

architecture March 1998 \$8.95 usa \$11.00 canada

architecture

Barton Myers
Changes Newark's Tune

Rem Koolhaas's
Learning Curve

Maine Lines by
Scogin Elam and Bray

THE **ARTS** BRING DOWNTOWN
BACK TO **LIFE**



With gestures large and small, America's cities are scrambling to find new ways to save their ailing downtowns. Some are trying to revitalize decaying central districts by building convention centers, sports stadiums, and even performing arts palaces, as this issue investigates. Other cities are hoping to revive their sluggish urban shopping and entertainment areas through more modest means—with mops and brooms and beefed-up police patrols. But a growing number of cities are taking the law-and-order approach one alarming step further: They are attempting to restrict public space in the name of urban improvement.

Policing Public Space

**Rules and regulations
alone can't revive
America's downtowns.**

Unlike big-ticket buildings, simple spruce-up schemes offer more easily attainable goals for cities on the mend. New York City Mayor Rudolph Giuliani is proudly extolling Manhattan's newfound hygiene and dropping crime rate. As part of Giuliani's cleanup campaign, New York's City Council, like many others across the country, passed a law in 1996 that curtails aggressive panhandling on city streets and prohibits begging or soliciting within 10 feet of bank entrances and automated-teller machines. The measure didn't cure all of Manhattan's urban ills, but it has brought an increased sense of security for residents.

Now, Philadelphia's City Council is debating a bill titled "Sidewalk Behavior," modeled closely after stringent regulations adopted by Seattle in 1994. The bill, which has the support of civic-minded Mayor Ed Rendell, would censure panhandling, but goes further to restrict activity on sidewalks—the city's most public pathways—in the name of improving downtown's quality of life. The ordinance would prohibit lying on sidewalks, limit the amount of time

people can sit on the pavement, and regulate sidewalk vendors. Supporters of the bill are touting it as a sure-fire boost to Center City's struggling retail districts. Most visitors and residents would enjoy cleaner, safer streets as a result of the ordinance. But should a city pin its hopes of reviving downtown on punitive measures that encroach on the public realm?

In their zeal to find quick fixes for urban problems, city leaders are overlooking simple urban strategies that improve the quality—and safety—of public space by animating it with new uses. Take recently resuscitated Lincoln Road in Miami Beach. Just a few years ago, the Morris Lapidus-designed promenade had all but died, its abandoned storefronts patronized only by vagrants. Enterprising property owners funded the street's refurbishment by creat-

ing a tax increment-financed district. Now, Lincoln Road is the centerpiece of Miami Beach's successful transformation from an economically depressed retirement town into a thriving, sophisticated urban center.

Lincoln Road's landlords cleaned up the pedestrian promenade not by restricting activities in the public sphere, like Philadelphia plans to, but by adding new ones. Designed by architects Thompson and Wood and Carlos Zapata, and landscape designer Martha Schwartz, Lincoln Road's master plan fostered a rich, day-and-night mix of activities oriented toward the street: office buildings, hotels, bars and sidewalk cafés, theaters, shopping—both high- and low-end—and even studios of the Miami City Ballet, whose ballerinas pirouette in shopfront windows.

Miami Beach also has statutes banning aggressive panhandling, but its rebirth has taken shape by encouraging the use of public space, not limiting it. Architects should remember the healing power of sound urban design—and America's cities should take note.

The Editors

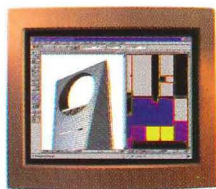
The Engineering Enterprise: Year 2, Day 95, 6 pm



How Do You Design More Value Into The World's Tallest Building?

Get the most value from your architectural designs and data with the Bentley Continuum, our unique approach to enterprise engineering for the life cycle.

The Bentley Continuum is our comprehensive offering of software products and support services, plus best-in-class solutions from our Strategic Affiliate,



WorkPlace System Solutions, Inc.

The MicroStation TriForma product family provides high-performance architectural, HVAC, plumbing and landscape modeling, creating a single 3D building model from which 2D drawings are automatically generated. Manage engineering information and facility operations across the enterprise with ActiveAsset Planner, ActiveAsset Manager and ActiveAsset Inquirer

SOM scandal

Your editorial on former SOM Partner Joseph Gonzalez (*Architecture*, January 1998, page 11) raised many important questions. The critical issue seems to be whether the man represented himself dishonestly—in effect, “lying by omission,” as your news item suggests. You imply that Gonzalez is so talented, he should be given another chance at SOM. However, it is his talent and contributions to the profession that must be laid aside when such serious ethical concerns arise, not the other way around. Honesty and integrity are perhaps the most important qualities any professional can possess.

You also brought out that tired old chestnut that “design-impaired” interns are capable of passing the licensing exam and that sensitive, talented interns fail every year, presumably needing to be shepherded and coddled through it. Get real! Such silly stereotypes obscure the fact that our profession thrives only with people who have differing abilities and passions.

My experience is that if one is disciplined, resourceful, and focused, it is possible to pass the entire exam on the first try, whether one is talented at design, management, detailing, or all of the above.

*Julie E. Gabrielli
Ziger/Snead Architects
Baltimore, Maryland*

Battle cries

Your protest of the proposed educational interpretive center for the Gettysburg National Military Park (*Architecture*, January 1998, page 59) was unfortunately based in part on misinformation. We selected a site that was convenient to, but concealed from view of, the major battlefields. Sites in downtown Gettysburg were considered, but could not accommodate the traffic and parking anticipated.

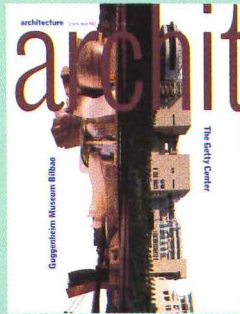
This will be an important pilot project for the National Park Service. We are confident that it can serve as an effective model for how the NPS can resolve many of their critical facilities needs, given the lack of public funding.

*Gregory Powe
Zeidler Roberts Partnership
Washington, D.C.*

Getty/Gehry gripes

Contrary to Aaron Betsky's assertion (*Architecture*, December 1997, pages 78-87), this is one architect who will voice his criticism of Richard Meier's new Getty Center. It is impossible to view or appreciate the art in galleries that are unable to accommodate crowds. Reservations to park your car in the garage are not available until mid-1998 at the earliest. You are forced to either park in the neighborhood and walk a mile or take a taxi from town. When you arrive at the foot of “Getty Mountain,” transportation up the hill means either a 1-mile walk on an inadequate sidewalk or a 45-minute wait for the tram.

Getty Trust President Harold Williams sees the lack of room for expansion as an opportunity to build small cultural centers in other communities. Let's hope he



precludes Richard Meier & Partners from receiving any future Getty Trust assignments.
*Theodore C. Hardy
Pittsburgh, Pennsylvania*

Shame on you. It is beneath your magazine's usual quality to indulge in such sophomoric cuteness as your overblown headlines to Aaron Betsky's critique of The Getty Center (“Faulty Towers,” *Architecture*, December 1997, pages 78-87) and Joseph Giovannini's story about Frank Gehry's Guggenheim Museum Bilbao (“Gehry's Reign in Spain,” *Architecture*, December 1997, pages 64-77). Perhaps we should

have been prepared for the schizophrenic nature of your presentation by the cover with its seismic fault-line down the middle.

*Richard Lee Francis
Bellingham, Washington*

Defending Delaware

To single out the MBNA headquarters (*Architecture*, November 1997,

page 71) as reflective of our spirit of urban redevelopment is sad commentary on the balanced reporting that I have come to expect from your publication.

MBNA's executive office tower, originally designed by Heery and Heery, is truly a fine structure. It anchors the northeast corner of Rodney Square and continues the horizontal cornice of the original Wilmington Post Office, the Daniel Hermann Courthouse, and the Wilmington Library.

Despite the fact that Wilmington is not a large city (population 71,000), we feel we have remarkable examples of both traditional and contemporary architecture.
*Buck Simpers, President
Delaware Architecture Foundation
Wilmington, Delaware*

WE WANT TO HEAR FROM YOU!

Send letters to the editor via e-mail (info@architecturemag.com), mail (*Architecture*, 1130 Connecticut Ave., N.W., Suite 625, Washington, D.C. 20036), or fax ((202) 828-0825). Letters may be edited for clarity or length and should include the sender's name, address, and daytime phone number.

STRONGER AND MORE IMPACT RESISTANT

- Specially designed hi impact corners to hold up where others fail.
- PVC cover is mounted on an aluminum retainer for maximum strength.
- Unique impact absorber under the PVC cover provides extra impact resistance.
- Decorative textured finish insert running the length of the rail in matching or contrasting color.

Tepromark International offers a full selection of corner guards and railings for complete wall protection. 28 different colors are available in a wide array of shapes and sizes.

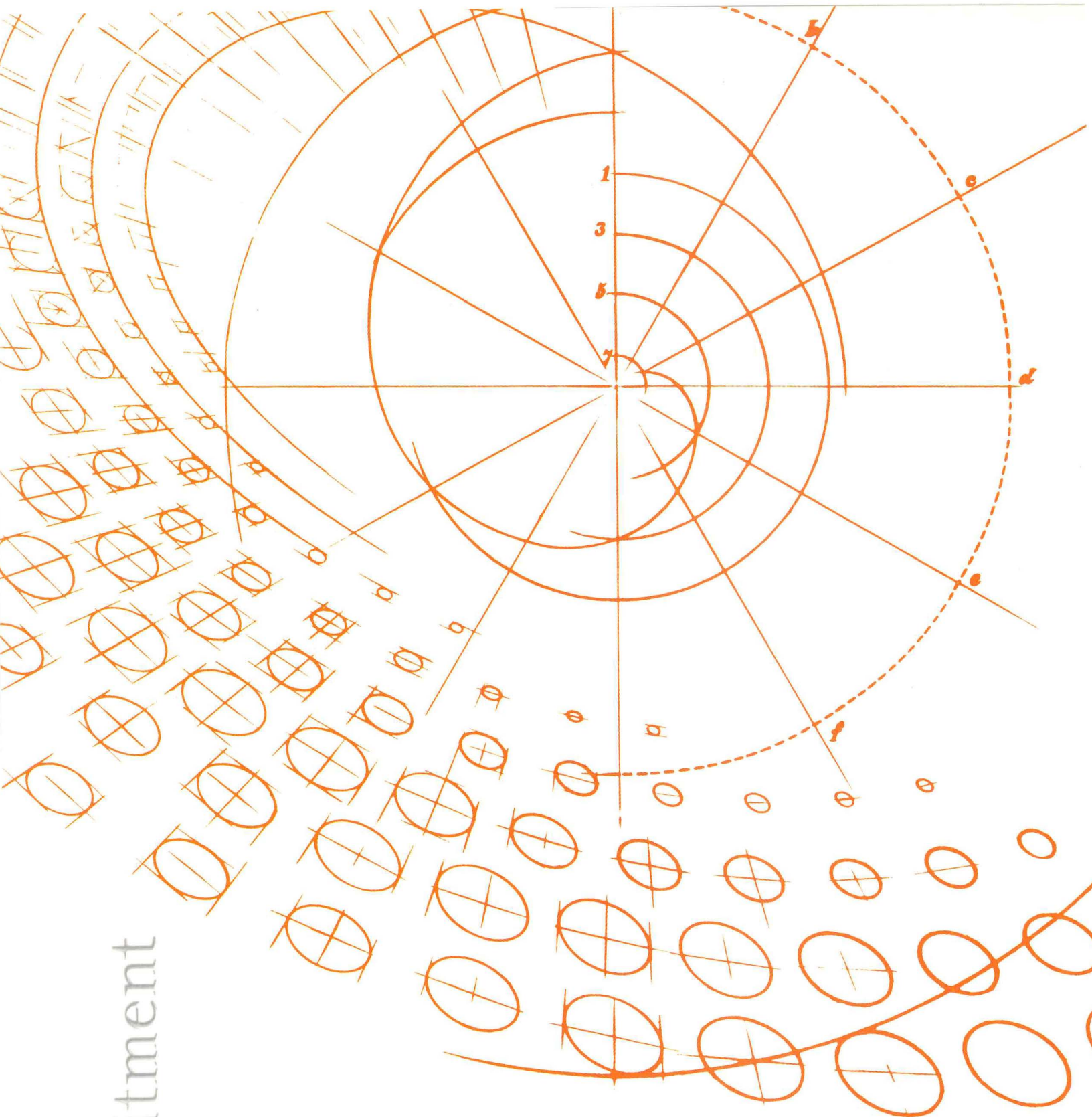
**Wall Protection
Since 1971**

Tepromark International, Inc.
181 South Franklin Ave.
Valley Stream, N.Y. 11581-9876

Write Tepromark for complete information and literature or call
1-800-645-2622.
Circle 74 on information card

See the Tepromark Catalog at the Sweets Catalog web site at www.sweets.com

Commitment



exhibitions

city	dates	exhibition	contact
Chicago	through May 3	Japan 2000: Architecture for the Japanese Public at the Art Institute of Chicago	(312) 443-3600
Columbus, Ohio	through April 12	Fabrications at the Wexner Center for the Arts	(614) 292-0330
Los Angeles	through April 5	9 + 1: Ten Young Dutch Architectural Practices , at the Southern California Institute of Architecture	(310) 574-1123
Montreal	through May 24	Montréal Métropole, 1880-1930 at the Canadian Centre for Architecture	(514) 939-7000
New York	through April 28	Fabrications at the Museum of Modern Art	(212) 708-9400
San Francisco	through April 28	Fabrications at the San Francisco Museum of Modern Art	(415) 357-4000



Modernity comes to Montreal in 1920 photograph of Jacques-Cartier Bridge from Canadian Centre for Architecture's exhibition.

Success Story.

It's always the same story – traditional butt hinges cause doors to sag or to bind and eventually to fail. PemkoHinge™ continuous geared hinges replace this problem with a guaranteed successful solution:

The architect of this new high school chose PemkoHinge™ for its quality, clean aesthetics, and smooth-acting functionality.

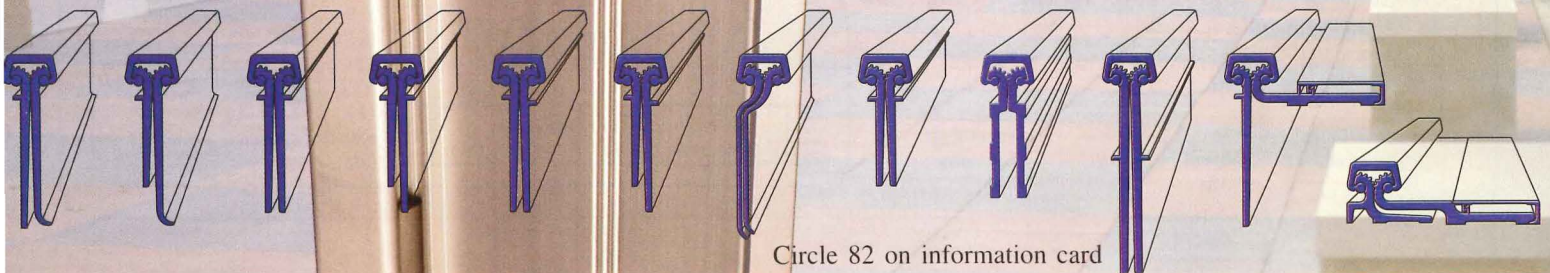
The contractor loves the ease of installation and the "Life of the Opening" guarantee.

The school district and facility manager appreciate the durability, safety, privacy and security provided by PemkoHinge™.

ASK FOR IT BY NAME.

**PEMKO
HINGE**

P.O. Box 18966, Memphis, TN 38181
Ph: (901) 365-2160 or (800) 824-3018
Fax: (901) 365-1354 or (800) 243-3656
P.O. Box 3780, Ventura, CA 93006
Ph: (805) 642-2600 or (800) 283-9988
Fax: (805) 642-4109 or (800) 283-4050

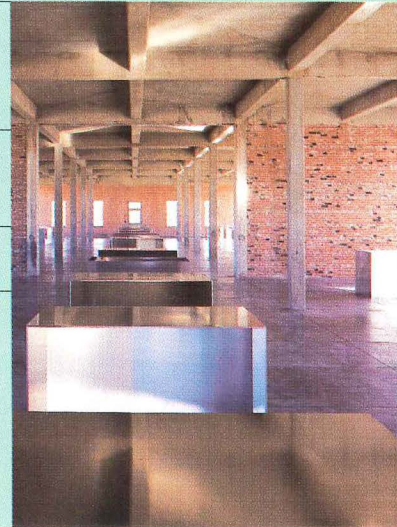


Circle 82 on information card

conferences

city	dates	conference	contact
Albuquerque	June 13-18	Solar 98: Renewable Energy for the Americas , sponsored by the American Solar Energy Society, the American Society of Mechanical Engineers, the American Institute of Architects, and the U.S. Department of Energy	(303) 443-3130
Boston	April 24-25	Reconceptualizing the Modern: Architectural Culture, 1943-1968 , sponsored by the Harvard University Graduate School of Design and the Graham Foundation	(617) 496-8728
Chicago	June 8-10	NeoCon	(800) 677-6278
	June 7-10	Decorex USA	(800) 677-6278
Marfa, Texas	April 25-26	Art and Architecture symposium , sponsored by the Chinati Foundation	(915) 729-4362
New York	April 28-29	Buildings NY	(203) 840-5556
San Francisco	May 14-17	AIA National Convention and Expo	(202) 626-7395

Frank Gehry and Robert Irwin will speak at symposium held by late sculptor Donald Judd's Chinati Foundation in Marfa, Texas (right).



TODD EBERLE

What's in a name?



NAAMM long has been identified as the Association that established and continues to maintain the definitive standards in metal products for architectural applications.

NAAMM is the benchmark against which architects and other specifiers can confidently measure their own plans and obtain precise information on design, manufacture and installation of superior products. The Association offers the most comprehensive guide specifications in the industry. Architects, engineers, other designers and contractors all look to NAAMM to ensure the highest standards and quality.

Contact your one-stop resource for specification and technical information about:

- Architectural Metal Products 148
- Expanded Metal Products 152
- Metal Bar Grating 156
- Hollow Metal Doors/Frames 150
- Metal Lath/Steel Framing 154
- Steel Cell Systems 158

NAAMM makes it easy to get this information by providing a series of targeted manuals, including:

- Architectural Metal Products**
 - Metal Stairs and Railings
 - Metal Finishes
 - Metal Flagpoles
- Hollow Metal Doors and Frames**
- Aluminum and Steel Bar Grating**
- Steel Framing Systems/Metal Lathing and Furring**
- Steel Cell Systems**
- Expanded Metal Products**

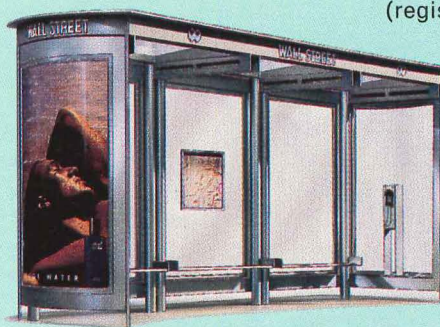
Consider taking advantage of all the benefits included in our name.

National Association of
Architectural Metal Manufacturers

8 South Michigan Avenue
Suite 1000
Chicago, IL 60603
312/332-0405
FAX: 312/332-0706
E-mail: naamm@gss.net
<http://www.gss.net/naamm>

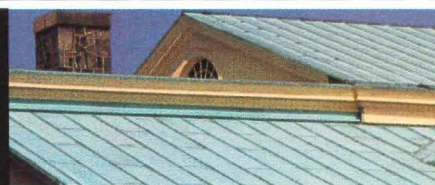
competitions

competition	deadline	contact
Van Alen Prize in Public Architecture	April 8	(212) 366-5836 fax
Young Architects Awards , sponsored by the Boston Society of Architects	April 30	(617) 951-1433
1998 National Preservation Awards , sponsored by the National Trust for Historic Preservation	May 1	(202) 588-6092
Student Case Study Competition , sponsored by the University of California, Berkeley	June 15	(510) 642-1696
Good Design awards program , sponsored by the Chicago Athenaeum	July 1	(312) 251-0175
Mid-Career Grants , sponsored by the James Marston Fitch Charitable Trust	August 15	(212) 777-7800
Johannesburg, South Africa, Constitutional Court Competition	August 25 (registration)	(27) (12) 325-8095 fax



Josef Paul Kleihues' New York City street furniture proposal for Wall City Design won 1997 Good Design Award.

For those of you who don't want to wait 25 years for patina.



Achieve your vision today, with new EverGreen™ from Revere.

New EverGreen™ prepatinated architectural copper eliminates the wait. Your vision of rich, multi-dimensional patina can be fulfilled now, with complete maturity after just four to six rainfalls.

Adds striking beauty and character to any roof or accent. Call today for our new EverGreen brochure.

Revere Copper Products, Inc.
P.O. Box 300
Rome, NY 13442-0300
800-950-1776
Fax: 315-338-2105
www.reverecopper.com

18 01
REVERE

Circle 86 on information card

It had all the potential to be brilliant. But they just didn't quite get it.

Suddenly, compromises had to be made. But not everywhere. The saving grace

was the windows. Because there's a kindred soul that shares your passion for

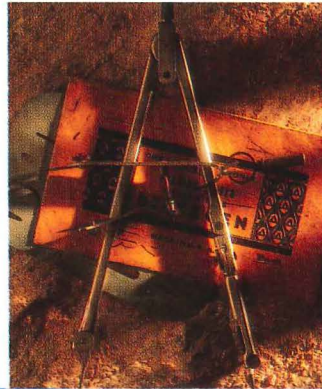
t h e o n l y t h i n g s c a r i e r

fine detail. From 7/8" TDL, five hardwood interiors, all the way to the only

vinyl window you would ever specify with confi-

dence. Unlike so many others...they get it.

Circle 88 on information card

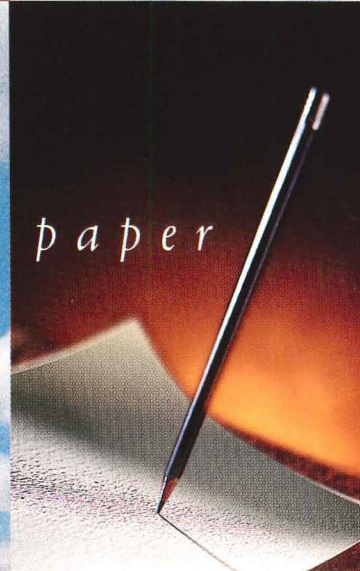


*T h e r e ' s m o r e
t o s e e i n a
W e a t h e r S h i e l d
w i n d o w*™

Weather Shield
Windows & Doors



t h a n a b l a n k s h e e t o f p a p e r



(800) 477-6808 ext 1820

www.weathershield.com

*is the blank stare
on a client's face*

DELIRIOUS CHICAGO

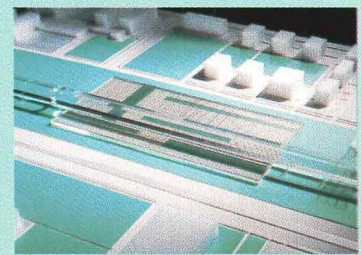
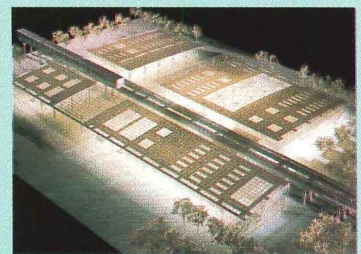
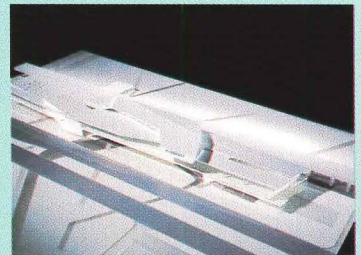
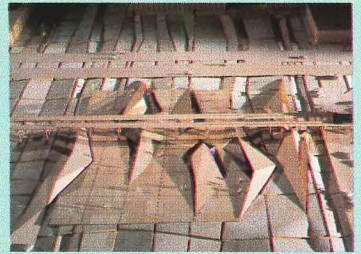
Dutch architect Rem Koolhaas has been selected as architect for a new \$25 million campus center at the Illinois Institute of Technology (IIT) in Chicago. While Koolhaas's energized urban forms might seem an odd fit for a campus where Modern master Ludwig Mies van der Rohe's staid and formal Modernism is the norm, the choice wasn't entirely surprising. The announcement last August that IIT would accept design proposals from Koolhaas, New Yorker Peter Eisenman, London-based Zaha Hadid, German-born Chicago architect Helmut Jahn and Berlin-based Werner Sobek, and Japanese architects Kazuyo Sejima and Ryue Nishizawa, indicated that IIT might be interested in something a bit more daring. The jury—consisting of architects Mack Scogin and James Ingo Freed, Harvard architecture Professor K. Michael Hays, and Canadian Centre for Architecture Director Phyllis Lambert—chose Koolhaas for his experience in blending urban planning and architecture. "Rem created an exciting

structure full of energy and activity that links the residential and academic parts of the campus," explains jury chair Scogin.

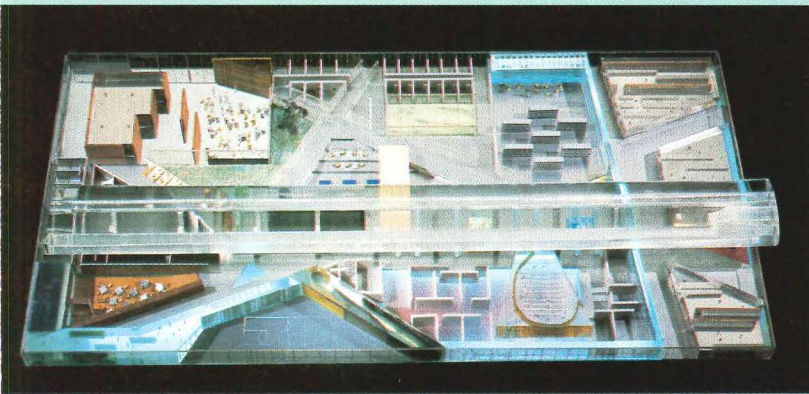
The site, located within sight of Mies's Crown Hall, is bisected by Chicago's famous elevated train line—a physical barrier that school officials hope the new building will help mitigate. Koolhaas slips his single-story solution under the elevated tracks and creates a series of diagonal interior streets that link the east and west sides of the campus through the building. The exterior of the structure is kept simple; an ellipsoidal steel shell surrounding the elevated tracks and the volume of an auditorium become bold rooftop ornaments. An existing Mies building, the Commons, is subsumed within the larger mass and becomes the jumping-off point for a vitrine that winds through the building displaying "Miesiana" to students and visitors. The 100,000-square-foot facility will house dining, entertainment, retail, and meeting facilities, as well as a

Mies interpretive center that will introduce visitors to the architect's legacy. The five finalist schemes for IIT will be on display at the Art Institute of Chicago beginning in May. Construction should begin next year. *Edward Keegan*

Interior of Koolhaas's winning scheme (left); Finalists' schemes (right, from top to bottom) by Eisenman, Hadid, Jahn and Sobek, and Sejima and Nishizawa



HEDRICH BLESSING PHOTOS



MORE AIA AWARDS

The American Institute of Architects (AIA) has unveiled another round of awards for 1998, following its announcement of the Honor Awards in January. The institute will confer the Architecture Firm Award on Essex, Connecticut-based Centerbrook Architects and Planners at the AIA convention in May. Syracuse University Professor of Architecture Werner Seligman will also step up to the podium in San Francisco to pick up the Topaz Medallion for Excellence in Architectural Education. Architect Leon Bridges will receive the Whitney M. Young Jr. Award for his role as an organizing member of the National Organization of Minority Architects and cofounder of the AIA/Ford Minority and Disadvantaged Scholarship Fund. Norman L.

Koonce, president of The American Architectural Foundation, will accept the Edward C. Kemper Award for service to the profession. And the New England Holocaust Memorial, designed by Stanley Saitowitz Office, will receive the Henry Bacon Medal for Memorial Architecture. Arthur Rosenblatt,

founding director of the U.S. Holocaust Memorial Museum, will receive the Thomas Jefferson Award for Public Architecture. Last month, at the Accent on Architecture gala in Washington, D.C., Louis I. Kahn's Kimbell Art Museum in Fort Worth, Texas, received the Twenty-Five Year Award. *Ned Cramer*

Centerbrook Partners
(left to right) Chad Floyd, Jefferson B. Riley, Mark Simon, William H. Grover, Principal James A. Coan, and James C. Childress



MARGARET WAZUKA

architecture's NEW EDITOR

Reed Kroloff is the new editor-in-chief of *Architecture*. Kroloff has been with the magazine for the past three years, most recently as a senior editor. "Reed's courage in speaking out about the challenges facing the profession makes him the ideal choice," says Publisher Stephen B. Donohue. Before joining the magazine, Kroloff was assistant dean of the College of Architecture and Environmental Design at Arizona State University in Tempe. He also served as architecture critic for the *Arizona Republic*, and has collaborated as a designer with firms in Arizona and Texas.

CAPITAL IDEA

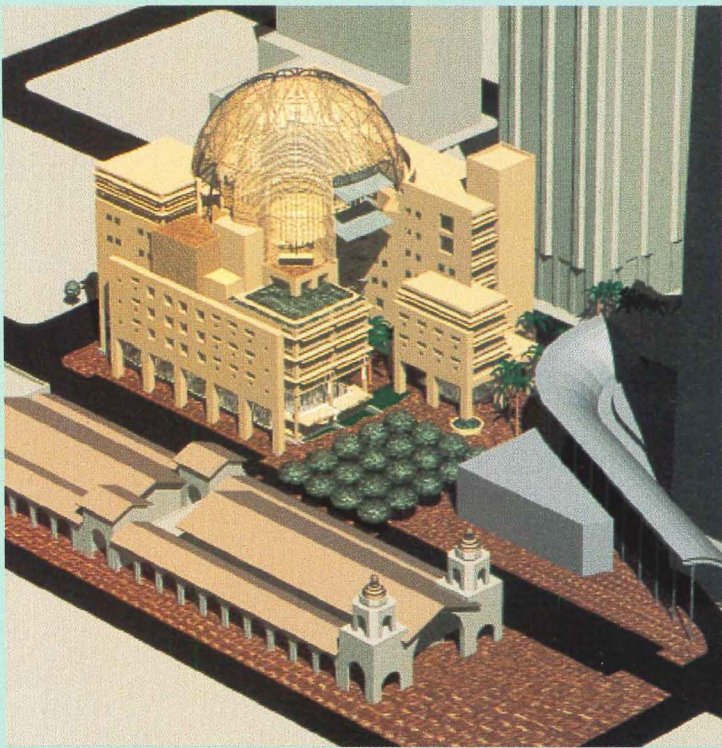
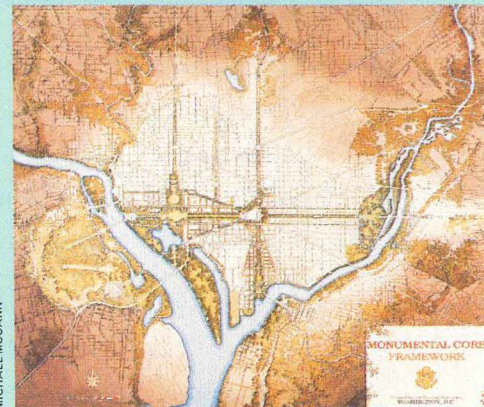
Architect Douglas Cardinal's National Museum of the American Indian will occupy the last available building lot on Washington, D.C.'s hallowed National Mall. And protests have stalled construction of Friedrich St. Florian's World War II memorial in the shadow of the Washington Monument. So the federal government is forced to look elsewhere in the District for future development sites. A new master plan for the District's monumental core solves the problem by shifting federal construction from its historic, and increasingly crowded, center to other, neglected areas of the city.

The National Capital Planning Commission (NCPC), the federal government's planning agency for the District and its surrounding region, developed the 100-year plan with a team of consultants including architects Harold Adams of RTKL and David Childs of Skidmore, Owings & Merrill. The plan restores Pierre L'Enfant's 1791 street grid and extends the concept of the 1901 McMillan Plan for the Mall and the banks of the Potomac River. New parks, monuments, memorials, and federal buildings will now be built along the avenues radiating east, north, and south from the Capitol, as well as along the Anacostia riverfront. The NCPC plan also calls for the removal of the tangle of rail lines, freeways, and exit ramps that clog the city, and the implementation of a new system of water taxis and streetcars to supplement the existing subway system.

The Planning Commission's proposal was released as a draft in March 1996 (*Architecture*, April 1996, page 15), and subsequently exhibited at Washington's Union Station and the National Museum of American History. The final version, released late last year, calls for the establishment of a District economic development corporation to handle the complexities of future federal building projects. N.C.

NCPC plan extends federal development north, south, and east of Capitol.

MICHAEL MCCAIN



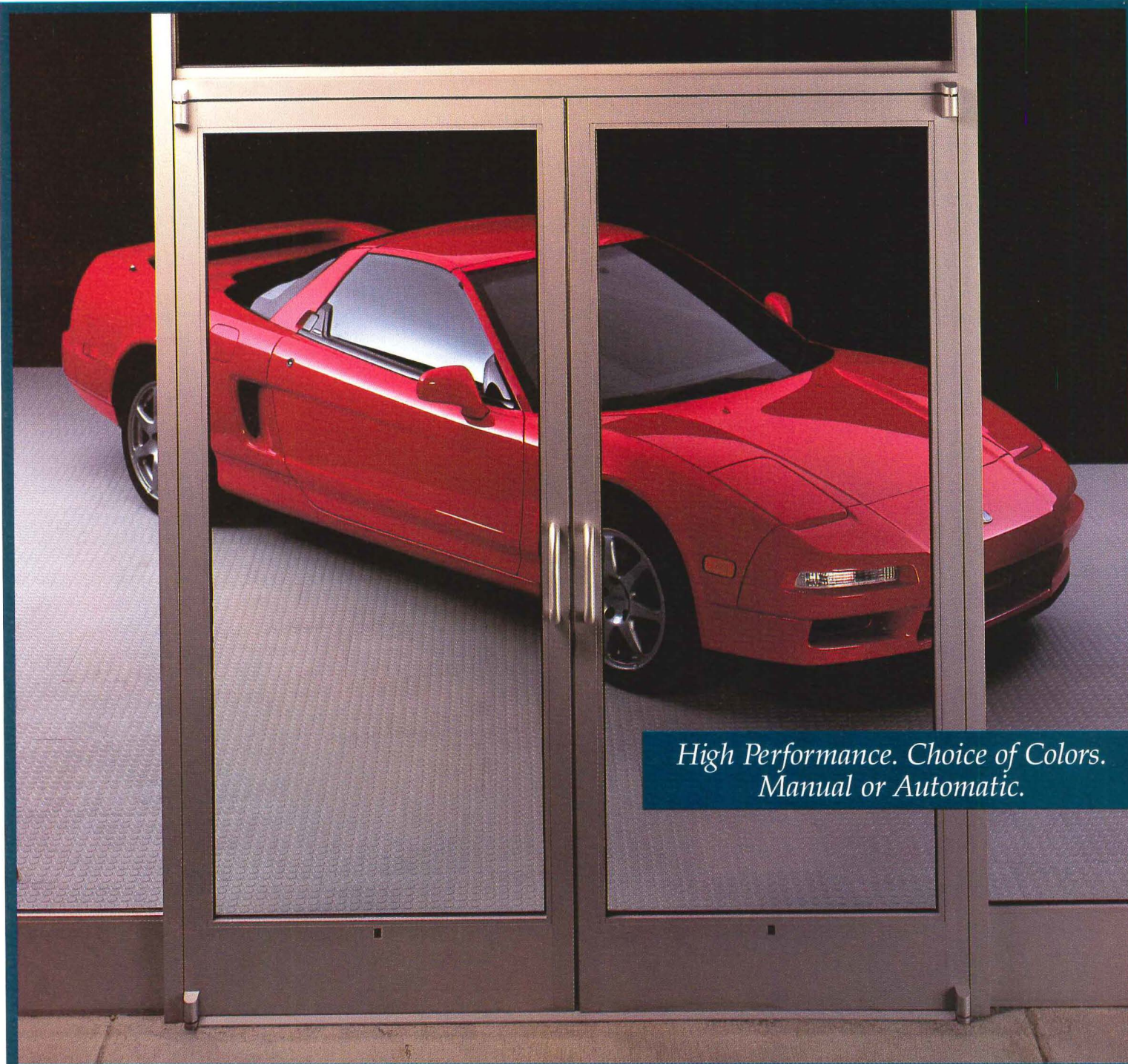
SAN DIEGO LIBRARY PROJECT ENDANGERED

The heralded San Diego main library hit a major stumbling block in February. The project was well into design development for a downtown site the city had purchased when, in a highly unusual move, the City Council abruptly halted the project until voters decide its fate. The unscheduled ballot measure is expected to encompass the controversial downtown site, which incorporates only 133 parking places in a highly car-dependent city; the city manager's financing plan for the \$103.5 million, 300,000-square-foot building; and the design by local architect Rob Wellington Quigley of San Diego with Simon Martin-Vegue Winkelstein Moris of San Francisco and Tucker, Sadler & Associates of San Diego. The design (top) is distinguished by an enormous wood-lattice dome over a seventh-floor, glazed reading room with views of San Diego Bay and downtown.

At the project's outset, Mayor Susan Golding and most of the council's members championed

the new main library as a civic asset and cultural symbol to replace the overcrowded, deteriorating central library, which opened in 1954. But in February, the council bowed to pressure from at least two fronts. In a period of dwindling city funds, constituents have been clamoring for branch libraries to be improved before building a new main library. Council members also wanted to skirt potentially costly legal challenges from a handful of local Libertarians who seem poised to strike at any publicly funded construction project in San Diego not directly approved by voters. The Libertarians have already sued the city over the proposed convention center expansion, which is headed for the June ballot thanks to their petition drive, and attacked a much-criticized Qualcomm Stadium expansion deal that continues to bedevil the council. *Ann Jarmusch*

Writer Ann Jarmusch is the architecture critic for the San Diego Union-Tribune.



*High Performance. Choice of Colors.
Manual or Automatic.*

EFCO® entrances are loaded with options. They're available in 21 standard colors, unlimited custom colors, and anodized finishes. Swing, sliding, and balanced styles. And high-performance RotoSwing™ manual and automatic models for ADA compliance. We even make low-energy operators for converting existing manual doors to automatic.

Contact us at 1-800-221-4169 or <http://www.efcocorp.com> on the Web for facts on our latest models. We offer a complete line of aluminum glazing systems for all your design needs.



WINDOWS
CURTAIN WALLS
ENTRANCES
STOREFRONTS

AIA Continuing Education Provider

THE BUZZ

Boston-based architect **Moshe Safdie and Associates** has bested **Barton Myers Associates**, **Antoine Predock, Architect**, and **Hardy Holzman Pfeiffer Associates** for a commission to design the Orlando Performing Arts Center in Orlando, Florida. Meanwhile, Predock recently completed designs for the 30,000-square-foot Teaching Museum and Art Gallery at Skidmore College in Saratoga Springs, New York. In Tempe, the Arizona Cardinals football team and NEXTSTEP, a development group, have selected New York City-based architect and avid sports fan **Peter Eisenman** to design a new stadium and mixed-use complex with **HNTB Architects**.

San Francisco-based architect **Simon Martin-Vegue Winkelstein Moris (SMWM)** is designing a 70,000-square-foot, mixed-use entertainment center and museum for **The Grateful Dead**. The complex will be called Terrapin Station, after the Dead's 1977 album. SMWM is also developing a master plan for San Francisco's Civic Center with landscape architect **The Olin Partnership**.

Los Angeles's Walt Disney Concert Hall is another step closer to reality, thanks to donations from the Weingart Foundation, the Ahmanson Foundation, and an anonymous donor, announced in February. The three \$5 million gifts complete the \$25 million in matching funds required by the Disney Corporation's conditional contribution in December, and bring the total funds raised and pledged to \$175.6 million, or almost 88 percent of the total amount needed.

Ellerbe Becket is designing a 30-story, 910,000-square-foot office tower for the investment firm **Piper Jaffray** in downtown Minneapolis. New York City-based **Brennan Beer Gorman/Architects** beat **Henri Ciriani** and **Michael Graves** to design a 28-story, 280,000-square-foot hotel in midtown

Manhattan for the Sofitel hotel chain. In February, the National Collegiate Athletic Association unveiled the design for its new headquarters and hall of champions in Indianapolis, designed by Graves with local architect **Schmidt Associates**.

The Mayors' Institute on City Design (*Architecture*, January 1997, pages 39-43), an initiative of the **National Endowment for the Arts** (NEA), has been moved from Harvard University to the AIA's American Architectural Foundation. The national office will be located at the U.S. Conference of Mayors headquarters in Washington, D.C. **Susan Henshaw Jones** has stepped down as director and president of the National Building Museum in Washington, D.C.

Frank O. Gehry & Associates is designing the Computing Information and Intelligence Sciences Building at the Massachusetts Institute of Technology. He is also collaborating with **Philip Johnson** on a casino in Atlantic City, and with **Rem Koolhaas** and **Jean Nouvel** on a mixed-use complex in Düsseldorf, Germany.



ROBERT RECK

Predock's museum at Skidmore College

IT'S DISCOVERING WHAT THIS COUNTRY WAS LIKE
BEFORE IT WAS CALLED AMERICA.

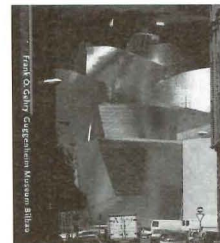


What is historic preservation?

It's your memory. It's our history. It's worth saving.

NATIONAL TRUST FOR HISTORIC PRESERVATION 1 800 289 7091
1785 MASSACHUSETTS AVENUE, N.W. WASHINGTON, DC 20036

The world's best architectural books
all in one collection.



**Frank O Gehry:
Guggenheim Museum
Bilbao**

Hailed as one of this century's most amazing constructs, the Guggenheim Museum in Bilbao already holds a place in the history of architecture. Gehry sees the process from first sketch into building as an evolution: "In the first sketch I put a bunch of principles down. Then I become self-critical of those images and those principles, and they evoke the next set of responses, and as each piece unfolds, I make the models bigger, and bigger, bringing into focus more elements and more pieces of the puzzle..." This book traces the design process as well as the construction of the museum through text, drawings and color photographs. A necessary book for any interested in Gehry's design strategy and the museum's entire building process.

Cloth \$55.00 USD
Paper \$27.50 USD

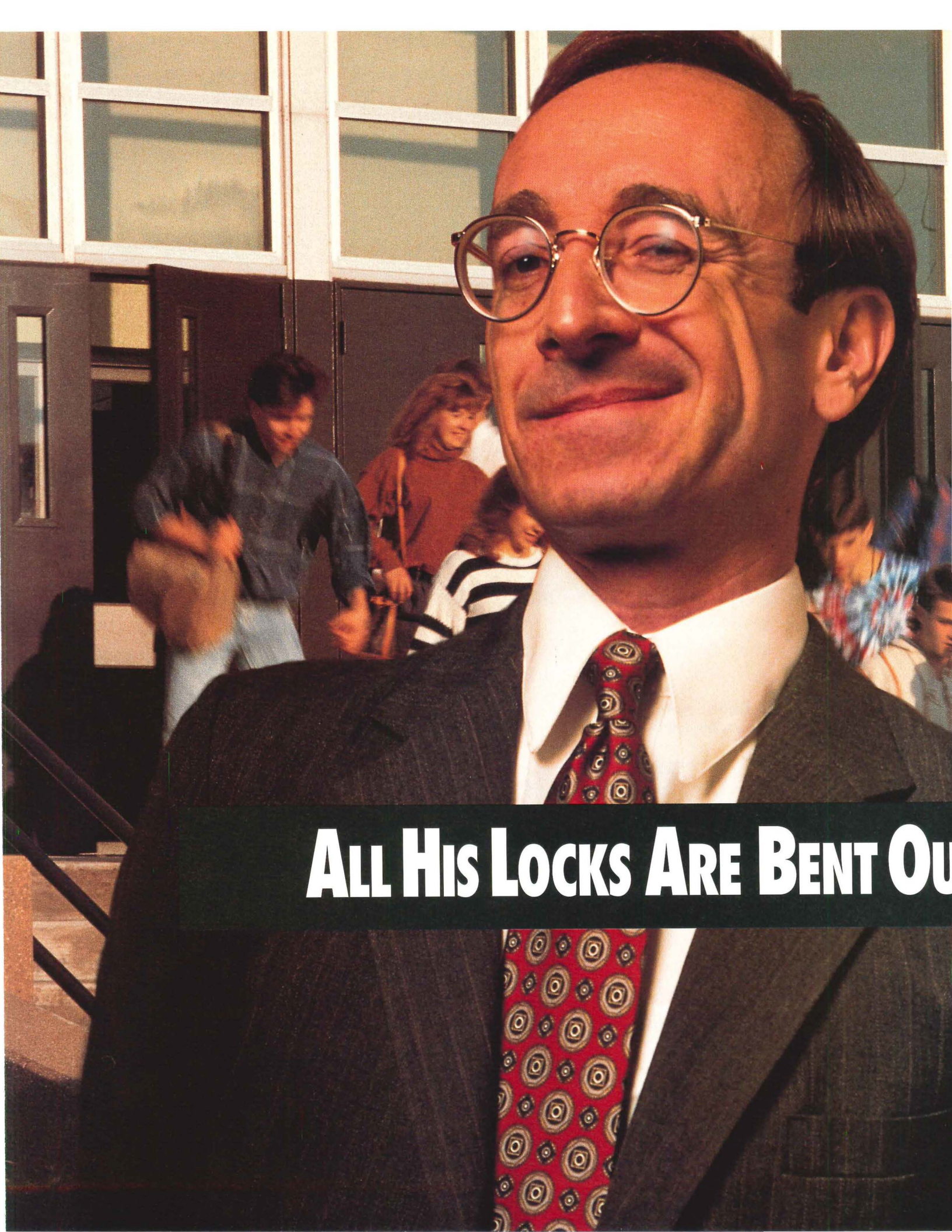
FORM ZERO ARCHITECTURAL BOOKS

Edgemar 2433 Main Street
Santa Monica, CA 90405 USA
T: 310.450.0222 F: 310.450.0071
E: info@formzero.com

Tue - Thu	10:30 - 7:00
Fri, Sat	10:30 - 9:00
Sun	11:30 - 6:00

FULL ON-LINE SERVICE WITH
CATALOG & SECURE ORDERING:
<http://www.formzero.com>

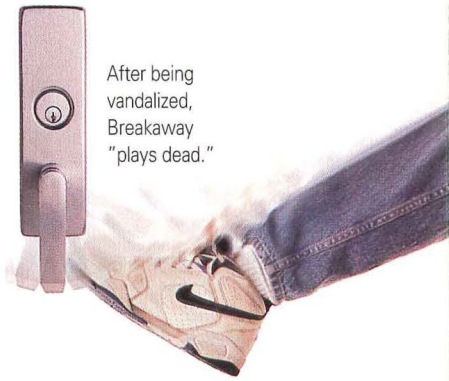
Circle 92 on information card



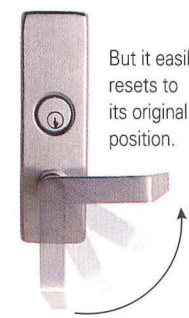
ALL HIS LOCKS ARE BENT OUT



Got a vandalism problem? Do what this principal did. Snap out of it with the vandal-resistant Breakaway™ lever from Von Duprin. □ Where other levers are no match for the punishing blows of adolescent rebellion, Breakaway can always take it. And if it should happen to fall away, Breakaway can be instantly reset to the locked position. All without compromising your building's security. □ For schools, sports arenas, hotels and retail facilities, the savings are huge. No more replacing levers or the entire trim. No more replacing broken spindles. No more time and labor costs required to replace what was vandalized. All of which may not put a smile on a little teen angel's face, but it's sure to bring a smile to yours. □ To find out more about the Breakaway



After being vandalized, Breakaway "plays dead."



But it easily resets to its original position.

OF SHAPE. SO WHY ISN'T HE?



lever trim, for use with our Series 98 and 99 exit devices, call us at 1-800-999-0408 (in Canada, 1-905-278-6128). Or visit our website at <http://www.vonduprin.com>.

VON DUPRIN

Ingersoll-Rand Architectural Hardware Group, Von Duprin Division, 2720 Tobey Drive, Indianapolis, IN 46219 ©1997 Ingersoll-Rand

Circle 94 on information card

INGERSOLL-RAND
ARCHITECTURAL HARDWARE

Fabricated Follies

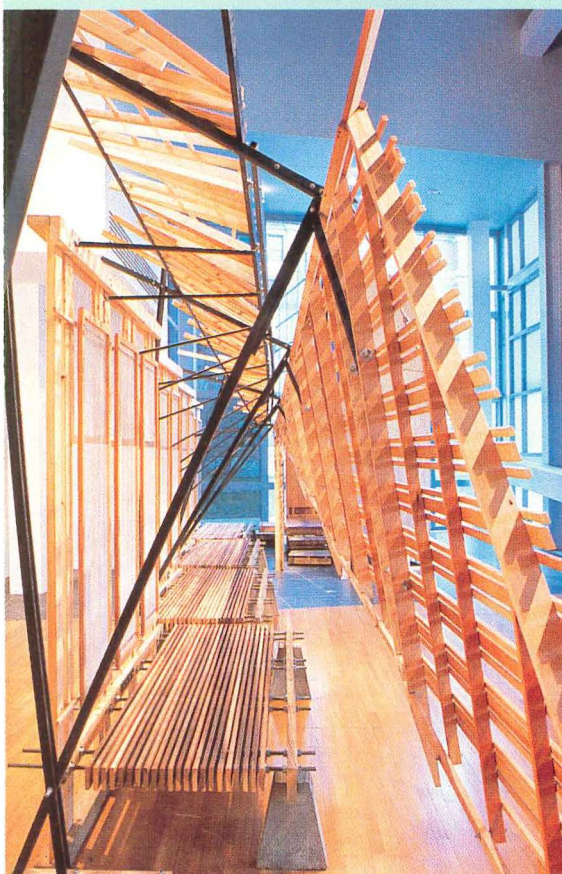
An ambitious trio of exhibitions challenges traditions in architectural curatorship.

Three of America's leading architecture curators are fed up with the tools of their trade: the models, drawings, and photographs that convey a partial, even distorted understanding of buildings. They hope their alternative—*Fabrications*, an exhibition of stunning architectural installations, or follies—will provide an understanding of architecture based on experience rather than graphics. In an unprecedented collaborative effort, the show is on view concurrently at three venues: the Museum of Modern Art (MoMA) in New York City, the San Francisco Museum of Modern Art (SFMOMA), and the Wexner Center for the Arts in Columbus, Ohio. (A late addition, at the Museum of Contemporary Art in Barcelona, is not reviewed here.)

Beyond its basic premise, which has more to do with architectural curatorship than with architecture as subject matter, there is little that connects the show's three venues. It's unclear what criteria drove the selection of the 12 architects and the allocation of four of them to each museum, besides geographic diversity and the curators' collective whim. And the curators—Aaron Betsky of SFMOMA, Terence Riley of MoMA, and Mark Robbins of the Wexner Center—decided the theme and design process for their own venues. Videos showing the 12 projects' construction and installation, not yet in place at the show's opening, seem unlikely to provide continuity.

The splintered process does not detract, however, from the strength of the individual sites. At MoMA, Riley places *Fabrications* in Philip Johnson's iconic sculpture garden, where the installations play beautifully in the sun. But the space is too expansive and cluttered with sculpture for the works—by Munkenbeck + Marshall Architects, Office dA, Smith-Miller + Hawkinson Architects, and TEN Architects with structural engineer Guy Nordenson—to engage one another formally. Instead, Riley provides an effective conceptual link among the projects by dictating that they address some preexisting condition in the garden: wall, pavement, window, or pool. This theme sometimes gets subsumed by the architects' own ideas. Nordenson and TEN Architects comply with Riley's idea by lowering a seat for viewing Auguste Rodin's *Monument to Balzac* into a hole in the pavement. But this act of excavation is not the central subject of the piece. It simply provides a sunken vantage point where a suspended glass plane and wooden ramp target Balzac with gun-sight accuracy.

The installations at the Wexner Center are more tightly packed, and, surprisingly, benefit from their close-up encounter with Peter Eisenman's aggressive architecture. Here the participants—Mockbee/Coker Architects, Eric Owen Moss Architects, Patkau Architects, and Stanley Saitowitz Office—balked at designing nonfunctional pieces. So Robbins gave the architects free rein to determine their projects' programs, a strategy that pays off nicely. Mockbee/Coker's fabrication will ultimately be installed as a porch and kitchen for an existing house in Alabama that

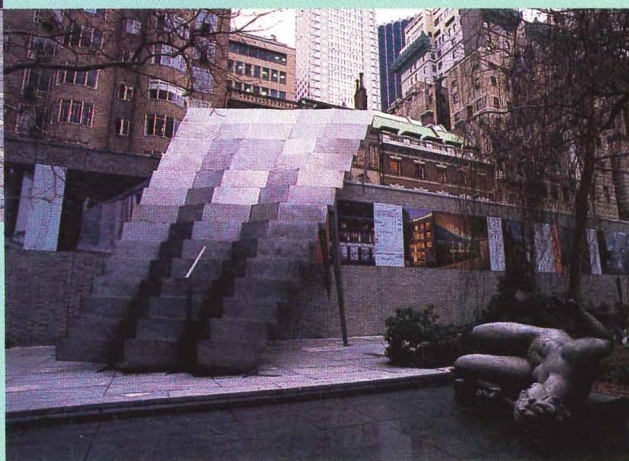


Mockbee/Coker's wood-and-steel porch (left) and Eric Owen Moss's steel bleachers (below) respond to Wexner Center's strict geometry.





At MoMA, TEN Architects and Nordenson's sunken seating targets Rodin sculpture (above); Office dA enlivens sculpture garden with steel wall (right).



LISA QUINONES

was converted from a bus. Its angled form and delicate wood-and-metal structure are a sophisticated, humanized take on Eisenman's shifted grids. The piece's future use doesn't weaken its formal and conceptual integrity.

Saitowitz removes his library at the Wexner Center from the main gallery; it's sadly unable to engage the other installations. The white walls surrounding his transparent acrylic benches and carrels thwart the reflectivity Saitowitz intends. Had the design process allowed interaction among venues, Saitowitz might have noted Smith-Miller + Hawkinson's comparably themed and sited installation in New York City, located in a corridor overlooking the sculpture garden. Smith-Miller + Hawkinson thrust a folded wooden plane through a window to connect the project with the others outside. To promote reflections, the firm places a glass panel in the hallway, lines the wall and floor with black rubber sheets, and hangs a black-stained wooden board outside the window.

Betsky is the only curator forced to contend with a neutral gallery environment—a white, skylit box in the Mario Botta-designed SFMOMA. He responds by dictating an uncompromising theme, the relationship between architecture and the human body, as well as an unusual design process. Rather than commissioning a single fabrication from each design team, Betsky had each architect participate in the design of all four installations, which have such corporeal subthemes as action, repose, and equilibrium. Hodgetts + Fung Design Associates, Kennedy & Violich Architecture, Kuth/Ranieri, and Rob Wellington Quigley each created the preliminary drawings for one fabrication, revised the schemes for two others, and prepared the working drawings for a fourth. The strategy effectively eliminates major stylistic differences, and provides a persuasive conceptual continuity. It does not, however, ensure consistent quality: Some installations are overly labored or underdeveloped. The group masterfully represents the body at rest with thick felt seats and curtains embedded in a gallery wall. Reclining in the soft, dim space is like returning to the womb, but with a view—of people, the wall's internal structure, and the other installations. But the curtains are clinically sliced open and drawn back with metal clamps, radically countering the idea of repose.

At least one fabrication at each venue stands out for its ability to convey complex architectural ideas abstractly. The San Francisco group's "somatic body," or assemblage of human parts into a whole, finds its architectural analogy in the expressive deconstruction and reconstitution of one corner of the gallery. Viewed from within the room, and from a surrounding corridor, the wall peels

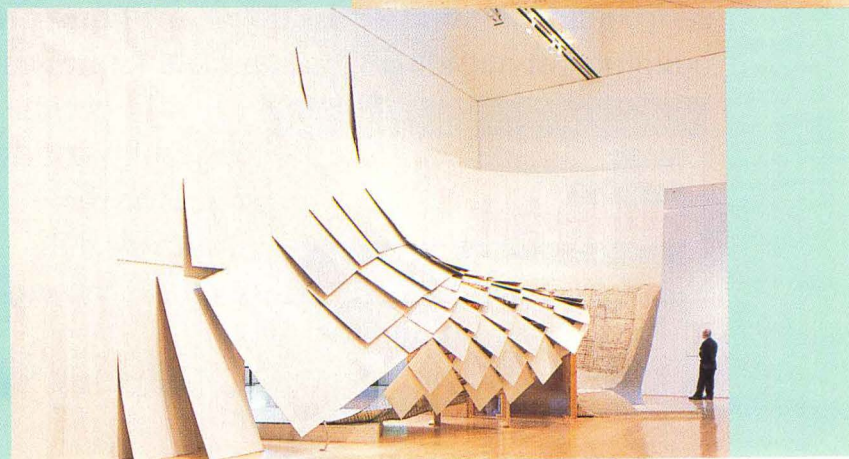
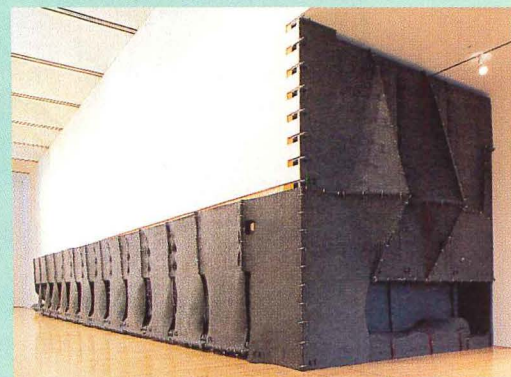
back like flayed skin. Staggered drywall panels evoke a scaly epidermis, plaster recalls sinew, and the timber frame becomes skeletal. At the Wexner Center, Moss's gigantic, fragmentary bleachers seem occupied by ghostly spectators. Stripped of seats, their bare steel bones recall bleak, industrial cityscapes. The curve in plan and drape in section contrast provocatively with Eisenman's grid. And at MoMA, perhaps most beautiful, Office

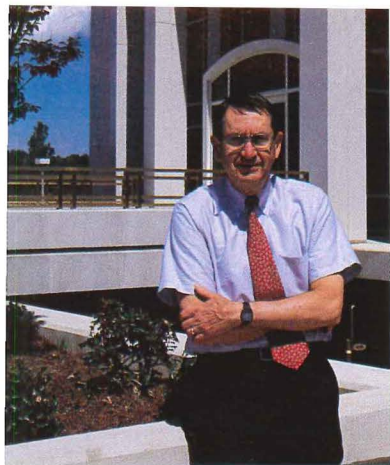
dA's expressive, folded metal plane, at once stair and wall, shimmers in the sunlight of the sculpture garden. Like an architectural origami, the plane literally creases along precise, laser-cut lines.

These endeavors are not intended to be fragments of actual buildings or pure art installations. However, certain projects are unable to strike a balance between the two: Some, like Patkau's diminutive, self-sustaining wilderness cabin at the Wexner Center, are too literally architectural. And others, like Smith-Miller + Hawkinson's piece at MoMA, veer dangerously close to conceptual sculpture. The most successful fabrications provocatively exploit the tension between the two extremes of art and building.

Few people will have the chance to view *Fabrications* at all three American venues before the show closes in late April. So perhaps their divergent thematic directions aren't so problematic, because each constitutes an exceptional, holistic curatorial undertaking. Given the effort of coordinating such an ambitious exhibition, however, it seems a missed opportunity to present a singular idea about architecture writ large. What does become evident, nonetheless, is the effectiveness of full-scale architectural installations as a curatorial alternative to more conventional museum media. *Ned Cramer*

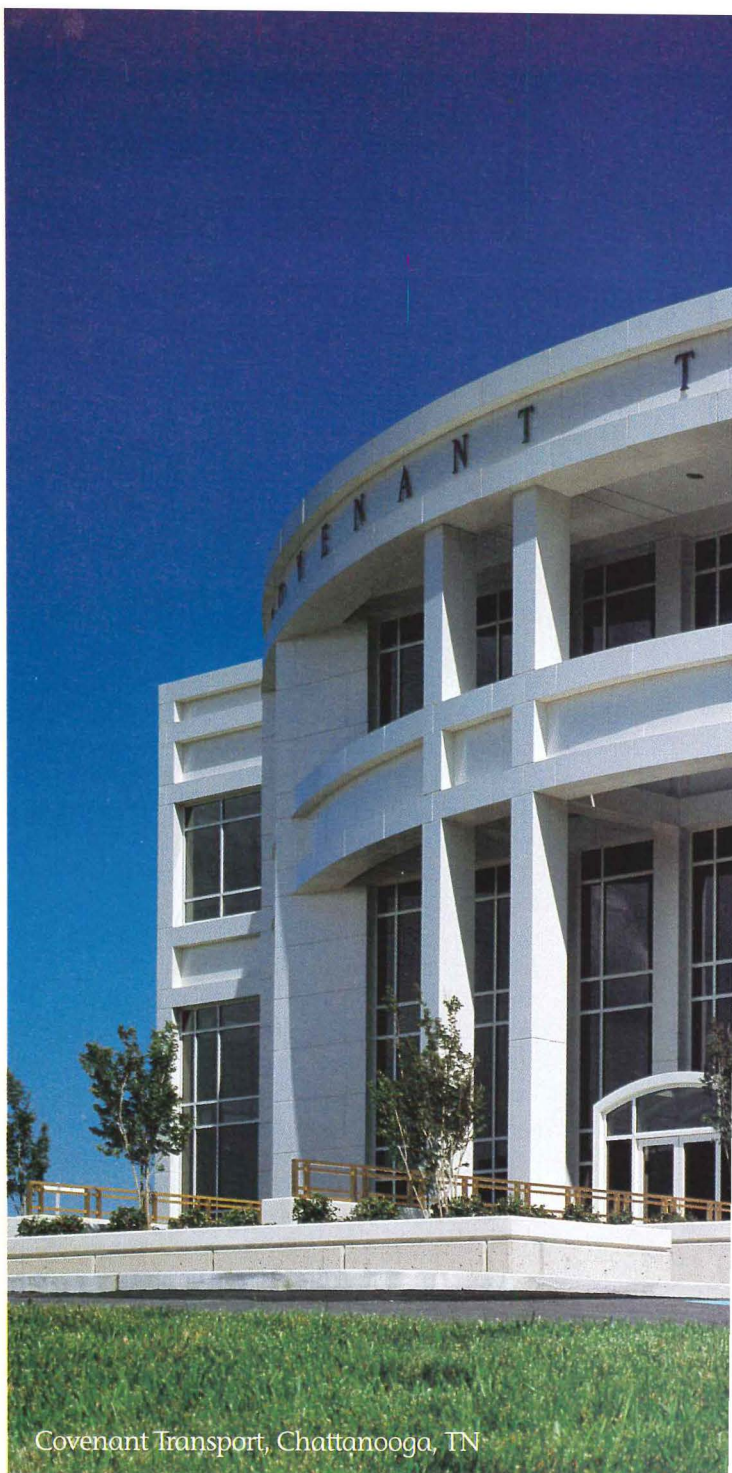
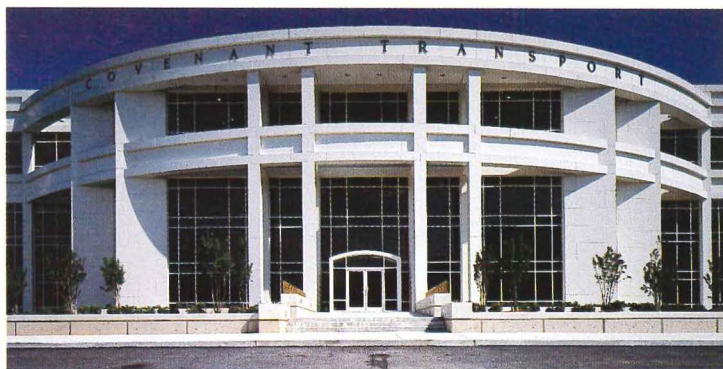
Installations at SFMOMA represent body at rest (right) and dissected body (below).





“You Really Can Afford To Be Versatile.”

Alan Derthick, Architect



Covenant Transport, Chattanooga, TN

So says architect Alan Derthick of Derthick, Henley & Wilkerson talking about his choice of Alucobond® Material for the Covenant Transport building just outside of Chattanooga, Tennessee.

“The building really stands out. And the things we did with Alucobond



Material would be extremely difficult to do with anything else. It gave us the ability to create a curving facade with lots of 3-D. It's the one material that lets you shape to fit your needs.

On April 18, 1997, after a winter of record cold and snowfall, the swollen Red River of the North finally broke its banks and flooded Grand Forks, North Dakota. Within hours, a catastrophic fire erupted, burning 11 buildings in the center of old downtown Grand Forks. The disaster unfolded on national newscasts: Firefighters worked in vain against racing, waist-deep flood waters to stop the flames raging through the city center.

When the flood receded, the city of 50,000 had sustained more than \$1 billion in damage. Of its 11,000 houses, 8,000 were damaged, and another 750 lost outright. Hundreds of businesses suffered serious losses. Most churches, schools, and public institutions were closed. Eighty percent of the city was flooded: Grand Forks had endured the largest per capita disaster in U.S. history.

With 20 percent of its downtown commercial buildings burned, and the rest with neck-high water

Soaked, Burned, and Salvaged

Grand Forks, North Dakota, rebuilds after its epic flood and fire.

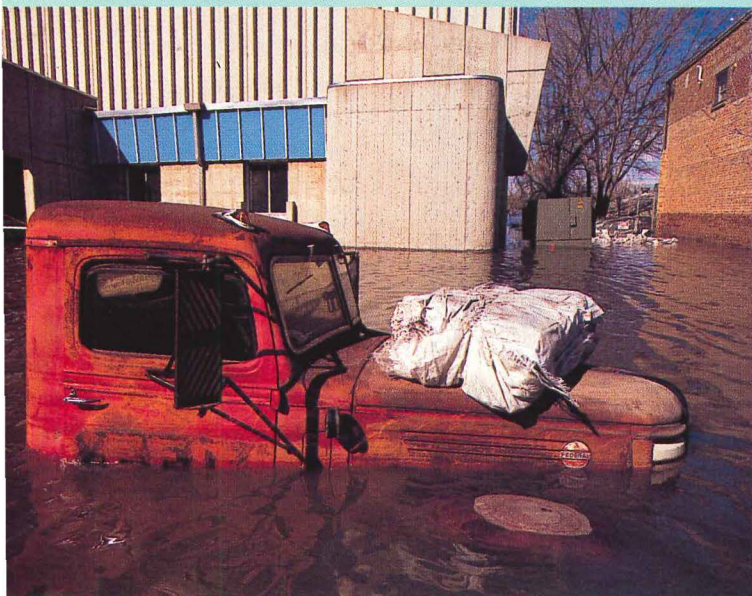
damage on the ground floor, the citizens of Grand Forks had to decide whether to abandon the traumatized downtown or rebuild it. They decided to rebuild.

The three-by-four-block heart of Grand Forks' century-old downtown forms the only urban fabric for miles. Its streets are lined with three- to five-story brick and stone buildings built shoulder to shoulder, whose storefronts open onto the sidewalks, with offices and residences above. Downtown's buildings frame and temper the relentless sky, humanizing the vast sweep of the landscape.

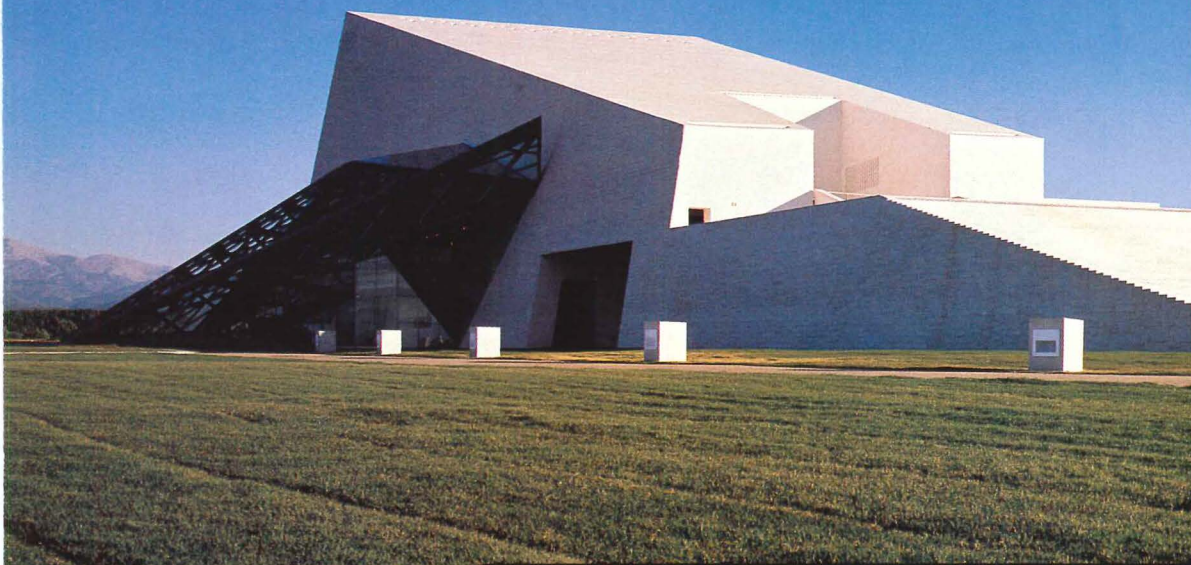
Even before last year's disaster, however, this place had been in decline. Downtown Grand Forks, like most U.S. cities, lost its commercial viability during the 1960s and 1970s, as a new mall opened in the suburbs and other businesses sought outlying locations with cheaper land and more convenient parking. The city's two hospitals also left, and the district withered into the 1980s.

Despite the exodus, several important businesses stayed downtown, including the Grand Forks *Herald*, the locally owned First National Bank, and several key law, accounting, and insurance firms. City Hall, Central High School, the federal courthouse, two residential hotels, and many subsidized apartments also remained.

Revitalization began stirring at the core of Grand Forks in the early 1990s. City leaders and residents knew downtown would not regain its importance as a commercial center, but its revival as an entertainment and cultural center seemed possible. New restaurants and a coffee shop opened, several old buildings were renovated, and new residents moved in, especially college students and working singles in their 20s. The economy was still struggling, however, and major lenders were ambivalent about investing. After the flood and fire, there was no longer room for ambivalence. Maintains



Carlisle's Sure-Weld™ gives you the design options you need.



SURE-WELD HEAT WELDED MEMBRANE

For a roofing system that looks as great as it performs, choose Carlisle's Sure-Weld.

When aesthetics are as important as durability, Carlisle's Sure-Weld is the choice of architects and specifiers. Sure-Weld not only offers installation expediency and seam integrity, it is also available in two color options for reflectivity and a consistent, monolithic appearance.

Sure-Weld Offers Flexible Design Options:

- Offered in white or gray
- Can be mechanically fastened or fully adhered
- Available in .045" and .060" thicknesses
- Polyester reinforcement provides added breaking and tearing strength and puncture resistance
- Provides long term UV and ozone resistance and is environmentally friendly because it is compounded without chlorine or plasticizers

Sure-Weld Systems Speed Application Time:

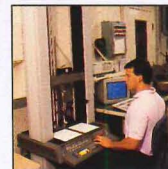
- Seams can be welded at 10–15' per minute
- Heat welding fuses splices together, creating a smooth, seamless appearance

Sure-Weld membrane from Carlisle increases your design options.

For nearly 40 years, Carlisle has provided specifiers with

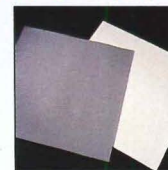
LEADERSHIP • INNOVATION • TECHNOLOGY • EXPERIENCE

CARLISLE
LEADERSHIP



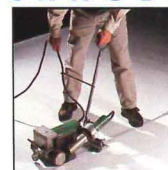
Industry-leading research assures product performance.

INNOVATION



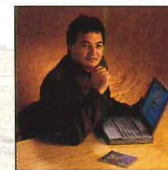
Innovative white and gray membranes resist biological defacement.

TECHNOLOGY



Heat-welding produces a visually seamless system.

EXPERIENCE



Carlisle's experienced design experts can help develop the right Sure-Weld system for your roofing challenges.

CARLISLE

Carlisle SynTec Incorporated

P.O. Box 7000 • Carlisle, PA 17013

Phone (toll free): 1-800-4-SYNTEC

Fax: 717-245-7143

<http://www.carlisle-syntec.com>

Circle 98 on information card

Sure-Weld is a trademark of Carlisle SynTec Incorporated.
©1998 Carlisle Corporation
Printed in U.S.A. 855034

YOUR
Single-PLY
SOLUTION™



Mayor Pat Owens, "The people of Grand Forks decided to turn disaster into opportunity" by rescuing this unique piece of the city.

To evaluate downtown's social and structural needs, the U.S. Department of Housing and Urban Development (HUD) committed \$1 million to a redesign and hired economic development consultant Sedway Group of San Francisco and Chicago-based urban designer Camiros.

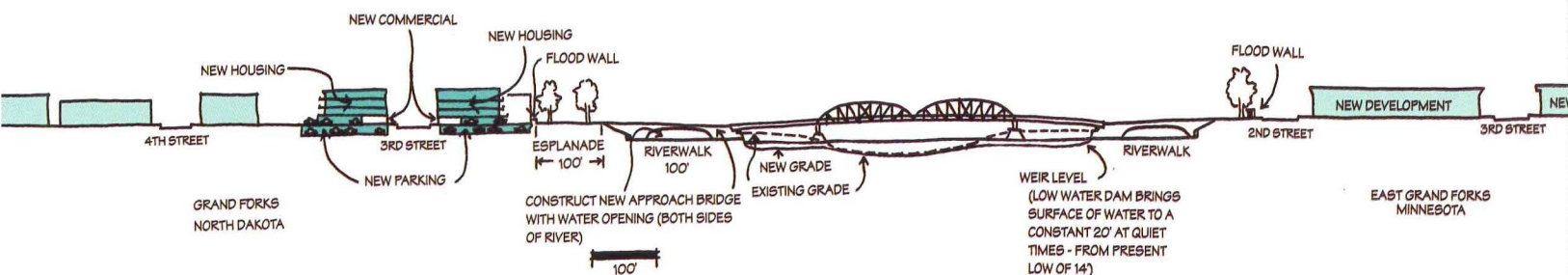
Alongside these efforts, the Mayor's Task Force on Business Redevelopment, appointed shortly after the flood, initiated a community design charette. More than 100 people participated, and from that event emerged a report titled "Reimagining Downtown" that envisions a lively, walkable precinct of restaurants, entertainment, retail stores, arts outlets, and a new town square.

To examine systemic rehabilitation issues, advisors from the Urban Land Institute (ULI), sponsored by HUD, conducted an intense five-day study of Grand Forks last summer. The ULI team found that downtown's long-term health required the development of a park along the river within the flood-control area; the creation of a pedestrian environment and a new public square; and the completion of a series of specific renovation and construction projects to ensure economic viability—imperatives that would be overseen by the Downtown Development Commission (DDC).

Of these priorities, not surprisingly, flood control ranks the highest. The U.S. Army Corps of Engineers has proposed earthen levees and concrete flood walls on both sides of the river, as well as the construction of a huge diversion channel. Alignment and cost, which will be at least \$250 million, remain indeterminate.

The proposed flood-control project will also present an enormous physical challenge to downtown and, ironically, damages the urban fabric while protecting it. Flood walls will actually rise above street level by anywhere from 8½ to 12 feet, depending upon the level of protection chosen. This means that on the edge of downtown, views of the river will be blocked. "Reimagining Downtown" suggests several ways to integrate the levee into the

At flood's height, neck-high water engulfed downtown Grand Forks (top). Urban Land Institute's recommendations (section) detail construction of flood walls and new housing and commercial properties.

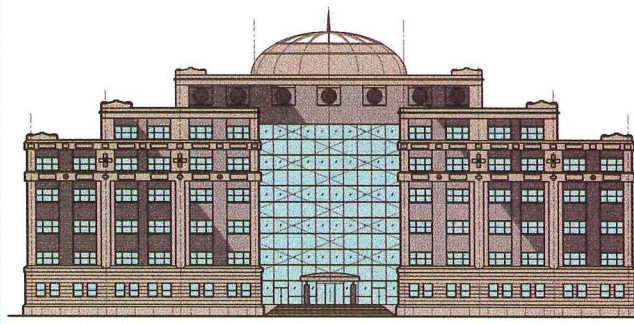


urban fabric with steps onto the levee at the ends of streets, and signage to indicate the streets for those in the park.

The revitalization will not be successful unless people actually frequent downtown. When the flood occurred, a \$1.5 million project was under way to convert the abandoned 1919 Empire Theater into a performing arts center, gallery, and offices for the North Valley Arts Council (NOVAC). Located on DeMers Avenue, downtown's

main east-west axis, NOVAC was originally scheduled to open last June. It represented one of the city's vital first steps toward cultural transformation. Fortunately, by the April flood, the seats had been removed to be reupholstered, and the fire never reached the building. The Empire's renovation is now back on track with additional public and private funds and the theater is scheduled to open March 27.

Four days after the flood crested, Grand Forks *Herald* Publisher Mike Maidenbourg rode through downtown in a motorboat with Tony Ridder, CEO of the Knight-Ridder



Post-flood construction includes Schoen Associates' County of Grand Forks headquarters (left); Grand Forks *Herald* newspaper facility, also by Schoen Associates (below left); and Hammel Green and Abrahamson's and Johnson Laffen Architects' Grand Forks Financial Center (facing page).

publishing company, to survey the damage. Maidenbourg says that, after seeing the extent of the damage, Ridder vowed to "come back with a building that symbolizes the paper's commitment to the city." The first new downtown building since the flood, the \$3 million Grand Forks *Herald* headquarters, designed by local firm Schoen and Associates, will be completed in June. The *Herald* was long an active supporter of the old downtown. Before the flood, its offices, press, and postproduction shop were in five different buildings at the heart of town; two buildings were purchased and renovated in 1993. Ironically, the fire started in the block where the

Herald's buildings were located: The paper lost them all except a 1931 Art Deco building that sustained major damage.

City leaders feared other businesses wouldn't follow the *Herald's* lead, despite the reopening of a few restaurants and the promised return of the Empire Theater. They recognized the very real chance of losing the district once and for all if old business fled to the suburbs: The First National Bank building had been damaged, and the bank, along with other business mainstays, temporarily moved out. In a project that is, according to Mike Conlon of the Sedway Group, "the linchpin for downtown recovery," city leaders lobbied



January 1998

architecture

AMERICAN EXPORTS
I.M. PEI'S SHANGRI-LA

HOLL'S NORTHERN LIGHTS IN HELSINKI
PACIFIC OVERTURES BY MORPHOSIS
AMERICAN DESIGN: A FOREIGN APPRAISAL

AMERICAN EXPORTS | PEI | MORPHOSIS | HOLL

Architecture Magazine On-Line:

January 1998

Special Features
Technology & Practice
Calendar
Protest
Pierpoint
Resources
Reader Support
SEARCH

Morphosis I.M. Pei Holl

www.architecturmag.com

SEE

- Architecture highlights from current issue
- Enhanced industry calendar
- The Protest Column with "Talkback" feature
- Technology & Practice articles

FREE

- Listings in our Architectural Firm Database

PLUS

- Search manufacturer's Web sites with PIERPOINT database organizer
- Virtual Reader Service Card
- New products on-line

A resource for the architectural community

architecture

to retain these essential businesses by assembling land at the intersection of Fourth Street and DeMers Avenue. On that corner, the city is financing the construction of the 100,000-square-foot Grand Forks Financial Center. The \$16 million project, designed by local firm Johnson Laffen Architects with Hammel Green and Abrahamson of Minneapolis, is scheduled to open in February 1999.

The city government, therefore, is staking itself in the city-center's rebirth. At the southern edge of downtown, the County of Grand Forks is consolidating several offices into a \$19 million, 135,000-square-foot facility to be designed by Schoen Associates and completed next year.

Alongside new construction, many buildings are under renovation. The DDC has initiated a grant program for property owners to restore damaged storefronts, intended, says Director of Urban Development John O'Leary, to foster "a change in use that should have several effects: increases in market and tax value,

intensified use, and higher density."

Downtown's reconstruction, however, is just a small part of Grand Forks' rebuilding story. As of January, 50 new modestly priced, single-family homes have been built and 200 more are under construction. The school district has budgeted \$34.6 million for new and existing school buildings over the next two years.

Despite the progress, there are still difficult decisions to make in Grand Forks. Resources are scarce; demand for them is infinite. There is disagreement about which projects to support. Moreover, now that the proposed levee's alignment has been announced, citizens understand how it affects them directly: Some face losing homes they only recently reclaimed, which will be either stranded on the "wet" side of the new structure (and therefore condemned) or in the levee's path. People bereft of decent housing find it hard to support government spending on a downtown entertainment district. To comply with new flood-protection rules, buildings

downtown will have to raise their ground floors by 1 to 2 feet, even if they are only marginally operational. The construction of the Financial Center will require the removal of two buildings listed on the state historic register. Push is coming to shove. The resolve of the city and its citizens to salvage the city's devastated urban fabric is now being put to the test. *L.R. Findley*

L.R. Findley is an Oakland, California-based architect who teaches at the California College of Arts and Crafts.



HOW WOULD YOU LIKE IT IF NOBODY PAID YOU FOR YOUR DRAWINGS?



It wouldn't be fair. In fact, it would be wrong. And like stealing drawings, stealing software is something that not only sacrifices your professional integrity but also could put you in a heap of legal trouble. Bringing copied software into the workplace is a crime punishable with up to 5 years in prison or a \$250,000 fine. So, prevent damaging your reputation by bringing the same set of ethics to your software as you do to your work.

▶ CALL 1-800-NO-COPIES FOR MORE INFORMATION
OR TO REPORT INSTANCES OF AUTODESK SOFTWARE PIRACY.

 Autodesk®
DESIGN YOUR
WORLD™

Project Outline DESIGN A WATERFRONT COMMUNITY CENTER BUILT TO WITHSTAND SALT AIR, HIGH WINDS AND SEASONAL TEMPERATURE VARIATIONS. IT MUST MEET THE APPROVAL OF AN UNUSUALLY DIVERSE CONSTITUENCY, INCLUDING THE ARMY CORPS OF ENGINEERS, MARYLAND STATE DEPARTMENT OF NATURAL RESOURCES, TOWN OF OCEAN CITY AND HERON HARBOUR ISLE RECREATION ASSOCIATION.

"It seemed like everything



© 1997 Anderson Corporation. All rights reserved.

Everything except ou

Design Solution DRAW FROM INFLUENCES OF LIGHOUSES AND TRADITIONAL EAST COAST ARCHITECTURE TO CONSTRUCT A FACILITY THAT UNIQUELY REFLECTS THE COMMUNITY AND ENDURES THE CHALLENGING NATURE OF ITS ENVIRONMENT. USE A WIDE VARIETY OF ANDERSEN® WINDOWS TO OPEN UP EACH ROOM TO THE VIEWS OFFERED BY THE SITE, AND BRING IN AN ABUNDANCE OF WARM, NATURAL LIGHT.

Project Portfolio, TEN Architects

Enrique Norten of TEN Architects is poised to raise his firm's profile in the United States over the next two years, with a spate of new commissions that prove Modernism's adaptability to context: as an urban screen, as a backdrop for historic buildings, and as a foil to nature. In each instance, Norten manipulates orthogonal geometries into site-sensitive forms.

Norten's competition-winning scheme for the 185,000-square-foot Social Sciences Building at Arizona State University in Tempe is a complex of intersecting platonic forms that showcase



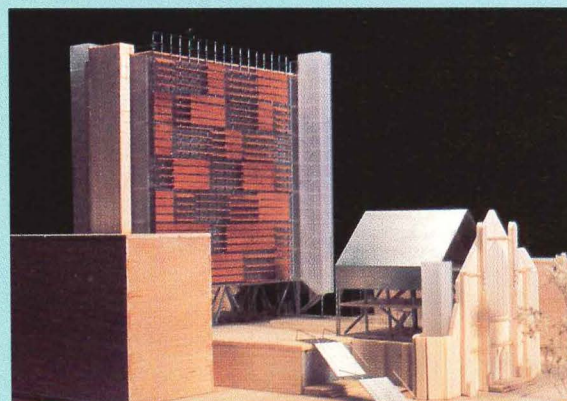
Social Sciences Building
Arizona State University
Tempe, Arizona



cutting-edge technology within a new campus hub. The design, chosen over submissions by Norman Foster, Richard Meier, and Morphosis, features five-story, concrete-clad classroom and administrative wings defining the northern and western edges of the site. These volumes create an opaque backdrop for a pristine glass box that Norten calls the project's "icon." The architect experiments with various materials inside the block—tempered, translucent, and colored glass, as well as stainless steel and wood. Each material defines interior zones that house the university's computer and technological research facilities. Pedestrian bridges on the second and third floors span the L-shaped courtyard between the concrete classrooms and glazed research block. The complex's southern face will incorporate a state-of-the-art screen, on which projected words and images will announce campus events and become, according to Norten, "an experiment in learning." Construction will begin at the end of this year; completion is expected in 1999.

When responding to historic architecture, Norten's Minimalism can still harmonize with a seemingly antithetical structure. His 79,000-square-foot Addams Hall Gallery and Graduate School of Fine Arts at the University of Pennsylvania furnishes a respectfully mute addition to the three remaining walls of a fire-damaged, Neo-Gothic church that the architect was charged with preserving. Following the original structure's form, Norten inserts glass walls behind the surviving granite facade to house a gallery on the first floor and a cafeteria on the second; the gallery's gabled metal roof mimics the ruin's original profile. Behind the gallery, a skylit, stone-clad volume houses studios equipped with flexible walls that provide additional gallery space when needed, and at its northern end, forms the base of a glazed, nine-story concrete tower that contains faculty offices and additional studios. Wood louvers modulate sunlight on the tower's southern side—the adjustable shades create a continuously changing backdrop for

**Addams Hall Gallery and
Graduate School of Fine Arts**
University of Pennsylvania
Philadelphia





**HIGH
SECURITY**

DON'T GIVE AN INCH

Every business, school or hospital has a department where extra measures must be taken to protect valuable documents and equipment. Thieves know, that with a little tampering, some closers will not completely close a door. LCN High Security closers have a vandal resistant design to assure that doors will close and latch to deny access to the wrong people. Surface and concealed closers have heavy duty forged steel arms, Torx® tamper resistant screws and jamb resistant tracks.



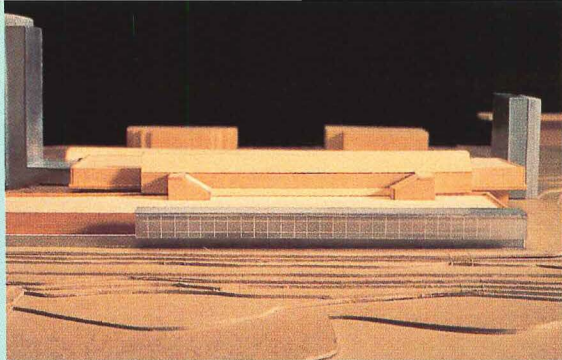
THE BEST CLOSERS. THE BEST VALUE. WORLDWIDE.

INGERSOLL-RAND
ARCHITECTURAL HARDWARE

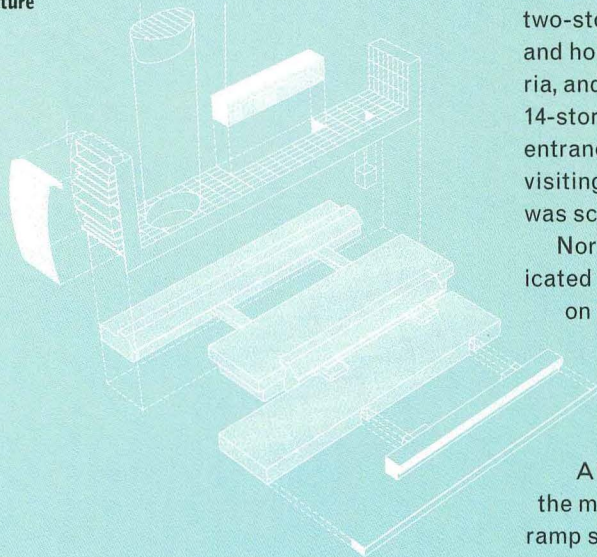
LCN

LCN Division, P.O. Box 100, Princeton, IL 61356-0100 Phone: 800/526-2400 Fax: 800/248-1460 Website: <http://www.lcnclosers.com>

Circle 104 on information card



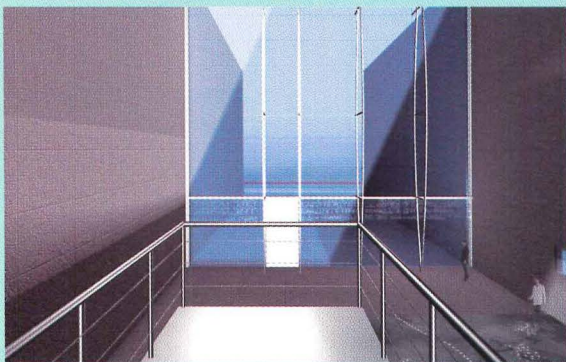
School of Art and Architecture
University of Michigan
Ann Arbor, Michigan



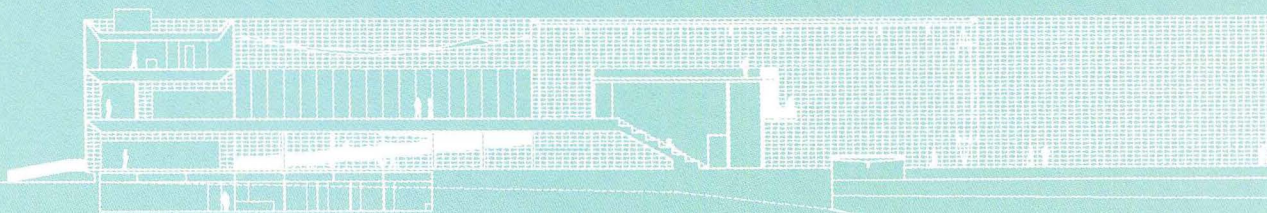
the ruin in the foreground. Construction, originally scheduled to begin in 1999, is on hold pending fundraising negotiations.

Norten's renovation and expansion of the School of Art and Architecture at the University of Michigan in Ann Arbor is equally restrained. The architect inserts a new 135,000-square-foot, concrete panel-clad block between existing 1960s classroom and studio buildings to redefine their haphazard juxtaposition. Norten's two-story addition matches the roofline of the adjacent buildings and houses a conical, 500-seat auditorium, a garden court, cafeteria, and student center that forms the complex's new nucleus. A 14-story, glass-and-concrete administrative tower marks a new entrance to the west. To the east, a nine-story block houses 16 visiting-professor residences and faculty studios. Groundbreaking was scheduled for late 1999, but is on hold pending fundraising.

Norten is also designing a museum in central New Mexico dedicated to the soldiers and families who marched, slept, and died on the Camino Real—a 300-year-old trail connecting Mexico City to the Spanish empire's northernmost capital of Santa Fe. The architect intends the 27,000-square-foot Camino Real Heritage Museum to tread delicately on its arid site in the Chihuahuan Desert, 75 miles south of Albuquerque: In an effort to minimize disturbance to the land, the museum cantilevers 120 feet out over the edge of a mesa. A ramp spanning the 45-foot width of the building's north entrance



El Camino Real Heritage Center
Socorro, New Mexico



facade leads to a foyer and exhibition space on the first level. On the second floor, galleries and a terrace lie adjacent to an auditorium. A double-height gallery to the south leads to a terrace—walled on three sides—training views to the southeast toward the remains of the Camino Real. All interior partitions will be crafted of glass and steel, while the two long side walls will be clad in local stone to match the hues of the surrounding desert. Construction will begin this summer; the museum is scheduled to open in late 1999. *Jessica Barrow Dawson*



Such a waste of paper.



Sharpe James was elected mayor of Newark, New Jersey, in 1986, after serving 16 years on the city's Municipal Council. He also taught in the Newark public school system from 1961 to 1968 before joining the faculty of Essex County College, where he was a professor in the department of behavioral sciences.

ARCHITECTURE: When did Newark's comeback begin?

MAYOR SHARPE JAMES: When we built Society Hill [a town-house development] in 1990, people said, "You can't keep the middle class in the city. Nobody's going to come back to the city and buy in Newark." We built Society Hill in Central Ward—the heart of the [1967 race] riots—and people lined up for a week in the rain to purchase those units and move back to the city. That told us that if we build the best mousetrap, people will surely come.

What is your strategy for redeveloping downtown?

My vision is to take advantage of Newark as a transportation hub. Decades from now, people will want to relocate, open, or expand a business based on transportation. Can they get to an airport? Can they get to a seaport? Can they get to a highway? That is the excitement of the new Newark. Starting with the New Jersey Performing Arts Center (pages 118-127, this issue), and our proposals for a new baseball stadium and waterfront development, and the new conference center, there's one magic ingredient that connects them all—a downtown-to-airport rail link. As we grow and bring in all these wonderful things, we plan to make sure they're tied to mass transportation.

Looking Sharpe

Mayor Sharpe James of Newark, New Jersey, talks about his city's strategies for urban renewal.

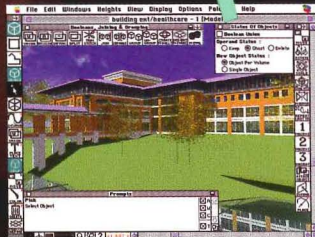
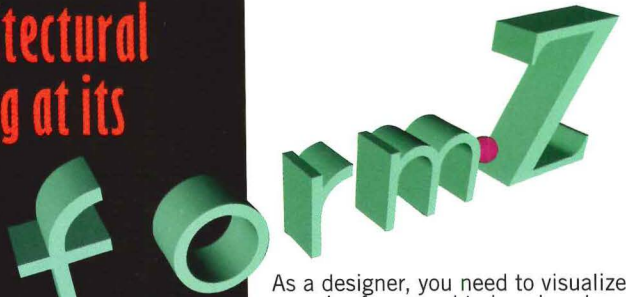
What methods have you utilized to spur development?

It takes compromise and vision to move a city forward and bring about change. What you find is that there are those who fight change for historical reasons, and those who fight change just to fight change. We had to create new legislation. We created urban-enterprise zones to bring sales taxes down and give incentives for hiring the unemployed.

Where have you targeted these districts?

We started with downtown because this is where Newark started in 1666. In downtown, you have the private-sector dollars of the business community, but you also have a wholesale effort in the neighborhoods where the taxpayers live. We didn't want to get into some of the problems that Jersey City had with gentrification. People said, "You're building a city and you're going to kick me out." When Mayor [Michael] White turned Cleveland around with Peddlers' Square, a stadium, and the Rock and Roll Hall of Fame, citizens said, "You favor downtown; you neglect the neighborhoods." Our program has been to connect the two.

3D architectural modeling at its best ...



As a designer, you need to visualize complex forms and to imagine shapes that do not yet exist. You frequently race against insane deadlines, while your clients grow impatient. That's when you need the modeling power of **form•Z**, which lets you create a vast variety of forms with great ease. It offers an extensive array of unique 2D and 3D form sculpting capabilities.

Grow a model from simple lines to complex **surfaces** or to true **solids** with a few quick clicks. Shape curved **splines** or **NURBS** surfaces as you slip effortlessly between 2D and 3D views. **Resize** your shape, **stretch** it, **extrude** it, **lathe** it, **sweep** it, **project** it, **unfold** it, **deform** it, apply advanced **vertex** and **edge rounding** to it. Use **metaformz**, smooth **meshing**, image-based **displacements**, or multi-source, multi-path **skinning** to create smoothly blended **organic** forms. What's more, **form•Z's Boolean** operations work even better than those found on pricey workstation level modeling packages.

Add as many **layers** as you need, work with floating point **precision** using **graphic** and **numeric input**. If you are unhappy with your new design, **unlimited undos** are at your fingertips.

As you model, you can interactively view your creations in wire frame or smoothly shaded images using **OpenGL** (Windows) or **QuickDraw 3D** (Macintosh). You can also produce **QuickTime VR** movies and view them from within **form•Z**.

RenderZone

When you are done modeling, you can use **RenderZone's** state of the art shader technology to produce your photorealistic images at high speeds.

RadioZity

If you need highly accurate simulation of lights, you can use **form•Z RenderZone RadioZity** for even more photorealism.

Or you can smoothly transfer your models into your favorite animation program, using one of **form•Z's** twenty import/export formats. Flexibility of this caliber has made **form•Z** the most effective modeling complement to many popular animation programs.

NBBJ,

a national and international multi-discipline architectural firm, has recently expanded their use of three dimensional visualization throughout the entire design process, and **form•Z** has become an integral part in their quest for excellence in design. How does it happen?

form•Z gives us an honest and accurate visualization of our design ideas very early in the design process. It permits the exploration of more complex forms and combinations of elements that otherwise might not be considered, because of the difficulty in correctly depicting them in sketch or model form. A sketch limits you to a single angle of view; form•Z permits an unlimited number of views with several clicks of a mouse for a whole new vantage point. It uses an intuitive approach to three dimensional model building that is natural for designers. form•Z is the most important new design tool to come along during my career.

James H. Schirtzinger
Design Principal, NBBJ



autodes^{INC}sys

Phone: (614) 488-8838

Fax: (614) 488-0848

Circle 110 on information card

NBBJ

See for yourself:
download a demo for
MacOS or Windows from
our web site at
www.formz.com.



How are you doing that?

We're creating special improvement districts like Philadelphia, Jersey City, and Baltimore have, so that when we start our downtown development, it actually reaches the neighborhoods. Governor [Christine Todd] Whitman, in her State of the State address, spoke of a New Jersey master plan that won't promote suburban sprawl and urban blight, and will fix up communities. That was rather unique.

What do you tell developers who want to build in your city?

People are used to leaving Newark to find a better place. If you choose to build in the city, it has to be attractive and state-of-the-art. People have got to be proud to say, "Mine is just as good as yours." Urban residents are very sensitive. They think if you're building just for urban populations—for blacks or Latinos—you're going to [use inferior construction]. They'll reject those facilities. But when you build a quality facility that is the same as those in the suburbs, they'll support it wholeheartedly.

What does it take to attract business to Newark?

We're willing to wave the carrot at them. We are offering them what they need—land, a labor force, tax abatement. I would like to believe that we offer them access to government, a willingness to work with them, a partnership with full cooperation. That's how we built the arts center: We received the largest public donation—\$61 million—in the history of any public project. We've demonstrated that there are people willing to work in a partnership to strengthen the city, to improve the quality of life, to make Newark better.

How is the city's public housing changing?

We no longer build poor housing in Newark; we build housing for the poor—safe, decent, affordable, and attractive low-income housing. We have decided to raze all the nonfunctional, abandoned high-rises and build quality townhouses in their place. We've changed the concept of public housing from vertical growth to horizontal growth. People are fighting to get into our public housing. Before we bring the high-rises down, we have to satisfy the one-for-one replacement plan. That has triggered a competition for land.

Will Newark continue to lose population?

I want to believe that with the recent surge in building, we won't fall below 275,000 in the next census [in 2000]. I hope we have stabilized by building safe, decent, affordable, attractive housing for all people—low-, middle-, and upper-incomes. We want all income types to call Newark home.

Are there specific federal and state policies that have helped Newark?

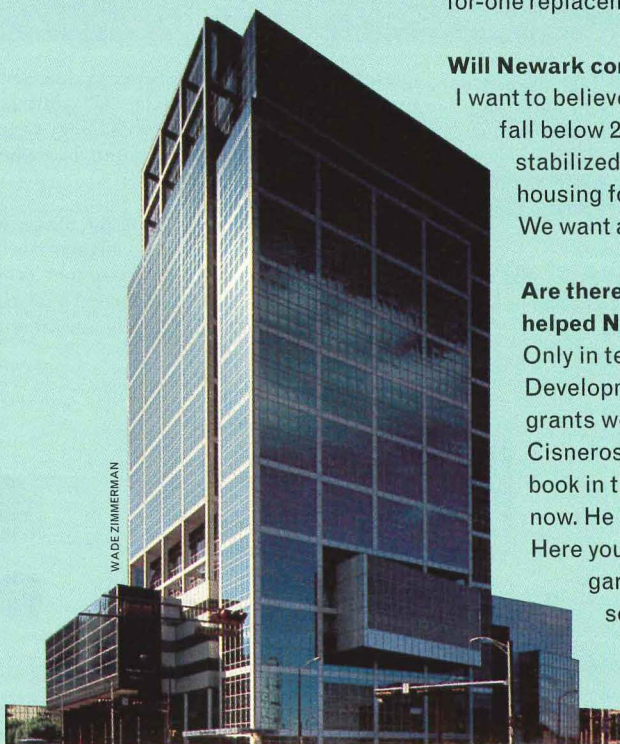
Only in terms of getting money from them—Urban Development Action Grants (UDAG) and the development grants we used to get from [then HUD Secretary] Henry Cisneros. Now, we have Andrew Cuomo. I threw his last book in the garbage; that shows how much we're getting now. He wrote a personal note to me and signed it "Andy." Here you go, Andy [as he throws HUD application into a garbage can]. They're getting ready to cut their budget so much that I think Congress wants HUD to go out



WILLIAM RAMOS PHOTOS



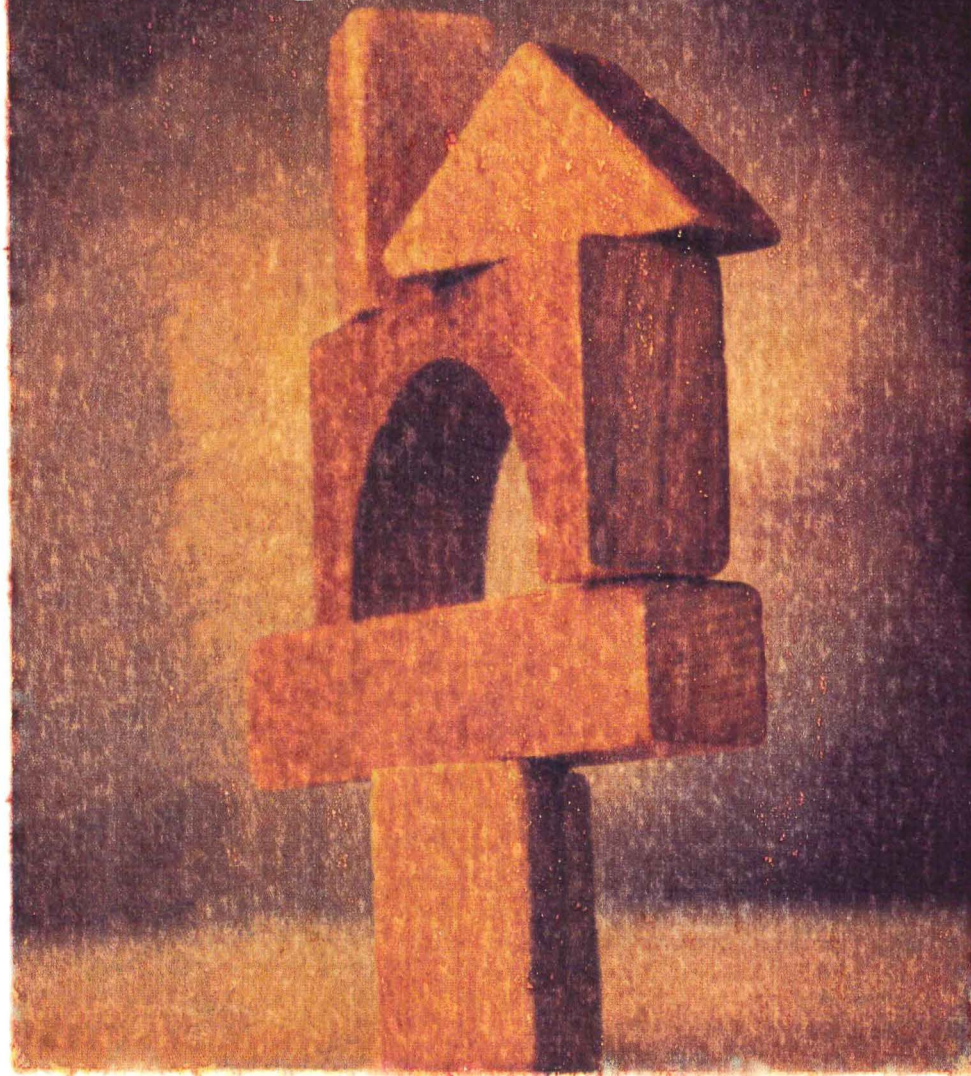
New industry has spurred high-rise development in downtown Newark (top). Society Hill neighborhood (center) proves cities can support middle-income housing. New dormitory at New Jersey Institute of Technology (above), designed by Johnson Berish, enhances urban campus.



WADE ZIMMERMAN

Westfourth Architects' Newark Center for Commerce and Education houses Seton Hall University law school.

Remember when
imagination
was all you needed to
express yourself?



The all-new ArchiDesign Interactive Design and Modeling Software from BAGH gives you the freedom you need to express yourself like never before...not since you were a kid anyway. ArchiDesign lets you explore and refine whatever designs come to mind in a truly interactive 3D environment and then use the resulting model not only for presentation purposes, but also as a base for all CAD production drawings.

ArchiDesign was developed specifically to meet the needs of today's AEC professionals. So you can count on powerful modeling tools, like intelligent architectural objects, true solids and NURBS-based complex surfaces, that are a snap to use. You'll also enjoy super-fast

interactive visualization to better evaluate any possible "what if" scenarios, along with interactive 3D editing, including BAGH's revolutionary Design-Track technology to ensure that the design constraints you establish are maintained whenever your model is modified.

And last, but not least, ArchiDesign makes it easier than ever to make that winning presentation with advanced rendering and animation. Not to mention drawing extraction that lets you automatically extract CAD-accurate and fully coordinated base drawings from your model and export them to AutoCad™ or any other CAD software.



(514) 285-1717
1-800-561-0522
info@bagh.com
www.bagh.com



EXPRESS YOURSELF



SiliconGraphics
Computer Systems

©1997 BAGH Technologies Inc. All rights reserved. ArchiDesign and the ArchiDesign logo are registered trademarks of BAGH Technologies Inc. AutoCad and DWG are registered trademarks of Autodesk Inc. All other brands and product names are the property of their respective holders.

Circle 112 on information card



This program meets
AIA + CES Quality
Level 3 criteria.

Participants
will receive 6 LU's.

This program
is worth
2 contact hours



Michael Graves' addition to Newark Museum added 60,000 square feet of exhibition space.

of business. HUD's always been the instrument we used to rebuild our cities.

Which federal policies have hurt Newark?

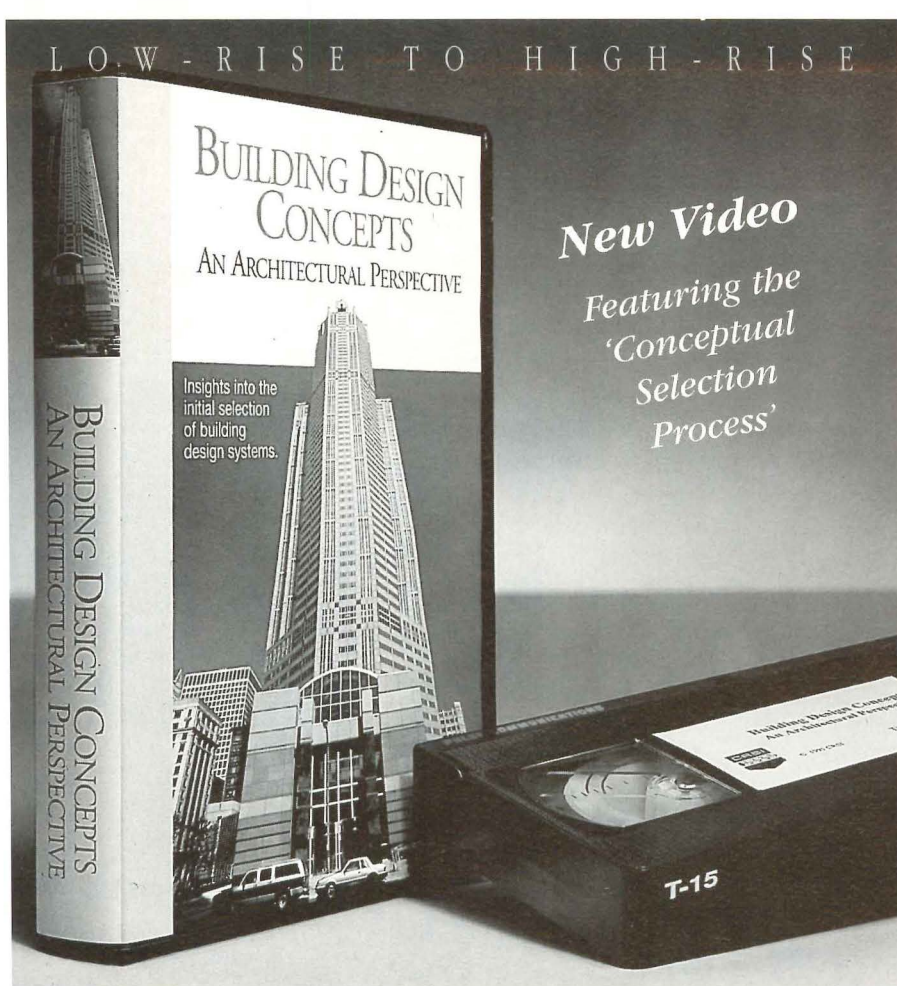
Decreasing federal and state funds, and the practice of giving block grants to the state and letting them divvy out less money. Now you have to go, hat in hand, and beg from them. Before the money came directly to the cities. The president would call and say, "Hey, Sharpe, we just gave you a grant." Now, balancing the federal budget has been on the backs of cities and towns—that's wrong.

What else is being planned for the district around NJPAC?

That area has a 12-acre footprint. NJPAC is looking for projects that complement it to go in this area. We're also looking to develop the waterfront. Former Governor Tom Keane said, "Sharpe, we can't just build a building, they won't come. We have to build a critical mass. They have to be able to walk outside and feel safe." What people are marveling at is only the first project on this 12 acres. We want to take the waterfront back to Clay Street.

What lessons do you offer other cities?

Dream great dreams, because if you dream a small dream, nothing gets accomplished. Have the courage to form the partnerships to make those dreams come true. Government does not have all the answers. You have to elicit the help of the business community, nonprofit, community-based organizations, and everyone who wants to help. The best projects, the best development, and the cities that have the most progress are not solely government-driven; they are driven by a partnership of ideas and solutions.



New Video
Featuring the
'Conceptual
Selection
Process'

Select the best structural system.

This new video uses a step-by-step approach to help you evaluate the best structural system in the initial stages of building design. The key factors affecting your design decision are addressed.



This 325,000 sq ft reinforced concrete building was completed within 17 months.

You'll see award winning designs along with comparisons between reinforced concrete and alternative systems.

You'll discover the reasons why reinforced concrete offers significant advantages concerning cost, design flexibility, creativity and aesthetics.

Call, fax or write for the new "Building Design Concepts" Video, exclusively from CRSI. *Free for a limited time.*



Concrete Reinforcing Steel Institute

933 N. Plum Grove Road
Schaumburg, Illinois 60173-4758
847/517-1200
Fax: 847/517-1206

© 1996 CRSI

Circle 114 on information card

WHY

TCS[®] – terne-coated stainless steel, introduced by Follansbee in 1967, has established itself as a premier roofing metal, evidenced by its specification on countless residential and non-residential structures. Its exceptional performance has been due in large part to its *sulphur-reactive* coating which is dependent upon atmospheric sulfides to develop an aesthetically pleasing, corrosion resistant, gray patina.

Because of our nation's efforts to create a cleaner environment, the sulphur content of the atmosphere in urban areas has been reduced significantly. In rural and coastal areas, it is virtually non-existent. Recognizing these changing conditions, Follansbee has created an improved TCS, stainless steel coated with a new, proprietary coating (*ZT[®]*) which is *oxygen-reactive*. Its performance and resistance to corrosion is enhanced,



Why plan? That's the question many Baltimoreans are asking in light of recent decisions by Baltimore Mayor Kurt L. Schmoke, the Baltimore City Council, and the Planning Commission. These city leaders approved plans in 1997 for a 430-foot-tall, 750-room Wyndham hotel that developers have proposed for a waterfront parcel between the city's rejuvenated Inner Harbor tourism area and the Fells Point historic district.

A \$134 million hotel normally would be welcome news for financially strapped Baltimore. In this case, though, the Wyndham's developers want to build within a 20-acre renewal area called Inner Harbor East that was planned to be a distinctive new neighborhood at the water's edge, with a 180-foot building height limit. The plan, designed by New York architect Stanton Eckstut of Ehrenkrantz Eckstut & Kuhn, won a 1995 AIA Honor Award in urban design. More importantly, it had the full backing of city leaders, landowners, and residents—until the Wyndham came along.

The hotel, designed by Cooper Carry of Atlanta and Betty Harvey Fillat of Baltimore, has drawn criticism on many levels. Opponents say it's too tall, too bulky, too far from the Baltimore Convention Center to attract bookings, and completely out of

Inner Harbor Horror

A hulking new hotel overwhelms the efforts of Baltimore's Inner Harbor master plan.

scale with its surroundings. They warn that it will clog traffic, throw the nearby Little Italy neighborhood into shadow, and destroy the character of the waterfront. Although the design is still undergoing changes—the height has been reduced to 31 stories, down from 41 proposed only a month earlier—the latest images depict a solid, hulking tower that does little to enhance its setting.

Beyond the architectural details of this particular project, most troubling is the city's willingness to trash Eckstut's master plan. Enacted in 1990, the plan calls for an ensemble of buildings working together to create a strong sense of place. The Wyndham is an isolated tower that resists being part of any ensemble. It's a striking clash of visions—and values—requiring city officials to raise height limits and override existing design standards. Despite widespread opposition, the hotel has sailed through the approval process, presumably because of its potential economic benefits.

Whether this high-rise moves ahead or not, the planning process that led to it represents a new low for a city that has generally benefitted from sound and predictable urban design strategies in the past. At a time when the Planning Commission

is asking neighborhood groups to take part in a comprehensive review process that will lead to a new citywide master plan, subverting Eckstut's vision is absolutely the wrong message for Baltimore's leaders to send.

Edward Guntz

Thirty-one-story hotel tower (right) designed by Cooper Carry and Betty Harvey Fillat defies low-scale Inner Harbor master plan (top).



ATTENTION
ALL SPECIFIERS OF
SLOAN ROYAL[®]
FLUSHOMETERS



SLOAN[®]



archi

THE **ARTS** BRING DOWNTOWN BACK TO **LIFE**

Cities have long taken for granted the presence of their downtown museums, theaters, and concert halls. No more. As they scramble to stabilize their declining fortunes, urban leaders across America are recognizing that cultural institutions bring people downtown and compel them to spend time and money in the city. Further, cultural facilities build civic pride in a way no entertainment megaplex can ever hope to match. That's why towns from Newark to Skokie to Fargo are depending on well-designed cultural projects to put their downtowns back on the map—and keep them there. This issue also presents two new projects—a house in Maine and a Dutch academic building—that tackle the problem of context in very different ways.

Cities turn to cultural buildings to revive their declining centers.

By Heidi Landecker

America's downtowns are struggling to find their market niche. Once the locus of jobs and culture, central cities are now places where teenagers die of gunshot wounds, addicts abandon their children, and mothers with infants beg on street corners.

Politicians and planners, desperate to reshape cities for a changed society, seek to rid downtowns of blight and crime, or at least to slow the decline that has plagued our urban cores since the 1960s. Thus, "megamalls," "entertainment," sports "venues," and "heritage tourism" are the buzzwords issuing nationwide from city officials, urban designers, and developers hoping to turn inner cities into desirable destinations once again.

Add to that list "cultural tourism," the idea of attracting visitors by bringing back art museums, performing arts centers, theaters, libraries, science museums, and other cultural palaces that long ago traded floor-area ratios for the wraparound asphalt of the suburbs. Hoping to lure tourists and locals, cities from San Francisco to Baltimore have rebuilt historic arts centers and opera houses or erected new galleries, history museums, and playhouses. And some cities are eschewing the somniferous art museum to invent newer, hipper institutions that honor our fascination with contemporary culture: technology, space flight, and even rock 'n' roll.

The good news is that cities have been reshaping themselves around changing cultural establishments since the Enlightenment, and the successful ones (Florence, Rome) will always be beacons of urbanity and the arts. Although it's no Florence, Cleveland transformed itself from a Rust Belt casualty so downtrodden that even the Cuyahoga River caught fire to a lively—at least in summer—tourist destination. The big drawing card, of course, is I. M. Pei's Rock and Roll Hall of Fame (*Architecture*, December 1995, pages 70-75) on Lake Erie; nearby lies E. Verner Johnson's Great Lakes Science Center. Across downtown, a block of restored vaudeville-era theaters has enlivened the city's Playhouse Square. And Hardy Holzman Pfeiffer Associates' glassy addition to the Cleveland Library (*Architecture*, September 1997, pages 108-113), smack in the middle of a Beaux-Arts block downtown,

doubled library attendance when it opened last April. Traffic has slowed as the main building is renovated, but when the facility is completed this summer, patrons are expected to return in droves.

The bad news is that, in the rush to reinvent their blighted blocks, some cities build cultural attractions before they can afford to run them. Akron, Ohio, lured the National Inventor's Hall of Fame from its Arlington, Virginia,

ART

headquarters with tax incentives and aggressive lobbying. The museum, which includes a hands-on "inventor's workshop" for those not keen on patent history, was designed by James Stewart Polshek and Partners, and graced the cover of this magazine in December 1995. During its first year, 275,000 visitors thronged to Inventure Place, as the museum is called. But since the cultural creation lacked an operating endowment, entrance fees alone couldn't finance the changing exhibits that museums need to make people return. Visitation dropped sharply, the director was replaced, and the city bailed out Inventure Place with a federal Section-8 grant. "We're nurturing Inventure Place along," confides Mark E. Albrecht, Akron's economic development manager.

Baltimore's Morton K. Blaustein City Life Exhibition Center (*Architecture*, January 1997, pages 134-139) was less fortunate. When the new linchpin for the Baltimore City Life Museums opened in April 1996, *Architecture* featured the innovative way architects Peterson and Brickbauer wrapped a historic cast-iron facade around the building. But \$5.8 million worth of architecture proved no tourist magnet; the center closed after only 14 months of operation. Voting to build before fundraising was complete, the museum's board anticipated as many as 100,000 overflow patrons from the nearby Inner Harbor retail complex. But the Blaustein Center's rangy surroundings stayed that way, and fewer than 50,000 people came. And just blocks away, Columbus Center, a new biotechnology research complex, opened its public-oriented Hall of Exploration in May 1997—and closed it in December.

Akron and Baltimore hopped aboard a cultural tourism bandwagon started by several early 1990s economic-impact

TRANSPLANT

studies of the New York metropolitan area. The studies revealed that the city earned revenues of \$9 billion in 1992 from cultural activities, with more than \$2 billion coming from out-of-towners. More recent reports by the Washington-based Travel Industry Association of America discovered that one-third of the U.S. adult population visited a cultural attraction in 1996. Furthermore, cultural tourists stay downtown, spending money on hotels and restaurants. And they shop like mad. They drop \$615 per trip as compared to \$425 for all U.S. travelers, according to the association.

Cultural tourism's detractors complain that museums are playgrounds of privilege, built instead of the schools and libraries that common folk need. Nevertheless, many locations not known for the arts are promoting theirs. Roswell, New Mexico (site of a purported U.F.O. crash in the 1940s), is marketing its museums and arts centers. So is Orlando, Florida. St. Louis bills itself as a stop on America's jazz corridor. And, in the fervent hope that culture might energize Newark, the \$165 million New Jersey Performing Arts Center, designed by Barton Myers Associates (pages 118-127, this issue), opened last fall to acclaim.

"Done right, cultural complexes bring people to the center, and things grow from there," suggests Allan Jacobs, professor of city planning at the University of California, Berkeley. In the late 1980s, San Francisco hoped to revive a bleak industrial swath south of Market Street with Yerba Buena Center for the Arts, a multimillion-dollar complex that includes an art gallery by Fumihiko Maki and a theater by Polshek and Partners. Mario Botta's 1995 Museum of Modern Art, on land purchased from the city for \$1, lies just across the street. Although the neighborhood is recharged, Yerba Buena's attractions were slow starters.

They survive, but "our numbers [of visitors] are not as high as we would like," admits Holly Krassner, director of marketing and communications for the center. The performance spaces draw about 100,000 people a year; visitors to the gallery number 50,000.

Now these upstart institutions are hoping for a shot of adrenaline from the Sony Metreon, a nearby entertainment complex designed by Simon Martin-Vegue Winkelstein Moris, slated to open next year. Close by lies Adele Naudé Santos and Associates' "Zeum," a performing and visual arts center for kids, in a complex with a child-care center, bowling alley, and ice-skating rink, all scheduled to open this year. As if these bundled attractions weren't enough, a Mexican museum by Ricardo Legorreta and a Jewish museum—whose architect has not yet been selected—are slated for the turn of the century.

Planners and politicians are fast learning that single, big-ticket projects like Inventure Place, nurtured in political corridors and planning boards, won't give the city back its heart. Institutions, like communities, grow slowly, with support developing over time. In the same period that Akron's Inventure Place had to be bailed out by city hall, the 75-year-old Akron Art Museum increased its endowment by 42 percent. Now Akron has adopted San Francisco's smorgasbord approach: A blimp museum and a canal museum are slated for the 21st century. And a successful buffet also means improving on old favorites: The Akron Art Museum, too, plans expansion.

Indeed, the potential of local cultural entities to adapt old districts with new quarters is vast. When the Harold Washington Library opened in Chicago in October 1991, it seemed an odd presence in the decaying Loop neighborhood abandoned by Sears and Montgomery Ward.

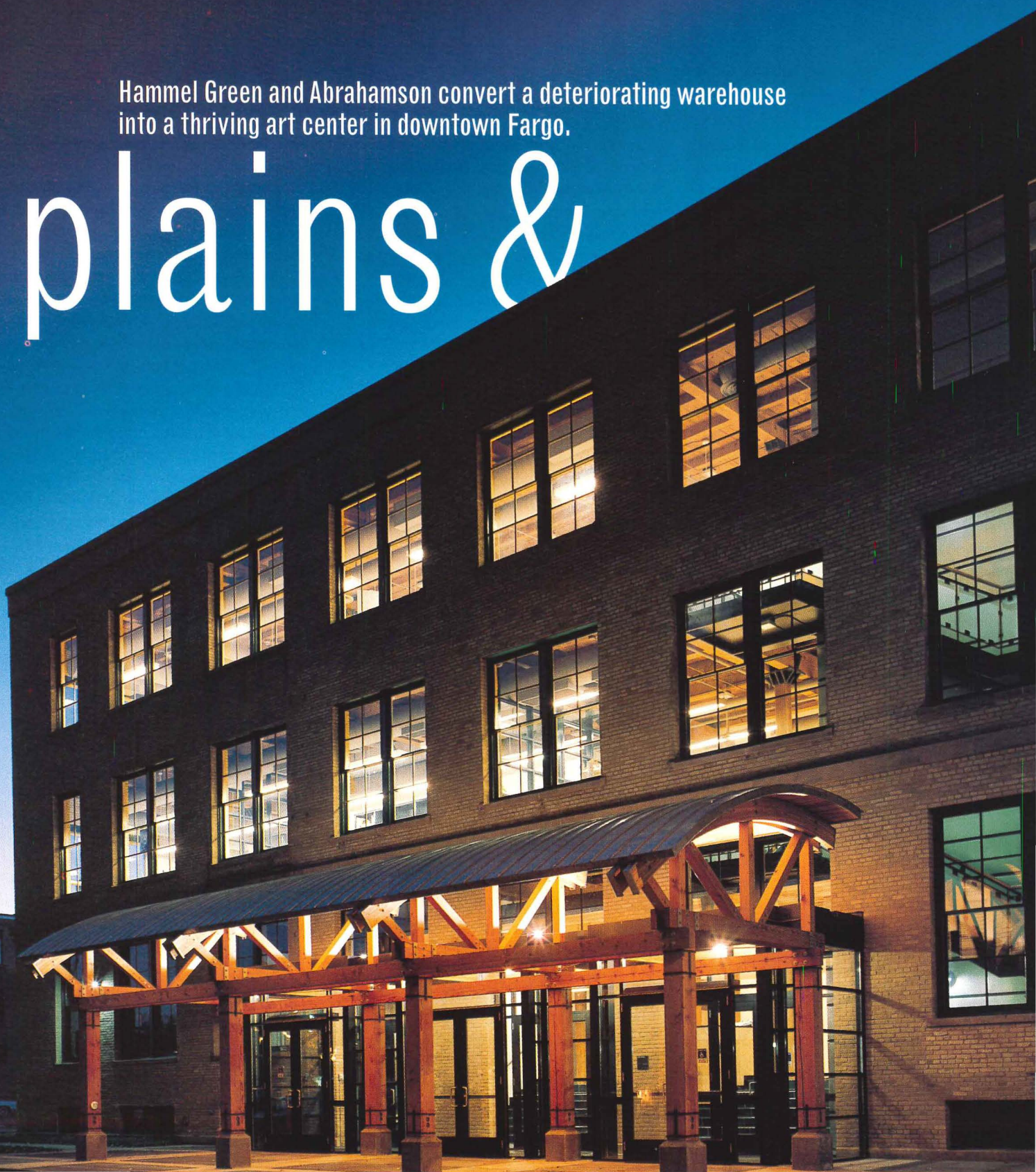
But the 10-story, 756,000-square-foot building has helped transform its former shopping district to an academic, residential, and office hub. Now Roosevelt University and Columbia College occupy new or expanded facilities within blocks of Chicago's public library. Diagonally across State Street, DePaul University reclaimed the former Rothschild Store building with music classrooms and street-level music retail. The Illinois Institute of Technology (IIT) built a new business and law school by Holabird & Root in the West Loop, and the School of the Art Institute of Chicago occupies the Champlain Building at Monroe and Wabash, and two dormitories nearby. The historic Second Leiter Building, across from the library, accommodates offices, and the Singer and Chicago buildings will both soon house apartments. And the city recently struck a deal with a successful West Coast chain to convert the historic Reliance Building into a hotel.

"People experienced the block before the library was there as a derelict place where nobody came," contends Kevin Harrington, architectural historian at IIT. "The library has had a genuinely significant impact. Buildings like this are part of the atmospherics of development." Indeed, the atmospherics of development may be enhanced by rock halls and high-tech science centers, as Cleveland and Akron prove. As the fashion of the moment, these venues may serve, perhaps briefly, as catalysts for further growth. But planners should be wary of such overly hyped hothouse projects that ultimately prove poor substitutes for classic, home-grown culture. As Harrington notes, "Year in and year out, hundreds of people will always go to the public library."

Heidi Landecker is a freelance writer based in Silver Spring, Maryland.

Hammel Green and Abrahamson convert a deteriorating warehouse into a thriving art center in downtown Fargo.

plains &





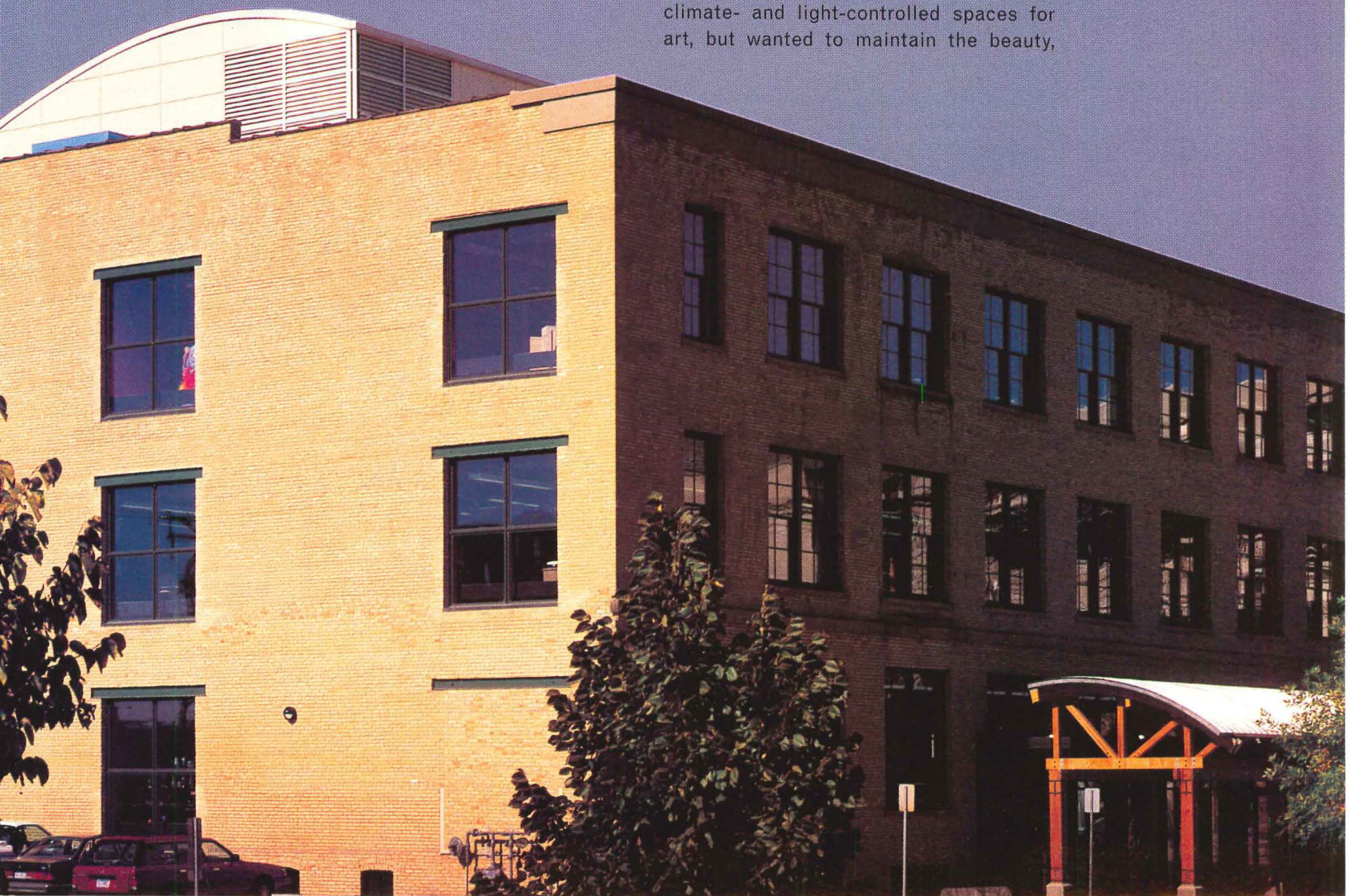
simple

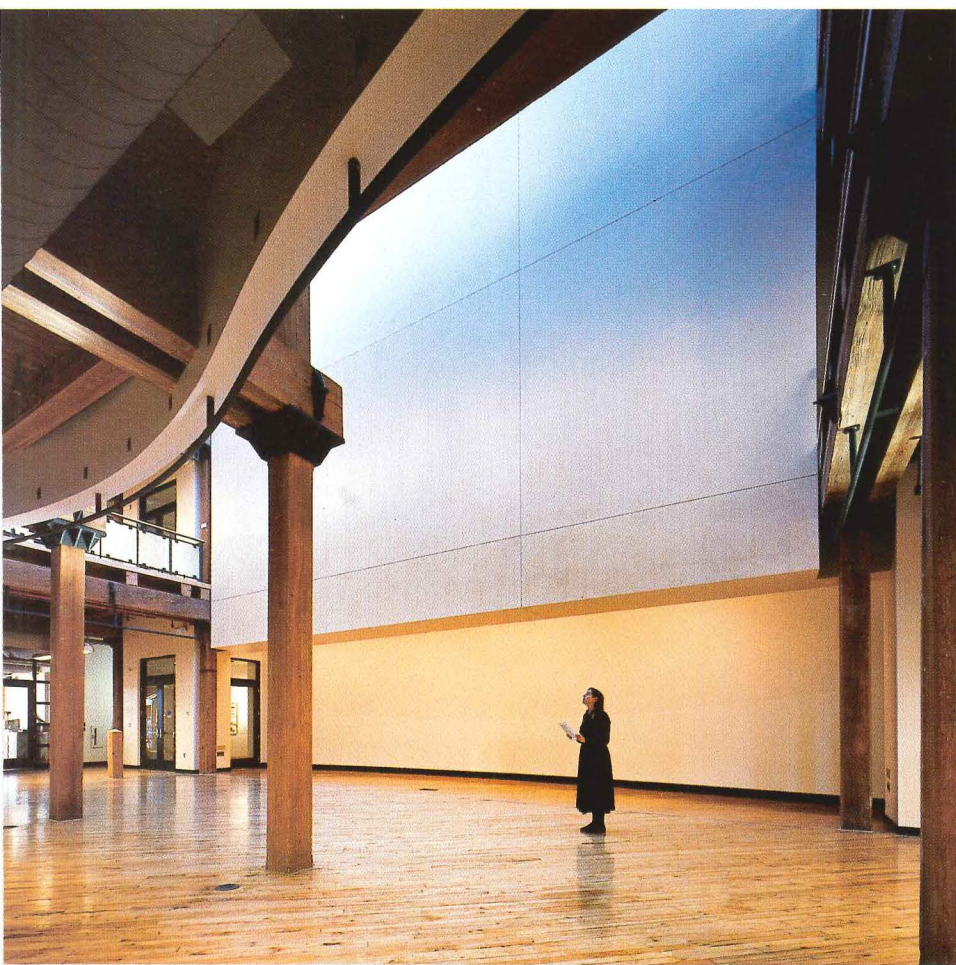
By L. R. Findley

Converting the drafty 1910 International Harvester Warehouse in Fargo, North Dakota, into a state-of-the-art museum seemed impractical to the architects at Hammel Green and Abrahamson (HGA) of Minneapolis. But the 23-year-old Plains Art Museum had outgrown its old quarters in the historic but cramped post office across the Red River in Moorehouse, Minnesota. The yellow-brick Harvester building offered ample space at the right price, even though it sat in a neglected area a few blocks southwest of the center of town. With a \$5 million budget—far less per square foot than most museum projects—HGA transformed the venerable structure into a light-filled, 56,000-square-foot facility with 9,000 square feet of exhibit space, classrooms, studios, offices, a

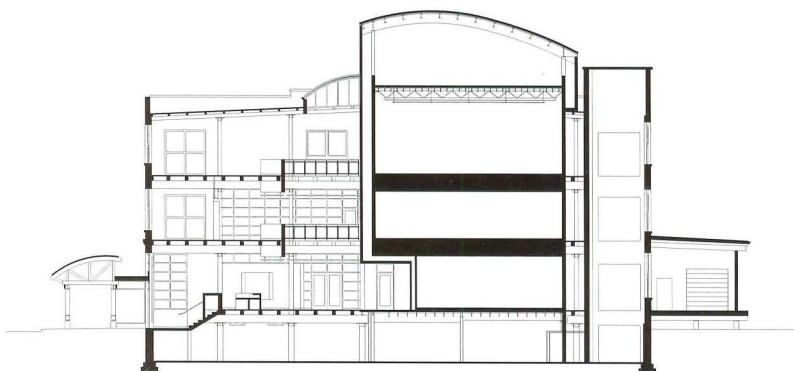
library, café, and a large, skylit atrium that doubles as a performance space.

It wasn't a simple makeover. The combination of an uninsulated exterior envelope, large window openings on all sides, a dense grid of heavy timber columns, and lower-than-desirable floor-to-floor heights presented "an extraordinary challenge," according to David Bercher, HGA's project designer. The architect needed to create climate- and light-controlled spaces for art, but wanted to maintain the beauty,





Recycled timber canopy (previous pages, left) marks museum entrance. Site plan (previous pages, top right) shows parking lot on south flank that will house future expansion. Vaulted gallery core (previous pages, bottom right) rises above original warehouse volume. Atrium (above) doubles as performance space. Vaulted core to west of atrium (section) houses new galleries. Reclaimed timber-framed walkways wrap skylit atrium (facing page, top right). Flexible new galleries (facing page, bottom left) house exhibits in light-controlled environment.



East-west section

openness, and abundant daylight of the original building. HGA resolved this dilemma by carving an atrium out of the middle of the warehouse, into which the architect inserted a core of concrete-floored galleries. This elegant strategy leaves the daylight perimeter to the museum's support functions. Window walls along the interior of these spaces—and the atrium's skylight—bring natural light into the lobby and the walkways that wrap it on the floors above. The steel-framed core continues into the basement, providing air-conditioned storage and curatorial space.

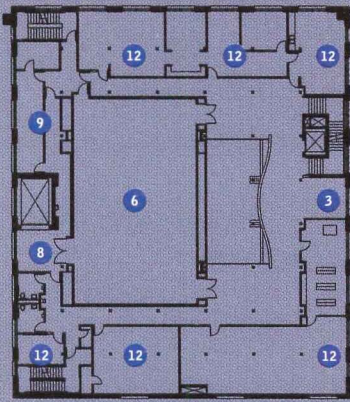
HGA rigorously contrasts old and new throughout the building. The original timber frame was sandblasted and left exposed, and the maple flooring was sanded and sealed. New walls, stairs, and railings are tautly detailed in drywall, steel, and glass. In a disciplined Modernist move, the new construction is pulled free of the existing columns. Visitors experience the contrast by moving between old and new: Each of the three cool, neutral, low-light galleries in the core is entered from the warm, wood-floored, and daylight edges of the atrium.

Much of the material HGA removed from the warehouse during construction was recycled back into the building: Reclaimed pressed-tin ceiling panels now serve as drop ceilings in the rest rooms. Maple flooring was transformed into tabletops for the museum café. Recycled heavy timbers were replaned to create an entrance canopy at the front, pulling a hint of the museum's interior character out to the street.

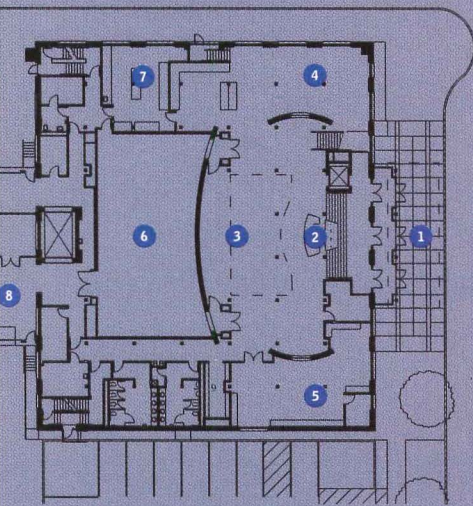
While the museum's adaptive reuse is not groundbreaking, it is nevertheless skillfully executed. It has also sparked a seven-fold increase in attendance. Further, the museum is helping its previously marginal neighborhood come alive. According to Fargo Mayor Bruce Furness, the museum, along with the restoration of the nearby Art Deco Fargo Theater, are "key pieces

in the reinvention of downtown as a cultural and entertainment center for the region." Located where a dog-leg in the city's grid puts the building on visual axis with downtown Fargo's main drag, the museum exerts a strong civic stature. "Originally, the site seemed remote," Museum Director Terry Jelsing explains, "but our presence here is actively revitalizing the neighborhood."

Oakland, California-based L.R. Findley is an architect who teaches at the California College of Arts and Crafts.



Second-floor plan



First-floor plan

- 1 vestibule
- 2 reception
- 3 lobby
- 4 café
- 5 gift shop
- 6 gallery
- 7 kitchen
- 8 receiving
- 9 storage
- 10 curatorial
- 11 mechanical
- 12 administrative



PLAINS ART MUSEUM
FARGO, NORTH DAKOTA

CLIENT: Plains Art Museum **DESIGN ARCHITECT:** Hammel Green and Abrahamson, Minneapolis—Daniel Avchen (principal-in-charge), Gary Reetz (project manager), Dave Bercher (project designer), Loren Ahles, Tammy Angaran, Nina Broadhurst, Chuck Mrotek, Tom Whitcomb (design team) **EXECUTIVE ARCHITECT:** Foss Associates, Fargo, North Dakota—William Cowman (principal), Joel Davy (project architect), Rochelle Conzemius, Pat DeLaPointe, John DeVries, Fred Drenkow (project team) **GENERAL CONTRACTOR:** Lee Jones and Sons **COST:** \$5 million **PHOTOGRAPHER:** Peter Aaron/Esto

The Centre East organization in the Chicago suburb of Skokie, Illinois, used to stage its productions in a former high school auditorium. Their new home—the North Shore Center for the Performing Arts—is a dramatic step up for the group, as well as for the local Northlight Theater and Skokie Valley Symphony. The facility they share sits in a typical commercial strip—set back behind a parking lot and wedged between an undistinguished hotel and a supermarket loading dock. Chosen because the adjacent hotel offered commercial opportunities and an existing parking garage behind the facility was capable of

serving the theater's patrons, the site seriously compromises the client's and the architect's high-minded aspirations.

Cambridge, Massachusetts-based Graham Gund Architects' 68,000-square-foot building encompasses a proscenium stage auditorium, a multipurpose theater and ballroom, a lobby, offices, and support spaces. The project's \$200 per square foot budget allowed for few design enhancements, and the complex suffers as a result.

The front facade's two-story-high colonnade, topped by sail-like steel fins, is the building's most expressive design gesture and conveys the project's civic nature. "It was important to distinguish this building from the commercial strip surrounding it," explains Principal Graham Gund.

The exterior's monumental colonnade promises an ordered experience inside, but Gund's desultory configuration of the lobby has all the grace and hierarchy of the park-

By Edward Keegan

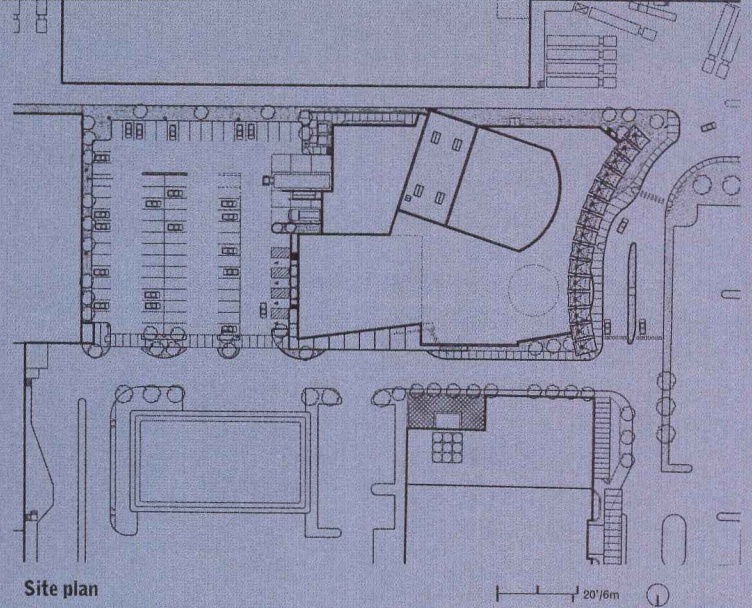
Civic virtue, performing arts, and the commercial strip make an uneasy alliance in suburban Chicago.



compromising

positions

Arts center sits along suburban commercial strip (facing page), sandwiched between hotel to north and grocery store to south (site plan). Fin-topped colonnade establishes civic presence; canopy marks entrance at left (below).



ing lot in which the building sits.

The rest is simply arranged. Two performance spaces are skewed behind the arc of the colonnade to fit within the narrow confines of the site, and share the amorphously shaped lobby. The 800-seat Centre East Stage is designed for drama, dance, and live-music performances. Its volume bulges awkwardly above the rest of the two-story complex with a curved stucco-clad mass that forms the back of the hall and a towering cube that houses the fly loft. The concert hall is a spartan affair, with exposed concrete walls and spare wood finishes. Maple ceiling panels act as acoustical clouds to deflect sound and to imply a finished ceiling. These wooden details are reprised as decorative fascia at the balcony and along boxes on either side of the hall.

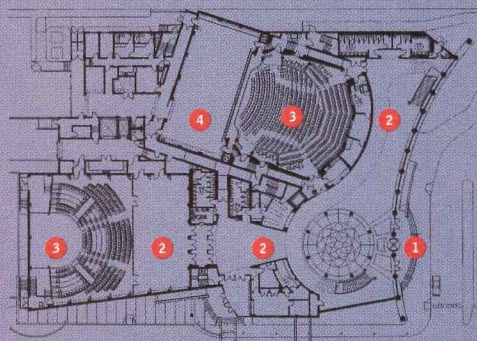
The Northlight Theater space converts from a 350-seat thrust-stage performance space with steeply raked seating to a flat-floor multipurpose room that the hotel next door utilizes as a 500-seat ballroom.

"This building is a major asset to Skokie," claims Gund, but he seems to confuse the civic position of the well-established resident companies it houses with the success of his design. For though civic buildings traditionally have been distinguished by prominent siting and elegant detailing, the North Shore Center for the Performing Arts enjoys neither of these. It may enrich somewhat the architectural landscape of suburban Skokie, but it does little to improve the city's civic structure.

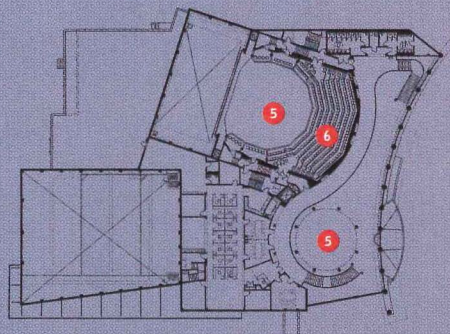


Circle of painted columns is focus of lobby (above). Main auditorium features painted concrete walls and seats salvaged from client's previous hall (facing page, left). Smaller theater converts to hotel ballroom on demand (facing page, right).

- 1 entrance
- 2 lobby
- 3 theater
- 4 stage
- 5 open to below
- 6 balcony



First-floor plan



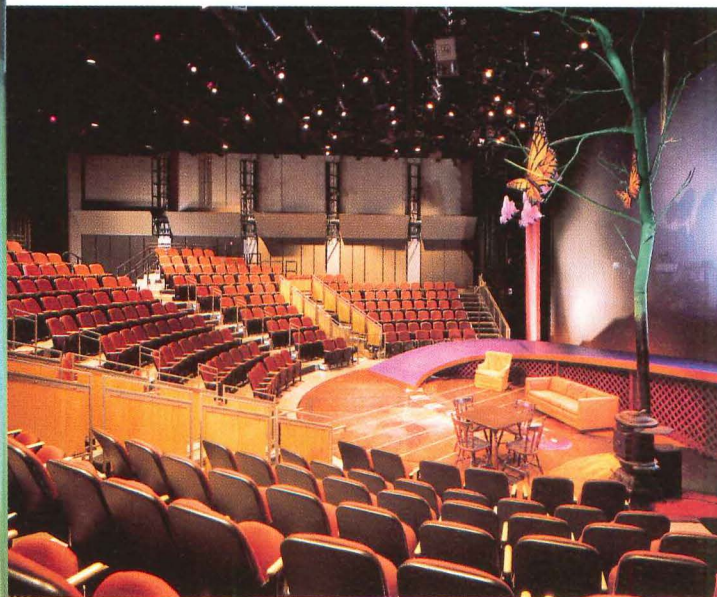
Second-floor plan





**NORTH SHORE CENTER FOR THE PERFORMING ARTS
SKOKIE, ILLINOIS**

CLIENT: North Shore Center for the Performing Arts in Skokie **ARCHITECT:** Graham Gund Architects, Cambridge, Massachusetts—Graham Gund (principal-in-charge), John Prokos (project architect), Marianne Beagan, George Coon, Alex Holser, Tom Maloney, Ed McDonald, Ping Mo, Laura Weiss (design team) **ASSOCIATE ARCHITECTS:** Lisec & Biederman, Chicago—Michael Lisec (president), Gregory Thomas (architect); Morris Architects & Planners, Chicago—John Morris (president), Mellisa Neal (architect) **Landscape Architect:** Ives/Ryan Group **ENGINEERS:** LeMessurier Consultants (structural); Environmental Systems Design (mechanical, electrical); SDI Consultants (civil) **CONSULTANTS:** Kirkegaard & Associates (acoustics); Theatre Projects Consultants (theater, lighting) **GENERAL CONTRACTOR:** Turner Construction **PHOTOGRAPHER:** Jon Miller/Hedrich Blessing



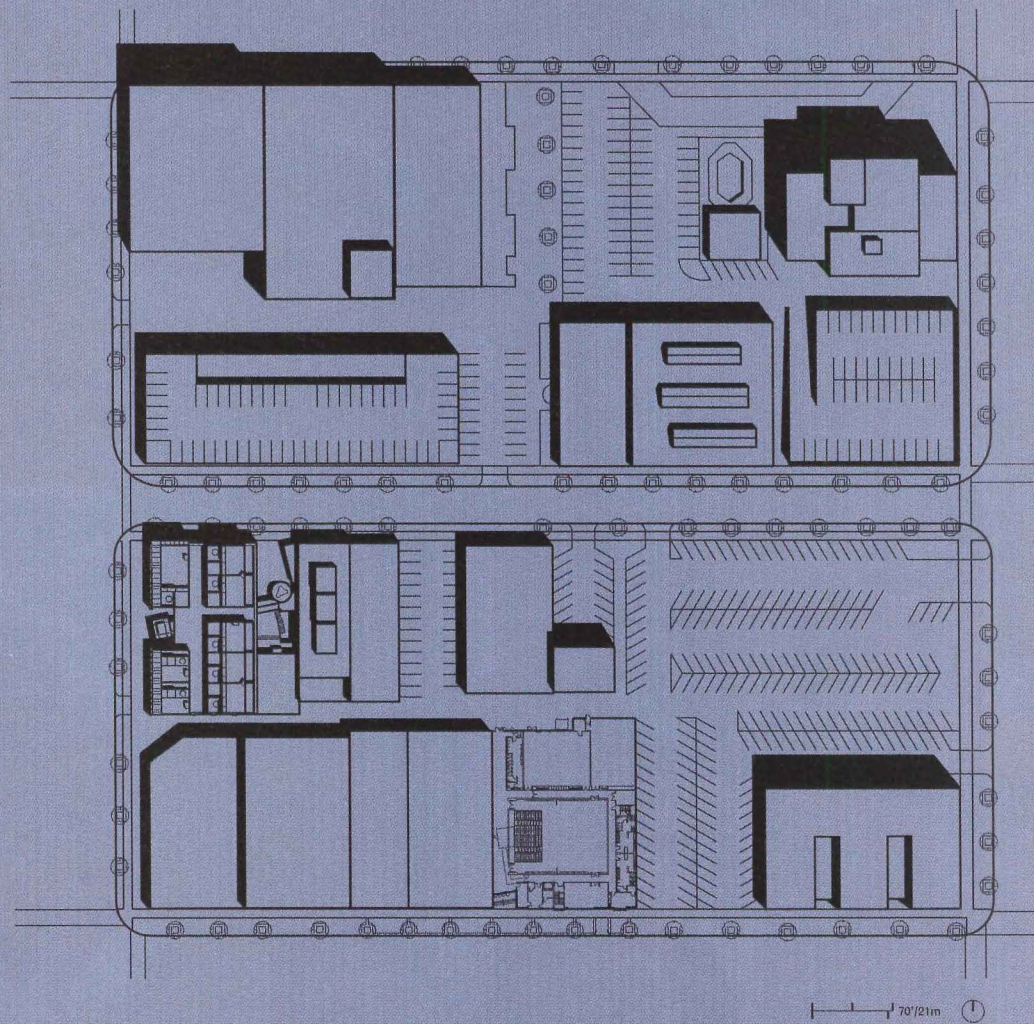
Salt Lake City's urban grid is huge. Its blocks were originally sized to support eight families with 1.25 acres of farmland each; its intersections are large enough for an 18-oxen team to turn around. These outsized dimensions are unwieldy for today's development and unfriendly to pedestrian activity. Just west of downtown, however, the Redevelopment Agency of Salt Lake City is gradually weaving a lattice of pedestrian alleyways to help break down the gigantic scale as it embarks on a series of redevelopment projects intended to create a new arts and entertainment district in the city's core.

In the middle of this too-big fabric, the \$2.5 million Rose Wagner Performing Arts Center opened its doors last year, a newcomer to a neighborhood of abandoned warehouses and sprawling empty lots. Designed by Prescott Muir Architects of Salt Lake City, the 20,000-square-foot Wagner Center is the product of the local Performing Arts Coalition's 10-year effort to secure a permanent home. To the long-itinerant coalition, the Wagner Center was worth the wait. Its new home, built on a tight budget and with a Modernist sensibility, comprises an intimate, flexible, 150-seat black-box theater, two large dance rehearsal rooms, and offices for arts-related nonprofit groups.

The concrete block-and-steel building is unsentimental and practical, like the Wagner Bag warehouse that previously occupied the site. The memory of roll-up doors in the previous building is ghosted in the bays fronting the Wagner Center's south facade. The building's previous sign has been moved, stripped to its bare aluminum-plated frame, and reoriented to create a backdrop for a new sign, which hangs like a proscenium curtain above the glassy entrance on the southwest corner.

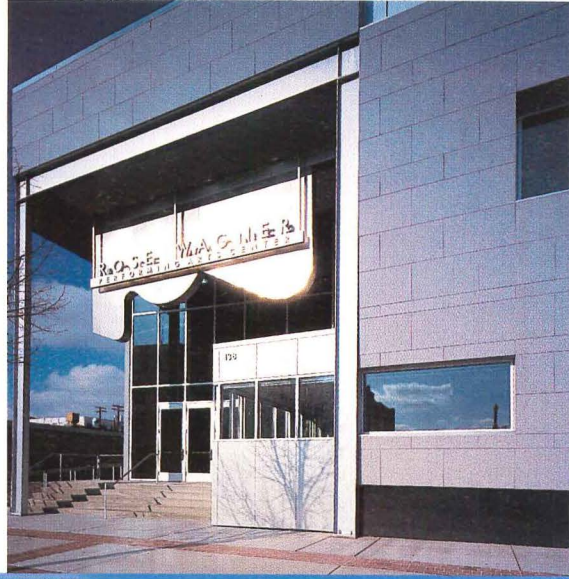
The polished granite panels that cover most of the south facade were added during construction at the insistence of one of the center's major financial backers, Izzy Wagner, who was born on the site in 1915 and viewed exposed concrete block as a material unworthy of a cultural institution, especially one that bears his mother's name. Forced to comply with the change, Principal Prescott Muir, tongue-in-cheek, details the panel attachments at the corner of the building to reveal the thinness of the applied granite. The concrete-block stair tower that occupies the center of the south elevation was already completed, and the structure of the building tied into it, when the granite was added. The granite, selected by Wagner, is thus unrelated in both color and detailing to the colored banding and horizontal

Wagner Center sits in southwest quarter of downtown (site plan). Aluminum-clad box office and sign mark entrance (facing page, top). Building's mass and faux service bays suggest former industrial incarnation (facing page, bottom).



A new theater brings life to Salt Lake City's burgeoning warehouse arts district.

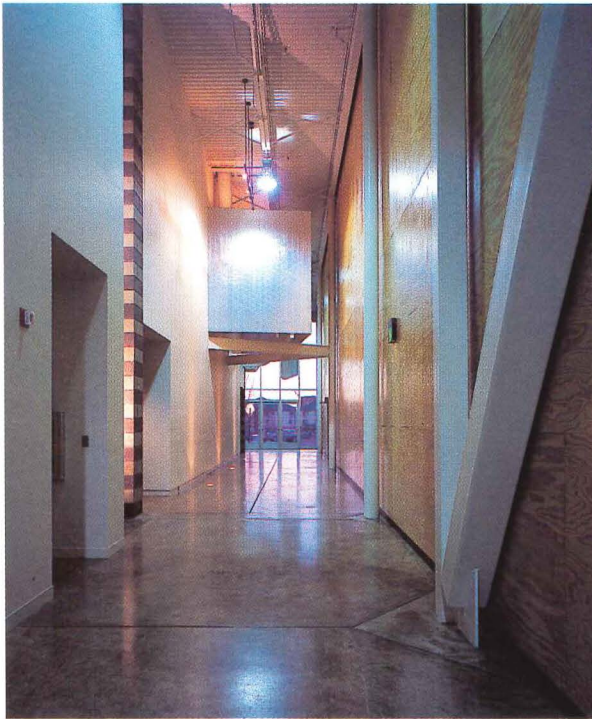
BY L.R. FINDLEY



saltBOX

THE ROSE WAGNER PERFORMING ARTS CENTER
SALT LAKE CITY, UTAH

CLIENT: Performing Arts Coalition—Jack Mark (president), Guy Kroesche (past president), Shari Quinney (director), Renee Krebs (project coordinator) **ARCHITECT:** Prescott Muir Architects, Salt Lake City—Prescott Muir (principal-in-charge), Lisa Arnett (design architect), Jeff Newman (project architect) **ENGINEERS:** ARW Engineers (structural); Olsen & Petersen (mechanical); Sear Brown Engineers (electrical) **CONSULTANTS:** Charles M. Salter Associates (acoustics); Nicholas Cavalaro (theater lighting and audiovisual) **GENERAL CONTRACTOR:** Culp Construction Company **COST:** \$2.5 million **PHOTOGRAPHER:** Scott Zimmerman



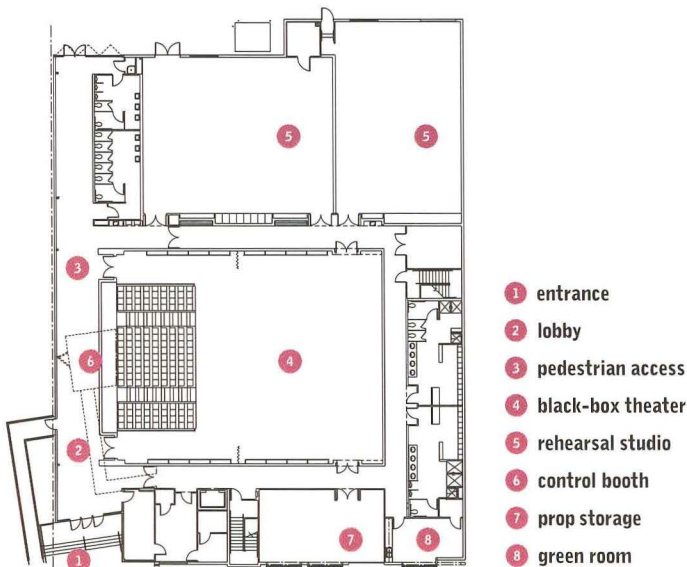
rhythm of the block on the stair tower. As a result, the facade remains an unresolved moment in an otherwise elegant building.

The lobby, on the other hand, deftly resolves several requirements at once. This linear space runs the depth of the site, perpendicular to the street, providing both a tall, gracious arrival space and mandatory fire exiting. It will also serve as a foyer for a 500-seat theater planned for a second phase. And, as required the city, pedestrian passage

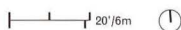
through the lobby engages the public in the day-to-day activities of the Wagner Center, while embedding the facility in the developing fabric of the neighborhood.

The Wagner Center, establishes several important precedents for neighborhood development. The building fills out its site and holds the sidewalk edge. It exhibits the memory of the building that previously occupied the site. And not least, it mediates Salt Lake City's massive scale by opening its front door in a gesture that anticipates—and contributes to—the cultural life of this emerging urban district.

Oakland, California-based L.R. Findley is an architect who teaches at the California College of Arts and Crafts.



First-floor plan



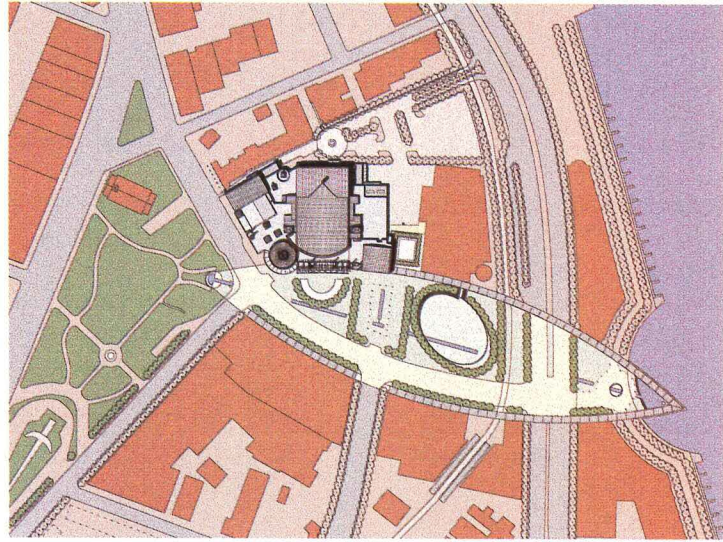
Double-height lobby (facing page, left) adds grandeur to narrow space. Black-box theater (facing page, right) is Salt Lake City's first. Control booth and cat-walk project into lobby (right), which doubles as passage between street and pedestrian alleyway behind building.





*Newark's new performing arts center is music
to the ears of a city struggling to rebound.*

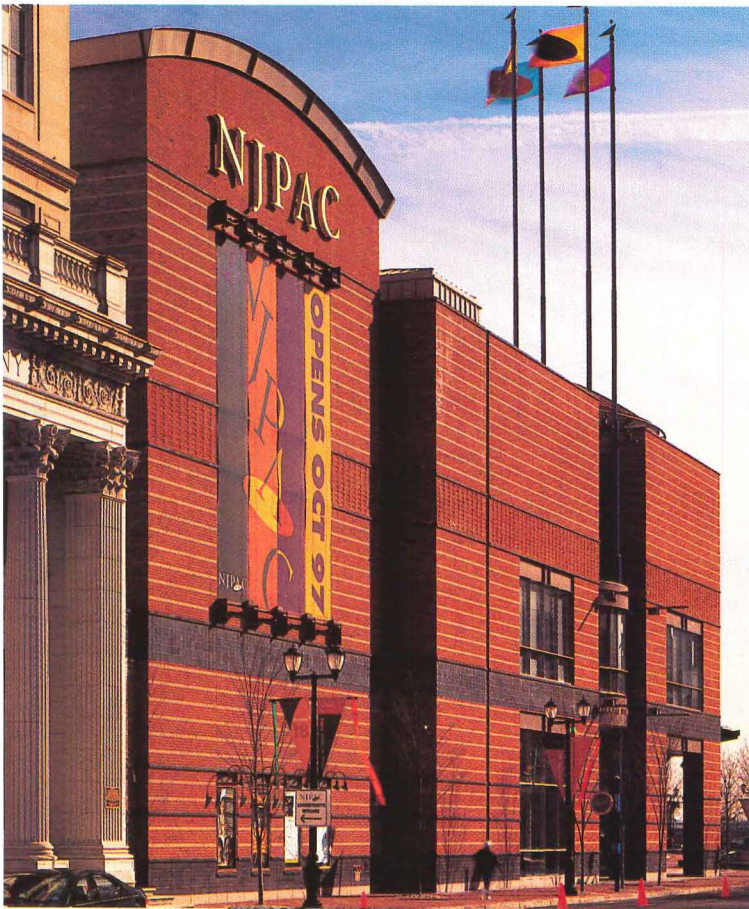
By Joseph Giovannini



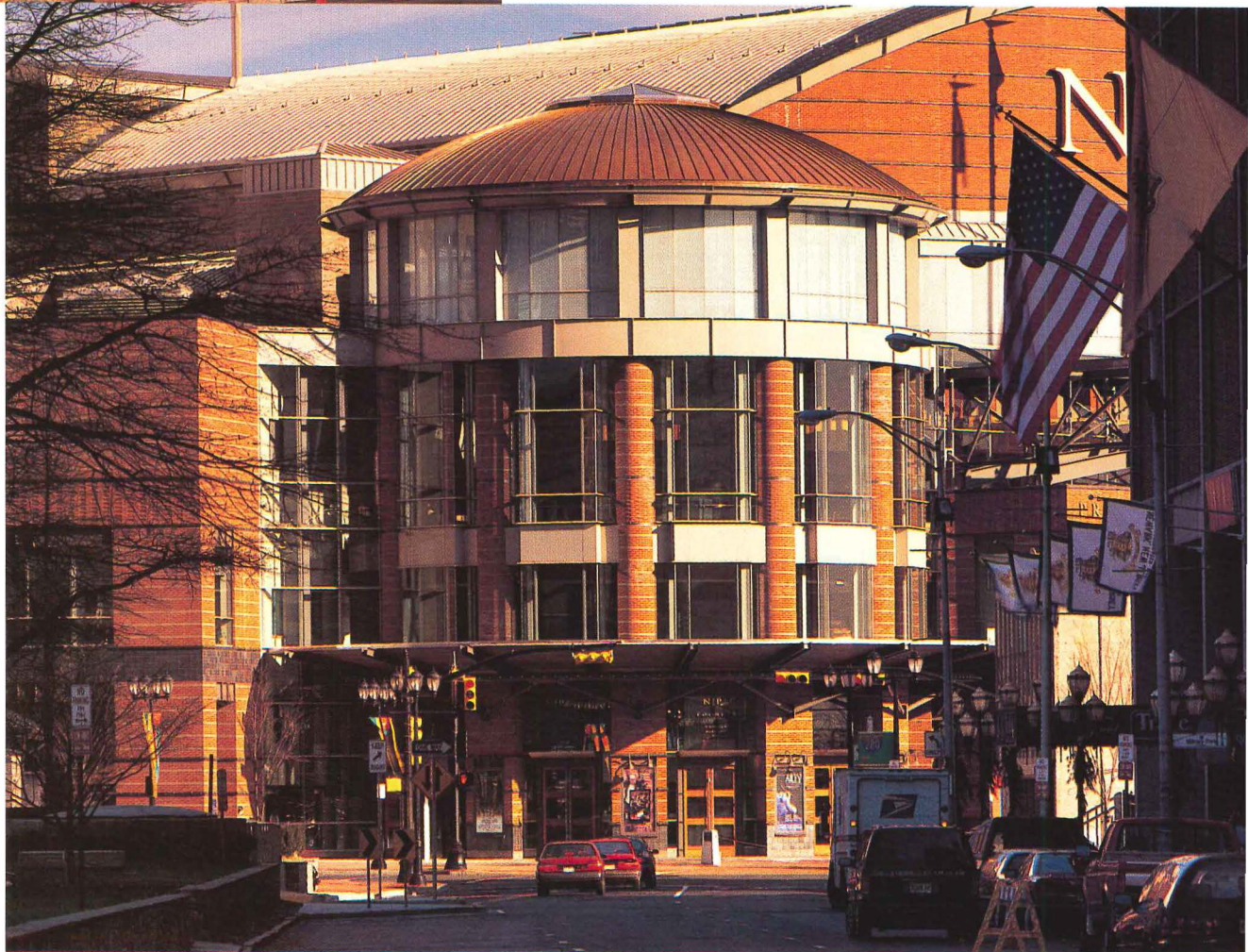
NJPAC site (above) defines northern edge of new Theater Square park that connects Military Park to west with future riverfront development to east. Site includes location of planned concert hall. Banded brick facade and external steel-truss "proscenium" canopy (facing page) echo adjacent industrial buildings and bridges. Cylindrical corner tower marks main entrance; smaller barrel-vaulted volume houses restaurant (below).

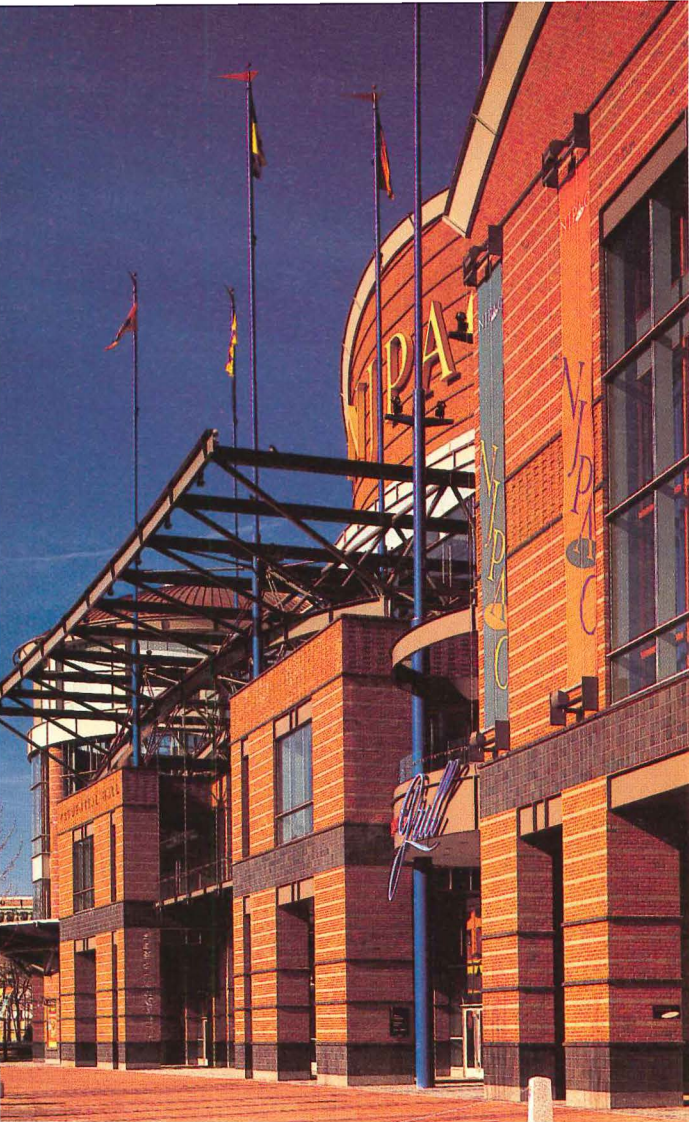
performance





NJPAC continues building wall along Centre Street (left). Domed entrance pavilion terminates Park Place (below). Lobby and restaurant front new Theater Square to south (facing page, left). Steel-truss canopy suspends public catwalk spanning face of lobby and overlooking Passaic River (facing page, right).





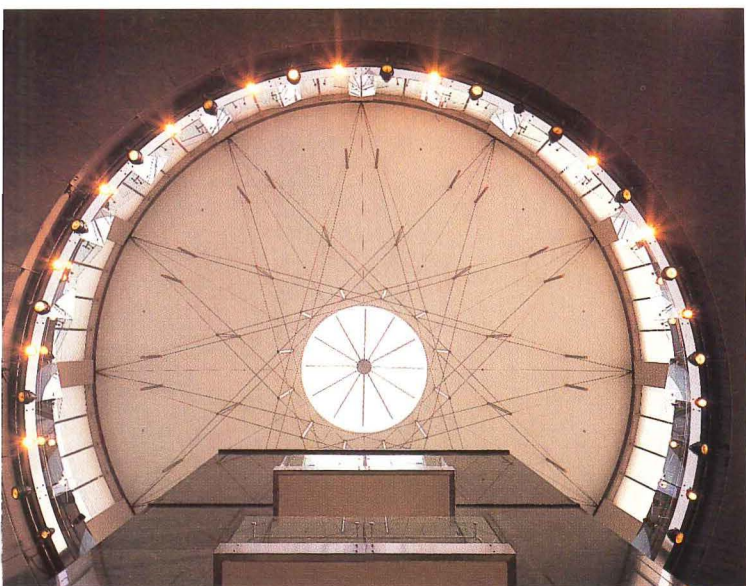
model, Lincoln Center, whose travertine plinth alone abstracts the building from its context, but instead conceived—with NJPAC President and CEO Lawrence Goldman—a mixed-use complex that would integrate into the city. The idea was to create acoustic excellence, but also to initiate urban renewal, catalyzing confidence through a new, festive, user-friendly building that could shake hands with safe streets. This would not be an aloof architectural object, but a people-oriented complex that would draw suburbanites out of their great rooms and invite citizens who never left Newark into a building that functions effectively as a large community center. The program includes a formal auditorium to be used for concerts, opera, and ballet; a 500-seat theater; restaurants; administration; and community rooms.

The imperative for the center's two auditoriums were to provide superior sound, sight, and intimacy. By all reports, the acoustics excel in the domed, horseshoe-shaped main hall, and sight lines are clear—the conductor can be seen even from the side balconies. The wide, yet compact, 2,750-seat Prudential Hall, which houses the New Jersey

Philharmonic and hosts operas, ballets, and musicals, keeps the stage close to the audience with geometric grace and atmospheric warmth. The curvilinear shapes of the ceiling, balconies, and perimeter walls ring the auditorium with stylistic grace. A second auditorium, Victoria Theater, is black, stark, and edgy, an informal venue for classical and modernist chamber concerts and intimate, experimental theater productions. Technically, the whole building is divided into seven contiguous structures: the two theaters, lobby, rotunda, restaurant, kitchen, and back-of-house facilities. Acoustic joints totally isolate

Seldom has an arts building had to shoulder so many responsibilities. Civic auditoriums are usually packaged in elegant jewel boxes, sited in monumental isolation within an arts acropolis puffed up to symbolize civic ideals. But the New Jersey Performing Arts Center (NJPAC), which opened in October, has other roles to play. After World War II, Newark lost half its population, and with the riots of 1967, the city's image was seriously tarnished, precipitating an exodus of its middle class. Large-scale construction continued in downtown, but post-riot buildings developed fortresslike postures to the street—closed, forbidding, self-protective, and self-contained.

Los Angeles-based architect Barton Myers, who designed NJPAC, did not follow the obvious regional



each theater. "Newark is noisy with highways, trains, and planes," explains Myers. "So we designed massive walls to keep sound out."

From his early career in Toronto and then after his move to Los Angeles in the mid-1980s, Barton Myers has been an urban doctor performing surgery to reanimate old districts. "Urban consolidation—using what you have in a better way," Myers calls it. In Newark, his response to a car-oriented cityscape pocked with urban holes was to suture the separate parts—park, riverfront, and future arts boulevard—with a conciliatory building that plays several linking roles. The site suggested many different pieces to him, each of which responded to the specifics of the immediate context at the outskirts of downtown.

The Centre Street side of Myers' building forms a street wall compatible with the rest of the avenue and leads to a corner, where Myers created a knucklelike

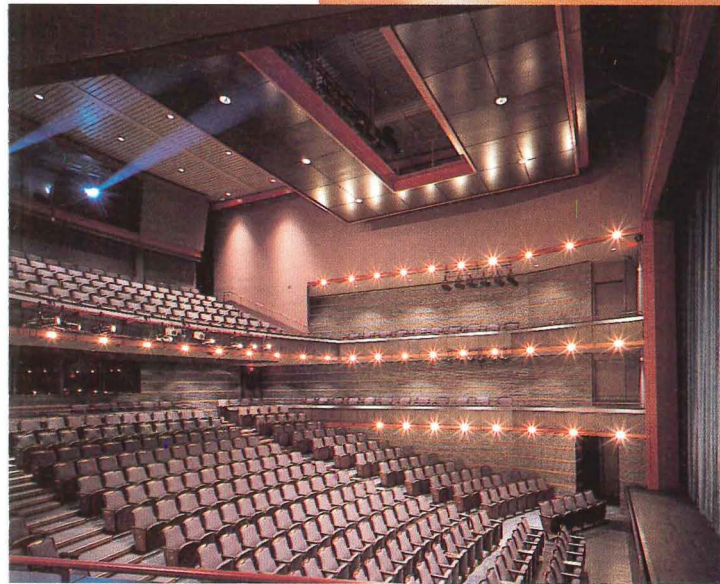
entrance rotunda that joins Military Park, on the opposite side of the street, with a new park fronting the arts complex. The broad face of NJPAC adjoins this park, Theater Square, which eventually will be the binding centerpiece of an arts district based on an existing master plan developed by Myers. At night, the facade illuminates the theater square with the warmth of a lantern. On the square's edge is an ellipse that curves toward the Passaic River, an old industrial artery spanned by truss bridges. Myers places a restaurant and bar at the river end of NJPAC's front facade. The semi-independent establishment has become the hot restaurant ticket in town. Its orientation to both the center's lobby and the arrival court and adjacent parking lot gives the restaurant a double life, linked to both the concert halls and the city.

The site's multiple nature creates a building perimeter of discrete parts—a street facade that sustains the existing urban fabric, a corner piece that pivots the building, a monumentalized frontispiece with iconic presence, and a break-out building for the semi-independent restaurant at the far corner near the river. "We wanted to avoid a mega-building and respond to the shifting site," Myers says. Beyond the site cues, he responded to existing vernacular brick structures in the immediate area, especially the nearby industrial structures and steel-truss bridges. For example, he designed the striped gray-and-red-brick coursing on the south facade with broad expanses of glass, crowned by a monumental steel truss. Composed of Euclidean forms—cubes, cylinder, arches, and a bowed front—the composite elevation resembles the imagi-

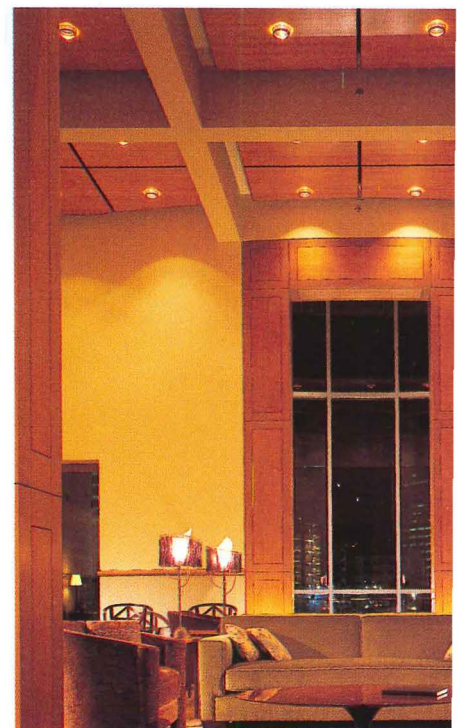


Ove Arup-designed tensegrity structure supports skylit roof with stainless steel cables and tubes (facing page, left). Granite-clad monolith supporting stair landings (facing page, right) rises through cylinder's central void. At upper levels, cylinder serves as lobby promenade (below).

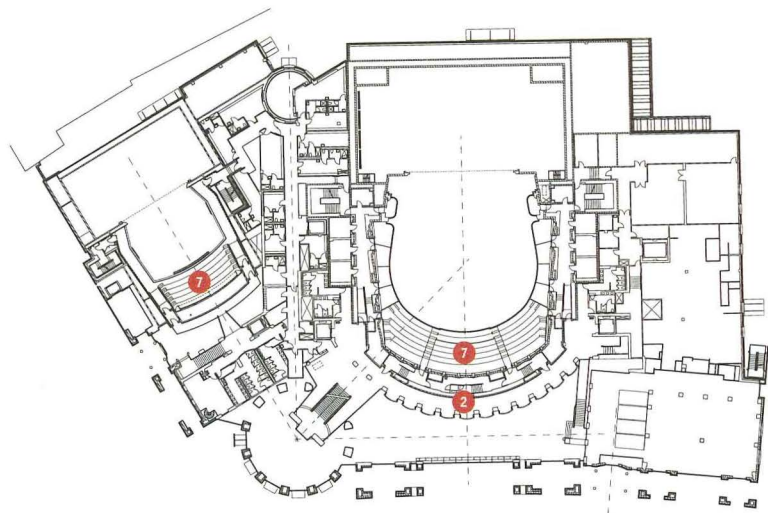




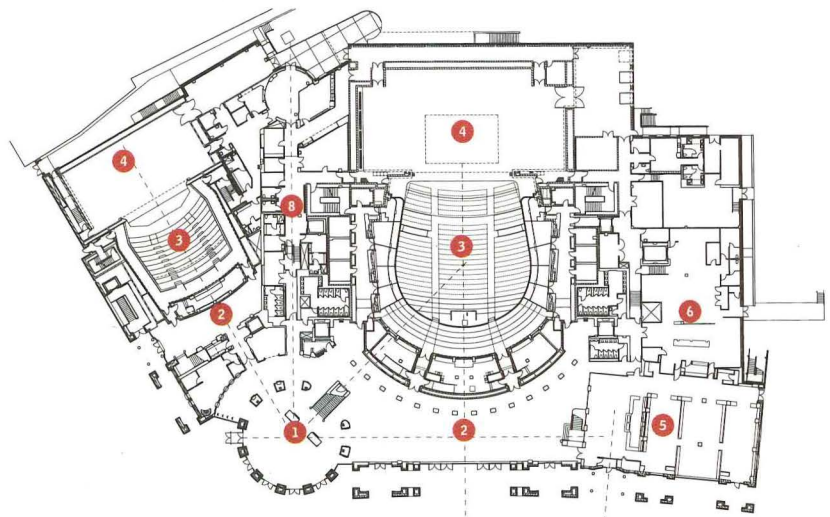
Acoustical glazing allows one of nation's few daylight rehearsal halls (top). Plays and smaller concerts utilize 500-seat, block-faced Victoria Theater (above). Elegant donors' lounge offers second-level retreat for major patrons (right). Offices and support spaces are sandwiched between skewed axes of theaters (plans).



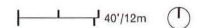
- 1 entrance rotunda
- 2 lobby
- 3 theater
- 4 stage
- 5 restaurant
- 6 kitchen
- 7 balcony seating
- 8 administrative



Second-floor plan



First-floor plan



nary visions Renaissance architects drew of cityscapes, where notable buildings from different parts of the city were collapsed into the same vista.

A historicist esthetic inspired by its architectural context may seem dated in today's neo-Modernist climate. "It was one of the longest pregnancies in architecture," jokes Myers about the commission, which he won in a 1991 competition. But the fundamental wisdom of the \$80 million, 250,000-square-foot structure resides in the concept of the building's perimeter, which might be called an occupied facade, choreographed for activity and community outreach. The first inklings of the building's approachability start with its skin,

at the bridge beneath the truss crowning the entrance facade, which visitors cross during intermissions. They step out, drinks in hand, to take in the view of the river and the Newark skyline. Like moving statues, these citizens, dressed to impress, give the building a human scale and sense of propriety.

The exterior catwalk bridge forms part of a network of overlooks and balconies that crosses NJPAC's public areas and creates a kind of civic living room, or vertical commons, in the lobbies outside the concert halls. Pearwood-clad bays line the stack of four balconies overlooking the main lobby. Theater patrons flock to these miniature royal boxes, most of which boast café-style, stand-up tables. The balconies bow out over the lobby, advancing into its space and compressing it. Myers further animates the void by feeding the lobby with stairs that flow around the space like human tributaries. "We treated the lobbies as if they were stages," the architect explains.

The subtlety in the design of the public spaces lies in dimensions calibrated to gather rather than separate people. When Winston Churchill, following the bombing of London's Houses of Parliament, was asked whether the House of Commons should be rebuilt larger, he responded that keeping the chamber small was essential. The space felt full during a normal session, and during emergencies, with members of Parliament sitting on the steps, there was a sense of urgency. Myers' lobby spaces, which are not oversized, seem full of life and robust during normal evenings, and for sell-out evenings, there is a palpable sense that the event is special.

The architect also programs the public spaces with stationary and mobile bars and gift shops, and a donors' lounge on the second level. The café, bar, and restaurant are on the

Pearwood-veneered maple balconies overlook five-story lobby and boast views of downtown and Passaic River (below). Mahogany-stained cherry finishes warm 2,750-seat Prudential Hall (right). Sound-reflecting canopy projects into auditorium during musical performances (facing page). Elliptical plaster ceiling is suspended from roof's superstructure (section).

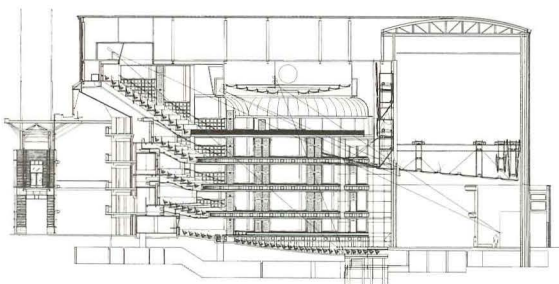


ground floor. Lobbies for Myers are an apparatus of physical and social engineering that bring people together and mix them in a space where they have reason—sight, sound, conversation, food and drink—to bond into the community that the suburbanization of Newark frustrated. The space is interactive: There is a buzz here that is absent in civic spaces that are the victims of their own grandiosity. The compression in the lobby then cedes to a sense of release in the gracefully open space of the main hall, with its domed ceiling floating on a cushion of light.

The effect of architecture that cultivates its occupants is enhanced by many details on which Myers collaborated with

the Los Angeles firm Sussman/Prejza, specialists in environmental graphics. Much of the friendliness of the building is cued by the palette of colors, especially in the public spaces. Sussman/Prejza's warm and complex hues—burnt orange, terra-cotta, olive gray—glow under the lights. The palette goes dark in Prudential Hall, where a tonal combination of dark reds and mellow woods confers a distinguished aura. Throughout the interior, the hues, which collect into a spatial pattern, kill the curse of flat expanses of the sheetrock walls. The warmth of the painted surfaces is enhanced by pearwood, mahogany-stained cherry, and patterned carpets. Research by Sussman/Prejza into the patterns of African fabrics yielded vibrant glass mosaic walls in the bathrooms in vivid shades of orange, ultramarine, green, and yellow set to rhythmic patterns. The firm also orchestrated a complex graphic program of directionals, signs, and even subtly etched copper elevator doors that animate the building while informing the visitor of directions and whereabouts. Myers encouraged these often ignored or underdeveloped aspects of a building to take on an architectural role.

Myers has not created a sound-bite monument pickled in black-tie formality, but a building that in addressing both the urban and social context and the smallest design detail, has emerged as the living heart of a city that had become cold in self-defense; NJPAC thaws Newark's icy cityscape. The project is also exemplary for other cities that have been vitiated by suburbanization and need a role model for downtown self-reinvention. The answer this building posits to civic anomie is not so much style as attitude—how architecture reaches out to its context and forms a living community within its walls.



East-west section

20'/6m

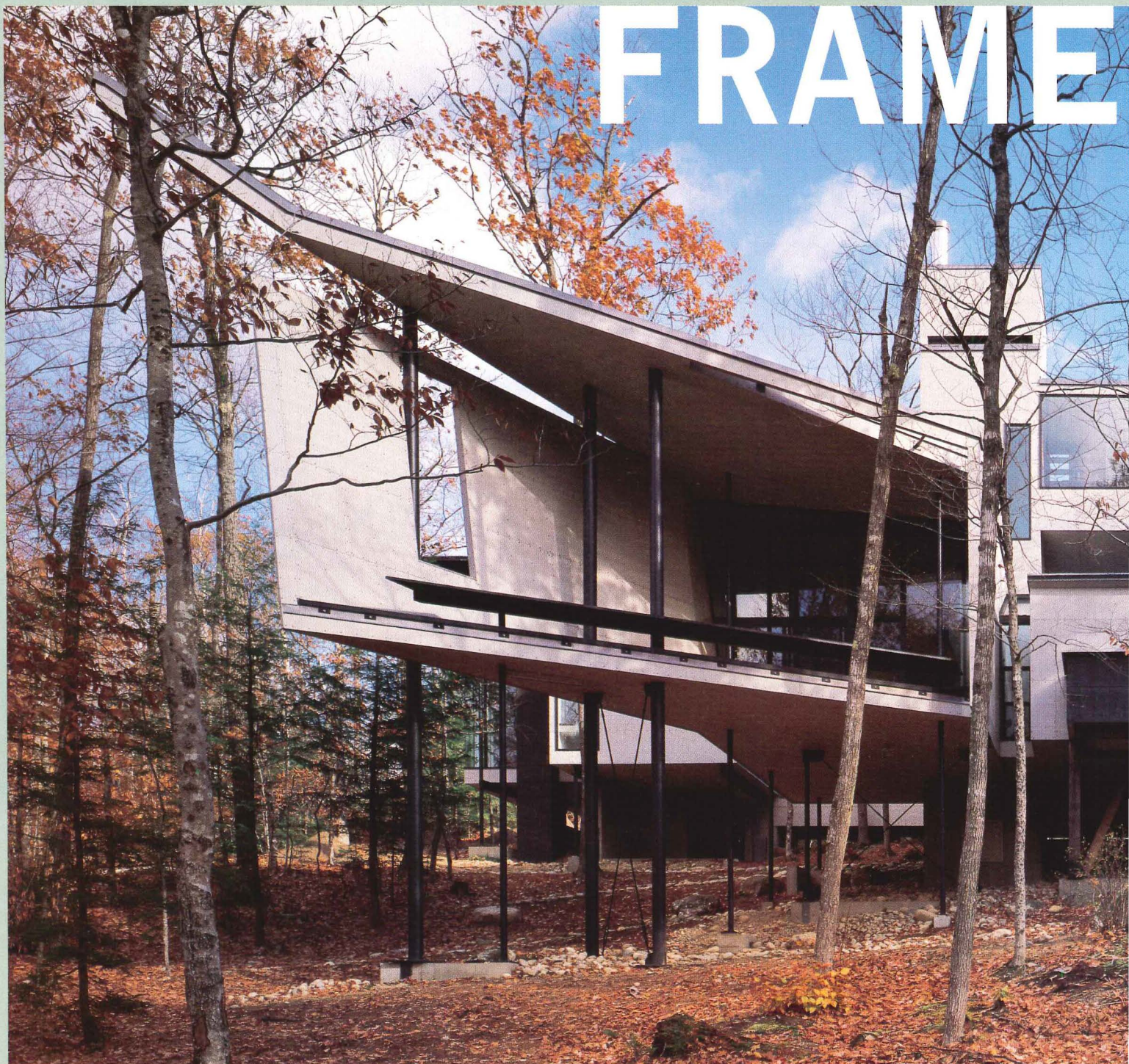


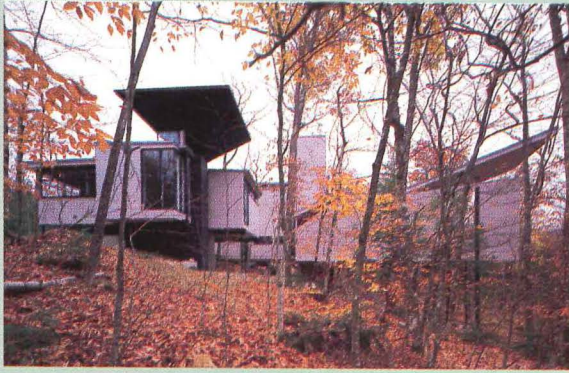
**NEW JERSEY PERFORMING ARTS CENTER
NEWARK, NEW JERSEY**

CLIENT: New Jersey Performing Arts Center—Lawrence Goldman (president and CEO), Gail Thompson (vice president, design and construction) **ARCHITECT:** Barton Myers Associates, Los Angeles—Barton Myers (principal-in-charge), Benjamin Caffey, Stephen Hamilton, Jonathan Hankin, Calvin Smith, Sita Torres, Patrick Winters (associates-in-charge), John Dale, Robert Edwards, Victor Garcia, Augis Gedgaudas, Erik Indvik, Jim Jackson, David Johnson, David Kim, Mario Madayag, John McMillan, Donald Mills, John Morgan, Michael Murdock, Alan Murphy, Stephanie Oestreich, Stuart Royalty, Patricia Shigetomi, Paul Tang, Ingaliil Wahlroos, Clinton Wallace (project team) **ASSOCIATE ARCHITECT:** Wilson Woodridge Architects, East Orange, New Jersey—Chuck Woodridge (principal-in-charge), Corrado Minervini, Marva Richardson, Hany Salib (project team) **ENGINEERS:** Ove Arup & Partners (structural, mechanical, electrical); Paulus, Sokolowski and Sartor (civil) **CONSULTANTS:** Artec Consultants (acoustics); Jules Fisher/Joshua Dachs Associates (theater); Fisher Marantz Renfro Stone (lighting); Sussman/Prejza (graphics and color); Donnell Consultants (cost); Adams Morioka (restaurant interiors); The Halvorson Company (landscape); Simpson Gumpertz & Heger (exterior wall); Lerch Bates & Associates (elevator); Finish Hardware Technology (hardware); Cini-Little International (food service); Rolf Jensen & Associates (fire/life safety); Ralph V. Ward (security); JGL Management Services (restaurant); Orth-Rodgers & Associates (traffic) **GENERAL CONTRACTOR:** Turner Construction **COST:** \$90 million **MODELMAKER:** David Maystead **PHOTOGRAPHER:** Jeff Goldberg/Esto

MAINE

FRAME





Dramatically angled porch on south facade (facing page) opens onto lake view. Concrete curb that flanks driveway (below) creates east-west axis across site. Flared zinc-clad chimney rises above bedroom and punctuates west facade (left).



Scogin Elam and Bray builds a hillside hideaway in the woods of rural New England.



By Joseph Giovannini



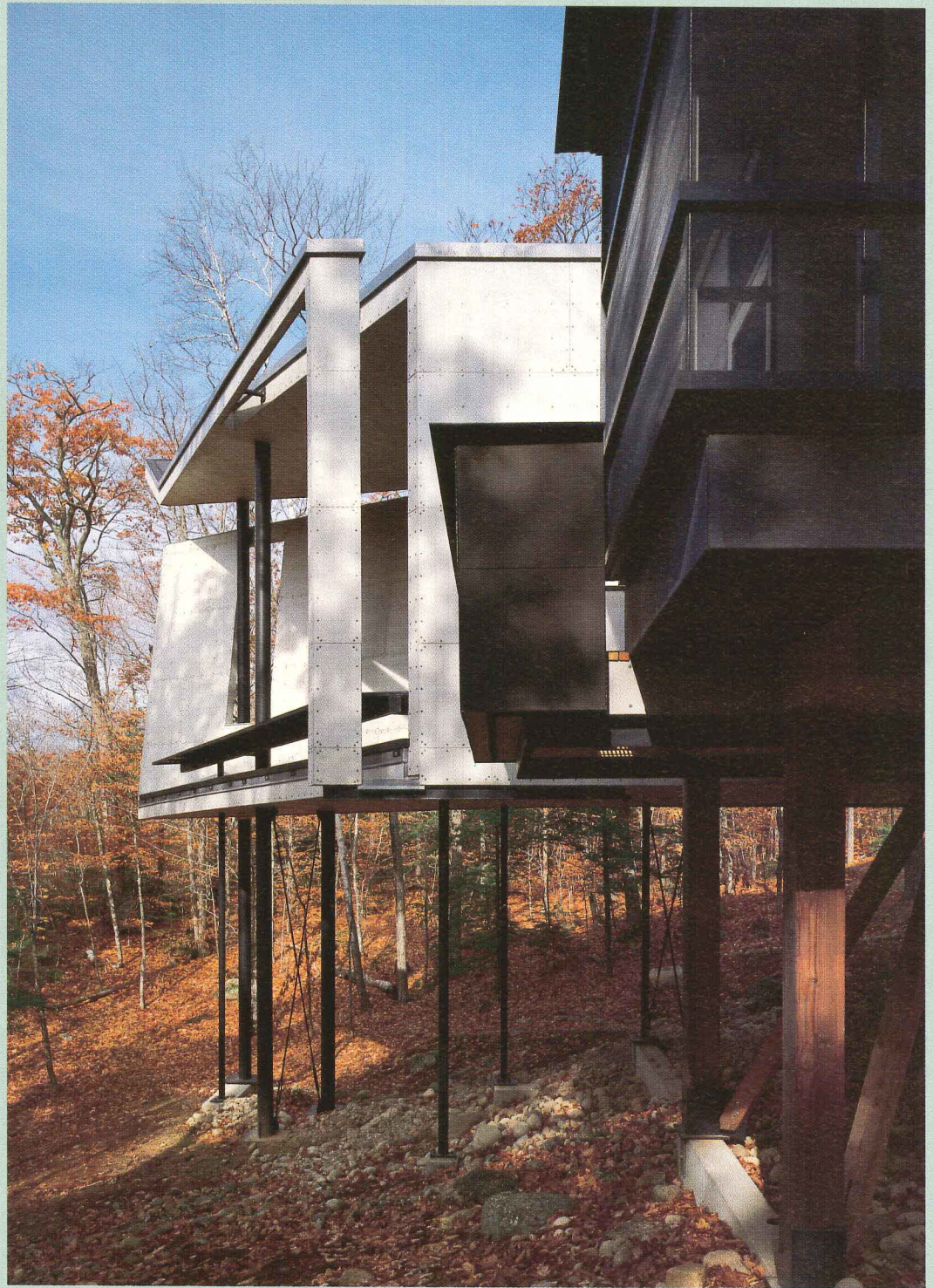
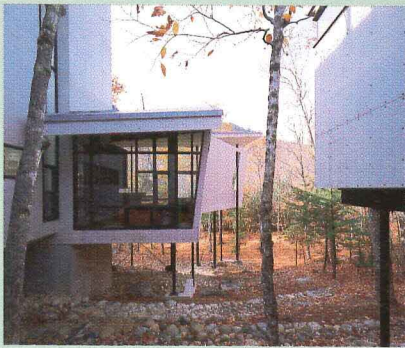
Some projects are a slalom of requirements that restrict the course of a design, but the house Margaret Nomentana asked Atlanta-based Scogin Elam and Bray Architects to create represented a permissive commission: One artist was hiring others to set their own esthetic agenda.

The client, a refugee from earthquake-prone Los Angeles, is a painter and interior designer who recently bought a gently sloping lakeside property facing a mountain in western Maine. Her tastes were sophisticated, and the budget for the two-bedroom, 3,000-square-foot house, realistic. Nomentana requested separate rooms rather than open loft spaces, and a design with a strong relationship between the inside and outside. "I wanted to be as close to nature as possible," she explains. "And I didn't want fussy."

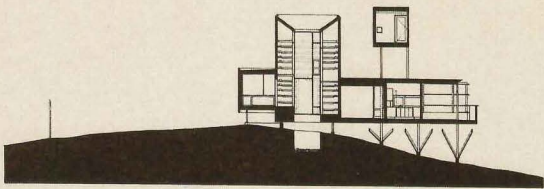
For Principals Merrill Elam and Mack Scogin, the site was the generator. "My inclination was to touch the land as little as possible because it was so fragile and special," maintains Elam. "When we first went there," she adds, "it was like walking across an unbelievable carpet of delicate, mossy plant material—the freeze-thaw cycles keep it spongy." The north side of the parcel slopes up to a street and the south, down to a lake. The architect divided the property with a low concrete curb that distinguishes between the man- and nature-oriented precincts—the front and back of the site.

Elam describes how their parti was inspired by the traditional concatenated Maine dwellings that she characterizes as "big house, little house, back house, and barn. The front door is formal, but everything else is tagged on." Inspired by houses in the area that extend out along a continuous floor plane, the floor of Nomentana's house stretches out and projects from the top of the hill.

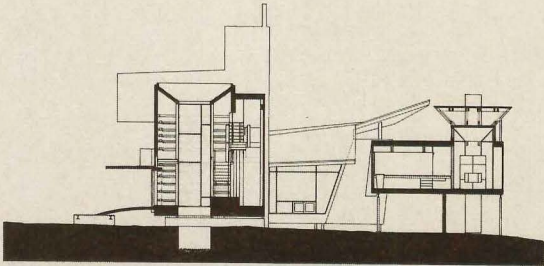
All the elements to the north of the curb—the garage and Nomentana's zinc-clad painting studio—sit directly on the ground. South of the curb, the architects maximized views by lifting the house into the trees on wood and steel *pilotis*. The elevated floor plane reveals a rocky terrain that was subtly embellished by Boston landscape architect Michael Van Valkenburgh Associates with native plants. A switchback path crosses the site under the belly of the house, working its way toward the lakefront. The architect bolted



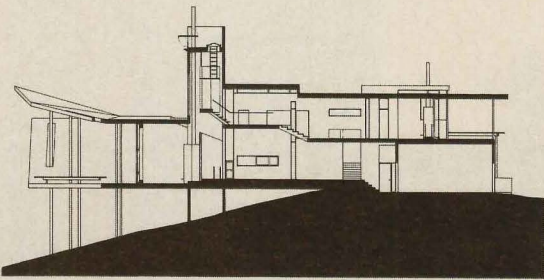
Arched concrete footbridge, crowned by zinc canopy, leads to entrance on east facade (facing page). House wraps around open inner courtyard with natural landscape (above). Folded roof and canted concrete wall break orthogonal geometry on south facade (right).



East-west section looking south



North-south section looking west



East-west section looking north



Two-story glazed impluvium (facing page, bottom left and top right) features steel-plated stairs and bookshelves and opens to sky. Main corridor, flanked by planes of steel plate, links front and rear of house (below).

cement-board panels onto the exterior walls and raised underbelly; the variegated light-gray cladding takes on rain, snow, and sun with subtly expressive patterns.

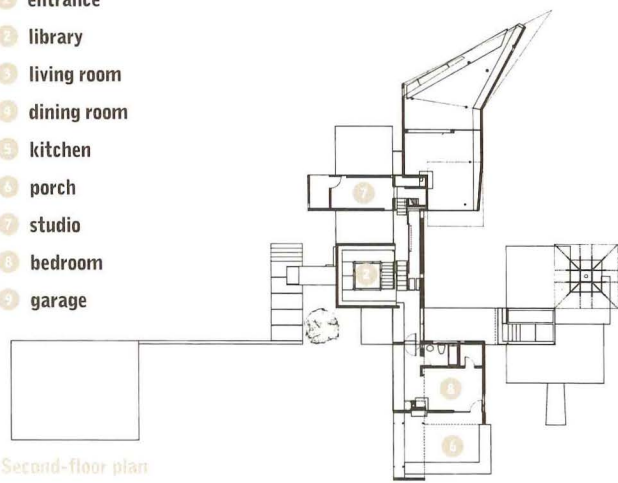
A cubic tower marks the entrance and serves as the joint of a pinwheel-shaped plan. "The views are beautiful everywhere, so there was no reason to privilege one over the other," explains Elam. The tall, cement-board-clad form encloses a book-lined stairwell, and leads into a long, stepped corridor that links small rooms that look and feel like elevated garden pavilions floating among the branches. To the south and west, wings that wrap around pools of air lock outdoor space into their configuration—the open form of the elevated house takes in land and trees. "The exterior in-between spaces are part of the inside," explains Scogin.

Le Corbusier perched Villa Savoye on *pilotis*, but it remains an object building that looks to the landscape. Scogin Elam and Bray, by contrast, opened up the Nomentana House so that it looks inward as well as out to the views. Never complete in its form, it reaches out to nature without trying to contain it in a closed courtyard. The architect reacted to the site, but also tried to invent a house that could act as a companion to a single person. "If you put Margaret in a saltbox, she'd always be looking out from the box without seeing any part of her life," says Elam. "We purposely configured the house so she'd see the bedroom from the living room, for example, and always see light in other parts of the house." Adds Scogin, "The house is about a forced movement that becomes a companion you constantly have to deal with as you move through it."

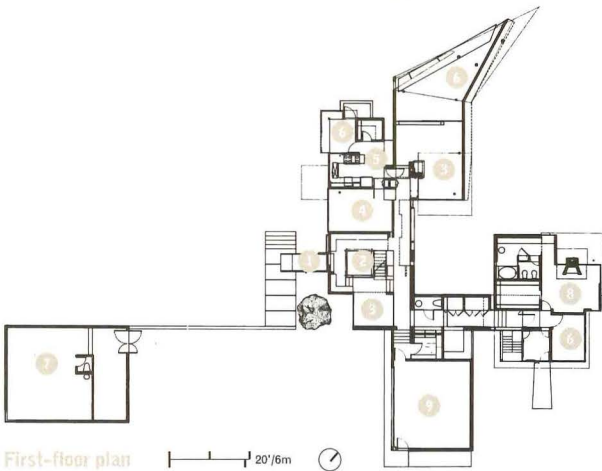
The program is disarmingly conventional, comprising living and dining rooms, a kitchen, two bedrooms, and two screened sleeping porches. (There's also a small room for Nomentana's two poodles.) Each room is its own environment in its separation from the others, and the very specific architectural responses to view, exposure, and function—the placement of windows, the choice of glass, and shape of walls. Long corridors string the rooms loosely together. The tentacular typology and its above-grade elevation lies somewhere between self-contained object houses and the house-pavilions Frank Gehry scattered across hillsides in the late 1970s. This house extends the idea behind the Chmar House Scogin Elam and Bray built in Atlanta in



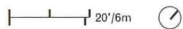
- 1 entrance
- 2 library
- 3 living room
- 4 dining room
- 5 kitchen
- 6 porch
- 7 studio
- 8 bedroom
- 9 garage



Second-floor plan



First-floor plan



1990—the project that attracted Nomentana to the firm.

Though each room is roughly the same size, no one space is favored over another. The main bedroom has an elaborate fireplace, even though the room is small, and it differs significantly from the guest bedroom, which opens onto a generous terrace with a cantilevered brise-soleil parapet. The terraced hallways have expansive window walls and powerful sheets of cold-rolled steel framed into banisters. The stairs wind around a mysterious, visually elusive, two-and-a-half story glazed impluvium, where reflections of books and the sky mingle and play off bookshelves. The client complements the material simplicity of the house with a few pieces of classic Modernist furniture, such as a Scandinavian dining table, and understated heirlooms.

In their most recent commissions, Scogin Elam and Bray have used free-form geometries, but few geometries are exotic in this house. Only the living room breaks rank from the orthogonal, opening to views of the pristine lake and mountain. The exterior walls slice out to form a terrace, and one wall leans in an almost ecstatic gesture to nature, with a long hole punched through its thickness. “That gesture is another way of wrapping the house around nature,” says Scogin. “The hole lets snow and rain and light come through the house; nature comes in and falls out.”

The house is, remarkably, both mature and enthusiastic—wise and disciplined, yet free and enchanting. Scogin Elam and Bray may have abandoned Modernist notions of systematicness in their ingenious formal maneuvers throughout the house, but these moves are never gratuitous or narcissistic. They reveal a view, perform a special function, or create a poetic pause in space and time. “It’s about enriching the experience of being there,” maintains Scogin.

Movement is, indeed, rewarded by shifting views in a relational environment that favors no single viewpoint. A panoply of phenomena invites promenades of discovery—light and shadow, for example, play themselves out dramatically against the almost photographic black-and-white material palette. The house feels simple despite its spatial complexity. And it doesn’t seem forced, despite the architects’ splicing of two traditions—a stepped landscape house and a *piloti* scheme—into a new, poetic typology.



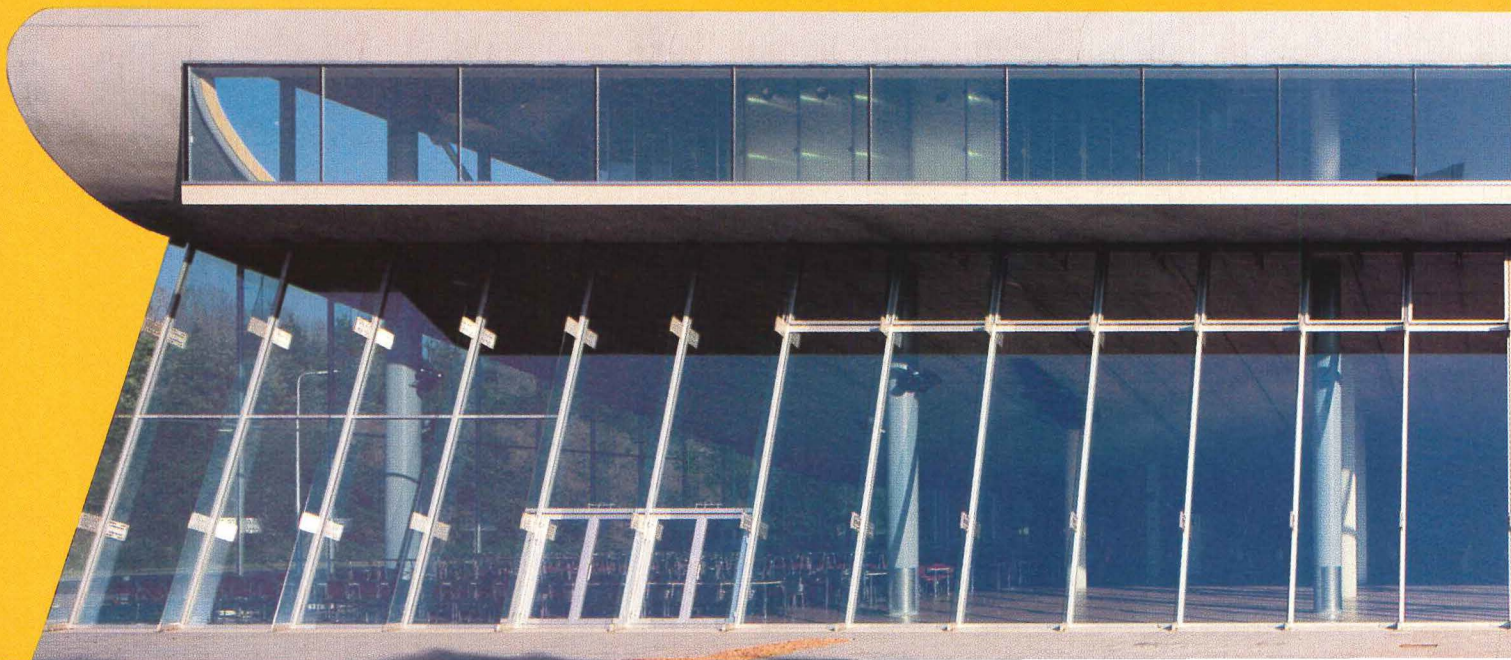
NOMENTANA HOUSE
LOVELL, MAINE

House is organized around linear corridors (plans). Guest bedroom (facing page, bottom) opens onto flagstone-paved terrace. Translucent glazing on east wall, which overlooks entrance, diffuses natural light. Tilted concrete-board-clad west wall of living room (above) encloses terrace overlooking lake.

CLIENT: Margaret Nomentana **ARCHITECT:** Scogin Elam and Bray Architects, Atlanta—Mack Scogin, Merrill Elam, Lloyd Bray (principals), Jeff Atwood, Juan Du, Denise Dumais, Ned Frazer, Tim Harrison, Martha Henderson-Bennett, Dustin Lindblad, Beth Morris, Elizabeth Pidcock, Kathy Wright (project team) **LANDSCAPE ARCHITECT:** Michael Van Valkenburgh Associates **ENGINEERS:** Uzon and Case (structural) **CONSULTANTS:** Ramon Luminance Design (lighting); Koets Corporation (kitchen) **GENERAL CONTRACTOR:** Conforte Builders **COST:** Withheld at owner's request **PHOTOGRAPHER:** Timothy Hursley, The Arkansas Office

the new

Rem Koolhaas builds a university center on the edge of downtown Utrecht.



By Raymund Ryan

dutch school



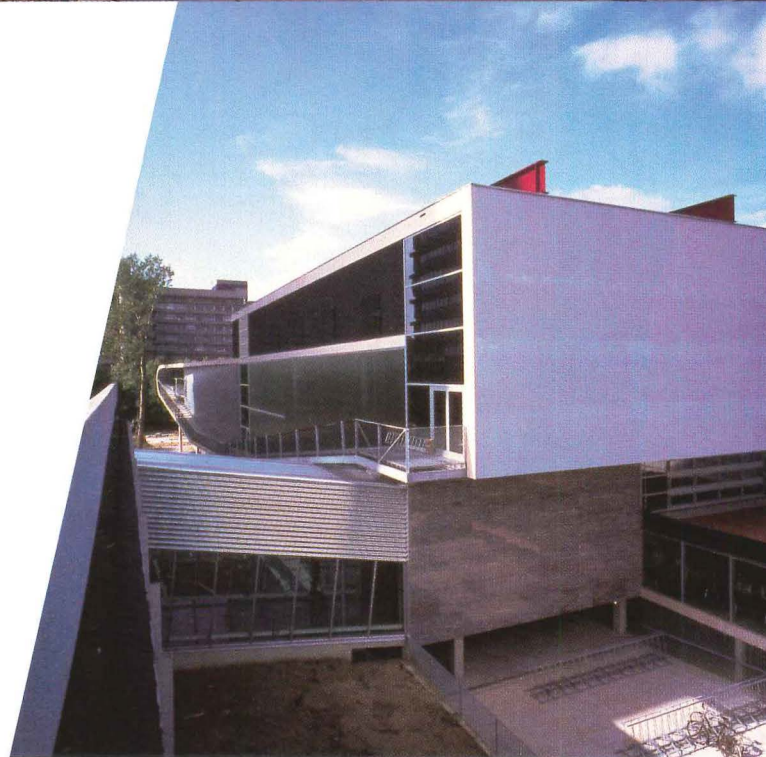
As every Dutch schoolchild knows, Holland consists to a large extent of reclaimed land. The very surface of this small, densely populated country is man-made, criss-crossed with roads, canals, farmland, and networks for distributing energy and information. Dutch Modernist Rem Koolhaas has always been intrigued by metropolitan congestion, but his current preoccupation can more accurately be described as topographic engineering: In a very Dutch way, Koolhaas now manipulates the surface of the earth. His most recent project, the University of Utrecht's Educatorium, heaves the ground upward, then literally rolls it back upon itself in order to create a new kind of monolith. Inaugurated in September, the 45,000-square-meter, \$12.6 million building is the most fluid example yet of what the architect calls "synthetic landscape."

The original university campus, which houses the arts and law departments, sits in the center of Utrecht, in various buildings that have become part and parcel of the city's busy public life. Having grown over the past 30 years to 30,000 students, the university has been building a second, "green" campus, the Uithof, located 10 minutes east of downtown by bus. The openness of the Uithof site provided sufficient space for laboratories, so the medical, natural, and social science departments were shifted eastward, and the university's two-campus scheme, conceived by its board in the mid-1980s, was realized.

The new Uithof context is one of those interstitial zones that Koolhaas finds so interesting, where the office blocks and chain hotels of suburbia intermingle with off-ramps and farmland. In 1985, the university's board asked Koolhaas's Office of Metropolitan Architecture (OMA) to prepare a long-term development plan for the Uithof campus. OMA was careful not to let new buildings dissipate loosely into the fragile countryside or to set up a strict differentiation between nature and the man-made. The architect decided instead to focus new construction around extant buildings, to create an archipelago of building clusters about which the Uithof's water channels and vegetation can flow.

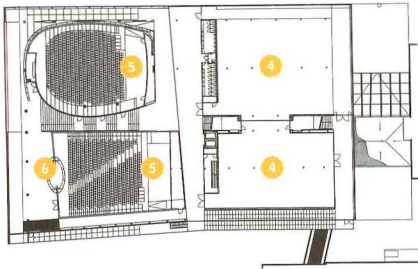
As part of this master plan, Willem-Jan Neutelings (an OMA alumnus) is currently constructing the Minnaert Building, a robust, elongated, colored-concrete bar that houses classrooms and social spaces. In 1995, Rotterdam-based Mecanoo Architects completed the economics department building, with its long, glazed facade and three elegantly landscaped courtyards. Located in the same cluster as the economics building, OMA's Educatorium serves a primary role in the life of the university.

Physically central, and linked to its immediate neighbors by glazed ramps and bridges, Koolhaas's Educatorium (a name invented by the university to suggest a "factory of learning") forms the nucleus of the Uithof's academic and social life. Within its concrete shell, the Educatorium accommodates the campus's principal cafeteria, two

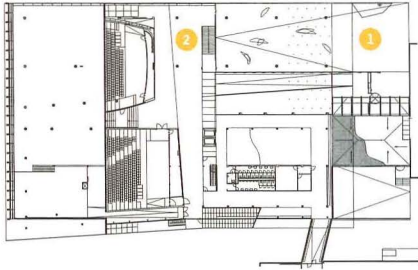




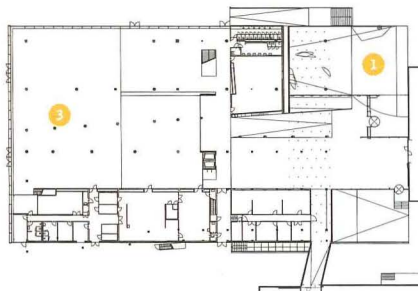
Educatorium adjoins existing lower on suburban university campus (facing page, top). Along west elevation, curved concrete prow punctured by steel and glass vitrine creates building's distinct profile. Bridge at southeast corner (facing page, bottom) links Educatorium with neighboring structures. Sloping concrete slab of lecture halls, supported by field of concrete columns, defines cafeteria ceiling (left). Canted glass walls enclosing western edge of 1,000-seat cafeteria provide views of botanical gardens.



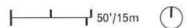
Third-level plan



Second-level plan



Ground-level plan



- 1 ramp
- 2 lobby
- 3 cafeteria
- 4 classroom
- 5 lecture hall
- 6 projection booth

large lecture halls, classrooms, and sundry circulation and gathering spaces. Although its architectural language is resolutely Modern, the Educatorium, with its programmatic adjacencies and possibilities of encounter, is surprisingly akin to the university's traditional facilities in downtown Utrecht.

Visitors first experience the Educatorium as a sleek, gray snout that protrudes from behind an office tower. It seems to hover like a concrete zeppelin, an unlikely amalgamation of weighty material and floating structure. In its underbelly, a glass wall is tethered and splayed westward to give refracted views into the busy, 1,000-seat cafeteria that doubles as a study area and venue for large ceremonies. With X-ray transparency, the architect's topographical strategy reveals itself along the building's northern flank. The hovering concrete soffit ascends from the ground at the building's northeast corner, then flips back to form a protruding snout that encloses two lecture halls visible above the cafeteria.

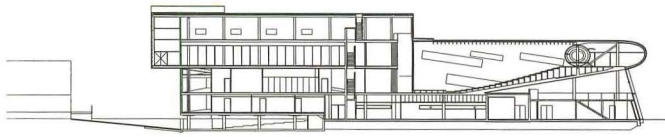
The building's formal entrance sequence begins at the same corner, initiated by a ramped portico that ascends toward the west beneath a two-story block of classrooms. Beneath this partially enclosed ramp—which leads to a lobby behind the pair of lecture halls—is storage for 1,100 bicycles, a popular mode of transit for Dutch students.

To shelter students and visitors from inclement weather, the architect linked the Educatorium to neighboring buildings with enclosed bridges and ramps. These crudely detailed links are neither part of the big concrete plate nor subsidiary items, yet they are more important than any doors to the exterior. They allow students and faculty to flow into the Educatorium year-round.

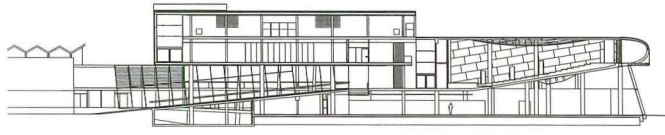
Throughout the interior, as evidence of Koolhaas's well-known affection for cinematic movement, OMA has set up dramatic views of tilted frames, glass-bottomed bridges, and two lecture halls perched rather steeply between the building's glazed flanks. Unlike the hermetic rooms of many college buildings, these complex chambers sit side by side within the sloping foyer. With panoramic views of the university's botanical gardens to the north, the halls are in fact—because of the ramping floor surface—on the second floor. To the north, the larger hall has 500 seats; its neighbor to the south holds 400. The larger room is enclosed by two curving partitions: The innermost is a metal and wood acoustic sandwich; the exterior glass wall is laminated with a holographic film that, depending on the viewer's position, is either translucent or transparent. Where these internal walls overlap to form an entrance, the Educatorium's snout splits to create a circulation terrace with views westward through a cantilevered vitrine.

Working with Dutch engineer ABT, Koolhaas and OMA Partner Christophe Cornubert developed intriguing structural solutions for both lecture halls. To span the larger chamber with its non-load-bearing walls, the compressive strength of concrete and the tensile strength of steel were isolated from each other. The poured-in-place concrete roof slab was kept to a slim 20-





East-west section through classrooms and south lecture hall

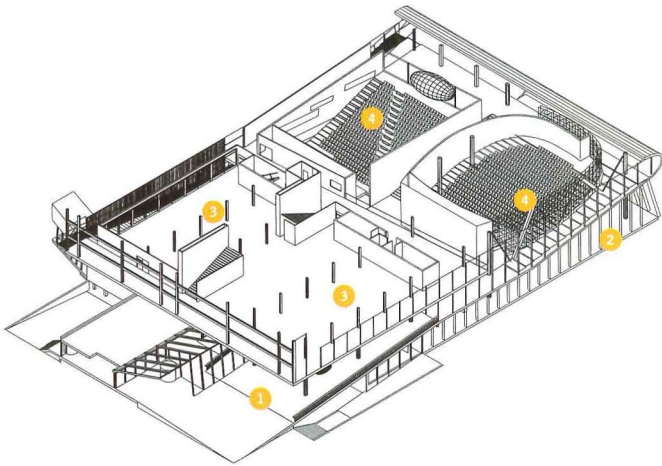


East-west section through entrance ramp and north lecture hall



Polished concrete ramp connects ground-floor entrance at east to glazed walkway leading to second-floor classrooms (facing page, bottom). Staircase, finished in planks of yellow pine, flanks glass-enclosed lecture hall along north end of building (left). Stairs terminate in wooden alcove. Truss composed of alternating steel and concrete members flanks curved glass walls at north edge of lecture hall (above). Holographic film applied to glazed panels renders wall transparent or translucent, depending on view angle.

- 1 ramp
- 2 cafeteria
- 3 classroom
- 4 lecture hall



Exploded axonometric



centimeter thickness, but the deeper web of reinforcing bars was allowed to protrude downward, crowning the theater with industrial ornament, a flat inverse of the conventional dome. The south lecture hall has structural concrete walls; its ceiling is composed of I-beams spaced very closely to hold up the thin roof slab.

The projectionist's booth is held as a precious capsule (part Hieronymous Bosch, part Tail o' the Pup) between the floor and the ceiling. Manufactured with racing-yacht technology, the booth has a smooth, red cedar skin and is accessed from the corridor behind the lecture hall through a hinged panel. The classrooms over the Educatorium's entrances have an independent circulation system, with brightly colored stairwells positioned at the perimeter to allow for internal partitioning. The upper floor accommodates up to 300 students; the lower area is divisible into suites of 150 and 200. The slab between the two classrooms forms a visual continuation of the roof that caps the lecture halls—students can look across its planted surface, but cannot access it.

The Educatorium's structure is contingent upon its immediate disposition. OMA has exploited these situations to create a kind of tectonic narrative that Cornubert refers to as "the accommodation of desire." The inward-curving snout, for example, could not be made of poured concrete. It's a steel frame with an external finish of sprayed concrete and flush interior panels of southern yellow pine—an invitation to skateboarders. Where the vitrine splits this envelope, OMA exposed its steel structure and supplementary diagonal ties. From south to north, there are fewer and fewer columns, and walls increase in transparency. The final layer of structure is a composite truss between the lecture hall and the glazed northern facade: Diagonal members alternate between concrete and steel.

The Educatorium is OMA's most impressive building since the Rotterdam Kunsthall (*Architecture*, September 1993, pages 86-89). The Educatorium borrows the endless contiguity of the spaces contained within that orthogonal box, but opens them up with greater fluidity. In 1993, between the construction of the Kunsthall and the Educatorium, OMA also

proposed a design for the Jussieu Library in Paris. In the unbuilt Jussieu scheme, Koolhaas memorably synthesized his evolving interest in raised and overlaid terrains of programmatic possibility with the flying-floor surface that he refers to as "a social magic carpet." The Educatorium is just such an environment, full of spatial excitement and seemingly in perpetual motion. The Educatorium broadens the classic Modernist notion of the architectural promenade into a realm of many dimensions, a multilevel crossroads that makes for great people-watching.

For the university, the Educatorium is a social stage and a shopping mall of the intellect. For Koolhaas and OMA, it is proof that the Uithof is no longer peripheral or unusual compared with traditional urbanism, but an increasingly typical condition. With buildings such as this, the Netherlands is harnessing a new sense of spatial awareness.

Raymund Ryan is a professor of architecture at University College in Dublin, Ireland.

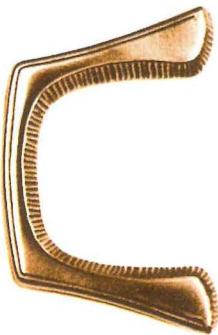
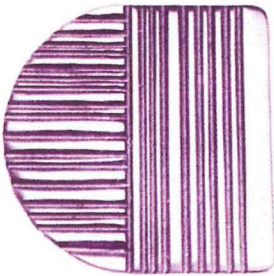
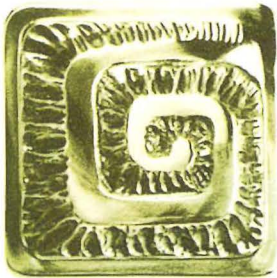
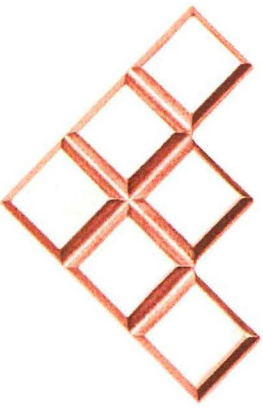


Yellow pine-paneled tunnel welcomes skateboarders (facing page, center). Egglike projection booth, finished in cedar planks and accessed by hinged door, extends into corridor behind lecture hall (facing page, bottom left). Exposed steel bars crown concrete ceiling of ovoid lecture hall at north (left); multicolored seating and lozenge-shaped projection booth animate rectangular lecture hall to south (below). Both halls accommodate large conferences and performances.



**EDUCATORIUM
UTRECHT, THE NETHERLANDS**

CLIENT: University of Utrecht **ARCHITECT:** Office for Metropolitan Architecture, Rotterdam, The Netherlands—Rem Koolhaas, Christophe Cornubert (design partners), Gary Bates, Frans Blok, Richard Eelman, Clement Gillet, Gaudi Houdaya, Michel Melenhorst, Enno Stemerding, Boukje Trenning, Henrik Valeur, Luc Veeger, Jacques Vink (project team), Christian Müller, Eric Schotte (technical support) **ENGINEERS:** ABT Building Technology Bureau (structural); Linszen Engineering (mechanical) **CONSULTANTS:** Technical Physical Research/Technical University Eindhoven (acoustics); Wolter & Drost-Evli (elevators); Robert-Jan Van Santen (facades); FBU (facility management); Joep Van Lieshout; Andreas Gurski (artists); Berenschot Osborne (cost); Duurzaam Bouwen (environmental) **GENERAL CONTRACTOR:** BAM Bredero **COST:** \$12.6 million **PHOTOGRAPHER:** Christian Richters



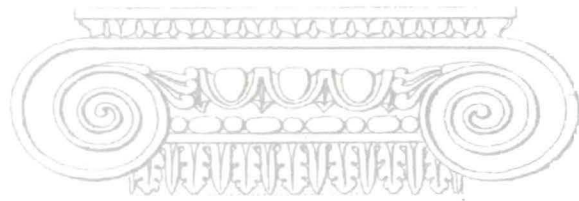
Inspired

by the

CLASSICS

mastercraft, a series of 20 strong, elegant pulls offer a unique opportunity to show entry doors as tasteful works of art. These hand-finished pulls provide a stunning first impression for any building. Series includes round, square, vertical and freeform pulls. Cast in our own foundry in all standard architectural finishes.

Vertical pulls 14-17" tall.



mastercraft

entry door hardware



**Builders
Brass Works**

CALL US AT 213/262-4191 OR
FAX TOLL FREE 800/637-8746
Circle 134 on information card

Custom entry pulls for Getty Center made by TRIMCO/BBW
TRIMCO/BBW offers the broadest range of sturdy and tasteful accessory door products.
additional information see us in the SweetSource CD and at the SWEETS web site: www.sweets.com

Ask for brochure MC1 for the full family of exciting shapes

ecture

TECHNOLOGY + PRACTICE

PRESERVATION
TECHNOLOGY

146

Reclamation on 42nd Street

COMPUTERS

152

Longer Life for Drawings

TECHNOLOGY

158

Lights, Cameras, Teleconference!

PRACTICE

164

From Vulnerable to Valuable



Reclamation on 42nd Street

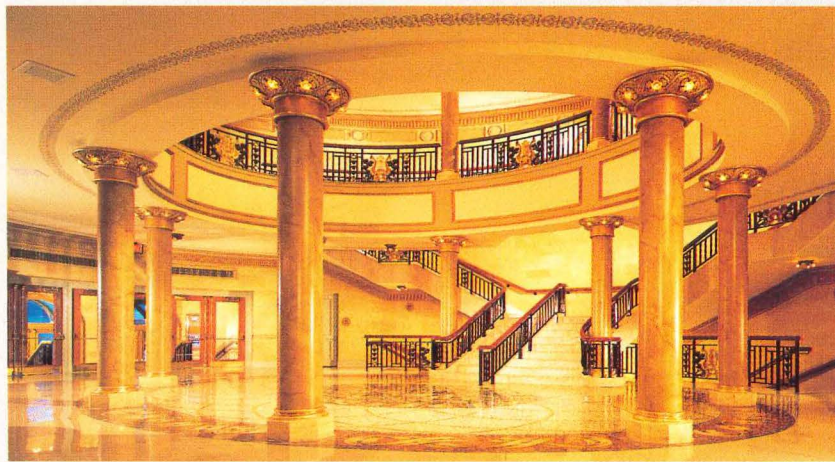
In an improbable dual feat of preservation and demolition, two Times Square theaters are combined to create the Ford Center for the Performing Arts.



By Sarah Amelar

In its heyday, New York's 1903 Lyric Theater resounded with the voices of Fred Astaire, Douglas Fairbanks, and the Marx Brothers. At the 1920 Apollo Theater next door, Ethel Merman and Jimmy Durante crooned, and Lionel Barrymore played Macbeth. But like many glamorous 42nd Street playhouses, the Lyric and Apollo grew derelict as pornography, crime, and prostitution disfigured their Times Square neighborhood after the Great Depression. By the early 1990s, when the city and state joined forces to reclaim the area, including seven legendary theaters, the Lyric was boarded shut and virtually gutted, its glittering gold leaf and stenciled lyres a distant memory, and the Apollo (renamed the Academy in 1987) was reborn as a seatless rock-concert hall.

During 42nd Street's recent renaissance, the New Amsterdam and New Victory theaters were restored through traditional preservationists' means, but the early 20th-century spirit of the Lyric and Apollo came back to life through an improbable combination of meticulous conservation and extensive demolition. Beyer Blinder Belle Architects & Planners (BBB) replaced the two vintage playhouses with the capacious Ford Center for the Performing Arts, a richly detailed, state-of-the-art theater that reincorporates such key elements as the Apollo's cherub-adorned proscenium arch and the Lyric's elegant facades. "Clearly, something radical had to be done," says Partner Richard Blinder. "The decision to go from two theaters to



Signage on Beaux-Arts 43rd Street facade (facing page) bears name of Ford Motor Company, a major sponsor of new theater. Gold-leafed dome, floor mosaic, and illuminated column capitals (left) embellish elliptical lobby.

one was determined early on, given the client's programmatic needs," Blinder adds.

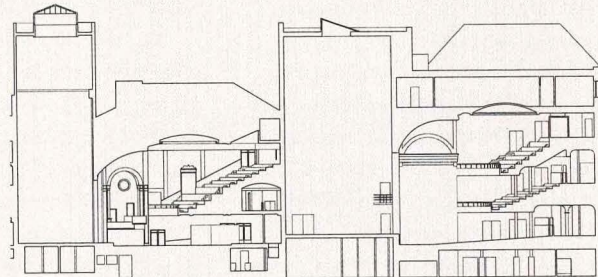
Client Garth Drabinsky, chairman and CEO of the Toronto-based theatrical production company Livent, envisioned staging spectacular musicals, which would require a 55-by-100-foot stage, a generous forestage area, 75 cast-member dressing rooms, a 100-foot-high fly loft, and the technological capacity for extravagant lighting and sound effects. Typical of their era, the Lyric and Apollo housed modest stages with minimal support spaces; in many traditional Broadway theaters, actors dressed in corridors or cubicles stacked in the wings, and during intermission, audiences simply overflowed from meager lobbies onto the sidewalk.

Drabinsky had revived the splendor of other antiquated theaters, including New York's historic Carnegie Hall Cinema, Toronto's 1920 Pantages and, currently in the works, Chicago's 1925 Oriental. But to justify a \$30 million investment in the Lyric and Apollo, this entrepreneur and impresario (and cofounder of Cineplex Odeon) needed to create at least an 1,800-seat house and virtually double the existing stage depth.

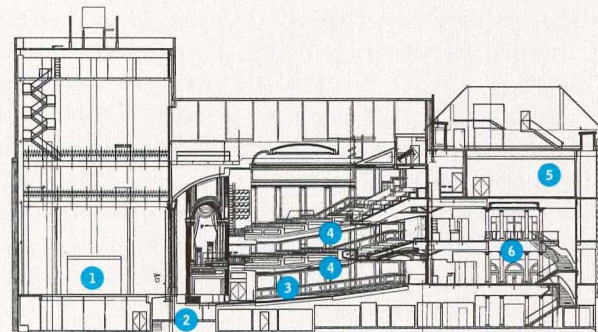
In combining the old and new, the project posed the classic preservationists' conundrum: How seamlessly should recent construction blend with the old or, conversely, how dramatically should contemporary additions contrast with period pieces? To complicate matters, the architect needed to salvage elements from two distinct epochs

and styles: the highly sculptural Beaux-Arts of the Lyric, designed by V. Hugo Koehler, and the Robert Adamesque low relief of the Apollo by De Rosa & Pereira. As if the challenge were not great enough, the theater had to be in operation by the end of 1997—a mere 12 months after breaking ground for new construction—to qualify the client for investment-tax credits valued between \$4 million and \$5 million.

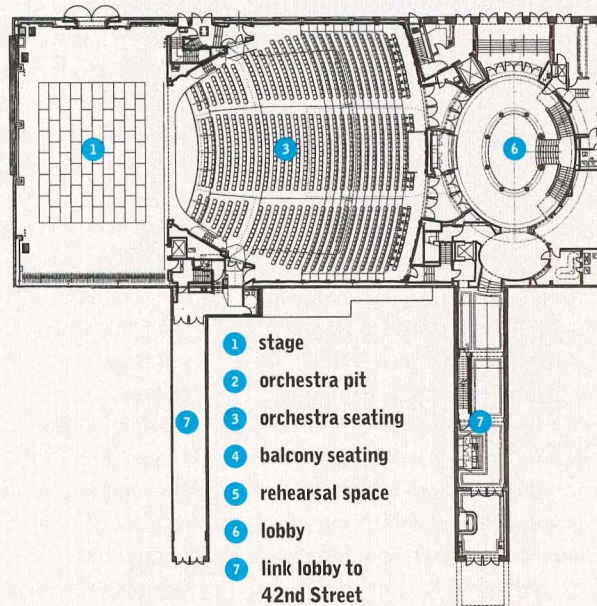
Lacking landmark status, the Lyric and Apollo were vulnerable to demolition, but not entirely unprotected. The 42nd Street Development Project, a division of the state's Economic Development Corporation, had established its own preservation guidelines, which obligated the developers to retain and accentuate historic elements of these theaters, without specifically requiring restoration of the entire buildings. As preservationists experienced in restorations at Ellis Island and Grand Central Station, BBB chose to exceed the guidelines. They kept not only the Lyric's sculptural terra-cotta brick-and-limestone facades, and the Apollo's 39-by-28-foot oval dome, proscenium arch, stageside boxes, sail vault, and ornate "link lobby," as required, but also three smaller domes from the Apollo and a 4-foot-wide medallion of Zeus from the Lyric's proscenium arch. The link lobby, lined in black and white marble and bas-relief sculptures, connects the original Apollo auditorium, sited on 43rd Street, with an entrance on prestigious 42nd Street. (The Lyric was also effectively a 43rd Street theater, and its corridor to 42nd



Original east-west section

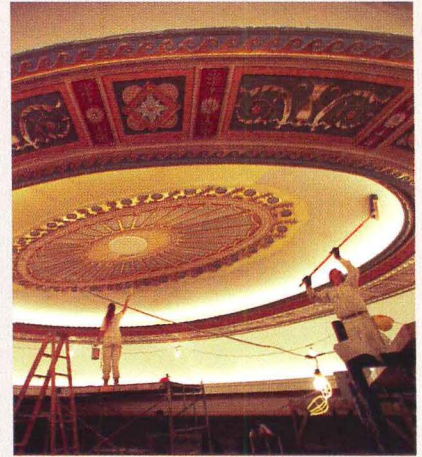


New east-west section



- 1 stage
- 2 orchestra pit
- 3 orchestra seating
- 4 balcony seating
- 5 rehearsal space
- 6 lobby
- 7 link lobby to 42nd Street

First-floor plan



Street, though not decoratively intact, was also retained).

Before any demolition could begin, master plaster restorer Jean-François Furieri and a 25-person crew from his Toronto-based firm, Iconoplast Designs, spent three months painstakingly removing monumental plaster ornament from the Apollo. With fine masonry blades, they carefully cut the original 36-foot-high proscenium arch into 69 sections, the elliptical dome into 34, and the great sail vault over the orchestra pit into nearly 70 parts. The smaller circular domes were extracted whole. Labeled and cradled in protective steel frames and crates, these huge pieces of the final puzzle—190 tons of material—were trucked to a New Jersey warehouse where Iconoplast launched seven months of intensive conservation. “Obviously, this plaster was never intended to be removed,” observes Furieri, who had previously restored elaborate details in Canada’s historic Imperial and Pantages theaters. Backed with concrete and sand (an old-fashioned soundproofing method), these elements were massively heavy and often embedded with steel members.

“Usually, plaster is restored in place or simply replicated,” says Furieri. “This is probably the first time plaster was taken as historic fabric, removed, restored, and reinstalled.” Though much ornament was water- and fire-damaged and, around the box seats, had weathered the ravages of rock-concert foot stompers, Furieri salvaged 100 percent of the dismantled material. (Even the precarious journeys between site and

warehouse caused no casualties).

At the warehouse, Furieri and his crew removed layers of paint and debris using small sculpting tools, eschewing detergents, solvents, or even soap and water that can dissolve and damage plaster. With thousands of epoxy injections, they sealed small holes and cracks, and applied fresh plaster to chips and dents. Furieri added 5 feet to the height and 8 feet to the width of the proscenium arch to accommodate the new stage. Iconoplast also built steel armatures to support the reassembled pieces and cast new plaster to extend the arch and replace missing sections throughout the building.

With these treasures safely ensconced, the architect cleared away the bulk of the Lyric and Apollo, leaving a gaping 21,000-square-foot site and the Lyric’s 43rd Street facade backless, braced against the wind. Faced in red and buff brick, with limestone and cast-terra-cotta sculptures, this four-story facade presents a triumphal panoply of garlands and cornucopia, comedy and tragedy masks, human-faced rams’ heads and mustachioed gentlemen. The composition is punctuated by arched entry doors that soar toward exuberantly foliated corbels, columns and balusters, and globed lampposts flanking wreathed oculi. Beyer Blinder Belle cleaned the facades, repaired the masonry, and replaced the medallion-embossed copper cornice and cast-iron, lyre-festooned balustrade.

With a tight 12-month construction schedule, the architect needed

to enclose the building quickly to shelter interior construction. BBB opted for precast concrete panels—red brick-faced over the auditorium, and exposed over the fly tower. Though connected to the steel superstructure, the panels rest against synthetic rubber pads that reduce transmission of vibrations and street noise. Intended to play a “supporting role” to the “starring” Lyric facades, these economical, efficient panels are probably the weakest part of this finely crafted project. Vast and windowless by necessity, the visually thin walls lack a sense of solidity, especially noticeable where the junctures between panels read as seams, rather than expressed joints. But behind these purposefully bland walls lurks a jewel of an auditorium.

Both inside and out, Beyer Blinder Belle’s philosophy mandated that new should defer to old. Initially, their interior scheme was relatively modern and neutral, contrasting with the historic relics. “But we soon recognized that approach as too diagrammatic,” Blinder says. With theater design specialist Roger Morgan Studio as the interior designer, the architect developed a subtler distinction between original and recent details—a sensibility that lends this new building the haunting character of a magnificent old theater.

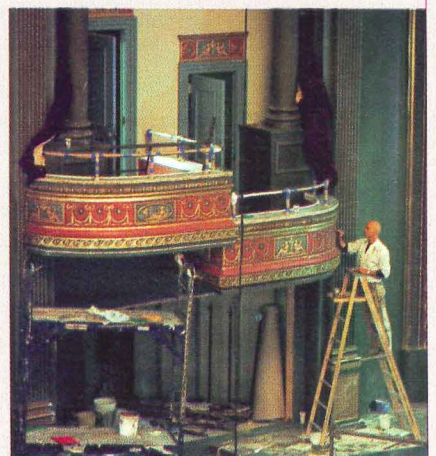
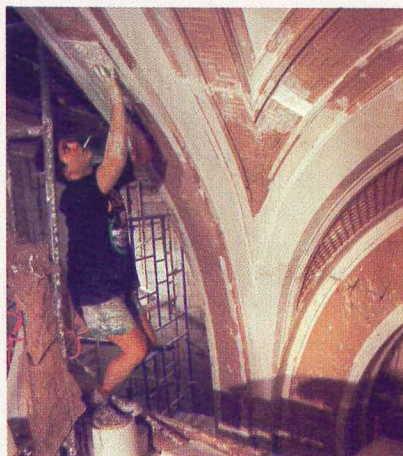
To give the historic remains a logical and metaphorically harmonious context, the designers took inspiration for the ample new lobby (entered directly through the Lyric’s north facade) from the Lyric, and inspiration for their auditorium from the



Conservators disassembled Apollo's proscenium arch (facing page, left) and elliptical dome and transferred them to New Jersey warehouse. New steel armature (facing page, center) was installed to rejoin dome. Lyric's dome (facing page, right) is a replica of damaged original. Reassembled and regilded Apollo dome (left) hovers over new 1,821-seat auditorium.

Plaster ornament from original box seating, proscenium arch, and sail vault (right) were refinished and replaced by hand.

ARI MINTZ / NEWSDAY PHOTOS





View toward Ford Center's new stage furthers perception of turn-of-the-century theater by displaying project's restored elements, including heightened and widened proscenium arch, sail vault, and boxes.

Apollo. Thus, an elliptical dome, based on the Lyric's damaged centerpiece, hovers over the Ford Center's elliptical lobby and mezzanine balcony, while the Apollo's great plaster mementos inhabit the new auditorium.

Crystal chandeliers, styled after the Apollo's original fixtures, deck the Ford Center's auditorium. Its lobby glows with warm candlelike carbon-filament bulbs, reminiscent of the Lyric. Built in the early days of electricity, such theaters celebrated the light bulb, generously punctuating signs with these glowing carbon-filament globes and jubilantly mounting them sideways, upside-down—or in any direction denied to a flame. Keeping with this lighting theme, Roger Morgan Studio capped the lobby's columns with gilded capitals in a swirling guilloche relief studded with replicas of Thomas Edison's original hand-blown light bulbs. Though no such capitals lit the Lyric, Morgan identifies these features as "of the period."

A spectacular floor mosaic, as found in many turn-of-the-century theaters (but not in the Lyric), also enhances the new lobby. Designed by Mariuca Brancoveanu of Roger Morgan Studio, this mosaic borrows imagery from the Lyric facade's comedy and tragedy masks. The lattice-patterned Axminster carpeting, the auditorium's damask wall covering, and the gilded seat ends were not part of the Apollo's original furnishings, but are consistent with its era.

The feel of an old theater is so convincing here that one almost expects the balcony to creak and the upholstery to puff out small clouds of

dust. On the interior, the Ford Center is a sophisticated new theater masquerading as old. Though preservation purists might disagree, the building does not smack of falseness or sentimentality. Its remarkable detail and authentic materials take on a richness of their own. In homage to a glorious period in theater history, the level of craftsmanship is exceptionally high—not only for the plasterwork, but also for the mosaic and extensive decorative painting.

For the decorative surfaces, Jeff Greene and EverGreene Painting Studios gold-leafed the domes, hand-stenciled lyres (after the original Lyric design) on the lobby ceiling, restored cold-painted cherubs to the Lyric's 43rd Street windows, glazed the plaster with gentle Adamseque colors (ivory, blue, beige, gold and terra-cotta red) applied to accentuate chiaroscuro only in the original details. Subtly enlivening the surface textures, they spattered, sponged, stippled, and glazed the walls with multiple coats, and lined the lobby with hand-crafted faux-sandstone ashlar on canvas.

With the auditorium's wealth of historic elements, they were careful—albeit with a delicate touch—to keep new from blending indistinguishably from old. New components, such as the balconies, are more restrained in palette and ornament than the historic box seats. Along the upper register of the top balcony's side walls, EverGreene painted 50-foot-long allegorical murals—an old theatrical device which, along with box seating and small-scale embellishments, gives this 1,821-seat house

a more intimate scale.

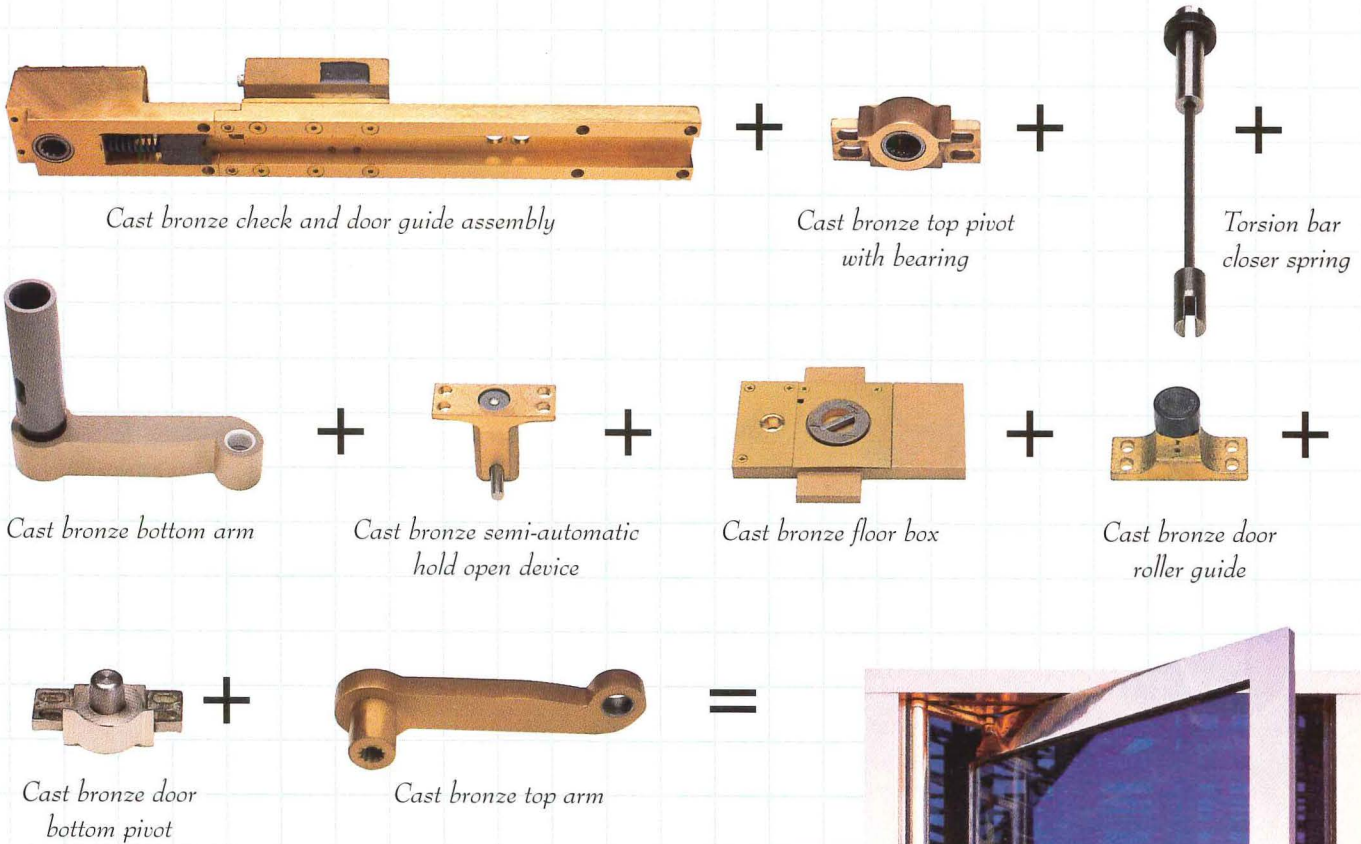
So much detail on a rapid schedule yielded, as Jeff Greene recalls, "a wild ride on a bucking bronco—there was always a '*crise du jour*!'" But remarkably, this new old theater was glowing and ready for its December 12th ribbon-cutting. "This project was in many ways like producing a musical," observes Drabinsky. "You never know if an artistic collaboration really works until everything comes together in the end." And like a good show, the Ford Center allows the spectators to suspend disbelief—imagining themselves in a 1920s theater—but only if they so choose.

**FORD CENTER FOR THE PERFORMING ARTS
NEW YORK CITY**

CLIENT: Livent **ARCHITECT:** Beyer Blinder Belle Architects & Planners, New York City—Richard Blinder (partner-in-charge), Don Lasker (project manager), Mariko Takahashi (project designer), Norma Barbacci (historic preservation), Tony Szekalski (job captain), David Virgil (field administrator)

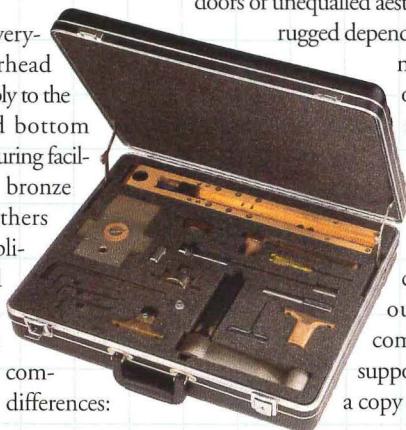
CONSULTING ARCHITECT: Kofman Engineering **ENGINEERS:** Yolles Partnership; Robert Silman Associates (structural); Smith and Anderson; Atkinson Koven Feinberg (mechanical); Mulvey & Banani International (electrical) **CONSULTANTS:** John Swallow Associates (acoustics); Roger Morgan Studio (interiors); Quentin Thomas Associates; Jules Fisher/Joshua Dachs Associates (lighting); Higgins & Quasebarth; Jay Cardinal (preservation); Kramer Design Associates (graphics); William Dailey (building and zoning); Evergreene Painting Studios (decorative painting); Iconoplast Designs (plaster); Gregory Muller Associates (mosaics) **GENERAL CONTRACTOR:** Structure Tone **COST:** \$25 million **PHOTOGRAPHER:** Frederick Charles, except as noted

Ellison's Balanced Door. Greater Than The Sum Of Its Parts.



You can open it with one finger in a heavy wind. It meets ADA requirements without additional hardware, and will operate dependably decade after decade. The construction and finish are meticulous, and the door comes with a no-hassle "bumper to bumper" ten year warranty. It is the unique Ellison Balanced Door, a system of components engineered to produce flawless operation and headache free maintenance.

Ellison makes everything—from the overhead check and guide assembly to the cast bronze top and bottom arms—in one manufacturing facility which includes a bronze casting foundry. Others have attempted to duplicate our hardware, and mimic our old-world craftsmanship. None have succeeded. Fast comparisons show major differences:



.09" thick stainless steel or bronze sheets are welded directly to an interior-tied subframe to form an impressive 2" thick door; our one piece arms are cast from molten bronze and then machined in our own shop; our exclusive concealed overhead check component provides easy routine maintenance.

While the others experiment with a part bought here, a part made there, Ellison continues to design and build doors of unequalled aesthetic appeal and rugged dependability. If you've never had the opportunity to see or feel the parts that make the whole, let us bring our case to you. Or, call and request our package of complete technical support literature and a copy of our video.

Circle 136 on information card

ellison

Ellison Bronze, A Division of Dowcraft Corporation
125 West Main Street / Falconer, New York 14733
716-665-6522 / Fax: 716-665-5552
www.ellison-bronze.com

Computers Longer Life for Drawings

New technology is turning design drawings into active frameworks for facility-management data.

By Patrick Mays

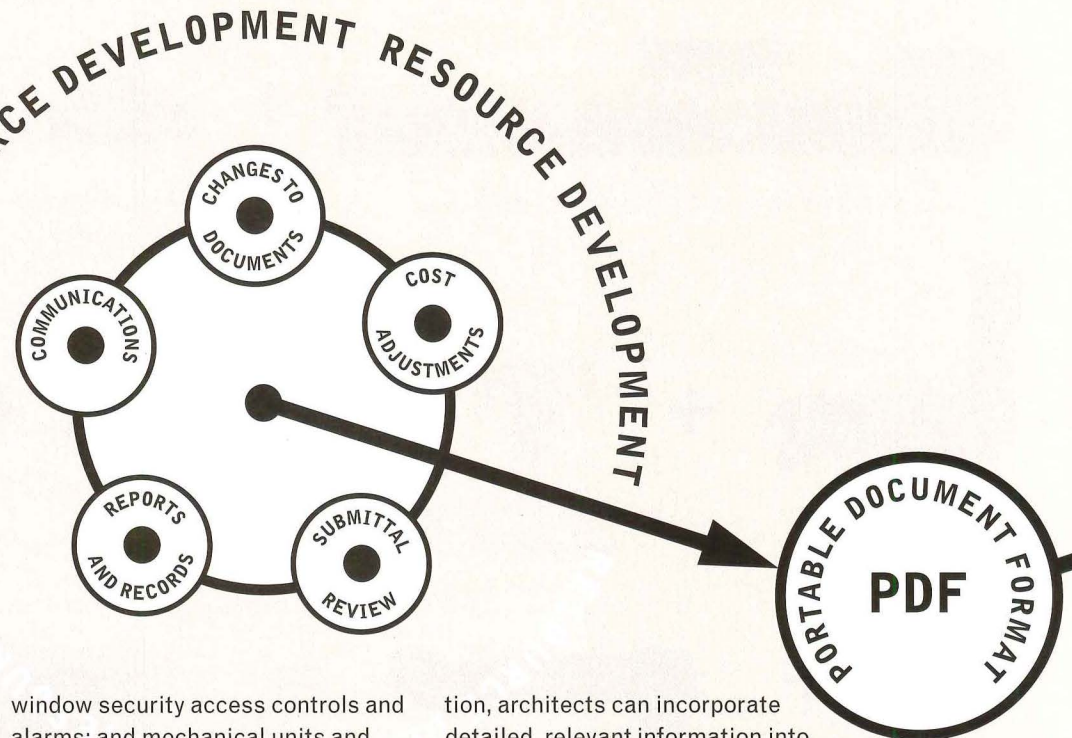
An architect's drawings are no longer just passive texts to guide contractors. They are now becoming active repositories of design intelligence, holding live information about a building's vital attributes for use by owners, facility managers, and users throughout the structure's life.

With CAD programs becoming more sophisticated and object technology—the ability to isolate drawing elements and attach information to them—within them more common, specialized computer-aided facilities management (CAFM) software is becoming unnecessary. Architects now have the means of providing owners of new buildings more intelligent design drawings and information packages that will aid in all aspects of facility management.

However, most architects still focus on producing drawings intended only for contractors. At the end of construction, drawings, submittals, and other information is turned over as-is to owners. And though drawings are usually supplied as CAD files, they generally lack the intelligence needed by building managers.

Greater detail

At a minimum, most building owners expect drawings to include bounded areas—with associated square footage—indicating utilization of space by department. They would also like an inventory of quantities of items and their attributes: Useful drawings indicate furniture placement and quantities; door and



window security access controls and alarms; and mechanical units and their maintenance requirements.

One corporate client, Melissa Michalik of Warren, New Jersey-based Chubb Insurance, explains that the need for such information is becoming the norm. "We want a partnership with our architects, but they won't even be considered if they aren't technically compatible with our standards of information technology," she explains. These standards will include a central repository of information where facility information can be easily searched, accessed, and reused.

Corporations are exploring these alternatives to CAFM because they are a cost-effective and efficient process for keeping information redundancy to a minimum. The long-term value an owner gains is a portable, well-organized record of all decisions from the design and construction phases.

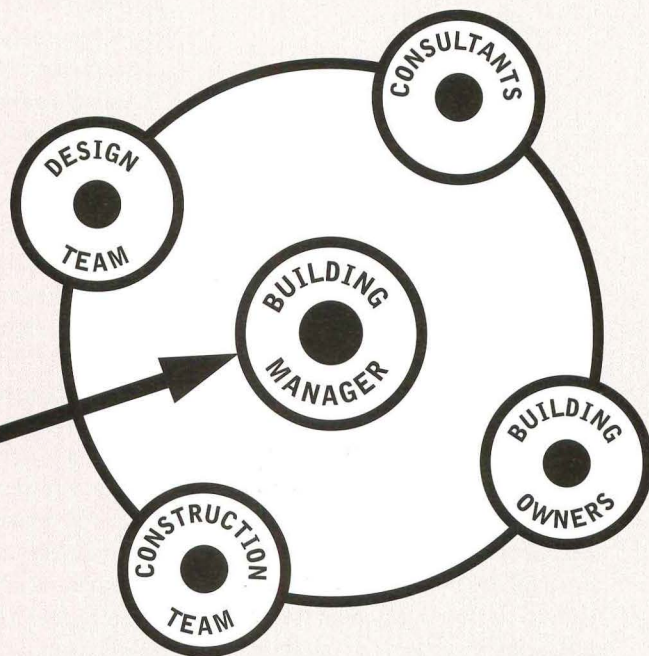
Fortunately, current computer applications make relatively quick work of these challenges. With a little planning during design and construc-

tion, architects can incorporate detailed, relevant information into drawings, extending their life spans and usefulness well beyond their traditional scope.

Laying electronic groundwork

Most major CAD programs allow data to be attached to drawing elements within each file. In AutoCAD, this is done by adding attributes to blocks, the isolated graphic elements within a drawing. Generally, any item that might appear in a schedule is created as a block, and descriptive data is then attached in an associated table. This approach is helpful in the production of construction documents because information can be updated automatically by keeping track of quantities shown in the drawings. More importantly, drawings created this way allow facilities managers to link drawing information to databases for long-term monitoring.

Unfortunately, the parties responsible for managing design and construction rarely coordinate with those who will maintain the facilities.



Project-specific extranets (below) create on-line workspaces for conducting meetings, reviewing submittals, and red-lining drawings. This collaborative work style creates a complete cross-referenced record of decision-making process for client use.

The pressures of deadlines and budgets usually take precedence over organizing information usefully. One way to avoid this trap is to create a Web site where all design and construction decisions are organized as they occur. By creating an extranet or a secure server accessible through the World Wide Web, the design and construction team can communicate more efficiently and maintain an electronic paper trail for later use by the owner and facility manager.

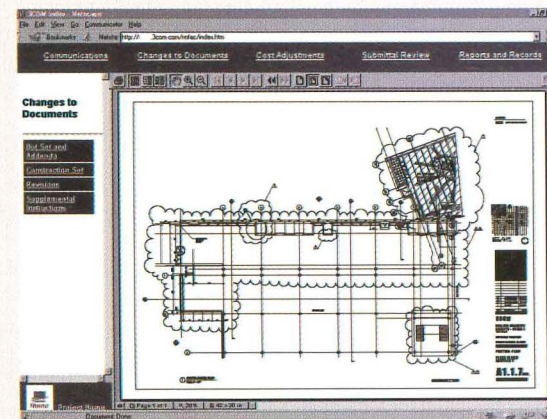
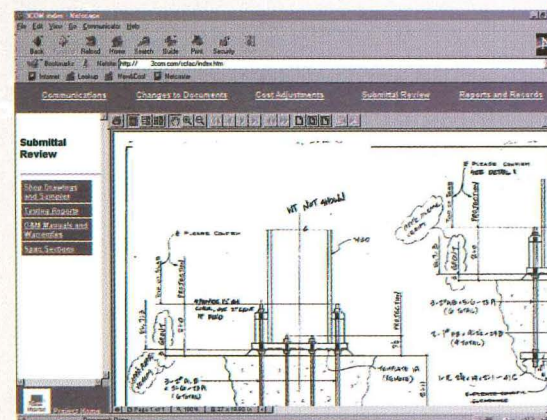
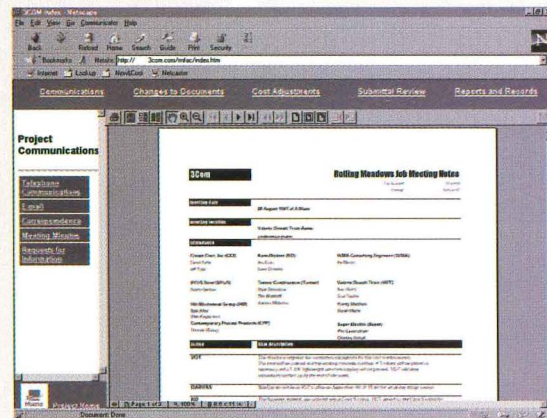
For its new corporate campus outside Chicago, 3Com Corporation worked with Valerio Dewalt Train Architects, Turner Construction, and Doherty Information Services to create a construction extranet (a project with which I am currently involved). 3Com Vice President Abe Darwish, challenged his project team to create an integrated approach for design and construction management that considered the needs of facilities managers. The goals were to eliminate redundancy, increase accuracy, and provide accountability for project reporting. Principal-in-Charge Joe Valerio contends that the better he

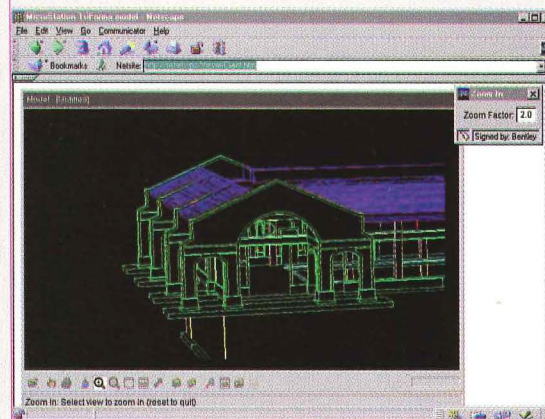
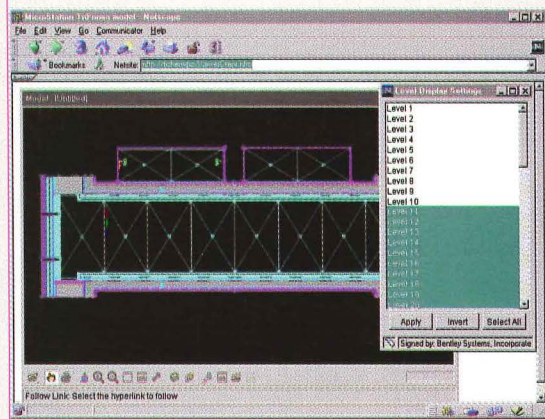
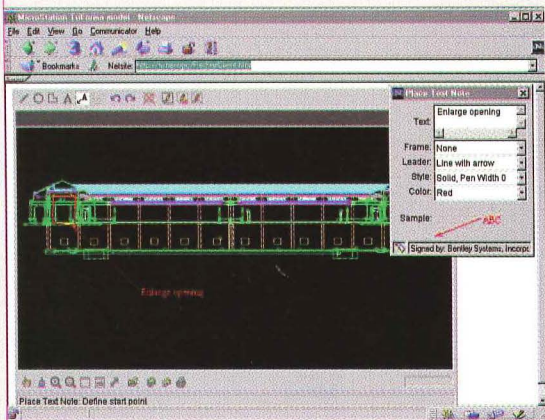
can serve his clients, the longer he will be in business with them.

Easing this process is the fact that drawings can be converted into portable document formats (PDF) using Adobe Acrobat. Acrobat Reader allows you to view and print documents without possessing the software with which they were created. The Reader software is also available as a Web browser plug-in, so you don't need to exit the Web in order to view and print files.

Incorporating other media types is becoming just as easy. By scanning paper files to the Acrobat portable document format, the team has the Web equivalent of microfilm. Field sketches and product literature can be scanned using inexpensive flatbed scanners, and a service bureau can scan larger drawings.

3Com worked with a service bureau to arrange weekly pickups of all material samples and paper documents, and the service bureau made sure that the information was properly scanned and posted to the extranet. At the end of the project, both paper and electronic files will





By extracting two-dimensional construction documents (top and center) from conceptual 3-D model (above), facility managers can conduct such studies as heat-load calculations and life-cycle analysis with greater ease.

be written to a CD-ROM for long-term storage and retrieval by both the architects and the owner.

With the information on a CD, links can be created between unrelated media types that might be important in understanding the decision-making process later. For example, a photograph of a field condition can be linked to a sketch that resolves a problem and both of these pieces of information can be linked to a meeting-minute item that discusses the issue. For facilities managers trying to understand the logic of a decision years later, this kind of information is critical.

Advantages of 3-D models

As the collaborative process matures, the next step is for project teams to refer to single three-dimensional building models. Bentley System's MicroStation TriForma allows this by storing all project information in a single three-dimensional model and automatically extracting two-dimensional plans, material bills, and other documents. As such models become more sophisticated, they can be repositories of all the information created during a building's design, engineering, construction, and operational phases. The model becomes an easily searchable electronic simulation of the physical building that grows more valuable over time.

It is important that architectural projects be conducted in an environment that not only promotes collaboration, but also assures effective management of engineering information from start to finish. Once again, Web formats are key. The organization should allow documents to be

grouped in sets, associated with specific files, and organized by project. It should allow a single file to be associated with multiple projects, and it should oversee the life cycle of the documents—controlling the creation, editing, review, release, and archiving of designs, as well as tracking multiple versions of each document.

Using a standard browser and the Internet/intranet/extranet, a reviewer can red-line a design with simple tools, including commands for lines, arcs, circles, and text. Because Bentley uses Java scripts, these tools are presented in the browser and do not require plug-ins. The changes can then be sent back to the originating designer and attached as reference files to the original data. Thus, the reviewer never changes the original information. In addition to red-lining capabilities, these Java applets (Web-based applications) can measure areas and distances. ModelServer has a module for controlling access to the information and supports several data formats, including .DGN and .DWG.

As building managers get timely access to three-dimensional geometry for building projects, they will be able to perform energy calculations and volumetric studies that have been inefficient up until now. With data attached to these three-dimensional building elements, cost estimating, maintenance plans, and monitoring for safety and security will be far easier to manage.

Indeed, clients want architects to consider entire life-cycle demands when assembling this information. "Architects we hire must not only be sensitive to our design needs, but be fully aware of the tight time and budget constraints that we operate under," explains Debi Yovanovich, director of corporate services for Prudential Insurance and president of the New York Chapter of the International Facilities Management Association. "We want to cultivate and continue relationships with architects, but only if they can deliver accurate and timely information."

Patrick Mays is director of technology for HOK in San Francisco.

architecture access advantage #2

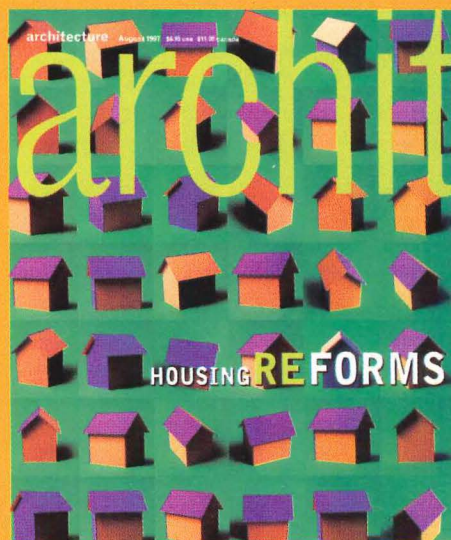


Overnight, overweight and underpriced...another great deal for Access Advantage members.

Other carriers, even the post office, charge extra when you send an overnight letter pack weighing more than the standard 8 oz. limit. Now Access Advantage members can stuff their Airborne Express packs with no overweight charge.

Here's how it works...Access Advantage members can buy "Airfare Paid" Letter Express® packs and get Airborne Express next business morning service to most zip codes in the contiguous 48 states. With no extra charge for extra ounces!

Access Advantage members enjoy quantity pricing as low as \$7.27 per pack. Plus, free pickups are



available from many locations, instant package tracking, and 24-hour toll-free customer service support.

YES! Send me _____ "Airfare Paid" Letter Express® packs (minimum order 10 packs). I understand that I can stuff as much as I can into each pack with no excess weight charge.

Quantity	Cost Per Pack	Total*
10	\$9.00	\$ 90.00
20	8.45	169.00
30	8.18	245.50
50	7.95	397.50
100	7.60	760.00
500	7.27	3,635.00

*Includes \$10 Shipping & Handling.

Name _____

Company _____

Address _____

Phone () _____

Fax () _____

Method of Payment: (circle one)

Check (Payable to: Garvin Group Ltd.)

Visa Mastercard American Express

Amount \$ _____

Credit Card Number _____

Name on Credit Card _____

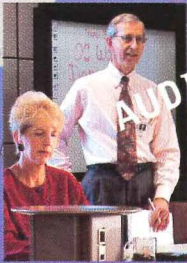
Expiration Date _____

Authorized Signature _____

Mail To: The Garvin Group, Ltd.
140 Broadway, 22nd floor
New York, NY 10005
call toll free: 1.800.953.9332

Lights, Cameras, Teleconferencing

Architects designing video-teleconferencing rooms focus on proper lighting and acoustics.



By Michael Maynard

Employees at Owens-Corning in Toledo, Ohio, have a regular opportunity to interact with vice presidents in a session titled "Lunch with the Leader." Never mind that a particular leader may be based in Europe or the Pacific Rim—video teleconferencing has made it possible for multinational companies like Owens-Corning to link its far-flung employees with the home office.

Once a high-tech novelty, video teleconferencing is now utilized as a serious tool for business as more executives discover that a video teleconference can save both time and money. And with the ability to share computer files on a wide-area network, ideas can be presented and reworked as in face-to-face meetings. For Owens-Corning, video teleconferencing reduces travel costs and time, but the real advantage is the immediacy of involvement among participants, asserts Nancy Puccetti, the corporation's manager of conference services.

Video teleconferencing is real-time, two-way video and audio interaction among individuals or groups in separate locations. For broadcast-quality transmission, the video signals travel through medium-bandwidth telco lines, such as T1 or ISDN lines, and along high-speed digital phone lines, each of which equals the capacity of six telephone lines. The high quality of video teleconferencing allows such companies as Johnson & Johnson to broadcast surgical operations to teaching hospitals around the world to promote new medical techniques, says Bill Othick, president and CEO of AAC Incorporated, a teleconferencing consulting firm in Dayton, Ohio. The hourly cost of a video teleconference is about \$28, according to Othick.

With the growing popularity of video teleconferencing, corporations are beginning to see the need for rooms specifically designed for that purpose. After all, when you set up a video teleconference with a client, you want to make sure that you and

your surroundings look their best. "Video-teleconferencing rooms are on the cutting edge" of workplace technologies, asserts Victoria Cerami, the president of New York-based Cerami & Associates, an acoustical consulting firm.

Designing for the camera

Architects are learning the importance of working with acoustical consultants and audiovisual engineers to ensure the room is designed to the appropriate standards. "A lot of it is a juggling act among the audiovisual consultants, the lighting consultants, and the architect," says Cerami.

Lighting consultants, she says, are important because they are responsible for the way people look on camera, "but they may be taking more ceiling space than we would like."

While any room can be used for video teleconferencing, Dennis C. Janson, managing partner of Janson Design Group in New York City, notes that merely installing a video camera into an ordinary room may not make for a particularly attractive setting. All elements within the room, including the size and shape of the room itself, must be analyzed for acoustical and visual quality. "Video teleconferencing is not television," notes Janson. "But there are similarities. There's more to it than simply throwing a camera into the room."

Janson, who has designed numerous television studios including NBC's "Today" show set, knows what looks good in front of the camera, but he often works with John Storyk, a coprincipal of New York-based Walters/Storyk Design Group, who specializes in acoustical and audiovisual projects.

Room-shaping

When Airtouch Communications, a three-year-old company in the wireless-communications business, planned its headquarters on the top floors of a San Francisco office building, a video-teleconferencing room was considered essential for meetings with its 22 nationwide offices and clients scattered around the world. So San Francisco-based Studios Architecture and Michael

Millnamow, Airtouch's audiovisual and video-conference manager, designed a 25-foot-by-25-foot crescent-shaped room that would meet the needs of the video cameras and television monitors. "We knew we had to have a room of a certain size and an adjacent equipment room that was pretty elaborate," comments Darryl Roberson, a principal of Studios. The curved rear wall of the room is shaped like a cyclorama to allow an even wash of light over the wall and to prevent the lights from leaving shadow lines in corners.

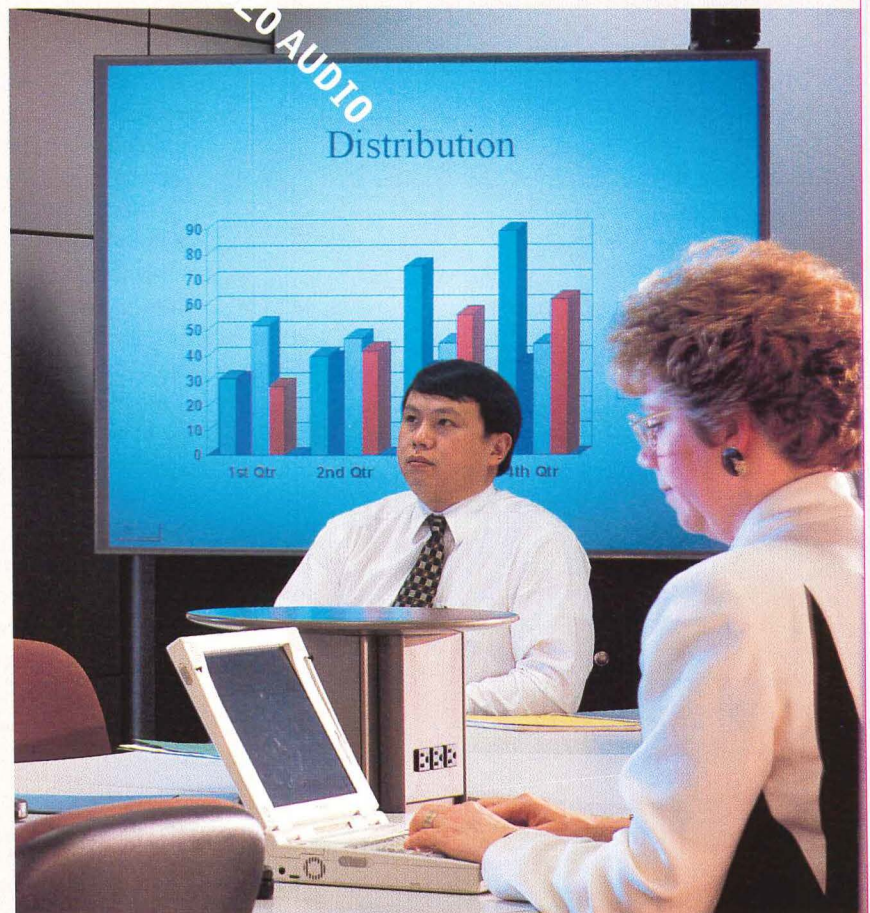
Owens-Corning established two dedicated video-teleconferencing rooms in its new three-story corporate campus. The 400,000-square-foot building, designed by Cesar Pelli & Associates at the confluence of the Maumee River and Swan Creek in Toledo, marks a cultural change for the multinational corporation, one which places new emphasis on high technology in its operations.

Video teleconferencing is available in nine rooms located in Owens-Corning's conference area, known

as The Commons. These rooms, including the boardroom, are equipped with video cameras and television monitors for video teleconferencing and distance learning. Several mobile video-teleconferencing units can be utilized in "teaming rooms" scattered throughout the building. In the two dedicated video-teleconferencing rooms, the architect worked closely with acoustical and audiovisual consultants. "We don't profess to be acoustical engineers," says Senior Associate Mark Shoemaker of Cesar Pelli & Associates, who incorporated the engineers' recommendations into the design.

Designing video-teleconferencing rooms in new or remodeled buildings allows architects to specify freely. Designing an interactive room in a skyscraper, however, can be fraught with complications. Janson and Storyk faced such a scenario when Janson was asked to design a New York City boardroom for Cemex, a cement manufacturer, that would be used as a video-teleconferencing link with the company's headquarters in

Video-teleconferencing technology enables Owens-Corning staff to transmit sophisticated graphics and video during meetings. Far-flung employees share computer files via extranet.





Lighting up a room

When a room is designed for how a person appears on camera, a “visual comfort” rating must be developed. Walls must be swathed in lighter colors and a matte or semi-matte finish to make people appear more three-dimensional. Storyk notes that lighting the perimeter of the room adds “a certain depth and reality” when the light is projected via video teleconference.

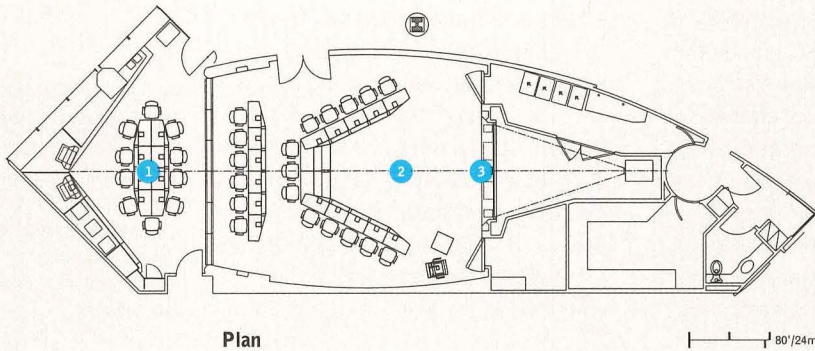
Because the lighting in most video-teleconferencing rooms is inadequate for a camera, participants often appear to have a greenish pall. Architects can solve this problem by equipping the room with lights that are rated between 3200 and 3600 Kelvin, a higher-intensity light that adds warmth to the room. For the Cemex project, Janson specified lights at 3500 Kelvin to give participants healthy skin tones and a three-dimensional depth for the camera. The lights in the Airtouch video-teleconferencing room are spaced regularly, then canted at 45-degree angles to bounce light off the table top and to light the faces of those in the room evenly.

The architects for Airtouch specified beechwood furniture based on how it would appear on camera. The lighter-colored wood acts as a reflector, observes Airtouch's Millnamow, bouncing light underneath the eyes and chins of the participants. Similarly, architect Janson utilized lighter-colored, acoustically treated fabric wall panels in the Cemex boardroom to utilize reflected light to his advantage, he notes.

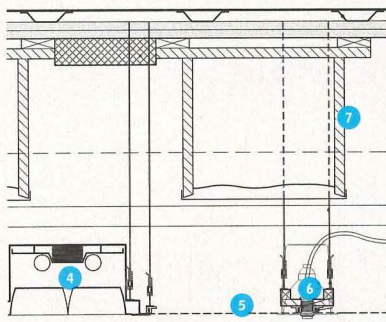
Light-blocking devices, such as blinds in the Owens-Corning room that are automatically lowered when the video camera is switched on, or a series of sliding window panels for Airtouch, proved effective. Such natural light may alter the color balance of the camera. When the room is not in use for a video teleconference, the panels open to provide panoramic views of San Francisco Bay.

Creating quality sound

A telegenic room solves only half the problem. How voices carry in the room and how they are transmitted to



- 1 war room
- 2 video-teleconferencing room
- 3 audiovisual equipment
- 4 fluorescent lighting fixture
- 5 stretched fabric
- 6 ceiling microphones
- 7 membrane absorber units



Ceiling section detail

Cemex Corporation's video teleconferences take place in tube-shaped room with tables in horseshoe configuration (top). Room can be divided into video-teleconferencing room and smaller meeting space, called “war room.”

Monterrey, Mexico. “The challenge was [to produce] high-end acoustics and audio in a room that didn't really want to have it,” explains Storyk.

The existing boardroom—on one of the top floors of the IBM Building in Manhattan—was shaped like a television tube, observes Storyk: long and narrow. “As with many projects,” he says, “room-shaping is not always generated with the best acoustics in mind.” Designing a state-of-the-art room required special lighting and audio equipment to make the larger room appealing for a video conference.

Most video-teleconferencing rooms also require storage for sophisticated audiovisual components. “The actual casework to hold the equipment becomes a design task as well,” says Cesar Pelli & Associates' Shoemaker. “In the case of a typical video-teleconferencing room, the equipment is built into the walls themselves.”

their various destinations is equally important. "It might look good on camera," explains Janson, "but you don't want it to sound like you're talking from the Midtown Tunnel." The goal of such a room, notes Cerami, is acoustical balance. "What video-teleconferencing is trying to do is have the same conversation that you would have with someone across the table," she says.

In existing office buildings, the biggest challenge often involves isolating the room acoustically. Because most buildings were not designed to anticipate the extensive cabling necessary to power today's technology, there is little room in the ceilings and walls for such items, let alone space to add sound-absorption materials. New materials, such as stretched-fabric wall systems, provide increased sound absorption.

While the shape of Cemex's boardroom was challenging, the lack of space above the ceiling presented a less obvious problem. The building was not designed for the needs of an advanced audiovisual age; there was less than 1 foot of space above the ceiling to house the audio and video wiring and sound-absorption panels. Adding to the space problem was the presence of oversized air ducts, installed to mask the noise of the HVAC system, that filled most of the ceiling cavity. But these larger ducts are important: They allow more air to be pumped into a closed room at a slower rate, minimizing air-flow noise, according to Janson.

Street noise, even on the 17th floor, was a problem for Studios' Roberson in the design for Airtouch. Working with San Francisco-based acoustical consultant Charles Salter, standard window treatments were replaced with double-glazed windows to block out sound. To further eliminate ambient noise, the architect designed an anteroom that serves as an acoustical barrier, isolating the video-teleconferencing room from the reception area and hallways. Equipped with a fax machine, telephone, and small table, the anteroom allows meeting participants to attend quickly to other business during breaks from the

video teleconference.

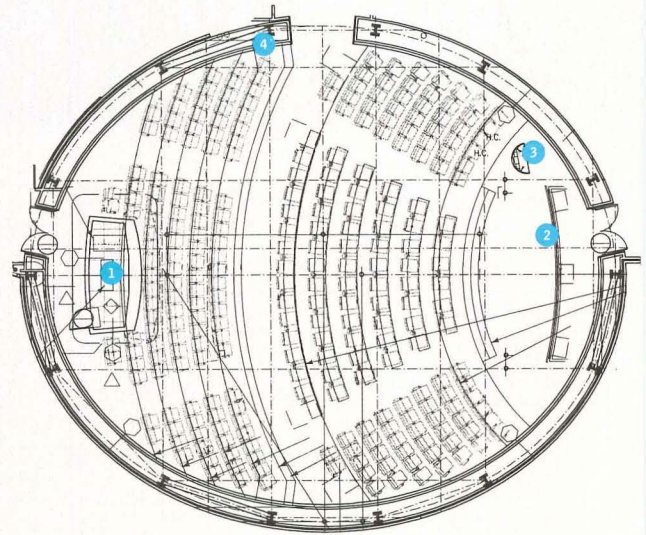
Architects for Owens-Corning attached the walls of the video-teleconferencing rooms to the ceiling slabs to ensure that the rooms would be insulated from adjacent noise sources. Cerami, the acoustical consultant, worked with mechanical engineers to fashion systems that would insulate ductwork above the rooms to keep out ambient noise.

Soundproof finishes

Acoustical ceiling and wall tiles and acoustical fabric absorb fugitive sound for video-teleconferencing rooms. The walls of the Airtouch room, for example, are comprised of 1½-inch-thick, blue fabric acoustical wall panels. Upholstered chairs and carpeting also absorb sound. "There is as much absorptive material as there could be" to prevent voices from bouncing around the room, says Shoemaker of the Owens-Corning rooms. Wooden walls would be problematic for the Cemex video-teleconferencing room or most other rooms where acoustics play a major role, Janson says. Millnamow visited many video-teleconferencing rooms

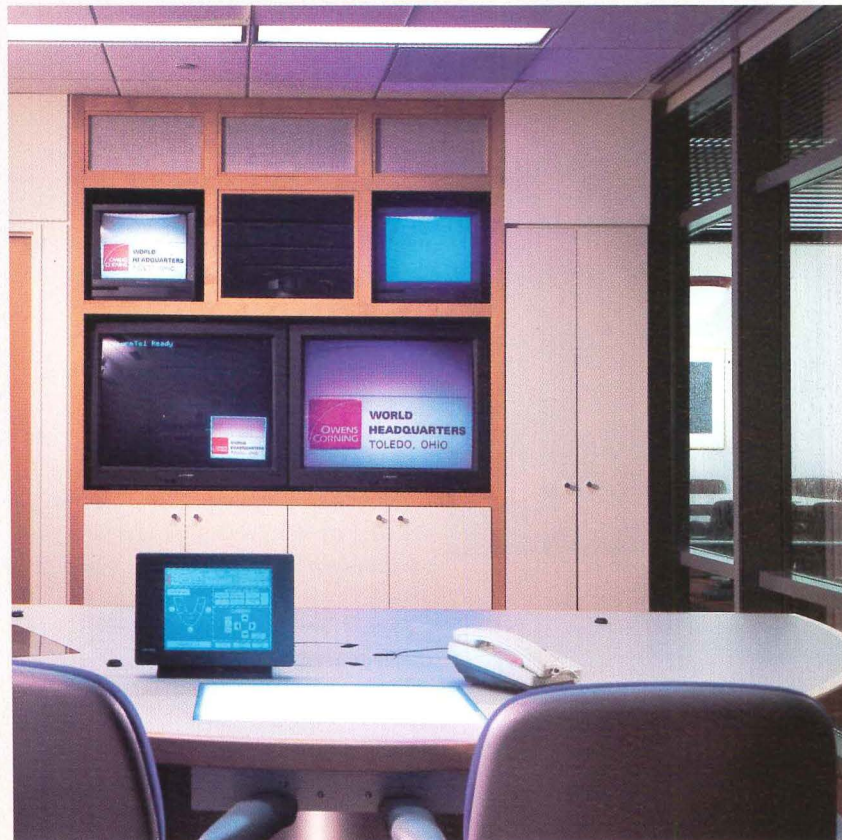


- 1 projection booth
- 2 video screen
- 3 podium with touch screen
- 4 acoustical wall tiles



Plan

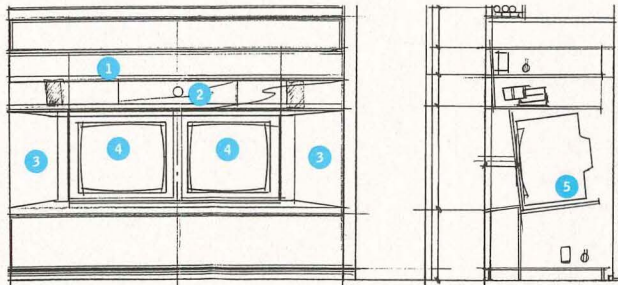
80'/24m



Acoustical ceiling and wall tiles enable Owens-Corning auditorium (top) to be used for video teleconferencing. Large monitor (left) shows conference participants; smaller monitors display accompanying graphics. All functions are controlled by touch screen (foreground).



- 1 time-zone display
- 2 video camera
- 3 speaker
- 4 36" video monitor
- 5 monitor tilt (to prevent glare)



Video-wall elevation

Wall section

Cyclorama-shaped video-conferencing room (top) at Airtouch Communications allows even light distribution, while table's shape equalizes participants' distance from video camera. Perimeter lighting (right) prevents glare on monitors; wooden disk at ceiling's center (below right) assists in sound transmission, eliminating need for microphones.



as Airtouch prepared to design its own room and observed that rooms in which all bounce was virtually eliminated had "an artificial, claustrophobic feeling."

High-tech products

Most advanced video-conferencing rooms contain "touch" screens, allowing the meeting leader to control all of the functions of the room through a laptop computer, from adjusting the lights and bringing down the window shades to ending the video call. The systems give the meeting leader explicit prompts to allow them to easily control the electronic equipment. One Cemex vice president was able to give Storyk a lesson in the audiovisual system after using it only once, Storyk recalls. The technology, marvels Storyk, is "truly intuitive."

The cameras are, of course, essential to the video-conferencing process. Some rooms rely on one or two cameras to capture the participants. Airtouch, however, employs

five devices. In addition to the primary camera above the television monitors, a second wall-mounted camera in the back of the room can record a person in the front of the room. A third camera looks out over the San Francisco Bay, giving viewers a sense of place, while a fourth camera mounted in the ceiling broadcasts documents placed on the table. A fifth camera can shoot and transmit more complex graphics.

Interactive "softboards," such as those utilized by Owens-Corning, allow a participant to write on the board and then save that information in a computer file that can be sent to other meeting participants. Other technology utilized by Owens-Corning in its larger video-conferencing rooms, including their 270-seat auditorium, includes a camera that automatically follows a speaker who is wearing a special microphone. Janson and Storyk equipped the Cemex video-conferencing room with audio speakers that provide surround-sound when necessary and a digital multi-image processor in which computer images can be presented on a split screen with video.

With advances in technology, consultants say that video conferencing will become an even more effective tool for business. Such rooms are already being utilized to a greater extent than conference managers originally believed.

At Owens-Corning, managers are looking at new ways to bring the technology to more employees. A pilot program begun last year puts employees together with professors who teach, via teleconference, from their campus. Video teleconferencing is only a start, says Jim Eckert, Owens-Corning's director of corporate real estate and facility administration. "Are we using it at the level that we're capable of using it?" he asks. "Absolutely not."

New Year's ReSolution



The First Source Solution:

- ✓ 9,400 Building Product Manufacturers
- ✓ 11,500 Trade Names
- ✓ 25,000 Products

Architects' First Source is written for Professionals by Professionals and is made possible by today's Leading Building Product Manufacturers.



Available in print and on the Internet.

For more information about Architects' First Source, call (800) 395-1988.

Architects' First Source for Products • 3577 Parkway Lane • Suite 110 • Norcross, Georgia 30092 • www.afsonl.com

a CMD Company

Circle 140 on information card

Practice **From Vulnerable to Valuable**

Architects need to reposition themselves in the client's eye if they ever hope to regain control of the building process.

By Barry B. LePatner

For much of the 25 years I have represented the legal and business interests of architects, I have been cautiously optimistic that architects could recapture their former role as the masters of the building process and return as the key player in the design and construction world.

Regretfully, I am no longer so optimistic. [An overview of the efforts architects have made since the early-1990s recession offers little sign that they have learned about either improving their outdated methods of service delivery or developing a competitive acumen attuned to today's business environment.](#)

Architects, first of all, need to recognize that our economy is increasingly based on investment in technology and the flow of information. New technology makes it possible to deliver design services in a more efficient and cost-effective fashion. Today's new business environment also calls for flexibility on the part of service providers. This means that architects need to create teams that can deploy quickly and nimbly to serve clients on projects of any size and in any location.

Indeed, architects need to think about everything they do for clients differently in today's information economy. They need to listen to clients to learn their business goals, and study the issues confronting them in their operations.

Most importantly, architects should be introducing new fee structures that reflect the higher value of architectural services needed by clients exploring new approaches to project development. Certainly, clients want more intelligence from their consultants in today's economy, but that added value should inhere a higher fee. Currently, many of the most forward-thinking, service-oriented practitioners are giving away their valuable services for free.

As architects lost influence in the 1980s and early 1990s, it should have become apparent to the profession that there was a need to recognize these lessons and implement solutions. Instead, opportunities that architects should have seized slipped away, as allied professionals usurped architects' territory, and as architects failed to pursue new methods and markets for themselves.

Preaching good design

Today, however, architects have an ideal opportunity to turn around this worrisome trend. [Some of the business world's top thinkers and consultants are preaching the gospel of good design, telling architects' business clients about the need to incorporate top-flight design into their company offices, images, and products.](#) For instance, Tom Peters, the 1980s management guru, states in his recent book titled *The Circle of*

Innovation (Knopf): "Design isn't just hiring a great designer. Design surely isn't merely 'prettifying.' ... [W]hen design makes a difference, it is...a way of life."

Thus, experts who have the ear of executives are doing architects' pre-marketing for them. Sadly, few firms have recognized that the endorsement of people like Peters offers a momentous chance to increase their market share as a result of this widely recognized imperative.

Even fewer firm principals have realized how critical it is to either modify the way they have been providing services, or risk becoming an even more irrelevant part of their clients' future building plans. The indifference of architects to key business trends is strikingly illustrated by industry surveys showing that profitability and optimism are not much better for firm principals than they were during the early-1990s recession. Indeed, the majority of profits in the building and transportation construction markets since 1990 have gone to contractors and engineers, while

Architects have retreated from their traditional construction responsibilities, a trend that corresponds directly with the rise of the construction manager. Architects served as silent accomplices in the wholesale give-away of the “master builder” role they held until the early 1970s, ceding services and fees to others in the building industry.

the “do-it-yourself” market is taking away millions of dollars in potential design fees.

Despite an excellent economy, architects remain mired in a recessionary mindset. Rather than becoming competitive businesspeople, they'd simply rather deny that they have competition. This trend is sadly evident in recent attempts by the American Institute of Architects to prohibit engineers and interior designers from securing work traditionally performed by architects. At the state and local levels, the AIA is attempting to influence the language of licensing statutes by distinguishing architecture from other design professions. Such designations, however, only further alienate the architect from a potential client who, in asking for services provided by an interior designer, will purposely seek out an interior design firm.

In the past, such territoriality has proven to be both self-defeating and embarrassing. The architectural profession must become less defensive and more offensive by studying successful business and market models if architects are to survive increasing competition both from forces within and outside the profession.

Much of the problem is that architects have retreated from their traditional construction responsibilities over the past 20 years. Not coincidentally, this decline in services corresponded directly with the rise of the construction manager. Architects served as silent accomplices, with the implied consent of the AIA, in the wholesale giveaway of the historically important “master builder” role they had filled until the early 1970s.

Architects lost critical elements of their services to others because they weren't comfortable playing the larger role of building advisor to their clients. Through passivity and inaction, architects ceded services and fees to others in the building industry.

How long will it be before architects realize they have hit bottom in the marketplace by continuing to offer up the same ill-suited brand of services they have provided for the past 100 years?

In the interest of improving the architect's marketing acumen today, I have several recommendations. First, we must define the new business environment that design professionals are confronting. Broadly speaking, it is characterized by the following five qualities:

Increasing client sophistication. Clients are more savvy about their programmatic needs.

Pressure for returns. Clients, particularly corporate real estate managers, increasingly need to show a direct return on what they spend for property management and professional services. Before selecting an

architect, they must assess the value their expertise adds to the process.

Technological mastery. Clients have little patience for professionals who can't work with their chosen technologies, particularly their communication methods. Technological dinosaurs need not apply.

Global perspective. Clients want worldly, widely experienced consultants. A global perspective, if not global presence, is mandatory. Even if one's clients and practice are local in nature, product selection and technological demands for new construction command a global comprehension of building products and construction methodologies.

Talented teams. Talent exclusively at the top no longer carries the day. Successful firms develop and retain competent professionals at all levels. Clients will not wait to have all issues discussed and addressed solely by the principal of the firm when dozens of critical issues can be handled by smart, experienced professionals working under them.

If architects can take any lesson from the past decade of boom and bust, it should be that they can no longer passively accept the premise that they will make so-so profits during the good times and suffer miserably when times are bad.

Practitioners must break away from this pattern by adapting their firms to reflect the enlightened business

Architects remain mired in a recessionary mindset. Rather than becoming competitive, practitioners would simply rather deny that they have competition by trying to keep allied professionals from securing work traditionally performed by architects. Such territoriality has proven to be self-defeating and embarrassing.

mindset of their client: To wit, by moving beyond merely serving as the client's project designer to becoming a direct participant in all elements of the client's building and human resource needs. The times demand that architects become full-time, trusted advisors to their clients, trading limited involvement for that of a comprehensive relationship embracing all the clients' design and construction needs.

The new client

Who are these new clients waiting for you to provide the services they need to meet their business goals? In the new global economy, a small sample looks like this: corporations seeking to recycle old warehouse facilities into new high-tech, back-office computer operations; small companies utilizing Internet communications looking to design and build open-area offices to meet constantly changing business needs; corporate facilities managers in downsized companies who want flexible facilities that can expand and contract as their companies' economic needs demand; pension fund and investment bankers trying to determine which shopping centers or hotels are economically feasible for their real estate portfolios; universities and other public institutions that need to add new research and laboratory facilities; banks who must balance new branch offices that meet the needs of 24-hour banking with their daily business customer services; and public libraries incorporating new computer tools to attract new users.

The above scenarios represent a fraction of the new services calling

out for design professionals to meet the opportunities offered by today's clientele. **Architects will only become a key part of the client's project process by acting like the quintessential corporate executive;** by asking the same kinds of questions that executives ask; and by studying the problems of their clients' world with the same perspective of those decision-makers. Only then will the design professional be able to convince the corporate client that they can make a difference as part of that process.

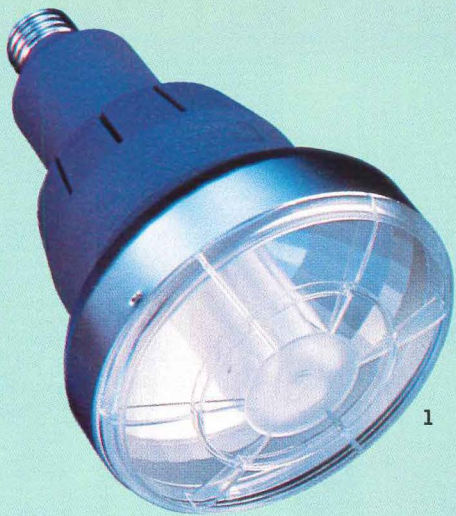
Committing to profitability

Most of all, the leaders of today's architectural firms must not shy away from the need to make profits to keep the entire operation moving along smoothly. He or she should not be

content to accept the historically paltry profit percentages that place the architect at the lowest professional rung of financial security. Arthur Gensler, principal of his eponymous firm, one of the nation's architectural success stories, summarizes his outlook on profits: "I've never thought profits were anything to be embarrassed about. I don't understand why architects who add enormous value to a project should make nothing while developers and corporations, who are the recipients of our work, gain great value from it."

Those are the facts. It will be up to today's generation of architects to make their profession a more interesting, productive, and profitable one than that which they inherited.

New York attorney Barry B. LePatner represents clients in the architecture profession. Roy R. Pachecano, his firm's design consultant, contributed to this article.



1

1 High-Wattage Fluorescent Bulb

An energy-saving fixture is the latest addition to Lumatech's Reflect-A-Star line of fluorescent outdoor floodlights. The design incorporates a ventilation system that cools the compact unit and supports the manufacturer's higher-wattage triple lamp, which generates the same amount of light as a 100-watt incandescent floodlight. The fixture is available in two sizes.
Circle 292 on information card.

2 Portable Spotlight

Megaray, the Cooke Corporation's latest portable spotlight, illuminates objects up to 3,000 feet away. The fixture comprises a 125-watt short-arc xenon lamp mounted behind a lens. Megaray has three beam settings: low, high, and strobe; the system includes a battery recharger.
Circle 293 on information card.



2

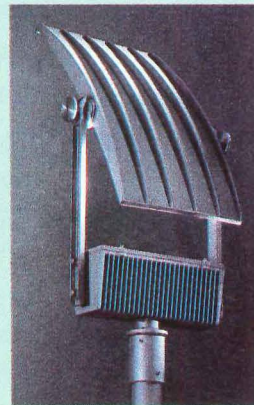
Security

Lighting

Spotlights and high-intensity fixtures illuminate entrances and pathways to boost safety.

3 Adjustable Reflector

Hessamerica's Campo pole- and wall-mounted outdoor lighting fixture pivots at 15-degree increments for precise positioning to illuminate entrances and pathways. The cast-aluminum fixture has a matte silver-gray metallic-paint finish. Two pole-mounted models are available in heights of 12 or 22 feet.
Circle 294 on information card.



3

4 Spider Mount

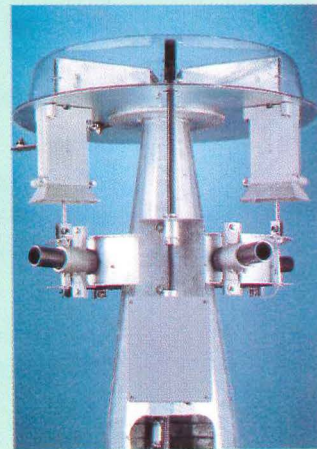
Stonco has introduced a steel spider mount for its SVL series of outdoor luminaires that fixes lights in an unobstructed position atop a steel mast for uniform illumination. Fixtures are compatible with 400-watt to 1,000-watt metal-halide or high-pressure sodium lamps.
Circle 295 on information card.



4

5 Mounting Ring

Quality Lighting's new Highmast outdoor lighting system features a galvanized steel mounting ring that can support up to 12 luminaires. The ring caps a steel mast with a maximum height of 150 feet, and can be hoisted into place with a pulley system of stainless steel hoisting cables. Each supporting arm can be removed without cutting or welding.
Circle 296 on information card.



5



BUILD USA

Sponsored by

architecture

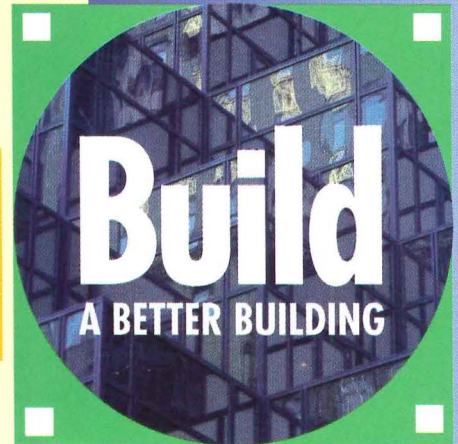
interiors

architectural specifier



CONSTRUCTION TECHNOLOGY 98

The Conference and Exhibit for New Building Products



7 REASONS TO ATTEND

1. Earn AIA/CES Learning units
2. See the latest and best new products
3. Watch live demonstrations during 19 hours of exhibit time
4. Meet our profession's movers and shakers
5. See a fantastic exhibit of building products and technology under one roof
6. Visit a great location: Chicago is easy to get to from all parts of the country
7. Benefit from over 180 educational programs

Code Conference

EXPANDED!

Metal Buildings Expo

NEW!

FacilitySYSTEMS

NEW!

National Specifiers Week

EXPANDED!

MEDIASPACE '98

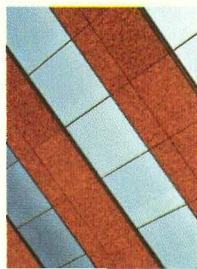
NEW!

June 2-5, 1998
McCormick Place
Chicago • Illinois

CALL TODAY FOR INFORMATION!

BUILD USA

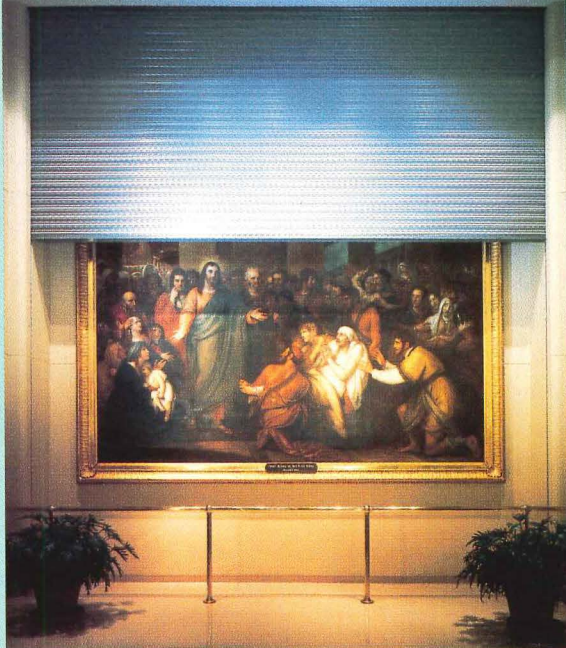
415 Eagleview Blvd.
Suite 106
Exton, PA 19341-1153
1-800-451-1196
1-610-458-7689
Fax 1-610-458-7171



Held in conjunction with
A/E/C SYSTEMS®

The IT Forum for Design and Construction

The world's largest computer and management show for the design & construction industry.



1

1 Rolling Door

Cornell Iron Works M100 rolling fire doors can be retracted with an accompanying digital remote-control panel. This computerized system eliminates the need for accessible coils and counterbalances required in traditional hand-cranked fire screens, allowing the door's working parts to be concealed in overhead soffits and above ceiling lines. Doors can be custom-sized up to 32 feet wide and 25 feet high, and are available in 32 finishes, including colors and metallics. *Circle 297 on information card.*

2 Detection System

Simplex has enhanced the early-warning capabilities of its True Alarm fire and smoke detection system with increased sensitivity that senses 0.2 percent smoke particles per square foot. The system minimizes false alarms by allowing users to program sensitivity according to the fire risk of various environments.

Circle 298 on information card.



2

Fire Protection

New devices offer improved detection and flame-resistance.



3

3 Exit Sign

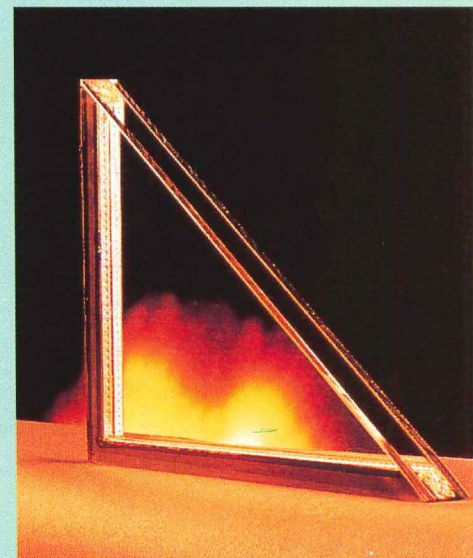
The newest exit sign from the Sure-Lite division of Cooper Lighting features variable mounting options to ease installation. Units can be top-, side-, or back-mounted, and include removable and replaceable arrows to indicate direction of egress. Available with red or green faces, the signs include long-life LED lamps and meet new 1998 UL standards.

Circle 299 on information card.

4 Fire-Rated Glass

Technical Glass Products recently introduced FireLite IGU, an insulated glazed unit for fire-rated applications. Each unit is composed of two panels of tempered or annealed glass coated with a flame-retardant film. The protective coating can be specified in grades that protect the glass from 20 minutes to three hours. Units can be specified in sizes up to 3 feet wide and 8 feet long.

Circle 300 on information card.



4

Product Information for March 1998 Advertisers

RS#			
52	Access Industries / p178	20	Invisible Structures / p176
—	AIA Convention / p99	32	Jacuzzi Whirlpool Bath / p177
—	AIA Virtual Exhibition / p61	40	Jomy Safety Ladder / p178
96	Alusuisse Composites, Inc. / p46-47	58	Kim Lighting / p5
1	Andersen Windows / p54-55	72	Landscape Forms / p28
12	APCO USA / p176	104	LCN Closers / p64
126	Arch. Area Lighting / p84	—	Lightfair Interntional 1998 / p96
140	Arch. First Source / p163	102	Marley Flexco / p62
54	Armstrong World Industries / C2, p1	—	Merchandise Mart / p168
132	Armstrong World Industries / p100-101	36	Metropolitan Ceramics / p177
144	ARRIS / C3	148	NAAMM / p34
—	Autodesk / p48	150	NAAMM / p34
—	Autodesk / p53	152	NAAMM / p34
—	Autodesk / p102	154	NAAMM / p34
110	Autodessys / p70	156	NAAMM / p34
112	BAGHTechnologies / p72	158	NAAMM / p34
130	Baldinger / p98	—	NEG America / p57-60
128	BEGA / p86	56	Nixalite of America / p4
142	Belden Brick Co. (East, Midwest reg.) / p167	48	Patterned Concrete / p177
—	Bentley Systems / p12-13	82	Pemko / p33
—	Brick Institute of America / p17-24	122	Philips / p80
18	Buckingham-VA Slate / p176	86	Revere Copper Products / p35
—	Build USA / p170	60	Roppe Corporation / p6-7
98	Carlisle Syn Tec Inc. / p50	100	Siedle Communication / p56
66	Carpet Rug Institute / p14-15	118	Siemon Company / p76
22	Certainteed Corp. / p176	48	Simpson Strong-Tie Co., Inc. / p178
114	CRSI / p73	120	Sloan Valve / p78-79
—	Design Intelligence / p179	28	So. Aluminum Finishing Co. / p177
138	Diehl Graphsoft / p138	124	SPI Lighting / p83
90	EFCO Corporation / p40	44	Springs Window Fashions / p178
136	Ellison Bronze, div. Dowcraft / p151	46	Sumiglas / p178
68	Endicott Clay Products Co. / p16	74	Tepromark International, Inc. / p29
116	Follansbee Steel / p74-75	24	Transwall Corporation / p177
92	Form Zero Arch. Books / Gallery / p41	134	Trimco / p144
80	Haller Systems / p32	70	Trus Joist MacMillan / p26-27
42	HAPCO / p178	38	Universal Laser Systems Inc. / p177
—	Hewlett-Packard / p66-67	146	USG Interiors / C4
16	Hoover Treated Wood / p176	108	Vistawall Arch. Products / p68
14	Hydrel / p176	76	Visteon / p30-31
26	Hydrel / p177	94	Von Duprin, Inc. / p42-43
50	IES / p178	62	Vulcraft / p8-9
34	Interface / p177	88	Weather Shield Mfg. Co. Inc. / p36-37
—	Int. Design Conference/Aspen / p181	64	Wiremold Company / p10

ADVERTISING SALES OFFICES

ADVERTISING SALES HEADQUARTERS

Stephen B. Donohue
Publisher
(212) 536-5041

Robert M. Hoover
Production Director
(212) 536-5234
1515 Broadway, 11th Floor
New York, NY 10036

WEST / TEXAS

Ty Kramer
Western Sales Manager
(619) 291-8198
fax (619) 291-6524
7801 Mission Center Court
Suite 206
San Diego, CA 92108

MIDWEST

Jack E. Bergren
Midwest Sales Manager
(312) 464-8505
936 The Merchandise Mart
Chicago, IL 60654

John W. Maisel
(630) 416-0780
Maisel Media Associates
1928 Pleasant Hill Lane
Lisle, IL 60532

Edward R. Novak
(847) 658-7133
ER&J Associates, Inc.
1637 Glengarry Court
Algonquin, IL 60102

NEW YORK / CONNECTICUT / SOUTHEAST

D. Douglas Johnson
(610) 935-8522
1625 Oak Hill Road
Chester Springs, PA 19425

Steph Popiel
(908) 996-7502
Johnson Associates
18 Indian Creek Road
Pittstown, NJ 08867

William Middleton
(770) 973-9190
Johnson Associates
561 Robin Lane
Marietta, GA 30067

NEW ENGLAND / MID-ATLANTIC

George T. Broskey
Eastern Sales Manager
(610) 640-3123
301 Lindenwood Drive
Suite One
Malvern, PA 19355

DesignIntelligence™

Sharing Ideas That Work

The trends, research, and strategies newsletter from the Design Futures Council
Published 24 times a year

Top 10 Reasons to Subscribe to DI:

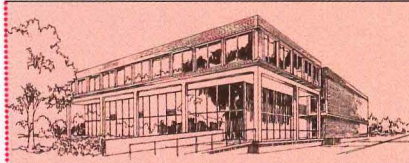
1. To find out how other firms are achieving success—new insights in every issue
2. Full membership in the Design Futures Council—includes invitations to annual conferences
3. The very latest financial benchmarks—24 times a year
4. New research on key trends and issues in the design professions
5. Discounts on in-depth “white papers” on the future of the profession
6. Exclusive rankings of top firms, collegiate design programs, and emerging design technology
7. Innovative communications and marketing strategies that get your firm noticed
8. The best source for executive career postings in the \$68,000-300,000+ range
9. The most sought after clients tell why certain firms are selected over others
10. Top leadership and profitability strategies revealed by today's most successful firms

You get all this and more when you subscribe to DI for just \$149 a year. That's almost 30% off the cover price (regularly \$199), and less than half of what you'd pay for just one hour of a top consultant's time!

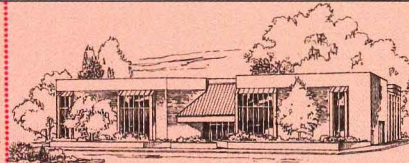
**You've got the talent.
DI brings you fresh strategies for success.**

Call 800/726-8603 to subscribe today.

CONSTRUCTION COST COMPARISONS PER SQUARE FOOT • MARCH 1998



COURTHOUSE, 2-3 STORY
Face brick with concrete block back-up on a steel frame



MEDICAL OFFICE, 2 STORY
Stucco on concrete block with a steel frame



RESTAURANT
Wood siding on a wood frame

	1st Q 1998	1st Q 1997	1st Q 1998	1st Q 1997	1st Q 1998	1st Q 1997
Atlanta	\$ 98.59	96.87	93.53	93.10	97.61	96.04
Boston	130.50	130.10	123.80	123.67	129.20	128.86
Chicago	122.93	118.59	116.62	113.91	121.70	117.45
Dallas	96.14	94.78	91.12	91.11	95.07	93.97
Kansas City	106.04	104.11	100.60	99.98	104.98	103.11
Los Angeles	123.71	123.19	117.47	117.42	122.29	122.10
New York City	151.05	148.31	141.61	141.52	147.86	146.89
Phoenix	100.20	100.05	95.15	94.94	98.58	97.39
St. Louis	113.71	111.35	107.75	106.96	112.46	110.28
San Francisco	138.83	137.89	131.45	131.29	136.83	136.57
Seattle	117.26	115.62	111.09	111.08	115.95	114.58
Washington, D.C.	107.26	104.76	100.67	100.58	104.99	103.76

Each month Architecture takes a snapshot of U.S. construction – looking at average costs and actual upcoming projects for different building types on a rotating basis. News on projects is provided by Construction Market Data (CMD). Costs are supplied by R.S. Means Co.

NOTE: Cost comparisons shown here are for the basic building without sitework, development, land, specialty finishes or equipment. Actual square foot costs vary significantly from project to project based on quality, complexity and local economy.

©1998, R.S. Means, A Construction Market Data Group Company. For more cost information, contact Means at 800.448.8182.

UPCOMING PROJECTS

Clearfield City Hall/Public Safety Building

Location: Clearfield, Davis County, UT
Project Value: \$10.5 million
Size: 57,000 sq ft, 1 structure
Contract Type: Open Bidding
Current Project Stage: Planning; Role Proposals Due
Status: Architectural Proposals Due 2/5/98
Start Date: 6/1/98
Owner: Clearfield Department of Administrative Services; Jack Bippes; 140 E Center Street; Clearfield, UT 84015
Phone: 801.774.7200; **Fax:** 801.774.7299

Fourth District Court

Location: Riverside, Riverside County, CA
Project Value: \$6 – \$7 million
Size: 42,000 sq ft, 2 floors above grade, 1 structure
Contract Type: Negotiated
Current Project Stage: Planning; Working Drawings
Status: Working Drawings Complete; Subbid schedule not set
Project Scope: Courtrooms, Chambers, Jury Rooms, Judges & Attorney Conference Rooms, Library Rooms.
Owner: Riverside County General Services Agency; Carrie Tyroll; 3133 Mission Inn Ave; Riverside, CA 92507
Phone: 909.275.4800; **Fax:** 909.275.4890
Architect: AC Martin Partners; Christopher Martin; 811 W Seventh Street; Los Angeles, CA 90017-1602
Phone: 213.683.1900; **Fax:** 213.614.6002

©1998, CMD, A Construction Market Data Group Company. Additional project details can be obtained from CMD at 800.928.4530 or 770.613.5900, email: sales@cmdonline.com, or from the Web at www.cmdg.com.

Barger Medical Office Building

Location: Barger & Altimont, Eugene, Lane County, OR
Project Value: \$4 million
Size: 37,000 sq ft, 2 floors above grade, 1 structure, 155 parking spaces
Contract Type: Invited Bidders
Current Project Stage: Planning; Schematics
Status: Schematics 95% complete; Bid date to be set approx. 6/98
Start Date: 8/1/98
Owner: Sacred Heart Medical Center Facility; Jim Weslon; 1255 E Hilyard; Eugene, OR 97401
Phone: 541.686.6866
Architect: Berry Architects; Loren Berry; 460 E 2nd; Eugene, OR 97401
Phone: 541.485.3970; **Fax:** 541.485.3402

Presbyterian Healthcare Medical Complex

Location: Exchange Parkway & Central Expressway, Allen, Collin County, TX
Project Value: \$8 – \$10 million
Size: 15 acres, 130,000 sq ft, 4 floors above grade, 2 structures
Contract Type: Negotiated
Current Project Stage: Planning; Masterplanning
Status: Masterplanning in Progress; Owner negotiating with GC's
Start Date: 6/1/98
Project Scope: Outpatient Surgery Center, Medical Offices, Diagnostic Center.
Owner: Texas Health Resources; Brian Holmes; 600 E Las Colinas Blvd.; Irving, TX 75039
Phone: 214.818.4500; **Fax:** 214.818.4651

Hall of Fame Sports Cafe

Location: Flamingo Road & Southwest 14th Street, Pembroke Pines, Broward County, FL
Project Value: \$2 – \$3 million
Size: 22,000 sq ft, 1 floor above grade, 1 structure
Contract Type: Invited Bidders
Current Project Stage: Planning; Working Drawings
Status: Working Drawings in Progress; Bid date to be set approx. 9/98
Project Scope: Boxing Theme Restaurant
Owner & Architect: Lawrence Kramer; Larry Kramer; 2209 NE 64th Street, #A; Ft. Lauderdale, FL 33308
Phone: 954.771.6050

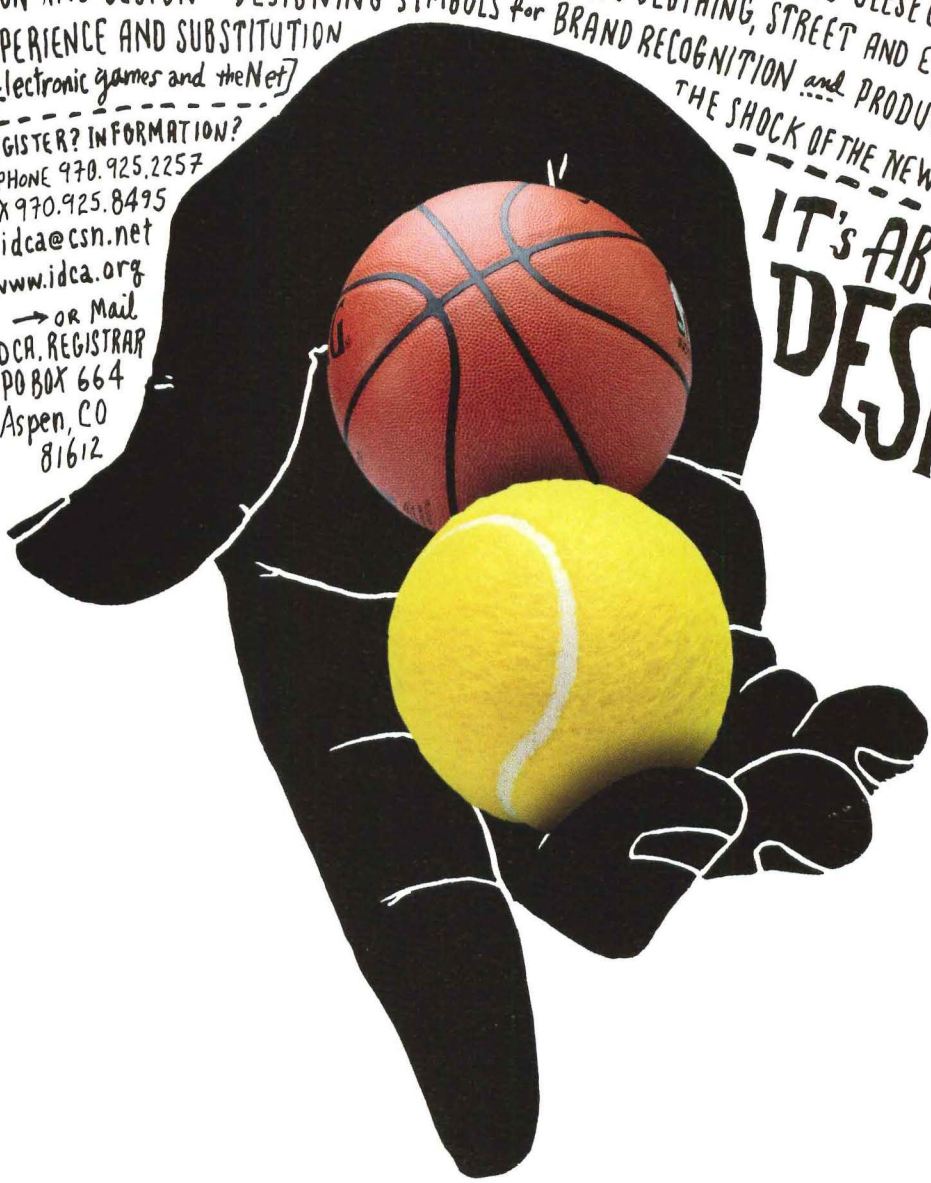
Kramer and Eugenes

Location: Copperfield Blvd, Concord, Cabarrus County, NC
Project Value: \$4 – \$5 million
Size: 4 acres, 50,000 sq ft, 2 floors above grade, 1 floor below grade, 1 structure
Contract Type: Negotiated
Current Project Stage: Planning; Working Drawings
Status: Working Drawings in Progress; GC to take subbids approx. late 2/98
Project Scope: Restaurant, Billiards Hall, Banquet Space, Sports Lounge
Owner: Griggs Publishing Co.; Robert E. Griggs, Jr.; 431 Copperfield Blvd. NE; Concord, NC 28025
Phone: 704.786.7132
Architect: Yelverton Architects; Don Yelverton; 5200 Park Road, Suite 229; Charlotte, NC 28209
Phone: 704.523.7834

IT'S NOT ABOUT SPORTS

DESIGNING WITHIN RULES [America's Cup/Formula One]
DESIGNING AND BENDING THE RULES [time + space in the NBA]
SIMULATION, IMITATION AND DECEPTION [fly fishing]
IMPROVING PERFORMANCE WITH NEW FORMS AND MATERIALS [shaped ski and pump shoe]
THE FORMAL DESIGN OF FESTIVALS [the Olympic Games] DESIGNING FOR DISABILITIES + CAPABILITIES [mono-ski + racing wheelchair]
FORMS FOR RITUAL & TRADITION [Sumo Wrestling] THE ETHICS OF DESIGNING THE BODY - THE AESTHETICS OF ATHLETICS
FAILURE AND SUCCESS IN DESIGN [the bike that was so successful it failed] DESIGNING INSTRUMENTS OF MEASUREMENT
DESIGNING THE SPORTS LANDSCAPE - THE STREET AS A PLAYING FIELD - KEEPING GEESE OFF THE GOLF COURSE
DESIGNING BODY COVER FOR SPEED AND PROTECTION - SPORTS CLOTHING, STREET AND EVERYDAY FASHION
INNOVATION AND DESIGN - DESIGNING SYMBOLS FOR BRAND RECOGNITION AND PRODUCT LOYALTY
EXPERIENCE AND SUBSTITUTION [Electronic games and the Net]

REGISTER? INFORMATION?
PHONE 970.925.2257
FAX 970.925.8495
Email: idca@csn.net
Web: www.idca.org
→ or Mail
IDCA, REGISTRAR
PO BOX 664
Aspen, CO
81612



IT'S ABOUT DESIGN

The 48th International Design Conference in Aspen, June 3 - 6, 1998

Architects can be an exceptionally sensitive lot. Though they're in a field famous for the frequency and severity of the criticism inflicted upon it—the architecture school crit is legendary, even among laypeople—critics tell of unhappy architects making angry phone calls or pouting over negative reviews, while architects complain wearily about bad critiques or ones that feature, in their opinions, wrong opinions.

This is dangerous territory, governed on all sides by the gut. Visceral reactions to bad press are unstoppable, like the hiccups, particularly in a creative field—and especially when the creation occupies a city block. Stanley Tigerman, of Tigerman McCurry Architects in Chicago, under-

Lawrence Speck, dean of the University of Texas at Austin School of Architecture, feels that criticism by novices, on the other hand, is as bad for the public's perception of architecture as it is for an architect's feelings. He cites a review in *The Austin Chronicle* of his firm's 1992 Austin Convention Center, written by a journalist with no background in architectural criticism. The writer was offended chiefly by variations in the building's four facades: He thought they all should be similar. "It was unnerving to hear somebody talk that way about something I had poured my heart and soul into," Speck remembers, "especially because he knew nothing about architecture, let alone convention centers."

Bad Press

Negative criticism, sound or otherwise, can be a real bummer.

stands the emotions well. "When someone says something negative about what you do, whether it's your spouse or your kids or a critic, it hurts," he says. "Still, architects are notoriously bad at taking criticism."

The way architects respond to negative criticism speaks volumes about their character, thinks Pulitzer Prize-winning architecture critic Paul Goldberger of *The New Yorker*. "Dignified people will respond with dignity, crazy people will respond crazily, and temperamental people will respond with outbursts," he says. "But most people don't respond at all, which is fine with me."

If anyone knows how to cope with bad press, it's Frank Gehry. The Los Angeles architect, whose recent Guggenheim Museum Bilbao (*Architecture*, December 1997, pages 60-77) has been both lauded and lacerated in the media, says that he learned a long time ago that "if you read the good stuff and believe it, then you have to read the bad stuff and believe it equally."

Gehry and other architects agree that the caliber of the criticism factors into how they take it. "The real pros, like Goldberger, Herbert Muschamp, and Ada Louise Huxtable, take time and really look at the project," says Gehry. "I look at them as partners-in-crime. Their opinions resonate with me and definitely impact my thinking."

Like writers, actors, musicians, and politicians, architects work in the public eye and are open to scrutiny and comment. Tigerman says architects shouldn't be too emotional in their reactions to criticism. Veteran heat-taker John Portman, who's been slammed frequently as both an architect and developer in Atlanta, agrees, adding that architects should be more confident. "Any architect worthy of the title has to feel pretty strongly about what he or she is trying to accomplish philosophically and creatively," Portman notes. "Learn from opinions, but don't let them control you. Look at Corbu and Wright—they both got beat up tremendously in the press."

Part of being successful with the media is giving writers information that will prevent inaccurate inferences. "If I make a curved wall, critics think I'm abusing power or wasting money," Gehry says. "But at the Guggenheim, there was a breakthrough in technology that allowed us to create such forms on time and on budget. Writers often don't recognize these parts of the stories."

When writers fail to recognize the facts, or when they dish out negative criticism—sound or otherwise—Tigerman encourages his colleagues to take the simple piece of advice given to him by his own son: Deal with it. *Eric Adams*

ARRIS 7

Windows NT/95 and UNIX

Sigma Design International is committed to **ARCHITECTURE**. This commitment has produced a CAD solution focused on creating and drawing buildings. ARRIS gives the architect a revolutionary tool that expands the creative possibilities of design and truly automates the construction documentation process.

ARRIS users like McCall Design Group in San Francisco are among the most creative and productive CAD architects in the world. The images seen in our advertising are real world projects done exclusively by ARRIS architects. ARRIS can give you the advantage of a true automated CAD solution.

New CAD Product

Ask about the ARRIS 90 Day Trial for **\$90**.

FREE Copy of Lightscape™
with Full Seat Purchase of
ARRIS Architect Studio!

Limited Time Offer — \$495 Value

Circle 144 on information card

1-888-990-0900

www.arriscad.com



FREE DEMO CD

EXPLORE THE POSSIBILITIES



Banana Republic Chicago, 744 North Michigan Avenue
ARRIS computer image by McCall Design Group, San Francisco.



SHEETROCK® Brand



DUROCK® Brand

**Introducing FIBEROCK™ Brand,
the newest member of the USG family.**



FIBEROCK™ Brand

Introducing FIBEROCK™ Brand Abuse-Resistant Gypsum Fiber Panels from USG. You've known them as Fiberbond. Then USG acquired the technology and made them much better. That's because FIBEROCK panels not only give you abuse-resistance, but they also give you a smooth surface and improved tapers for easier finishing. To find out more, call 1-800-USG4YOU.

Circle 146 on information card



USG