bring to your next project, call 1-888-PPG-IDEA or visit www.ppgideascapes.com.
The Interior Metal Framing Industry is changing...

...forever!

Get ready to discover the NEW standard for interior framing.

From the Industry’s Leading Innovator...
Introducing...

DIETRICH
UltraSTEEL™
FRAMING

Tomorrow's Technology Today!™

Why Specify Dietrich UltraSTEEL™ Framing?

- A Better, Quieter Building
- Less Noise Transmission Through Walls and Ceilings
- A Nationally Recognized and Preferred Brand
- Better Acoustical Performance
- Improved Fire Resistance
- Greatly Reduces Screw Stripping
- Faster, Easier and Safer
- UL® Classified in Design V450
- Stronger Load-Carrying Capacity
- Greater Limiting Heights
- Stiffer, More Rigid Construction

Faster...Easier...Safer!

Better Acoustical
(reduce sound transmission up to 60%)

Improved Fire Test Performance!

Superior Performance at the SAME PRICE!

UL Underwriters Laboratories
Dietrich UltraSTEEL™ Framing Classification
Wall Design No. V450 in the UL Fire Resistance Directory
Steel Framing Members Fire-Resistance Classification
See UL Fire Resistance Directory

Available Sizes: 1-5/8", 2-1/2", 3-5/8", 4" and 6"
Available Gauges (EQ): 25 EQ and 20 EQ
Patent Nos.: 6,183,879 & 5,689,990

Making Our Industry Better...

Visit dietrichmetalframing.com or call 412-281-2805
to discover the NEW standard for interior framing.
"Architecture is frozen music."
Johann Wolfgang von Goethe
1749-1832

If you seek virtuoso performance from cast stone, look no further than Haddonstone’s collection of designs ranging from quoins, porticos and window surrounds to balustrading, copings and landscape ornaments. We also pride ourselves on our custom architectural designs. Contact us for our inspirational new 200 page catalog. We also offer a CD Rom containing our catalog, technical specification sheets, assembly advice, CAD drawings and video.

Visit us at www.haddonstone.com

Haddonstone (USA) Ltd, 201 Heller Place, Bellmawr, NJ 08031 Tel: (856)-931-7011 info@haddonstone.com
Haddonstone (USA) Ltd, 32207 United Avenue, Pueblo, CO 81001 Tel: (719)-948-4554

Circle 67 or www.architecturalemag.com/productinfo
Mohawk Commercial Introduces New Tile Product

Hot off the press, the Breaking News collection includes 3 patterns available in 13 color ways.

Breaking News Collection Includes: Headlines, Top Story and News Worthy (Shown Above)

Circle 154 or www.architecturemag.com/productinfo
OBSERVER  22 Manhattan’s Morgan Library awakens  24 APPRECIATION Farewell to Jane Jacobs
26-28 NEWS An Asplund landmark expands; Meier’s Ara Pacis meets the press; and more  30-32 UNBUILT
Making tracks in Puerto Rico; communing with nature in Washington, D.C.  34 BUILT A pigsty reinvented
36 PRESERVATION Heritage politics in Cairo  40 PROFILE Seattle’s Lead Pencil Studio inverts a typology
42 EXHIBITION Modernism at the V&A  44 BOOKS Waste not, want not  48 CALENDAR Current and future exhibitions, events, and competitions  50-56 PRODUCTS Milan’s Satellite Pavilion; all lights on Frankfurt.

BUILDING CULTURE

EDUCATION  110
Designing for the disenfranchised. BY THOMAS FISHER

MATERIALS  111
From kaolin to Kevlar. BY JOHN E. FERNANDEZ

PUBLIC REALM  111
The Preservation Act at 40. BY MAX PAGE
REUSE

64 Material World
A Midwestern architect and his students catalog waste. BY WES JANZ

68 The Next Best Thing
Faced with the loss of its decorated shed, Venturi, Scott Brown and Associates finds a new use for old cladding. BY ABBY BUSSEL

74 Cut and Paste
Cold War housing for the masses is dismantled and reformed. BY JAN OTAKAR FISCHER

80 Protective Measures
Injured seals find refuge on a former missile silo site. BY JULIE SINCLAIR EAKIN

88 Beijing Diary
How a Chinese munitions factory came to house a twenty-first-century architecture school and practice. BY ROBERT MANGURIAN AND MARY-ANN RAY

94 Restorative Powers
A 1935 seaside pavilion by Erich Mendelsohn and Serge Chermayeff displays its former spirit, thanks to John McAslan + Partners. BY CHRISTOPHER WOODWARD
RadioShack® was looking for an innovative design that would reflect their transition from a "traditional" office environment to a new corporate culture of connectivity and collaboration.

I got Viracon involved early into the conceptual process – they're the resource I trust for glazing recommendations on many of my projects.

The Viracon team really listened to what I wanted to accomplish. They offered great options that gave me the look and performance I was looking for on this high-profile project.

We decided on Solarscreen™ VRE 1-46 Insulating Glass because of its high performance characteristics and the aesthetic properties it has to complement the beautiful urban location on the Trinity River.

Do you want a turn?
Contact us for details. Call 800.533.2080 or e-mail glass@viracon.com.
PRECAST THAT CAN'T BE TYPECAST

High lets you take precast concrete farther than you’ve ever dreamed possible. Using cutting-edge 3D computer models to integrate a complex precast panel geometry with an equally complex steel truss structure, the remarkable Richard E. Lindner Varsity Village at the University of Cincinnati pushes the envelope of precast technology. High’s unparalleled commitment to new technology and innovation led to this and advancements such as carbon fiber reinforced CarbonCast™—precast that’s stronger, lighter, better insulating, and more durable, allowing a virtually unlimited selection of colors, textures, and finishes at no additional cost. And the 15'-wide MEGA-Tee deck system, which enables wider spans and more open plans in total precast buildings and parking garages. Visionary structures like the Varsity Village are possible with High’s expert technical assistance in all phases of a project, from design to erection. High gives architects the flexibility to explore unique solutions while ensuring a job is completed on schedule and on budget. Call High to learn more about precast that can’t be typecast.
Prediction: You will soon enjoy a satisfying lunch as you learn industry trends and earn continuing education credits. Your future will brighten when you e-mail Scott Carlsen at ngcaia@nationalgypsum.com to schedule your Lunch 'N Learn seminar. As an alternate path to happiness, visit the National Gypsum website for free online AIA/CES courses. Knowledge and prosperity will be yours.

National Gypsum

Technical Info: 1-800-NATIONAL
nationalgypsum.com
nationalgypsum.com/espanol

Excellence Across The Board®

Circle 27 or www.architecturemag.com/productinf
Where windows are just the beginning.

Creating an outstanding look is just the beginning when you select E-Sunshade™. With arms and blades in a wide range of standard lengths and shapes, E-Sunshade offers broad flexibility for visual appeal and functionality. E-Sunshade is engineered for EFCO Curtain Wall systems allowing seamless designs and single-source convenience.

For a complete listing of EFCO products, please visit us online at efccorp.com or call us at 800.221.4169

Circle 97 or www.architecturemag.com/productinfo
CONTRIBUTORS

1 MARY-ANN RAY AND ROBERT MANGURIAN, PAGE 88 Principals of StudioWorks in Los Angeles, Mary-Ann Ray and Robert Mangurian teach at SCI-Arc, and are co-founders of Beijing Architecture Studio Enterprise, an institution that encompasses both academic and professional endeavors. They are recipients of Rome Prize fellowships, P/A Awards, and the Chrysler Design Award. The firm is currently building a $100-million, inner-city public high school in Los Angeles. STUDIOWORKSARCHITECTS.COM

2 MARISA BARTOCCOLI, PAGE 22 Former executive editor of Metropolis, Marisa Bartolucci has written about architecture and design for a wide range of magazines. She is the co-creator of the monograph series, Compact Design Portfolios, and the author of Living Large in Small Spaces.

3 ELIZABETH FELICELLA, PAGE 22 Elizabeth Felicella is a photographer living in Manhattan. She is currently finishing a book titled Idlewild: An Atlas of the Periphery of Kennedy International Airport. ELIZABETHFELICELLA.COM

4 JAN OTAKAR FISCHER, PAGE 74 Architecture contributing editor Jan Otakar Fischer is an architect and critic living in Berlin. He grew up in New York City and earned a degree from Harvard's Graduate School of Design in 1990. He writes regularly on European architecture and urbanism, and is co-founder of Lexia International Architecture in Berlin, a study abroad program.

5 JOHN E. FERNANDEZ, PAGE 111 Architect, researcher, and professor in the Department of Architecture at MIT, Fernandez's work focuses on emerging materials and fostering the development of construction ecology. Fernandez is Architecture's materials columnist. ARCHITECTURE.MIT.EDU/PEOPLE/PROFILES/PRFERNAN.HTML

6 CHRISTOPHER WOODWARD, PAGE 94 Christopher Woodward is an architect and writer who lives and works in London. He has written architectural tour books on several European cities including A Guide to the Architecture of London, which he co-authored with Edward Jones.
Reconstructed Stone™ Masonry & Wall Panels

reconstructing stone pieces into beautiful building panels

Hanover's line of exterior Masonry and Wall Panels bridges the gap between concrete and natural stone. Through unique manufacturing methods, stones are fused together creating a truly Reconstructed Stone™ panel.
architecture

GARY J. GYSS PUBLISHER
GGYSS@VNUBUSPUBS.COM  T 646 654 5756

LISA Y. HANUKA SALES COORDINATOR
LHANUKA@VNUBUSPUBS.COM  T 646 654 5754

KEVIN MARTY GROUP MARKETING MANAGER
KMARTY@VNUBUSPUBS.COM  T 646 654 7369

VINCE HABICK PRODUCTION MANAGER
VHABICK@VNUBUSPUBS.COM  T 646 654 7238

PRODUCTION INQUIRIES
T 646 654 7308  F 646 654 7318

CARRIE EISENHANDLER ASSOCIATE INFORMATION
MARKETING MANAGER
CEISENHANLER@COMCAST.NET  T 215 886 4488

CUSTOMER SERVICE AND SUBSCRIPTIONS
T 847 763 9050  F 847 763 9037
ARCHITECTURE@HALLDATA.COM

FOREIGN AND CANADIAN SUBSCRIPTIONS
T 847 647 7987

BARBARA GRIENINGER PERMISSIONS
For one-time use of our content, as a full article, excerpt, or chart please contact:
BGRIENINGER@VUBUSINESSMEDIA.COM  T 646 654 4675

MORENE STARK ADVERTISING/EDITORIAL REPRINTS
MORENE.STARK@FOSTEREPRINTS.COM  T 866 879 9144  EXT 119

JOHN LOGUODICE LIST RENTAL MANAGER
Edith Roman Associates
Blue Hill Plaza, 16th floor
P.O. Box 1556
Pearl River, NY 10965 8556
T 800 223 2194  F 845 620 9035

BACK ISSUES
T 857 763 9050

SEND ADDRESS CHANGES TO:
Architecture, P.O. Box 2099,
Skokie, IL 60076

ADVERTISING SALES

DAVE HAGGETT MIDWEST
DHAGGETT@AOI.COM  T 847 934 9123

REGGIE LAWRENCE SOUTH
REG.LAWRENCE@MSN.COM  T 404 327 7770

TODD TIDMORE SOUTH CENTRAL/MID ATLANTIC
ATTIDMORE@ARPINASSOCIATES.COM  T 512 477 3806

DAN BURKE NORTHEAST
BURKENEGRIA GROUP@MSN.COM  T 732 229 2771

CLIFF SMITH EAST COAST/CENTRAL LIGHTING ACCOUNTS
CLIFF.SMITH@VNUBUSPUBS.COM  T 646 654 4478

MEGEAN COLDWELLS WEST COAST
MEGEANCOLDWELLS@VNUBUSPUBS.COM  T 626 577 0021

FATIMA RUIZ CLASSIFIED/PRODUCT REVIEW
FRUIZ@VNUBUSPUBS.COM  T 646 654 5763

ADVERTISING INQUIRIES  T 646 654 5754

Circle 225 or www.architecturermag.com/productinfo

So compelling, no one will want to take the elevator.

Make a lasting design statement with inox™ pre-engineered stainless steel railing systems and custom stairways.

Make a lasting design statement with inox™ pre-engineered stainless steel railing systems and custom stairways.
SMOOTH, SLEEK AND INFINITELY MOLDABLE.

When you work with Corian® its MALLEABILITY lets you create unprecedented, free flowing designs. See all the potential of DuPont® Corian® Solid Surfaces in our Possibilities Magazine. Call 800-436-6072 or visit coriandesign.dupont.com for your copy.

DESIGNER Ron Arad
TITLE Oh Void 2 Chair
MEDIUM CORIAN®

Circle 51 or www.architecturermag.com/productinf0
Everything looks better under the glow of the MoonLight. This new series is housed in natural brushed aluminum with a green-tinted diffuser. Contemporary and stylish, MoonLight creates an ambiance of sophistication.
WHAT IS WHITE CEMENT?

Contact us to learn more about the possibilities of using Lehigh White Cement in your next project.

Lehigh Cement Company/White Cement Division
7660 Imperial Way • Allentown, PA 18195
PH: 800-523-5488 • PH: 610-366-4600
FAX: 610-366-4638

www.lehighwhitecement.com

VISIT US AT AIA BOOTH #3715
Our motive for creating the ultimate fire barrier is completely transparent, saving lives.

Pilkington **Pyrostop™**
Fire Resistance Glass

Product Features:
- 45, 60, 90, and 120 minute configurations available
- Optical clarity of clear glass for high light transmission
- Cat II Human Impact Resistance
- Various security options available
- Passes hose stream test required in North America
- Underwriters Laboratory Inc (UL) listed

Find out more. Contact Technical Glass Products (TGP) at 800-426-0279 or visit www.fireglass.com today.

Pilkington Fire Protection Glass North America
www.pilkington.com/fire
200 D-SIZE COLOR PRINTS. BY 9 AM. NO PROBLEM.

Introducing the HP Designjet 4500 printer series.
Unattended printing makes getting more done possible.

Could you use more time? Now you don’t have to spend as much of it attending to your printer thanks to the new HP Designjet 4500 Printer series. Two high-capacity media rolls and high-capacity ink cartridges enable fast, virtually unattended printing of dozens of wide-format color prints—even up to 200 D-size color prints with the optional stacker. The stacker and high-capacity media and ink capabilities let you set big jobs to print overnight to hit early deadlines and free up the printer for daytime use. And whether you’re printing complex AEC and MCAD drawings, blueprints or renderings, you’ll get the outstanding HP color quality and crisp line definition you expect.

HP Cash In & Trade Up Promotion: Get up to $2,500 cash back! Buy or lease an HP Designjet 4500 printer series and related HP Care Pack, and then trade in your old large-format printer, plotter or vinyl cutter, and you can get up to $2,500 cash back.²

Plus, go online to learn how to get an additional $500 cash back—act now!

Click www.hp.com/go/CashInARCH
PAST IS PROLOGUE

RENZO PIANO ILLUMINATES THE MORGAN LIBRARY.

Despite its cultural riches, a visit to New York City's Morgan Library used to feel as dreary and incoherent as studying ancient Greek in the age of the iPod. Charles McKim's 1906 palazzo, built as J.P. Morgan's personal library, and its reverential 1928 annex were, for all their marble majesty, mausoleumlike, while the 1991 undulating glazed atrium by Voorsanger Mills, linking those pavilions to an adjacent Morgan family brownstone, displayed all the grandeur of a food court in a shopping mall. No more. The institution's renovation and expansion by Renzo Piano extols with industrial precision and luminous clarity the enduring relevance of classical erudition.

How one approaches a subject—or a building—can determine its relevance. The entry to the Morgan used to be on brownstone-lined 36th Street. Passing through its bronze doors did little to dispel the sense of being an interloper in an oligarch's rarified preserve. Piano has moved the entrance to bustling Madison Avenue, and with it the very spirit of the place. The new steel-and-glass façade is formal and proud, but democratic in its transparency. Narrow glass walls conjoint it with the old buildings and allow passersby a peek inside. And it's respectful. The steel has been coated in a pink-hued off-white paint to compliment the Tennessee pink marble of the original buildings. With its cherry-paneled walls, the lobby feels warm and inviting. Entering through it into the glass atrium is an architectural epiphany. Everything comes radiantly together. The older buildings define the corners of the campus with the additions filling out the space: an office pavilion to the north, the atrium's glazed wall to the east, a cube-shaped gallery to the south, and, above the entry, another gallery and reading room.

The many urban views situate the Morgan within the contemporary life of Manhattan.

Piano, who worked with architect of record Beyer Blinder Belle, blasted through bedrock to provide a subterranean theater and ample storage vaults. In his deft design, natural light floods the lower-level lobby. On the second floor, a baffled roof system delicately filters daylight. It's also present in his masterful cube, inspired by Renaissance studiolo. Within its spare, intimate confines, visitors may at last contemplate the Morgan's extraordinary treasures as their own.  

architecture 23
"A city is a place where you can buy a second-hand violin and keep a mistress." So wrote Jane Jacobs in the late 1990s apropos of the redevelopment and gentrification of Manhattan’s Times Square, a transformation she heartily disapproved. I’ve always found the violin and mistress a wonderfully compact way to define the multifarious pleasures of urban life, even if the mistress part is a bit surprising coming from a woman of Jacobs’s liberal persuasions. In 2004, on one of her increasingly rare trips from her home in Toronto back to New York City, I had the chance to ask her about it. She told me that the author of the statement was actually the architect Oscar Stonorov, who said it of Philadelphia.

Jacobs’s own love of cities, passionately defended in *The Death and Life of Great American Cities*, published in 1961, places her in the lineage of the most perspicacious and trenchant observers of metropolitan urbanism, from Charles Baudelaire to Siegfried Kracauer and Walter Benjamin to the Situationists. Her gaze was, of course, more that of “eyes on the street” journalist-activist than avant-garde flâneur. Yet her appreciation of the city as a place of serendipitous encounter and diverse everydayness relates her to the critical tradition of Modernism that evolves precisely in opposition to the dehumanizing projects of top-down planners and architects.

Jacobs’s vision of the city is at once big and small. On the one hand, her city is a place ample enough to make new discoveries and pursue unscripted experiences. That’s what made it so liberating for a young working woman of her day—unlike the suffocating suburbia of the (un)happy housewife, protagonist of Betty Friedan’s *The Feminine Mystique*, an equally epochal book that would appear two years after her own. And also unlike the paternalistic and anti-urban Garden City model of Lewis Mumford, one of Jacobs’s major targets in *Death and Life*. No wonder the professional critic disparaged her ideas as amateurish: what Jacobs means by “great” American cities, wrote Mumford, is merely “big.” For Mumford bigness was a pathology, and the exploding metropolis of the 1960s the product of a metastatic disease. This is reflected in his book review, “Home Remedies for Urban Cancer,” originally published in the *New Yorker* under the even more explicitly sexist title “Mother Jacobs’ Home Remedies.”

On the other hand, Jacobs’s enthusiasm for the big city’s messy vitality stops well short of Koolhaasian paeans to delirium. Besides Mumford, her David-versus-Goliath struggle was directed against two other “M”s—Robert Moses, whose brutal excesses as New York City’s planning czar culminated in the 1950s in a plan to ram an expressway through her beloved Greenwich Village neighborhood, and the “statistical” Modernism of Le Corbusier, who famously pronounced New York City’s skyscrapers “too small” in the 1930s for not conforming to any grand scheme, and whose towers-in-the-park typology had devolved by Jacobs’s era into an alienating and dangerous form of habitation. The small-scale, quotidian intimacy of the Hudson Street milieu, her privileged residential model, undoubtedly gave parts of her argument a certain quaintness. This allowed it to be readily appropriated by those mobilizing a backlash against modern architecture in the 1960s and 1970s and, a generation later, by the New Urbanists. Yet the sociability and urban density she espoused have equal affinity with the polemically unnostalgic “doorstep philosophy” advocated by the British architects Alison and Peter Smithson and their Team 10 cohorts during the same period.

In fact, Jacobs’s argument was never stylistic. "I was an old-fashioned pragmatist," she would state retrospectively of the urban-economic prescriptions in her first book, "not an ideologist." In her final book, *Dark Age Ahead*, published in 2004, her diagnosis of the prospects for urban life is more global and ecological than architectural, and the outrage that animates her early activism has yielded to gloomy and wide-ranging ruminations on a future she will not live to see. (The book may also be read as a counterprophecy or anti-thesis to the techno-environmental optimism of her fellow Canadian, Marshall McLuhan, whose celebratory concept of the “global village” was coined at just the same moment she was extolling the propinquity of Greenwich Village.) Yet Jacobs stays constant to both the urban values and the intuitive-empirical approach she pioneered four decades earlier, and committed to social betterment, a sharp-eyed, commonsensical reformer to the last. What is needed to get us out of our “dead end,” she affirms, is independent thinkers—that rare type of which she will remain a permanent, most admirable exemplar.

JOAN OCKMAN IS AN ARCHITECTURE CRITIC AND HISTORIAN. SHE TEACHES AT COLUMBIA UNIVERSITY, WHERE SHE DIRECTS THE TEMPLE HOYNE BUELL CENTER FOR THE STUDY OF AMERICAN ARCHITECTURE.

JOAN OCKMAN IS AN ARCHITECTURE CRITIC AND HISTORIAN. SHE TEACHES AT COLUMBIA UNIVERSITY, WHERE SHE DIRECTS THE TEMPLE HOYNE BUELL CENTER FOR THE STUDY OF AMERICAN ARCHITECTURE.
Task lighting for any environment.

Lightolier's new specification grade task lighting enhances any interior environment. Striking designs are coupled with high-performance optics, a variety of lamping and mounting options plus multiple color shade selections. Choose from spring-balanced, parallel-motion adjustable-arm task lights, undercabinet lights and portable ambient lighting fixtures. Integrating Lightolier task lighting into any space increases worker comfort and productivity. Contact your Lightolier Sales Representative for more information.

Lightolier
Lighting that makes a difference.
CHICAGO'S SOLDIER FIELD LOSES LANDMARK STATUS

In a bold move announced April 21, then Interior Secretary Gale Norton ordered the removal of Soldier Field from the National Park Service’s list of historic landmarks—where it has held a place since 1987—citing the “incompatible construction” of the new steel-and-glass seating bowl within the classically colonnaded stadium by Holabird & Roche (now Holabird & Root). City officials argued unsuccessfully against the rescinding, saying that the new $660-million design by then Boston-based Wood + Zapata (the partners now operate separate firms) and local architect Dirk Lohan added modern amenities while preserving a majority of the 1924 design.

Critics of the latest effort, unaffectionately deemed the “Eyesore on Lake Shore” by some, have focused on the fact that the preserved colonnades are no longer visible within the stadium and the new design overpowers the pillars. Public reaction in Chicago has been predominantly in favor of the de-designation—a rare occurrence—most vocally through local architecture critic Blair Kamin’s repeated calls for stripping the stadium of landmark status since its completion three years ago. BY JOHN HILL

STOCKHOLM PUBLIC LIBRARY TO BE EXPANDED

The City of Stockholm is sponsoring an open international competition to expand its 1927 Gunnar Asplund-designed Public Library. Because of the building’s architectural significance, the goal is not to change the character of the complex, but rather to accommodate current and future research and information technologies. The Swedish Association of Architects estimates that the library’s current 150,700 square feet (80,700 of which are housed in the original building) will need to be expanded by nearly 110,000 square feet to support new and growing departments. The winning submission will provide a basis from which an expansion of the current facility can be developed. The jury is to be named in the coming weeks and the first stage of the competition will conclude in October (deadlines are to be announced this month). BY KATIE GERFEN
Our shelter was completed before dusk.
We covered the walls with lean and supple carpet.
Silence. The vast, eternal sky.
ARA PACIS OPENS TO CONTROVERSY

Richard Meier’s Ara Pacis museum opened in Rome on April 21 to the competing cries of laud and vitriol. The building features a lofty hall enclosed by glass walls and a polished travertine floor. The first major modern structure in the city center since the 1930s, proponents cite the clean lines as showcasing the 9 B.C. monument it houses, and support the site’s plaza as a new open area that might bring life back to a declining neighborhood. Critics—including former cultural undersecretary and controversial art commentator Vittorio Sgarbi, who, it is widely reported, burned a model of Meier’s project in a nearby square—claim the building is out of context and have compared it to both a shopping mall and a gas station. The Ara Pacis, commissioned by the emperor Augustus to celebrate victories in Gaul and Spain, was moved to its current site on the Tiber River by Benito Mussolini, where it was housed in a 1938 structure by architect Vittorio Morpurgo. By the time of Meier’s 1995 commission, the building was deteriorating so badly as to endanger the marble altar. BY KATIE GERFEN

YALE FORMALIZES SUSTAINABLE STUDIES

The first two students enrolled in Yale University’s new dual masters in architecture and environmental management begin a four-year course of study this August that awards degrees in both disciplines; the school claims that the program is the first of its kind in the United States. The combination of the curriculums decreases the credit requirements for each by allowing courses from one department to be considered as electives in the other. Admission numbers are kept low for both schools due to available faculty and facilities. In their final year, students must take an advanced sustainable design studio. The degree program formalizes a long-time relationship between the two schools, according to architecture dean Robert A.M. Stern. He noted that William McDonough, whose Cradle to Cradle has catapulted him to global celebrity, took courses in the forestry and environmental management school before graduating from the architecture department in 1974. BY NATHALIE WESTERVETL
Eureka! Other anti-reflective glasses have twice the glare of SCHOTT Amiran®!

Our single-sheet design has some astounding advantages. Amiran® delivers less than 1% reflectivity in tempered applications and less than 2% in insulated applications. That's about half the glare of some other anti-reflective glasses on the market. And when it comes to windloading and ease of fabrication, Amiran® monolithic, tempered anti-reflective glass can have a clear advantage over tempered laminates.

There's something else you can count on – we've been producing architectural anti-reflective glass for over 20 years, so the stunning results Amiran® delivers have been proven to last. See amazing Amiran® for yourself: for a free sample, call 914-831-2243 or visit www.us.schott.com/architecture.
The cost-conscious client’s goal for the 5-acre track field at the University of Puerto Rico campus in Utuado was to create a facility that meets all International Association of Athletics Federation guidelines and keeps maintenance at a minimum. To that end, San Juan-based Urbana Arquitectura proposed a four-phased project that accommodates a standard 400-meter running track, related field sport requirements, and spectator seating. The slimly profiled, 7,400-square-foot stands run between an illuminated tower and a two-story storage and locker room building, all of cast-in-place concrete. Prefabricated metal panels enclose the back of the bleachers and the structure is sheltered by a tensile roof membrane on a steel frame. Photovoltaic panels on the roof of the storage building provide the energy needed to light the field, and a sloped roof directs rainwater to a cistern used for site irrigation. The $4.6 million project is slated to break ground early next year. **BY KATIE GERFEN**
Thanks for helping us build an amazing century.

build for life
www.kawneer.com

architectural aluminum systems • entrances and framing • curtain walls • windows

Circle 18 or www.architecturalmag.com/productinfo
This 9,000-square-foot Environmental Education Center designed by Studios Architecture's Washington, D.C., office was the winner of an invited competition sponsored by Mayor Anthony Williams's Anacostia Waterfront Initiative, a program that aims to increase access to and the sustainability of riverfront destinations. To minimize its footprint, the building rests on a plinth supported by concrete pilings. Its green roof system meets the sloped terrain to the east and houses the center's nursery: There, native plants are grown from seed and transferred into the surrounding landscape. Triple-layer low-e glass façades and operable sunscreens of reclaimed wood resembling the surrounding trees enclose the visitors' center and classrooms. The narrow building width allows sun to pass easily through the space, reducing the need for artificial illumination. Skylights for hot air evacuation run along the south side of the building. In addition, geothermal heating and a concrete floor provide the basic conditions for passive cooling in the summer and efficient heating in the winter. Studios will complete a cost analysis by the end of the summer.

BY NATHALIE WESTERVELT
No matter what you're working on, Visa Business gives you the debit and credit payment tools to get it done more efficiently. So you can put all your projects to bed a little earlier. For more information, visit visa.com/smallbusiness. Your business is your life. Life takes Visa.

Circle 43 or www.architecturemag.com/productinfo
SILK PURSE
A PIGSTY IS REMADE AS AN ARTIST’S SHOWROOM.

Stuttgart-based FNP Architekten was asked to create a folly from a ruin on the grounds of a hotel they designed outside Fritzlar, but the client later decided instead to donate the space to a different artist each year—a goldsmith in 2005 and a textile artist starting this summer.

The site of the crumbling 200-year-old pigsty fell under a law preventing new construction within 65 feet of rural roads, which suited the architects' original preservation-minded decision to leave the facade undisturbed. They assembled an interior shell from 1-1/2-inch-thick weather-resistant laminated wood, which was in turn lowered into the original brick-and-mortar walls—without touching them—by crane. A roof was then installed, supported by the new structure and large enough to shelter the old. Martin Naumann, FNP principal says, “When only the wooden structure is left, maybe another architect will build around it. It is like passing something on to the next generation.” BY KATIE GERFEN PHOTO BY ZOEY BRAUN.
APARIA.
Optimal Optical.

Introducing the Aparia Linear, the newest architectural lighting design from Prudential Ltg.
Offered in your choice of translucent acrylic, aluminum, steel or galvanized steel, the Aparia Linear lets you create a powerful aesthetic statement without sacrificing optical performance.
For more on the Aparia, visit our website: www.prulite.com

Light creates life. Create with Prudential Ltg.

Circle 182 or www.architecturemag.com/productinfo
"Miracles here are getting things done," an Egyptian architect told me in Cairo 10 years ago. I was studying the built implications of the integration of worship into the everyday lives of the city's 16 million residents. Since then, the world's attention has focused on this region and getting things done today carries the additional weight of universal scrutiny. Reviewing the issues surrounding the development of a significant park project in the city's center over those same years is to witness a successful instance of the priorities of Cairenes being merged with the dignified image of the metropolis so necessary to its ongoing dialogue with the rest of the globe.

During the past century, the 3.5 million square feet of land now claimed by Azhar Park was a dumping ground for rubble from the gradual demise of old buildings in this extremely poor area. That the world's most important collection of Islamic monuments—mosques and madrasas, or Koranic schools—also populates the meandering streets in the Darb al-Ahmar neighborhood means they have been largely overlooked by those not using
UNIQUELY FORMABLE. ABSOLUTELY ALUCOBOND.

The unique ability of Alucobond® Material to deliver sweeping curves, tight radii and distinctively flat applications is vividly demonstrated on Sharp Grossmont Hospital's new Emergency and Critical Care Center. Labeled as one of the most technologically advanced emergency and intensive care facilities in the nation, the new Center is high-tech in its appearance, too. The gleaming five-story, 165,000 sq. ft. facility is clad in Champagne Metallic finish and is "the latest example of Sharp Grossmont Hospital's ongoing commitment to clinical excellence and patient-focused care" according to hospital officials. Uniquely Formable. Absolutely Alucobond.
For more about Herman Miller's design legacy, please go to HermanMiller.com/discoveringdesign.

For the Herman Miller retailer nearest you, call 1 800 646 4400, or go to HermanMiller.com/hmhome.

©2006 Herman Miller Inc.

THE NEARLY MILE-LONG, TWELFTH-CENTURY ABBUYID WALL FOLLOWING THE REMOVAL OF 35 CUBIC FEET OF RUBBLE (PREVIOUS PAGE) FORMS THE SOUTHERN EDGE OF CAIRO'S NEW AZHAR PARK; SEVERAL TOWER FORTIFICATIONS WERE UNEARTHED DURING THE EXTENSIVE TEN-YEAR RESTORATION PROCESS (ABOVE).

them. Specifically, the ancient spine once protecting the region, an imposing Abbuyid wall dating from the twelfth century, had all but disappeared under the accumulation of refuse.

Tourists visiting Egypt typically see only its Pharaonic monuments because that's all they've heard about. The Aga Khan Historic Cities Support Programme (HCSP) thinks visiting the architecture of a culture goes a long way toward an appreciation of those who hold unfamiliar or different beliefs and promotes that agenda in Muslim countries for this reason. "We use culture as a matrix for sustainable development," says Stefano Bianco, HCSP's director at the Aga Khan Trust for Culture. In Cairo, those words manifested themselves by including local residents in the revitalization of their neighborhood, which adjoins the new park. They have been trained and employed as workers in the restoration of the wall and nearby monuments, as well as their own homes. The architects who collaborated to design the park are also local and include my instructor, Abdelhalim Ibrahim Abdelhalim.

Bianco cites two major obstacles in the park's realization. First, the United States Agency for International Development had earmarked the space for three desperately needed water reservoirs they planned to donate. Second, local preservation codes called for the removal of houses subsequently built on or attached to the wall over the past century so that the monument could be viewed in pristine condition from both sides. HCSP argued that the more recent interventions constitute a living history—one equal in value to the wall and deserving of preservation and restoration. In a rare example of the aforementioned miracle occurring twice, the organization prevailed in both cases: The houses were saved and are being restored, and the park now rests on top of the buried cisterns, each 262 feet in diameter. After the removal of 35 million cubic feet of fill, the ancient wall, complete with its more recent appendages, today testifies to the complexity of all the lives it will continue to support over time.
Herman Miller lifts your spirits. | Noguchi Table. The perfect glass for any guest.

Circle 80 or www.architecturemag.com/productinfo
SEEING THE FOREST FOR THE TREES
A SEATTLE FIRM PRACTICES AT DIFFERENT SCALES.

BY ERIC FREDERICKSEN PHOTOS BY RICHARD NICOL

150 Works of Art, on view at the Henry Art Gallery in Seattle earlier this year, began from a series of refusals: no theme, no hierarchies, no wall labels. The museum’s chief curator, Elizabeth Brown, engaged the local design firm Lead Pencil Studio to collaborate on the project from an early stage. Partners Annie Han and Daniel Mihalyo work in what they call “the emerging field created from the interdisciplinary overlap of architecture and site-specific art.” Their practice has embraced everything from houses to sculpture, but their current prominence in Seattle is owed mostly to that overlap: filling a Seattle art space with 19,000 vertically suspended lines of nylon monofilament to create 2004’s Linear Plenum; and building a structure in scaffolding to make a one-to-one scale twin for a brooding mansion in the upcoming Maryhill Double. While developing Minus Space, a site-specific installation for the Henry, Han and Mihalyo were asked by Brown to also work on an exhibition exploiting the museum’s wide-ranging, though little seen, collection.

The curator wanted to draw from deep storage, to offer a very broad sample of the museum’s holdings. Consequently, Han and Mihalyo decided that one of their first tasks was to determine the largest number of pieces that could fit into the gallery. The designers researched nonhierarchical spatial systems, including the arrangement of musicians in an orchestra and the grouping of easels in a painting class. These examples inspired the stands built for each work. Having found room for 150 pieces, the team was then faced with the challenge of illuminating them, including light-sensitive photographs. Their budget-saving solution involved suspending Ikea halogen fixtures nine feet above the floor, each customized with a small laser-cut shutter to keep the light from shining directly into visitors’ eyes.

Upon entering the exhibition, one encountered a forest of simple black steel stands bearing rectangles of plywood, each stenciled with a year and, in smaller type, the artist’s name and the title of the work. The art extends chronologically, beginning in the mid-nineteenth century, into the future across the length of the large gallery.

“We were interested in the process of walking through fields of information,” wrote the designers in the show’s catalog. The arrangement was radically simple; it was in one’s peregrinations that its complexity became apparent. Museum exhibitions tend to unfold like narratives or essays; this one was more like an encyclopedia, in which every entry could cross-reference to many others. Or better, like a cocktail party—the stands holding each piece at eye level were somewhat anthropomorphic, so the artworks could be read as a series of interesting guests engaged in conversation. Having left Adolphe-William Bouguereau, one could cross the room to parley with Homer Dodge Martin, or head into the future to chat with Robert Rauschenberg.

ERIC FREDERICKSEN IS THE DIRECTOR OF WESTERN BRIDGE, A CONTEMPORARY ART SPACE IN SEATTLE.
There's CrossingGard®.

In times of panic, there's no time to think. That's why it's critical that you do the thinking for them. Choosing the innovative CrossingGard Emergency Response Grille from Cornell ensures security day in and day out, while also allowing access to safe escape when occupants need it most. And, you can rest assured knowing that the CrossingGard Emergency Response Grille has been successfully evaluated for access-controlled egress per the International Building Code®.

On duty 24 hours a day, every day, the CrossingGard is in control ...even when the situation isn't.

Step toward safety with the CrossingGard®. Call 1-800-233-8366 for more information, or visit www.cornelliron.com today.

Circle 232 or www.architecturemag.com/productinfo
MANY MODERNISMS
THE VICTORIA & ALBERT MUSEUM CASTS A WIDE NET.

BY ELLIS WOODMAN PHOTOGRAPH BY CARLO DRAISCI

London's Victoria & Albert Museum has brought together over 400 exhibits for its blockbuster show Modernism: Designing a New World 1914-1939, through July 23. Covering developments in art, architecture, product design, graphic design, fashion, film, and dance over a quarter century and across a couple of continents, it is a selection that lacks nothing in variety. The exhibition's stated aim is to draw out the shared sensibility lying behind this wealth of material, but one would be hard pressed to identify much common ground between some of the parties rubbing shoulders. One clear strain is the existenzminimum brigade, represented by socially conscious figures such as Austrian architect Margarete Schütte-Lihotzky, whose rigorously pared down Frankfurt Kitchen (1927) is on display (right). In the next room, however, one finds such wildly expressionist visions as Bruno Taut's 1919 proposal for stained-glass roofing over much of the Alps.

A visitor can't help thinking that a better name for the show might have been "Modernisms." Architecture is at once at the core of the selection and its weakest element, represented in large part by original black-and-white photographs. There are, however, some extraordinary drawings on show—not least Georgii Krutikov's 1928 proposal for a Flying City. Interestingly, the reproduction of this image in the catalog has been printed upside down and looks rather more plausible for the inversion.

Privacy windows at the touch of a switch!

Polyvision™, a revolutionary breakthrough in Liquid Crystal Display technology, allows you to transform from a milky-white translucent to an optically clear state with the touch of a switch. Polyvision provides endless applications for architects and other design professionals.

- Privacy windows for conference rooms, executive offices and trade show exhibits
- Bullet-proof security glass
- Hospital privacy, surgery and intensive care area
- Bank teller windows
- Special effects for the entertainment industry
- Ultra-modern residential and commercial applications

Polytronix, Inc.
805 Alpha Drive
Richardson, TX 75081

Tel: 972.238.7045 x140
Fax: 972.644.0805
Website: (privacyglass)
www.polytronix.com
“We prefer aluminum and use it every chance we get.”

—Rick Morrison, Architect, Grimm & Parker

“The cost of aluminum has never been an issue for us. It’s a life cycle issue. Aluminum delivers a longer service life.”

—Tom Hutchinson, Principal, Hutchinson Design Group, Ltd.

“The cost of aluminum is not an issue for us. We quote on 2-3 jobs per day and have never won or lost a job due to the cost difference of aluminum. The increased cost is only pennies. The cost of labor is the real issue, not the material.”

—Jim Donovan, Westar Roofing Corporation

For projects located in coastal regions, aggressive environments, or areas subject to acid rain, PAC-CLAD® Aluminum may be the product of choice for metal roofing applications. Inherent properties include superior corrosion resistance, lighter weight panels and ease of installation. PAC-CLAD® Aluminum is available from Petersen in over 34 standard colors and a wide variety of UL-580 Class 90-rated roofing profiles.
WASTE NOT, WANT NOT

OLD BUILDINGS LOOKING FOR A NEW USE:
64 EXAMPLES FROM EUROPE
By Pierre Thiebaut
Edition Axel Menges; 276 pages; $118 (forthcoming this fall/winter)

Modern materials can lend vitality to a space originally crafted from limestone and granite, but are such interventions in a historic renovation an affront or might they sometimes enhance the structure? Using specific examples from across Europe, Thiebaut analyzes what he terms "a museum heritage, frozen in time," and pursues the idea that architects can preserve a building while still altering its physical structure enough to provide usefulness in the twenty-first century. BY KATIE GERFEN

BUILDING WITH RECLAIMED COMPONENTS AND MATERIALS:
A DESIGN HANDBOOK FOR REUSE AND RECYCLING
by Bill Addis
Earthscan; 208 pages; $95

In this textbook, Bill Addis, who heads Buro Happold's Sustainability and Alternative Technologies team, documents techniques for dismantling and reconditioning construction materials in older buildings with a focus on timber, steel, concrete, aluminum, cast and wrought iron, and brick. Detailing all scales of reuse, from structure to mechanical systems, he provides case studies summarizing lessons learned from several recent projects. Although the environmental impact of reclamation is beneficial overall, Addis admits the drawbacks of occasional increased cost and project delays. He also believes that the construction industry has the ability to ameliorate these liabilities, and the book’s subtext contains a message for current fabrication practices: Buildings should be designed for disassembly. Concerning the viability of using old elements in new structures, Addis writes: "Human inertia is a highly effective barrier to change. In the absence of a legal compulsion to reuse and recycle, the essential requirement is a client or developer who wants to do it or, at least is not against the idea." BY NATHALIE WESTERVELT
DROSSCAPE: WASTING LAND IN URBAN AMERICA
by Alan Berger
Princeton Architectural Press; 256 pages; $34.95

When Alan Berger, an associate professor at Harvard University's Graduate School of Design, re-examined the aerial photographs from field research for his previous book *Reclaiming the American West*, he identified vast parcels of wasted land on the peripheries of cities and towns as "drosscapes." In this volume of the same name, he calls for "a design pedagogy that emphasizes the productive integration and reuse of waste landscape throughout the urban world." Berger's well-researched current discourse about the inevitability and causal factors of sprawl extends to an analysis of 10 urbanized regions, with three types of mapping termed by the author: "entropic indicators," charting four categories of waste landscapes (infrastructure, obsolescence, exchange, and contamination); "dispersal graphs," juxtaposing population density, distance from the city center, and changes in urbanization patterns; and "spindle charts," setting the decline and growth of industry within the context of its distance from the city center. The result is support for a thesis summarized by Lars Lerup in the book's postscript: "...what [Berger] wishes to recover is not waste but the manna of the horizontal city." **BY NATHALIE WESTERVELT**

How do you Swing?

- bare
- diffused
- indirect
- lensed
- asymmetric
- louvered

delraylighting.com
Circle 199 or www.architecturemag.com/productinfo
GREEN ROOF SYSTEMS: A GUIDE TO THE PLANNING, DESIGN AND CONSTRUCTION OF BUILDING OVER STRUCTURE
By Susan Weiler and Katrin Scholz-Barth
John Wiley & Sons; 304 pages; $75 (forthcoming this winter)

POWER AND ENERGY: POWER PLANT RUMMELSBURG-BERLIN
Edited by Hans-Achim Grube
Jovis; 120 pages; $29.95

REMAKING BEIJING: TIANANMEN SQUARE AND THE CREATION OF A POLITICAL SPACE
By Wu Hung
The University of Chicago Press and Reaktion Books; 272 pages; $35

SOLAR DESIGN: PHOTOVOLTAICS FOR OLD BUILDINGS, URBAN SPACE, LANDSCAPES
By Ingrid Hermannsdörfer and Christine Rub
Jovis; 143 pages; $25

TEN SHADES OF GREEN: ARCHITECTURE AND THE NATURAL WORLD
By Peter Buchanan
The Architectural League of New York; 128 pages; $24.95

WHO OWNS THE WATER?
Edited by the Swiss Federal Institute for Environment Science and Technology (EAWAG) and Lars Müller
Lars Müller Publishers; 480 pages; $58 (forthcoming this summer)
MEGANITE™
Acrylic Solid Surface

Great Colors!
Great Performance Characteristics!
Great Savings!

- MEGANITE gives you products that you can count on where performance is critical. Hospitals, Clinics, Nursing Homes, Schools, Government Facilities, Cafeterias, Kitchens and Restaurants
- Performance that is the same or better than other solid surface brands.
- Colors and patterns that are the industry's most sophisticated and popular: Over 64 great colors in 5 outstanding design groups: Solid, Mist, Granite, Stone, Boulder
- A large selection of sinks and vanity bowls in your choice of solid colors.
- Wall applications including wet-wall without grout seams with our 1/4" product.
- MEGANITE allows you to meet critical budget demands for those "value engineered" projects. With material savings of up to 40% less than other brands MEGANITE keeps you within those tight budgets
- **MEGANITE... Today's Smart Choice!**

<table>
<thead>
<tr>
<th>COMPARISON</th>
<th>MEGANITE™</th>
<th>LEADING BRAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot; Thick Acrylic Solid Surface</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10-Year Warranty</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Inconspicuous Seams</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Solid Surface Bowl Options</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Meets ASTM G-21 and G-22 Specifications for Bacteria and Fungus Resistance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Meets National Sanitary Foundation Specifications NSF-51</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Meets Class 1 Standard for ASTME-84 Flame Spread and Smoke Generated</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Meets ANSI-Z124.3 and Z124.6 Specifications for Stain Resistance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>A Value-Engineered Price</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

MEGANITE, INC.
1254 Lexington Ave., Pomona, CA 91766 • 800-836-1118 • www.meganite.com

DISTRIBUTED BY:
Western USA
E.B. Bradley
800-533-3030
www.ebbradley.com

Eastern USA
Foxxondom Hall
856-665-2210

New England States USA
MEGANITE Inc.
800-836-1118

Midwestern USA
MEGANITE Inc.
866-834-2648
www.meganite.info

Southeastern USA
Maxstone International
577-778-1149
www.maxstoneusa.com

Southwestern USA
Ultimate Solutions Dist.
602-353-9153

Canada
Solid Source
905-625-3746
www.solidsource.ca

Circle 167 or www.architecturemag.com/productinfo
Expanded Metal Yields A Cost Savings Of Up To 50% Over Perforated

NEW EXPANDED METAL DESIGNS
- Solid areas within the sheet
- Virtually no scrap
- Stretches the metal rather than punching holes
- Makes a stronger product
- Architecturally inspired
- The exciting alternative to perforated
- Great for security uses such as window guards, gates and fencing

Expanded Metal Manufacturers Association
www.emma-assoc.org or call NAAMM 312-332-0405

Circle 6 or www.architecturemag.com/productinfo

EXPERF
The Perforated Metal Alternative
- Is Interchangeable with most perforated patterns, has comparable strength, open area & acoustic and filtration properties.
- Offers Design Features that are only available from expanded metal.
- COST SAVINGS - Expanding the material, rather than punching or perforating the openings, saves on the material costs.

Certified ISO 9001:2000

NILES EXPANDED METALS & PLASTICS
ph. 800-321-2727
experf@nilesexpandedmetals.com • www.experf.net

Circle 8 or www.architecturemag.com/productinfo

CALENDAR

EXHIBITIONS
NEW YORK CITY
THE HIGH STYLE OF DOROTHY DRAPER
Drawings, photographs, and sample books explore the life of one of Manhattan's most influential tastemakers. MUSEUM OF THE CITY OF NEW YORK mcny.org THROUGH AUGUST 27

NEW YORK CITY
ZAHY HAIDID
A retrospective of the London-based architect's work (above). GUGGENHEIM MUSEUM guggenheim.org THROUGH OCTOBER 25

SEATTLE
MAYA LIN: SYSTEMATIC LANDSCAPES
Three large-scale sculptural installations offer alternative encounters with "natural" forms. HENRY ART GALLERY henryart.org THROUGH SEPTEMBER 3

VANCOUVER, BRITISH COLUMBIA
ARTHUR ERICKSON: CRITICAL WORKS
Twelve of the Canadian architect's projects spanning the last 40 years, including Vancouver's Robson Square (1973-1979). VANCOUVER ART GALLERY vanartgallery.bc.ca THROUGH SEPTEMBER 10

WASHINGTON, D.C.
NEWER ORLEANS—A SHARED SPACE
Traveling from the Netherlands Architecture Institute, designs for the hurricane-ravaged city by six firms. NATIONAL BUILDING MUSEUM nbm.org THROUGH JULY 30

EVENTS
JYVÄSKYLÄ, FINLAND
LESS AND MORE—EXTENDING THE RATIONAL IN ARCHITECTURE
The 2006 Alvar Aalto Symposium will focus on the work of several contemporary architects exploring the rational in architecture. UNIVERSITY OF JYVÄSKYLÄ alvaraalto.fi JULY 28–30

SAN FRANCISCO
2006 NOMA CONFERENCE
The National Organization of Minority Architects' annual conference focuses this year on achievements in design and diversity. THE ARGENT HOTEL noma.net OCTOBER 12–15

VENICE, ITALY
VENICE BIENNALE Curated by Richard Buorder—founding director of the London School of Economics's Cities Program—the 10th International Architecture Exhibition looks at cities, their inhabitants, and the built environment. VARIED LOCATIONS labiennale.org SEPTEMBER 10–NOVEMBER 19

COMPETITIONS
HOME OF THE YEAR AWARDS
Architecture's annual residential awards program (see pages 107-108) calling for single family, multifamily, renovation, emergency shelter, and apartment projects. architecturemag.com SUBMISSION DEADLINE: JUNE 26

54TH ANNUAL P/A AWARDS
Architecture's awards program (see page 126) for unbuilt commissioned work. architecturemag.com SUBMISSION DEADLINE: SEPTEMBER 8

IMAGINING PENN CENTER
A national student ideas competition sponsored by the Ed Bacon Foundation calling for designs to revitalize downtown Philadelphia's Penn Center. edbacon.com SUBMISSION DEADLINE: SEPTEMBER 15
If you look real close you can see 25 years of fire-rated glazing experience reflected in it.

SCHOTT PYRAN® fire-rated glass-ceramics are an architect’s best friend. PYRAN® is everything you’ve been looking for in fire-rated glass. It’s fire-protective, impact-resistant and, aesthetically speaking, quite fetching. PYRAN® Crystal offers the highest standard of clarity, transmission and true color rendition. And PYRAN® Star is both beautiful and economical. PYRAN® is available with a surface applied film, laminated or polished. It comes in large sizes and is easily accessible through distributors, fabricators and glaziers. For new construction or retrofit, spec the glass with a loyal following among fire professionals – PYRAN®.
In furniture, we seek utility and comfort, as well as an allusion to another world, the life we could be living, if only. And unlike committing to a house, it’s a relatively inexpensive way to achieve the right amount of other. Investing in furniture can be like buying a new piece of clothing in the hope that it will convey a separate aspect of one’s character, but it’s a selection you wear a lot longer and usually not in public. Good furniture, like housing and clothes, carries in its identity the suggestion of habitation and the body. Another part of its job is to instill desire: A carpet, for instance, might encourage the anticipation of walking across it in bare feet.

In these fresh examples from the Satellite
Pavilion at the Milan Furniture Fair—a Dutch rubber carpet that fits the aforementioned bill, terra cotta lamps from Chile, chairs with Japanese, Icelandic, and German pedigrees—there's a pronounced interest in line, whether etched across a surface, forming a unique silhouette, or tucked within, as a fantastical representation of that distant world made suddenly familiar in our living rooms.

The ninth annual Satellite Pavilion had a renegade status, secondary to the main event, as its name suggests. Booths there were small, the common spaces crowded, and the lighting unforgiving. It's where about 600 yet-to-be-established designers from around the world—some still in school—were invited to share their experiments. All of which recommended it to me after just a day of my first taste of Salone chicdom in April. In short, I saw more innovative, diverse furnishings via the Satellite in a lot less time. Both the designs and their makers reflected the exhilaration of being poised on the cusp of something, and the energy was contagious. The new glass-clad Massimiliano Fuksas-designed fairgrounds on Milan's northwest periphery may boast 1 million square feet of convention space, but the far smaller Satellite Pavilion, also on site, does a better job of representing yet another important aspect of successful furniture design: appropriate scale. FOR MORE INFORMATION, CIRCLE 120
One company ... taking a wider view.

Our wide range of products covers the full landscape of design possibilities.

From grand entrances to grand views, sunny atriums to airy offices, Vistawall Architectural Products has it all covered, with custom Vistawall curtain walls, entrances and storefronts, plus our popular Moduline window systems, Naturalite skylights and Skywall translucent systems. And with streamlined production, aesthetic consistency, precise structural integration, on-spec performance and peerless project management, we’ve covered all the other bases, too. When you’re selecting products for the exterior of your next building, give us a call.

Vistawall Architectural Products
1.800.869.4567 • vistawall.com

RadioShack® Corporate Headquarters – Fort Worth, TX
Architect: HKS, Inc. – Dallas, TX
INSPIRED FORM IN FRANKFURT

EVERY OTHER YEAR, LIGHT+BUILDING NOURISHES LOVERS OF LIGHT.

BY EMILIE SOMMERHOFF

For believers in light's gift to architecture, walking the biennial Light+Building exhibition in Frankfurt—its aisles a disorienting mass of silhouetted bodies and every angle another alluring illuminated view—is a religious experience. One is pulled back to corporeality only by discomfort: foot pain owing to 15 floors of product, and the hot ambient temperature, a consequence of the show's content.

The trade fair presents a comprehensive and, in many cases, inspiring summary of what European lighting manufacturers are offering, testing, and imagining. Occupying a small island of their own in Hall 6, winners of the fourth "Lights of the Future" competition, a program founded by the European Commission Joint Research Centre in 1999 and since adopted by show organizer Messe Frankfurt, neatly encapsulated many of the themes threaded through the sea of booths beyond. With a general mission to honor solutions that unify energy efficiency and design, the jury gave awards to 17 products from 16 manufacturers and four concepts by student designers. Predictably, the majority employed light-emitting diodes (LEDs) as their source, though a few fluorescent-based luminaires joined the mix.
Designing a wall?
Or an Advanced Thermal and Moisture Protection system.

"What's wrong with conventional metal stud cavity insulated walls?"
The technology’s old and thermally inefficient.

"But, we use multiple components for moisture control."
And any component, not installed perfectly, can cause total wall failure.

"But, we use the details recommended by wall component manufacturers."
And who is responsible for the total wall system’s integrity?

"So, what makes CENTRIA Formawall Dimension Series a better system?"
One panel, one step, one manufacturer. And it works.
In addition to resource-saving techniques—most literally expressed in the 13-foot-tall outdoor Blattwerk fixture (previous page, bottom) by third-place student winner Henning Bogershausen, which powers its LED-illuminated legs with a maple-leaflike array of photovoltaic panels—the premiated designs included both organic forms (first-place student winner Robin Carpenter's Spiralight, previous page, top) and color adaptability (Zaha Hadid and Patrik Schumacher's Vortexx color-changing chandelier for Zumtobel, above).

The Hadid/Schumacher tag was just one of the high-profile imprimaturs on display: iGuzzini's booth showcased its guest designers, among them Renzo Piano Building Workshop and Foster and Partners. The Danish manufacturer Lightyears has built its entire business around this model, with celebrities like Jorn Utzon in its stable. (The architect's Opera luminaire for the company recalls his lionized Sydney Opera House, center right.) Yet another trend afoot on the floor: control. Many architectural fixtures incorporated the adjustability common to task lamps, with features that enable users to direct the throw of light. Lumini's Bossa pendant, for example, has a movable shade, allowing uplight or downlight depending on its position (bottom right). While many of the Frankfurt-premiered products will not make their way through the UL-listing procedures that gain them access to the U.S. market, one can only hope their aesthetic spirit is not thwarted by the same restrictions. FOR MORE INFORMATION, CIRCLE 121.

LUMINI.COM.BR
The latest innovation in reducing office clutter.

Introducing the ReUse™ Reclamation Program, another eco-friendly idea from Tarkett. Now, in addition to recycling unused Tarkett flooring, we'll recycle our sample sets and carry boards. We even pay the postage to get them to our recycling center. And out of your office.

For details, e-mail reuse@tarkett.com

Circle 195 or www.architecturemag.com/productinfo
WinGuard Impact-Resistant Windows and Doors spell the end of plywood. The end of unsightly shutters and brackets, too. WinGuard maintains the look of your design, and even enhances it with a wide variety of custom shapes and sizes. But as beautiful as these windows and doors are, they’re also tough. WinGuard protects against strong winds and flying debris, meeting the strictest hurricane code requirements in the nation. In fact, even after the extraordinary 2004 hurricane season, with over one million units installed, WinGuard had zero reported impact failures.

To learn more, visit Architect View at www.NoMorePlywood.com or call 1-877-WINGUARD

Circle 4 or www.architecturemag.com/productinfo
A WARRANTY
that offers more than just fine print.

It's upfront and simple. When you specify DuPont™ Tyvek® CommercialWrap® with the Build It Right™ Warranty for your projects, you know the job will be done right. We make sure of it.

That's why we've introduced a no-nonsense 5-year product warranty with a documented job site service package for Tyvek® CommercialWrap®. And to back it up, a member from our national network of DuPont™ Tyvek® Specialists will provide on-site consulting and training for a successful installation of the Tyvek® CommercialWrap® system.

You'll also get the peace of mind in dealing with a company that for over 200 years has been committed to producing innovative, quality products to enrich lives and protect our environment.

FOR MORE INFORMATION

www.Construction.Tyvek.com or 1-800-44-Tyvek

Circle 218 or www.architecturemag.com/productinfo
A warm welcome flows from transparent walls. Light blossoms where there was darkness, curves swim from where there were corners. Excitement, vision, power.

Shading, cooling, ventilating.

Space Sculpting systems will comply with your imagination unlike any other material you've ever worked with.

TOLL FREE 1 866 806 2385
WWW.CAMBRIDGEARCHITECTURAL.COM

A DIVISION OF CAMBRIDGE INTERNATIONAL
Make sure your specs are followed to the number with PPG's new Certified Applicator™ Program.

When you need to be sure that the color you specify will be the color that gets delivered, rely on the new PPG Certified Applicator Program. Members are quality audited by PPG to help achieve color consistency and maximum performance on window, door, storefront and curtainwall extrusion components. Plus, they use the same color-measuring software and hardware as PPG to minimize color variability.

Choosing a PPG Certified Applicator to support your color and design vision gives you more than color consistency. You get experience – with 40 years of proven performance from Duranar® extrusion coatings. You get choice – our global database features 75,000 unique colors, including the vibrant, high-gloss finish of Coraflon® coatings. And now you also get the reliability of the PPG Certified Applicator Program.

To find a Certified Applicator and receive PPG’s white paper on “Color Considerations,” call 1-888-PPG-IDEA. Or visit www.ppgcap.com.
This issue of Architecture focuses on the potential of the existing. Our features begin with a look at the world of missed opportunities that resides, temporarily, in dumpsters on construction and demolition sites. From containers of waste, we move onto a recounting of partial reuse, in which Venturi Scott Brown and Associates finds a new home for the flower-covered cladding of its Best Products Catalog Showroom, which was recently remodeled. Next, building components salvaged from demolished Cold War housing blocks are reconfigured as low-rise, single-family dwellings. The scope of material reinvention then expands to an exploration of decommissioned missile silos at a San Francisco Bay Area institution currently being transformed into a more efficient base of operations for marine mammal rescue. Progressing to the scale of the building, architects Robert Mangurian and Mary-Ann Ray tell their story of design's transformative power, as they describe the experience of establishing an educational and studio enterprise in the shell of a Beijing factory. Finally, at the macro scale of reuse, our theme concludes with an article on a seminal modern work, the English seaside De La Warr Pavilion, designed in 1935 by Erich Mendelson and Serge Chermayeff, which, in the hands of John McAslan + Partners, is once again a place of rejuvenation.  

The contents of one construction site dumpster processed on August 11, 2004, at the 334 Recycling and Transfer Facility, owned and operated by Ray’s Trash Service in Zionsville, Indiana, included: hundreds of 2x4 lengths, hundreds of oriented-strand board shards, tens of wood truss ends, tens of cardboard boxes, tens of aluminum cans and plastic bottles, tens of rigid insulation pieces, and tens of lengths of steel strapping.

Approximately 75 to 100 dumpsters are processed every day at 334, along with 75 to 100 garbage trucks, and 5 to 10 smaller trailers. Most of the dumpsters come from construction sites; selected loads are sorted for cardboard, steel, or concrete chunks. A few objects are pulled out: bicycles and tires, among them. Everything else is transferred into 80-cubic-yard trailers that are driven southwest to the Twin Bridges landfill site in nearby Danville. There, the trucks are backed onto a platform and unhitched; tilted into the air, their contents are poured out. Thirty-two 18-wheelers arrive daily.

In the past three years, I have photographed 250 construction site dumpsters and one year ago my students photographed 250 more. We found walls and sections of walls, doors, windows, carpeting, carpet pads, trusses, shingles, building paper, timber and steel framing stock, sheets of plywood, sheetrock, and oriented strand board. We saw metal and PVC pipes of all sizes and lengths, ductwork, rigid and batt insulation, entire ceiling systems, corner bead, topsoil, smooth stones, rope, burlap, plastic pots, branches,
trees, conduit, junction boxes, wiring, coaxial cabling, copper tubing, spools, bricks, concrete blocks, bags of cement, empty bags, aluminum and vinyl siding, cardboard boxes and tubes, reinforcing rods, mesh, buckets, timber pallets, bathtubs, cabinets, countertops, and kitchen sinks.

Two reports prepared for the Environmental Protection Agency in the 1990s add dimension to the story: 3,000 pounds of solid sawn and engineered wood, 2,000 pounds of drywall, and 600 pounds of cardboard are discarded when constructing the average new 2,000-square-foot house (National Association of Home Builders, 1995); and residential and nonresidential building construction, renovation, and demolition generate approximately 136 million tons of debris per year in the United States (Franklin Associates, 1998).

The flow of waste from construction sites is relentless; the transfer, a mad ballet; the destination, toxic.

I am done photographing dumpsters.
Wes Janz is an associate professor in the Department of Architecture at Ball State University. His classes include "World Architects and the Working Poor" and "Leftover People, Spaces, and Materials." This article was adapted from a paper, "Sustaining Sustenance through Everyday Building," first published last year in the proceedings of an Association of Collegiate Schools of Architecture conference.
The Next Best Thing

Faced with the loss of its decorated shed, Venturi, Scott Brown and Associates finds new use for old cladding.

by Abby Bussel  photographs by Tom Bernard
The decorated shed isn’t what it used to be, its visage now as banal as its skin and bones. The promiscuous repetition of the big-box store has homogenized the commercial strip. Today’s “ugly and ordinary” is harder to love.

To make matters worse, Robert Venturi and Denise Scott Brown’s seminal Best Products Catalog Showroom (1978) is a shadow of its former self. Its joyfully flowered panels—inspired by the wallpaper in the architects’ own bedroom—are gone. The original steel-and-concrete structure is now wrapped in a reflective-glass skin. It’s still a generic loft, but it is no longer a decorated shed. And the world is poorer for it.

The situation, however, is not entirely dire. This month—as a group of doctors and dentists unpack their equipment in the former showroom building at the Oxford Valley Mall in Langhorne, Pennsylvania—about a quarter of the porcelain-enameled steel panels will have been relocated. Having learned of Best’s significance from the architect they’d hired to remodel the building, the new owners contacted Venturi, Scott Brown and Associates (VSBA) and arranged to donate panels to several arts institutions through the University of Pennsylvania’s Architectural Archives, where the firm’s prolific production is being cataloged.

VSBA principal James Kolker supervised the disassembly process. Most of the cladding was in very good condi-
OF THE 1,208 BEST PANELS, EACH MEASURING NEARLY 4 X 5 FEET, 287 WERE SAVED FOR REUSE.
tion, he notes, especially on the upper portion of the façade, which "says a lot about the durability of the panels." Of the 287 that were saved, small groupings of the panels now reside in the permanent collections of the Museum of Contemporary Art in San Diego, the Denver Art Museum, the Virginia Museum of Fine Arts, the Philadelphia Museum of Art, and the Museum of Modern Art in New York City; eight are on view at the latter through the autumn.

And in another satisfying turn of events, the big flowers will not only be on public display as works of art but will decorate a new shed on the grounds of the Acadia Summer Arts Program in Mount Desert Island, Maine, where VSBA has previously built a shed in the form of a Greek temple and a library/studio in the shape of a giant "A." The firm has designed a two-story, 1,200-square-foot volume clad in western red cedar that will house maintenance vehicles in the off-season and operate as an artists' studio in the summer. The flowered panels of Langhorne will be replanted this summer onto freestanding walls (fastened to a lightweight steel support structure with a modified clip system, similar to the original one) that will be installed just outside the little garage/studio.

That the Best panels have traveled north to live among the A-frames, capes, cabins, and lobster shacks of the "Maine Strip," as VSBA refers to it, is a full-circle moment in the realm of poetic justice. □
Cold War housing for the masses is dismantled and reformed.

by Jan Otakar Fischer

Plattenbau ("paneled, or slab building")—the dreary architectural legacy of communism. The fringes of countless cities in Eastern Europe and the former Soviet Union are still marked by rows and more looming rows of the prefabricated concrete housing estate. To the Communists, they were a cost-effective solution to severe housing shortages during the Cold War. To many western architects and planners, they were inhumane and undemocratic. When some called for the wholesale demolition of these blocks after the Wall came down, almost a third of all East Berliners lived in plattenbau apartments. But unlike the Wall, they were not simply an unsavory reminder of dictatorship to be eradicated as soon as possible.

Sixteen years after the demise of the German Democratic Republic, the fate of the plattenbau is being determined largely by demographics. Eastern Germany is losing its population to a declining birthrate and migration to better jobs in the west. The major cities still attract enough people to keep population levels stable, but the single-family homes of the suburbs are multiplying at the expense of the old estates. By 2000, the government announced that at least 350,000 plattenbau apartments would be torn down over the course of this decade.

But Germans are among the world's most diligent recyclers. It has long been standard practice to extract the steel reinforcement from old plattenbau panels, melting down and redeploying the metal and crushing the concrete into gravel for highway construction. Now, an innovative technique called "elemental recycling" preserves whole panels and uses them to build new forms of housing on different sites.

Four years ago, architect Hervé Biele participated in a research program sponsored by the Institute for Building Preservation and Modernization (IEMB) at Berlin's Technical University. Working closely with an engineer there, Claus Asam, Biele built a prototype pavilion using plattenbau elements in the school's testing hall. After proving that the technique was workable, Biele, now 33, founded his own practice, Conclus—Office for Sustainable Architecture, in Berlin.

Last year his first house was completed in Mehrow, a town just beyond Berlin's northeastern boundary. Three more houses are under construction now, and politicians and the media are paying close attention. The Mehrow home illustrates Biele's confidence that building with plattenbau panels is safe, economical, ecologically beneficial, and aesthetically appealing. A young eastern German couple discovered the architect
through his website, and he designed for them a two-story, flat-roofed house with three bedrooms and 2,280 square feet of living space. Then Biele located a nearby plattenbau high-rise primed for demolition and got permission to salvage a set of panels, which were removed, cut to specification, transported to the building site, and assembled in just seven days by a construction firm. The family moved into the house within a year.

The Mehrow residence is set back on a lot that terminates at a wooded riverbank. Its crisply orthogonal, ivory-tinted plaster walls, flat roof, expansive glazing, and lack of ornament make it an unusual object amid the traditional wooden pitched-roof houses of the sleepy town, but it holds its own by dint of its confident, clearly modern sobriety. The new house reveals no hint of its previous incarnation as a tenement.

Twenty miles away in Schildow, Biele is constructing a 1,940-square-foot two-family house with a pitched roof. The component parts were also mined from a Berlin plattenbau. The groundfloor panels sit on two layers of insulated sand-lime bricks and a bed of recycled foam-glass rubble atop a standard foundation. Only interior panels are employed, as plattenbau façade panels are not uniform and were often treated with a mineral insulator now thought to be cancer-causing. Floor panels originally measuring roughly 10 by 20 feet and 5-1/2 inches thick are used to form new floors. Interior wall panels, similar in dimension, are employed to construct new walls. The panels are stripped of any wallpaper, paint, or other surface treatment before they are cut apart and extracted with a portable crane. They are then sliced with a circular saw and the resulting sections are transported by truck to the building site. There, they are raised into place with a crane—wall panels atop floor panels, wall panels abutting each other—and bolted together. Adjoining panels are occasionally stabilized with thin steel strips fastened across them like Band-Aids. Upper window openings receive steel lintels, simply laid into place, and the joints between the panels are filled with cement.

Biele has found that using recycled plattenbau components in a new house is 30 to 40 percent cheaper than building an entirely new structural frame. The reuse of the panels also saves the fuel that would otherwise be needed to crush the panels into gravel, or to create new concrete. (Asam believes that the 400 liters of oil saved by building the Schildow house could heat it for 20 years.) The demolition firm charged with dismantling the plattenbau blocks provided the panels for free, happy not to pay for their further disposal. "The concrete used in plattenbau," says Asam, "is of a very high quality. And generally speaking, the older it is, the better, because concrete never stops hardening. The slabs will last essentially forever." The panels Biele has used mostly date back to 1980 and they all cure smoothly over time.

The savings and the environmental benefits are multiplied when owners choose to make their new houses as green as possible. A recycled plattenbau house, with the addition of at least 12 inches of insulation, double or triple-paned glazing, and solar and earth-warmed heating systems is roughly three times more energy efficient than a normal house. All of Biele's homes will have a higher than normal energy rating, and they can be built for as little as $88 per square foot. The final enticement is that all such houses qualify for long-term, low-interest federal building loans.

Biele knows that his designs must banish any lingering stigma associated with plattenbau—the new house must not look like an apartment simply extracted from the high-rise and set on the ground. The almost Loosian restraint of the Mehrow house was achieved largely because the panels can be cut to any dimension, allowing a broad range of formal variation. Once the exterior of the house has been insulated and finished (with plaster, wood, or brick), it no longer declares its origins; interior walls can be left as polished concrete or covered with another material. Every panel was customized in some way. Such flexibility even allows for luxury, the antithesis of the old plattenbau experience.

"Building these houses is all about logistics," says Biele. "The assembly is simple, but the timing is a challenge." He finds his "donor buildings"
mehrow house assembly system
through newspaper reports of planned demolitions and from a 2000 government list of all plattenbau in eastern Germany scheduled to come down in the next decade. He has calculated that it is cost-effective to transport panels from plattenbau up to 70 miles to a building site. Biele admits that his recycling technique has minor disadvantages. Concrete walls are exceedingly hard—to hang a picture or attach lighting fixtures requires a heavy-duty masonry drill—and because the panels are about five tons each, the houses must be assembled with a portable crane, which is often difficult to maneuver in an urban situation.

Biele and Asam were not the first to come up with the idea for building with recycled concrete panels, but only now, in Germany, is the idea being put to the test with state support. How far can it go? The architect and the engineer are developing techniques for building double-height spaces (like sports halls) using stacked panels. And Biele does not yet have much competition. "You can count on one hand the number of other architects who have shown serious interest in plattenbau recycling," he says, not without some regret.

Both men feel that, although the press has been positive in Germany, the country must act quickly to make their procedure commonplace. The theory is solid, but there needs to be more practical implementation from architects, less opposition from the concrete industry (which feels threatened), and less legal wrangling about what is or is not "waste." The clock is ticking. The nationwide plattenbau demolition program may continue another 20 years, and it will only be subsidized until 2010. Fewer than half of the condemned estates have thus far been torn down. The plattenbau panel is a limited resource that needs to be harvested and conserved now, before it disappears beneath the country’s many autobahns.

For now, however, Germany is setting the example. Despite the varying standards, western countries could also transform their concrete building stock according to the same principles. The blighted high-rises of France’s urban banlieue, for example, would be especially suitable. And even in the United States, the concept might eventually gain traction—despite the fact that prefabricated concrete construction is not as widespread. "Crazy ideas are often more accepted in America," says Asam coyly, "and who knows, if oil prices rise higher and there is someday a new mood in Washington..."

project: Mehrow House, Mehrow, Berlin client: Beate and Ingo von Zwedorff architect: Conclus, Berlin—Hervé Biele, Robert Schramm engineers: Krampe Ingenieure (structural); Thermomaxx, Elektro Lemme (M/E/P); EMB (civil) area: 2,280 square feet cost: $230,000
Injured marine mammals take refuge on a former missile silo site.

It's a drizzly late morning in the San Francisco Bay Area's Headlands, and before I can see any patients at the Marine Mammal Center (MMC), located on a plateau above some truant surfers, I hear them barking. This loud activity, directed at volunteers preparing a feeding, fortunately doesn't indicate the severe conditions that landed the 30-odd California, harbor, and elephant seals here—shark bites, gunshot wounds, and untenable toxins in their liquid habitat, to cite a few common threats.

I watch toddler-sized pups administered herring milkshakes through tubes reaching down into their stomachs, as they hadn't yet learned to swallow fish before becoming separated from their mothers. Ideally, they'll gain 200 pounds in four weeks on this diet. On average, 50 percent will eventually be released back into the bay, 20 percent will become the subjects of invaluable autopsies, and the rest will live out their lives in institutions such as aquariums, where they'll receive ongoing treatment. Half of all injured pinnipeds and cetaceans found in the United States—typically 700 over recent years, mostly reported by vigilant fishermen—are treated here.

In 1974, when the Golden Gate National Recreation Area (GGNRA) first leased this 9-acre parcel of land to the MMC, garden hoses and inflatable Doughboy pools were indicative of the fledgling organization's budget—and dedication. It soon graduated to surgery units and offices fashioned from shipping containers. Presently, private donations totaling $16 million are translating into a new home. Bay Area architect Scott Dennis of Gyroscope Architecture, who designed portions of the Orange County and Monterey Bay Aquariums, consulted with San Francisco-based Noll & Tam Architects on the new hospital and research facility now under construction. As we wander the site, he notes an earlier instance of animal occupation: kennels for guard dogs during the Cold War, when the land hosted a pair of Nike missile silos. In addition to reusing its parts, the MMC benefits from both the conceptual logic of the military installation's design and its strong material character.

Philosophically, the notion of protection unites the two incarnations separated by 60 years. A dozen anti-aircraft missiles were first secured here in two 3,000-square-foot underground berths to protect residents and property in the event of an attack on the San Francisco Bay area. Soon, one of those deep concrete wells will contain all of the hospital facility's water processing equipment, keeping it away from the sun's damaging rays and freeing the territory above ground for recovery functions. (Four separate processing systems for as many species will prevent disease from spreading among the most fragile recuperants.) The other silo will contain long-term freezer storage of animal tissue specimens for study.

"The silos became the springboard of the design," explains Dennis, as we descend into one of the underground spaces via steep stairs. "They structurally support the new building, and are strong enough to establish the overall
geometry. What had appeared as a rectangular slit in the ground opens outward into a blunt cruciform in section, with the extensions formerly harboring the missiles. The relation to sacred space intensifies with time; it’s large, empty, and austere to the point of abstraction, and the past feels suddenly less remote from this vantage. Just 20 feet away in actual distance, we are suddenly a world apart from the seals up top. The long central elevator tray that once lifted the weapons into position lays stilled in its pit but bears the trace of its raison d’etre in its exacting dimensions, as does the design for the entrance to the small dark control room, which has short staggered walls that would have delayed the journey inward, making it a very deliberate destination.

The architects' uncomplicated parti is equally resonant of its own very different contemporary goals and embodies a significant ethical statement germane to their client’s mission: Quarters for animals and humans are accorded equal attention, in part to lend 30,000 yearly visitors an understanding of how the patients are treated, a commitment rendered tangible by the use of identical materials and very similar spaces throughout.

The two-story building currently beginning construction will be open to the sky; there’s no ceiling. "Most ceilings hide crap," Denis notes, "We don’t have any crap to hide." It will be heated entirely by radiant sources beneath the concrete floor and is designed to be durable and washable. Overhead, a steel uni-strut grid will function as an organizing mechanism from which lights, video monitors, and signage will be suspended. Black vinyl-coated fencing with one-inch openings (small enough to not catch flippers) will separate the animal pens and is respectful of the cultural landscape: Long distance vistas are preserved for nearby hikers, who won’t be distracted by shiny metal glinting in the sunlight. Views into the places where animals stay will be limited and are indicated by discrete bay windows. (Various species have different tolerances for human interaction, and the primary goal, unlike a zoo, is to ready them for return to their own habitat). Significantly, the new facility will unite animal care workers and administrative staff who’ve been separated until now.

Outdoor pens for the seals will come in two versions: pools completely submerged and containing ramps within their long-lasting fiberglass forms for ease of entrance and egress (accommodating animals with weak back flippers); and with lips rising a foot above ground. Because the center operates around the clock, illumination for night had to be directed in a manner sensitive to the fact that animals in the bay use light for migration. A portion of the pools will always be shaded by overhead awnings—many of which will be lined with photovoltaic panels, thanks to a generous donor—giving the animals a choice of where to hang out, and cutting down on cooling costs. "Ironically, these places are energy hogs," admits Dennis. Another untidy reality he cites was reckoning with waste: "Think of it as a miniature sewage treatment plant," says the designer of the sophisticated processing area contained in one silo that he and project manager Tad Costerison took pains to develop properly.

The latter likes to check on the MMC's construction progress between weekly visits via its public webcam. Plans for the facility, which is due to be completed next spring, were stalled several times to obtain approvals from the GGNRA, for whom the scope of the center was a learning experience, says Dennis: "Most of their projects are about preservation." He describes a year-long delay during which an environmental impact study was conducted on nearby land and power sources as something akin to treading water, while also acknowledging its importance: A project such as this, sensitive to its context in multiple eras, reveals architecture's value as a historical record, reflecting priorities of the societies in which it was produced.
GATHERING AROUND THEIR BATHING FACILITIES (ABOVE), THE CALIFORNIA SEALS' COATS ARE PAINTED TO REMIND VOLUNTEERS WHICH MEDICINES THEY ARE RECEIVING; A SECTIONAL RENDERING THROUGH A POOL (BELOW) INDICATES THE OPTIMAL ANGLE FOR AN OVERHEAD AWNING'S PROVISION OF SHADE; THE POOLS ARE DIVIDED BY BLACK LATEX-COATED CHAIN LINK FENCING (BOTTOM) THAT REFERENCES THE FACILITY'S INDUSTRIAL HISTORY; PLAN OF WATER-PROCESSING EQUIPMENT (FACING PAGE).
FOR THREE DECADES THE FACILITY RELIED ON SALVAGED DONATIONS FOR ITS HAPHAZARD ASSEMBLAGE OF WATER PROCESSING EQUIPMENT (ABOVE); TWO MISSILE SILOS (BELOW AND BOTTOM) HAVE BEEN INACTIVE FOR AS LONG; A RENDERING FOR THE NEW MMC, (FACING PAGE) DETAILS LOCATIONS FOR THE POOLS AS WELL AS THEIR PROTECTIVE OVERHEAD AWNINGS.
Since 1993, from our outpost at StudioWorks in Los Angeles, we have endeavored to establish B.A.S.E. (Beijing Architecture Studio Enterprise), throwing ourselves and sympathizers into the alchemy of an emerging new China—a strange, fascinating, and unsettled mix of imperialism, communism, socialism, and capitalism, of individuality and community, repetition and invention. As of May, B.A.S.E. formally extended its speculative arms, one academic and the other a working practice. The enterprise is intended to serve as a haven, a laboratory, a platform, and a foundation for architecture and urbanism research and production in the midst of the extraordinary changes underway in China. (The first two-month school session is a cooperative venture between the University of Michigan and the University of Toronto, and a late summer session will host Chinese and visiting upper-level students.)

The idea for an initiative of this kind was first suggested to us in 1993 by Yung Ho Chang, the former director of the architecture school at Peking University and now department head of MIT’s graduate program. With a longstanding penchant for China, but no experience there, we journeyed to meet with him to lay the groundwork for a branch of SCI-Arc (Robert Mangurian was then director of the graduate program), and with Chang’s connections, we entered the inner architecture and academic circles in Beijing, Nanjing, and
Shanghai, Nanjing was immediately attractive as a site, with a respected architecture program already in place at Southeastern University, and the possibility of traditional courtyard dwellings to house the program. Shanghai was also appealing, as was the generous offer of a floor in a building on the Tongji campus, although we had cold feet about tying the program so closely to any institution that would regulate activities. Beijing was, for us, thoroughly depressing in 1993, at least from an architectural point of view. The seemingly endless destruction—splintered red lacquered columns and heaps of Beijing gray brick being mowed down—could be glimpsed through the cracks of billboards showing the "utopian" futures that lay ahead. Considering those options, although the concept for B.A.S.E. nearly materialized then, it felt ahead of its time, and the project was placed on hold until 10 years later when the right opportunity finally presented itself.

Today, it feels in the nick of time, if not overdue. Via an alliance of the foremost North American and Chinese schools of architecture, B.A.S.E. is now a place of education, research, and practice in Beijing. The endeavor is program-and project-driven, as opposed to being generated by any particular curriculum or the market demands of architectural offices, and it intends to break old patterns and habits of education and practice which have, for the most part,
become tired and static. In this way, the project will provide a necessary respite for both its Chinese and international participants.

B.A.S.E. will attempt to undertake work where architecture, urbanization, and related disciplines are altered and affected by emerging conditions new to buildings and those who make them in twenty-first-century Chinese cities. How, for instance, do we reconsider the role of building, city making, and landform in a place like Beijing, where realities such as deforestation due to harvesting for disposable chopsticks have led to the Gobi desert moving a mile per year toward the city? Resulting in a "fifth season" throughout Asia when Gobi sandstorms hit, the reaction has been to plant between three and four million trees in response to a government mandate for "a-forestation" and, as part of this solution, to water the trees using technological rainmaking techniques (i.e., 72 rockets of silver iodide equals two days of rain).

A principle of action for B.A.S.E. is that learning and designing occur simultaneously on several levels: in the intensely focused and personal space of the table, intended to accommodate and provoke cooperation, collaboration, dialogue, and heated words; and in that of the interface, or the living world outside the studio that allows and causes us to confront the often extreme conditions "out there." The architecture of the former factory provides the place from
which such interaction can spring and then return.

The activities of work and daily life at B.A.S.E. are inextricably linked—philosophically, spatially, historically, socially, and programmatically—to the space that houses them, reminding us of the power of architecture. This extraordinary building, located in the Dashanzi area northeast of central Beijing, is a 40,000-square-foot former tooling factory where workers once produced electronics for munitions. Built in the late 1950s with East German and Soviet design and funded by the latter, it now finds itself within the “798” Arts District (recently dubbed the SoHo of Asia by the New York Times) where, since 2002, artists, galleries, and cafés have been taking over the original housing, office, and factory spaces. Curved sawtooth roofs let northern light into a space so fieldlike in its dimensions that it seems more like a landscape than a building.

To prepare the space for B.A.S.E., we have taken the role of gentle caretakers and stealth upgraders. The East German-designed double-paned windows were replaced with high-performance insulating glass. Embedded in a new floor slab is a new soft heating and cooling mechanical system using hot and chilled water, plus hard-wired data and electrical capabilities. Small, thin, and high bedroom spaces called ciphers are tucked into one row of the vaults for guest and student lofts. Under these are war rooms for discussions, screenings, and meetings. The
rest of the space is devoted to the large open lab, visibly unchanged since the late 1950s except for the removal of the floor-mounted machine tools. The space is easily adaptable for events and presentations. Much-needed critical discussion about the urban renewal will be the subtext of B.A.S.E.

Designs engaging the emerging city and its inhabitants and visitors will require conversation among different voices, and new integrated approaches to the development of work. B.A.S.E. is a medium for these endeavors. Its foothold—which will be allowed to slip and slide—is in both the distant past and the most projective futures. While B.A.S.E. currently stands for Beijing Architecture Studio Enterprise, it is intended that it will take on other meanings and nicknames as the life of the place, people, and designers associated with it form, inform, deform, and reform it.

project: B.A.S.E., Beijing, People’s Republic of China client: B.A.S.E. architect: StudioWorks, Los Angeles, CA—Robert Mangurian, Mary-Ann Ray (principal designers), Stefan Scheide (project manager), Tammy Ho engineers: Englekirk & Sabol (structural); ICC (M/E/P) general contractor: FAKE Design and Beijing Urban Construction Group lighting designer: Nikolakopoulos & Associates area: 40,000 square feet cost: $480,000
1 entrance
2 bookstore
3 restaurant
4 performance space
5 work space
The small seaside town of Bexhill-on-Sea lies on England's south coast, facing the Channel and its notoriously inconstant weather. It offers visitors a promenade and a coarse-sand beach, but no bay, port, or fishing industry; its present population of about 40,000 is mainly elderly. As a resort, it must compete with the larger, more established Eastbourne and glamorous Brighton to the west and with the rich history of Hastings and Rye to the east. But Bexhill possesses what none of these have: one of the finest buildings constructed in England between the two world wars, the creation of the unlikely partnership between an English aristocrat and an architect who fled Hitler's Germany.

The family of Herbrand Edward Dundonald Brassey Sackville, the 9th Earl De La Warr (1900-1976), had been ennobled in 1299. He succeeded to the title while still a schoolboy and at 24 he became a member of the House of Lords. In 1932, he also became mayor of Bexhill.
Erich Mendelsohn (1887-1953) was born in Prussia. He studied architecture in Munich, where the Expressionist 'Der Blaue Reiter' artists were active. After service in World War I, he moved to Berlin and received his first commission, the 1921 Einstein Tower in Potsdam, which immediately established his reputation. During that decade his architecture became less wayward: simple rectangular forms were juxtaposed with cylinders frequently containing staircases. He became an international celebrity, traveling widely in Europe, Palestine, Russia, and the United States. In 1933, Mendelsohn left Germany with his family and visited London, where influential architects and others helped him settle and reestablish his architectural practice.

That same year, Earl De La Warr decided that Bexhill needed a public building to house arts, education, and entertainment activities. He sponsored a competition and explicitly recommended a design with "large windows, terraces, and canopies" and "steel-framed or ferro-concrete construction," clearly favoring modern architecture. The competition attracted 230 entries and its advisor, Thomas S. Tait, a champion of the new architecture, chose that of Mendelsohn and his partner, the Russian-born Serge Chermayeff.

Their design was a rigorously functionalist composition: On either side of a broad lobby were a 1,000-seat auditorium, to the west, and, to the east, a two-story wing containing a café on the ground floor and reading and lecture rooms above. Two staircases housed in projecting semi-cylinders provided vertical circulation; the one on the north marked the entrance, the one on the south contained a spiral staircase that provided access to the terraces and roof sundeck. The building's engineer, Felix Samuely, another émigré, designed Britain's first welded-steel frame; cheaper than the bolted alternative, it enabled the pavilion to be built in a remarkable 10 months, opening in 1935.

Although the building's design sharply divided British critics, contemporary photographs show that it was appreciated by the public, who ate or danced in the evening in the restaurant, read in the library, and sunbathed on the lavish terraces. The Earl had succeeded in his wish to provide "that relaxation, that pleasure, that culture, which hitherto the gloom and dreariness of British resorts has driven our fellow-countrymen to seek in foreign lands." His vision, however, only survived until the outbreak of World War II, when the British army requisitioned the pavilion. The building never recovered and, its maintenance and management neglected, gradually fell into disrepair and disuse. In the early 1980s, it was nearly sold to a brewery chain before being rescued by a designation of national landmark status.

In 1989, a charitable trust of concerned individuals was established to undertake the project of preserving and redeveloping the pavilion. The trust's work, with the strategic and technical advice of architects John McAslan + Partners, eventually enabled a successful bid for grants from the National Lottery and other agencies that allowed for the
development of the pavilion as an ambitious new regional center for the performing and visual arts. The architects’ contribution to the building, which reopened last autumn, has been their restraint and tact in not trying to ‘makeover’ the building; much of their work is, happily, invisible.

While the auditorium has been largely restored to its original state, only with new seating, the two-story wing has been replanned and its original scheme inverted. The former ground-floor restaurant is now one of two galleries; the new restaurant and café occupy the former library on the first floor and enjoy uninterrupted sea views. The former lecture hall has been converted into a second gallery.

The building’s fabric has been meticulously restored with admirably high standards of workmanship. The immediate task was to repair the damage to the steel structure caused by leaks, and to waterproof the rooftop sundeck and terraces. The rendered reinforced-concrete cladding, built without expansion joints, and the tiling on external columns needed comprehensive repairs. Most of the original steel window frames had already been replaced. Only those at the north stair landing, protected from the salt-laden wind, survived, and these were dismantled, stripped, repaired, galvanized, reinstalled, and painted. The long horizontal stretches of steel windows on the north and south façades were replaced with new double glazing and set in profiles
that closely match the originals. The restoration’s greatest splendor are the curved windows that enclose the south staircase, which, replaced in the 1970s, have been repaired. The stair’s assured curves and elegant, robust detailing that Mendelsohn brought from Berlin confirm the Earl’s belief that modern architecture could be beautiful, perhaps even popular.

While the descendants of the pavilion’s first clientele now tend to shun the English seaside to seek pleasure in foreign lands, for those who do not, current government arts policy requires that the De La Warr’s curators and management will make their offerings of interest to a broad audience. Their success, and the increasing appeal of cultural tourism, should allow the pavilion to offer serious competition to its coastal neighbors.

THE SOUTH SIDE OF THE BUILDING IS DOMINATED BY MENDELSOHN AND CHERMAEFF'S SPIRAL STAIRCASE TOWER (FACING PAGE). THE PAVILION'S RESTAURANT, ORIGINALLY ON THE GROUND FLOOR, NOW RESIDES ON THE SECOND LEVEL, WHERE A TERRACE IS USED FOR AL Fresco DINING (ABOVE).
1 entrance
2 lobby
3 auditorium
4 gallery
On the pavilion's waterside, the original spiral staircase and its glass disc lighting fixture have been restored (facing page). Terraces (above) and the rooftop sundeck were waterproofed as part of the rehabilitation.
Not Just Another Brick In The Wall.

With Belden Brick you get more than just another brick in your wall. You get unrivaled quality and durability. Belden Brick products are available in a variety of colors, textures, sizes and shapes. All in all ... Belden Brick - more than just another brick in the wall.
HOME OF THE YEAR AWARDS

CALL FOR ENTRIES

DEADLINE JUNE 26, 2006

We are seeking projects from low budget to sky’s-the-limit that embody innovative efforts in the domestic realm. Specific areas of interest include works that promote sustainable practices, investigate prefabrication and modular systems, accommodate diverse lifestyles, exploit modest means, or support public/private initiatives.

CATEGORIES

SINGLE FAMILY • MULTIFAMILY • RENOVATIONS/ADDITIONS
EMERGENCY SHELTER • INDIVIDUAL APARTMENTS/CONDOMINIUMS

JURY

Kevin Alter, Alterstudio, Austin, Texas • Julie Eizenberg, Koning Eizenberg Architecture, Los Angeles • Robert Hull, Miller/Hull Partnership, Seattle, Washington • Rocio Romero, Rocio Romero, Perryville, Missouri • Marc Tsurumaki, Lewis.Tsurumaki.Lewis, New York City

ENTRY FORMS AND GUIDELINES: WWW.ARCHITECTUREMAG.COM
# CALL FOR ENTRIES

**JURY**
- Kevin Alter, Alterstudio, Austin, Texas
- Julie Eizenberg, Koning Eizenberg Architecture, Los Angeles
- Robert Hull, Miller/Hull Partnership, Seattle, Washington
- Rocio Romero, Perryville, Missouri
- Marc Tsurumaki, Lewis, New York City

**DEADLINE** JUNE 26, 2006

## ELIGIBILITY
1. The contest is open to architects and other design professionals practicing in the United States, Canada, or Mexico for projects completed only in those countries. Entries must be at least 18 years old.
2. There is no limit to the number of projects that any firm or individual may enter. However, any project that has previously appeared in a national design (consumer or trade) publication is NOT eligible and will be disqualified if submitted.
3. Employees of VNU Business Publications are not eligible.
4. Architects and designers must certify that any work they submit is their own creation and no one else has any rights in or to the work. They must also obtain their client's permission to enter the contest.

## WINNING ENTRIES
1. An independent panel of judges will select projects, at their sole discretion.

## CATEGORIES
- Single Family
- Multifamily
- Renovations/Additions
- Emergency Shelter
- Individual Apartments/Condominiums

## SEND ENTRIES TO:
Home of the Year Architecture
770 Broadway, 4th Floor
New York, NY 10003

Judging will take place in July 2006. Winning entrants will be notified in August 2006 and their projects published in the November 2006 issue of Architecture. Winning projects may subsequently travel as a curated exhibition.

## SUBMISSION REQUIREMENTS
1. All projects must have been completed after July 2004.
2. All entries must include clear, comprehensive images of both the interior and exterior of the house (no more than 24 photographic images) and presentation-quality plans and sections. Drawings must also include a north arrow, legend, and scale.
3. All entries must include at least one photographic image documenting the project's physical context.
4. All entry material must be firmly bound in binders no larger than 9 inches by 12 inches. (Entrant must supply binder; please avoid fragile or sharp materials.) Slides should be submitted only as supplementary material. Videocassettes, CD-ROMs, models, and any unbound material will not be considered by the Jury.
5. Project Facts Page. To ensure clarity, the first page of each entry must list project facts under the following headings: Location/Context, Site Characteristics, Zoning Constraints, Client/Program, Construction Systems, Sustainable Features (if any), Schedule, and Cost per Square Foot. This information must include square footage, overall cost, and specific construction materials and systems. All project facts should fit on one page.
6. Each submission must be accompanied by a signed entry form and a check for the entry fee ($150 for the first entry, $125 for each additional entry). Reproductions of the form are acceptable. Complete the entire form and put it with the check in an unsealed envelope attached to the binder's back cover.
7. Each submission on its entry form as ONE of the following categories (mandatory):
   - SF single family
   - MF multifamily
   - RA renovations and additions
   - AC individual apartments and condominiums
   - ES emergency shelter

## ENTRY FEES
1. An entry fee must accompany each submission. The fee for the first entry is $150; subsequent entries are $125 each. OPTIONAL: Late entries must be postmarked by June 30, 2006, for an extra fee of $50 per entry.

## RETURN OF ENTRIES
22. Architecture reserves the right to return entries ONLY if they are accompanied by a self-addressed Priority Mail or courier envelope. Architecture assumes no liability for loss or damage to any entry.

## ENTRY DEADLINE
23. All entries must be postmarked on or before June 26, 2006, or by June 30, 2006, if accompanied by a late fee (see rule 19).

## ENTRY SIGNATURE
24. I certify that the parties credited executed the submitted project and that it meets all eligibility requirements. I understand that Architecture may disqualify any entry that fails to meet submission requirements. I grant Architecture magazine sole first publication rights to the project. (Signer must be authorized to represent those credited.)

## Entry Form

<table>
<thead>
<tr>
<th>Entrant</th>
<th>Client Name</th>
<th>Client Phone Number</th>
<th>Address</th>
<th>Phone Number</th>
<th>Fax Number</th>
<th>E-Mail Address</th>
<th>Project Location</th>
<th>Entry Category (Initials Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Fee: $150 (first entry) $ __

$125 (each subsequent entry) $ __

Late fee ($50 per entry) $ __

Total $ __

(Make check payable to Architecture)

I certify that the parties credited executed the submitted project and that it meets all eligibility requirements. I understand that Architecture may disqualify any entry that fails to meet submission requirements. I grant Architecture magazine sole first publication rights to the project. (Signer must be authorized to represent those credited.)
Designing for a Sustainable Future...

AAL's Indirect product line added a sibling, the 'Straight Fixed Head'. The Dark-Sky Friendly luminaire produces soft, glare-free illumination making it a perfect match for applications where mood is just as important as illumination. The 'Straight Fixed Head' model is available for post and wall mount configurations and can be styled with a round or square upper reflector to compliment architectural details. The Indirect product family utilizes energy efficient lamp sources up to 150 watts and Egress (emergency) options may be added for enhancing public safety.

For product information, log onto: www.aal.net/indirect_sfh.html

Circle 52 or www.architecturemag.com/productinfo

Architectural Area Lighting
EDUCATION

DESIGNING FOR THE DISADVANTAGED.

BY THOMAS FISHER

One of the great missed opportunities we have as architects lies in serving the needs of the billions of ill-housed people around the globe, who require our design skills and who have no direct way of paying for them. That may seem like a noble, but unreachable goal in a profession not structured to meet such needs, but a large and growing number of architects, academics, and activists are taking this challenge seriously, engaging in a range of humble and very hard-headed projects.

A few of the academics leading this movement include Wes Janz at Ball State University, Tom Dutton at Miami University, Dan Pitera at Detroit Mercy, and Victoria Beach at Harvard University. In addition, some recent projects my colleagues and I have initiated at the University of Minnesota show the potential of this way of working.

Adjunct faculty member John Dwyer, of Shelter Architecture in Minneapolis, recognized that global slum-dwellers most need access to electricity, clean water, and toilet and bathing facilities, so he designed the "Clean Hub," a 10-by-20-foot unit with a V-shaped metal roof that collects rainwater and features up to 16 adjustable photovoltaic panels capable of generating up to 2,640 watts of electricity, a reverse-osmosis water cleaning system that operates in a below-ground reservoir, showers and sinks whose gray water is recycled back into the reservoir, and waterless self-composting toilets. He is currently working with McGough Construction to build prototypes that will later also serve as green construction trailers. After seeing an article about this project in the Utne Reader, the World Bank offered financing. "The organization spends $15 billion a year on slum upgrades," says Dwyer, "and for only $1 billion, we could build and deliver enough Clean Hubs to meet the United Nations' Millennium Goal of improving 100 million slum-dwellers' lives by 2020."

Cass Gilbert visiting professor and executive director of Architecture for Humanity, Cameron Sinclair, gave students 48 hours to design a laundry building for Kathy Everad and her granddaughter, who live in a FEMA trailer in Waveland, Mississippi. David Vilkama and Mark Lescher (as second-year graduate students) produced the winning scheme and, along with a group of New York City firefighters, built the structure for Everad. "She was crying through the whole construction," says Sinclair, "a lot of people down there expressed interest in living in this structure because of the poor conditions," adds Lescher. Sinclair also had students design a pier for a village in India separated from its school after the tsunami rerouted a river, and he gave students "a small peek at what it is like to be without a home—how difficult it is to live when it is a matter of survival," by having them find or buy materials for under $20, erect a structure on campus, and spend the night.

We don't have to go to India to do this work, however; there's plenty in our own backyards. Last semester, I taught a course with Virajita Singh, an adjunct faculty member and research fellow at the university's Center of Sustainable Building Research, that looked at homelessness in the Twin Cities. Our students spent a day as people without lodgings (a for-profit experimental opportunity offered by a local men's shelter), designed props such as a live-in rickshaw and camouflage storage bags for people living on the streets, invited homeless men to their reviews, redesigned a city shelter, and envisioned a daytime drop-in center for the group Homeless Against Homelessness. Students in a simultaneous seminar researched what other cities have done, interviewed architects working on homeless issues, and gathered information on built projects. Meanwhile, our teaching assistant, Rebecca Celis, completed a CONTINUED ON 112...
FROM KAOLIN TO KEVLAR

BY JOHN E. FERNANDEZ

The engineer and architect must go back to basic principles, must keep abreast with and consult the scientist for new knowledge, redevelop judgment of the behavior of structures, and acquire a new sense of form derived from design—rather than piece together parts of convenient fabrication. LOUIS KAHN, 1944

The invention of architectural form fuses the flux of immaterial thought with the promise of physical things. Spanning the gulf between design intentions and effective artifacts is a supremely human endeavor. Today, as Kahn suggested, it may be limited to the banal process of "piecing together parts of conventional fabrication." On the other hand, it can be an extraordinarily creative act that takes us back to the foundations of our species.

Amid the flurry of new materials and products introduced during this past century, returning to basic principles requires more than the simple desire to do so. It requires an intellectual strategy and sophisticated tools that facilitate assessment and selection. During the past several decades, in addition to the standardization and improvement of numerous variants of traditional materials such as brick and timber, or concrete and steel, an extraordinary array of nontraditional materials has been introduced. The increasingly immense and unfamiliar list of new resources now available to every kind of designer and engineer is seemingly endless in size and

CONTINUED ON 112

THE PRESERVATION ACT

TURNS 40. BY MAX PAGE

You would miss it if you blinked. But with a decent map and a keen eye you will find, hidden behind some bushes on Route 23 in Great Barrington, Massachusetts, a brass plaque bearing the uninformative declaration that "this property has been placed on the National Register of Historic Places by the Department of the Interior." It marks the home site of William Edward Burghardt (more commonly W.E.B.) Du Bois, one of America’s most important intellectuals and civil rights leaders, author of Black Reconstruction in America and The Souls of Black Folk, and cofounder of the NAACP.

I say home site because the house that Du Bois lived in as a boy, which his friends repurchased for him for his 60th birthday, is gone. Fragments of the chimney and a few foundation stones are the only visible remains of the homestead, once part of a 250-year-old African American community in the Berkshire Mountains. There is no visitors' center, no interpretive signage, and no ready stream of funding for anything that would let the thousands of tourists to the area learn about Du Bois and his deep roots in the region.

The site is emblematic of the great achievements, and the great failings, of the 1966 National Historic Preservation Act. That 40-year-old Act, famously coming in the wake of the destruction of Pennsylvania Station, brought the federal government fully into the business of historic preservation after a century of scattered efforts. Like the National Labor Relations Act of 1935 was for labor unions, the 1966 legislation was a bill of rights for preservation. It created the National Register for Historic Places, as well as the State Historic Preservation Officers, whose job it became to cull the most significant places from local commissions and advocate on behalf of historic sites in all 50 states. It served as the starting point for state and local laws designed to protect historic places. Virtually every preservation policy and project today depends in some way on the 1966 Act: To designate a building as historic, to protect it from demolition, and to seek funding for its restoration usually requires the validation of importance that comes with a National Register designation. For two generations, those fighting to preserve significant buildings and landscapes have depended on this Act. They have also struggled with it. Although anniversaries are cause for celebration—they should be a time for honest critique as well.

The National Historic Preservation Act is a weak tool for preservation. The law does not in and of itself guarantee, or even impede
BUILDING CULTURE

EDUCATION CONTINUED FROM 110

thesis on the redesign of homeless service systems, showing how new kinds of hybrid buildings, which are not currently allowed by code, could go a long way toward housing a diverse population of those without homes. All of this work is being published as a book for use by a commission in Minneapolis charged with ending homelessness in 10 years.

Those interested in this movement might begin their journey with books such as Architecture for Humanity's Design Like You Give a Damn, Bryan Bell's Good Deeds, Good Design, and Sergio Palleroni and Cristina Merkelbach's Studio at Large, in addition to checking out organizations like Public Architecture, directed by Minnesota graduate John Cary. He has created a way for professionals to do pro bono work with its One Percent Solution program, directing "one percent of all architects' working hours to matters of public interest" and enabling firms to serve the needs of nonprofit agencies in the normal course of practice. Efforts such as Cary's, Sinclair's, and Dwyer's are often deemed idealistic or impractical, but they are just the opposite: They solve real problems, practically. The truly idealistic and impractical course is continuing to ignore what most of the world requires from us.

MATERIALS CONTINUED FROM 111

complexity. In particular, the twentieth century witnessed the introduction of an entirely new class of materials (synthetic polymers and elastomers) and the rapid development and industrial application of many metallic alloys, especially the light metals (aluminum, titanium, magnesium). We now have access to tougher glass coated in thin, high-performance films of metal and organic materials; highly compacted and performing concretes; engineered woods; and many others. Today, fiber-reinforced composites of carbon and glass particles are applied to civil and building projects such as pedestrian bridges, vehicular overpasses, industrial buildings, and other constructions.

All of these innovations have compounded an accelerating change in the nature of the industrial material world. Some of the offerings are generally unfamiliar to architects and not part of common construction experience. They have, however, augmented the diversity of choice that can catalyze inventive design. As this list grows longer and more intricate every year, how does a designer make informed choices? How do we even commence a discourse of an altered material world, whether it is in the service of novel building form, sustainable design, or simply durable, cost-effective, and risk-free construction?

It is understandable that the explosion of new materials has compelled designers to resort to the imprecise language of "materiality"—a word loosely associated with the essence of a substance. The intellectual energy consumed in such discourse has been substantial, while the utility of such a term remains quite limited. And yet, the rewards of understanding the science underlying material behavior have been proven time and again. Small kernels of basic knowledge, such as the distinction between intrinsic and extrinsic properties or the fundamental characteristics of ceramics versus metals, yield enormous return for the effort taken by a designer to broaden his perspective.

And clearly, designers of every stripe have shown a growing interest in learning more about new materials. Provocative exhibitions and architectural projects of the last several years keep the promise of new materials at the forefront of the search for new architecture. The absence in the discipline of architecture of methods of material assessment, however, prompts the question of how such an interested designer progresses from knowledge of a traditional material such as kaolin—the primary clay constituent of earthen materials also known as loam and used in fired clays such as brick—to all of the relatively new materials, through Kevlar and beyond. At the very least, loam is a material with which personal, hands-on experience is possible, given enough time and dedication. One can join a construction crew building with adobe or rammed earth, for example. But how does one acquire comparable experience with polyvinyl butyrate, metal-polymer composites, and other nontraditional materials?

Grappling with notions of materiality may be related to this deficit of direct experience—a kind of best attempt to make sense of unfamiliar properties that belie traditional knowledge. But how can architects take control of materials? And does real invention have a chance of flourishing amid this flurry of frenetic choice and market-driven product development? The answers to these questions are relevant both to the practice and the education of architects. The next three articles in this series explores these and other key questions of our altered material world.

A version of this article appeared previously in the Journal of Architectural Education.
where high-performance hardware meets beautiful design

PRESENTING

Studio collection

High-performance hardware.
Distinctive, superior quality levers.
Conveniently from one source.

SARGENT's sophisticated new Studio Collection levers make specification easy. Now you can choose from a wide selection of designer levers and hardware that were meant to go together - from mortise and tubular locks, to access control locks, exit devices and master key systems.

Explore your options at
studiocollection.com

With just a few clicks, select a lever, door hardware, rose or escutcheon, and finish. You can even try it on a choice of doors and request a sample lever. Once again, we've raised the bar of excellence.

Contact your ASSA ABLOY
Door Security Solutions
Sales Representative
or visit studiocollection.com

An ASSA ABLOY Group company
BUILDING CULTURE

PUBLIC POLICY CONTINUED FROM 111

the demolition of buildings listed on the National Register. It does not fund the protection of the historic resources listed on the Register nor does it require or provide for the interpretation of those sites to the general public. The plaque is often all we get.

The National Register is too big—pushing close to 100,000 items—and is overly focused on the architectural heritage of the eighteenth and nineteenth centuries, and lacking in places of significant events, especially those related to workers and minorities. In large measure, this is because the Register enshrines only historic places that have significant architectural "integrity"—that is, where a substantial amount of the "original" physical building or structure remains. (The Du Bois homesite is a notable exception).

The Register is a passive list—waiting for nominations from states and localities, with their slow-changing tastes—and has been dragged kicking and screaming into the twentieth century. No doubt many of the masterworks of the last 100 years, not to mention representative examples of residential and commercial architecture, will be long gone before appreciation of modern design makes its way to local historical commissions. The New York City Landmarks Preservation Commission's unwillingness to even hold a hearing about Edward Durrell Stone's 2 Columbus Circle is a sign of the long road ahead.

The Act, however, has literally only left its meager brass mark on the Du Bois legacy, yet it has proved to be an important catalyst for action by dedicated community historians, academics, and activists who have researched the site and struggled to tell its story over the past generation.

Now their work is finally bearing fruit. The Friends of the W.E.B. Du Bois Boyhood Homesite, in cooperation with its owner, the University of Massachusetts, is taking action to make the spot accessible and help it reveal how rural New England shaped Du Bois's majestic vision for our world. Perhaps at another anniversary—in 2009, the centennial of the founding of the NAACP—visitors won't have to drive at a snail's pace along Route 23 to find an important reference to one of our national heroes.

In an era where it seems everything must turn a profit if it deserves our attention, the ringing words of the introduction to the 1966 Act remain inspiring: "The Congress finds and declares that the preservation of this irreplaceable heritage is in the public interest." Some places, the act declares, simply don't belong on the open market. They have a value beyond money, an idea more radical today than it was in 1966. ☺
Power made easy.

Easy to choose. Easy to use. Easy on your budget.

Introducing the Eclipse Powered System™ by Spacesaver. A unique new concept in powered high-density mobile storage. With the flexibility to do just what you want it to. Without loading you down with features you don’t really need.

Eclipse is easy to configure. Easy to afford.

Exceptionally safe. Remarkably reliable.

And simple to use. Eclipse. Easy does it.

www.spacesaver.com  (800) 492-3434

Circle 12 or www.architecturemag.com/productinfo
architectural CHARTS A NEW DIRECTION IN PRINT AND ON THE WEB ...
It is true. It will make a permanent change in the way you design.

**SlenderWall** is independently tested for...
- Hurricane level winds, Tornadoes and Earthquakes
- Test data available upon request

**SlenderWall system is designed to...**
- Provide permanent, light-weight, architectural precast concrete cladding
- Reduce shipping, installation and building foundation costs
- Make cantilever design practical
- Facilitate recladding of existing structures
- Isolate exterior precast skin from wind loading, expansion/contraction and steel/concrete structural movement
- Provide the lowest thermal transfer in Precast Industry
- Provide additional interior floor space on all floors

Call today for literature and design manual

**EASI-SET® INDUSTRIES**
“New Dimensions in Concrete”
Midland, Va 22728 • 1-800-547-4045
www.easiset.com • info@easiset.com

**SLENDERWALL®**
Architectural Precast Concrete/Steel Stud Building Panels

**ENDERWALL**® is available worldwide from the finest architectural precasters through Easi-Set Industries, licensor of precast concrete products worldwide.

Easi-Set Industries is a wholly owned subsidiary of Smith-Midland Corporation, publicly traded as SMID.
LETTERS

POLITICALLY INCORRECT

I am deeply disappointed in Richard Rogers’s knuckling under to political pressure to cling to the Javits Convention Center commission. While your news story [April 2006, page 19] presents Rogers in the best light—unaware of the meeting he had hosted and delayed by serious health risks—the story told elsewhere was less flattering: Initially supportive of Architects and Planners for Justice in Palestine, Rogers vocally dissociated himself from the group at the behest of state funders of the Javits project. His saga leads to the realization that even a highly successful and incredibly talented architect can be easily cowed, and demonstrates the power of political intolerance over publicly awarded architectural commissions. What comes next, publishing a blacklist of architects who support Palestinian human rights?

RAHMAEL SPERRY  SAN FRANCISCO, CALIFORNIA
President, Architects/Designers/Planners for Social Responsibility

ON DRAWING

Juhani Pallasmaa’s words [March 2006, page 28] about the thought process of architecture are like a set of guidelines all of us should consider, especially in an age where one can get lost in cyberspace rather than allowing the human sense of self to express space. Perhaps it is still okay to encourage young designers to imagine with whatever media resonate with them.

MARYAM ESKANDARI  PHOENIX, ARIZONA

CHARACTER BUILDING

I have been subscribing to Architecture for ever so many years, though I am not an architect, but an ancient country lawyer. Today, I sneaked a peek between clients, as is my habit with the magazine. What a wonderful surprise to see Brian Healy’s design for our small-town cultural center [April 2006, page 35]. This national competition has caused a marvelous uproar, enraging our local architects—who are beginning to see their potential for a heightened role in the community—and breaking the established norm of everything looking like a southern mansion house, while our mountains beg for something authentic. Healy has discerned in the character of the locals the fundamental stoicism ingrained in us after centuries of isolation. How a boy from Boston did it, I don’t know. I deeply appreciate you recognizing something special going on in our wonderful small-town world.

KENNETH YOUNGBLOOD  HENDERSONVILLE, NORTH CAROLINA

PLEASE SEND YOUR LETTERS TO KATIE GERFEN, ASSOCIATE EDITOR, ARCHITECTURE, 770 BROADWAY, NEW YORK, NY 10003. OR, E-MAIL US AT KGERFEN@ARCHITECTUREMAG.COM. LETTERS MAY BE EDITED FOR CLARITY AND LENGTH.
innovation
design
technology
diversity
PRODUCT REVIEW

BIOFIT BUILD YOUR OWN CHAIR CONFIGURATOR
BioFit® Engineered Products introduces its Build Your Own Chair Configurator for designing a chair to your specifications. Go to www.biofit.com to assemble your chair and get a price quote within one working day. BioFit’s modular construction and selection of options make it easy to provide chairs for exact needs. The configurator covers all models in BioFit’s quick-ship program. For information, call 1-800-597-0246 or email biofit@biofit.com.

FAAC INTERNATIONAL, INC.
Perfect for Gated Communities
FAAC is the world’s largest specialized manufacturer of operators for swing, slide and barrier gate systems. The Model 400 heavy-duty hydraulic swing operator is designed for heavy traffic situations, such as subdivisions and apartments. It’s small size and power also make it ideal for large, ornate gates. Visit www.faacusa.com for more information.

HORIZON LITE-TOUCH™ 2 CERAMIC ELECTRIC COOK TOP
Experience culinary brilliance on the Horizon Lite-Touch™ 2 ceramic electric cook top from Kenyon Custom. World-first infrared Lite-Touch™ control technology is unaffected by moisture or humidity. Full safety features include safety lock-out, auto shut-off, audible fault alarms, ADA compliant.

Kenyon International, established 1931, manufactures ceramic cook tops in 1, 2, 3, 4, and 5 burners for the home, hospitality, institutional, military, academic, marine, and mobile markets. Proudly manufacturing in the USA, we invite you to contact Kenyon Custom via your preferred method for further information and product specifications.

NATIONAL GYPSUM
National Gypsum’s family of XP products provides increased mold and mildew resistance. The family includes: XP Wallboard, Shafﬁliner XP, Hi-Abuse XP Wallboard, Hi-Impact XP Wallboard and ProForm XP Ready Mix. XP products score a 10 rating per ASTM standard D 3273, the best possible score for this test.

GAGECAST®
Gage Corporation, Intl.
800-786-4243
Gagecast® is a cast metal wall surfacing material suitable for a variety of interior architectural applications where patterns that feature high luster, relief, durability, and cost effective installation are a requirement. Twenty-eight designs are standard, however, custom collaboration is encouraged. Gagecast® is one component of Gage Vertical Surfacing. Contact the factory for product literature and selected samples. 800-786-4243 www.gageverticalsurfacing.com

To advertise, contact Fatima Ruiz: T 646 654 5763 F 646 654 7108 E FRUIZ@VNUBUSPUBS.COM.
MANUFACTURERS FROM SPAIN PRESENT TEXTURE
Spanish tile manufacturers are offering more textured surfaces than ever this year. Adding texture to solid colored tiles keeps the look fresh and updated. Strategically placed textured tiles can cast shadows across a wall adding depth and interest to a design.

For more about tile produced in Spain, contact Tile of Spain Center at the Trade Commission of Spain, 2655 Le Jeune Road, Suite 1114, Coral Gables, FL 33134. Call 305-446-4387 or visit www.spaintiles.info. CIRCLE 111

RENNER Germany
An external roof drainage systems that exceeds in term of its Unique; top-quality material a guttering system that stands out with regards of function excellence and exquisite quality. Give your roof the crowning glory it deserves. For more details, please contact: American Master Gutters, Inc., 3836 N. Kimball Avenue Chicago, IL 60618 Phone: 773.463.6390 Fax: 773.463.6453 CIRCLE 108

NEED TO IDENTIFY AN OLDER STEEL JOIST?
Design professionals trying to identify older steel joists found in the field can get help online from the Steel Joist Institute. Visit www.steeljoist.org and look for the Joist Investigation Form in the What’s New section. Submit the known information, and SJI will search their files to try to find the proper match and information. CIRCLE 109

ASTRA-GLAZE-SW+ ... IT’S NOT JUST ANOTHER PRETTY FACE.
Astra-Glaze-SW® glazed concrete masonry units combine the beauty of glazed masonry units with the structural integrity and durability of concrete masonry. Mold and moisture resistant, Astra-Glaze-SW+ is USDA-approved for sanitary environments. Its impervious surface is perfect for foodservice areas, restrooms, surgical clean rooms or swimming pools. Recycled and sound-absorbing options available. Phone: 800-233-1924 Website: www.trenwyth.com CIRCLE 112

PETERSEN ALUMINUM CORPORATION
Petersen Aluminum Corporation produces a complete line of metal roofing products. Their new 2006 catalog includes several new products: the Prestige and ZT lines of copper and zinc-titanium clad roofing tiles, Column Covers and Composite Panels. Their Cool Colors Palette meets cool roof certification requirements. PAC-CLAD®, a full Kynar 500®/Hylar 5000® paint system, with a 20 year non-prorated warranty, is available in 36 colors. Visit us at http://www.pac-clad.com or call 1-800-PAC-CLAD. CIRCLE 107

2THOUSAND DEGREES™ Presenting the EMBARCADERO COLLECTION from 2thousand degrees™
Six new table lamps and 3 new large fabric pendants comprise the line. All feature refined electric components and attention to design detail. Like Madison (shown), all pendants are tailored with designer fabric, utilize a glass diffuser, are available in up to three colors, and feature incandescent or energy-efficient compact fluorescent lamping. www.2thousanddegrees.com or call 800.522.5315. CIRCLE 110

RENNER Germany
An external roof drainage systems that excels in term of its Unique; top-quality material a guttering system that stands out with regards of function excellence and exquisite quality. Give your roof the crowning glory it deserves. For more details, please contact: American Master Gutters, Inc., 3836 N. Kimball Avenue Chicago, IL 60618 Phone: 773.463.6390 Fax: 773.463.6453 CIRCLE 108

NEED TO IDENTIFY AN OLDER STEEL JOIST?
Design professionals trying to identify older steel joists found in the field can get help online from the Steel Joist Institute. Visit www.steeljoist.org and look for the Joist Investigation Form in the What’s New section. Submit the known information, and SJI will search their files to try to find the proper match and information. CIRCLE 109

ASTRA-GLAZE-SW+ ... IT’S NOT JUST ANOTHER PRETTY FACE.
Astra-Glaze-SW® glazed concrete masonry units combine the beauty of glazed masonry units with the structural integrity and durability of concrete masonry. Mold and moisture resistant, Astra-Glaze-SW+ is USDA-approved for sanitary environments. Its impervious surface is perfect for foodservice areas, restrooms, surgical clean rooms or swimming pools. Recycled and sound-absorbing options available. Phone: 800-233-1924 Website: www.trenwyth.com CIRCLE 112

PETERSEN ALUMINUM CORPORATION
Petersen Aluminum Corporation produces a complete line of metal roofing products. Their new 2006 catalog includes several new products: the Prestige and ZT lines of copper and zinc-titanium clad roofing tiles, Column Covers and Composite Panels. Their Cool Colors Palette meets cool roof certification requirements. PAC-CLAD®, a full Kynar 500®/Hylar 5000® paint system, with a 20 year non-prorated warranty, is available in 36 colors. Visit us at http://www.pac-clad.com or call 1-800-PAC-CLAD. CIRCLE 107

2THOUSAND DEGREES™ Presenting the EMBARCADERO COLLECTION from 2thousand degrees™
Six new table lamps and 3 new large fabric pendants comprise the line. All feature refined electric components and attention to design detail. Like Madison (shown), all pendants are tailored with designer fabric, utilize a glass diffuser, are available in up to three colors, and feature incandescent or energy-efficient compact fluorescent lamping. www.2thousanddegrees.com or call 800.522.5315. CIRCLE 110
WALKER DISPLAY
Life's all about change and so are we when it comes to art presentation. The Walker system frees you to explore all your options. No-More-Holes frees you to rearrange your artwork with ease and speed. Embrace change!
Walker Display
www.walkerdisplay.com
800.234.7614
CIRCLE 113

TWO NEW TRADITIONS FROM WEATHER SHIELD
Set a new benchmark in tradition with the new Weather Shield® casement window. A new optional putty glazed grille profile provides a traditional hand-glazed look to the SDL bars. The new colonial sash profile adds authentic ogee detailing to the sash and SDL bars. And an exclusive new standard nested crank handle boasts a sleek low-profile design in seven popular hardware finishes. For more information, visit www.weathershield.com or call 1-800-477-6808.
CIRCLE 114

CAREER OPPORTUNITY
JR Walters Resources, Inc. specializing in the placement of technical professionals in the A&E field. Openings nationwide. Address: P.O. Box 617, St. Joseph, MI 49085-0617 phone: 269-925-3940 fax: 269-925-0448 e-mail: jrwawa@jrwal ters.com www.jrwalters.com.

CAREER OPPORTUNITY

CAREER OPPORTUNITY
Architectural Project Designer for NY, resp. for rsrch, analysis & dvlpmnt of exterior wall system. Knwldg of comp dsng s/ware such as Rhino, 3D Max, Autocad 3D to develop proj ect dsngs & 3D models. Reqts: Master's in Arch & 3 yrs exp in job offered or rlt position. Resume to: Tim Milam, FXFOWL E Architects @ 22 West 19 St., NY, NY10011, Attn: 342.

VISIT A|L'S NEW EXPANDED ONLINE LIGHTING PRODUCTS RESOURCE

THE NEW SECTION FEATURES:
More than 150 product listings with photos
12 Luminaire Categories
Improved Search Capabilities
Direct Links to Manufacturer Websites
Weekly Updates
NO REGISTRATION REQUIRED

GO TO
WWW.ARCHLIGHTING.COM/PRODUCTS
## AD INDEX

<table>
<thead>
<tr>
<th>RS #</th>
<th>ADVERTISER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Alcan Composites</td>
<td>37</td>
</tr>
<tr>
<td>241</td>
<td>ARCAT</td>
<td>127</td>
</tr>
<tr>
<td>52</td>
<td>Architectural Area Lighting</td>
<td>109</td>
</tr>
<tr>
<td>1</td>
<td>Armstrong World Industries</td>
<td>C2-1</td>
</tr>
<tr>
<td>26</td>
<td>Belden Brick (Regional)</td>
<td>106</td>
</tr>
<tr>
<td>249</td>
<td>Bendheim Wall Systems</td>
<td>46</td>
</tr>
<tr>
<td>101</td>
<td>Biofoa Engineered Products</td>
<td>121</td>
</tr>
<tr>
<td>245</td>
<td>Cambridge Architectural</td>
<td>60</td>
</tr>
<tr>
<td>235</td>
<td>Cascade Coil Drapery</td>
<td>44-1</td>
</tr>
<tr>
<td>238</td>
<td>Centria</td>
<td>55</td>
</tr>
<tr>
<td>82</td>
<td>CeraSue 2006 (Ediger SPA)</td>
<td>119</td>
</tr>
<tr>
<td>232</td>
<td>Cornell Iron Works</td>
<td>41</td>
</tr>
<tr>
<td>199</td>
<td>Delray Lighting</td>
<td>45</td>
</tr>
<tr>
<td>57</td>
<td>Dietrich Industries</td>
<td>4-5</td>
</tr>
<tr>
<td>51</td>
<td>DuPont Corian</td>
<td>17</td>
</tr>
<tr>
<td>218</td>
<td>DuPont TYVEK</td>
<td>59</td>
</tr>
<tr>
<td>97</td>
<td>EFCO</td>
<td>13</td>
</tr>
<tr>
<td>102</td>
<td>Eldorado Stone</td>
<td>121</td>
</tr>
<tr>
<td>6</td>
<td>EMMA (Expanded Metal Manufacturers Assoc.)</td>
<td>48</td>
</tr>
<tr>
<td>45</td>
<td>Epic Metals</td>
<td>125</td>
</tr>
<tr>
<td>73</td>
<td>Eurotex</td>
<td>32</td>
</tr>
<tr>
<td>103</td>
<td>FAAC International Inc.</td>
<td>121</td>
</tr>
<tr>
<td>104</td>
<td>Gage Corporation</td>
<td>121</td>
</tr>
<tr>
<td>67</td>
<td>Haddonstone USA Ltd</td>
<td>6</td>
</tr>
<tr>
<td>71</td>
<td>Hanover Architectural Products</td>
<td>15</td>
</tr>
<tr>
<td>225</td>
<td>HFD Railing Systems</td>
<td>16</td>
</tr>
<tr>
<td>80</td>
<td>Herman Miller</td>
<td>38-39</td>
</tr>
<tr>
<td>5</td>
<td>Hewlett Packard</td>
<td>21</td>
</tr>
<tr>
<td>165</td>
<td>High Concrete Group</td>
<td>11</td>
</tr>
<tr>
<td>54</td>
<td>Invisible Structures</td>
<td>124</td>
</tr>
<tr>
<td>2</td>
<td>Jakob</td>
<td>124</td>
</tr>
<tr>
<td>18</td>
<td>Kawneer</td>
<td>31</td>
</tr>
<tr>
<td>105</td>
<td>Kenyon International</td>
<td>121</td>
</tr>
<tr>
<td>194</td>
<td>Lehigh Cement</td>
<td>19</td>
</tr>
<tr>
<td>56</td>
<td>Lightnol</td>
<td>25</td>
</tr>
<tr>
<td>17</td>
<td>Loewen</td>
<td>118</td>
</tr>
<tr>
<td>248</td>
<td>McNichols</td>
<td>114</td>
</tr>
<tr>
<td>167</td>
<td>Megahne</td>
<td>47</td>
</tr>
<tr>
<td>154</td>
<td>Mohawk</td>
<td>7</td>
</tr>
<tr>
<td>44</td>
<td>Muscon Rubber</td>
<td>118</td>
</tr>
<tr>
<td>27, 106</td>
<td>National Gypsum</td>
<td>12, 121</td>
</tr>
<tr>
<td>59</td>
<td>NCARB</td>
<td>112</td>
</tr>
<tr>
<td>8</td>
<td>Niles Expanded Metals</td>
<td>48</td>
</tr>
<tr>
<td>267</td>
<td>Original Cast Lighting (OCL)</td>
<td>18</td>
</tr>
<tr>
<td>220, 107</td>
<td>Petersen Aluminum Corp.</td>
<td>43, 122</td>
</tr>
<tr>
<td>4</td>
<td>PGT Industries (Regional)</td>
<td>58</td>
</tr>
<tr>
<td>187</td>
<td>Pilkington</td>
<td>20</td>
</tr>
<tr>
<td>206</td>
<td>Pine Hall Brick Co., Inc.</td>
<td>116</td>
</tr>
<tr>
<td>226</td>
<td>Polynors</td>
<td>42</td>
</tr>
<tr>
<td>193, 72</td>
<td>PPG Industries</td>
<td>2-3, 61</td>
</tr>
<tr>
<td>182</td>
<td>Prudential Lighting</td>
<td>35</td>
</tr>
<tr>
<td>108</td>
<td>Renner Germany</td>
<td>122</td>
</tr>
<tr>
<td>176</td>
<td>Sargent</td>
<td>113</td>
</tr>
<tr>
<td>24, 198</td>
<td>Schott</td>
<td>29, 49</td>
</tr>
<tr>
<td>170</td>
<td>Smith Midland</td>
<td>117</td>
</tr>
<tr>
<td>12</td>
<td>Spacesaver</td>
<td>115</td>
</tr>
<tr>
<td>109</td>
<td>Steel Joist Institute</td>
<td>122</td>
</tr>
<tr>
<td>110</td>
<td>2Thousand Degrees</td>
<td>122</td>
</tr>
<tr>
<td>195</td>
<td>Sargent</td>
<td>57</td>
</tr>
<tr>
<td>40, 111</td>
<td>Tile of Spain</td>
<td>120,122</td>
</tr>
<tr>
<td>112</td>
<td>Trenayh Industries</td>
<td>122</td>
</tr>
<tr>
<td>16</td>
<td>Vircon</td>
<td>10</td>
</tr>
<tr>
<td>43</td>
<td>Visa</td>
<td>33</td>
</tr>
<tr>
<td>28</td>
<td>VIstawall</td>
<td>53</td>
</tr>
<tr>
<td>113</td>
<td>Walker Display</td>
<td>123</td>
</tr>
<tr>
<td>114, 250</td>
<td>Weather Shield</td>
<td>123, Back Cover</td>
</tr>
</tbody>
</table>

This index to advertiser page location is published for reader convenience. Every effort is made to list page numbers correctly. This listing is not part of the advertising contract, and the publisher is not liable for errors or omissions.

---

**Stainless steel wire rope products and connectors for an unlimited range of applications.**

If you can imagine it, Jakob can help you create it! Contact us: (561) 330-6502 or toll free: 1-866-525-6226 www.jakob-usa.com

**Contains, Retains and Drains**

Gravelpave² porous pavement, can enhance your site design. Gravelpave² contains the gravel to prevent rutting, washingboard, and gravel migration. Gravelpave² retains a natural look and can enhance the beauty of your site. Gravelpave² drains the water for a true porous surface to add stormwater and environmental benefits.

800-233-1510 • invisiblestructures.com

Circle 54 or www.architecturimag.com/productinfo

---

**Volume 95 Number 6**

WIDECK®
Creating First Impressions

Wideck Roof and Floor Deck Ceiling Systems offer flexibility in application, acoustic control, and clear spans up to 55’—inspiring creativity through performance.

EPIC METALS CORPORATION
www.epicmetals.com
PHONE: 877-696-3742 (toll-free)
AIA Expo Booth # 315

Will Rogers World Airport,
Oklahoma City,
Architects: The Benham Companies
P/A AWARDS
CALL FOR SUBMISSION
ENTRY FORM AND GUIDELINES AT ARCHITECTUREMAG.COM
DEADLINE 09 08 2008
SpecWizard®
Revolutionizing how specs are written.

The best way to configure products and write specs.

- Select and configure products quickly and accurately
- Complete specifications automatically produced
- In the CSI 3-Part Format
- No registration required
- FREE

SpecWizard is a registered trademark of ARCAT, Inc., Patent Pending

www.arcat.com
Circle 241 or www.architecturemag.com/productinfo
EDITOR'S NOTE

ARCHITECTURE MATTERS

I live in the West Village. It's Jane Jacobs territory, still. When she died this spring, the neighborhood felt infinitely diminished by her loss. But her death was also a keen reminder that words can alter the course of history. And alter it she did. She saved my community and many others from ill-conceived renewal efforts by indelicate hands. She opened many eyes to the inherent integrity—the genius loci—of human-scaled row houses and storefront commerce, short blocks and heterogeneous community. She wasn't an architect or an urban planner, but she understood in her boots why design matters, and she taught us how to see without the bias of one ideology or another blinding the view.

Jacobs's acute observations of the public realm—and the many private moments it supports—will echo for generations to come. They are also at the heart of the new Architecture. Like her, we are not content to accept the status quo. And so with this issue, we begin a new era in an effort to recognize that the design process is of equal importance to the finished work. We believe that public policy shapes the constructed landscape as much as it influences our bank accounts and international affairs. We believe that history, culture, and education are critical factors in the generation of physical form; that technological and material advancements are economic and social imperatives, because they help us to build more efficient systems and use energy in more sustainable ways. And we've redesigned our magazine to investigate those intersections and convergences.

For the past three years, the last page of each issue of Architecture held our Protest column. This page becomes home to our Editor's Note—one of many changes you will find in the magazine. The commentary previously found only in Protest is now in evidence throughout the magazine.

Architecture has a new tripartite format. It opens with Observer, a section in which we publish reports from the field. Next, our feature stories are organized around a theme each month (starting in June with Reuse), a curatorial approach that allows us to focus on a single issue or subject while simultaneously broadening its traditional definition. Moving beyond the standard formula that relies on a steady diet of object-oriented coverage, our features now encompass a variety of article types in order to represent disparate perspectives.

Each issue wraps up with Building Culture, a collection of columns featuring regular commentary by authoritative figures on dedicated subjects. Independent thinkers all, our columnists include: Joan Ockman on culture; Thomas Fisher on education; Kazys Varnelis on history and theory; John E. Fernandez on materials; Max Page on public policy; Andrew Whalley on sustainability; Jeanne Gang on technology; and David Grahame Shane on urbanism. With this talented group among our ranks and two new contributing editors—Jan Otakar Fischer in Berlin and Ellis Woodman in London—we will begin to set a new agenda, one in which ideas are valued above all else.

—ABBY BUSSEL

Loewen has proven its industry leadership and environmental commitment by receiving Forest Stewardship Council chain of custody certification for a complete line of luxury fenestration products. Contact a Loewen Architectural Consultant at 1.877.563.9368 to begin the experience.

Discover the world's most inspiring windows and doors at www.loewen.com
Set your sights high. Sky high. Create a focal point that's absolutely impossible to ignore. Consider, for example, what you could accomplish with a combination of Weather Shield® windows such as the rectangle, square and triangle shaped direct-sets displayed here. Rise. Shine. Elevate custom home design to a whole new level.

Demand Better. Compromise nothing. Get more of everything you could possibly want in windows and doors. Visit us online at weathershield.com/A

1-800-477-6808

Weather Shield® Premium Windows and Doors

© 2006 Weather Shield Mfg. Inc.
Circle 250 or www.architecturamag.com/productinfo