

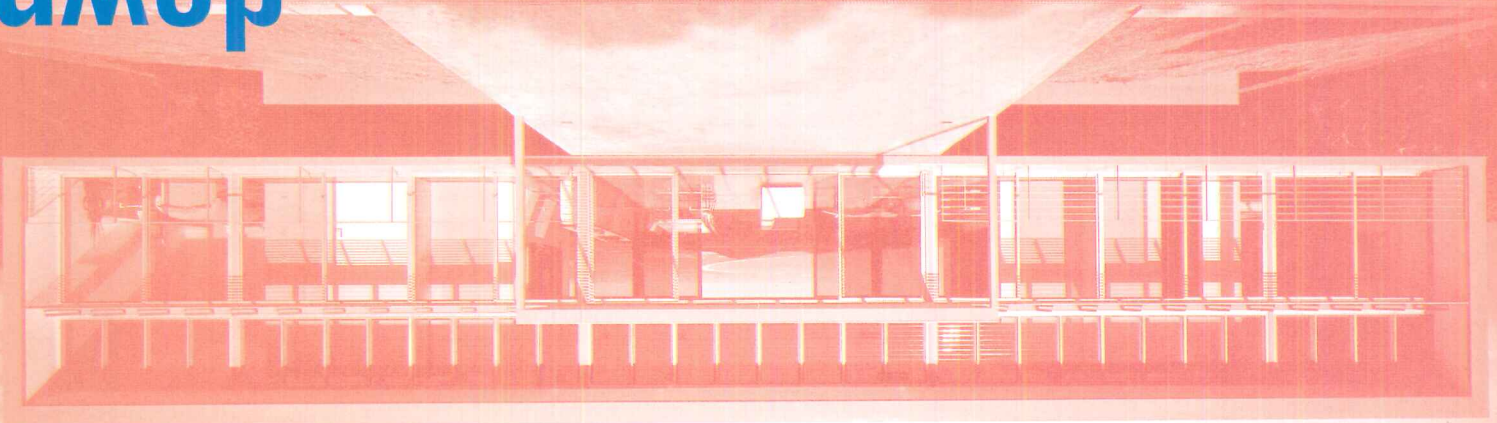
# ARCHITECTURAL RECORD



up  
top

Scandinavia and Australia: making architecture at the edge

under  
down



Also in this issue: Building Types Study  
Performing Arts Centers

Residential Section  
The New American Vernacular

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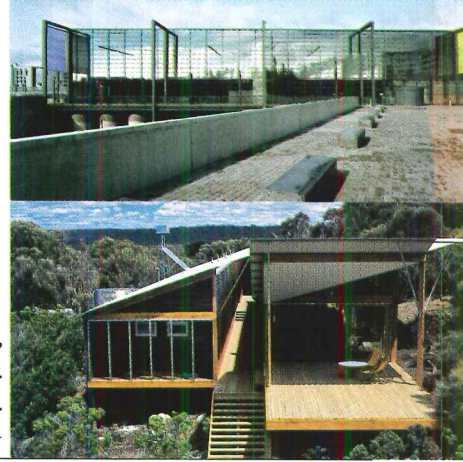


# ARCHITECTURAL RECORD

## 07.2001

On the Cover: Nordic Watercolor Museum, Sweden, photo by Christer Hallgren,  
and Rose House, Australia, photo by Ross Honeysett.

Right: Vuotalo Cultural Center, Finland (top), photo by Jussi Tianen.  
Bay of Fires Lodge, Australia (bottom), photo by Simon Kenny. ▶



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The AIA/ARCHITECTURAL RECORD

Continuing-Education Opportunities are "The Return of Natural Ventilation" [page 137], "Understanding Urethane Millwork" [page 153] sponsored by Style Solutions, and "Designing Curved Ceilings" [page 159] sponsored by USG.

WWW \* You can find these stories at [www.architecturalrecord.com](http://www.architecturalrecord.com), as well as expanded coverage of projects. Explore the latest news about emerging architects at [architecturalrecord.com/archrecord2.com](http://architecturalrecord.com/archrecord2.com).



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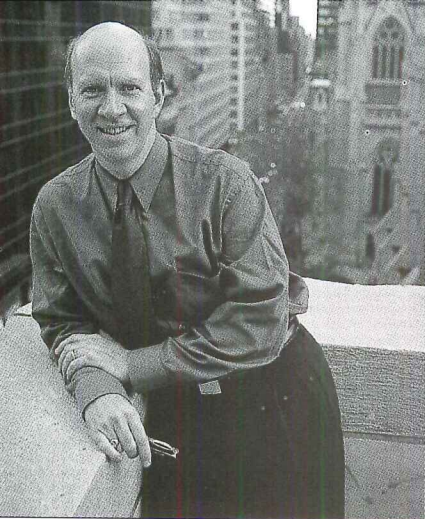
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## A critical moment

# Editorial

By Robert Ivy, FAIA

**F**or the first time in decades, architecture, a 12-letter word formerly consigned to cult status, is drawing big crowds and blazing-hot attention in the public arena. On a recent Sunday afternoon, people poured into the Guggenheim Museum, spiraling down the ramp and smiling all the way, the kids poking their fingers into the models when the guards weren't looking and nodding reverently at the screens—the words “Gehry, Gehry, Frank Gehry,” whispered like a prayer to a rock star. Across town, it was Mies, the chaste Modern master, dominating MOMA and the Whitney in an unprecedented bilateral Sturm of cultural Drang. All told, a smashing triple-header for architecture, and grist for weeks of critical speculation. But these curatorial efforts will be less meaningful without critical examination in the consumer press—particularly the newspapers. For as accessible as Gehry may be to the public, a pungent critic can help set his work in a framework of late-20th-century culture, examine its suitedness to cities and the places it inhabits, analyze its components, seek out analogies in literature or history or science or poetry, compare and contrast the work to what we see around us. A good critic can deepen our love and sharpen our wits, while ferreting out the imperfections and raising questions that we, and he, might answer.

We may not get all the answers we would like, since the state of architectural criticism teeters painfully between extremes. The problem concerns its emphasis and placement. A recent survey by Columbia University's National Arts Journalism program unearthed surprising facts about the status of that maligned craft: Only 15 individuals enjoy full-time status at the 45 daily newspapers that claim to have an architecture critic. Others are part-time or cover the real-estate or lifestyle beat.

According to the critics, however, all have to fight for space with editors more prone to give ink and inches to Survivor than to Mies. Even though Herbert Muschamp's column decrying the World War II Memorial gained front-page status in the New York Times, more often the architecture story is buried deep in the Arts section. Think what's missing in your own hometowns: Houston has no regular critic, nor does USA Today, with its

blanket coverage. Chicago, formerly the only major city to boast two architectural critics, just lost Lee Bey, a respected writer for the Sun-Times. New York, a city with four dailies, has one critic. For a topic so central to our lives, the critical writing seems too scarce, the ideas scattered too thinly.

When it succeeds, criticism informs debate and educates, clarifies the issues and states a position, allowing us to make informed decisions, to be wiser consumers and more ardent and rational proponents for worthwhile efforts. Our cities need informed clients. What will become the character of the land above the Boston artery? Should New York build the downtown Guggenheim as proposed, and how will it change downtown? What effect will budget and material challenges have on Rem Koolhaas' Seattle library? Can development in San Diego's low-scale neighborhoods escape the inexorable financial pressures that push for greater bulk? An informed public can send ripples through our civilization, since architecture has such an immediate effect on public life. While a tiny percentage of people forms architecture's clientele, a larger number controls zoning laws, affects development pressure and real-estate value, and more still, building systems and construction methods. All respond to human desire, and what we want is a function of what we know.

It may seem wishful thinking, but this young country could benefit from the cultural milieu in which every person's taxi driver or university president could articulate a position about architecture. Too much of our wealth and power has been wasted on mediocrity in the public realm, with a continual stream of banal buildings and a waste of the land itself. We need guides, instructors, editors, and writers to take us by the hand and lead us forward past the Inferno to Paradise. The destination is a more courageous, articulate, and informed public, and the guide, better criticism.





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**Of babies and bathwater**

I read with interest the news about Eisenman's Wexner Center [News, JUNE 2001, page 38] needing a \$10 million renovation/retrofit after only 10 years. I was appalled that a building termed a "landmark building" should be in such a state, not only of disrepair, but also evidently of markedly poor design and engineering.

My immediate reaction was that the building should be demolished—it has ceased to function properly. It leaks, there is a condensation problem, the radiant heating system is nonconforming, the HVAC system doesn't work, and the design significantly contributed to the problems.

Then I read Mr. Robert Campbell's Critique [JUNE 2001, page 75]. I couldn't agree more with

his views and assessment. I would like to nominate buildings that are not functioning after a 10-year life span for inclusion with those buildings deserving of our critical attention. This sort of "architecture" gives architects and architecture a bad name. It is astounding that clients are willing to pay millions of dollars for something that will last only 10 years, whether by design or because of poor design.

Architecture is a special blend of art and engineering. When we allow architecture to deteriorate to the point that function is secondary or matters not at all, we deserve the scorn of the public and the decline and downfall of the profession of architecture.

—Lynn A. Javoroski, Assoc. AIA  
CSI Milwaukee Chapter President

# Letters

*Department of Public Works  
Architecture, Engineering and  
Environmental Services Division  
Milwaukee*

**Immoral memorial**

America deserves an honest, beautiful World War II Memorial [News, JUNE 2001, page 30]. The Friedrich St. Florian design is, as many people have already noted, aesthetically banal and potentially ruinous to the Mall in Washington, D.C. As an architect and the son of a U.S. Army World War II Air Corps lieutenant, I feel passionately that the current design is an insult to what he and every American soldier fought for. Its aloof marble columns—symmetrically placed around a sunken pool at the end of the Mall—give no visual sense of the ugliness of fascism, the inten-

sity of the conflict, and the true pride felt by every soldier who fought for democracy. In the words of the artist Chaim Koppelman, a veteran of the D-Day Normandy invasion, the design is "a travesty, more like a monument to the Nazi Wehrmacht" than to American freedom fighters. The memorial should educate people about the cause of the war and should strengthen the most beautiful and powerful thing about American democracy: the notion that differences among peoples—be they of race, skin color, or language—only add to the greatness of humanity.

—Dale Laurin, AIA  
New York City

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WWII memorial's location and design. Ironically, the Mall on Capitol Hill is the symbolic place of expression for democratic resistance to injustice. Now its literal and symbolic openness will be obstructed by a forgettable representation of a noble national effort. The Vietnam vets are better remembered. Is there some way to continue the fight?

—Dennis McLaughlin, *AIA*  
via e-mail

### Trumping Berlin

Berlin city officials are turning their backs on the past and giving Donald Trump the green light to do the otherwise unthinkable. They are allowing the historically rich area of the Alexanderplatz to be overshadowed by just another "Trump Tower." This tower will surpass the height limits of the master plan for the Alexanderplatz by almost three times and will surpass almost everything else in the city as well. Ironically, this is actually an attempt to retain the city's plan for the

reform of the Alexanderplatz which cannot be implemented due to a lack of developers. And, of course, Trump has a great ability to attract tenants. Instead, Berlin should seek architecture that addresses site issues and does not compromise the architectural integrity and the cultural context of the Alexanderplatz.

—Deborah Sciacca  
*Rhode Island*

### Marketing kudos

I enjoyed reading your series on marketing these past few months [Marketing, part I, FEBRUARY 2001, page 66; part II, MARCH 2001, page 66; and part III, MAY 2001, page 180]. As a marketing communications professional who has been working in the design industry for more than 19 years, I have often been frustrated by architects' lack of understanding of this important part of their business. I'm sending the articles to my architect clients and keeping them in my files for future reference. Perhaps market-

ing could be added to the AIA Continuing Education series in the magazine?!

—Sara Marberry  
via e-mail

### Market fever

Bravo! Your comprehensive coverage of marketing professional design services is a "must read" for everyone who works in, or aspires to work in, the AEC industry. It is probably the most thorough series of articles I've ever seen in an independent, national publication geared to a technical audience.

Client consciousness and expectations have been raised over the years, spurring increasingly sophisticated brochures, direct mail, Web sites, and other vehicles to give firms a competitive advantage. Therefore, I think that it would be very interesting if ARCHITECTURAL RECORD did a follow-up article on how marketing collateral materials has evolved from the Dark Ages to the Technology Age, as a result of the industry changes you cited

in your article series.

—Dorothy J. Verdon  
Chair, SMPS Public Relations  
Task Force  
*Alexandria, Va.*

### Corrections

In our story on the Whitaker Center [MAY 2001 page 330], by HHPA, the interior designer, Caroline Bertrand, and the construction administrator, Jim Simmons, were not listed. Also in May [AIA awards, page 141], our coverage of the New York Stock Exchange trading floor expansion incorrectly listed Parsons Main as architect of record. The architect and the architect of record on that project was SOM. In our coverage of the concert hall in Rouen, France, by Bernard Tschumi Architects [JUNE 2001, page 104], the following people were not listed as part of the team: Peter Cornell, Cristine Devizzi, Robert Holton, Megan Miller, Laurane Ponsonnet, Kim Starr, Roderick Villafranca; and Hugh Dutton Associates as facade consultant. send letters to [rivy@mcgraw-hill.com](mailto:rivy@mcgraw-hill.com)



# Three Custom Solutions That Work!

By Barbara A. Nadel, FAIA

FROM HISTORIC COURTHOUSE  
RENOVATIONS TO RESIDENTIAL  
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For over 80 years, the Warroad, Minnesota-based manufacturer has produced made-to-order windows and doors for residential and commercial construction, renovation, and historic restoration projects. Marvin offers over 11,000 standard styles, shapes and sizes, along with nearly unlimited custom possibilities to meet project requirements.

Marvin's new Wood Ultimate Double Hung window provides flexibility for historic renovations and other special installations. This product can be configured numerous ways, including traditional double hung, single hung or an operating round top window. Custom details, such as divided lites or special hardware colors to coordinate with building décor, are available. For more traditional applications, the optional simulated thick sills and ogee lugs capture the charm of old windows.

Custom capabilities don't necessarily mean additional premium costs or lead times of 12 weeks or longer. Marvin offers many standard options, such as unusual divided lite patterns or special exterior casing, considered custom work by other manufacturers. For example, Marvin's *Made for you* manufacturing process provides one-of-a-kind windows and doors to meet specific project needs, such as custom clad color, special glazing options, or other unique design requirements.

## Standard Sizes for Historic Homes

"Marvin's standard window selections are also excellent," says Eileen Koenigsberg, AIA, principal of Moore Koenigsberg Architecture, in Denver, Colorado. When Koenigsberg designed a two story, 600 square foot addition to her home in a Denver historic district, she specified standard Marvin Windows and Doors because of the variety and increments available.

"The standard sizes perfectly matched the existing windows on the house. We used double hung cottage style windows on the first and second floors to maintain the historic look, along with regular double hung windows in the sun porch to let in more light," she says.

## "Turtle Glass:" Environmental and Energy Solutions

Glazing options are available to suit project and climate requirements. In the southeastern United States, particularly Florida, tinted glass (or "turtle glass") for coastal areas is popular for environmental reasons. According to Mike Hoffart, Marvin Architectural Division Manager, some southeast Florida building codes have a "Turtle Code", calling for tinted glass on coastal homes facing the water.

Sea turtles come to the shore to lay eggs, and follow the moonlight reflecting off the water to go back to sea. When homes built along the coastline reflect too much light on the beach, turtles get confused and go inland, explains Hoffart. Turtle glass maintains shading coefficients designed to minimize reflected light on the beach and guide the turtles back to sea.

For better energy performance and heating and cooling cost savings, Marvin offers insulating glass with Low E II coatings, to lessen conductivity of heat and cold from the outside.

Glazing with Low E II coatings reflect the high angle summer light and absorb the low angle winter light for temperature control.



## Small Town Courthouse Maintains Operations

In recent years, Marvin has provided windows for many non-residential applications, including universities, courthouses and healthcare facilities. In upstate New York, an area subject to cold temperatures and high winds, Marvin worked closely with architects and owners to meet the functional, environmental, acoustical and scheduling needs of a small town courthouse built at the turn of the century along a busy highway.

"During the renovation and new addition to the historic H. Douglas Barclay Courthouse for Oswego County in Pulaski, New York, Marvin was very willing to work within our constraints," says Sheila Weed, AIA, principal of Group 1 Design in Syracuse, New York, and former project architect with JCM Architectural Associates, of Syracuse for the courthouse.

"A small town cannot afford to close down a busy courthouse for even a few hours. The contractor replaced two or three windows at a time, and worked around the client's schedule, with no loss of downtime to the owner. As soon as the windows were installed, the work was done," Weed says.

Marvin customized over a dozen different window sizes and configurations for the project, including simulated divided lites to replicate the original windows in both the renovation of the existing building and the new addition. The double-paned, Low E II glass windows used in courtrooms, judges' chambers, and throughout the building effectively address cold climate concerns and block out ambient noise from adjacent highway traffic.



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## Marvin Windows and Doors Custom Solutions

"Everything is in the details," says Hoffart. "Our project management personnel work with distributors and dealers for support on custom projects, proposals and drawings. We stay involved with ordering, production, delivery and field service through project close out. Our design support tools include the Marvin Design System, a CAD software package created with the design team in mind. The Marvin Design System runs either as a stand-alone format or with AutoCAD."

The Architectural Services Division in Warroad, about six miles from the Canadian border in northern Minnesota, is across the road from the company's manufacturing plant, where skilled workers turn truckloads of pine into custom-made window and door components.

Marvin's local architectural representatives, along with technical support from Marvin's Architectural Division, are available to provide for technical information, project coordination and product training to architects from concept to completion for all project needs.

Barbara A. Nadel, FAIA is principal of Barbara Nadel Architect, in New York City, specializing in programming, planning and design of institutional facilities. She is 2001 National Vice President of the American Institute of Architects and frequently writes about design and technology.

**MARVIN**  
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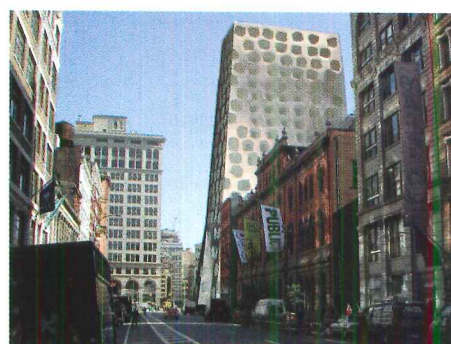
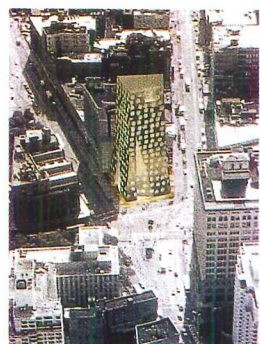
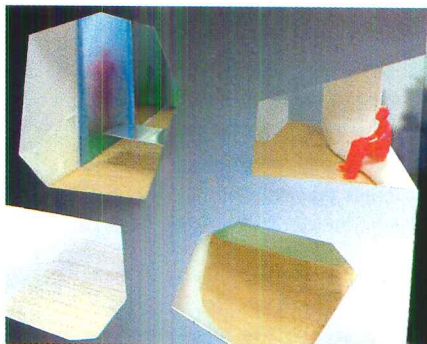
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## Plans nixed for NYC hotel by Koolhaas and Herzog & de Meuron

Although plans for new development and the reconfiguration of streets surrounding Cooper Union in New York City will move forward, the hotel designed by OMA/Rem Koolhaas and Herzog & de Meuron for Ian Schrager Hotels will not be built.

Schrager is the New York-based hotel owner who created Studio 54 and the Palladium in New York in the 1970s and who owns hotels in New York, Los Angeles, Miami, and London, including the Paramount and Hudson in New York. Schrager hired OMA/Rem Koolhaas and Herzog & de Meuron to design a \$120 million, 20-story hotel at the intersection of Astor Place, Lafayette Street, 8th Street, and Fourth Avenue in New York. This was



The hotel (center and right) by Koolhaas and Herzog & de Meuron would have had distinct windows (left) for each room.

the first collaboration between Koolhaas and Herzog & de Meuron. In a press conference held on May 11 Schrager, together with Koolhaas and Jacques Herzog, unveiled the design, but the collaboration ended within weeks of the press event.

A joint statement released by Ian Schrager Hotels and the team of architects states, "Ian Schrager

Hotels has ended its collaboration with the architecture firms of OMA/Rem Koolhaas and Herzog & de Meuron on the Astor Place Hotel project in New York, citing differences in the direction of the project.

Acknowledging that the project has been rewarding, chairman and CEO Ian Schrager expressed the highest admiration and respect for both architects and their work." Neither Schrager nor the architects would comment further.

A spokesperson for Schrager's office said the hotel developer still plans to build

a hotel on the site, but it's too soon to say how or when a new architect will be selected. This would be Schrager's first newly constructed hotel: All of his current hotels are renovations of existing buildings.

The hotel by Koolhaas and Herzog & de Meuron would have had 260 guest rooms with varied, angular window openings, and 60 tiny, capsulelike rooms, each with only enough space for a bed. An outdoor urban plaza linking Lafayette Street and Fourth Avenue was planned. At the press conference, Schrager said, "This building may revolutionize the hotel business."

The hotel would have been built on a site across from Cooper Union. The New York firm Pasanella+Klein Stolzman+Berg has developed a master plan for the Cooper Union blocks immediately surrounding the school's Foundation Building. The plan calls for a reconfiguration and narrowing of streets immediately north of the hotel site and to the south of the Foundation Building—creating a larger, more prominent Peter Cooper Park. Sites for a new engineering building, up to 17 stories tall, and for a nine-story building east of the Foundation Building, are part of the plan.

John E. Czarniecki, Assoc. AIA

### CALATRAVA DESIGNS OLYMPIC STADIUM CANOPY FOR ATHENS

Santiago Calatrava has his eyes set on the 2004 Olympic Games in Athens, Greece.

Calatrava unveiled a proposal in June to literally shield

Athens' Olympic Stadium and the surrounding complex from

Greece's severe summer weather. His design would

cover the existing stadium with translucent glass panels

on steel arcs. The panels would be arranged to span

the 80,000-seat Olympic stadium, as well as the nearby

cycling stadium. Walkways connecting the complex

would be lined with trees and water pools—intended to

produce what Calatrava calls "a micro climate" to keep

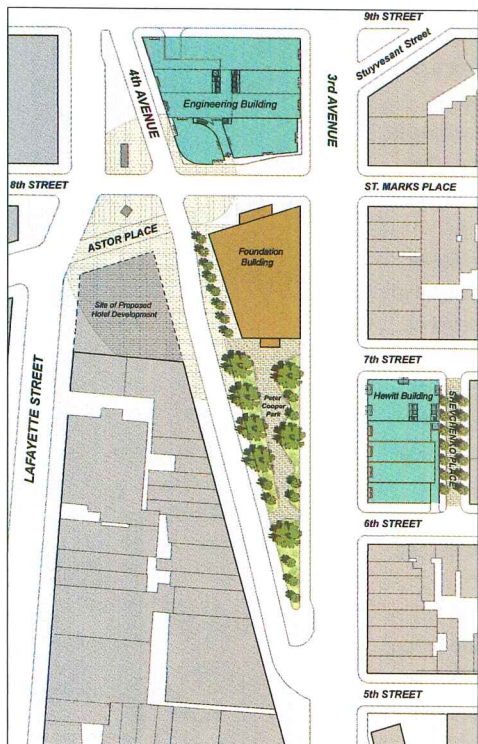
visitors cool. The Greek government is likely, although

not certain, to welcome Calatrava's offer of design

services. Athens' Olympic stadium is expected to close

early next year for renovation to begin.

Christina Rogers



The master plan for the Cooper Union area.

## OFF THE RECORD

Steven Holl, AIA, has won the 2001 Médaille d'Or (gold medal) from the French Academy of Architecture. Holl is the first American to win the French gold since I.M. Pei in 1981. French architect Jean Nouvel, who has never had a project built in Britain, received the 2001 Royal Gold Medal for Architecture by the Royal Institute of British Architects. The Royal Architectural Institute of Canada (RAIC) awarded Toronto architect A.J. (Jack) Diamond the 2001 RAIC Gold Medal.

The Milwaukee Art Museum [JUNE 2001, page 37] has decided to construct its brise-soleil out of steel, rather than carbon fiber. The brise-soleil and the rest of the addition by Santiago Calatrava will be completed in time for a gala opening on October 13 and 14.

Ralph Lerner, FAIA, stepped down as dean of Princeton University School of Architecture, effective July 1. Mario Gandelsonas will be acting dean while a search for a successor takes place.

Martha Ellen LaGess has been named dean at the University of Texas at Arlington's School of Architecture. She was Unit Master at the AA in London. The search for new deans continues at Texas Tech and UT-Austin.

The shortlist in a competition to design a new home for the Sculpture Center in Long Island City, Queens, N.Y., includes Deborah Berke, Diller + Scofidio, Maya Lin, and Weisz + Yoess.

British firm Alan Short and Associates, with Burnidge Cassell and Associates, of Elgin, Ill., has been selected to design a home for the departments of art, design, and architecture at Judson College in Elgin.

Actor Anthony Quinn, who died on June 3 at age 86, studied under Frank Lloyd Wright at Taliesin. Wright advised Quinn to take acting lessons to improve his communication skills.

## Pei Cobb Freed and SOM to plan NYC East River site

Pei Cobb Freed & Partners and Skidmore Owings & Merrill (SOM) of New York have been selected through an ideas competition [APRIL 2001, page 32] to complete the master plan for a 5-million square-foot mixed-use development on the site of a former Consolidated Edison (Con Ed) steam plant on the East River in Manhattan, just south of the United Nations headquarters.

The site extends from 35th to 41st Streets, between First Avenue and FDR Drive. FSM East River Associates, a partnership between Fisher Brothers and Sheldon H. Solow, is developing the nine-acre site. The partnership recently contracted to acquire the land from Con Ed for up to \$680 million, based on many contingencies. The architect-



The development site on the East River.

selection process was led by Bill Lacy, FAIA, president of Purchase College of the State University of New York and executive director of the Pritzker Architecture Prize.

The initial ideas competition included firms that were asked by the developers to work together: David Childs of Skidmore Owings & Merrill, Richard Meier, Peter Eisenman, and Hugh Hardy; HOK and Schuman Lichtenstein Claman Efron; Kohn Pedersen Fox, Rem Koolhaas, Davis Brody Bond, and



Initial schemes for the Con Ed site were developed by Pei Cobb Freed & Partners (above) and SOM (right) as part of teams that included other firms.



Toyo Ito; Henry Cobb and James Ingo Freed of Pei Cobb Freed & Partners and Machado & Silvetti Associates; and Christian de Portzamparc and Gary Edward Handel & Associates.

Pei Cobb Freed & Partners and SOM were on competing teams in the initial competition. Unhappy with the selection

process, other competing architects declined offers for consulting positions on the master-plan team. In a statement, Meier and Eisenman said, "Unfortunately, the euphoria of the design process has been quenched by unfortunate circumstances that blur, if not blind, the vision of what should happen in this great city."

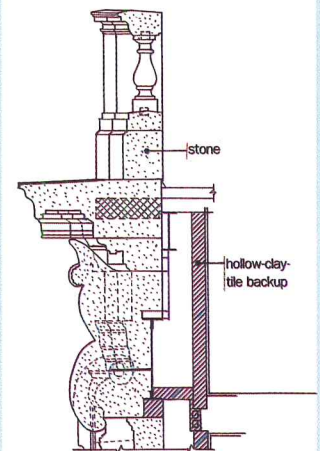
In response to Meier and Eisenman, Lacy said in a statement, "The level of all of the design proposals was truly exceptional. The developers were faced with the nearly impossible task of selecting a master-planning team from among a group of supremely creative and talented individuals. It was unfortunate that they could not choose everyone."

The master-plan team is led by Henry Cobb, FAIA, of Pei Cobb Freed, and Marilyn Jordan Taylor, FAIA, of SOM. Consultants on the project include Machado and Silvetti Associates of Boston and landscape

architecture firm Olin Partnership of Philadelphia. The new team is expected to take about four months to develop an initial master-plan concept. JEC

## AR illustrator dies

Muriel Cuttrel, a graduate of Pratt Institute who first drew and later coordinated this magazine's architectural drawings, died of a stroke on May 28. She worked as a draftsman in an architectural firm before becoming our freelance illustrator and consultant, a post she held at the time of her death. Her 43-year association with RECORD spanned from hand-rendered ink drawings on vellum to computer renderings. Design director Anna Schlesinger characterized her drawing as "a trademark that architects came to treasure as RECORD's own."



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## Record News

### OFF THE RECORD

For its renovation, Lincoln Center is considering a glass covering by [Frank O. Gehry, FAIA](#), to extend over its open plaza. The design includes a funnel-like passageway swooping down to the street.

Filmmaker [Sydney Pollack](#) is making a documentary about [Gehry](#).

[Antoine Predock, FAIA](#), earned two honorary doctorates this spring: a Doctorate of Fine Arts from the University of New Mexico and a Doctorate of Human Letters from the University of Minnesota.

[Marilyn Jordan Taylor, FAIA](#), has been elected chair of Skidmore, Owings & Merrill, effective October 1. Taylor will be the first woman to head the firm.

The Charter High School for Architecture + Design (CHAD) in Philadelphia held its first commencement in June. Author and illustrator [David Macauley](#) was the speaker.

[Antonio Cruz and Antonio Ortiz](#) of Seville, Spain, were selected for the major \$180 million renovation project for the Rijksmuseum in Amsterdam [JANUARY 2001, page 36].

The [Office of Metropolitan Architecture/Rem Koolhaas](#) won a competition for the design of a new conference center for the city of Córdoba, Spain. Others competing were [Cruz and Ortiz](#), [Toyo Ito](#), [Zaha Hadid](#), and [Rafael Moneo](#).

British architect [David Chipperfield](#) was selected in a competition for the new BBC headquarters in Glasgow—Chipperfield's first major commission in the U.K. in 11 years. Competing were [Mecanoo](#), [Page and Page](#), [WilkinsonEyre](#), [Sauerbruch Hutton](#), and [Richard Rogers Partnership](#).

[Richard Meier, FAIA](#), is designing a \$40 million open-air pavilion at the site of Woodstock, which he didn't attend.

## Australians battle for tallest residences

Sydney will be ahead, temporarily, in the contest for Australia's tallest residential tower, but Melbourne will ultimately be on top.

At 760 feet, Sydney's World Tower will be the tallest residential building in the southern hemisphere and, internationally, second only to New York's Trump World Tower. But Sydney's supremacy won't last long, nor will that of the Trump World Tower.

Sydney's \$105 million World Tower, under construction and due for completion in early 2003, will be overtaken by Melbourne's \$127 million Eureka Tower, which is due for completion in late 2003. At 984 feet tall, Eureka Tower will be the world's tallest residential tower.

Both Eureka Tower and World Tower are designed by the Melbourne-based firm Nation Fender Katsalidis (NFK). World Tower's design was chosen in a limited competition of NFK, Peddle Thorp, and Harry Seidler. NFK says World Tower will be a "tall building with skinny legs and broad shoulders,"



Eureka Tower (left) and World Tower (right) are proposed in Australia.

to maximize views and sales opportunities. It will have a crisp white frame, with colored panels varying from gray to blue near the top, "to connect to the sky." A rigid master plan, dictating sun angles and so on, accompanies the development of World Tower as well, making it a building about "structural expression." By contrast, Eureka would be, according to NFK,

"smoother . . . a more direct expression of verticalness." NFK calls Eureka a "vertical city," comprising three separate residential areas on top of one another, each with a separate elevator core.

According to NFK, Eureka is "essentially a glass skin with some balconies. It looks a bit like a big carving knife—a sharp, angular design." *Anne Susskind*



## Towers by Yeang highlight London redevelopment

Elephant and Castle, an unloved and heavily trafficked area southeast of central London, will be overhauled into a new district within the next 10 years. Central to this regeneration in the London borough of Southwark will be two high-rise residential towers designed by Malaysian "green skyscraper" specialist Ken Yeang.

The rebranded Elephant and Castle will become a mixed-use district composed of a multimodal transport interchange, public piazza, retail center, and public park. The master plan and individual buildings for the enormous area have been designed by London practices HTA, KP Architects, Foster & Partners, and Benoy, in association with engineer Battle McCarthy. Foster & Partners has designed a train station for the site. A curvaceous, glazed canopy covering the interchange will form the central point of the development.

Yeang's residential towers, which will flank a 15-acre park, are a continuation of the architect's innovative approach to sustainable high-rise design. The buildings will be oriented to maximize passive solar benefits for occupants and make use of solar reflection to the northern facades of the building below. The towers, whose core uses will be residences and work spaces, will also host "events in the sky," with bars and restaurants, a hotel, and health and sports facilities.

Environmental and social concerns are being addressed in all aspects of the development. In an attempt to allay local residents' fears that the overhaul will lead to the gentrification of the area, community representatives have been consulted at every stage. *Adam Mornement*

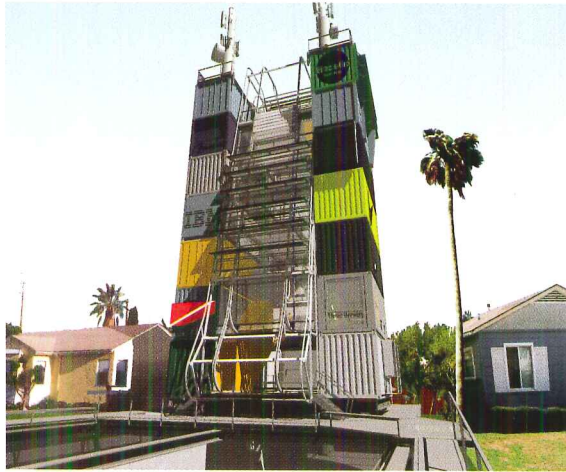
### Young, cutting-edge architects gather at Archilab in France

"The Blob is dead!" someone proclaimed last April during the Archilab conference in Orléans, France. That sweeping statement did not come from the podium or stage—where provocation, playful or otherwise, was not exactly the *soupe du jour*—but from the back of the bus, en route to the final meal of the three-day conference. In fact, blobs were amply represented in Archilab 2001's exhibit of work by its 90 participants. But the contrast between conversations in the lecture hall and those around the dining tables was far more striking.

"Housing Today," the official theme of this third annual Archilab meeting, never quite galvanized the group's diffuse onstage discussions. And individually, the 70 presenting teams—mostly architects—were granted five minutes in which to show work. Speakers were whisked by in rapid succession, as if on a conveyer belt, their five-minute allotments strictly enforced by dimming lights and microphones, while the projected slides only occasionally corresponded to the presenter. Nonetheless, Archilab 2001 was an enormously valuable conference.

Where else would so many youthful architects (many in their early and mid-30s) from around the world have an opportunity to gather, exhibit work, and share intense days in a pleasant, but undistracting, setting? In Orléans, Tokyo-based Shigeru Ban (making refugee shelters from cardboard tubes) might find himself lunching with, say, Detroit-based Kyong Park (focusing on burnt-out relics of urban blight) and Rotterdam-based Kas Oosterhuis (proposing "elastic" houses). The very act of throwing together an array of thinkers for a concentrated stretch of time may be the essence of a good conference—perhaps little more is ever really needed.

Archilab, the brainchild of Frédéric Migayrou, now curator of architecture at Paris' Pompidou Center, and Marie-Ange Brayer of the Regional Contemporary Art Fund (FRAC), was conceived as a laboratory for research-oriented architects, a great beaker for ideas. Backed by FRAC and the city of Orléans, this forum embraces an unusually inclusive approach, each year inviting back all past participants, plus 30 new ones, swelling the



Wes Jones proposed a residence of shipping containers (top); NL Architects showed landscape on houses (above).

ranks from 30 participating teams in 1999 to 60 in 2000 and 90 in 2001.

The 2001 theme, "Housing Today," seemed like many catchalls—a construct awkwardly imposed on the invitees. For starters, why should we assume that all past Archilab participants, however interesting their work, have necessarily focused on housing? The heading, though undeniably important, was simultaneously too broad and too narrow; and the exhibit's categories—individualizing collective housing, flexibility, creating landscape, new lifestyles, subversion, and form—often seemed arbitrary. That said, the richness of Archilab emerged in a plurality of voices and visions. Curated by Brayer with Béatrice Simenot, Archilab 2001 ran the gamut, alphabetically, from Spain's Abalos & Herreros to the Netherland's Zanderrothe Architekten.

Visit [www.archrecord.com](http://www.archrecord.com) for more on the Archilab conference. Sarah Amelar



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## Modern restaurants to anchor San Francisco waterfront park



Before the 1989 Loma Prieta earthquake, the financial district of downtown San Francisco was cut off from the waterfront by the two-level elevated Embarcadero Freeway. One salutary effect of the quake was that the freeway was so damaged it had to be torn down. Overnight, San Francisco was again both physically and visually connected to the Bay. The city has taken advantage of this connection with a series of redevelopment projects, including a light-rail line, waterfront public spaces, the new Giants baseball stadium, and numerous other projects that had been fueled, up to this year, by the booming economy.

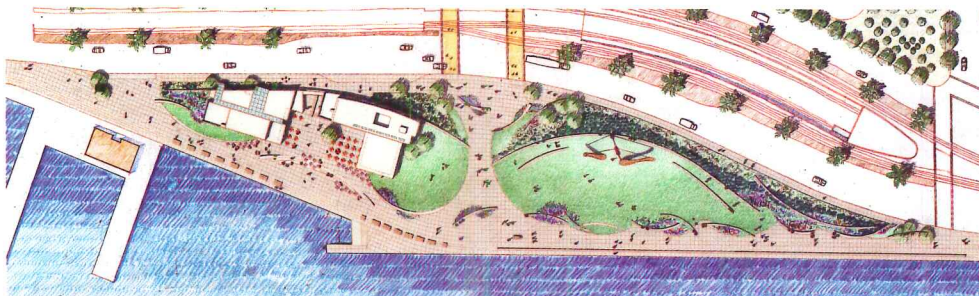
One of the last projects of the San Francisco waterfront redevelopment is finally happening. Located right across the Embarcadero from the new Gap headquarters building, Rincon Park is actually three projects: a park and two restaurants. The new park, an extension of the already lively waterfront public spaces, is a collaboration between the Office of Cheryl Barton in San Francisco and the Olin Partnership of Philadelphia, and will be home to an Oldenburg sculpture. The restaurants, both to be operated by famous restaurateur Reed Hearon, will occupy buildings that help define three sides of a public plaza on the park's eastern end. One restaurant is being designed by the office of Jim



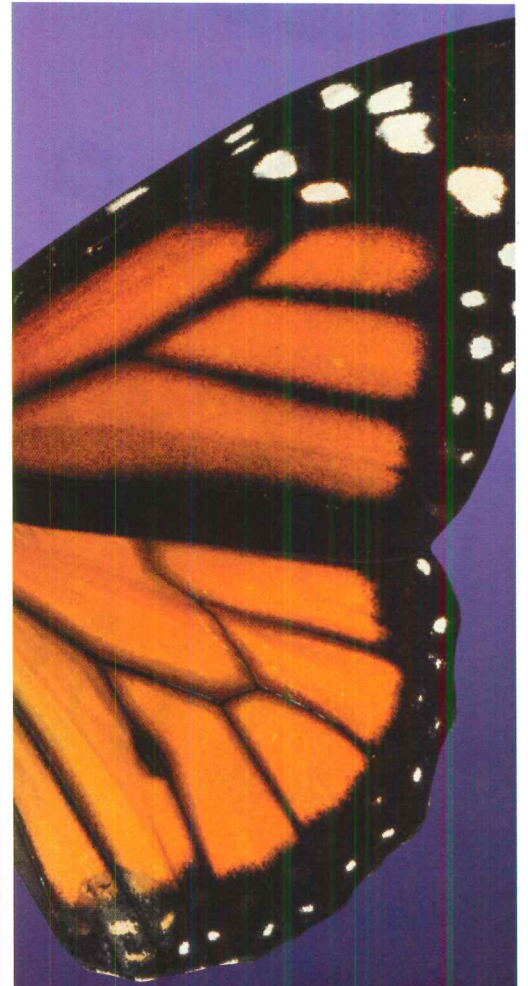
**Restaurants by (top, left to right) Jim Jennings and Pfau Architecture will complement each other. The Pfau building (above) includes a Modernist composition of wood and glass.**

Jennings, and the other by Pfau Architecture, both of San Francisco. The gracious placement of the buildings in relation to the park's arcing seat walls demonstrates the collaborative work established early on by the landscape architects and the architects to create common ground for their projects.

The restaurants, at 8,000 square feet each, will be glassy pavilions in a clearly Modernist language. Both firms are well-respected for their applications of this idiom. Pfau Architecture, known for experimental materials and tactile surfaces, is using glass and steel for a luxurious restaurant with southern French cuisine. Jim Jennings, revered for his almost Zen-like Minimalism and refined detailing, will assemble similar materials for the other eatery with more casual southern Italian fare. The public plaza between the two restaurants will allow outdoor dining, protected somewhat from the winds off the water, with stunning views of the Bay Bridge, Treasure Island, and the Bay. *Lisa Findley*



**The restaurants (left in plan) will anchor Rincon Park by the Olin Partnership and the Office of Cheryl Barton.**



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redevelopment authority purchased it from the Duquesne Slag Company for \$3.8 million. To counter Pittsburgh's population loss and tax-base erosion, Mayor Tom Murphy formed a public/private partnership to make Summerset Pittsburgh's first major new neighborhood since World War II. More than \$15 million in public funds have been spent to grade and prepare the site, and the watershed cleanup has cost \$7.8 million.

In early studies, Cooper, Robertson & Partners of New York and Urban Design Associates Architects of Pittsburgh envisioned a 1,200-unit development, but Pittsburgh landscape architects LaQuatra Bonci Associates recommended a reduction to 713 units to keep the stream open and minimize the considerable grading required.

Incorporating suggestions from an extensive community charrette, Summerset's master plan re-creates a traditional neighborhood where houses with front porches are close to sidewalks, and alleys minimize on-street parking. Looney Ricks Kiss, specialists in traditional housing, has designed three

## New neighborhood to rise on former slag heap in Pittsburgh

At a dramatic brownfield site in Pittsburgh, a New Urbanist residential development with a restored watershed is supplanting an industrial dump. Developers have sold the first units in Summerset at Frick Park, a \$243 million project that will eventually have 713 residences on 234 acres. Memphis firm Looney Ricks Kiss developed the master plan.

Summerset is located in Nine Mile Run, a ravine and stream between Pittsburgh's 455-acre Frick Park and the Monongahela River. Between 1922 and 1972 the steel industry dumped 20 million tons of slag here, making an astonishing heap as high as 20 stories tall in some spots. The site lay dormant until 1995, when the city's urban

different housing types—cottage, village, and estate—which range from 1,400 to 3,500 square feet and cost from \$180,000 to \$635,000. Looney Ricks Kiss architect Mark Jones says, "We took the symbols and scale of the surrounding communities, but developed the new floor plans that people want."

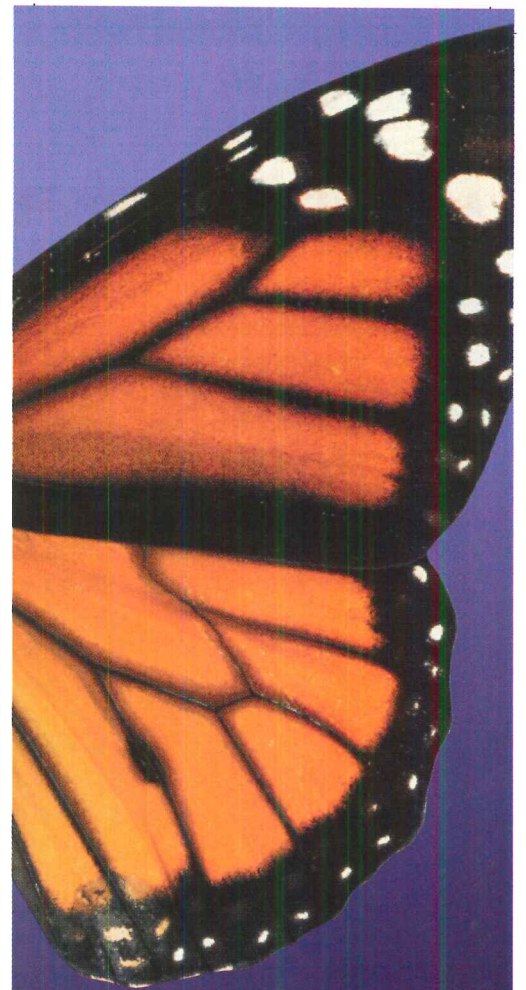
Construction will be in three phases over 10 years. The \$42 million first phase will include 72 single-family homes, 81 townhouses, and a 48-unit apartment building.

The city of Pittsburgh owns the land and will profit on each home sale, anticipating more than \$21 million in profit in 10 years.

*Charles Rosenblum*



Looney Ricks Kiss Architects has developed the plan for Summerset (right), to be built on a former slag heap in Pittsburgh (top). The development will include 713 homes on 234 acres.



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CIRCLE 21 ON INQUIRY CARD

## Record News

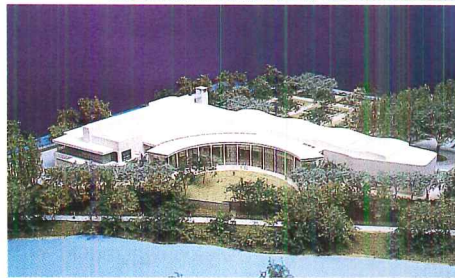
### American Center for Wine, Food and the Arts by Polshek Partnership nears completion

California winemaker Robert Mondavi is widely credited (and blamed) for helping to transform the Napa Valley into a high-end tourist destination. His latest project is taking shape in the city of Napa, at the valley's south end, which is often bypassed by tourists heading to the wineries. The \$50 million American Center for Wine, Food and the Arts, designed by New York-based Polshek Partnership, will open in November and be called Copia, after the Roman goddess of abundance. Mondavi himself kicked in \$20 million and enlisted support from many area wineries.

Polshek Partnership's Robert Young says that Mondavi and the directors "were adamant that this not be just a 'museum' to food and wine, but a place where people will

share their connections with food and wine as expressions of American culture." On two floors within 82,000 square feet, Copia will have galleries, offices, kitchens, a restaurant, classrooms, a 500-seat amphitheater, and an elaborate kitchen garden (based on gardens at the Villandry chateau in France's Loire Valley).

The most striking aspect of the design may be the unification between the structure and the elegant geometry of the landscape design. Douglas Findley, of Berkeley-based Peter Walker Partners, created a grid of 45-foot-square plots for the kitchen gardens, and a long allée that brings



The American Center for Wine, Food and the Arts will include galleries, a restaurant, and a kitchen garden.

Napa River could be too roomy when not filled for a banquet, but that's likely to depend in part on how the space is furnished and how visitors use it.

Copia's mission and the region's climate could have set the stage for an environmentally responsive building. The architects specified some local materials but needed a larger budget for more aggressive "green" efforts. *Kira L. Gould*

visitors from the vine-planted parking lot to Copia's entrance. The garden grid relates directly to the grid on which the building is based; the playful wave roof adds to the grids' rhythm.

The double-height, glass-walled gathering space with a view to the

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CIRCLE 22 ON INQUIRY CARD

# News Briefs

## Weiss/Manfredi to design Seattle Olympic Sculpture Park

New York-based architecture firm Weiss/Manfredi was selected in June to be the lead design firm for the Olympic Sculpture Park, which will be a public art waterfront park and the third venue for the Seattle Art Museum. Competition finalists were Michael Van Valkenburgh Associates, Michael Maltzan Architecture, Tom Leader Studio, and Caruso St John Architects.



Roy Thomson Hall as it will appear when renovated.

## Cubs propose more seats for bleacher creatures

The Chicago Cubs announced plans in June to add 2,100 seats to the left- and right-field bleachers at Wrigley Field. The new bleachers, which would extend out and over Sheffield and Waveland Avenues, may block some views of the field from homes and rooftops bordering the ballpark. Pending city approval, the Cubs want the seats in place for the 2002 season.

## Major renovation planned for Toronto's Roy Thomson Hall

The Toronto firm Kuwabara Payne McKenna Blumberg (KPMB) has been chosen for a \$13 million interior renovation to Roy Thomson Hall, home of the

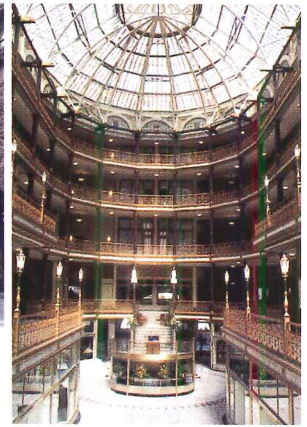
Toronto Symphony Orchestra. The two-year project will require the hall to be closed for 22 weeks, from March to August 2002. Roy Thomson Hall, completed in 1982, was designed by Canadian architect Arthur Erickson. Toronto Symphony Orchestra director Jukka-Pekka Saraste has publicly expressed frustration regarding the acoustics. Sound will be improved by acoustics consultant Russell Johnson of New York-based Artec Consultants.

## Hyatt opens hotel in renovated Cleveland Arcade

Following a \$60 million, 18-month renovation to the historic Arcade, the Hyatt Regency Cleveland at the Arcade opened in May. The 111-year-old Arcade, a National Historic Landmark, was once the



Hyatt Regency Cleveland in the renovated Arcade.



center of retail in downtown Cleveland and served as a model for indoor shopping malls. The renovation was completed by Sandvick Architects of Cleveland and Brennan Beer Gorman Monk of New York. The first two floors of the main arcade concourse will include 40 shops, and 293 hotel guest rooms will be in two nine-story towers and the top three floors of the five-story concourse. The opening of the Hyatt and the renovation of the Arcade are part of the ongoing revitalization of Euclid Avenue in Cleveland.



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# Dates & Events

## New & Upcoming Exhibitions

### **Albert Kahn: Inspiration for the Modern** Ann Arbor, Mich.

June 2–October 21

Explores how Kahn's industrial architecture inspired the development of international Modernism. Includes works of art and architecture by many of Kahn's contemporaries, such as Diego Rivera and Le Corbusier. At the University of Michigan Museum of Art. Contact 734/764-0395 or see [www.umich.edu/~umma](http://www.umich.edu/~umma).

### **Equilibrium: The Architecture of Nicolas Grimshaw & Partners** Zurich

June 7–July 21

The firm's work is presented in a series of aluminum flight cases that display mock-ups, fabrics, models, and drawings. Coincides with the publication of *Equilibrium*, the latest monograph on the firm. At the Architektur Forum Zurich. Contact 41/1252 92 95 or [ngp@ngrimshaw.ch](mailto:ngp@ngrimshaw.ch).

### **Landscapes of Retrospection** **Still Rooms & Excavations** Pittsburgh

June 9–September 2

*Landscapes of Retrospection* shows how British 18th- and 19th-century architecture was recorded in watercolors and drawings. *Still Rooms & Excavations* documents the expansion of the California Palace of the Legion of Honor and the excavation of a potter's field beneath it. At the Heinz Architectural Center at the Carnegie Museum of Art. Contact 412/622-3131 or see [www.cmoa.org](http://www.cmoa.org).

### **Out of the Ordinary: The Architecture and Design of Venturi, Scott Brown and Associates** Philadelphia

June 10–August 5

Presents over 250 drawings, models, pieces of furniture, and reconstructions of building elements, many exhibited publicly for the first time. At the Philadelphia Museum of Art. Contact 215/684-7860 or see [www.philamuseum.org](http://www.philamuseum.org).

### **Mies van der Rohe & Louis Kahn** **Drawings** New York City

June 19–July 31

Displays a selection of drawings, including the controversial sketches Mies made of the Barcelona Pavilion in 1938 in which the banner of the Third Reich is featured. Forty drawings and models of Kahn's Kansas City Office Building are also shown. At Max Protech Gallery. Contact 212/691-4342 or see [www.maxprotech.com](http://www.maxprotech.com).

### **Mies in Berlin** New York City

June 21–September 11

Exhibits work from the early career (1905–1938) of architect Ludwig Mies van der Rohe. Though Mies is known mostly for his American Modernist glass skyscrapers, this exhibition will focus on early influences. At the Museum of Modern Art. Contact 212/708-9400 or see [www.moma.org](http://www.moma.org). Exhibition complements **Mies in America**.

### **Mies in America** New York City

June 21–September 23

Exhibits work from the late career of the German architect Ludwig Mies van der Rohe, after he arrived in America in 1938. The Seagram Building in New York and the Farnsworth House in Illinois are the show highlights. At the Whitney Museum of Art. Contact 212/570-3600 or see [www.whitney.org](http://www.whitney.org). Exhibition complements **Mies in Berlin** (see preceding entry).

### **Glass of the Avant-Garde: From the Vienna Secession to Bauhaus** New York City

August 21, 2001–January 6, 2002

Exhibits the collection of 19th- and early-20th-century Eastern European glass from the Museo Nacional de Artes Decorativas in Madrid. At the Cooper-Hewitt, National Design Museum. Contact 212/849-8400 or see [www.si.edu/ndm](http://www.si.edu/ndm).

### **Flushed with Pride** Stoke-on-Trent, England

August

In tribute to that indispensable piece of ceramics: the toilet. Examines the history of sanitation, including the development of bathroom tiles and sinks. At the Gladstone Pottery Museum. Contact 44/1782 319232 or see [www.stoke.gov.uk/gladstone](http://www.stoke.gov.uk/gladstone).



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## Dates & Events

### Ongoing Exhibitions

**Frank Gehry, Architect**  
New York City

Through August 26

Exhibits work from the 40-year career of the architect and his firm, Frank O. Gehry & Associates. At the Solomon R. Guggenheim Museum. Contact 212/423-3500 or see [www.guggenheim.org](http://www.guggenheim.org).

### Conferences & Conventions

**MESH International Landscape  
Architecture Conference (EDGE VI)**  
Melbourne, Australia

July 9-11

MESH is the sixth in a series of student-run conferences. Speakers from all over the world will address landscape infrastructure in the city of the 21st century. At RMIT University. Contact 61/3 9925 3806 or [mesh@rmit.edu.au](mailto:mesh@rmit.edu.au).

**National Marketing Conference of the  
Society for Marketing Professional  
Services**

Orlando

August 8-11

This annual event draws 750 CEOs, marketers, and business developers from architectural, engineering, planning, interior design, construction, real estate, and specialty consulting firms. Contact 800/292-7677 x14 or [melanie@smps.org](mailto:melanie@smps.org).

**Restoration & Renovation**

New Orleans

September 7-8

The only trade show and conference for the rehabilitation of building interiors, exteriors, landscapes, streetscapes, and historically inspired construction. Contact 800/982-6247 or see [www.restorationandrenovation.com](http://www.restorationandrenovation.com).

### Competitions

**Construction Specifications Institute  
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# With a love of the spectacular, Swedish architects embrace supercharged aesthetic

## Correspondent's File

By Nicholas Adams

Older colleagues have often told me about their incandescent impressions of Swedish new towns in the 1950s. With their busy community centers, swift connections to town via public transport, and attractive public spaces, this was the stuff of dreams for American architects in the age of Robert Moses. Since then, few Swedish projects have created a similar stir. Sweden is reserved for the “warhorses-of-Modernism” pilgrimage (Gunnar Asplund, Sigurd Lewerentz) or those quaint models of 1950s social planning at Vällingby admired by my colleagues. What happened to Swedish architecture? To investigate this silent space, I recently spent months visiting new buildings in Sweden.

Of course, silence is an illusion created by distance. Up close Sweden has a flourishing architectural community centered around its schools of architecture and represented in its thick periodical literature. *Arkitektur* is the most widely circulating architectural monthly in Sweden; other magazines cover architecture along with interior design, and there's a rich exhibition program at the Architecture Museum in Stockholm. Added to the mix are architectural

*Nicholas Adams teaches architectural history at Vassar College. He is preparing an exhibition, to open in November 2002 at the Canadian Centre for Architecture in Montreal, on Terragni's Casa del Fascio in Como and Asplund's Law Court addition in Gothenburg.*

critics at the major newspapers, and frequent reports from abroad—excellent coverage, for example, in one of the major dailies, of the last of the ANY conferences.

If dialogue about design seems intense in Stockholm, even Stockholmers admit (through gritted teeth) that some of the most interesting architecture is being built on the west coast (around Gothenburg) and in the south (around Malmö). Three of the busiest design-oriented firms, Gert Wingårdh; Erséus, Frenning & Sjögren; and Jais-Neilsen & White have their main offices outside of Stockholm.

So what is the problem? Why does Sweden seem to be out of phase with the rest of the design world?

Look back to the period from 1965 to 1975, following the construction of the postwar new towns. With long waiting lists for apartments, the government undertook a massive building campaign using newly developed standardized building techniques. During the *rekordåren*, or record years, a million new dwellings were created, but unfortunately the values implicit in the older social housing were lost in sheer mass. It was *betong och tristess*—concrete and gloom. Just as the 1986 murder of Prime Minister Olof Palme was a watershed in Swedish life and self-image, so the *rekordåren* marked Swedish architecture.

Postmodernism, arriving in Sweden in the mid-1970s, was a welcome relief. It reconnected Sweden to a larger international

debate, making it possible to talk about Peter Celsing's shifted grid of the Riksbank, completed in Stockholm in 1976, in the same breath as Aldo Rossi or Peter Eisenman. Moreover, Postmodernism stimulated talk about an “alternative tradition” of Modernism linking Asplund directly to Postmodernism. Some architects, such as Carl

aesthetic taste didn't play well. Claes Caldenby, professor of architectural history and theory at Chalmers Technical University in Gothenburg and one of the most acute observers of the contemporary scene, was too polite to say it out loud, but I could tell he was scandalized by the “boring” buildings I liked.

By contrast, the prevailing



A swimming bath in Stockholm by Erséus, Frenning & Sjögren.

Nyrén, who first made a name in the 1950s with elegant boxes, turned to a stylistic Postmodernism in the 1970s and never returned to a Modernist aesthetic.

### Modernist boxes not in style

The Modern box has not returned to favor. Stigmatized by the *rekordåren*, the box is too corrupted by past misuse to be worth exploiting today. As I talked with architects about what constitutes “interesting” and what constitutes “boring,” it was clear, after some understated misunderstanding, that my modernistic

Swedish aesthetic sometimes seems supercharged. Martin Forsby, principal at Studio Grön, calls this a weakness for the spectacular. “Many Swedish architects use too many colors, too many angles, and too many materials,” he says. The observation rings true. In buildings like Erséus Frenning & Sjögren's Hogskola in Jonköping (completed in 2000) or Arkitekturbolaget's Emigrants' House in Växjö (completed in 1999) and developments like Nybodahöjden in Stockholm (completed in 1998) or Norra Hamnen in Helsingborg (in progress)

## Correspondent's File

I sensed a restless desire for variety. At its best, this produces an emphasis on light and materials over form. But in the extreme there is cacophony. One building used almost every material possible, including wood, stone, steel, copper, ceramic, brick, and glass, on its facade!

One who handles this spectacular quality well is Gert Wingårdh—the closest Sweden comes to an architectural star. His entry for the Oslo Opera House (1998) was in the form of a large, gold Hershey-style kiss, and his boot-shaped skyscraper for Malmö has been published extensively (though dull reproductions miss the luminescent quality of the glass skin). Wingårdh looks to the organic tradition of Nordic architecture, to the work of the Finnish architect Reimio Pietilä. Nonetheless, he sustains this spectacular quality with a sharp attention to materials and a playful

ability to surprise with unexpected gestures. And, when necessary, he is capable of restraint. He points with pride to a recent house along the west coast of Sweden that briefly calls to mind the best work of Alvaro Siza.

### Problem contractors

Underlying these aesthetic issues, however, are other problems. Almost every architect I met complained about contractors and the status of the architect on the building site. The issue goes back to the *rekordåren*. Caldenby says, "When the government approached the contractors about their plans to build one million dwellings, the contractors extracted concessions, among them the right to substitute materials 'as like' to save costs at the discretion of the contractor." Rights of access to the site were curtailed, as were change orders.

Rasmus Wærn, associate editor at *Arkitektur*, adds that in Sweden it is common for architects to be hired by the contractor and have no guaranteed access to the client. Cost savings are extracted at the price of visual effect. "When the contractor cuts costs, his solution is to use cheaper materials, changing stone to plaster on a facade, for example. The savings are illusory,

for the cost of a facade is too small a portion of the total cost to make for significant savings, and the building now requires extra maintenance. The architect, on the other hand, could save money, if allowed, by rethinking functions. Without access to the client, though, this sort of change is difficult to accommodate."

With these aesthetic preferences and special problems, Sweden's sense of isolation remains strong. I asked Mårten Claesson, principal at Claesson Koivisto and Rune, one of the hipper architecture and interior design firms in Stockholm, whether there was any Swedish architecture he thought I should see? He was silent. Was there anyone he looked at with interest? Again silence. His firm's work mines the currently fashionable vein of Eurominimalism, but his rhetorical position reveals how segments of the Swedish architectural culture feel ambiguous about themselves. Isolation and particularity are a tradition in this country. ■



An Ericsson plant in Lund, Sweden, designed by Gert Wingårdh.



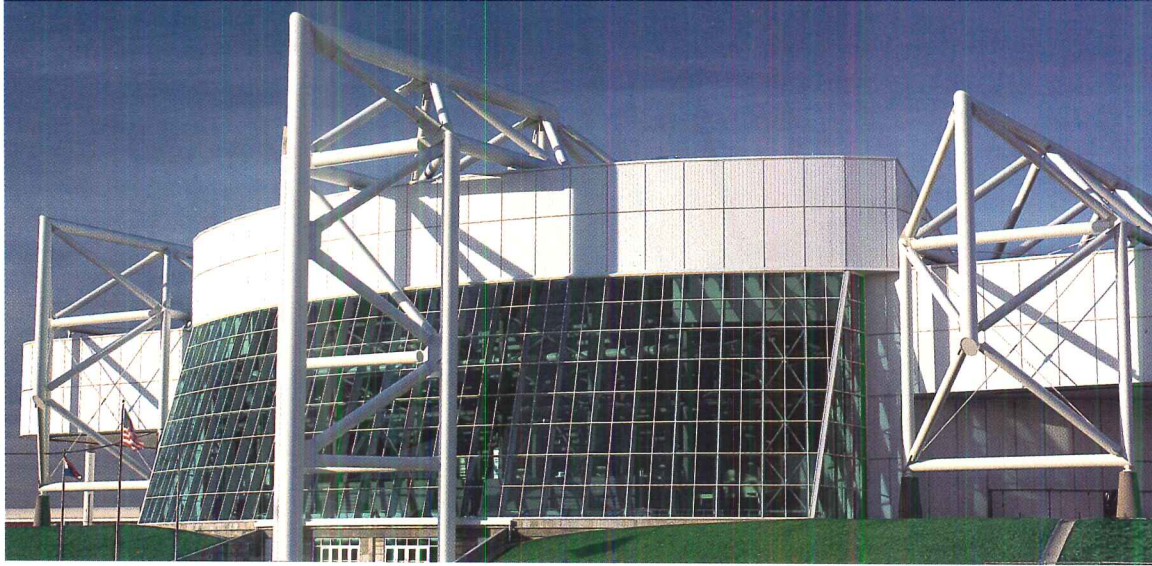
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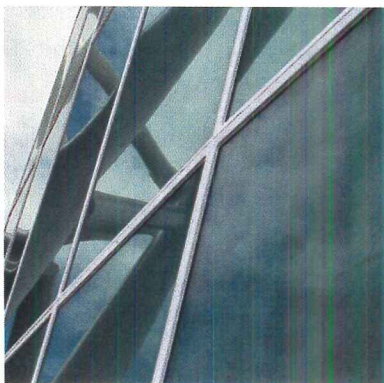
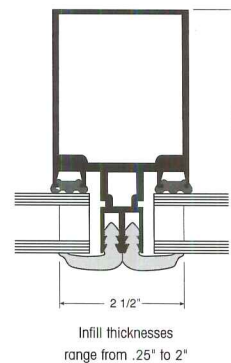
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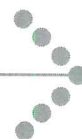


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# For and about the new generation of architects

## archrecord2

FOR THE EMERGING ARCHITECT

To see what one young architect is doing both in London and internationally, **archrecord2** takes a transatlantic vacation. We also bring you coverage of the AIA Associate Awards. And, as always, you can keep up with all four sections, **Design, Work, Live, and Talk**, on our Web site, where they all receive regular updates. Now read on!

### DESIGN

#### Alison Brooks: big ideas for Britain

Like many young architects just starting out, Alison Brooks had grand ideas about what her architecture could accomplish. Newly arrived in London, she fell into a job with the designer Ron Arad, and the firm began to work in earnest on its design for the foyer of the Tel Aviv opera.

"We were doing something in Tel Aviv which was a completely free-form piece of architecture inside a really big, corporate piece of architecture," Brooks says. "We were doing it as a kind of protest piece, and we thought that the whole world was going to stop and take notice, and hundreds of operas were going to call us up and ask us to do their next opera building, which of course didn't happen."

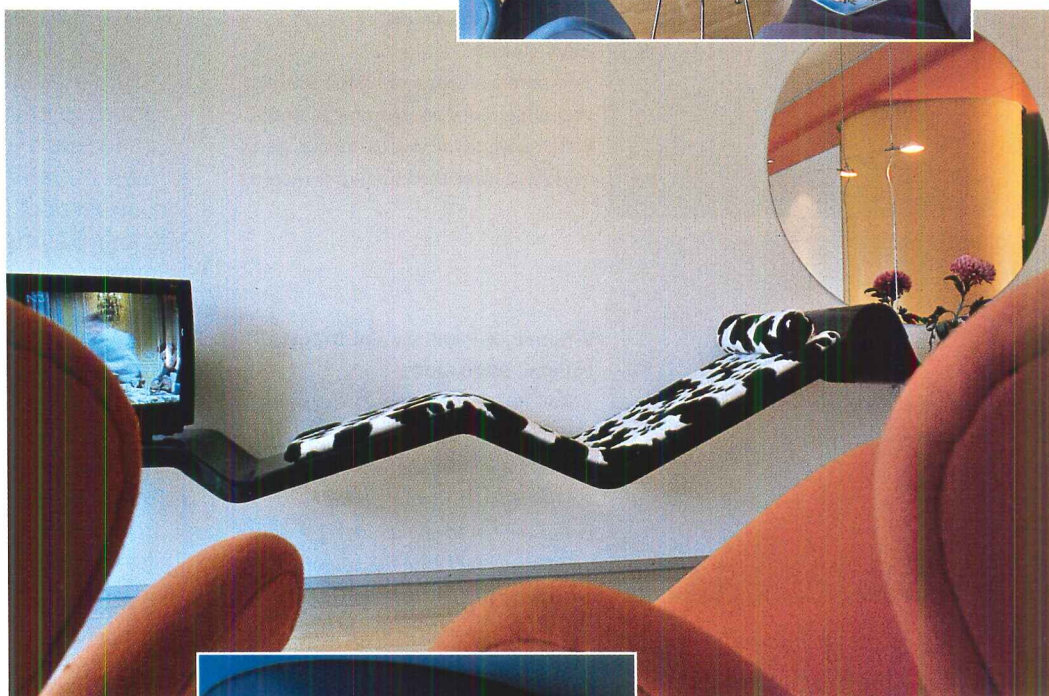
Arad and Brooks did, however, receive commissions for several other projects in London, including the restaurants Belgo Noord and Belgo Centraal, which were as celebrated for their design as for their food.

Brooks had come to London from Ontario, Canada, where she had grown up, attended Waterloo School of Architecture, and worked briefly for A. J. Diamond. She moved to London to escape the Toronto architecture scene. Working with Arad in his Covent Garden furniture showroom afforded Brooks the chance to exercise her design skills for the first time. By the time of the Belgo restaurant commissions, Brooks had become a partner in the firm, but because of her evolving design philosophy, she decided that the time had come to set out on her own.

"I wanted to address some of the big, big problems that need to be addressed, particularly in London," Brooks says. "The quality of housing and the quality of public space really suffered in the 1980s under Thatcher, and there's been, in the last 10 years in London, a movement to start investing in the public realm and looking at things that haven't been looked at in a long time: new forms of housing, sustainable housing, urban design and infrastructure—all of that stuff that Britain's been pretty far



DEPARTMENTS



**Atoll Helgoland Hotel, Helgoland, Germany, 1999**  
*Alison Brooks Architects. Brooks' first large solo commission allowed her to rethink the interior spaces of the resort hotel, from the bistro to the bathrooms to the furniture. The bar (left) was formed by carving a wedge from a cylinder. Her "Shelf Life" design for built-in guest-room furniture (above) may go into commercial production.*

continued from previous page behind on. So that was my big ambition.”

She set up her practice in a spare room of her home and sent letters to potential clients. She kept busy with some smaller jobs, including a scheme for an “egg” that was featured in a proposal for an intermodal train station in Bilbao, Spain. “These are the kinds of things you do when you’ve got a new practice and you’re waiting for the big one to walk in the door,” she says.

Then one of her letters paid off, and she was invited to design the guest rooms, interiors, and public spaces for a new resort hotel on a German island in



the North Sea. The Atoll Helgoland Hotel has brought Brooks much acclaim in Europe, as well as new commissions for everything from private homes to university buildings. So from her first grand plans to working out of her house, Brooks is once again in a position to try to correct the problems she sees in British architecture.

But even considering her concern with social issues, she is difficult to pigeonhole as a designer. “The main point I try to make,” she says, “is that the idiosyncrasies of each project drive different solutions. I really like the fact that people don’t know what they’re getting with me.”

Kevin Lerner

For more coverage of Alison Brooks, including more photos and projects, or to submit your own projects, go to [architecturalrecord.com/archrecord2](http://architecturalrecord.com/archrecord2)



V-House, X-Pavilion, and O-Port, London, 2000–2001

Alison Brooks Architects. This conversion of a 1960s house includes a stair suspended by steel mesh and original, site-specific artwork by Simon Patterson. On the same site, a pavilion and carport will echo the house’s alphabetic support column theme.

## WORK

### Associates at their best

The inaugural American Institute of Architects (AIA) National Associates Committee Awards were given at the AIA convention in Denver in May. The 2001 AIA Chapter of the Year at the Associate Level is the AIA Eastern Oklahoma chapter. Sheila Burns, Assoc. AIA, of AIA Northern Nevada was honored as the 2001 Associate AIA Member of the Year. Earning 2001 Associate AIA Member of the Year Honorable Mentions were Gail Suzuki-Jones, Assoc. AIA, of AIA Honolulu, and Christopher J. Perri, Assoc. AIA, of AIA North Carolina. F. Michael Ayles, Assoc. AIA, won the 2001 Associate AIA Special Accomplishment Award.



Ayles (left) and Burns

AIA Eastern Oklahoma has developed an array of programs for Associate members, including Architect Registration Exam (ARE) review seminars, a design charrette, site visits, and a community service project. Burns developed a library of

ARE study materials for Associates in her chapter and has encouraged fellow Associate members to complete the process to registration. Taking his own initiative, Ayles has approached the Connecticut Architecture Foundation for funding for those having difficulty paying for the ARE and has formally presented to his state’s licensing board concerning the increased cost of the ARE.

### IDP Awards

The 2001 IDP Outstanding Firm Awards were also given at the AIA convention. Gorman Richardson Architects of Hopkinton, Mass., won the 2001 IDP Outstanding Firm Award and Kling Linquist of Philadelphia was awarded a 2001 IDP Outstanding Firm Honorable Mention.

## LIVE

### Life beyond the CAD terminal

This month in the LIVE section, take a look at the architectural art of Christian Culver, an Atlanta intern architect. His award-winning mixed-media compositions, called “Coalescent Constructions,” combine pastels with architectural photography to explore contemporary perception of the built environment. This “On the Side” feature is the second in a series that also includes the furniture design of Manche Mitchell. See them both, as well as all of our other archived stories and features, on the Web.

Go to [architecturalrecord.com/archrecord2](http://architecturalrecord.com/archrecord2) for more lifestyle features and information on how to submit your own work and ideas for the section.

## TALK

### Connect with your peers

Participation in archrecord2’s TALK forums has hit a new peak with the introduction of our general questions forum and our ARE discussion group. We are quickly moving toward the establishment of a real community on the site. This month, we introduce a reader-suggested question: What architect, living or dead, would you most like to work with? (And you don’t have to say your current boss.)

Go to [architecturalrecord.com/archrecord2](http://architecturalrecord.com/archrecord2) to throw in your two cents.

# Still the bad boy, Philip Johnson looks ahead at age 95

## Interview

By Clifford A. Pearson

"After 50 years, you shouldn't do the same thing," says Philip Johnson, FAIA, describing his recent design for a multidomed, Byzantine-inspired addition to the Robert C. Wiley House, a chaste, Modernist box he designed in 1956. The comment, of course, could apply to Johnson's career in general. Architecture's great chameleon, Johnson has changed his colors with nearly every passing style—delighting the media with his nimble aesthetic and annoying colleagues who staked their reputations on the last wave. From his heralding of the International Style in 1932 to his stripped-down neoclassical designs for the New York State Theater at Lincoln Center (1964) and the Boston Public Library (1973) and his championing of Postmodernism in the 1980s and Deconstructionism in the 1990s, Johnson has always anticipated the next great thing. He has famously called himself "a whore," and some critics have agreed. As he turns 95 on July 8, he's still designing in many modes—from three-dimensional collage for a real-estate developer in New York City to whimsical historicism for a fan in Vermont. Now in partnership with Alan Ritchie, Johnson comes to his office in the Seagram Building three days a week and works on projects large and small, from New Canaan to Qatar. Recently he and Ritchie discussed their new work with RECORD's Clifford Pearson and Suzanne Stephens.

**ARCHITECTURAL RECORD:** You have projects in various stages of development all over the world—from an addition to the Amon Carter Museum in Fort Worth, Texas, to a folly in Vermont and a mixed-use, urban redevelopment project in Liverpool, England. That's a lot to juggle, isn't it?

**PHILIP JOHNSON:** It's a real dichotomy of types and scales, yes. But that's what keeps it fun. I tell Alan that as long as it stays fun, he can count me in.

**AR:** Let's talk about some of these new projects. You have a 26-story residential tower on Spring Street in Manhattan that was recently announced. It doesn't look like anything else you have designed.

**PJ:** It's all sculpture. I stacked a lot of blocks on top of each other to create a free-form sculpture that kind of recalls Dutch Expressionism from the 1920s. The blocks are Cubist forms, and each will have a different kind of brick to pick up the colors of the neighboring buildings, which are mostly 19th- and 20th-century warehouses. All of the windows will be old-fashioned double-hung windows. I call it "the revenge of the double-hung."

**AR:** Would you call this a Modern building?

**PJ (laughing):** Modern is what I say it is.

**AR:** The project is right next to the historic James Brown House, which is an early-19th-century landmark. How does your high-rise building relate to its three-story neighbor?

**PJ:** Well, it picks up the old windows

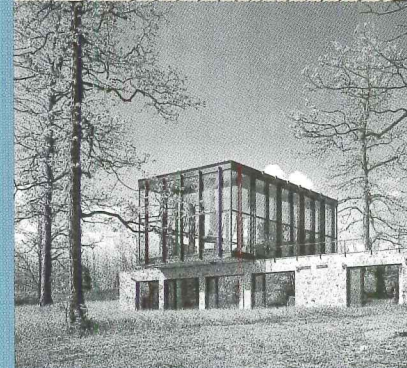
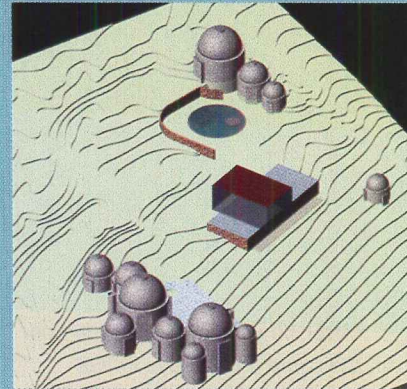
Johnson gazes from his 1949 Glass House in New Canaan, Conn., more interested in discerning the new landscape than in reflecting on his past. Quick to latch onto the latest whatever, he is now working with young firms such as Studio BAAD.



# Interview

A sampler of current projects by Philip Johnson/Alan Ritchie Architects: (1) addition to the Robert C. Wiley House in New Canaan, Conn., featuring clusters of domed structures for guest quarters, a sculpture studio, and pool facilities on either side of the 1956 residence designed by Johnson; (2) sculpture for Chuck Meyer in Vermont; (3) Chavasse Park development in Liverpool, England, with Studio BAAD; (4) sculpture for Sheikh Saud Al-Thani-Doha of Qatar; (5) apartment building for Place Vendome Realty at 320 Spring Street in New York City.

Johnson during a recent interview with ARCHITECTURAL RECORD in New Canaan, Conn.



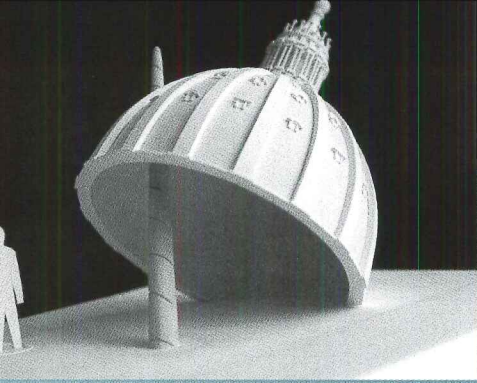
and the different colors of brick found in the area. The client, Nino Vendome, started with a sandwich shop next door, then moved into real estate. So he knows the area. Now he wants to contribute a piece of sculpture to the neighborhood.

**Alan Ritchie:** Architecture joining with sculpture—that's what we've been exploring in a range of projects over the past few years.

**AR:** Tell us about the 4,000-square-foot addition to the Wiley House in New Canaan that you are designing for a young family.

**PJ:** Well, it's a new owner and a new era, so we wanted to do something different. The addition will be two groups of domes—like clusters

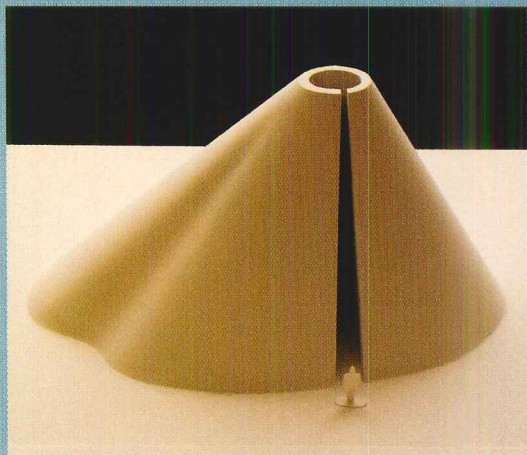




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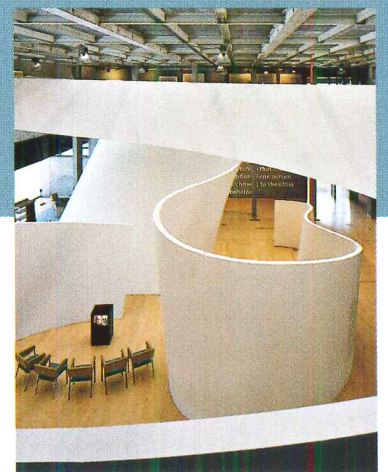
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of grapes of different sizes. Each dome will be stuccoed and a different color. Our idea is to use summer colors: red, orange, yellow. It will be like a village of Byzantine domes with no windows, just glass doors and light coming in from the top, like at the Pantheon.

**AR:** You also have two small-scale projects: a sculpture in Vermont and one for the Sheikh of Qatar.

**PJ:** The sculpture in Vermont I originally designed for my own backyard. It's the dome of St. Peter's, 20 feet in diameter and pierced by a unicorn horn. For your backyard you make a joke. It's ridiculous. The client, a man named Chuck Meyer—not to be confused with

Richard Meier—loved the idea of a folly on his property. The dome will be cast in aluminum or some kind of fiberglass. The sculpture for the sheikh will be poured concrete 30 feet high and 50 feet wide. The key to the design is the opening, the slit in the continuous form.

**AR:** You're working with a young British firm, Studio BAAD, on a big project in Liverpool. How is that going?

**Ritchie:** It's been going through a difficult process. It's a large project—over 1.2 million square feet of shopping, movie houses, recreation, and park land linking the old heart of Liverpool to the city's docks and waterfront. The docks had long been

cut off from the rest of Liverpool, and our site has been essentially a derelict park. The project goes up for city approval in September or October. The public seems to want it, but you never know what's going to happen. I figure we have a 50-50 chance of getting the okay. We're quite excited about the design, especially the roof structure, which is a swooping glass umbrella that covers but doesn't totally enclose the space. We worked with Arup on the engineering of the project.

**PJ:** The structure is like a Möbius strip, twisting and then curving back on itself. It's really quite interesting.

**AR:** Sounds a little like your own career. ■

In Rotterdam, the Netherlands Architecture Institute is presenting an exhibition "J.J.P. Oud—Philip Johnson, a Dialogue," on view until September 9. Johnson designed the curving structure in the middle of the exhibition as an homage to Oud, whose work he has long admired.

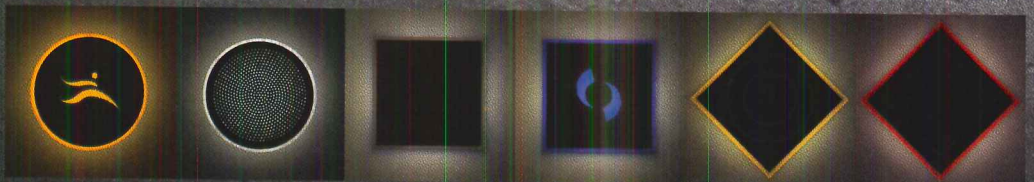


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CIRCLE 35 ON INQUIRY CARD

# Sorkin finds a model in a Tennessee small town with a genuine sense of purpose

## Critique

By Michael Sorkin

In my suburban Washington, D.C., childhood, I had a remarkable next-door neighbor, a grandfatherly figure called Bob Coe. Bob was a landscape architect—trained at Harvard—whose early career had been spent with the Olmsted brothers. A man of sincere liberalism, he signed on with the Tennessee Valley Authority (TVA) in the 1930s and was responsible for landscape design at a number of sites throughout the project.

The one that he spoke of most, though, was Norris—a planned community built in 1933–34 to house TVA workers who were building a giant dam nearby. Bob had lived in Norris, and it was there that he met and married his wife, Kay, a preternaturally kind Tennessee native who taught first grade for over 50 years. The two of them spent hours each week cultivating their beautiful garden which was, for me, a paradise—the most lovingly cultivated half acre I have seen before or since. I assumed Norris was a variation on this garden.

A couple of months ago, I finally had the opportunity to visit Norris and take a dam tour down the Clinch and Tennessee. Norris is lovely: The Garden City layout of the town is carefully informal and sensitive to the hilly topography, and it contains a number of astute spatial deployments, including a grouping of three houses around a common lawn that struck me as beautifully scaled and latently convivial.

*Contributing editor Michael Sorkin is an architect and critic based in New York City.*

Throughout the town, I thought I could recognize Bob's rich, serpentine, and layered sensibility in landscaping grown lush.

The original houses that have survived are very small and inexpensively built but have a compact elegance. One mustn't overstate the consequences of 350 houses: The current atmosphere leans toward the funky, and Norris remains a very small place with a few modest shops and services, two schools, and several TVA labs and workshops. The vibe is tender, though—even moving. Kids are wandering the pathways at dusk. Neighbors are chatting in the commons.

Here, I thought to myself, was a genuine town, built out in the optimistic idiom of interwar modernity. At Norris, and nearby Oak Ridge, there's a lingering aura of purpose that exceeds the site planning. The plan conveys a way of seeing spaces as continuities, flowing in scale from the town to the river to its watershed to regional topography to the organization of the nation and beyond. The spectacular dam down the hill and the beautifully disciplined river are there to testify to what a town can do. A place with a grounding beyond economy, this is not a company town but its flip side. Its rationalism is gentle and its layout curvy. Those curves—understood as the contour-following outgrowth of a compact with nature—reflect a strong feeling for the welfare of the environment: an ecological vision, an idea of

sympathy, not of discipline.

A recent visit to Taliesin revealed another classic intersection between form, ideology, and organization. Taliesin continues to draw both the shape and the reasons for its routine from the religio-architectural principles laid down by Mr. Wright. To the degree that these principles are complicit



Norris, Tenn., should be a model for town planning because of what Sorkin calls "its light lie on the land, its distributive dream, and its modesty."



and shared, the place works wonderfully in both its hierarchy and its collectivity. Like Norris, the architectural frame still functions adaptably despite the inevitable ebbing of the force of the cultural project of Wrightian architecture. And the specificity is superb, a complex that continuously reads its own site.

### Hyperbolic dissent

Not long after my trips to Norris and Taliesin I spoke at one of the periodic conclaves of the Congress for the New Urbanism (CNU), this one in Ann Arbor. I have had a modest career in the past few years playing Tim Leary to Andres Duany's Gordon

Liddy at these events, offering hyperbolic dissent to his neo-traditional, generic planning strategies. The argument has some merit: It's no accident that Seaside and Celebration have become icons for creepy discipline and social control, symbols of fraud and camouflage, private interest masquerading as public, the opposite of Norris.

Not living in a very civic time, we do get a huge overproduction of surrogates and appropriations of civil life—the Disney effect. How to resist? I don't suggest that we must be Shakers or rural electrifiers to find reasons for shaping townscapes. But real town life is not simply a matter of consumption, of mass customization, or even of market-driven "choice." Not an original insight but one shared, I'm happy to think, by many in the CNU. Indeed, I became skeptical of my own interlocutory position at that conference in Ann Arbor. I felt a bond with the range of projects presented by a softer, more formally

## Critique

disinterested wing, including Peter Calthorpe, Bill Morrish, and Anne Vernez-Moudon, among others.

Norris is something I think all of us might agree on: We're all trying to keep alive the idea of a town, of the next Norris. Norris is no Disneyland—it's malleable and the intentionality is soft. It was founded in a real fantasy of the

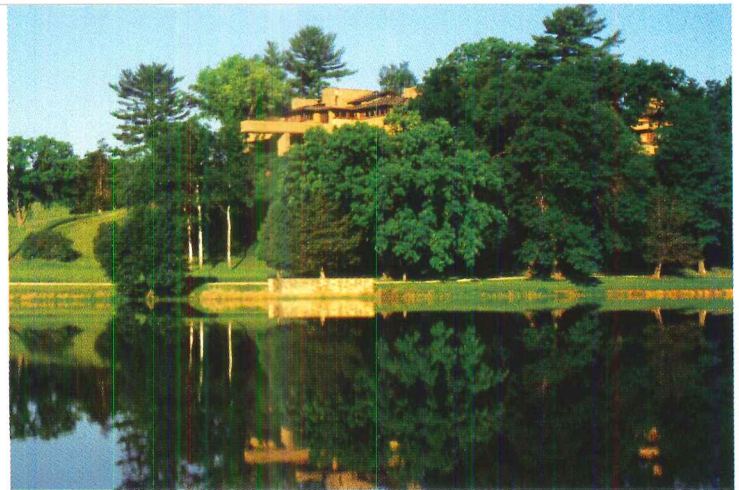
other godfathers of the experiment. Refitted now for other ways of living, Norris succeeds in its revalidation of the founding plan by contemporary events and in its retention of strong vibe and community.

There are two big issues confronting town building today, and they are the same ones that pro-

### THE SUCCESS OF NORRIS IS IN THE REVALIDATION OF THE FOUNDING PLAN BY CONTEMPORARY EVENTS.

demos. The New Deal really was a big deal for a lot of people—Bob and Kay among them. The cluster of ideologies and strategies behind it readily attached (and were shaped by) both the pastoral planning of the Garden City movement and the organizational vision in the exponential thinking of Patrick Geddes and Benton MacKaye and

duced and were addressed by Norris: environment and equity. Towns both organize and steward the environment, anchoring the natural economy. They are themselves produced from the countryside and, at the same time, they are its annihilation. Environmentally informed planning is the medium for declaring a truce.



Wright's Taliesin continuously reads its site and retains its original principles.

The recent flash of Bush terror—a scorched-earth policy from hell—showed how close to the surface the paranoia about recolonizing hard-won boundaries for sprawl is. This is a true civil emergency, and planning is the only answer.

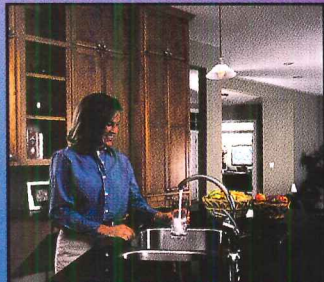
#### Equity in property

Planning always engages questions of equity. In America, equity resides in property, and a town plan represents its division. But a real town creates a proprietorship that

exceeds property: Town plans are the medium of negotiation between public and private rights, and freedom and power are as legible as can be. The plan is the medium for quantifying parity or scarcity—of space, of environmental quality, of architecture.

The beauty of Norris lies in its smooth enclosure of these desires. Its light lie on the land, its distributive dream, its modesty, and its aspirations for a culture and region larger than itself make it a model. ■

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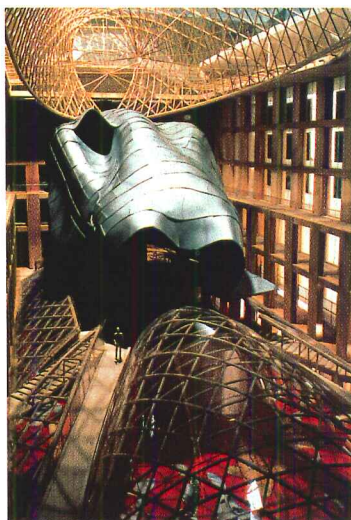
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# Opposite attractions: two shows, two venues, two views of the world of design

## Exhibitions

### The Architect's Architect

Frank Gehry, Architect, at the Solomon R. Guggenheim Museum, through August 26. Curated by J. Fiona Ragheb and Mildred Friedman.



Frank Lloyd Wright was a household name by the time New York's Guggenheim Museum opened in 1953. Almost half a century later, Frank O. Gehry gained a similar universal name recognition when the Guggenheim Museum in Bilbao, Spain, opened to a standing ovation heard around the world. But proof that Gehry has become a branded entity, to borrow from marketing parlance, registered when his named was dropped on the television drama *Ally McBeal*. In an episode involving divorce proceedings, an architect is struggling to downplay his professional success in an effort to escape a costly settlement. At one point, the architect's attorney leaps to the aid of his client and shouts, "Hey, he's no Frank Gehry!" The writers obviously

assumed that the audience would get it.

A chronicle of Gehry's ascension from iconoclast to cultural icon is currently on display at the Guggenheim Museum in New York. Curated by J. Fiona Ragheb and Mildred Friedman, the retrospective occupies the museum's entire spiraling rotunda, which, as everyone knows, was designed by fellow cultural icon Frank Lloyd Wright. Forty projects covering four decades are on view—furniture, houses, museums, performing arts centers, university buildings, and corporate headquarters. Hundreds of models, but relatively few drawings, demystify to a certain extent his seemingly idiosyncratic design process, revealing a discovery, rather than an invention, of form which is at once cerebral and visceral.

Gehry has always pushed the building envelope with daring angles and jarring intersections, from his now legendary Santa Monica house renovation (1978) to the Ray and Maria Stata Center at MIT (1998–), the grand finale of the retrospective. But his vocabulary changed from planar to undulating with the Vitra Design Museum in Weil am Rhein, Germany (1987–89). This turning point created a need for technology that could aid in the design and fabrication of increasingly complex forms. Partner James Glymph discovered CATIA, a three-dimensional

modeling program used in aerospace engineering. Every project since the Fish Sculpture at Vila Olimpica (1989–92) has been executed using this technology.

The real pleasure for architects will be the occasional presence of the DNA code for Gehry's buildings—working drawings. Almost lost among the virtuosity of models and videotapes are complete sets of blueprints for three projects: Nationale-Nederlanden Building (1992–96), the Performing Arts Center at Bard College (1997–), and the Stata Center. The heart of the architect races. Here, the interface between CATIA modeling and traditional documentation is revealed to be almost seamless. The documents are exquisitely detailed. CATIA axonometrics describe the complex geometries with amazing logic.

The only disappointment is the large aluminum-mesh panels hanging from the skylights of the rotunda. Intended to recall the industrial materials of Gehry's early work, they're redundant in this richly documented context. As a matter of fact, they're vaguely reminiscent of a smoke screen, an unfortunate analogy.

There are grumbings that Thomas Krens, the museum's director, mounted this show as a public relations ploy to garner

**Computer rendering of the DG Bank Headquarters in Berlin (above left). View of the exhibition with aluminum-mesh panels in the rotunda (right).**

financial and political support for the next Gehry Guggenheim on the banks of the East River in Lower Manhattan. Granted, Gehry's scheme for the new museum occupies the first room of the show with seven study models and a large presentation model of the final design. And granted, Krens doesn't curb his ambition in his introduction to the show's catalog, when he prophesies that it "could come to be regarded as his greatest project of all." Still, it's hard to fault him. The success of Bilbao in no way ensures that New York will coddle the architect or his ambitious scheme, as the powers in Bilbao did. Krens will still have to raise millions and maneuver through the byzantine bureaucracies—city, state, and federal—that govern, and often stifle, development of the island city's waterfronts. If this retrospective gets it built, then good.

Sara Hart



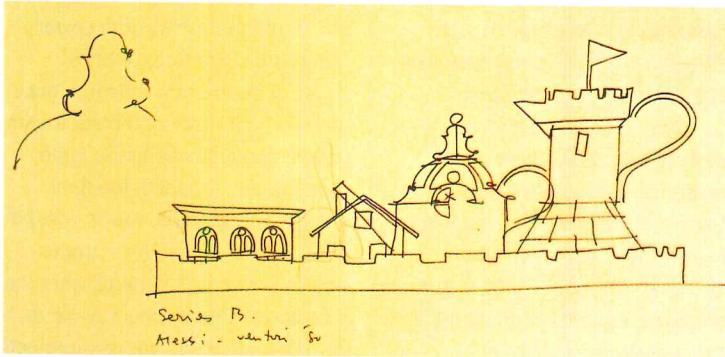
## Exhibitions

### Go for Baroque

Out of the Ordinary: Robert Venturi, Denise Scott Brown and Associates Architecture, Urbanism, Design, at the Philadelphia Museum of Art, through August 5, 2001. Organized by Kathryn B. Hiesinger with David B. Brownlee and David G. DeLong

As a longtime admirer of the work of Venturi Scott Brown and Associates (VSBA) and the tireless intelligence of its partners, Robert Venturi and Denise Scott Brown, I've long won-

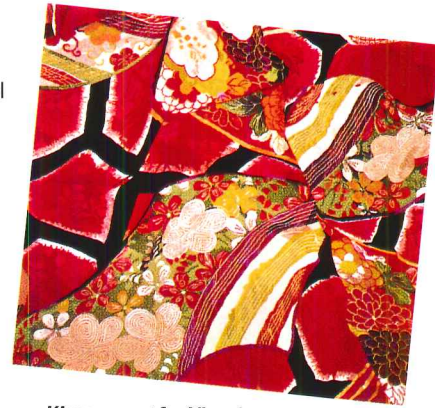
dered why they lost their once razor-sharp theoretical edge. Here's the team that so successfully skewered three decades of architectural pretensions. In the last few years the



Tea and coffee service for Alessi, 1980-83.

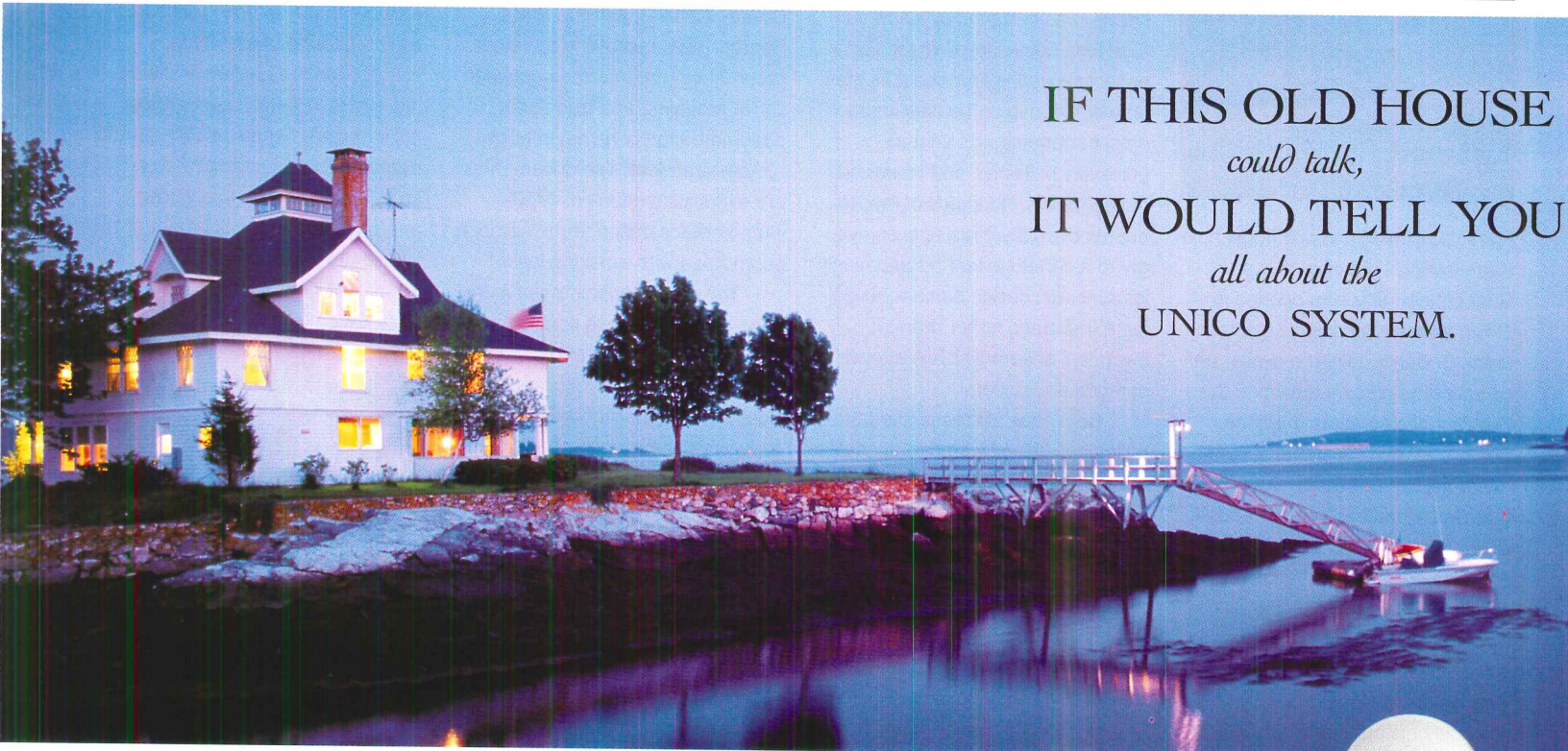
built work has achieved greater refinement, while on the theoretical side the "gentle manifesto" of the early years has segued into a defensiveness (on display in this exhibition in a room of VSBA's own design) as they have drifted to the outer edges of theoretical debate. Seeing the 40-plus-year body of work all together gave me a clue. In the early work, there's a layering of wall surface, a playing of inside against outside, and an experimentation with large sculptural gestures that makes such projects as the unbuilt town center for Canton, Ohio, gutsy, passionate, poignant, and elegiac. You can see the connection to the theatricality and the spatial richness of Baroque Rome, which Venturi opened our eyes to in his classic book *Complexity and Contradiction in Architecture*.

But this plasticity has drained out of the firm's work over the years. Their famous notion of the decorated shed—the building as a box with information applied to it—may have



Kimono rug for V'soske, 1989-93.

straitjacketed their development. An ambivalence toward the three-dimensional aspect of the building comes through, a seeming fear that too much sculptural development will be seen as capitulation to the enemy (formerly the histrionic shapemaking of Paul Rudolph, now the invading blobmeisters). The Mannerist pilasters that skid across the facade of their celebrated Sainsbury Wing of the National Gallery in London just don't sweep you off your feet the way real Mannerism does. One of Venturi's sketches stopped me in my tracks,



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**The Unico System**

CIRCLE 39 ON INQUIRY CARD

though. It is of a lone column outlined in black felt marker against a scribbled red Miesian grid. This became the Charles P. Stevenson, Jr., Library at Bard College, and that lone column somehow had a poignancy that never came through in the finished building. So my admittedly hubristic advice for Robert Venturi and Denise Scott Brown is to succumb to the curves and the cantilevers, or at least go more gutsily for Baroque.

I doubt they'll take my advice. They know that owners want cheap boxes, and, as the partners have frequently pointed out, architects continue to ignore the possibilities in iconography, popular culture, and symbolism. In regularly taking their colleagues to task for these failings, the partners have assumed something of a moral high ground. But here they lie stranded as the currents of theory have flowed elsewhere.

People who promote theories tend to build buildings no one can occupy. This cannot be said of VSBA, which has loyal clients, especially among prominent universities,

precisely because of Scott Brown's sensitive planning (see the gorgeous University of Michigan analysis) and the graphic brilliance Venturi has always been able to deploy. Applied to the facade of a 1988 hotel for Disney in Paris, for example, is an extraordinary Pop Art explosion—a Las Vegas-derived sign that radiates the childlike joy of a brightly colored toy. (It was attached, however, to a V-shaped structure that proclaimed its budget-driven banality perhaps too overtly for the Imagineers' comfort. It was not built.) The show joyfully celebrates the sketches, collages, and other graphics used by the firm. (Many look far more glorious in the original than they ever looked published.) Even the computer has been deployed to brilliant and original effect.

#### Curatorially impaired

On view are many projects that defined turning points for the firm and for architecture: the early beach houses, the National Collegiate Football Hall of Fame, the Yale

University Mathematics Building proposal, Gordon Wu Hall at Princeton, the State Mosque in Baghdad. The plurality of style and approach that makes ours an unusually rich era of architectural innovation was to a great degree unleashed by Venturi's and Scott Brown's critical acuity. But their influential role is hard to sort out in this exhibition. It's organized

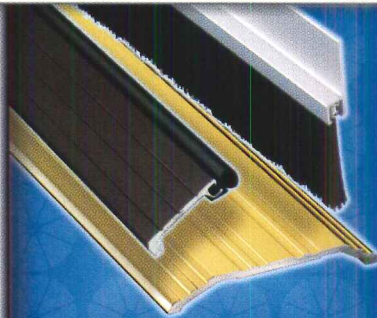


Sheraton chair for Knoll, 1978–84.

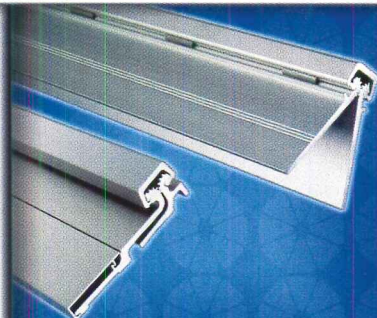
like a firm brochure (by building type) rather than chronologically or thematically. How do we understand the firm's contribution except by some discussion of the storms of controversy their views have often aroused? The ultra-respectful exhibit and catalog, as well as the dry gallery presentation, suggest an almost placid career trajectory. The arrangement of objects and the lack of information on wall cards (many are undated) obscure the progression of design intent even when multiple versions of projects are shown.

The presentation of the firm's decorative arts adds a livelier note, suggesting that VSBA could give Michael Graves and Martha Stewart a run for their money in the discount-chain housewares department. (Don't miss the gift shop, including the light-up "I am a monument" baseball cap.) These pieces are emblematic of the intriguing tightrope the partners have always walked: about but never of popular culture. They teeter; we gasp; they still have the power to amaze.

James S. Russell, AIA



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CIRCLE 41 ON INQUIRY CARD

Photo by Louis Rohl - Sienna, Tuscany Italy





By Jane F. Kolleeny

The Norwegian coastline is marked by surf beaches, sheer rocky shorelines, spectacular fjords, and over 3.5 million islands. Set against such remarkable contrasts in beauty are the 365 largely uninhabited islands that make up Kvitsoy, located off the west coast of Norway, near the city of Stavanger.

On one of only three inhabited islands in the group, a rustic fishing village, also named Kvitsoy, is home to the Coastal Traffic Center, a fortresslike structure designed by Jarmund Vignsnaes Architects, of Oslo. The traffic center guides ships in the area and controls the nautical traffic using eight radar sites located along the coast.

The project was the result of an invited competition in 1997 and was completed in 2000. A tiled slate "coat" and additions in length and height cover an existing 1980s white-boarded pilot station, still visible behind the new structure. There is an interplay between the existing structure and the Viking-like shield that covers it, anchoring it firmly in the rich history of the area.

## Tranquil island hosts Norse-like nautical pilot station

## Snapshot

The ground floor comprises sleeping quarters, wardrobes, and a canteen. Offices with meeting rooms are organized on the first and second floors. Additional sleeping quarters, with a living room for employees on duty, are located in the first-floor addition, together with technical facilities. There is a control room on the third floor with 360-degree views of the breathtaking coastal panorama. A roof terrace for visitors sits atop the structure, with external access from the south.

The expansion results in a more efficient use of space, with minimal site interference. The sculpted volume closely integrates the structure with the topography of the island, the dramatic rocky coastline and crevices, the nearby lighthouse, and the quaint architecture of the fishing village.

"Our wish was that the result would convey ambiguity, uncertainty—perhaps doubt is a better word—about the building," says principal designer Einar Jarmund. "Our primary goal was to establish a multitude of themes in the final building, so that it is at once part of the landscape, part ship, and part reference to coastal objects. This includes the lighthouse, the beacons, and the roofscapes of nearby buildings." ■



**Kvitsoy boasts a wealth of attractions, including Viking-age historic sites and a lighthouse. The Coastal Traffic Center stands like a wary parent in the background of the sleepy fishing village.**





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# up top

## Scandinavia's modernist architectural identity is not so monolithic

By Thomas Mellins

**P**hilip Johnson and Henry-Russell Hitchcock may have envisioned architectural Modernism as an “international style,” but in Scandinavia, it has always been firmly rooted in a sense of place. While the Scandinavians did not single-handedly invent Modern architecture, nobody does it better. No one has more convincingly shown that Modern architecture can embody enlightened social policy, or practically demonstrated that it can provide physical comfort, even in a harsh natural environment. Perhaps most strikingly, no one has done more than the Scandinavians to popularize Modern architecture throughout the world. “Scandinavian Modern” instantly conjures up a “look,” even for people who cannot name a single Scandinavian architect. Indeed, throughout the 20th century, in the hands of Denmark’s Arne Jacobsen and Jørn Utzon, Sweden’s Erik Gunnar Asplund, and perhaps most profoundly, Finland’s Eliel Saarinen and Alvar Aalto, the emerging language of Modernism was delivered in a voice with a character all its own—one that was at once quiet and impeccably enunciated. And the early Scandinavian Modernists displayed a genius for transforming the quotidian into visual poetry. In general, they eschewed the monumental in favor of what Eric Messerschmidt, director of international affairs and communications at the Dansk Arkitektur Center in Copenhagen, has called a “focus on the architectural settings of daily existence.” Because of this, he adds, “public buildings and housing have traditionally been the preferred

projects, while commercial projects have been considered by many architects not to be fully ‘proper’ work.”

So powerful and well known is the Scandinavian Modernist legacy that today the region’s architects are at risk of being merely watered-down imitators, unable to establish their own point of view. Yet, the quality of contemporary Scandinavian architecture remains unquestionably high. A few architects are famous: Norway’s Sverre Fehn was awarded the Pritzker Architecture Prize in 1997, and the work of both Sweden’s Johan Celsing and Denmark’s Henning Larsen has been seen on the pages of architecture magazines around the world. The rest, a cavalcade of young, talented architects, are producing excellent work, yet only people very much in the know can name them. William Morgan, professor of architecture at Roger Williams University and editor of *Heikkinen & Komonen* (Monacelli Press, 2000), suggests that this may be the case because Scandinavian architects tend “not to shout.” Their work, he further notes, “is not in your face like some contemporary Dutch architecture.” Indeed, in this way, they keep faith with their progenitors.

Although much of the current work is firmly grounded in the tenets and traditions of Scandinavian Modernism, it is now being created within a political and cultural context that has changed radically since the fall of the Soviet Union. (continued on page 78)

Thomas Mellins, an architectural historian, cowrote *New York 1880*, *New York 1930*, and *New York 1960*.



**Johan Celsing's Art Gallery at Millesgården in Stockholm emerges as a sensitive interplay between old and new.**

National Environment Centre in Albury, New South Wales, joins a wave of green designs.



**A**rchitecture in Australia today is an intriguing balancing act, set in motion by changing perceptions of the country's place in the world and opposing responses to the natural environment.

Seen from America or Europe, Australia is a distant shore. Its isolation from the Old World, of course, is what prompted the English government to ship the first group of 750 convicts to New South Wales in 1788. But the telegraph, air travel, and now the Internet have changed our notions of distance, so that Melbourne and Sydney no longer seem so far removed from New York or London.

Once an outpost of the British empire, Australia absorbed waves of southern and eastern European immigrants through much of the 20th century and is now discovering that its proximity to Asia and its growing population with Asian roots can be assets. Spend a few days eating in any of the country's major cities and you'll discover the polyglot sources of ingredients and techniques shaping modern Australian cuisine. The same is true with its architecture.

"Australians have always seen themselves as being outside the centers of power," explains Graham Jahn, a Sydney architect who is currently the president of the Royal Australian Institute of Architects. In previous centuries, that meant being the last to receive a new style or influence. In an age when drawings

and digital images can skip from Melbourne, Florida, to Melbourne, Victoria, in less time than it takes to turn a page, this distance is more psychological than temporal. Today, being on the periphery of power allows Australian architects to filter and alter foreign influences so they have a particularly local flavor. As a result, modernism Down Under is tempered by a mostly benign climate and a laid-back culture that doesn't let anyone take himself or herself too seriously. The strident aspects of modernism found elsewhere are replaced by a more easygoing sensibility that takes advantage of local materials and informal lifestyles. So houses by Glenn Murcutt, Andresen O'Gorman [APRIL 1999, page 138], Sean Godsell [OCTOBER 2000, page 208], and other Australian architects employ the forms and abstract language of modernism but soften them with screens, louvers, natural materials, and outdoor spaces. The houses are often boxes, but much more permeable, more open to the outdoors than their European cousins.

#### **A streak of independence**

Australia's distance from European sources also provides its architects with "a freedom from conservative attitudes and entrenched historicism," says Jahn. And the country's history as a new frontier has encouraged a strong streak of independent thinking and identification with the pioneer, the person who wanders off the beaten track. "There's a strong sense of the individual in Australian culture," states Romaldo Giurgola, FAIA, who has lived and practiced in Australia (continued on page 79)

Australia's  
brand of  
Modernism is  
rooted in  
the local  
landscape

down  
under



1



2



3

## UP TOP *continued from page 76*

Economic globalization means, on the one hand, we increasingly wear the same fashions, watch the same television programs and movies, and idolize the same pop stars. On the other hand, globalization has sparked ethnic and nationalist resurgence; groups that once appeared seamlessly integrated into the international community have raised their voices.

In Scandinavia, national distinctions, as well as a sense of competition between the constituent countries, have intensified. Many outside observers still mistakenly view the region as more cohesive and less in ferment than it is. Far from being the single nation that some 19th-century statesmen imagined it would become, Scandinavia is not even fully represented within the European Union: Norway and Iceland have refused to participate, Denmark and Sweden joined with great reluctance, and only Finland easily embraced it.

### Globalism and particularity

The contradictory effects of globalism help pose the principal question now facing Scandinavian architects: What happens to a sensibility and tradition, so central to the 20th-century architectural canon, in the face of dramatically altered 21st-century economic and political realities? Looking back in time across the 20th century, during which each Scandinavian nation transformed itself into a modern welfare society, helps put the region's current architectural activity in perspective. Denmark, a trading nation with 4,000 small islands, retained its decentralized economic structure in the face of

increased industrialization. Its large number of urban craftsmen, who tended to focus on detail, maintained significant control over building activity. In Sweden, a comparatively large industrialized economy, unimpeded by World War II because of the country's neutrality, rested on the shoulders of a few corporate giants: Saab, Volvo, and Electrolux. The Swedish building industry was similarly structured, and the concentration of power among a select number of companies was accompanied by a diminution of the architect's power and influence. Today, the Swedish architect is to a large degree a consultant to the building industry. In Norway, despite a high degree of wealth brought about by the oil boom of the 1970s and enjoyed by both the public and private sectors, the building industry and the architectural community remained small, and there have been more opportunities for collaboration among architects than in other countries. Iceland, a part of Denmark until 1947, has continued to rely heavily on rurally derived, traditional architectural forms and building types. The nationwide absence of an architecture school, however, has resulted in all Icelandic architects being educated abroad, and, consequently, in a surprisingly sophisticated and internationally informed output.

What role does the rich architectural tradition of the recent Scandinavian past exert today? Messerschmidt argues that whereas in the 1980s Scandinavian Modernism was relegated to discussions of *(continued on page 80)*

Three of the five Nordic embassies in Berlin include the Norwegian Embassy (1), by Snøhetta, of Oslo, Norway; the Royal Danish Embassy (2), by 3xNielsen of Copenhagen, Denmark; and the Chancellery of the Royal Swedish Embassy (3), by Wingårdh Arkitektkontor, of Göteborg and Stockholm, Sweden.

**DOWN UNDER** *continued from page 77*

since completing the country's Parliament House in Canberra in 1988. Such an attitude helps explain both Ashton Raggatt McDougall's wildly nonconformist renovation of historic Storey Hall in Melbourne [NOVEMBER 2000, page 106] and the bush architecture of Gabriel Poole in Queensland, Ken Latona in Tasmania (see article, page 104), and Troppo in the Northern Territory.

"What distinguishes Australian architecture is a combination of a unique cultural history of independence and larrikinism [rowdiness] mixed with a strong and characterful landscape," say Lindsay and Kerry Clare, a husband-and-wife team of architects who started their careers in Queensland, then worked for two years with the government architect of New South Wales (the state that includes Sydney). Although not exactly rowdy, the Clares' design for the National Environment Centre, done with the NSW government architect, exhibits the kind of rugged engagement with its setting that Australians admire. It also serves as a prototype of green design.

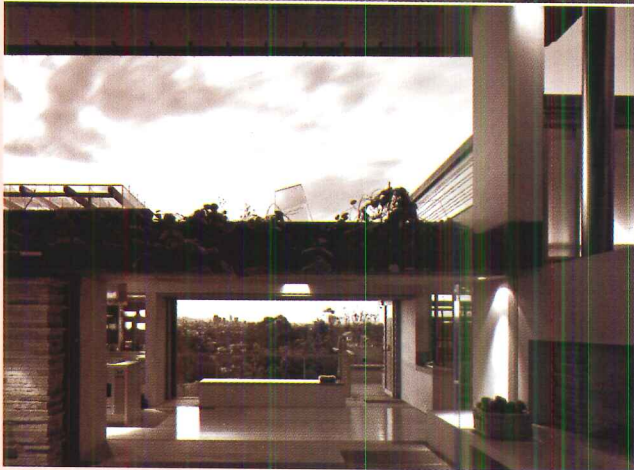
In a country blessed with scenic coastlines and remarkable physical beauty, it's not surprising that the relationship to the land has been a critical factor in architecture's development and expression. Chris Johnson, the government architect of New South Wales, explains this relationship in the book *Australian Architecture Now* (coauthored with Davina Jackson). Johnson states, "Two opposing concepts guided Australian architecture towards the end of the 20th cen-

tury. One led to structures that stand upon and hover above the ground to show separation and superiority. The other generated buildings that come from and merge with their contexts. Both approaches continue the eternal struggle between humans and the land. The first idea leads to architecture that, like a bridge, touches the earth lightly and displays clean, modern technology in simple and mostly rectangular forms oriented to the sun. The second is represented by buildings that remould the earth in flowing forms, displaying the craftsmanship of local materials."

Touching the earth lightly is most clearly identified with Murcutt, whose Sydney-based practice accepts only a limited number of commissions each year. His buildings, especially his houses, usually rest on columns or piers instead of solid foundations, employ traditional methods for capturing daylight and breezes, and use materials found in vernacular buildings. A younger generation of architects that includes Peter Stutchbury, Latona, the Clares, and Troppo has absorbed Murcutt's ethic and is busy applying it to projects around the country.

A project that tries to combine the light touch and the more solid and grounded approach that Johnson mentions is the C House (1) on the outskirts of Brisbane in Queensland. Designed by the firm Donovan Hill, the house sets a series of wood-and-glass pavilions atop a cascading base of poured-concrete walls, courts, and terraces. Sixteen flights of stairs lead up, around, and about the sprawling residence, built for a bachelor. According to Jahn, Donovan Hill—along with Neil Durbach in Sydney—brings "a (continued on page 82)

**Donovan Hill's C House (1)**  
in Brisbane places a series of pavilions on top of an artificial landscape of concrete terraces. The Scientia at the University of New South Wales (2), by MGT (formerly Mitchell/Giurgola & Thorp), exemplifies a kind of expressive Australian individualism that Romaldo Giurgola admires.

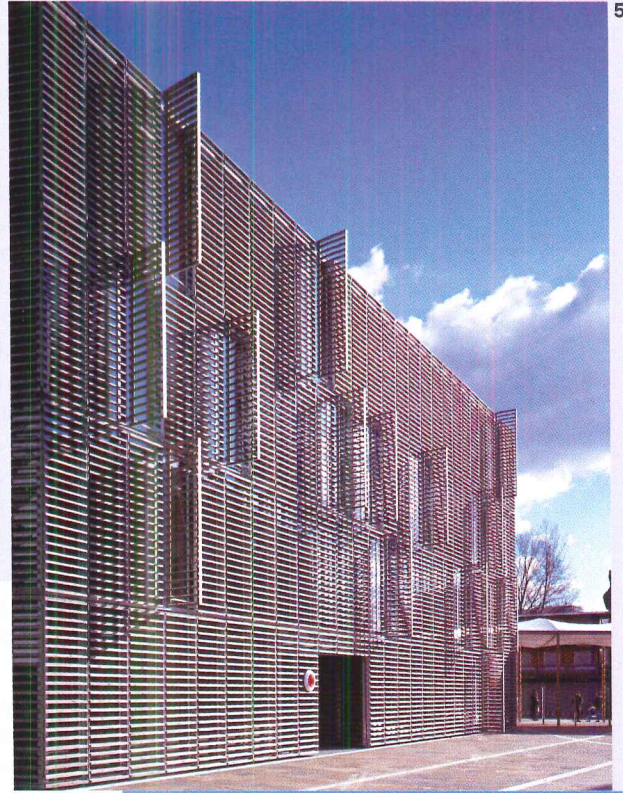


PHOTOGRAPHY: © JOHN GOLLINGS (2); TIM LINKINS (3)

1

2

down  
under



**UP TOP** continued from page 78

history in Denmark, now its principles are treated as part of the ongoing discourse. In Norway, some architects reputedly have stated that using wood, once a hallmark of the regional sensibility, can seem “kitsch.” As Bjorn Larsen, editor-in-chief of the Norwegian magazine *Byggekunst*, put it, “Nostalgia for Modernism can be just as nostalgic as other forms of nostalgia.” Rasmus Wærn, an editor at the Swedish journal *Arkitektur*, points out that Sweden’s connection to its own Modernist past is somewhat different from that of the rest of Scandinavia. Sweden, he contends, had a “stronger Postmodern reaction,” linked to its own “crisis of the welfare state,” and subsequently the profession suffered from a collective loss of confidence. Pointing to the highly positive response that Swedish designers received recently at an international exposition in Milan, as well as to the strength of the work itself, however, Wærn hypothesizes that the time may have come for young Swedish architects and designers.

**Competition for the Alvaristi**

In Finland, the “scene” was for decades dominated by Alvar Aalto. His image even appears on paper currency. William Morgan asserts that, following Aalto’s death in 1976, “there was more room for people who were not ‘Alvaristi.’” Harri Hautajärvi, editor-in-chief of the journal *ark-Arkitehti*, notes, “While it is easy for young architects anywhere to feel stymied by a lack of compelling projects, luckily we have many architectural competitions in Finland—many of which are open to young

architects and students.” Despite the significant differences between the Scandinavian countries, one fascinating architectural complex, completed in 1999 and located, ironically, not in Scandinavia, but in Berlin, shows that cooperation does not necessitate a loss of cultural identity.

The building group, wrapped by an undulating, four-story-high copper wall, contains five separate buildings, each housing a national embassy. Stressing the intrinsically multinational dimension of the project, an Austrian-Finnish firm, Berger & Parkkinen, was responsible for the overall concept, including the inventive site plan, as well as the design of a common building serving all five nations. The stylistically referential Danish Embassy was designed by the firm of 3xNielsen, the sleek Swedish Embassy by Gert Wingårdh, the dramatically colored Icelandic Embassy by Pálmar Kristmundsson, and the Finnish Embassy (not surprisingly, evocative of Aalto’s work) by VIIVA Arkkitehtuuri Oy. The Norwegian Embassy was designed by Snøhetta, a firm whose main office is located in Oslo, but whose three principals—Craig Dykers, Cristoph Kapeller, and Kjetil Thorsen—hail from the U.S., Austria, and Norway, respectively. Seen as a whole, the embassies powerfully reflect the vitality of contemporary Scandinavian architecture. Whether the complex’s insistent, if somewhat strained, maintenance of distinctive national architectural identities within an overarching regional sensibility will find further expression in Scandinavian architecture remains to be seen. ■

**Additional Nordic embassies in Berlin include the Icelandic Embassy (4), by Pálmar Kristmundsson of Reykjavík, Iceland, and the Finnish Embassy (5), by VIIVA Arkkitehtuuri Oy of Helsinki, Finland.**





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**DOWN UNDER** *continued from page 79*  
 molded, tactile design approach” that is both sensual and organic.

**Urban competition**

For a country of just 19.2 million people, Australia has marked differences in architectural expression from one region to another. “I doubt the utility of the term *Australian architecture*,” states Leon van Schaik, deputy vice chancellor of the Royal Melbourne Institute of Technology (RMIT) and head of the school’s architecture program. “It makes more sense to think of the architecture of the city-states that form the federation of Australia. The tradition and the discourse in the different cities are shaped strongly by the intellectual history of each city and by the very different climates and social origins,” adds van Schaik.

While Sydney is blessed with its spectacular natural setting and a few landmark structures, such as the Harbor Bridge and Jørn Utzon’s Opera House, Melbourne has the more robust architectural community these days. Firms such as Denton Corker Marshall, Wood Marsh, and Nonda Katsilidas have given Melbourne a host of dynamic and colorful new buildings, including the Melbourne Museum [JANUARY 2001, page 70], Bourke Street Bridge, and Melbourne Terrace apartment block. At the same time, practitioners such as Godsell and John Wardle (see page 114) have contributed more subdued but elegant designs. In Sydney, classic modernism still lives, as seen in the courtyard housing units of Alex

Popov, the stripped-down residences of Engelen Moore (page 108), and the apartment towers of Harry Seidler (3).

“There has always been creative tension between Sydney and Melbourne,” explains Giurgola, with Sydney architecture tending to be more commercial and Melbourne’s more intellectual. Giurgola sees this rivalry as a good thing, likening it to that of Florence and Venice during the Renaissance. “All of Italian art comes from provincial competition,” states Giurgola.

**Still close to the landscape**

While Australia’s head may be in Melbourne and its wallet in Sydney, its heart is probably in the bush and along the shore. Building in rugged places has given Australian architecture a strong environmental ethic and a deep respect for the land. “The language driving Australian architecture is still rooted in a sense of place,” says Jahn. “The proximity of the original landscape to our cities exerts a powerful force on us. Australia is very urban statistically, but not psychologically. To us, the landscape is never really far away.” ■

**Suggested reading**

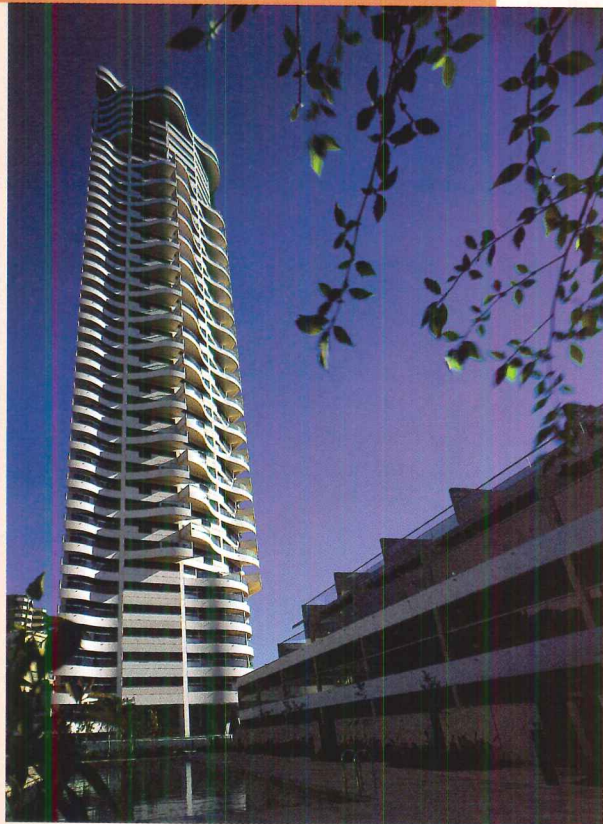
**Australian Architecture Now**, by Davina Jackson and Chris Johnson. Corte Madera, Calif.: Gingko Press, 2000, 258 pages, \$75.

**Local Heroes: Architects of Australia’s Sunshine Coast**, by Peter Hyatt. Sydney: Craftsman House, 2001, 224 pages, \$45.

**Denton Corker Marshall: Rule Playing and the Ratbag Element**, by Haig Beck and Jackie Cooper. Basel: Birkhäuser, 2000, 252 pages, \$70.

**Heikkinen + Komenon**, edited by William Morgan. New York: Monacelli Press, 2000, 192 pages, \$40.

Sydney area: the Horizon by Harry Seidler (3); Grant House by Graham Jahn (4), and Peter Stutchbury’s Link Building at Newcastle University (5).



3



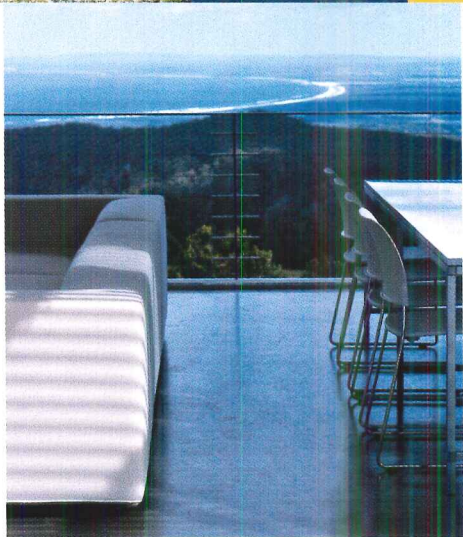
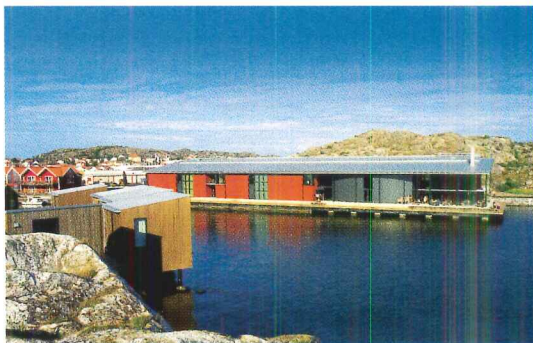
4



5

down  
under

# up top in Scandinavia, modernism varies with clime and country, while in Australia, design makes a case for place down under



**Two oceans, worlds apart.**  
**Nordic Watercolor Museum,**  
**Skärhamn, Sweden (top).**  
**Rose House, Saddleback Mountain,**  
**New South Wales, Australia (above).**

**T**his high-speed world is shrinking. As it picks up velocity, lands formerly confined to the margins—the archipelagos, the minor continents—have joined center stage, propelled by global economic forces, mass communications, cheap transportation, and a pervasive electronic intelligence über alles. Suddenly, the periphery has leaped from backwater to mainstream, informing and feeding and energizing us. We look to the margins for ideas.

Examine these extremes, lest you doubt. Surprisingly, Scandinavia and Australia share certain similarities, including maritime cultures with urban coastal centers and landforms that luxuriate into broad uninhabited zones. Their frontiers, like our own, continue to affect the collective imagination, and the soul, of the people. While the Scandinavian tradition may be older, both Up Top and Down Under are making remarkable contributions to contemporary architecture.

For the past couple of years at RECORD, the number of powerful projects from Down Under had been mounting; we realized that something was brewing outside the Foster's lager. While we had become thirsty for more of the Murcutt school, (eco-friendly, supremely sited, up from the landscape), we noticed diverse types bubbling up, projects that spanned from cool orthodox Modernism to a kind of unnamed Postmodernist bravado.

As we prepared this issue of RECORD, our preconceptions crumbled. Up top, we peeled back the layers of an apparently cohesive Scandinavia and found five distinct nations struggling with national identity. Today they display individualistic responses to place, including scale, materials, and even construction techniques. Look at Denmark and Sweden. While the Malmö bridge now links the two and they share the same limpid summer light, the Danes have incorporated a more modest Modernism into every aspect of contemporary design, particularly their furniture and the objects of everyday life, in contrast to their Swedish cousins.

ARCHITECTURAL RECORD explores these developments. Turn the pages. Surf our site. It's the perfect summer getaway, without a single canceled flight. *Robert Ivy*

The museum is a Falun red color, achieved with a copper-based paint used in rural Sweden. The exterior surfaces of the artists' studios (foreground) are stained with ferrous sulfate, a traditional treatment to make wood more resistant to water.



# Niels Bruun & Henrik Corfitsen of Denmark won a competition for the **NORDIC WATERCOLOR MUSEUM** in Sweden, and then the fun began...

By Nicholas Adams

**T**he hottest architectural competition to take place in Scandinavia over the past few years was the Nordic Watercolor Museum in the small Swedish town of Skärhamn, just north of Gothenburg. With 386 entrants, it was the biggest competition ever held in Scandinavia. The results brought surprise, disappointment, and controversy. Although some of the top players in Swedish architecture entered (including Gert Wingårdh), the winner was a pair of little-known Danish architects, Niels Bruun and Henrik Corfitsen, who had teamed up for the competition.

Sweden was the big loser: None of its architects placed among the prizewinners, and the Swedish chairman of the jury, Peter Ohrstedt,

*Nicholas Adams teaches architectural history at Vassar College and was the editor of the Journal of the Society of Architectural Historians.*

declared that Swedish architecture and Swedish architectural education were now in a state of crisis. And the new building, with its pronounced Danish character, has not stilled the controversy. Startlingly successful with the public, the museum has been sharply attacked by Swedish architectural commentators, who accused it of being insensitively adapted to its site, dull, and not sufficiently representative of Nordic values. A visit to Skärhamn is no idle tour to a new museum facility, but a tiptoe among the sharp-edged shards of Nordic architectural politics.

The program was ambitious. The Nordic Watercolor Society wanted not only gallery spaces for the exhibition of watercolors from the five Nordic countries, but classroom studios for teaching, as well as a room for lectures and small concerts. A visiting artist program required small residential studios, and a restaurant and gift shop were planned for the 30,000 visitors projected annually.



Nestled in the cliffs alongside an ocean inlet and a small offshore island called Blockholmen, the new museum is a low-key wooden box with a gable roof. In deference to the site, the building sits on a concrete pad, supported on pylons, which forms a wharf over the inlet. A boardwalk allows visitors to walk along the water and reach the island without having to go into the museum.

This modest exercise in the vernacular seems, at first glance, to be a maritime warehouse. The architects chose thin wood batten, either painted or left natural, and concrete, as the most dominant materials. The overall effect is dressed-down formal—in some places (such as the lecture hall) it is relatively elegant; in others (such as the galleries) spare, with a casual air that suits the seaside location. In an effort to enliven the interior of the box, the architects may have overdone it a bit. (Or, in the language of Nordic architecture, perhaps the building could have been more Danish.)

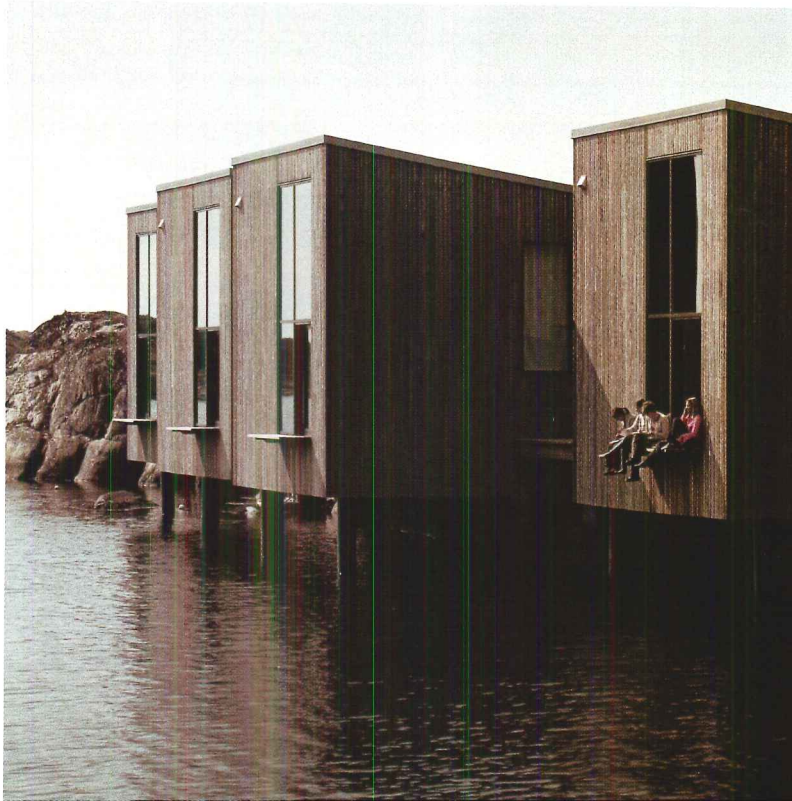
The Watercolor Museum is not a conventional exhibition hall: Bruun and Corfitsen had to fuse space for the exhibition and practice of art, and for the appreciation of nature, into a museum for enthusiastic watercolorists. Nature alone provides a surfeit of sensations; this is one of the most photogenic stretches of coastline in Sweden, particularly popular among painters, who have been coming here since the end of the 19th century. The gallery spaces effectively combine the exhibition of artworks with bold floor-to-ceiling clear-glass windows that frame views of the stony cliffs of Blockholmen and the five studios. Each view from the studio, where windows on three sides allow the proper light for painting, offers a potential artistic image. Nature beckons. This building makes the act of painting the natural next step.

The museum has been a hit—the Nordic equivalent in popularity to the Guggenheim Bilbao. In the six months since its opening, it counted about 100,000 visitors and expects 200,000–250,000 for the year. Already expansion is planned for fall 2001. The entrance will be improved with new signage, paving, and exterior lighting, which will take some of the guesswork out of the now slightly ambiguous approach. There will be new facilities for exhibition and education, and screens projecting out at right angles to the main gallery spaces will prevent the low-angled sun from entering the galleries.

As for the objections raised by Swedish critics? Some of the functional objections don't hold up. The extreme openness of the galleries is clearly a programmatic decision, however unwelcome it may be to experts in painting conservation. And though the Falun red color of the building, like a dense watercolor stain itself, doesn't please everyone, this copper-based paint is used on rural architecture throughout Sweden. As for being dull, Bruun and Corfitsen have squeezed as much life from a tight box and

a tight budget (about \$5.1 million) as they could. Though the site may not stand up to the unexpected invasion of visitors who clamber over Blockholmen to see the dramatic views beyond, the solution seems to be the right one, given the client's desire to respect the locale.

These critiques remind one of the discomforts of cultural collaboration, even in Scandinavia. Sweden got the building (and the new investment); Denmark got the design; the current director is from Finland. As to the question of the crisis in Swedish architecture, a special sensitivity still remains. What the competition and its result do reveal are that national traditions of building remain lively in Nordic Europe. This project, which ultimately performed an international cultural mission, taxed the Scandinavians' legendary ability to compromise. With its architecture already a focus of controversy, it will be interesting to see how well both building and mission wear in the coming years. ■



**Project:** *Nordic Watercolor Museum, Skärhamn, Sweden*

**Owner:** *Nordiska Akvarellmuseet*

**Architect:** *Niels Bruun and Henrik Corfitsen Arkitekter m.a.a.*

**Interior designer:** *Karin Nyrén*

**Engineers:** *PI i Göteborg AB (structural); AF-RNK (mechanical); Scandiaconsult SCC (electrical)*

**Lighting:** *Jan Ejhed*

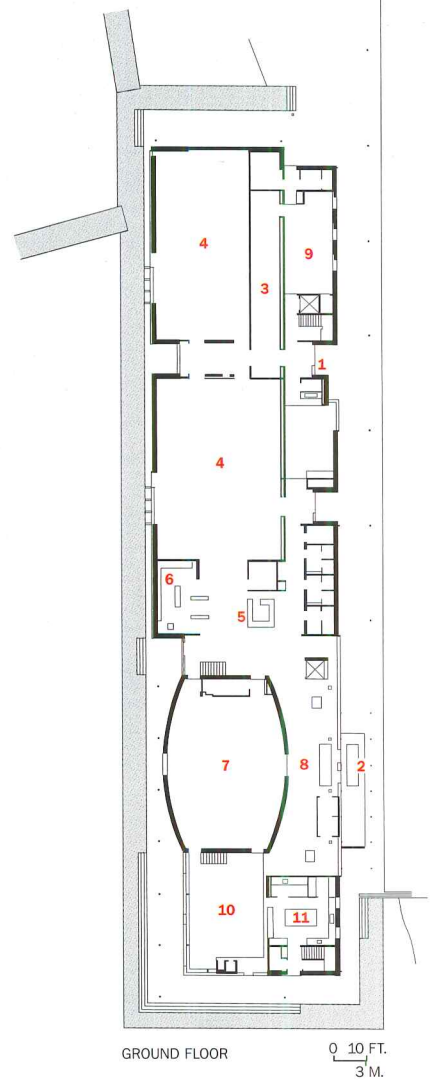
**Sources**

**Roofing:** *Rheinzink*

**Windows:** *Schüco international*

**Glass glazing:** *Saint-Gobain/Emmaboda*

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1. Admissions entrance
2. Main entrance
3. Store
4. Exhibition
5. Reception
6. Boutique
7. Assembly hall and exhibition
8. Foyer
9. Workshop
10. Restaurant
11. Kitchen



Inside, some of the most successful spaces, such as the cool, airy restaurant, limit one's attention to the spectacular view across the water (above). The flooring of the galleries is spruce, specially treated with soap to resist dirt and give a neutral, light reflection (bottom).

The art museum is a renovation—more accurately a transformation—of an existing harborfront warehouse, a 1930s concrete structure now on the historic register.





# Studio Granda's inventive renovation of a 1930s building enlivens the waterfront in Iceland's REYKJAVIK ART MUSEUM

By Peter MacKeith

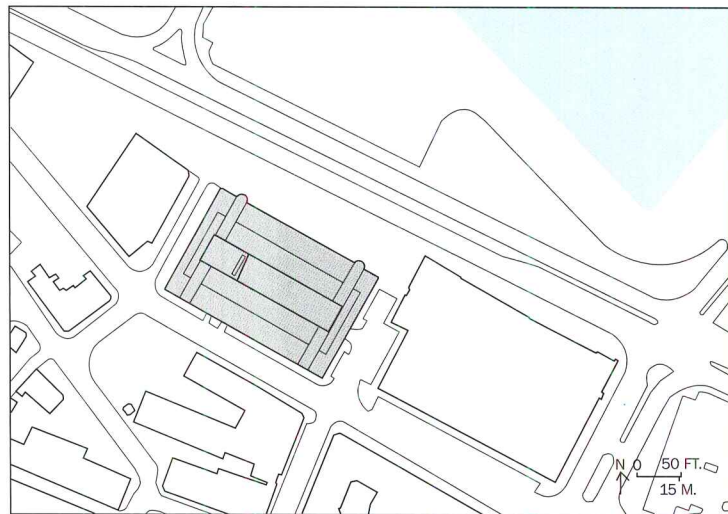
**O**n a sunny May afternoon in Reykjavík, architect Steve Christer—who together with Margrét Hardardóttir leads the partnership of Studio Granda—energetically demonstrates the operation of a paired set of 24-foot-high steel-clad folding doors. The doors are important insertions by the architects in their new Reykjavík Art Museum, a renovated concrete warehouse on the city's harbor. Since the doors are placed on both sides of a corridor that separates a multipurpose room from a courtyard, opening them creates a continuous area for special events. This spatial advantage made for a memorable “dance” of industrial forklifts, choreographed for last year's dedication.

Studio Granda's work demonstrates an intimacy borne of well-considered siting, spatial character, and choice of materials. Finely made details are highly individual, yet possess a whiff of other architectures and cultures. The effect is surely the product of the close-knit atelier, the life collaboration of Christer and Hardardóttir, and their keen commitment to building well in Iceland.

These days Reykjavík is a European capital city whose small size belies its expanding artistic prominence. The last year has brought a wave of attention to the Icelandic pop-music scene, and, meanwhile, the city is expanding in all directions as Icelanders continue to move from the hinterland to this one political, economic, and cultural center. Studio Granda has figured prominently in the development of the capital's architectural landscape. In the last decade, the office has completed three notable public buildings there: the Reykjavík City Hall (1992), the Supreme Court of Iceland (1996), and, recently, the Reykjavík Art Museum. All three lie within walking distance of one another in the city's heart, with the art museum at the edge of the main harbor.

The relationship between the art museum and the harbor is critical. Whereas the City Hall and Supreme Court commissions were for entirely new construction, the art museum is a renovation—more accurately, a transformation—of an existing harborfront warehouse, a 1930s concrete structure now on the historic register. The museum occupies most of the warehouse—two floors of the south wing and three of its north wing, which in turn enclose an open court. The new centrally located facility houses collections previously scattered in three locations throughout the city.

*Peter MacKeith is assistant dean at the School of Architecture, Washington University in St. Louis, and is a permanent resident of Finland.*



In the course of its research for the competition entry, Studio Granda discovered that the building occupied the former site of Reykjavík's main pier, dating to 1900. They felt that this buried construction (the pier was covered by landfill) deserved recognition, and so incorporated its skewed axis into the organization of the museum's entrance and circulation sequence.

Appropriately, the building is painted in contrasting shades, predominantly “Fishery Protection Vessel” gray for the spaces that aren't part of the museum, while the museum portions are called out in white. On the city facade, a concrete canopy tilts above the entrance, twisted at an angle to recall the shifted axis of the pier. The canopy's tilt also directs light into the dark, double-height lobby, lined in hot-rolled blued steel panels and black walnut flooring. The corridor follows the line of the pier's axis as it extends through the thickness of both wings and the courtyard, aligning the reception areas and the museum shop, then a small multipurpose room opposite an external exhibition area (the courtyard), and finally the museum library and curatorial and storage rooms.

Bent-steel stairs in each wing—seemingly hovering above the floor—lead to the gallery levels. Here, too, the visitor can retrace the path of the former pier on a bridge that connects the two wings and terminates in the museum cafe's immense glass wall facing the harbor.

Differences in location and dimension distinguish the six museum galleries, yet they are united by a straightforward recognition of the concrete columnar structure, simply organized artificial lighting, and provisions for indirect daylight. By their dimensions, the galleries are

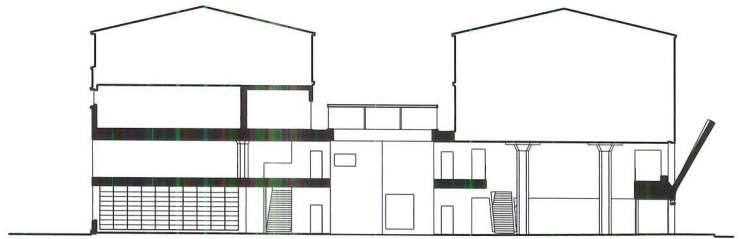
**Project:** Reykjavík Art Museum, Reykjavík, Iceland

**Architects:** Studio Granda—Margrét Hardardóttir, partner; Steve Christer, partner; Steinthor Kári Kárasson, architect; Heba Hertervig, architect;

Silja Traustadóttir, intern

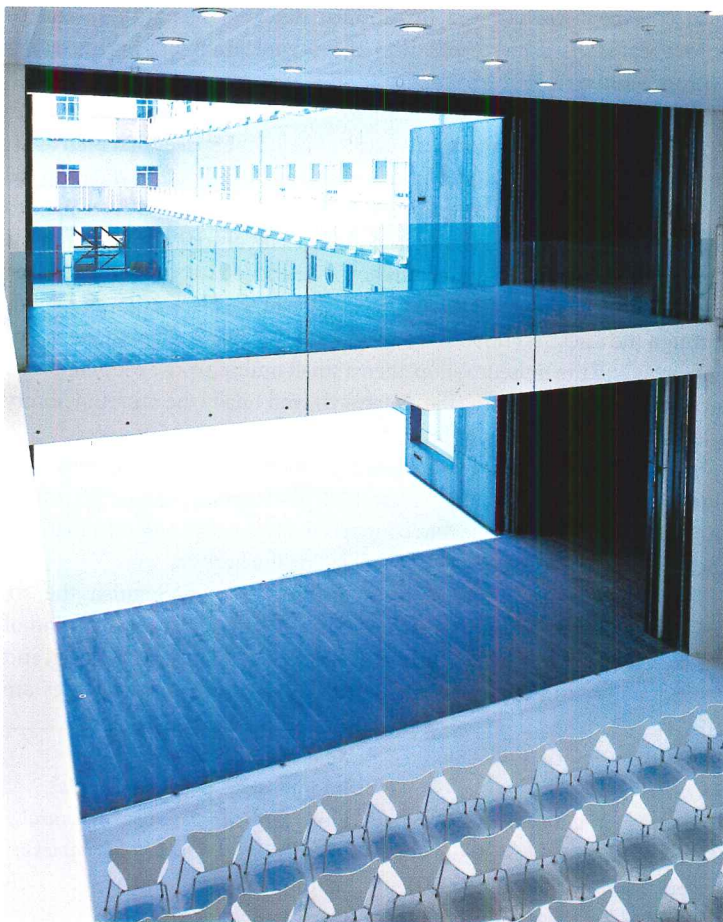
**Interior design:** Studio Granda

**Engineers:** Línuhönnun (structural); Raftækning (electrical); Lagnataekni (environmental); Steindor Gudmunsson (acoustical)



SECTION A-A

- 1. Entrance lobby
- 2. Reception
- 3. Shop
- 4. Gallery
- 5. Pier link
- 6. Library
- 7. Multipurpose space
- 8. Court
- 9. Loading



more suited to highly selective exhibitions of smaller-sized work, or larger-scaled and more singular works. The rooms are not entirely neutral: The column structure, in particular, lends each gallery a formal dignity, yet presents a robust existing condition.

The museum's administrative offices and Iceland's Architectural Archive reside on the uppermost level. Iceland's preserved architectural history may be small in quantity and depth, but significant nonetheless in the country's consciousness. Admirably, the city and the architects recognized the value of keeping one of the few remaining 1930s functionalist buildings in Reykjavik, and its revitalization has become part of a waterfront effort to reinvigorate older structures for cultural use. As a renovation, the art museum is Studio Granda's most condensed public work to date. The architects' design deftly weaves a figural element of the site's history within the structural order of the building, making necessary, inventive, and sensitive adaptations appropriate to the reception of visitors and the exhibition of art. The firm has also made a significant place by uniting a series of opposites—past and present, land and sea, warehouse and museum—in the intimate Icelandic capital. ■

**Sources**

- Roofing:** Kemperol (elastomeric)
- Windows:** Tresmidjan Solvir (wood)
- Glazing:** Samverk (glass); Schuco (skylight)
- Doors:** Beyki (wood doors); Staltak (metal doors, sliding doors, fire-control doors, security grilles, special doors, upswinging doors)
- Hardware:** BSW (locks);

Lamaindjan (hinges); Dorma/Geze (closers)

- Furnishings:** Fritz Hansen
- Lighting:** Concord; Gira (controls)
- Elevators:** Kone

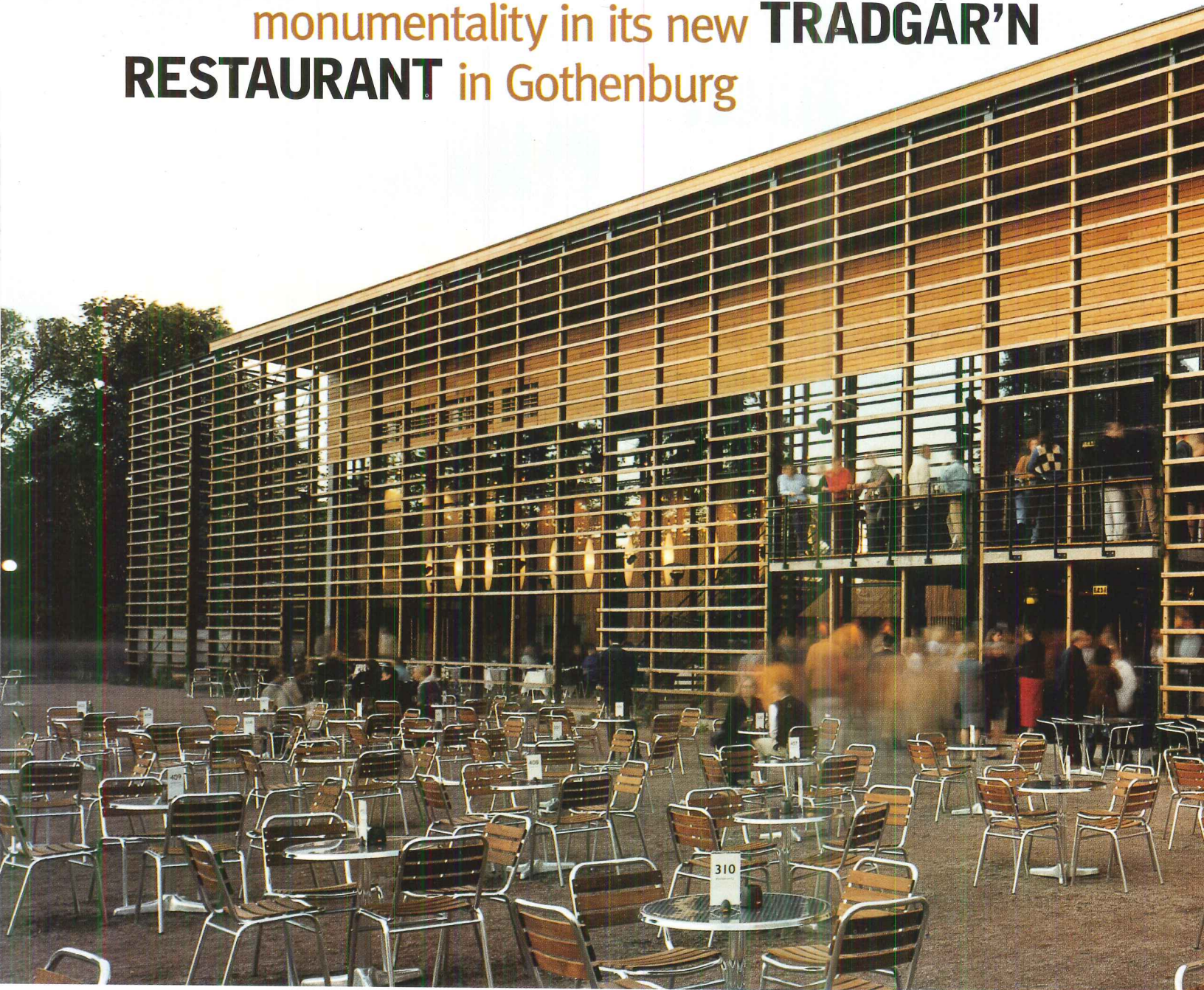
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A set of 24-foot-high steel-clad folding doors are placed on both sides of a corridor that separates a multipurpose room from a courtyard

(opposite). The six museum galleries are distinguished by location and dimension, but united by a concrete columnar structure.

Studio **Gron** of Sweden blends informality and monumentality in its new **TRÄDGÅR'N RESTAURANT** in Gothenburg



A giant trellis of untreated Siberian larch will slowly be overgrown by vines to make a great green wall during the summer. Behind the unifying green wall, the restaurant includes an informal bar/cafe, a first-class restaurant, and a nightclub for the younger crowd.



By Nicholas Adams

PROJECTS

One of the high points of a trip to Gothenburg, Sweden, is a visit to Trädgårdsforeningen, a public garden landscaped in the English manner. Built over the outworks of the 17th-century wall system and alongside the old moat-canal, the garden, opened in 1842, includes a rosarium, a butterfly house, and rolling lawns dotted with fountains, sculpture, and picturesque late-19th-century wood cottages where lunch and coffee are served. A special surprise is the Palm House, a miniature copy of Joseph Paxton's Crystal Palace built by a Scottish firm in 1878.

For 150 years a formal public restaurant and dance hall has faced the Palm House at the center of the park. But both the original and its replacement have since burned down. Now, the latest reincarnation, by Studio Grön of Gothenburg, combines a restaurant and a nightclub disco. Restaurant Trädgår'n is that rare contemporary commission in which a city administration has dared to fund significant architecture on a major municipal site and got everything right. Studio Grön was selected after an international competition and, despite its youth (it was formed in 1996), has produced a mature building that draws on Nordic traditions without looking stale or imitative.

The elevation of the restaurant facing the old Palm House and the garden consists of a giant trellis of untreated Siberian larch (to avoid sagging) that will slowly be overgrown by vines to make a great green wall during the summer. Behind the unifying green wall is a bar/cafe for informal dining and drinking, a first-class restaurant, and finally the nightclub for the younger crowd. If the architectural traditions of this building are distinctly Nordic, the traditions have been cranked up for contemporary taste.

Consider the main rooms. The restaurant is dominated by a birch-paneled inner wall that recalls Alvar Aalto's Finnish Pavilion at the

*Nicholas Adams teaches architectural history at Vassar College and is currently a member of the editorial board at Casabella.*

**Project:** Restaurant Trädgår'n, Gothenburg, Sweden

**Client:** City of Gothenburg through Higab Gruppen AB

**Architects:** Studio Grön Arkitekter AB—Fredrik Lund, design management; Martin Forsby, project management; Henriette Michaelsen,

Mika Määttä; Johan Lundin, Mikael Sonnsjo, Bjorn Edstrom, assistants

**Interior design:** Studio Grön Arkitekter AB with Vigdis Ruud

**Landscape:** Studio Grön arkitekter AB with Snohetta AS and Fritid Göteborg

**Structural engineer:** FB Engineering AB



TOP AND BOTTOM (RIGHT)

New York World's Fair (1939) or, closer to home, Nils Einar Erickson's Concert Hall in Gothenburg (1936). Birch, the Swedish wood par excellence, gives the room the same warmth as those distinguished predecessors. A giant window wall faces the trellis and the Palm House and fills the room with dappled sunlight by day. By night, hanging fixtures and tiny spots—like stars in the dark Nordic night—give it a magical character recalling the romantic nocturnal effects created by Gunnar Asplund at the Skandia Cinema in Stockholm (1923).

The nightclub at the other end of the building is little more than a black box with high-tech lighting, a high-powered sound system, and a balcony around the upper level that allows more dancing and a chance to see and be seen. Facing the garden is the bar, a kind of urban artists' cafe that provides simple meals and drinks. Between the building and the vine-covered trellis is one of the most genial areas, the veranda. Here one can retreat from comings-and-goings of the park visitors without losing contact with the open air. The veranda represents a remarkable blend of nature-inspired informality and monumentality that so often coexist in Swedish architecture.

Although based in Sweden, the principals of Studio Grön—Fredrik Lund, Martin Forsby, Henriette Michaelsen, Mika Määttä—come from Norway, Sweden, Denmark, and Finland. (They met as students at Chalmers Technical University, the architectural school in Gothenburg.) One can sense the multiplicity of their backgrounds in Trädgår'n: Asplund from Sweden and Aalto from Finland are there with a refinement and precision of detailing suggesting an attentive study of Danish architecture.

Indeed, it is this attention to detail that separates Restaurant Trädgår'n from many other new buildings in Sweden. Göran Arvidsson, who represented the client, the city of Gothenburg, insisted on high-quality materials and backed the young architects in their plans. The city wanted a durable building—both in materials and in style—that would be a permanent resource for Gothenburg. Studio Grön's methods of working with the contractors have been written up as a model for other Swedish projects. The results show up not only in the tight logical details (at the stairs, in the entry foyer), but in the exquisite surfaces of the birch panels and appropriate matches of color with the concrete. The overall effect is a lighthearted place that is neither frivolous nor cheap, a tranquil and richly detailed space that is open and accessible to all. Enlightened municipal patronage, another significant Nordic tradition, continues to thrive in Sweden. ■

#### Sources

**Closing and pulls:** *d-Line* (standard doors); *Studio Grön* (glass doors and public doors)

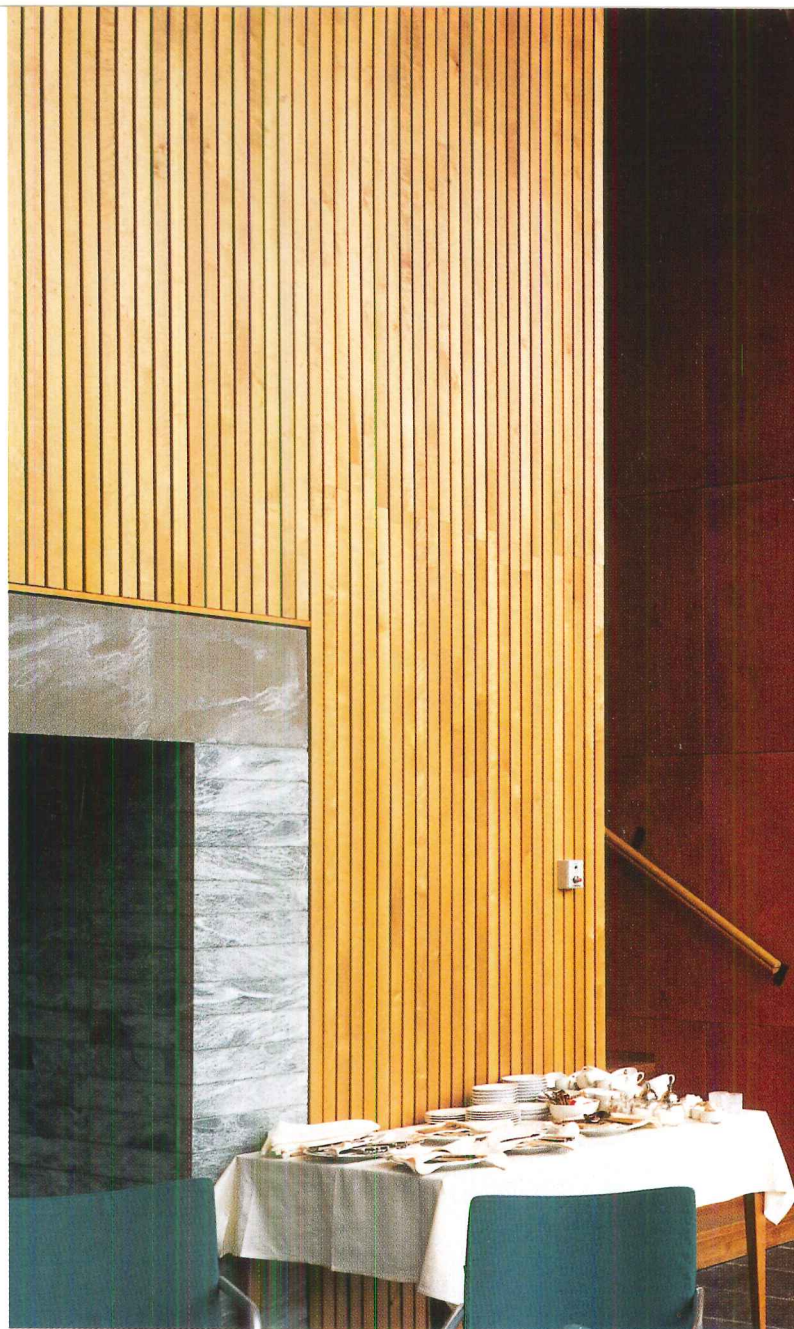
**Glazing:** *Råda Glas and Centa*

**Lighting:** *Foscarini; Havana* (restaurant)

**Acoustical ceilings:** *Armstrong*

(restaurant, salon); *Gyptone* (other)

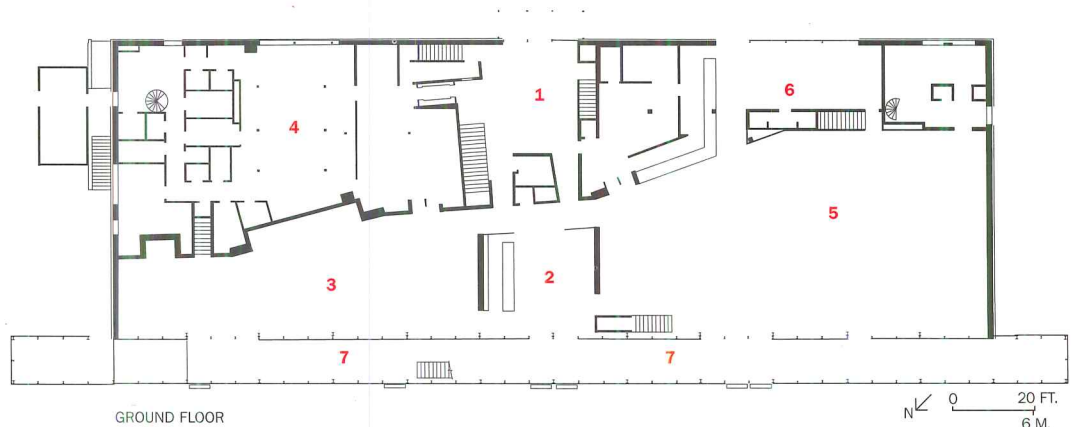
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By night, hanging fixtures and tiny spots—like stars in the dark Nordic night—give the main dining room a magical character and the romantic nocturnal effects (above). The space between the building and the vine-covered trellis creates a veranda, one of the most genial areas in the restaurant (adjacent page). The foyer on the opposite (street) side of the restaurant has a stair leading to additional spaces.

- |                     |               |
|---------------------|---------------|
| 1. Foyer            | 5. Night club |
| 2. Cafe             | 6. Side bar   |
| 3. Main dining room | 7. Veranda    |
| 4. Kitchen          |               |



(OPPOSITE BOTTOM LEFT AND RIGHT); HANS WRETLING (ABOVE)



A two-story volume has been sheathed in a horizontally proportioned grid of dark green aluminum panels covered by a

stainless-steel mesh (above). The entrance is defined by a glass curtain wall and steel-framed portico (opposite).



# Heikkinen-Komonen explores simple geometries and modernist materials for the new **VUOTALO CULTURAL CENTER** in Finland

By Peter MacKeith

**A**fter nearly 20 years of collaborative practice, the Helsinki-based partnership of Mikko Heikkinen and Markku Komonen possesses an international reputation based upon recognizably forceful, coherent strategies of siting, form, materials, and construction. The practice is classicist in the best sense: It demonstrates a tenacious concentration upon a limited set of formal and tectonic principles, continuously adapted to contemporary circumstances. The firm's Vuotalo Cultural Center in the Helsinki suburb of Vuosaari, a result of a limited design competition it won in 1996, reveals these intentions succinctly, with modesty, clarity, and precision. The center, which opened only a few months ago, is already a locus of community activity.

Over the last 15 years, Vuosaari has developed as a satellite residential and commercial community of 40,000, at the eastern terminus of the metropolitan subway line, some 12½ miles up the coast from Helsinki. Vuosaari is now a hothouse of housing designs of all types, and day-care centers and schools have been common architectural competition subjects in recent years. Its center of gravity remains the area surrounding the metro station where Kolumbus, a linear shopping mall under a curving metal carapace, dominates this landscape. The site for the cultural center designated by Helsinki's municipal authorities is in an area best known for its 1960s housing blocks, a high school from the same period, and a swimming/sports hall.

The program called for a public library, a community auditorium, music rehearsal spaces, adult education facilities, and city cultural administration offices. Simultaneously, the new building had to integrate pedestrian circulation across the site between the high school and the swimming center, and between new underground parking lots and the activities of the center.

Heikkinen and Komonen's design relies on pure geometries to resolve these siting, circulation, and internal planning issues. In contrast to prevailing aesthetic winds elsewhere, Euclidean geometry remains alive and well for the two designers, still a valid means for achieving civic architecture. Their consistent use of formalist strategies across a range of programs and sites is highly identifiable and referential, acknowledging the geometries articulated earlier in the century by Gunnar Asplund, the rigorous proportional systems by Aulis Blomstedt,

*Peter MacKeith is assistant dean at the School of Architecture, Washington University in St. Louis, and is a permanent resident of Finland.*



and the ascetic sensibilities of Aarno Ruusuvuori.

In the Vuotalo center, a cylindrical volume is positioned as point of site control, interlaced with a modular 20-foot structural grid, and then inflected with secondary structures. The actual structure is a two-story half-cylinder, about 257 feet in diameter, which stands resolutely on the main grade level between the shopping mall, high school, and swimming hall. The split open face of the cylinder—the entrance facade and its steel-framed portico—is placed to continue the north-south axis of the shopping mall's circulation spine, extending it out to a hedgerow labyrinth, yet to be planted. The high school entrance is located on a cross-axis with the revolving entrance door. Below grade, an indoor corridor connects the center with the high school, the swimming hall, and other facilities. Also below grade, an open-air portion of the encircled site

**Project:** Vuotalo Cultural Center, Helsinki, Finland

**Owner:** City of Helsinki

**Architects:** Heikkinen-Komonen Architects

**Engineers:** Leo Maaskola Engineers (HVAC); Olof Granlund Engineers (electrical); Akukon Engineers

(acoustical); Teakon/Timo Tuovila (theater consultants); City of Helsinki, Department of Public Works (geotechnical)

**Interior design:** Heikkinen-Komonen Architects

**Landscape:** Byman & Ruokonen

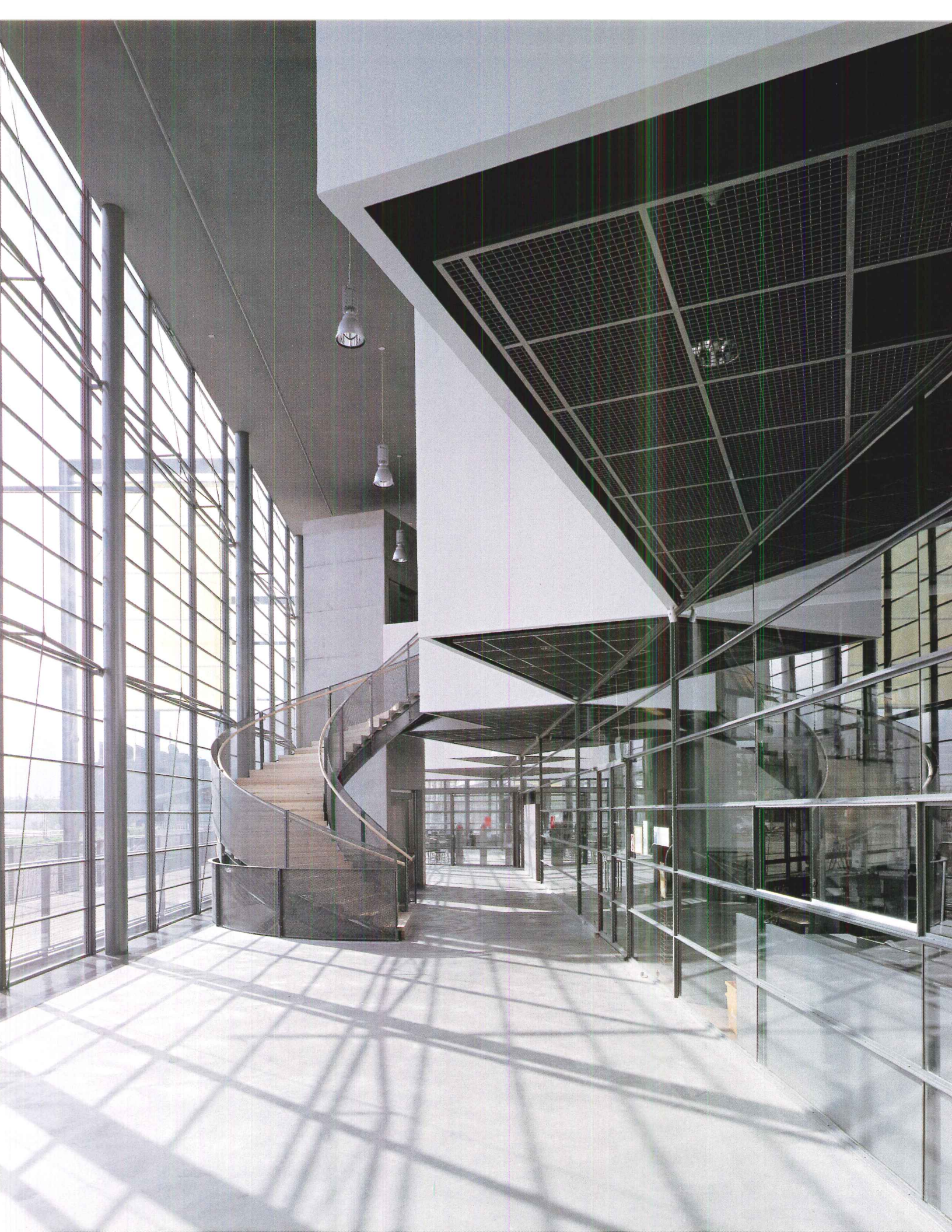
**General contractor:** Skanska



VUOTALO  
OJATOUV

The entrance facade is a glass curtain wall supported by interlaced columns and a braced tension-rod system. An open-air portion of the site has been placed below-grade and planted with a grove of rowan trees.

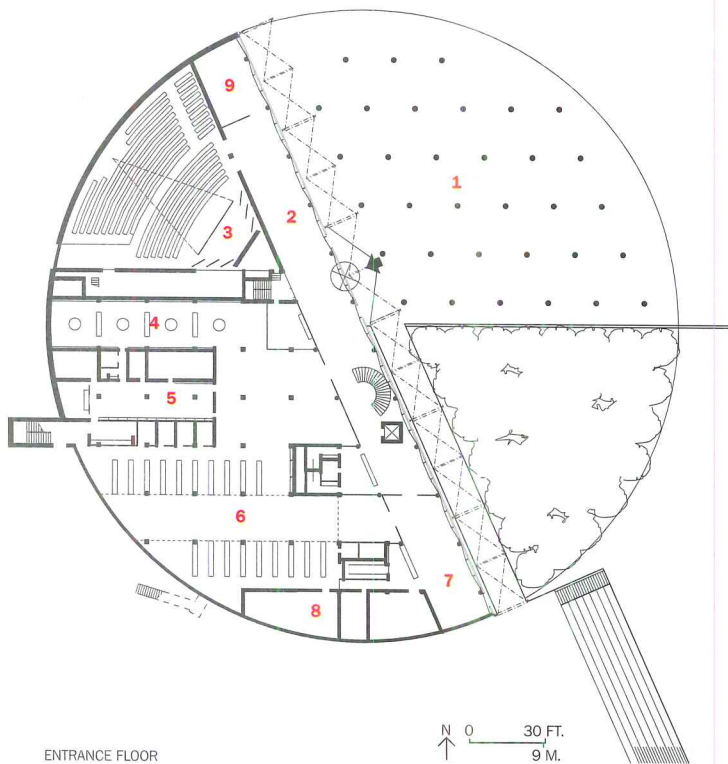




Music rehearsal rooms, the stair landing, and classroom corners are set out in serrated formation above the lobby (opposite), and the multipurpose hall occupies a wedge-shaped space on the ground floor (below). Careful attention has been given to the admission of natural light, as demonstrated in the library (right).



1. Plaza
2. Foyer
3. Multipurpose hall
4. Children's library
5. Staff
6. Library
7. Coffee shop
8. Meeting rooms
9. Gallery



has been planted with a grove of rowan trees on the 20-foot module. The architects confidently envision a canopy of the mature trees creating a green cloud on level with the main entrance path.

Inside the half-circle building, the double-height lobby provides access to the wedged-shaped community auditorium and general reading rooms. Two long double-height, top-lit reading rooms—one for children and one for adults—are notable as vertical shafts of space rising in counterpoint to the building's prevailing horizontality. A diminutive cylindrical children's reading tower winningly restates the dominant formal geometry. And a generous winding stair leads to the adult education facilities and city administrative office on the upper level. Throughout the interior, careful attention has been given to the admission of natural light, often through a series of glazed wall planes and adjacencies to top-lit spaces.

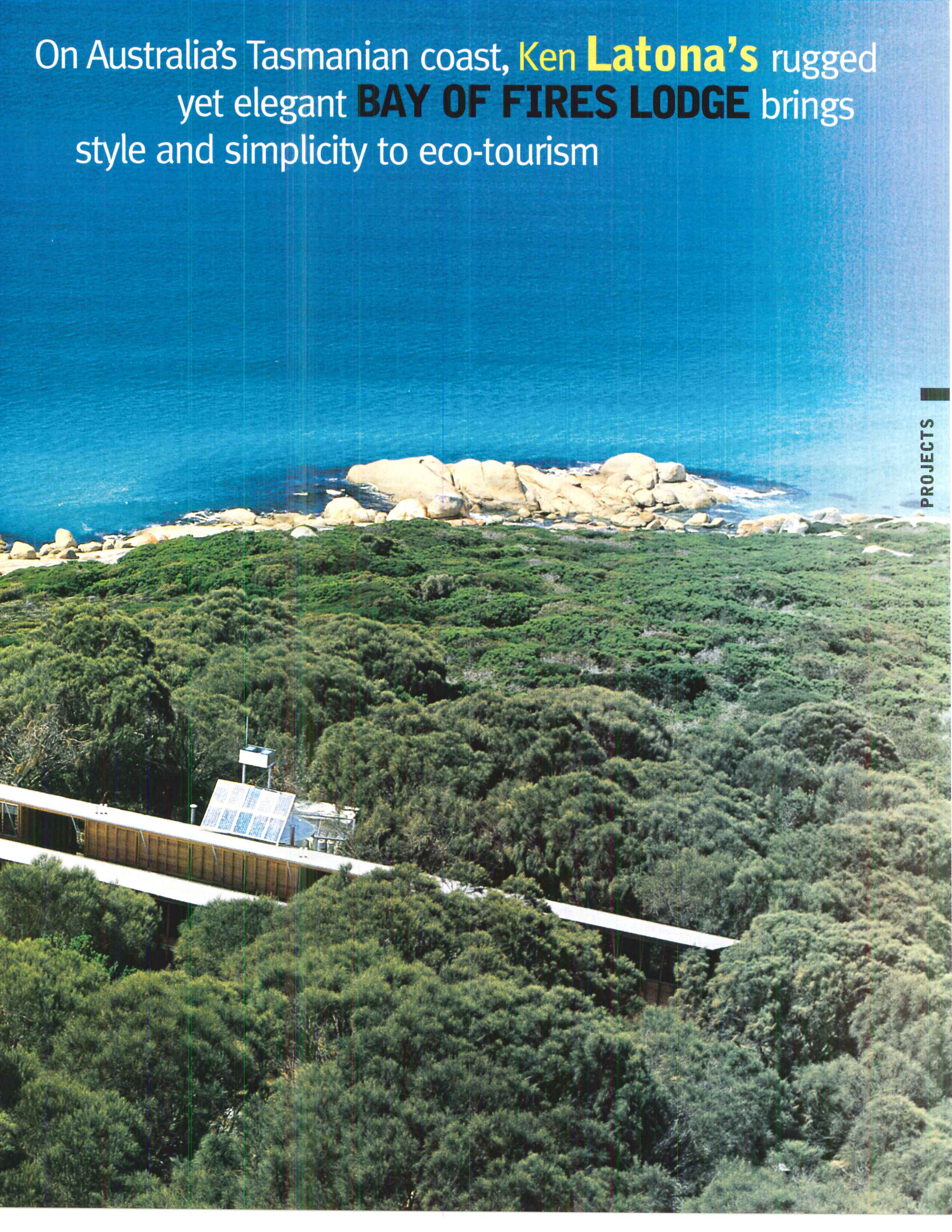
Vuotalo's poured-in-place concrete structure of walls and slabs is faced along the entrance by a glass curtain wall supported by interlaced columns and a braced tension-rod system. Interior finishes are direct and unadorned, relying on a strict catalog of standardized metal grilles and panels and a restrained palette of grays and browns. A horizontal grid of dark green aluminum panels sheathes the cylinder's exterior, which is virtually obscured by a suspended skin of stainless-steel mesh. In fact, the mesh is an industrial conveyor belt material, the result of extensive material research conducted by the partnership's staff. While the mesh skin offers little view into the interior of the cultural center, it does provide both light and visual access from within.

This formal control, reliance on module, proportion, and standardized materials, and an increasingly evident desire to dematerialize a building's surfaces are well-known tactics for Heikkinen and Komonen. These features can be transferred to other locales, to be sure, but in the architects' own backyard they possess a particular strength and purposefulness. Vuotalo represents a modest example of what can be accomplished even with the toughest of municipal construction budgets. Moreover, its restraint is a bracing, even instructive, contrast to the nearby neon-layered shopping mall and surroundings. As a member of the office cleaning staff, a resident of Vuosaari, exclaimed, "It makes everything around it look overdecorated!" ■

To get to the lodge, visitors must trek four days through Mount William National Park, an experience that helps them appreciate the project's careful siting and environmentally sensitive design.



On Australia's Tasmanian coast, **Ken Latona's** rugged yet elegant **BAY OF FIRES LODGE** brings style and simplicity to eco-tourism





By David Clark

Standing on the remote northeastern coast of Tasmania, you could imagine yourself on a deserted island. Black cockatoos squawk overhead, dolphins ply the surf, and wallabies occasionally wander to the shore to nibble on iodine-rich seaweed. The only signs of human life are the middens, piles of discarded shells that mark the feasting places of the aborigines who lived on this land for thousands of years.

On a piece of private property here, on the edge of Tasmania's Mount William National Park, architect and planner Ken Latona has built the Bay of Fires Lodge. Reached by foot at the end of a four-day trek through the reserve, the lodge points architecture and tourism onto a more ecologically sensitive path.

Latona, who splits his time between Sydney and Tasmania, represents the Australian school of architecture that advocates "touching the earth lightly," an ethic exemplified most famously by Glenn Murcutt and Richard Leplastrier, architects admired for their poetic understanding of place. Latona studied with both men at Sydney University in the early 1970s and, like them, has made environmentally sensitive design intrinsic to his work.

"I came to understand through people like Murcutt, who is still a close friend, that the Australian landscape is so unusual in world terms, and so diverse in itself, that if you don't pay attention to the details of that landscape—you don't have an architecture that fits," states Latona.

In addition to designing the Bay of Fires Lodge, Latona owns and operates it, along with a string of trekking huts in the Cradle Mountain National Park in central Tasmania. The huts and now the lodge are Latona's way of connecting people to the unique environment of Australia's southernmost province, a 26,000-square-mile island that's a short flight from Melbourne. During summer months the Bay of Fires Lodge is usually occupied by groups of up to 10 bushwalkers plus their two guides, although on occasion two groups will overlap.

The building consists of two long Tasmanian-hardwood-and-glass pavilions on an east-west axis and sited on the southern slope of a hill close to the shore. Latona avoided building on the more sheltered and sunnier northern slope (remember, this is Down Under) for two reasons. First, there are aboriginal sites on the warmer northwestern pockets away from

the wind. "It was very important to avoid building there—to avoid a desecration," he explains. Second, he felt the northern location would have made the building a more visible protrusion from the landscape. Instead, he placed the lodge just under the canopy of casuarina trees and approximates their windswept line. From the walking tracks in the park, it can hardly be seen.

Set on a 10-by-17-foot (3-by-5-meter) grid of columns, the building has one pavilion a few feet lower than the other, following the contour of the slope. The upper pavilion serves mostly communal uses, such as cooking, eating, and lounging, and includes an open veranda room in the middle and, at its end, a large deck cantilevering out from the bush and overlooking the sea. The lower pavilion contains areas that are more private—a bank of bedrooms on either side of storage rooms and shared bathroom and toilet facilities. The bedrooms open directly onto a long outdoor corridor that runs the full length of the lodge. This 165-foot-long spine, the lodge's most memorable space, forms a timber-lined channel shooting out to the sea and sky at one end and the bush at the other.

Just as the dramatic spine connects the lodge with the surrounding landscape, its sloping roofs capture the northern sun, bringing daylight and warmth into the living pavilion through a glass-louver wall and into the bedrooms via louvered clerestory windows. At the heart of the plan, the veranda room sits under the building's great roof, open on one side to a clearing in the bush. At the end, the deck practically floats above the landscape, with its roof rising up to align with the horizon.

Latona calls his buildings "simple sheds—nothing more." Indeed, they are that, but all the more elegant and seductive for it. Their detailing is not sophisticated—just "straight off the saw," which seems appropriate for the place. Materials, brought in by helicopter, were cut to

To keep visitors cool without air conditioning Latona covered the deck (above left) and veranda (above right) and opened rooms with glass louvers (opposite, top). The main walkway (opposite, below) delivers powerful views.

David Clark is a Sydney-based journalist who writes frequently about architecture and design. He is a former editor of *Belle* magazine.

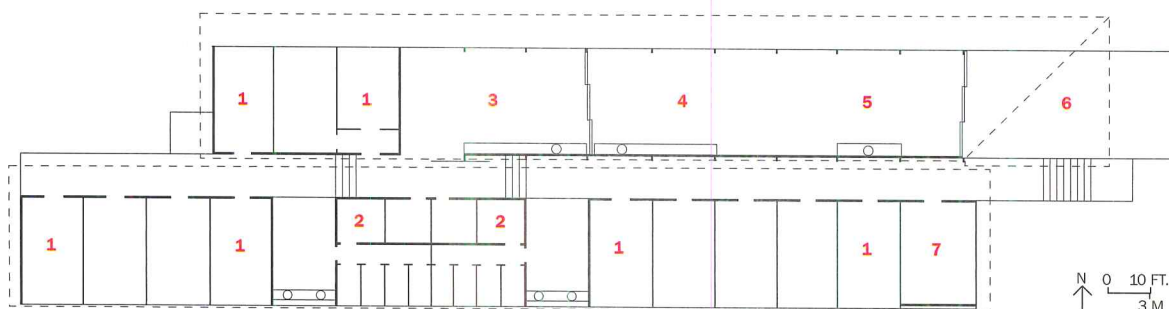
**Project:** Bay of Fires Lodge, Mount William National Park, Tasmania, Australia

**Owner:** Bay of Fires Pty Ltd.

**Architect:** Ken Latona, Architect—Ken Latona, principal; Jonathan Buist, documentation

**Engineer:** Gandy + Roberts (structural)





1. Bedroom
2. Storage
3. Veranda
4. Dining
5. Sitting
6. Deck
7. Library

FLOOR PLAN



fit on-site by the architect and a team of “bush carpenters,” as Latona refers to his crew of builders skilled in the ways of the region and the landscape. True to his collaborative nature, Latona says he relied on the team’s “collective wisdom” to refine the design during construction, “stop-ping only when the building was finished.”

Latona spent 18 months visiting the site to make sure it was right and just 15 weeks building the lodge with a team of up to 12 people. He designed the project with the attitude that it was temporary and could be easily removed. To make the buildings ecologically responsible, Latona and his crew removed only three casuarina trees during construction and equipped the lodge with composting toilets, gray- and black-water reticulation systems, imported gas bottles for heat, and solar panels for power.

Seductive in its simplicity, the Bay of Fires Lodge offers the right level of spartan comfort to be a welcome retreat for weary bushwalkers and serves as the perfect connection to a remarkable landscape. ■

**Sources**

- Tasmanian hardwood boards:** Gunns Timber
- Metal roofing:** BHP (Colorbond)
- Aluminum louvers:** Naco
- Wood doors and sliding doors:** Custom by Tasman Joinery
- Cabinetwork:** Custom by Mick Dabrowski

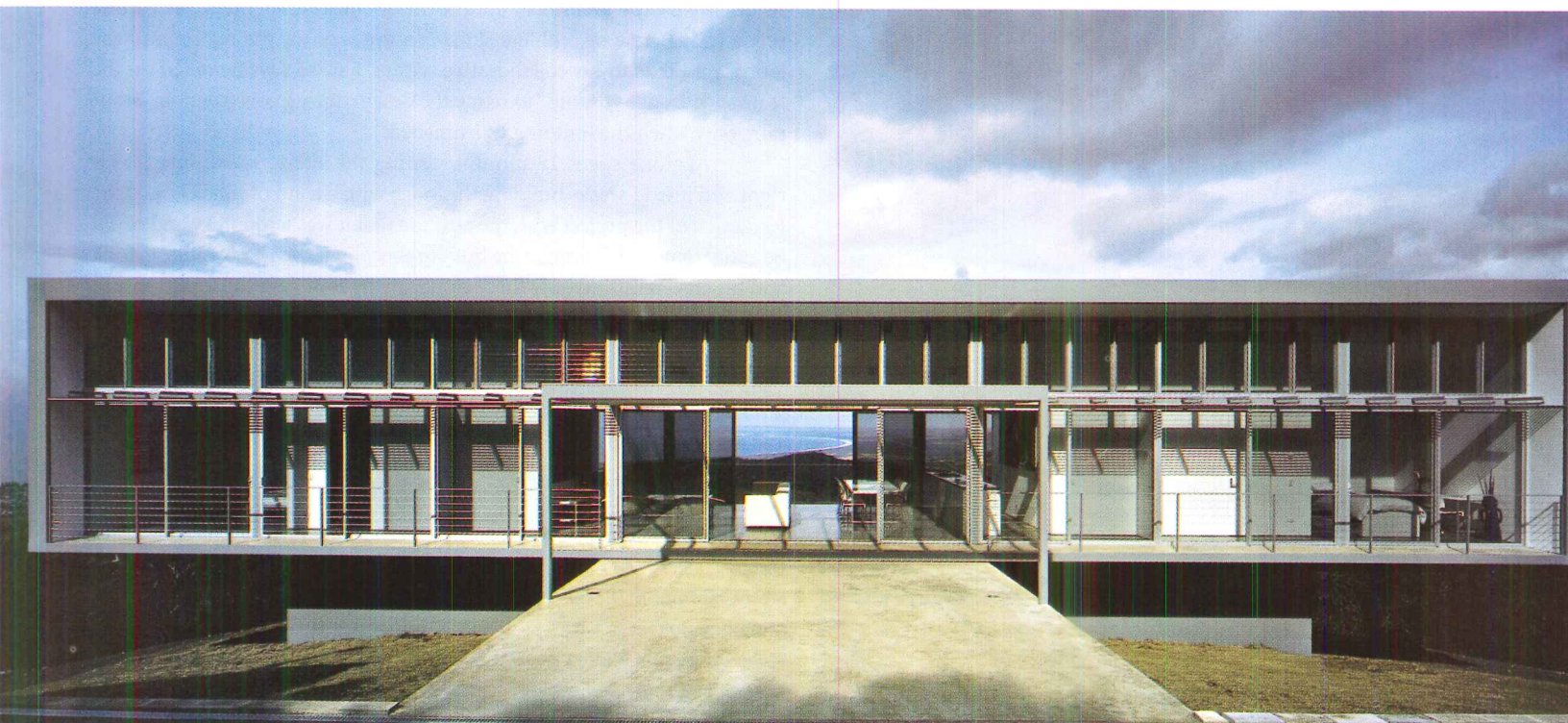
**Solar system:** Rob Wells

**Composting toilets:** Clivus Multrum

**Gray- and black-water treatment:** Cradle Huts

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By contrasting transparent elevations with solid ones and straight edges with a rolling terrain, the architects established visual tensions that hold the visitor's attention.



# Engelen Moore brings its particular brand of uncluttered modernism to the mountainous setting of the **ROSE HOUSE** outside of Sydney

By David Clark

**T**he Rose House sits high on the slope of Saddleback Mountain, about a two-hour drive south of Sydney, and offers spectacular views of the coastline in the distance. Indeed, the Sydney firm of Engelen Moore designed the project as a viewing platform, with sliding glass doors running the entire length of the south and north elevations. The transparency of the house is seductive. As soon as you pull into the driveway, you can see right through the 2,500-square-foot house out to the ocean. Walk across a wide concrete bridge linking the carport to the main building and you've entered the precise, uncluttered world characteristic of the architects.

Since joining forces in 1995, Tina Engelen and Ian Moore have worked primarily on residential projects: first high-profile houses and recently a spate of stylish apartment buildings that have created a buzz in Sydney's hungry real-estate market. Moore comes to architecture by way of engineering in New Zealand, and London, and spent four years at Arup in Hong Kong working on Norman Foster's Hong Kong Shanghai Bank building before returning to Australia to study architecture. Engelen, who had achieved prominence as a furniture and interior designer before establishing her partnership with Moore, comes from a family that has been part of Sydney's design world for over 30 years. Her parents started the Danish Design Centre in the early 1970s, and today her two brothers run the business, now called Dedece and considered one of the leading contemporary furniture suppliers in Australia. Engelen herself contributes to Dedece in her role as creative director.

Engelen and Moore approach their architecture as if it's a product. Indeed, their signature is clearly stamped on all of their projects. The architects have at times likened "Engelen Moore" to a fashion label, and recently they've trademarked their name worldwide. But to suggest they are all style over substance would be inaccurate. A rigorous pursuit of modernist logic supports all of their work.

The Rose House is the architects' first project in a rural setting after a string of houses and residential towers on tightly knit urban sites. Nevertheless, their signature is there, perhaps a result of what the architects call their "kit of parts"—elements of their buildings that have, in the true spirit of modernism, become standardized, reused, and adapted from project to project.

The kit includes sliding glass doors, glass window louvers, over-



head track lighting, roller blinds, external aluminum louvers, and sleek, modern furniture. But perhaps the most important ingredient, especially in this house, is the pair of service pods that contain storage and wet areas. Engelen and Moore have employed this system on a number of projects, using the pods to define spaces without making conventional rooms. Pulled away from the building envelope, the pods allow the interior to flow around them, enhancing a sense of spaciousness. In the Rose House they divide the house into three zones, east for the parents, west for the two teenage children, and in the middle a living, dining, and kitchen area for everyone. Moore says that "by putting these two elements in space without touching the exterior walls, the interior becomes continuous." He explains, "It's possible to stand at one end of the house and look right through to the other end, which makes the place feel bigger. Also, by holding these pods back from the glazing line, we set up diagonal vistas. The views are fantastic in every direction, so it was important that we got all of them."

The clients, who are in their mid-40s, grew up around

**Project:** *Rose House*

*Saddleback Mountain,*

*New South Wales, Australia*

**Owners:** *Peter and Maria Rose*

**Architects:** *Engelen Moore—Ian*

*Moore, Tina Engelen, principals; Dua*

*Cox, Claire Meller, Sterrin O'Shea,*  
*design team*

**Engineers:** *Peter Chan + Partners*  
*(structural); Cottier + Associates*  
*(geotechnical)*

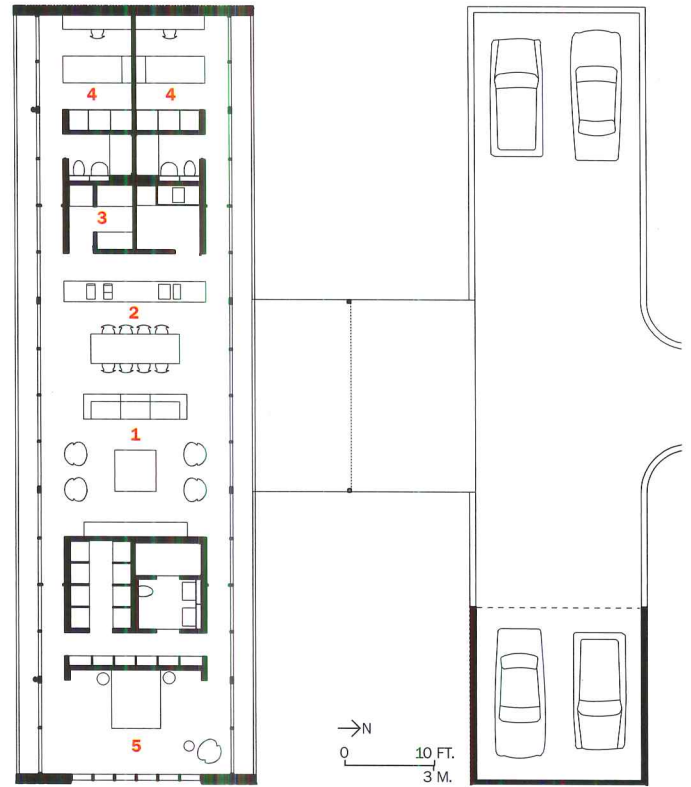
**General contractor:** *Phillip C. Young*



The 2,500-square-foot house is cantilevered from two concrete-block "feet" that anchor it to the ground. The concrete-slab bridge between the carport (left in photo) and the house also helps

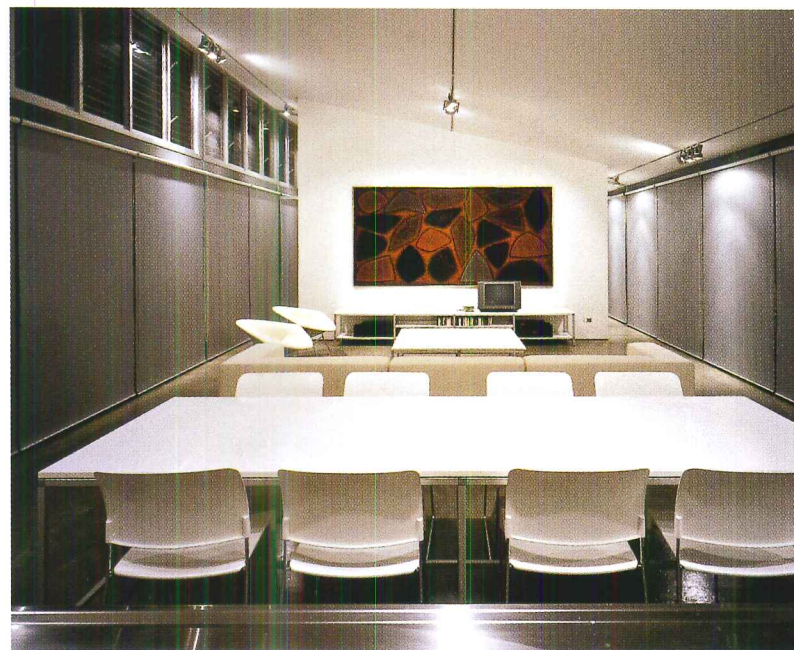
secure the structure to the site. A pair of Vierendeel trusses running the length of the house eliminate the need for cross bracing, which would have interfered with the views to the north and south.





MAIN FLOOR

1. Living
2. Dining
3. Storage
4. Bedroom
5. Master bedroom



When sliding glass doors on the north and south sides of the house are open, the main living space can

feel like a veranda. But with the blinds rolled down, the space changes into an intimate setting (above).



Saddleback Mountain and were attracted to Engelen Moore after seeing the firm's work featured in various publications. They have a keen interest in contemporary architecture and didn't want to build a timber cottage like the ones commonly found in the area.

The symmetry of the plan developed from the site, which has a broad ridge running from the top of the mountain. The architects placed the house so the land falls away roughly evenly from east and west. Then they turned one long transparent elevation to the south, where the ocean views are, and the other one to the north, with its more intimate views of the wooded hillside.

Because the house is in a geological "slip zone," some creative engineering was required. To avoid extensive and expensive foundation work, the architects minimized the building's contact with the ground by resting it on two concrete-block boxes that are visual and structural extensions of the main floor's service pods and that act as feet gripping the earth. Originally conceived as storerooms, these two lower-level spaces have since been appropriated by the clients' teenage children as their private hangouts. The house is also anchored to the site by the entry bridge, which ties to the concrete mass of the carport and driveway.

To get all of the living and sleeping spaces on one level, Engelen Moore cantilevered the main floor beyond its concrete-block "feet," using a pair of overscaled Vierendeel trusses laid like big ladders on their sides. The trusses run the length of the house and eliminate the need for diagonal bracing, which would have interfered with the views. The eight-inch-deep floor slab—thicker than usual to accommodate the considerable cantilever—sits on the two cores like a bridge. These cores,

which conceal all the plumbing, leave the "fifth elevation," or underside of the house, free of exposed pipes and servicing ducts.

With its sliding doors and glass louvers on the north and east facades, this house works with nature to promote cross-ventilation and moderate interior temperatures. Louvered sun shades on the north, for example, block the summer sun here in the southern hemisphere, while the roof pitch draws the winter sun deep inside, where it warms the building's concrete slab which then distributes heat throughout the house. Radiant-heating elements in the floor also help keep the house comfortable in winter. In summer months, when the glass doors are open and the breeze is rippling through, the interiors feel like one large veranda.

While some architects use structural gymnastics to create complexity, Engelen and Moore's goal is simplicity. In the Rose House, they have employed their minimalist aesthetic and hard-nosed logic to create an uninterrupted box for living. ■

#### Sources

**Structural steel framing:** Antax

**Concrete block:** Boral

**Profiled steel cladding:** BHP

**Sliding glass doors:** Lidco

**Adjustable glass louvers:**

Breezeway

**Aluminum louvers:** John Waters

**Skylights:** Capral (St. Kilda Suite)

**Aluminum composite panels:**

Symonite Australia

**Furniture:** Cappellini (Cuba sofa);

Vitra (Sim dining chair); Knoll

(Bertoia Diamond); Engelen Moore

(easy tables and TV cabinet)

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A canted glass atrium anchors a new campus entry and helps animate an adjacent yard. With its cable-supported curtain wall, the south elevation (opposite) blurs the separation of indoors and out.



# John Wardle glorifies the industrial process in the **PRINTING FACILITY BUILDING** for the Royal Melbourne Institute of Technology

By Annemarie Kiely

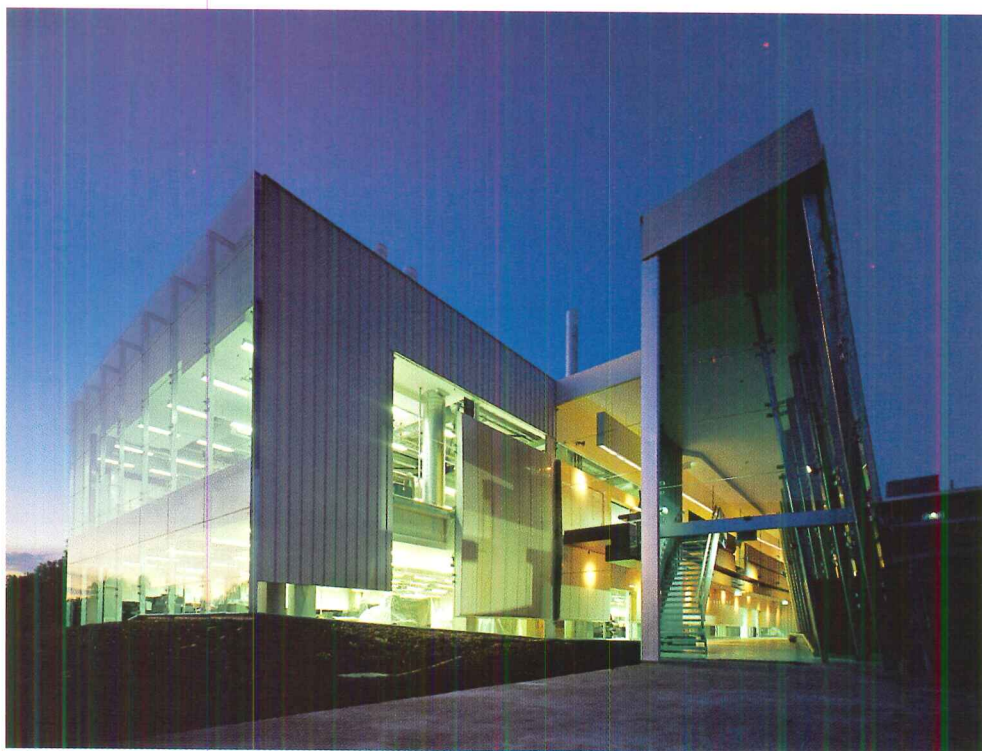
Just as printed words give structure to human thought, so John Wardle's new printing facility building for the Royal Melbourne Institute of Technology (RMIT) gives shape to an academic program devoted to an industrial art form. Born of a merger between RMIT and the Melbourne College of Printing and Graphic Arts, the glass-and-metal building combines learning with the production of university literature, and the artistic with the practical. Located at RMIT's Brunswick campus, an inner-suburban locale about three miles northwest of the university's main venue in downtown Melbourne, the building helps activate a new entry to the satellite campus and an important outdoor space.

The project, designed in association with the Demaine Partnership, extends an existing printing building from 1990 and helps define the campus' western edge. The building is part of RMIT's ongoing program of commissioning innovative architecture from adventurous design practices, such as Ashton Raggatt McDougall's expressionistic renovation of Storey Hall on the university's downtown campus [NOVEMBER 2000, page 106].

In developing his design, Wardle decided to "express the characteristics of industrial processes and put them on display." The result is an extruded two-story building, cleanly sliced at the north and south—as if by some giant machine—and then sealed with a cable-supported curtain wall at either end. Wardle's frameless, seemingly weightless glass walls are elegant reminders of how less can indeed be more. "Structure, building fabric, mechanical and electrical elements, furniture, and clear space are all expressed in cross-section profile," says Wardle of the north and south elevations. On a more practical level, these transparent ends let visitors immediately see what's going on inside while bringing daylight into large studio spaces.

The building's long west elevation offers a striking contrast with the large precast-concrete panels resting above an uninterrupted

*Annemarie Kiely is a Melbourne-based writer who contributes to a variety of local and international design and art publications.*



band of ground-floor glazing. The precast-concrete panels, shaped like enormous pieces of a jigsaw puzzle, feature interlocking joints that suggest finely detailed tongue-and-groove mortises (see following page, bottom right). The solidity of the panels is broken in a few places by discrete cutouts, which offer glimpses into the work spaces inside. Speaking of the way the concrete panels fit together, Wardle says, "The idea was to express the exacting requirements and coordination [found] in many printing processes." And by showing the concrete columns set behind the elevation's glass and precast panels, Wardle expresses an architectural concern for the relationship between the alignment of the building skin over the structural grid.

For the east side of the building facing the campus' main outdoor space, Wardle designed a sheer, two-story wall of inclined glass that

**Project:** RMIT Printing Facility Building, Brunswick, Melbourne, Victoria, Australia

**Owner:** Royal Melbourne Institute of Technology

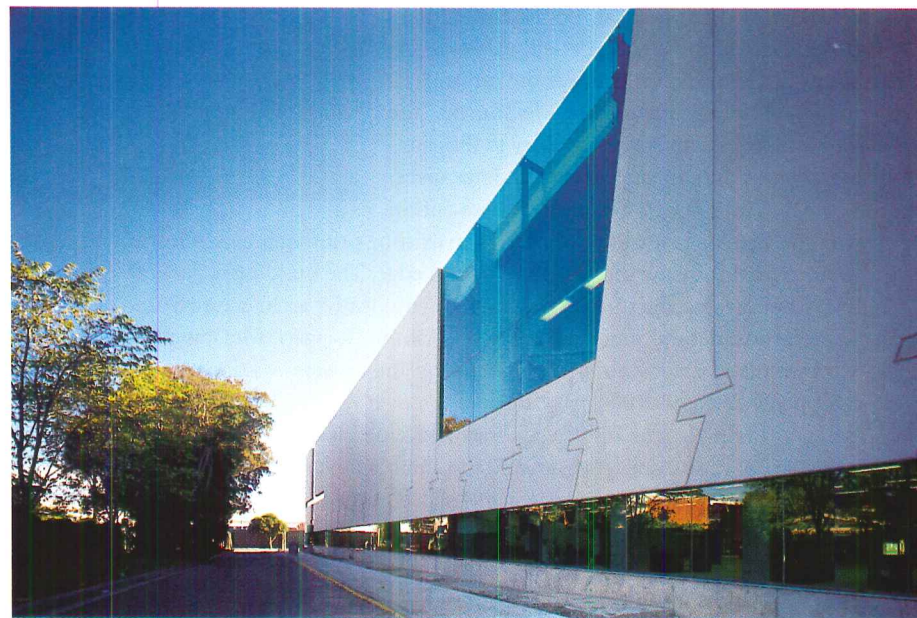
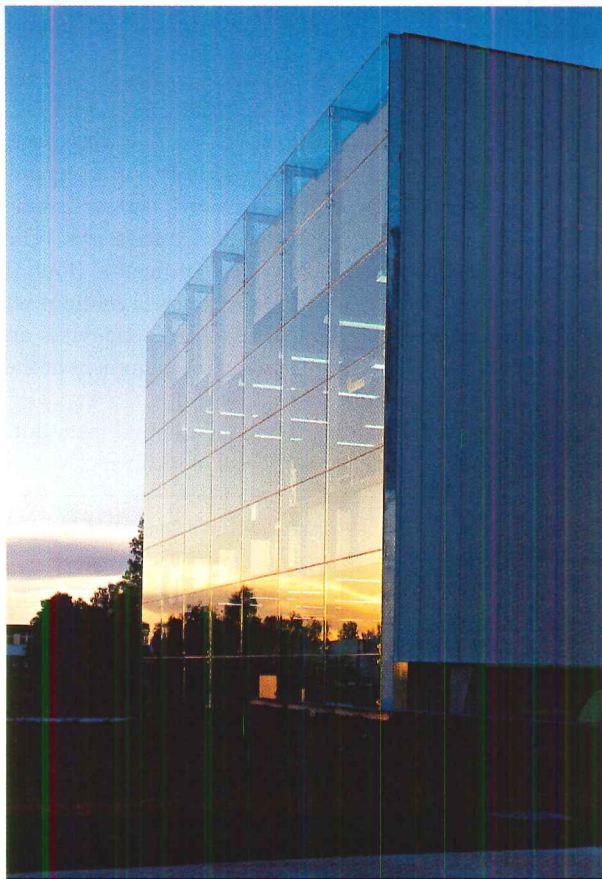
**Architect:** John Wardle Pty Ltd Architects—John Wardle, Simon Hanger, Pasquale Di Iorio, Anna

Fairbank, Beatrix Rowe, Andrew Wong, Alan Driscoll, project team

**Associate architect:** Demaine Partnership Pty Ltd

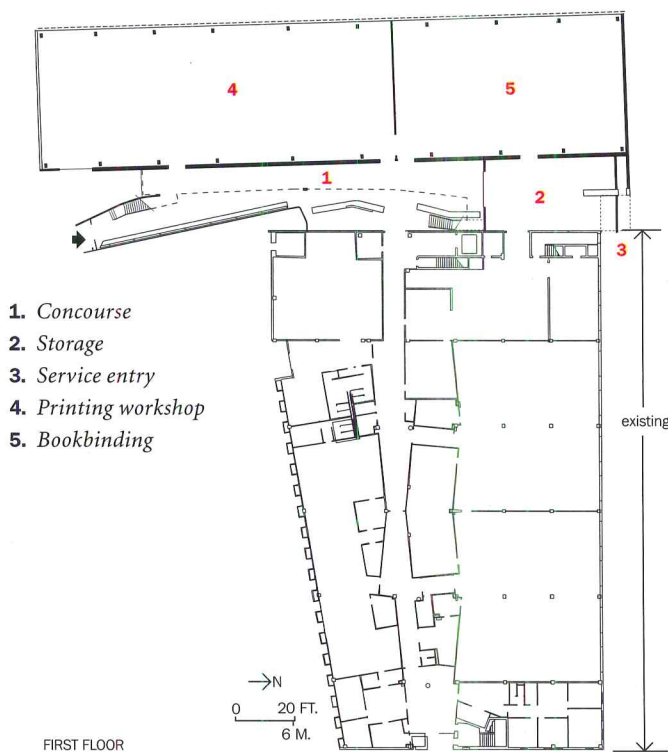
**Engineers:** WP Brown & Partners (structural); O'Connor & Associates (mechanical/electrical)

**Building certifier:** Peter Luzinat & Assoc.



By exposing the steel frame behind the glass panes of the south elevation (top and left) and the enormous recast-concrete panels of the west elevation (above), the architects show how the building

was assembled and how the skin is separate from the structure. A mezzanine running the length of the concourse (opposite) continues the theme of extruded or manufactured forms.



turns the entry atrium into a showcase of students in motion as they climb the main stair and hurry to their studios. While the north and south elevations emphasize the extruded form of the building, the east side reveals the facility as a series of distinct parts: a two-story box containing training spaces, the glazed entry atrium, and a long concourse punctuated by a suspended walkway that offers access to second-floor studios.

Inside the building, the print studios and training areas are factorylike: large open spaces with epoxy-coated concrete floors and exposed mechanical and electrical systems hanging from the ceiling. The sense of industrial production is brought inside with molded pearlescent fiberglass panels on the workshops' walls and an elongated mezzanine walkway wrapped in rust-orange linoleum.

With its engaging glass atrium and muscular forms, Wardle's building has helped revitalize the Brunswick campus and raise the profile of the school's printing program, states David Beanland, who was the university's vice chancellor during the project. In its edgy linear forms and machined materials, the building expresses the culture of printing, while its transparent east elevation makes knowledge visible and accessible to all. ■

#### Sources

##### Steel-and-glass curtain wall :

Custom by Lysaght Brownbuilt

Acid-etched precast-concrete wall panels: Fabcon

Structural glazing system: Glass by DMS

Fiberglass wall panels: Bob McWilliam Plastics

Plasterboard: Boral

##### Resilient flooring and mezzanine

bench: Marmoleum

Low-sheen acrylic paint: Dulux

Joinery and high-density laminate: Constructed by Adam Brothers

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## PERFORMING ARTS

# The Next Stage

**FROM A MUSIC TENT TO A REBUILT CONSERVATORY CAMPUS, RECENT CONCERT VENUES ENGAGE PERFORMERS AND PATRONS.**



1.

### **Pont-Audemer, France**

*Jakob + MacFarlane gives a small-town theater new life with a sleek curtain wall wrapped around newly configured interior spaces.*



2.

### **Lahti, Finland**

*An unusual set of design mandates called for creative reuse of a harbor-side factory, with new construction featuring innovations in wood.*



3.

### **Cincinnati, Ohio**

*Pei Cobb Freed & Partners teams with NBBJ/Roth to enhance a college conservatory of music with fine-tuned performance spaces.*



4.

### **Aspen, Colorado**

*For a revered summer music festival, Harry Teague orchestrates a third-generation performance tent with upgraded acoustics.*

**By William Weathersby, Jr.**

**W**hat makes a great theater is a mystery," says director and writer Emily Mann. "It is not about a beautiful lobby or beautifully treated walls or even the shape of the auditorium. It takes wizardry to make a haunted, electric, living theater." Clearly, the sustaining alchemy of live performance—whether music, dance, or spoken word—lies in the successful connection forged between performer and audience. Patrons gather in the dark to suspend disbelief, surrender to a journey, celebrate a culture. Much of the magic is set into play by the onstage actors or musicians, but what if the sound of the strings is lost to the rafters, or a neighbor in the next row is fidgeting in a squeaky, cramped seat? Clearly, the environmental setting is crucial to the success of this ephemeral shared experience.

Addressing the requirements of both performers and patrons is a particularly collaborative art. Architect, acoustician, engineer, theater consultant, artistic director, and operator tweak plans and materials to ensure that the comfort zone carries across both sides of the footlights or orchestra pit. Long overlooked, backstage amenities for staff and crew are joining public spaces like restaurants and gift shops on the theater programming punch list.

Pragmatically, theater design and construction continue to perform well. According to F.W. Dodge, total domestic construction of the building sector (which includes cinemas as well as performance stages in the Theater category) reached 9.8 million square feet in 2000, with a recent high in 1998 of 17.5 million. Municipalities of every size—from Dallas and Miami to Columbus, Ga., and Madison, Wis.—are investing in major new civic facilities to support the performing arts. Representing a landmark leap of faith, the overhaul of the infrastructure and amenities of New York City's Lincoln Center will tally more than \$1 billion and stretch across the better part of the next decade. Within a few years, opera, ballet, and symphony patrons on the way to their seats at Lincoln Center may be dazzled by the procession of arrival. If current plans under discussion proceed, a three-pronged, birdlike canopy of glass designed by Frank Gehry may swoop down toward the street. Meanwhile, Jean Nouvel is directing the redesign of a renowned regional showcase, the Guthrie Theater in Minneapolis.

Our latest project survey illustrates the variety of size and scale, moods and methods, found in current spaces designed for the performing arts, in this case venues mostly meant for music. More current work by marquee names is on our Web site.

*Contributing editor William Weathersby, Jr., is a writer based in Westport, Conn.*

**NEW!** For 10 more performing arts projects go to Building Types Study at [www.architecturalrecord.com](http://www.architecturalrecord.com). The monthly expanded Web BTS features project descriptions, photographs, drawings, statistics, and links to people and products.

# Théâtre L'Eclat

## Pont-Audemer, France

# 1

**JAKOB + MACFARLANE CLOAKS A 1960S BRUTALIST BOX WITH A VIBRANT CURTAIN WALL TO REINVIGORATE A COMMUNITY THEATER IN NORMANDY.**

By Claire Downey

**Architect:** Jakob + MacFarlane—*Dominique Jakob, Brendan MacFarlane, principals; Patrice Gardera, assistant*  
**Client:** *City of Pont-Audemer*  
**Consultants:** *Scene (theater consultant); Commins Acoustics Workshop (acoustician); ITEC Engineers (engineers)*

**Size:** 17,120 square feet  
**Cost:** \$1.9 million  
**Completion date:** 2001

#### Sources

**Seating:** *Mussidan*  
**Architectural lighting:** *Erco, Mazda*  
**Acoustical wall:** *Placoplatre*  
**Glazing:** *Staba*  
**Sliding stage doors:** *Algaflex*

#### Program

Big theaters don't necessarily put small towns on the map. The city of Pont-Audemer, north of Paris in the Normandy countryside, wanted to scale back its 800-seat theater to make it more intimate while increasing its functional capabilities. Launching a competition in 1997, city officials chose Paris-based architects Dominique Jakob and Brendan MacFarlane well before the duo had completed their innovative design for Georges, the restaurant atop the Centre Pompidou [SEPTEMBER 2000, page 128]. For the Théâtre L'Eclat, the architects carried out a radical intervention, removing all but the rough concrete bones of the 1960s structure and replacing its vital organs from the inside out.

Pont-Audemer is a charming, provincial town of many cross-timbered houses bordered by canals, vestiges of medieval tanneries. The existing theater, designed by Maurice Novarina, was built aside the Risle River. An earlier theater on the same site was destroyed during World War II; before that, ancient fortified walls followed the river.

Far from assimilating any trace of the town's history, Novarina's theater was fairly brutalist: a glass-and-concrete box raised above a concrete slab. The auditorium took up



the entire second floor, with seating running right up to draperies cloaking the perimeter glass walls. "When it got too hot," says MacFarlane, "patrons would open a window, which of course ruined the acoustics."

#### Solutions/Intentions

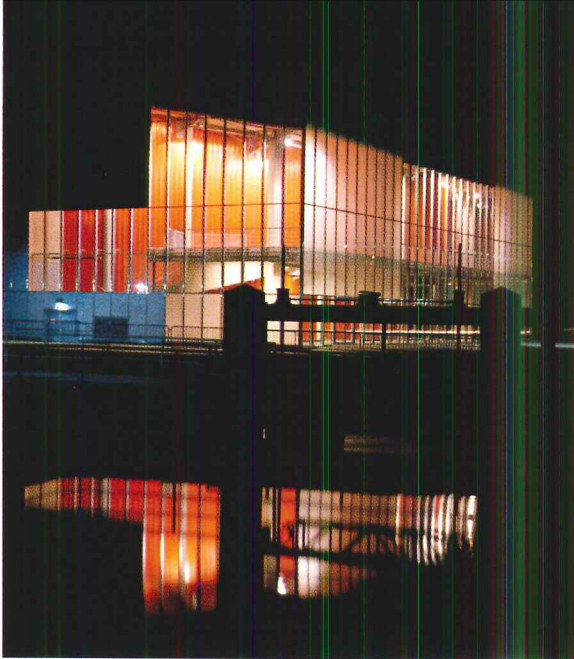
The main objectives of the recent renovation were to improve acoustics, add programming flexibility, and downsize the auditorium. The

original 800 seats were rarely filled, and the corner stage position precluded many music and dance productions. The new configuration had to accommodate varied forms of spectacle—from choral recitals and piano concertos to hip-hop and film projections. The program also required a lobby bar, bathrooms, and offices. The dressing rooms, a further enhancement, were placed below the stage and now are

#### WWW

For additional performing arts projects and more information on the people and products involved in this project, go to Building Types Study at [www.architecturalrecord.com](http://www.architecturalrecord.com)

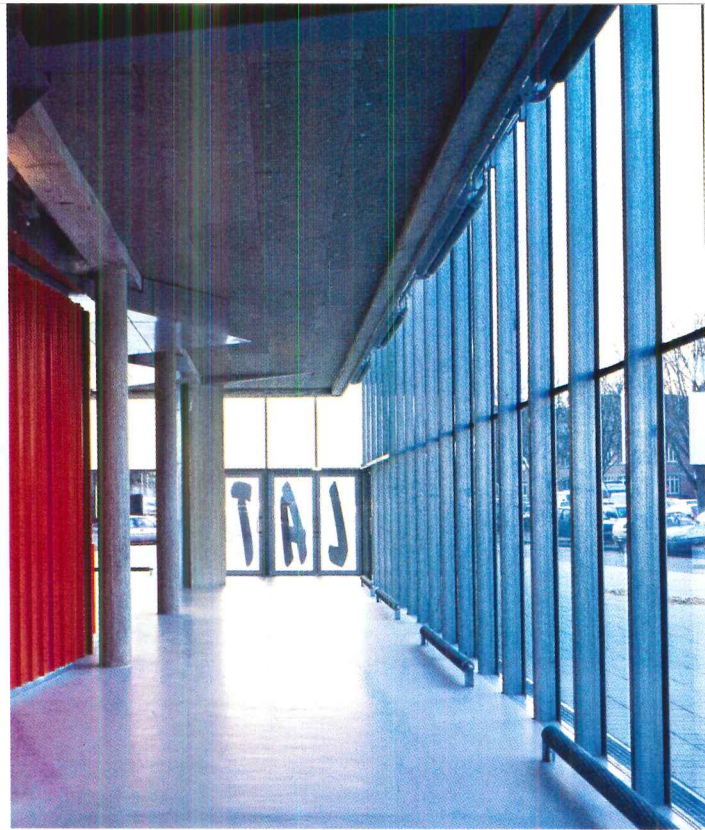
*RECORD contributing editor Claire Downey is a writer based in Paris.*



The existing theater (opposite, top), seemed at odds with the town's centuries-old houses lining the canals (opposite, bottom). A new curtain-wall skin of

translucent and clear glass panels, set in front of interior walls sheathed in bright orange siding, presents an artful, illuminated box at night (this page).

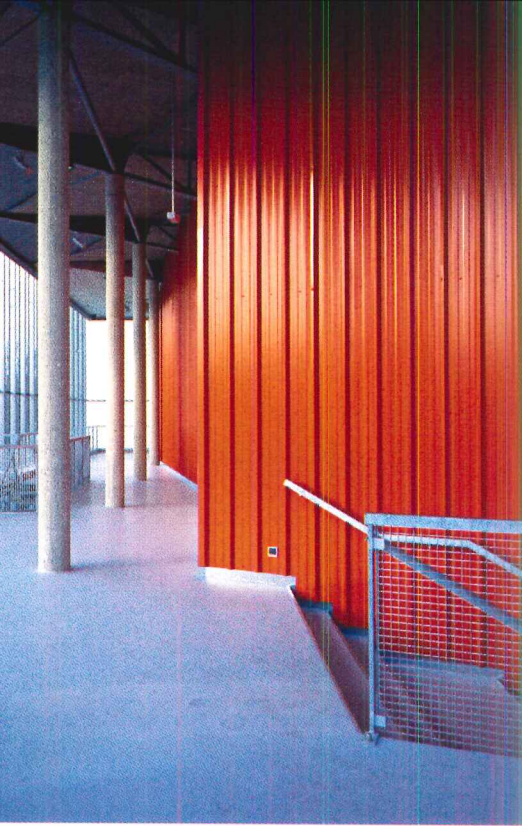




Metal siding and stairs allude to forms and materials found in the region's agricultural buildings (above and below). The curtain wall was brought down to street level to enclose interior spaces. The auditorium has fewer seats and is enclosed by walls that mask HVAC units (opposite, right).







accessed by a narrow spiral staircase at the rear of the stage.

Jakob + MacFarlane chose to retain the corner stage but double its depth by adding a 24-foot extension that projects into the room. A new proscenium is composed of collapsible, rectangular segments that can be removed and stored beneath the stage.

One dramatic change was the creation of an 18½-inch-thick acoustical wall to enclose 360 seats arranged concentrically in the redesigned auditorium. This new interior shell gives the room intimacy. It also creates a separation between the auditorium and the second-floor lobby, while supporting heating and air-conditioning units.

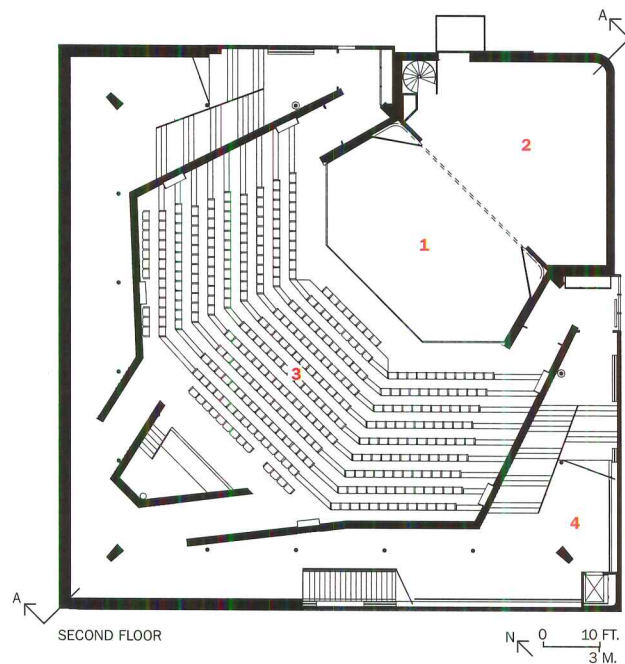
The entire auditorium—from floor to ceiling, walls to seating—is enveloped in shades of slate gray. The dark floors are painted, waxed oak. Chairs feature wooden armrests to aid sound absorption. On the ceiling, acoustic panels are set between exposed structural elements. Though austere, the overall effect is surprisingly warm. “The auditorium has to be accessible to a wide public,” explains MacFarlane. “It had to be popular, not precious.”

Welcoming a broader audience also meant bringing the building

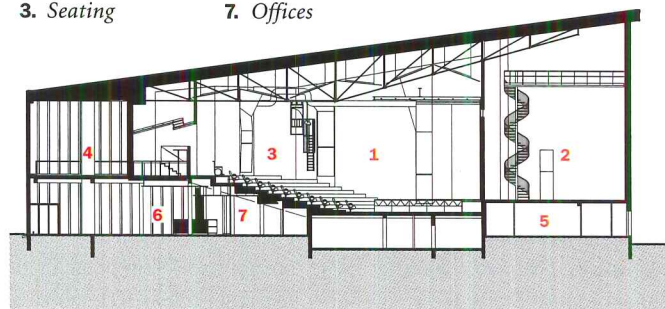
facade down to meet the plaza. Even the corner entrance, with its supermarket-inspired lettering, points toward the town center. The full-height skin of transparent and opaque glass employs a German glazing system in which vertical structural mullions allow a minimum of horizontal breaks. With only silicone joints separating the glass panels, which alternate from 39 to 47 feet high, the facade appears detached from the building behind it, like a curtain stretched across a stage. With the ground floor now completely enclosed, the city also has a new space that can be rented for exhibitions or events.

### Commentary

Inside, the facade’s frosted glass panels are positioned across from auditorium exits so that, post performance, patrons’ eyes do not immediately confront the outside world. The only subtle shock comes from orange metal siding used to clad the ticket desk and lobby walls. The siding is the same type that wraps local farm buildings, albeit in a brighter shade here. For Jakob + MacFarlane, this inexpensive, stock material “connotes a work site, which nicely parallels the activity of creation found within the theater.” ■



- 1. New stage
- 2. Original stage/backstage
- 3. Seating
- 4. Enclosed walkway
- 5. Dressing rooms
- 6. Tickets
- 7. Offices



SECTION A-A

# Sibelius Hall

## Lahti, Finland

# 2

**HANNU TIKKA AND KIMMO LINTULA BUILD A HANDSOME CONCERT HALL ON THE WATERFRONT, A WELL-MADE WOODEN VESSEL ENCASED IN GLASS.**

By Peter MacKeith

**Architect:** Artto Palo Rossi Tikka Architects—Hannu Tikka, Kimmo Lintula, project architects  
**Client:** City of Lahti  
**Consultants:** Artec Consultants (acoustician); Turun Juva Oy (structural engineer); Yap Oy Kari Majala (electrical engineer); Markku Liukkonen (interior design); VTT Building Technology

**Size:** 142,300 square feet  
**Cost:** \$20 million  
**Completion date:** 2000

#### Sources

**Acoustic walls and ceilings:** SPU Systems  
**Wood:** Kerto-LVL, Finnforest Corporation, Schauman Wood Oy  
**Dowel joints, laminated beams:** Vierumäen Teollisuus Oy

#### WWW

For additional performing arts projects and more information on the people and products involved in this project, go to Building Types Study at [www.architecturalrecord.com](http://www.architecturalrecord.com)

#### Program

Raising his baton in Sibelius Hall, conductor Osmo Vänskä commands the attention of the 60-member Lahti Symphony Orchestra and quiets the murmurs of a full house of 1,250. The moment of silence is absolute and deep, signaling a convergence of refined acoustics, civic pride, and architectural achievement. The complex, designed by Hannu Tikka and Kimmo Lintula of the Finnish firm Artto Palo Rossi Tikka, overlooks the Lahti harbor on Lake Vesijärvi. The handsome composition juxtaposes a rehabilitated 1907 brick factory building and two new glass-sheathed boxes that enclose intricate wood space frames. Quietly monumental, the new hall is already regarded as the premier musical performance space in Finland and caps a concerted effort to revitalize the once downtrodden waterfront district.

The international renown of the orchestra belies its home in the provinces. Sixty miles northeast of Helsinki, Lahti has been a hub of commerce for the past century. The forestry industry capitalized on the waterways as a timber-floating route, on the city's many sawmills and joineries, and on its access to St. Petersburg and Helsinki railheads. Gripped by a recession a decade ago, however, the city has sought to diversify its economy and reinvent itself as a center of culture, sports, and business.



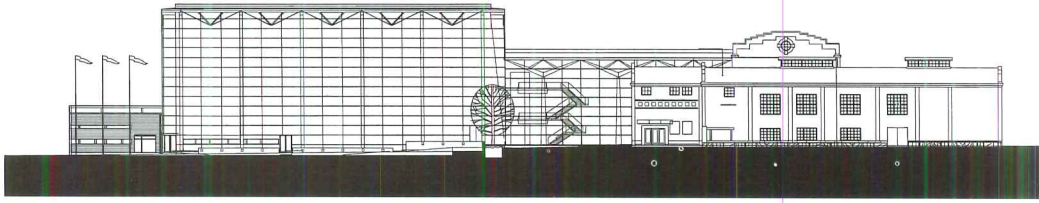
The 50-year-old orchestra's rise to prominence, meanwhile, took flight with the appointment of conductor Vänskä and general manager Tuomas Kinberg in 1985. The orchestra's successful recordings of the overlooked works of Finnish composer Jean Sibelius also fueled a drive to construct a new symphony hall. This momentum dovetailed with the civic redevelopment plans, while the national government was aligning with forestry concerns to create a public flagship as a showcase for Finnish wood in design and construction.

#### Solutions/Intentions

The 1997 design competition for a Lahti congress and concert hall set forth goals of architectural quality, acoustical excellence, innovation in

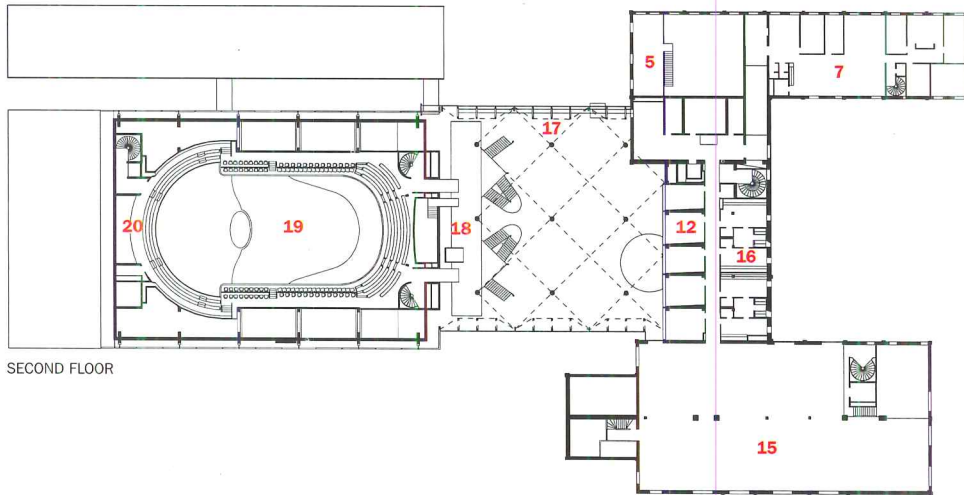
The civic complex orchestrates a historic brick-clad furniture factory and new curtain-wall structures. Forest Hall, a lobby and reception space (right), serves as a unifying core that conveys the feeling of a Finnish forest with glue-laminated timbers and trusses.



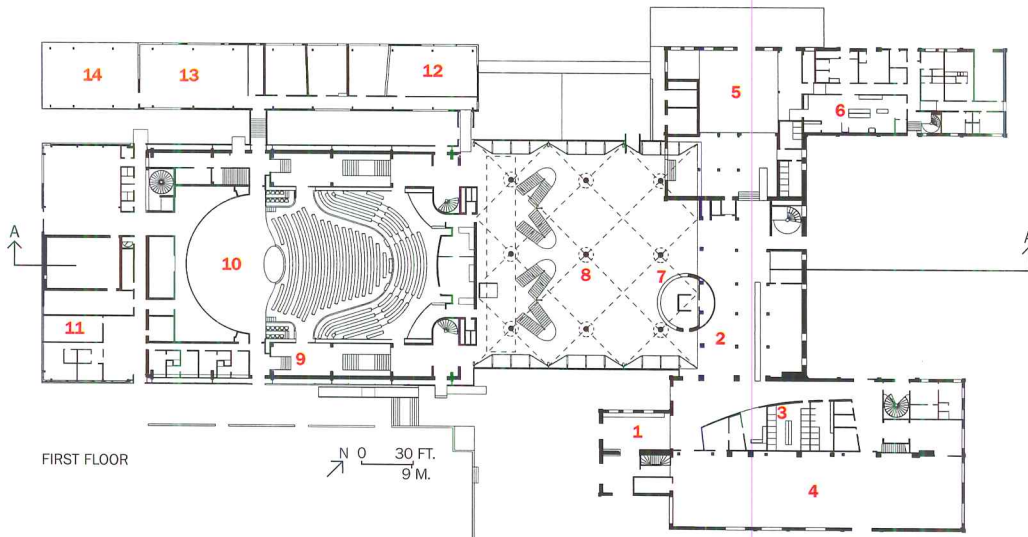


SECTION A-A

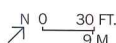
- |                       |                      |                         |                    |
|-----------------------|----------------------|-------------------------|--------------------|
| 1. Main entrance      | 6. Kitchen           | 11. Conductor's suite   | 16. Dressing rooms |
| 2. Lobby              | 7. Office            | 12. Rehearsal rooms     | 17. Wooden bridge  |
| 3. Tickets/shops      | 8. Forest Hall       | 13. Artists' foyer      | 18. Gallery        |
| 4. Exhibition/joinery | 9. Acoustic chambers | 14. Covered terrace     | 19. Balcony        |
| 5. Restaurant         | 10. Auditorium       | 15. Exhibition/function | 20. Choir gallery  |



SECOND FLOOR



FIRST FLOOR



wood construction, and civic presence. New York acoustician Russell Johnson of Artec Consultants was retained by the city to ensure the acoustical viability of entries; the firm later expanded its role as a project consultant.

Each of the four short-listed teams was paired with a general contractor to refine schematic designs and develop the mandated wood construction technologies. Finalists also had to meet stringent budget targets; the city would fund nearly half of the final \$20 million cost, with the remainder divided among the Finnish state, corporate supporters, and the European Union.

Tikka and Lintula's design was awarded first prize on all counts. The architects realized early on that relying upon the aging brick factory building alone to house a world-class concert hall was not feasible. Instead, their plan places arrival, support, and public spaces in the more cellular masonry structure. The symphony chamber was conceived as a new, distinct volume on the lakefront, a well-made wooden vessel encased within a glass vitrine. Joining the old and new is a grand public foyer, the glass-enclosed Forest Hall, dominated by a grid of towering laminated-wood columns that support a dramatic canopy of splayed "branches." Two additional wings support backstage functions and conference areas.

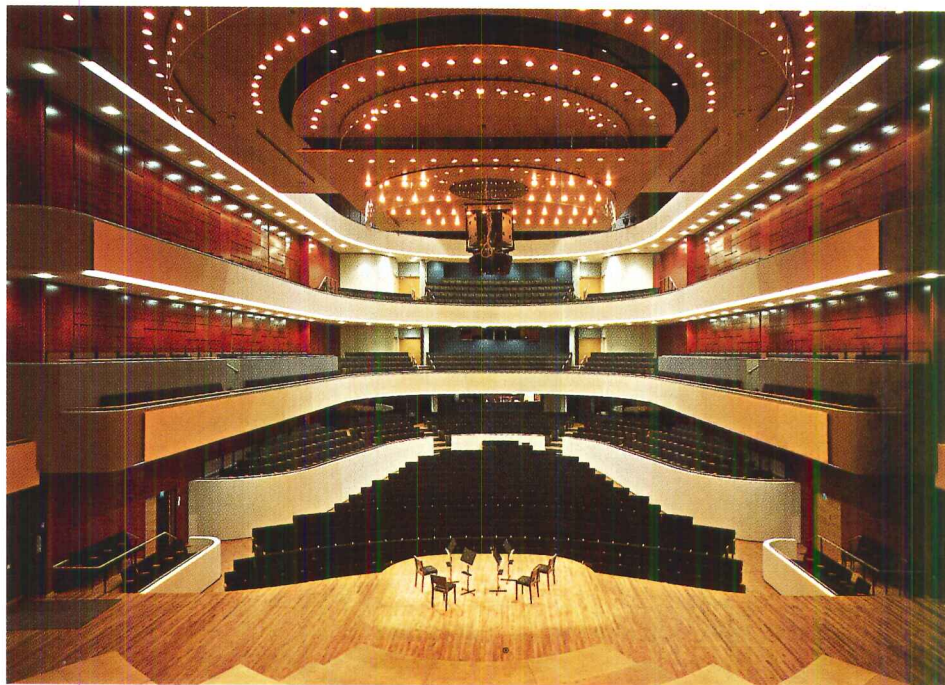
### Commentary

The architectural composition enhances the cityscape: The harborfront has gained a striking and symbolic anchor. Not every elevation is engaging, however, as the necessities of backstage service are exposed to the general line of entry through a parking lot. The former factory structure does possess a new dignity, acting as the primary entrance into the entire complex.

With discipline and flair, the orchestra's new home tangibly addresses the legacy of its namesake native son, Sibelius. It also engages and supports the talented musicians and wide audience welcomed within. ■



Adopting the classic shoebox configuration of revered symphony halls, the architects set a long and narrow auditorium within a larger rectangular volume (right and below). Side walls feature wooden doors that are computer-controlled to adjust the acoustics of the chamber to suit varied music types. Public spaces showcase Finnish wood construction (left).



# University of Cincinnati Cincinnati, Ohio

# 3

## PEI COBB FREED & PARTNERS TRANSFORMS THE COLLEGE-CONSERVATORY OF MUSIC, GIVING DISPARATE BUILDINGS A UNIFIED IDENTITY.

By William Weathersby, Jr.

**Architect:** Pei Cobb Freed & Partners Architects—Henry Cobb, FAIA, partner-in-charge; George Miller, AIA, partner/management; Charles Young, Thomas Baker, Richard Diamond, Eric Schiller, Campari Knoepffler, Baker Goodwin, Susan Lowance, Libby Polenz, project team

**Associate architect:** NBBJ/Roth

**Client:** University of Cincinnati

**Consultants:** Theater Projects Consultants (theater); Kirkegaard & Associates (acoustician); Olin Partnership (landscape); Fisher Marantz Stone (lighting); THP Ltd. (structural engineer); Korda/Nemeth Engineering (MEP engineer); Shen Milsom & Wilke (audiovisual)

**Size:** 146,870 square feet (new construction); 137,900 square feet (renovation); 400-car garage

**Cost:** \$93.2 million

**Completion date:** 1995–99

### Sources

**Aluminum, curtain wall:** EFCO

**Masonry:** The Belden Brick Co.

**Brick pavers:** Pine Hall Brick

**Elevators:** Dover

**Carpet:** Lees Commercial Carpets, Atlas Carpet Mills

### WWW

For additional performing arts projects and more information on the people and products involved in this project, go to Building Types Study at [www.architecturalrecord.com](http://www.architecturalrecord.com)

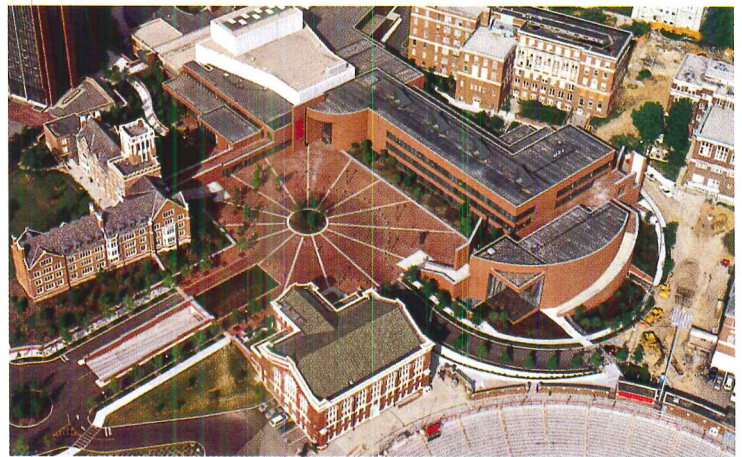
### Program

The sprawling campus of the University of Cincinnati encompasses a remarkable breadth of architectural audacity: the architecture school by Peter Eisenman, a biotechnology building by Frank Gehry, the physics center by Michael Graves, and soon-to-open expansions by Gwathmey Siegel and Leers Weinzapfel. A decade ago, amid these architectural gems, the university's College-Conservatory of Music was an aesthetic backwater.

"Arriving on campus in the early 1990s, I was enchanted by the life and creativity of the music school, but appalled by its physical conditions," says Henry Cobb, FAIA.

The conservatory comprised squat 1960s boxes clad in precast concrete. The dull enclave was squeezed onto an awkward, steeply sloped site between undistinguished classroom and dormitory buildings, "crammed like a bone in the throat" of the campus, Cobb recalls. Worse, a ring of service roads choked off surrounding pedestrian space, so that the music college was effectively exiled from the larger university whole.

Pei Cobb Freed & Partners was charged with a bold, complicated overhaul: upgrade the aging facilities and more than double the existing floor area. Conservative university budgets and the constricted site ruled out a total tear-down of most buildings to achieve a

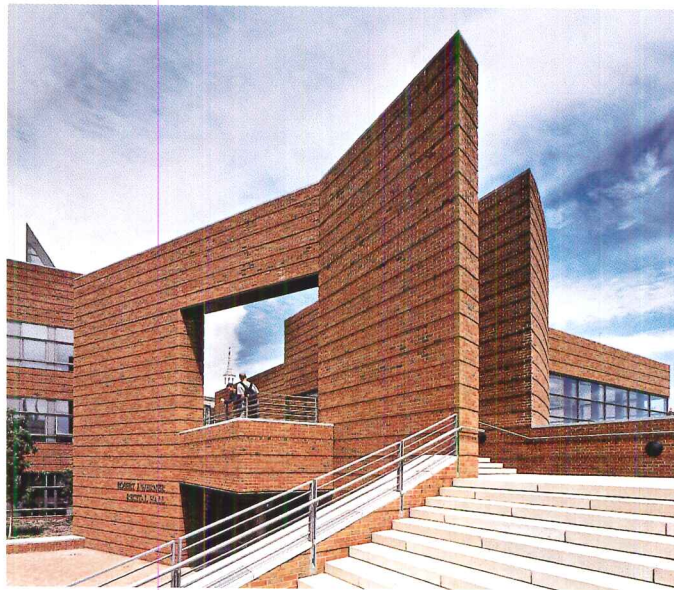
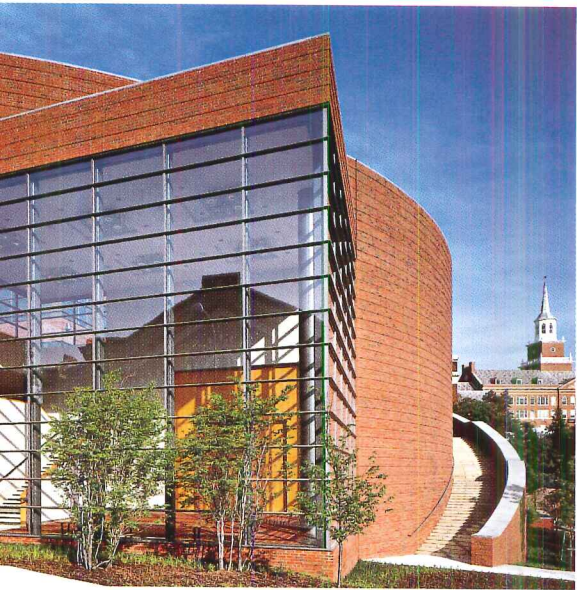


clean slate for new construction, so the architects had to imaginatively salvage at least some of the existing facilities. As an image-elevating goal, administrators also wanted the conservatory to evolve as a village-like plan threaded with gathering places to support the creative community. A final challenge: construction would be phased in six

stages over seven years so that classes and performances would not be interrupted.

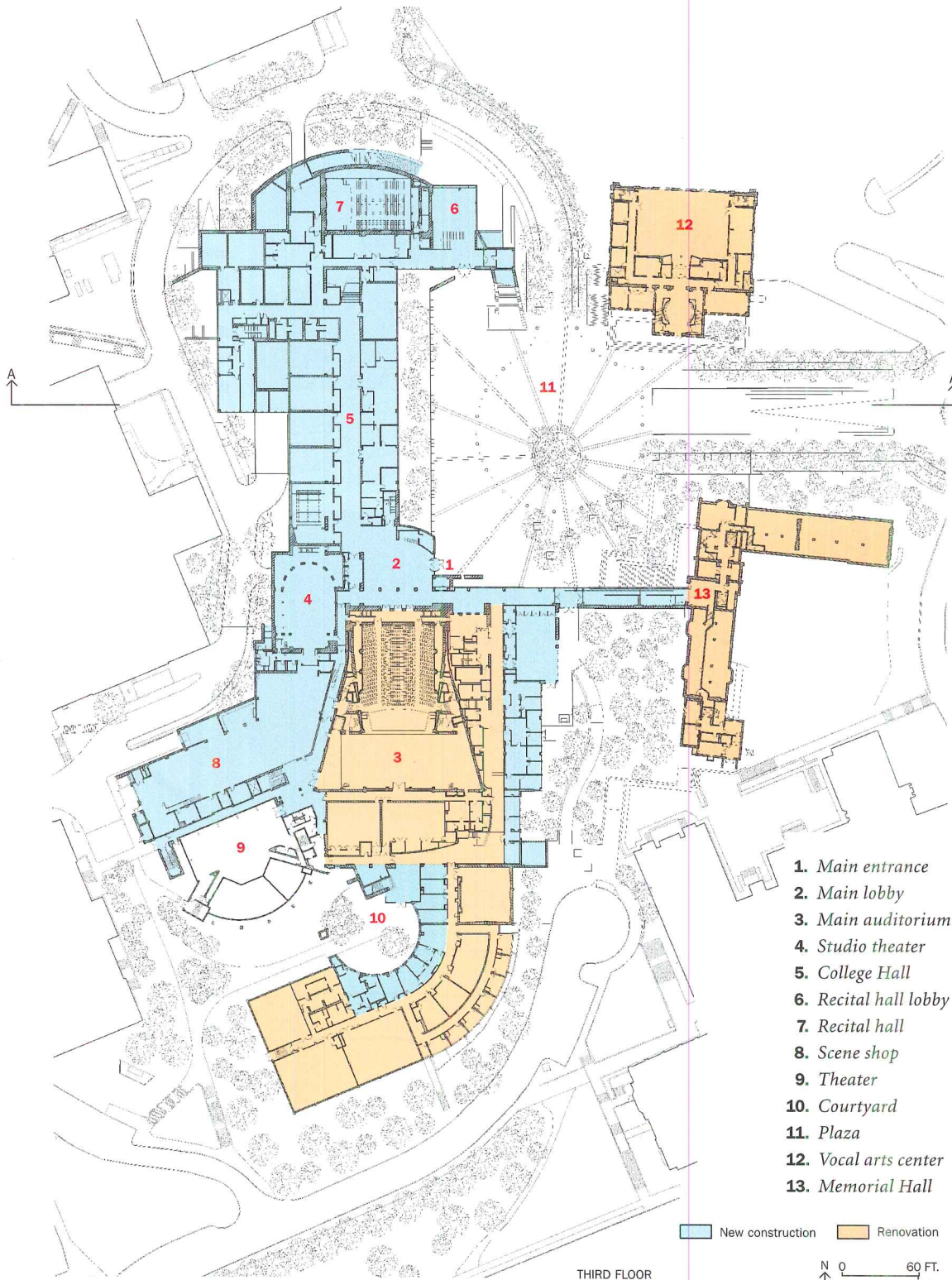
### Solutions/Intentions

After thoroughly analyzing renovation versus new construction options, the architects decided that existing performance and related support spaces could be retained



The plaza is the center around which academic life in new and renovated conservatory buildings revolves, day and night (opposite). The recital hall lobby (below and far left), with a boxlike grid intersected by a curving wall, echoes the chamber's plan. Balconies and wide stairs on the plaza support interaction (left).



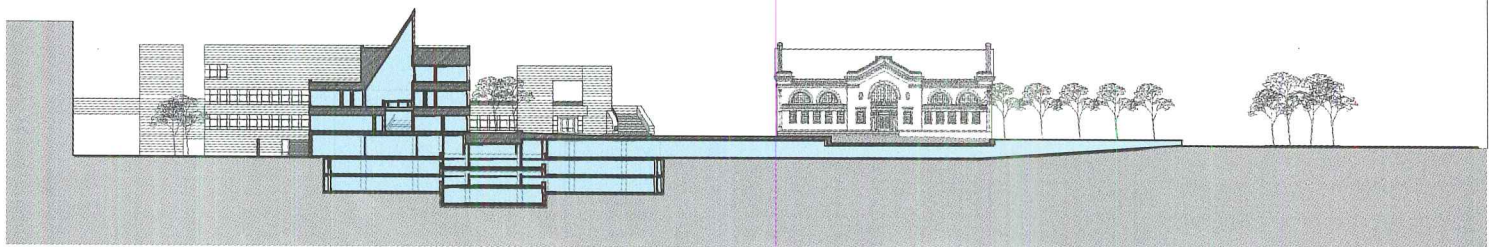


1. Main entrance
2. Main lobby
3. Main auditorium
4. Studio theater
5. College Hall
6. Recital hall lobby
7. Recital hall
8. Scene shop
9. Theater
10. Courtyard
11. Plaza
12. Vocal arts center
13. Memorial Hall

New construction
  Renovation

N ↑ 0 60 FT. 18 M.

THIRD FLOOR



SECTION A-A

and renovated, while the classroom wing would be razed and replaced. Two adjacent buildings—an abandoned gym and outmoded dorm—were drafted as sites for a student union and a vocal arts center. These strategic choices made it possible to shape the new academic wing so that it framed a courtyard. Formerly a knot of asphalt streets, the brick-paved piazza now serves as the spatial focus of the buildings, both new and old.

The college's venues now include a renovated 750-seat proscenium theater, an existing 400-seat thrust stage, a new 300-seat recital hall and 200-seat studio theater, and a 100-seat master classroom. New and reconfigured rehearsal spaces in multiple buildings support musical, dance, and theater performances. Rehabbed dorm rooms were particularly well suited for new roles as practice pods.

### Commentary

A range of dynamic performance spaces features graceful motifs of grids punctuated by curves, like variations on a musical theme. The proliferation of red brick—including the broad courtyard—seems an unadventurous choice of palette, if still judicious for the budget. But with maturing landscaping, public sculpture, and planned pedestrian bridges that soon will connect the conservatory complex to the center of campus, the nuances of the composition are enriched with each school season. Cobb says his intent was not to create an “easily read” architectural object, but to transform the relationships between a progression of always-in-use spaces. “This is the opposite of a one-liner,” he says. “It’s the sum of many complex parts.” ■





The recital hall (left) is expressed as a wood-framed cage of 14-foot squares. A curved wall of limestone sweeps behind a row of seats as a grace note. In the studio theater (below), a brick colonnade acts as a proscenium in front of another rusticated wall, here hewn concrete standing in for natural stone.



# Benedict Music Tent

## Aspen, Colorado

# 4

**WITH GREAT FANFARE, HARRY TEAGUE BLENDS TRADITION AND IMPROVED ACOUSTICS IN A NEW TENT FOR THE ASPEN MUSIC FESTIVAL.**

By David Dillon

**Architect:** Harry Teague Architects—Harry Teague, AIA, principal; John Backman, AIA, project architect; Phil Beck, job captain; Milton Rosa-Ortiz, David Keleher, Ryan Sturtz, Michael Hassig, AIA, Brian Wilson, project team

**Client:** Aspen Music Festival and School

**Consultants:** Kirkegaard and Associates (acoustics, audiovisual); Auerbach + Associates (Theater design, media, lighting); ME Engineers (mechanical/electrical engineer); Schmuser Gordon Meyer (civil engineer)

**Size:** 37,480 square feet

**Cost:** \$11.2 million

**Completion date:** June 2000

### Sources

**Membrane structure, cables, fittings:** Birdair

**Curtain wall:** AIA Industries

**Tent doors:** McKinney Doors & Hardware, John Truso Hardware, Industria Acoustics

**Carpet:** Interface

**Raised floor:** Mystic Scenic Studios

### WWW

**For additional performing arts projects** and more information on the people and products involved in this project, go to Building Types Study at [www.architecturalrecord.com](http://www.architecturalrecord.com)

### Program

Summer in Aspen means crisp air, sublime vistas, and the sounds of Bach and Beethoven wafting across upland meadows. Ever since Eero Saarinen designed its first music tent in 1949—a canvas “big top” with a dirt floor and log poles—Aspen has been the summer home to hundreds of young musicians and performing artists. The combination of the music festival, the Aspen Design Institute, and the Institute for Theoretical Physics transforms the entire town into a floating seminar in which scholarship intersects with sophisticated play.

Aspen now has a new music tent designed by Harry Teague Architects. It continues the tradition of casual culture initiated by Saarinen’s structure and expanded by a larger octagonal version designed by Bauhaus émigré Herbert Bayer in 1967. The new tent, named for Bayer’s brother-in-law Frederic Benedict, seats 2,050 beneath a swelling white dome reminiscent of a schooner under sail. Patrons sit on long wooden benches that fan out from a sunken stage, or flop on a sloping lawn dotted with birch trees. The skirt of the tent consists of 180 vertical louvers in Bayer blue that open to the lawn and the mountains in good weather and that can be closed against wind and rain.

*Contributing editor David Dillon writes for the Dallas Morning News.*

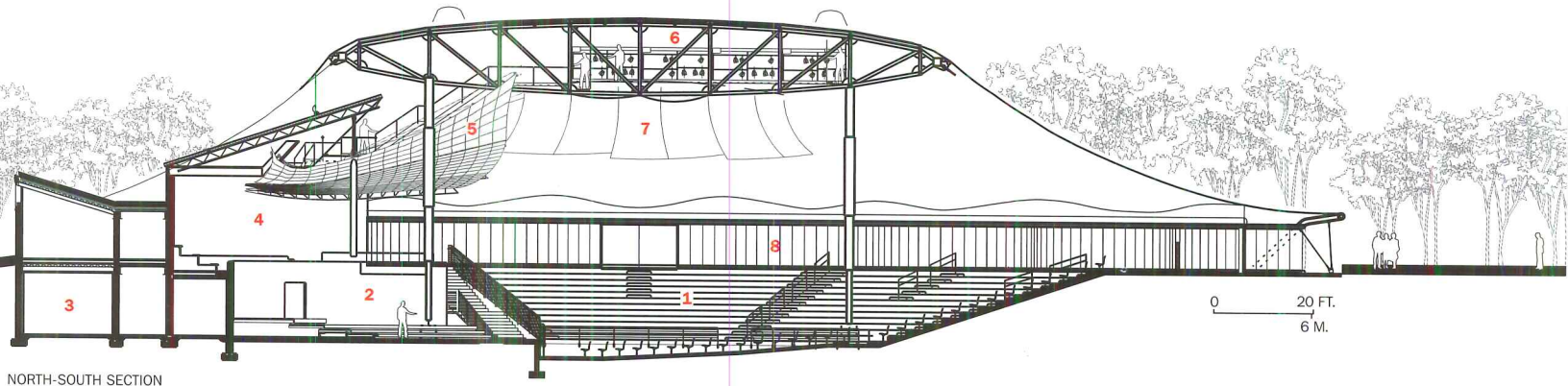
The design of the Benedict Music Tent was driven partly by nostalgia and mostly by the need to solve the physical and acoustical problems of its immediate predecessor. Aspen residents insisted that the new tent be no taller or wider than Bayer’s, that bench and lawn seating be preserved, and that the tent’s friendly relationship to nearby Harris Concert Hall—also designed by Teague—be maintained. The architects met these politically sensitive requirements while improving on most features of the earlier designs.

### Solutions/Intentions

Both the Bayer and Saarinen tents were made of canvas that lasted only a few years before beginning to leak and tear. At the end of every season, the tents had to be dismantled and stored at considerable expense. The Benedict, on the other hand, is made of the same Teflon-coated fiberglass that covers the main terminal at Denver International Airport. It has the same transparency and warmth as canvas and the strength to withstand snow loads of 95 pounds per square foot. The fabric is secured by steel cables anchored to massive concrete blocks that could be footings for a small bridge.

The tougher challenge was to approximate concert hall acoustics within the soft embrace of a tent. Bayer’s design had a simple thrust stage and few hard surfaces to





NORTH-SOUTH SECTION

- 1. Seating
- 2. Stage
- 3. Backstage
- 4. Choral balcony
- 5. Stage canopy
- 6. Acoustics, catwalk
- 7. Sound reflectors
- 8. Louvered panels



Concerts have the look of a town meeting, with patrons on benches or sprawled on the lawn.





reflect the sound. Because the musicians couldn't hear themselves or one another, they had to anticipate the conductor's beat to keep pace. "There was no bottom to the music at all," says Harry Teague. "It just disappeared into infinity."

Working with acoustician Lawrence Kirkegaard, Teague designed an acoustical shell to bounce sound back to the stage and out to the lawn. Fabric reflectors swoop above and around the players. The old mushiness has given way to a new brightness and balance; it still doesn't rival the sound in a concert hall, but it's better than anything festival audiences have heard in years. The shell rests on four tapering steel columns designed to sway as much as 12 inches.

### Commentary

A tight budget forced a few compromises backstage. While there is space for storage, rehearsal, and services, it is mostly raw and rather grim. The green room, for example, is a painted concrete-block wall. The backstage area, though, is connected by underground tunnel to Harris Hall, which provides more rehearsal and performance space.

These are minor limitations in an otherwise outstanding design. Tradition has been served without retro foolishness. A spirit of relaxed reverence prevails—precisely what the festival founders had in mind. ■



The stage, a wide, paneled semicircle with a choral balcony, holds up to 150 performers (above). Adjustable risers allow for varied configurations, vital to

the festival's diverse programming. Vertical louvers open onto the surrounding lawn or may be closed during inclement weather (left and below).



# The Return of Natural Ventilation

AS ARCHITECTS REDISCOVER THE BENEFITS OF FRESH AIR AS AN ALTERNATIVE TO HERMETICALLY SEALED, AIR-CONDITIONED BUILDINGS, THEY DISCOVER NEW ARCHITECTURAL FORMS.

By Todd Willmert

Natural ventilation is not a new idea—for thousands of years wind scoops and towers have been an integral part of vernacular Middle Eastern architecture. These structures moved air either up or downward, depending on the prevailing winds, and helped make homes and buildings habitable in the hot, harsh climate.

During the Victorian era, the English became obsessed with clean air. London and other cities were plagued with smoke- and dust-saturated air, and buildings such as Pentonville Prison and Parliament were designed with chimneys and towers that were used not only to expel smoke and to serve as observation points, but also to be part of the ventilation systems.

After World War II, the advent of central air conditioning and its progeny, the sealed building, made natural ventilation an anachronism. Today it is making a comeback, however, owing to rising energy costs and the worldwide movement toward buildings that employ “green” strategies. Architects and engineers, mostly in England, are using advanced computer and modeling techniques to refine the physics of heating, cooling, and ventilating. Chimneys and towers are key architectural elements for harnessing pressure differentials by employing the stack effect and other air-movement principles.

*Todd Willmert is an architect with Ellerbe Becket and a researcher at the University of Minnesota's Center for Sustainable Building Research at the College of Architecture and Landscape Architecture.*

## CONTINUING EDUCATION



Use the following learning objectives to focus your study while reading this month's ARCHITECTURAL RECORD/AIA Continuing Education article. To receive credit, turn to page 204 and follow the instructions.

## LEARNING OBJECTIVES

After reading this article, you should be able to:

1. Explain basic air-movement principles.
2. Describe pre-Industrial Revolution ventilation devices.
3. Explain how night flushing cools buildings.
4. Understand the economic and environmental benefits of natural ventilation.

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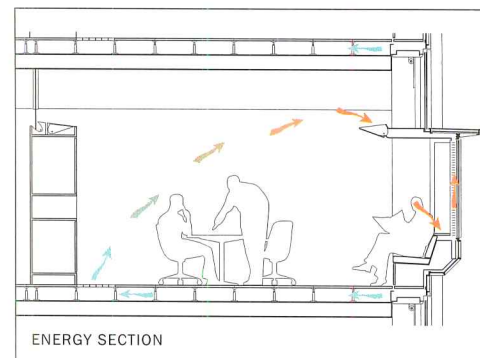


Tower-top cowlings, which can be seen above the buildings, help draw fresh air through the offices at the Jubilee Campus at Nottingham University in the U.K.

The following case studies provide lessons for American architects, because the design strategies, which were motivated by client mandates to reduce energy costs, go beyond the implementation of their efficient environmental control systems. Such projects work because naturally ventilated buildings have a certain appeal that sealed buildings do not. In the U.K., there is a long tradition of designing well-ventilated buildings to promote health and hygiene; typically in such structures large quantities of diffuse air are delivered at low velocity at floor level. This contrasts dramatically with the common U.S. practice of delivering forced air at high velocity near the ceiling, a more energy-intensive strategy. Furthermore, the temperate U.K. climate—not too hot, cold, or humid—makes natural ventilation a relevant concept. Ventilation also helps to remove moisture; by code, buildings are ventilated at a background rate (24 hours a day) to alleviate dampness.

## Buildings that breathe

These circumstances have fostered a new approach to mechanical servicing in the design of large offices and other building types. In particular, two projects in England—the Inland Revenue Center in Nottingham, by London-based Michael Hopkins and Partners with engineers Arup, and the Queen's Building at De Montfort University in Leicester, by Short Ford Associates with Max Fordham engineers—are excellent examples of a new trend in which architectural form purposefully exposes mechanical function.



**Portcullis House (left), across from Big Ben, houses offices for members of Parliament. The wall cavities and ducts, articulated on the facade, actually diagram the path from the main block to the rooftop. Fresh air is delivered to the offices (above) via a plenum under the floor. Solar radiation is absorbed by dark blinds located in the ventilated cavity of the triple-glazed bay windows.**

Vertical chimneys and towers are the noteworthy elements of these buildings, but they are only the culmination of a complete planning effort that includes three-dimensional section development. In fact, a low-energy, passively ventilated building must fully address total airflow patterns, from intake to exhaust, with the chimney or stack effect the primary, but not sole, principle employed. The other key consideration for enhanced ventilation is displacement ventilation (harnessing air's natural buoyancy to facilitate its movement). The principle is simple. Fresh air is introduced at the bottom of a space. As it is warmed, primarily by people and equipment, it rises and collects against the ceiling, where it can flow to the exhaust chimneys or towers. Key factors in calculating stack venti-

## **IN FACT, A LOW-ENERGY, PASSIVELY VENTILATED BUILDING MUST FULLY ADDRESS TOTAL AIRFLOW PATTERNS.**

lation include both total and net stack height—the distance from the top-floor ceiling to the top of the stack.

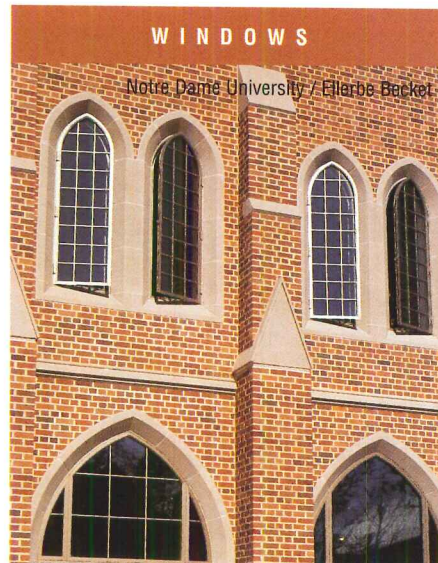
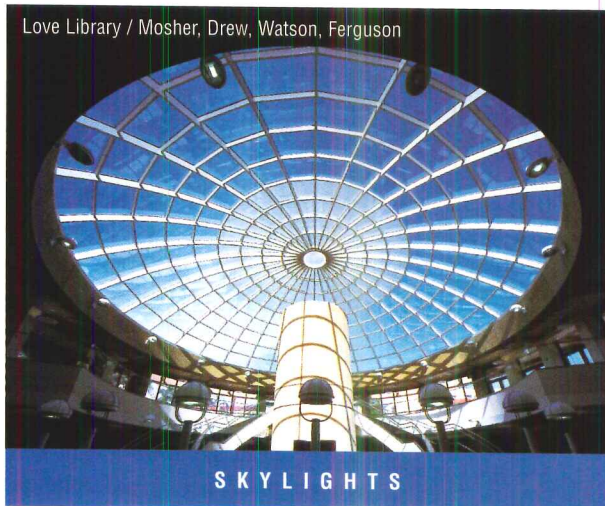
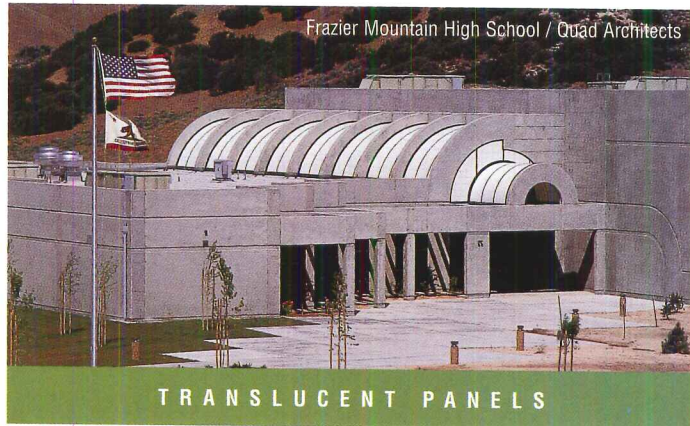
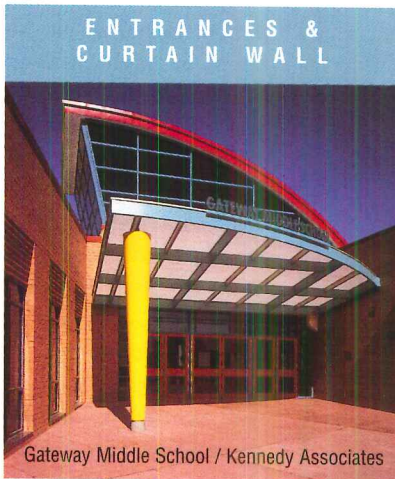
At the Inland Revenue Center, a 400,000-square-foot government office complex, wings are 45 feet wide and 240 feet long, to maximize exterior exposure. The long, narrow floor plates of the building facilitate cross ventilation when windows are open. When the windows are closed, intake louvers draw in fresh air and allow stale air to travel through the building to the roof ridge and towers at the end of each wing. On the top floor, spent air is expelled by a skylight ridge, instead of the stair towers, which would have to have been at least 20 feet higher than the ceiling to draw air adequately. Each of Inland's three floors has parallel airflow. Fans within the raised floor on each level pull fresh air through louvers directly into the cavity. The air travels over heat exchangers, where it is heated if necessary, then moves through a nearby floor grille, where it is introduced in the offices at floor level. Stale, warmer air collects at the

ceiling and is drawn along the ceiling until exhausted through the ridge, or stair towers, whose roof raises and lowers to regulate rate.

At the Queen's Building, window, louver, and chimney forms demarcate the various ventilation strategies—which are principles taught in the classrooms of the building itself. Multiple atrium chimneys exhaust air, supplementing other chimneys in the high-bay lab spaces and auditoriums. The great variety of spaces and their usage at Queen's calls for a more varied ventilation approach. Here, 100,000 square feet of labs, classrooms, auditoriums, and offices housing the university's engineering program are either high, narrow spaces exposed on two or more sides, or they open to an atrium. Two small labs for precision work require mechanical ventilation, but aside from these spaces, more passive means are fully explored. Offices utilize simple cross ventilation where possible, with deeper spaces relying on stack ventilation. Underfloor ventilation provides fresh air to auditoriums; as the warm air rises it is pulled out the stacks. Rooms overlooking the atrium have walls punctured with operable panels that can be changed to control ventilation.

These projects illustrate the nuances of chimney caps and tower tops, which are critical to ventilation design. The towers at the Inland Revenue Center absorb solar energy to create and assist draw. By contrast, another project by Michael Hopkins and Partners, this one at Nottingham University, uses tower-top cowlings that rotate in the wind. With openings facing downwind, the wind pressure differentials over the building and across the cowlings create draw. At Queen's, the chimneys, with four faces, are designed to draw regardless of wind direction and are solar-assisted. Much recent work utilizes this principle, instead of the temperature differences that drive the stack effect to foster air movement. Potential advantages of this strategy include chimney diameters that are smaller than those usually required to create the stack effect.

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**At the Inland Revenue Offices in Nottingham, U.K., fresh air, assisted by fans, enters through full-height, operable windows (above) and is exhausted through the top of the stair towers (top).**

#### **Economical and environmental benefits**

As demonstrated in the Inland Revenue Center and Queen's Building, natural ventilation enjoys considerable advantages: air-conditioning equipment can be downsized initially. This reduces electrical consumption, peak demand, and carbon dioxide emissions at the electrical generating plant. The results, confirmed over the last few years, are more sustainable buildings with operating budgets lower than the

norm. Inland Revenue consumes about a quarter of the energy a conventional building would utilize on the same site, with a conventional air-conditioning system accounting for about half that energy. Monitoring at Queen's reveals similarly impressive results.

Part of the economic and environmental success of these buildings stems from the fact that natural ventilation strategies tend to work

well with other sustainable practices. For instance, the high spaces and narrow floor plates necessary for ventilation also work well with daylighting. Naturally ventilated buildings such as these also depend on thermal mass—concrete and masonry—to provide a stable mean radiant temperature. Not only does mass temper incoming air, but ventilating it after hours, or “night flushing,” dissipates the heat built up during the day. Mass provides a thermal damper, so the building requires less overall energy to heat and cool.

Perhaps the real strength of natural ventilation is that architects have found it can be a new source of inspiration. The spring point for Alan Short's recent renovation of Manchester's Contact Theater was scrapping the air conditioning, which was always too noisy during performances, and replacing it with ventilating chimneys. Ventilation there consists primarily of five extract stacks built on the roof. Square terra-cotta inlet flues at ground level, revealed rather than concealed, are made from standard chimney liners, a building component rarely visible at all, but celebrated in this design as a direct expression of an inventive servicing approach.

#### **Computer and physical modeling**

Empirical insights are the starting points for design, but technology is pushing further. Arup and Max Fordham have both developed proprietary computer programs to help determine tower and chimney parameters. Multiple factors impact airflow: The amount of heat absorbed by the tower or chimney dictates airflow rates; the size of intake grilles into each space limits the amount of air that can pass through them; room geometry and openings to the stack itself affect air currents. A computer model of the proposed design, with weather data integrated into the program, can simulate the myriad factors determining airflow.

Physical models are also used to cross-check the computer simulations, which are not perfect and are not powerful enough to model the airflow through the complicated shapes of some rooms. Wind-tunnel testing of scale models has proved to be an effective design tool to analyze air movement through a building. Another method employs saline solu-

### **A COMPUTER MODEL WITH WEATHER DATA SIMULATES THE MYRIAD FACTORS DETERMINING AIRFLOW.**

tions. These sink in water in exactly the same way that hot air rises in colder air. In this method, a clear plastic model of a building is immersed in a water bath. When the saline solution is added, its flow reveals how increasing stack size or the number of air inlets can boost airflow. If a room's shape or partitions hinder airflow, this will be indicated by the physical model.

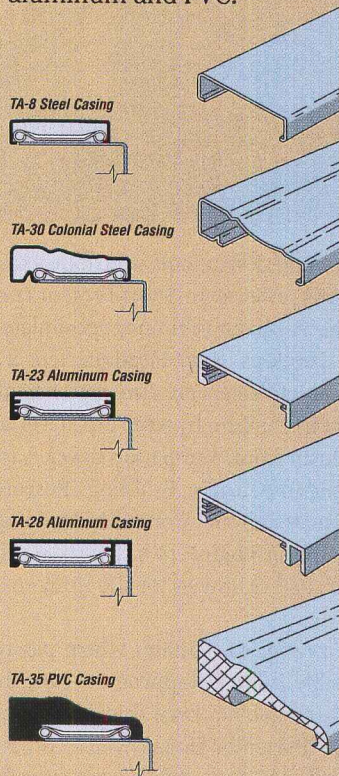


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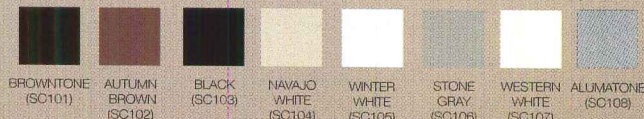
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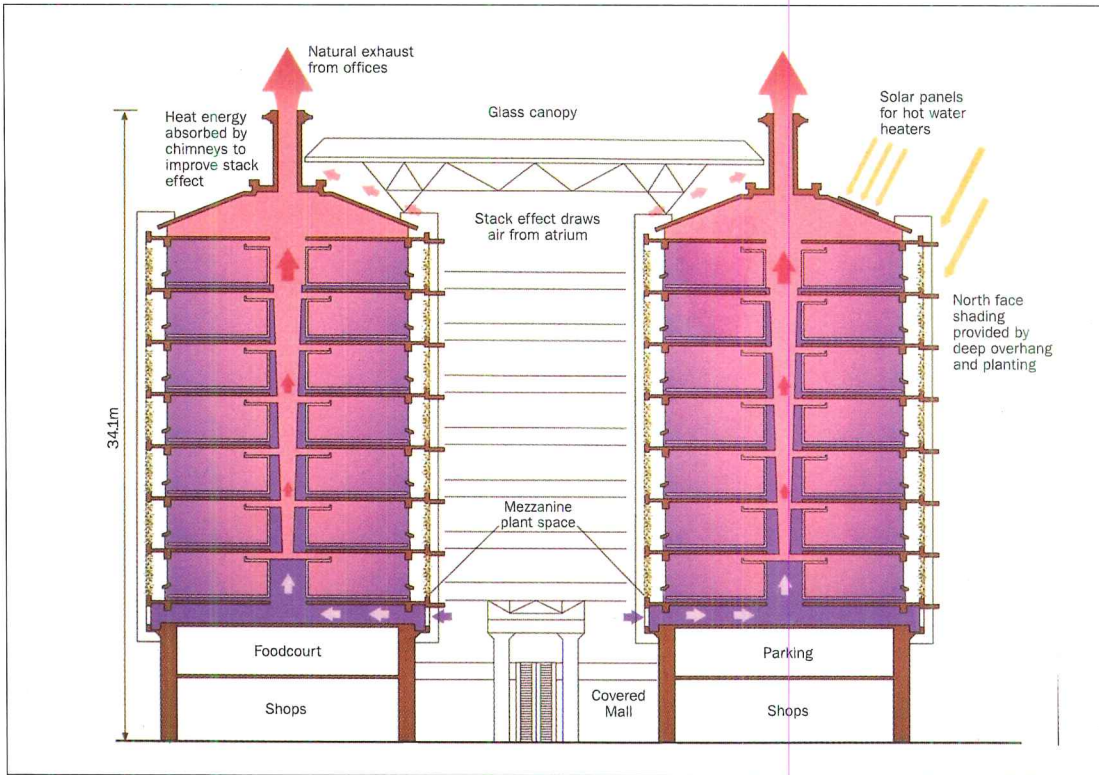


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Eastgate (below, right and left), a large office block in Harare, Zimbabwe, relies on long, narrow floor plates for maximum daylighting and ventilation. A large atrium, covered by a glass canopy (below, left), provides fresh air to the ventilation system, as shown in the energy section (left).



The development of expertise and design tools contributes to an expanding range of naturally ventilated projects. In Short's recent completed Coventry University Library, the ventilating chimney vocabulary is applied to a new building type; at Hopkins' Saga Headquarters it is applied to a corporate facility. Other practitioners are also exploring the ventilation concepts: In a dorm project in Durham by Arup architects and engineers, the buildings cluster around an iconic ventilation tower. A row of stainless-steel chimneys in Feilden Clegg's Building Research Establishment in Hertfordshire punctuates and reinforces the building's bay structure. Battle McCarthy Consulting Engineers has worked with architects to explore ventilating towers and chimneys for shopping malls and other projects.

These projects encompass a range of climates where passive, low-energy ventilation is most applicable, but it is important to note that sites such as these should have access to fresh air. Even this limitation is being challenged, however, at Hopkins' Portcullis House, which contains offices for members of Parliament and is located right across from Big Ben. London's air and security concerns dictated inoperable windows,

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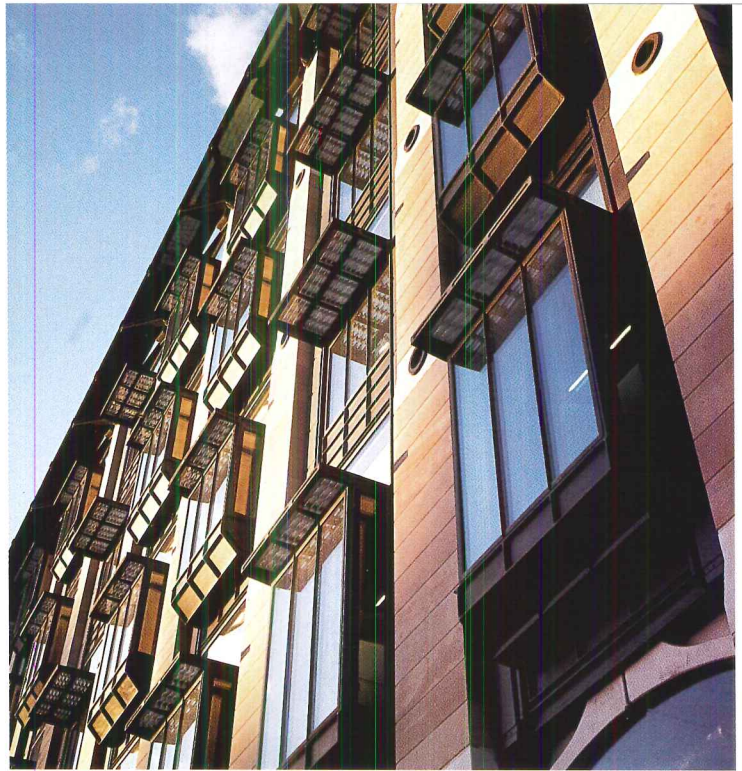
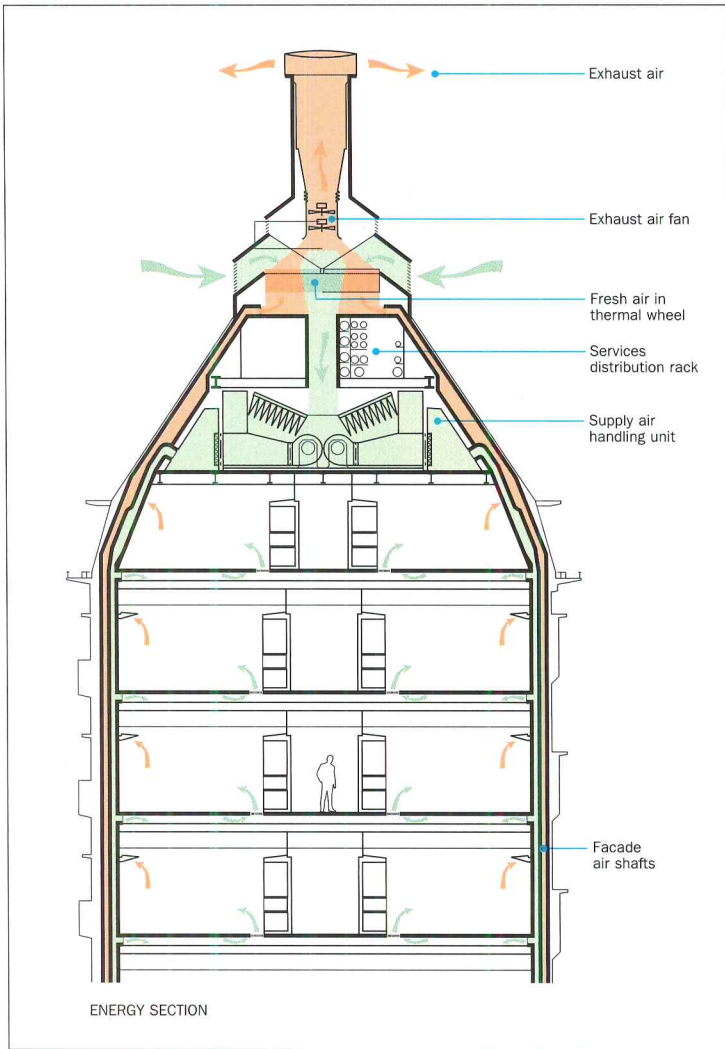
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**At Portcullis House (above and below) in London, the windows are not operable, so air is drawn in at the chimney bases and rises through facade air shafts as shown in the energy section (left).**

suggesting a conventionally air-conditioned building. Instead, 14 bronze chimneys and connecting ductwork send spent, stale air out the chimney caps. Fresh air is brought in at their bases, where it is cooled—with cold ground water drawn from 450 feet below the building—before it is delivered to office spaces.

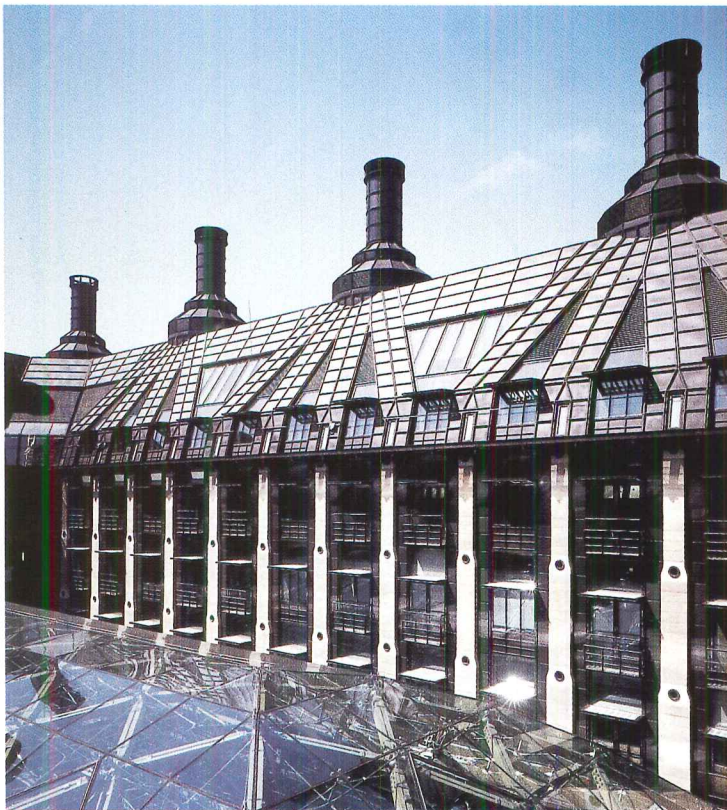
**Natural ventilation goes global**

While circumstances favor development of naturally ventilated buildings in the U.K., the principles are applicable to other cultures and climates. Eastgate by Pearce Architects with Arup in Harare, Zimbabwe, illustrates stack-ventilation concepts in an office block. The capital and maintenance costs of imported air conditioning, along with other factors, led designers to develop a passive ventilation alternative—the first of its kind in Africa. Harare's climate is moderate,

**DEPENDING ON BUILDING PROGRAM AND TYPE, NATURAL VENTILATION IS APPLICABLE THROUGHOUT THE U.S.**

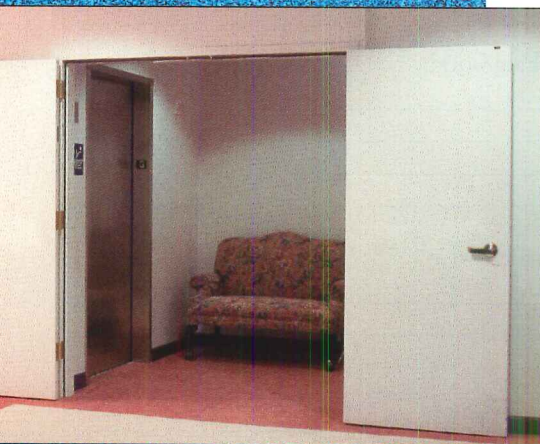
characterized by sunny, warm days and cool nights, yet it is quite distinct from the climate in the U.K. A myriad of strategies—shading, good daylighting, and ventilation chimneys—contribute to a low-energy building made of local materials.

Depending on building program and type, natural ventilation is applicable throughout the U.S.—at least for parts of the year. Yet in much of the country, natural ventilation cannot totally supplant air conditioning for spaces requiring full conditioning, given humidity levels in the peak cooling season. The concept is most appropriate for mountain climates, with low humidity and large diurnal temperature swings. For a proposed classroom and laboratory facility at Montana State University in Bozeman, BNMI Architects plans to use stack ventilation, expressed in the towers, for ventilation and passive cooling. The area's cool summer nights, which are often 30 degrees Fahrenheit lower than the daytime highs, mean that night flushing can cool the building sufficiently. According to calculations, no air conditioning will be required.



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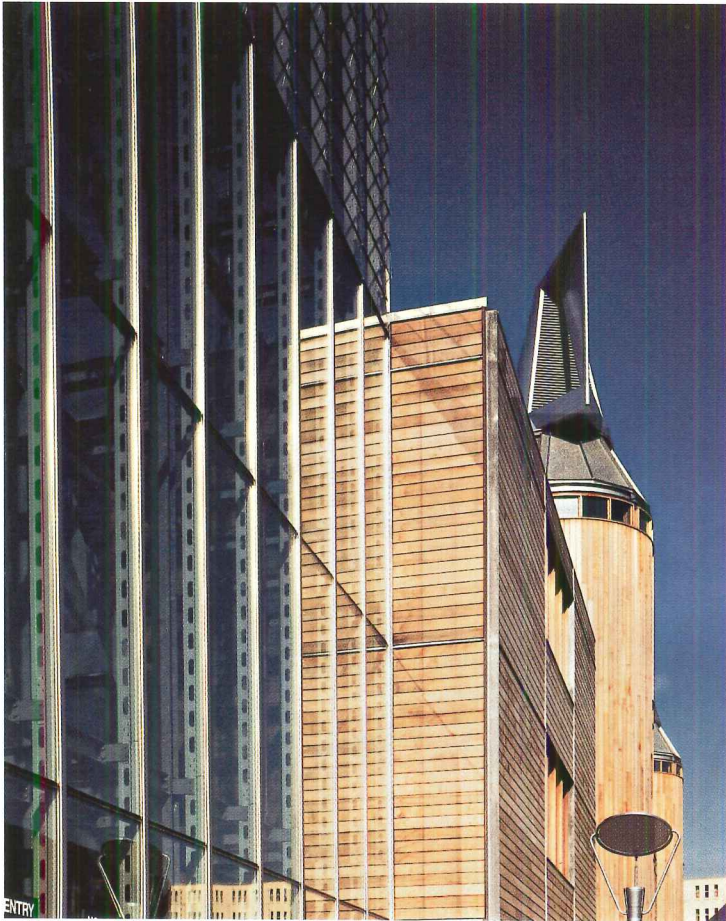
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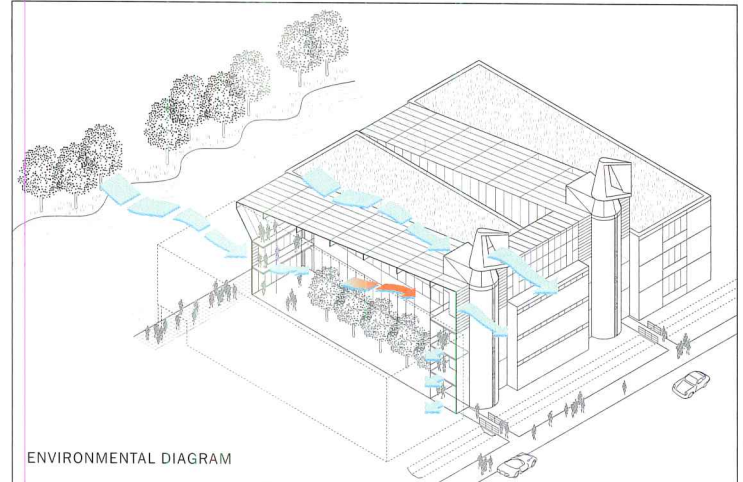
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**Nottingham University's tower-top cowlings (left) rotate in the wind. Pressure differentials across the building and cowlings create draw (below).**

In the hands of talented architects and engineers, vertical gestures are becoming distinctive elements wedding architectural design and building service systems. Bridging these concerns in this way is not new: Wright's Larkin Building and Kahn's Richard Medical Labs both have a striking vertical expression of mechanical services. What is novel, however, is how chimneys and towers become key components as alternatives to hermetically sealed buildings. While the flat-roofed, horizontal aesthetic—whose ascendancy as a predominant design style coincided with the popularization of central air conditioning—is coming under challenge, the new vocabulary can only expand as strategies underlying these building are explored further. ■



**AIA/ARCHITECTURAL RECORD CONTINUING EDUCATION**

**INSTRUCTIONS**

- ◆ Read the article “The Return of Natural Ventilation” using the learning objectives provided.
- ◆ Complete the questions below, then check your answers [page 204].
- ◆ Fill out and submit the AIA/CES education reporting form [page 204] or file the form on ARCHITECTURAL RECORD’s Web site at [www.architecturalrecord.com](http://www.architecturalrecord.com) to receive one AIA learning unit.

**QUESTIONS**

**1.** How does the stack effect work?

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**2.** How do natural ventilation and reduced energy consumption work together?

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**3.** How does night flushing work?

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**4.** What factors impact airflow?

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**5.** Why isn’t natural ventilation widely used in the U.S.?

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**6.** What is parallel airflow?

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# Digital Architect

## Tips from the IT masters

By Jerry Laiserin, FAIA

Architects have been using computers long enough to have determined some guiding principles for what works and what doesn't. Part of the mission of AIA's Technology in Architectural Practice Professional Interest Area (TAP/PIA) is to identify and disseminate these best practices or lessons learned. During the past year, TAP/PIA has convened several panels of architects who manage information technology (IT) for their firms, and the panels explored the issues in depth. As a past chair of TAP, I helped organize and moderate panels in Boston and Portland, Ore., in which participants examined the adoption of technology in architecture firms, the effect of technology on practice and firm structure, and possible future directions. Taken in the aggregate, the panelists' comments and conclusions amount to a catalog of tips from experts who have mastered these issues.

### Be flexible but expect to invest

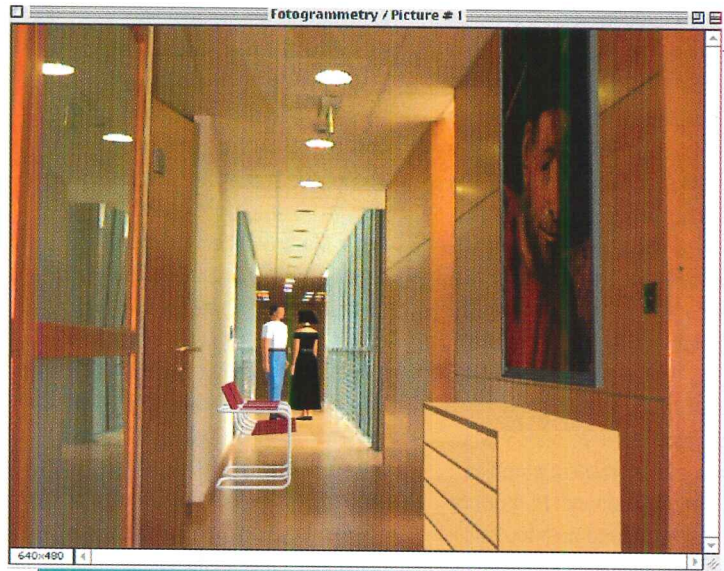
In the mid-1980s, firms that could afford to purchase the extremely costly computers of that time often became mired in legacy issues: Their investment in equipment and software created a reluctance to

*Contributing editor Jerry Laiserin, FAIA, provides strategic consulting services to architects and their technology providers.*

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adopt newer, less costly, and more widely used hardware and software tools that came along in the next 5 to 10 years. Over time, firms realized that this hesitance was hindering their growth and that success with technology demands flexibility in the face of constant technological evolution. For example, ADD, Inc., a 150-person firm with offices in Cambridge, San Francisco, and Miami, has undergone at least five technology transitions in 15 years. Jill Rothenberg, information systems (IS) director and senior associate principal, says, "We started with ARRIS CAD on Intergraph (UNIX) workstations, then moved to the Macintosh, first with Claris CAD in 1992, followed by Microstation on the Mac in 1997. When Bentley Systems stopped providing support for the Mac platform, we kept Microstation but switched to Windows PCs." Now ADD is exploring Revit as a CAD alternative to Microstation.

The pros are also aware that technology is no longer an optional aspect of practice; firms that wish to remain up-to-date must maintain a consistent level of investment and research. "You have to see technology as a consumable item," says Marc Margulies, AIA, principal of his own 40-person firm in Boston, which went through three technology transitions in 12 years before standardizing on Autodesk Architectural Desktop. Although keeping up with technology has increased the total cost of doing business, computers and software are much less expensive on a per-



**Software tools integrating 2D and 3D, Windows and Mac, visualization and photographs can simplify digital practice by giving firms fewer individual tools to manage and integrate.**

user basis than they were 15 years ago. And technology providers—knowing their customers face these challenges—have improved the cost-effectiveness of how their products work with one another, and with older hardware and software platforms.

### Keep it simple

Many architects initially used UNIX workstations or Macintosh computers, yet today more than 80 percent have standardized on Windows-based PCs, with the rest still using Macs (very few U.S. architects still use UNIX workstations). Similarly, local area networks (LANs), which once ran primarily on Novell or UNIX operating systems, now run almost exclusively on Microsoft WindowsNT or Windows2000 server software. According to Eric McKinney, AIA, chief information officer of 80-person

Gordon H. Chong & Partners (GHCP) in San Francisco, "Five or six years ago we stopped using Macs and Novell server software in favor of a 'Microsoft everywhere' approach, because a single environment of commonplace systems lets us spend less time managing technology and more time making architecture." At Callison Architecture, a 450-person firm in Seattle, IT manager Susan Connor Koenigs warns, "Don't be seduced by bells and whistles; pick the software that works best for you. Most of the products we use have capabilities we're not even touching."

### Technology is more than CAD

There's no question that CAD programs are a primary focus among architects: All firms produce project documents in CAD, with roughly 60 percent of architects using

# Digital Architect

AutoCAD, nearly 20 percent using Microstation, and the remaining 20 percent divided among a dozen or so other programs, including FormZ for modeling and 3D stalwarts such as ArchiCAD, Architectural Desktop, DataCAD Plus, Revit, and VectorWorks Architect.

But especially among architects younger than 40, facility with multiple software tools is taken for granted—and increasingly, it's a skill necessary for advancement. "There is a subtle power shift from the senior technical people to younger people with CAD skills," observes Tim Rice, AIA, IS manager with LMN Architects, a 140-person firm in Seattle. "This is paralleled by a shift in power from our traditional marketing rainmakers to people who are wizards at creating graphics (e.g., Adobe Freehand, PhotoShop, and Illustrator) and desktop publishing (primarily Quark), and from our senior project managers to expert users of project-management software like Microsoft Project and Internet-based collaboration tools such as buzzsaw.com." Margulies sees software mastery as a training and career-development skill. "It is expected that everybody in the firm will be equally versed in all aspects of the computer, as well as design," he says. Like many other professionals, architects of the future will have no choice but to become fluent in a wide range of digital technologies.

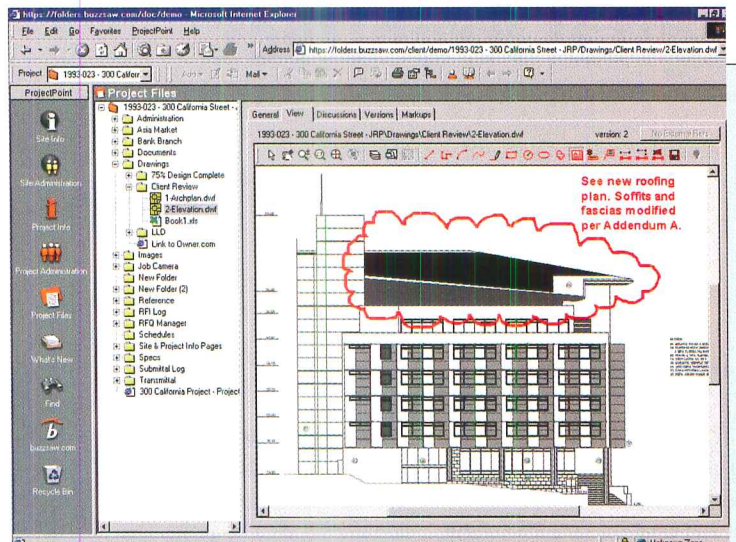
## Manage knowledge, not files

All the panelists agreed that using technology imposes information-management burdens, but firms must focus on higher-level knowledge and communication about their projects and practice. "Especially in a multi-office firm, the use of video-conferencing and intranets (internal Web sites) is essential for effective collaboration," notes Rothenberg. Rice stresses that CAD drawings and other information that architects work on electronically should be

both understood and meaningful to all parties involved. "Younger architects must retain access to seasoned practitioners who know more about designing and building, while seasoned practitioners need exposure to the technology tools, even if this happens vicariously through their juniors," he says. Darren Rizza, director of IT at 165-person Payette Associates in Boston, seeks to avoid a common complaint at firms: Many architects who are expert users of CAD don't fully understand the building elements they design, while those who best understand design are not fluent in CAD. Payette is now embarking on a five-year internal knowledge-management project, which uses Architectural Desktop linked to a document management system and collaborative extranets (project Web sites).

## Embrace standards

Adherence to standards for work processes and file sharing and formats ensures that multiple users can work together on the same project files, that design information can be shared with outside collaborators, and that files created today can be reworked when necessary. "I constantly monitor standards for digital work; otherwise, you can't assume files will be accessible in the future," says Koenigs. "What happens if your designer leaves the firm, or the client wants to remodel the building five years from now?" She is encouraged by efforts such as the National CAD Standard promulgated by the National Institute of Building Sciences (NIBS), which incorporates AIA's CAD Layer Guidelines and the Construction Specification Institute's (CSI) Uniform Drawing System. Margulies looks forward to the day when efforts such as the International Alliance for Interoperability (IAI) will allow him to "replace drawing deliverables with information deliv-



Many architects believe that if they use externally hosted Internet applications, such as project administration via buzzsaw.com, they can focus more effectively on design, rather than on technology management.

erables—via 3D objects on the Web." This reality may be some time off, but architects and their technology providers are beginning to coalesce around such efforts.

## Reuse information intelligently

All panelists acknowledged that detail libraries and project histories comprise the underutilized flipside of standards. "CAD drawings look so polished that less experienced architects may have no clue what they are copying when they start designing a new project," says McKinney. "We produce more drawings than ever before, so there's more information to look at—but to understand it, you have to piece together the designer's thought process, based on the logic of the drawing and file structure." Rice agrees that proper use of standard details is one area in which architects could show improvement. Intelligent reuse of field-proven information can improve quality and productivity.

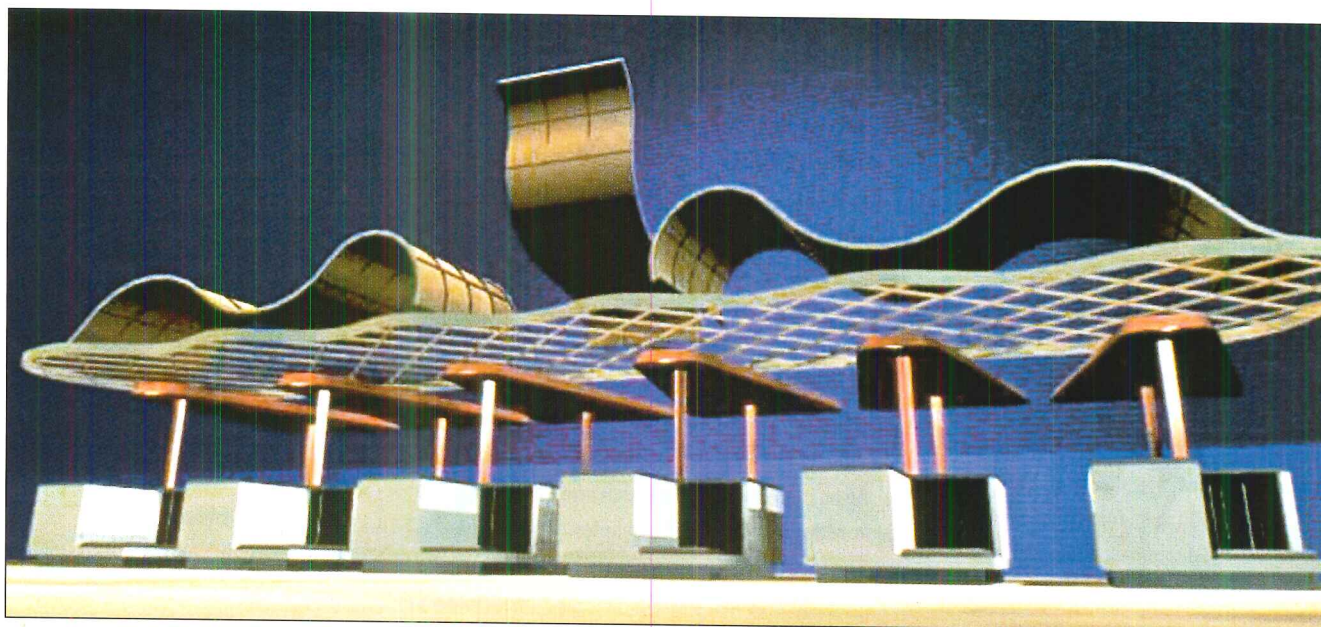
## Focus on making architecture

By streamlining the process of maintaining hardware, software, and files, firms are able to focus on the heart of practice—designing. Koenigs sees

her firm moving to a subscription-based model for buying software and services, perhaps via application service providers (ASPs) hosting software over the Web. "Outsourcing saves time for our IT staff, so they can spend more time training architects how to use design tools, rather than managing our network," she says. Rizza is already experimenting with ASPs as part of his firm's knowledge-management project. Rothenberg believes ADD's intranet and extranet will be merged into a unified system that supports all of the practice's functions—projects, marketing, administration, and accounting—which would be accessible from every computer through standard Web browser software.

It's important to remember that technology in architectural practice is not an end in itself, but only a means to support the creation of quality design and the delivery of quality services. According to McKinney, "The system level of technology should be invisible. We try to focus on the process layer. Essentially, we are designing the environment for producing work." As the tools of the trade continue to improve, architects will find it easier to tailor technology to serve their needs. ■





Curved ceiling design such as this computer-rendered ticket counter area is here to stay, thanks to new design software and innovative systems technologies

USG presents

## DESIGNING CURVED CEILINGS: SYSTEMS MAKE THE PROCESS EASY, EFFICIENT AND ECONOMICAL

by: Rosa Lee, AIA  
Marketing Manager  
USG Corporation

**CURVED BUILDING DESIGN IS NOT ONLY IN VOGUE, IT'S HERE TO STAY. THANKS**  
to sophisticated new computer-aided design programs and innovative systems tech-

nologies, architects, construction professionals and manufacturers are now able to collaboratively create and implement curved wall and ceiling designs that were formerly either impractical or cost-prohibitive.

The "wow" effect of curved building design is undeniable. Consider the attention that architect Frank Gehry continues to receive for his design of the Guggenheim Museum, Bilbao, Spain, and some of his other more recent projects.

Central to Gehry's process are several important elements: unprecedented creativity, generous budgets and groundbreaking technology. To push the limits of curved building design, Gehry utilizes a powerful computer program called Catia (Computer-Aided Three-Dimensional Interactive Application). This software, originally developed to design fighter jets, is now used by Gehry's technicians in translating the complex curves he has in mind to plans that the builder can use on the job site. Every component is accounted for and every detail confirmed as buildable before construction begins.

Unfortunately, not all design firms have the funding, staff and technology that Gehry can deliver. However even without a full-time Catia technician on staff, most architects can still incorporate exciting, innovative curves into their projects – and do it easily, efficiently and economically – thanks to two factors: advances in computer-aided design technology and a new generation of products and systems that facilitates curved building design, especially in commercial interiors.

Designers are now using flexible, 1/4-inch gypsum board panels combined with track systems to create elegantly curved walls. Bullnose paper faced metal bead and trim is taking the (90-degree) edge off wall corners. Curved modular office furniture, computers and accessories are adding energy and flow to desktops. And thanks to a combination of computer design programs and an innovative array of new integrated systems, 2-D and 3-D ceilings are lending curved dynamics, practical functionality and an expressionistic freedom to a wide range of interior spaces.

AIA/ARCHITECTURAL RECORD  
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Use the learning objectives below to focus your study as you read **A COMPARATIVE GUIDE: UNDERSTANDING AND SPECIFYING ABUSE-RESISTANT WALL SYSTEMS**. To earn one AIA/CES Learning Unit including one hour of health safety credit, answer the questions on page 157 and follow the reporting instructions on page 204 Or, use the Continuing Education self report form located at [www.architecturalrecord.com](http://www.architecturalrecord.com).

**LEARNING OBJECTIVES:**

- Describe different types of materials used to form curved ceilings.
- Explain how curved ceilings are created.
- Describe where different curved ceiling systems are used.

## THROWING CEILINGS A CURVE

Nowhere in the commercial interior environment is the excitement and drama of curves more pronounced than in ceilings. Gone are the days when architects were limited to horizontal suspension systems and flat infill panels. There now are several types of ceiling systems that add depth and interest to an interior's "fifth plane," provide locations for lighting and signage, indicate room transitions, guide pedestrian traffic and more – all while incorporating curves into the room design. What's more, some of these systems offer architects computer-aided design technology that delivers a complete design/build solution, assuring that the architectural plan is not only buildable, but is constructed to precise design specifications. The four primary types of curved ceiling systems that are supported by computer-aided design technology are:

- Suspension trim (for use with specialty-type ceilings, as well as flat acoustical ceilings)
- Metal accent systems
- Curved metal ceiling systems
- Drywall suspension systems

**SUSPENSION TRIM** was first introduced to the marketplace about 12 years ago as a way to finish the straight edges of suspension systems. Manufacturers found, however, that they could produce curved components in steel or aluminum and in different heights to interesting effect. Suspension trim systems facilitate a number of key design and performance criteria, including:



*Suspension trim enables the creation of free-form island ceilings and fascia.*

- The creation of free-form island ceilings or fascias that can be filled in with tile and grid to draw attention to and highlight specific areas within ceiling spaces.
- Acoustical sound control, accessibility and the use of lay-in fixtures.
- Various trim heights to create visual excitement and the illusion of varying ceiling thicknesses.
- Clean, crisp edges.

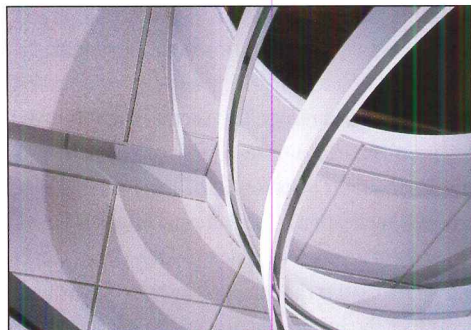
- Significant cost savings over conventional drywall soffit construction.
- Pre-engineered to design specifications, providing total design freedom for the architect and ensuring that the design is built to exacting detail.

Suspension trim can be used to create floating clouds, islands or layers of ceiling, and is often used in contemporary offices, retail stores, entertainment and gaming venues, as well as high-bay areas such as airports, lobbies and entryways.

Given the reality that standard curved components can never meet the specific design requirements for every project, manufacturers are now offering custom component design and production. This provides designers with complete design freedom. The most versatile systems are offered in custom finishes, and are pre-cut and numbered for faster installation. The ceiling contractor simply assembles the trim according to the numbered parts, which correspond to numbered instructions. Installations are typically completed using standard tools and techniques.

**DESIGN TIP:** *To minimize the effect of visible hanger wires on the job site, specify that they must be installed plumb, straight and neat. The spec should include instructions for uniform wire turns and pigtailed trimmed close to the vertical wire. Alternatively, use aviation wire with a crimping sleeve. For open ceilings, try using 18 ga. hanger wire.*

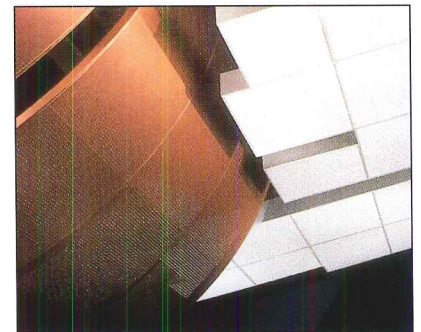
A recent twist on the suspension trim concept is the development of **metal accent** systems, which can be configured to create circles, straightaways, arcs, angles or spirals. Lighting and signage can be hung or mounted on the metal channels for way-finding and space-defining applications. The systems are available in various sizes, heights and reveals, and can be finished in any color.



*Metal accent systems can be used for decorative, way-finding or space-defining applications.*

Recently, suspension trim has evolved into even more sophisticated **curved metal ceiling** systems. Intended for visual impact and heightened aesthetics, these systems have made ceilings more expressive than was ever possible before. Available as a series of vaults and valleys in various radii, the range of different curved shapes and effects is nearly endless. Curved metal ceiling systems offer the following features and benefits:

- Curved main tee segments and flexible panels offer multiple variations for creating beauty and drama in interior spaces at affordable prices.
- Optional edge trim and access panels provide design versatility while meeting functional requirements.
- A broad choice of infill panels makes these systems desirable for a wide range of applications.
- They are designed and pre-engineered as a system to reduce labor costs.
- They are shipped in a kit to ensure that the design is constructed exactly as intended.



*New one-directional infill panels lend a monolithic look to curved metal ceilings.*

Infill panels are made from expanded metal or woven wire mesh in an anodized brass or steel finish, solid metal, perforated metal or translucent materials. Lighting can be integrated into the systems or placed behind the infills panels for transparent or luminous effects.

Some manufacturers offer curved metal ceiling systems customized to meet specific design requirements. All pieces are marked with "genetic codes" that correspond to an assembly sequence outlined in installation directions. These products install like conventional suspended ceiling systems, enabling experienced ceiling contractors to handle installation quickly and efficiently.

**DESIGN TIP:** For the greatest creative latitude and assurance that the envisioned design will be successfully constructed on the job site, look for a curved metal ceiling system whose manufacturer offers AutoCAD®-compatible software for the system's design and specification. This software permits three-dimensional rendering on the computer screen, incorporates custom finishes and can be exported into the architect's rendering programs to create client presentation drawings. Just as importantly, the software will notify architects when they've created a system detail that cannot be executed due to space or component limitations.

Recent line extensions to curved metal ceiling systems offer a narrow-faced, 9/16-inch profile grid with a slight reveal that provides a virtually non-interrupted ceiling plane. New, one-directional infill panels, which butt against each other to create an almost invisible seam, add further to the monolithic look.

Speaking of monolithic ceilings, it is now possible to create curved drywall ceilings easily and economically. In the past, drywall was used on either

the flat surfaces of bulkheads or painstakingly wetted, scored and bent into curved shapes, which had to be left overnight to dry. The panels then were installed using hat channel steel, black iron suspension and GRG (glass-fiber-reinforced gypsum) ceiling shapes constructed on the job site. This involved process made curved drywall ceilings very expensive to install and rather unpredictable in terms of finished results.

Thanks to recently developed **drywall suspension systems**, drywall vaults, valleys, arches and other curved elements – all cost-prohibitive only a few years ago – are now within reach for a wide range



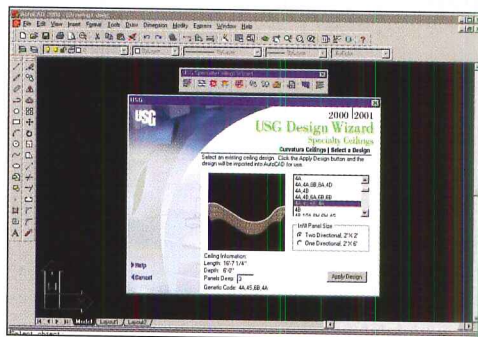
Drywall suspension systems facilitate the design construction of vaults, valleys and arches.

of projects. Like other specialty ceilings, these systems are supported by computer-aided design and pre-engineered component manufacturing. They accept 1/4-, 1/2- and 5/8-inch drywall, and deliver the following features and benefits:

- Facilitate the design of vaults, valleys, arches and other curved drywall ceiling configurations, while dramatically reducing installation time and costs.
- Pre-engineered system components ensure that ceiling designs are constructed on the job site in exacting detail.
- Enable cost-efficient construction of curved and serpentine drywall soffits and fascia.
- Transition exceptionally well from soffits, flat drywall ceilings and even acoustical ceilings.

The technology used to develop drywall suspension systems is now being applied to systems that permit precise and economical construction of domes. Domed suspension systems are usually covered with plasters or plastics, but the end result is the same: versatile design capabilities, time-saving installation and exact reproduction of designs on the job site. ■

## ADVANCED SOFTWARE MAKES ARCHITECTS WIZARDS AT CEILING DESIGN



USG Design Wizard for Ceilings

While not all architectural firms can invest the money and time required to utilize robust design software programs such as Catia, manufacturers and software designers do offer a variety of highly useful and time-saving computer-aided design systems.

A leading application is USG's Design Wizard for Ceilings. While the program is intended primarily for use with USG's ceiling products (both acoustical and specialty), it serves as an example of the powerful design tools currently available. The plug-in application integrates seamlessly with AutoCAD®

14, AutoCAD 2000 and AutoCAD 2000i to create accurate 3-D renderings and specifications within the architect's own drawings.

The software enables architects to start from scratch in designing a specialty ceiling or they may choose from and/or modify existing designs from a database of specialty ceilings. The resulting renderings are ideal for client presentations. The software also produces instant schematic drawings, providing contractors with a construction reference guide.

The USG Design Wizard is offered as a free download on the USG Web site.

## CURVED CEILINGS MAKE AIRPORT A DRAMATIC DESTINATION

Like much of Las Vegas, the new Satellite D Terminal at the city's McCarran International Airport is all about atmosphere.

Dramatic ceiling heights, broad concourse walkways, vaulted skylights and a 58-foot-tall glass wall are highlights of the 684,000-square-foot facility. To define space and add visual drama, project architect Tate & Snyder Architects of Las Vegas made extensive use of USG's CURVATURA™ 3-D Ceiling System.

Making the CURVATURA ceiling design a reality required intimate collaboration between Tate & Snyder Architects, ceiling contractor M&H Building Specialties, Inc., and USG.

"We supplied 175 different custom components for this project," said Greg Ahren, market development manager for USG's Specialty Solutions Group. "That included computer-designing, forming and custom laser-cutting all the transitional and trim components that enabled the design team and the contractor to pull this off."



The CURVATURA 3-D Ceiling System from USG adds drama and visual interest to the McCarran International Airport, Las Vegas, Nev.

## NEW CEILING DOME SYSTEM DELIVERS SPECTACULAR RESULTS



The USG Drywall Suspension System saved hundreds of man-hours and ensured perfect results on the construction of 19 domes in Regent Auditorium, Pensacola.

The Regent Auditorium, a new \$90-million educational facility located in Pensacola, Fla., has set a high standard for creativity and engineering excellence in domed ceiling construction.

Designed by Strobel & Hunter, Inc., the 300,000 sq. ft. auditorium features an amazingly complex ceiling treatment, incorporating domes, curved barrel vaults and a huge saw-tooth suspended ceiling.

The ceiling elements were created using USG's Drywall Suspension System. Custom-engineered tees and crosspieces were developed by USG's Specialty Solutions Group to meet the exact specifications created by Strobel & Hunter. The components were shipped to the job site, where Acousti Engineering of Florida handled installation.

Steven Capps, project manager/estimator for Acousti Engineering, estimates that the efficiency of the USG system shaved 72 man-hours off the installation of each of the 10 18-foot-diameter domes, and 37 man-hours off the installation of each of the nine 12-foot domes.

"I've never seen domes that look this good," said Capps.

## WALLS THAT FLOW

Creating curved gypsum board walls has been greatly facilitated by the development of flexible, 1/4-inch-thick drywall panels. Typically applied in double layers, the thinner, flexible panels eliminate the scoring and wetting procedures usually required to create curved walls using conventional gypsum panels.

To create rounded drywall corners, paper faced metal bullnose tape-on corner bead offers a simple solution. Joint compound is used to adhere the tape-on style bead to wall surfaces, so nailing – and nail pops – are eliminated. The paper tape covering the metal bullnose profile ensures excellent adhesion of joint compounds, textures and paints for a strong, smooth finish. USG backs its SHEETROCK™ Brand Paper Faced Metal Drywall Bead and Trim with a lifetime warranty against edge cracking.



Flexible 1/4-inch-thick SHEETROCK Brand Gypsum Panels facilitate curved drywall applications.

TABLE: MINIMUM BENDING RADII FOR FLEXIBLE 1/4-INCH GYPSUM BOARD PANELS

Application	Condition	Lengthwise Bend Radii	Max. stud spacing	Widthwise Bend Radii	Max. Stud Spacing
Inside (concave)	Dry	32"	9" o.c.	20"	9" o.c.
Inside (concave)	Wet	20"	9" o.c.	10"	9" o.c.
Outside (convex)	Dry	32"	9" o.c.	11"	6" o.c.
Outside (convex)	Wet	15"	6" o.c.	7"	6" o.c.

NOTE: Bending specifications are for USG's SHEETROCK® Brand 1/4 Inch Flexible Gypsum Panels tested at 65 degrees Fahrenheit and 45 percent relative humidity.

## MORE TO COME

The four basic curved ceiling systems described above are, no doubt, just the beginning of things to come. As clients continue to ask for curves and architects can more freely add them to their plans, manufacturers and computer design software developers will continue to push the curved ceiling envelope.

Curved ceilings may soon become a focal point in and of themselves, much like Michelangelo's painted barrel vaults were more than 400 years ago. And that would bring curves around full circle, so to speak, as a crucial element in ceiling design. The big difference however, is that today's curved ceilings are no longer relegated to Sistine Chapel-type construction. Thanks to computer design technology and the systems approach, curves can flow everywhere.

## ABOUT USG

USG is a Fortune 500 company with subsidiaries that are market leaders in their key product groups: gypsum wallboard, joint compound and related gypsum products; cement board; gypsum fiber panels; ceiling tile and grid; and building products distribution.

For more information about the company's ceiling systems, write USG at P.O. Box 806278, Chicago, IL 60680-4124, call USG's Customer Service Department at 1-800-USG-4YOU or visit the company's Web site at [www.usg.com](http://www.usg.com).

**LEARNING OBJECTIVES**

- Describe different types of materials used to form curved ceilings.
- Explain how curved ceilings are created.
- Describe where different curved ceiling systems are used.

**INSTRUCTIONS:**

Refer to the learning objectives above. Complete the questions below. Then turn the page upside down and check your answers. Fill out the self report form on page 204 and submit it or use the Continuing Education self report form on *Record's* web site - [www.architecturalrecord.com](http://www.architecturalrecord.com) - to receive one AIA/CES Learning Unit including one hour of health safety welfare credit.

**QUESTIONS:**

1. Where are suspension trim ceilings used?

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2. What are the benefits of using curved metal ceilings?

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3. What type of designs use drywall suspension systems?

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4. What ceiling type is used to create a monolithic look?

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5. How can computer software aid architects in designing curved ceilings?

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1. Suspension trim ceilings are normally used in places with high ceilings where visual effects are desirable. These are usually lobbies or entryways in commercial venues. Installations are typically in retail stores, entertainment areas, gaming halls and airports. Suspension trim is used to create floating clouds or layers of ceiling to draw attention and highlight specific areas within ceiling spaces.

2. Curved metal ceiling systems offer benefits in installation and design. The installation benefits are that they are shipped in a kit to ensure that the design is constructed exactly as intended and they are designed and pre-engineered as a system to reduce labor costs. The design benefits are that they offer flexible panels and curved main tee segments, as well as optional edge trim and access panels for creating design versatility. The infill panels can be made of solid or perforated metal or translucent materials, allowing lighting to be integrated into the system.

3. Drywall suspension systems are used to create vaults, valleys, arches and other curved elements. They transition well from soffits, flat drywall ceilings and even acoustical ceilings.

4. In the past, monolithic looks were created from drywall that was wetted, scored and bent into curved shapes. This was time consuming, with unpredictable results. Now, the smooth monolithic look can be created using drywall suspension system ceilings. These use standard thicknesses of drywall with pre-engineered components. Another way to create monolithic looks is from a narrow profile metal ceiling grid with a slight reveal. One-directional infill panels butted against each other create an almost invisible seam, adding to the monolithic look.

5. Using computer software, an architect can select a ceiling design from a database of specialty ceilings or sketch a curved element on the computer screen, selecting grid size and suspension profiles. The software program then generates a precise design and corresponding specifications, schematic drawing, renderings and a construction reference guide.

**ANSWERS:**



1-800-USG-4YOU  
www.usg.com  
email: usg4you@usg.com

Circle 56 on inquiry card

**in·spi·ra·tion** *n.* the stimulation within the mind of  
some idea, feeling or impulse which leads to creative action.



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Presents

# UNDERSTANDING URETHANE MILLWORK

*Decorative urethane entryway surrounds enhance the look of any style home.*

AIA/ARCHITECTURAL RECORD  
CONTINUING EDUCATION Series

Use the learning objectives below to focus your study as you read **UNDERSTANDING URETHANE MILLWORK**. To earn one AIA/CES Learning Unit including one hour of health safety credit, answer the questions on page 163 and follow the reporting instructions on page 204. Or, use the Continuing Education self report form located at [www.architecturalrecord.com](http://www.architecturalrecord.com).

## LEARNING OBJECTIVES:

After reading **UNDERSTANDING URETHANE MILLWORK** you will be able to:

- Explain the benefits of urethane over wood for trim.
- Describe where urethane millwork is used.
- Explain why urethane millwork is popular in interiors.
- Describe how urethane millwork is made.

In years past, when trimwork was needed on a home or building, the first, and often only, choice was wood. Since the 1970's that situation has changed. Urethane millwork products — made from high-density polyurethane — are available to enhance the interior and exterior of both residential and commercial projects.

While wood trims are widely available and have a good aesthetic value, they have several disadvantages. Susceptible to decay, rot and warping in a variety of climates, wood millwork can become infested with termites. And, although wood offers warmth and beauty to a project, it requires stripping, repainting and intense maintenance.

Currently available in thousands of profiles from a variety of manufacturers, urethane millwork products have been applauded for their ease of installation and low maintenance features. An intricate decorative crown moulding, which could take days to construct from wood, can now be manufactured as a single piece of urethane — and installed in minutes.

Naturally resistant to decay, splintering and insect infestation, urethane products have a closed cell structure that prevents water penetration and

absorption. Urethane millwork is ideal for all types of climates ... from areas that experience extreme cold temperatures and harsh weather to those receiving an abundance of rain, salt spray and searing temperatures. The precision molded, high-density pieces are manufactured using a two-component rigid polyurethane foam system.

Urethane millwork pieces can replicate intricate patterns on ceiling medallions or contain smooth, seemingly endless lines on mouldings. One of the chief assets of urethane is its ability to gain highly detailed, authentic looking reproductions of historic products. A heavy, ornate plaster ceiling medallion can easily be replicated in a urethane piece weighing under a pound. And, for those projects requiring the "look of wood" many manufacturers offer stainable urethane mouldings containing authentic wood grains.

Overall, compared to wood, plaster and concrete decorative trim products, urethane millwork generally has lower product and installation costs. The appealing low maintenance aspects of urethane millwork, coupled with the product's resistance to water and insect infestation have helped the product grow in popularity.

## HOME AND COMMERCIAL USE

Available as both decorative and structural products, urethane millwork is so diversified that a single home can employ the product as window and door trim, louvers, porch balustrade systems, eave vent systems, interior and exterior moulding, ceiling medallions and wall niches.

These same products can be used in commercial applications. A college dormitory, nursing home or restaurant trimmed out with urethane pieces will require minimal maintenance and gain years of top quality product benefits. Since most manufacturers offer urethane millwork products in a smooth finish with an exterior grade ultraviolet (UV) stable coating applied, paints are easily accepted.

## UNLIMITED EXTERIOR PRODUCT SELECTION

Almost any decorative element an architect can imagine is available in urethane. Generally, most manufacturers offer a variety of product categories in their technical and product catalogs to make life easy for architects.

In the entrance trim category architects find pilasters, pediments, crossheads and trim to surround entryways. Decorative accessories, such as bottom trim, dentil trim, keystone and trim strips can enhance the shadow lines and look of an entrance way surround.

When it comes to window trim for homes and commercial structures, urethane manufacturers offer an assortment of decorative pieces including crossheads, sunburst and half round pediments and arches. For the easiest window trim possible, miterless window surrounds can be achieved by using plinth blocks/rosettes in the corners and butt joining window moulding between them.

Raised urethane window panels can be specified below a window to give more depth to its overall look. By surrounding the window and panel completely with moulding and topping off with a crosshead and pediment, the window can become a focal feature of the structure.

When specifying louvers, look no further than urethane. Easily one of the most requested products from manufacturers, urethane louvers come in both functional and decorative styles. Solid, one-piece functional louvers incorporate a screen backing (some manufacturers use a non-corrosive fiberglass screen for long-term

minimal maintenance), which keeps insects out, while allowing maximum airflow. Decorative louvers do not allow air to pass through and are intended to create visual interest in the peaks and gables of a home.

Another innovation applauded by the industry as a time saver is urethane eave vent systems. Form and function combine with these sensible, cost-saving products. Eave vent systems serve the dual purpose of providing a functional venting system that prolongs roofing shingle life with a decorative moulding profile.

To complete the exterior of project, consider specifying urethane balustrade systems. Balusters are reinforced with fiberglass or aluminum, while rails and newels have PVC reinforcements and porch posts have steel reinforcements. All balustrade parts are made with noncorrosive parts that are totally hidden to provide a clean, classic appearance from any angle. Balustrade systems stay beautiful without the heavy demands of continuing maintenance.

## DECORATIVE BEAUTY

Urethane companies offer authentic architectural profiles in everything from uncluttered simplicity to extremely ornate designs. Ideal for both interior and exterior use, there are hundreds of decorative urethane millwork options including corbels, acorns, wall niches and brackets.

Fishscale panels, gable pediments, dentil blocks and other millwork pieces add a special decorative touch to the outside of a home. Many of these elegant pieces replicate the Victorian era and are complemented by interior mouldings and ceiling medallions.

Available in long lengths, urethane mouldings are easy to install and range from simple two-inch tall pieces to intricate built-up combinations that can reach over a foot high. Hundreds of profiles exist to replicate a wide variety of designs and styles. Some of the most popular mouldings include dentil profiles, cornice and cove, crowns, chair rails and window/door trim. More elaborate egg and dart, crown leaf, ribbon and bow, Florentine and scalloped moulding profiles are also available. Moulding accessories, including miterless corners, plinth blocks/rosettes, keystones and moulding divider blocks, are widely available.

## MAKING URETHANE PRODUCTS

To manufacture a piece of urethane millwork, a company creates a wood master of the design selected. Next, silicone is poured around the original wood master to create a production mold (see photo A).

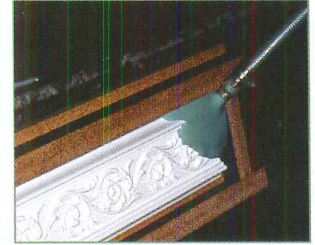


Photo A

A nozzle dispenses liquid urethane into the production mold, which has been painted with a barrier coat (see photo B).

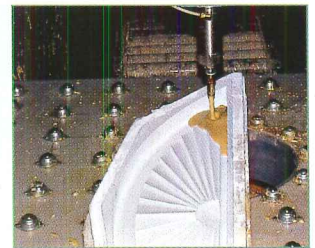


Photo B

A lid is then placed over the mold, trapping in the liquid urethane. The mold is placed under pressure and the urethane quickly expands to fill the mold. Once set, the molded part is removed from the production mold (see photo C).



Photo C

Next, the high-density urethane piece is treated like wood. Each piece is hand inspected, sanded and cut to finished size. The piece is then primed and ready for packaging (see photo D). All pieces are carefully inspected prior to packaging to assure that the finest quality product is shipped.



Photo D



## FINISH OPTIONS

Installed pieces of urethane may be painted with any good quality latex or oil base paint. One coat of paint is usually sufficient on pieces that come with a primed topcoat. Urethane pieces also accept decorative faux finishes exceptionally well. For stainable pieces with a woodgrain, a non-penetrating, high quality stain can be applied.

A unique real metal finish, METALLON™, is available exclusively from Style Solutions™ Inc. as an upgrade option on the company's interior and exterior urethane products. Available in copper, brass, nickel and bronze, the METALLON finishes transform urethane products to serve as a unique accent in both commercial and residential settings.

## LIMITATIONS AND BUILDING CODES

While urethane millwork products are ideal for all types of climates, they should never be stored for a long period of time in extreme heat. Most urethane millwork products can withstand temperatures of about 140 degrees F. However, the millwork should never be specified in an area subject to solar temperature buildup, such as behind a storm door.

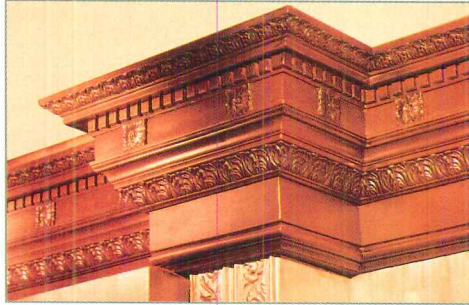
Unless specifically noted by a manufacturer, most urethane millwork products are for decorative use only and have no structural integrity. Balustrade systems, with uPVC, fiberglass and steel support systems, are the exception.

Most urethane millwork products are not specifically formulated for fire resistance. Check with individual manufacturers for additional flame resistance restrictions and for special product orders that meet Class 1 ratings. Architects will find that most urethane products produced by manufacturers can safely be used in accordance with SBCCI, BOCA, CABO and NFPA rulings.



*Durable high-density urethane trim pieces on the exterior of a home resist decay, water and insect penetration.*

## CASE STUDY#1: METALLON™ FINISHES CAPTURE INTEREST



*Glowing copper METALLON™ real metal finish on this urethane moulding allows the trim to play a major role in the room.*

Designers and architects looking for new products and trends at the recent 2001 Kitchen/Bath Industry Show didn't strike gold at the show — instead they struck brass, bronze, copper and nickel. New METALLON™ real metal finishes available on Style Solutions urethane millwork products quickly became the "talk of the show" for designers looking to add metal accents to kitchens and bathrooms.

"When members of our staff attend K/BIS we're looking for the up-and-coming trends ... and I found one when I entered the Style Solutions booth," says Meg King with The Evans Group in Orlando, Florida. "I can easily see that millwork with METALLON finishes would add a great deal of versatility to kitchens and bathrooms. Imagine the appeal of having a wall niche in a bathroom that has a copper green patina finish. This could create an Old World charm and richness that would be balanced throughout the room with other designer accents."

Resistant to temperature extremes and decay, urethane millwork products are ideal for kitchens and baths, where humidity can be a problem.



*Hand-rubbed bronze METALLON™ on Style Solutions™ crown moulding completes the upscale design of this kitchen.*

"The introduction of the METALLON finishes could not be better timed," according to show attendee Terri Berlage, design consultant with Mary Jo Peterson, Inc. in Brookfield, Connecticut. "Metals are hot right now. Whether it's copper accents in a kitchen or brass pieces in a bathroom, people are definitely emphasizing metal more throughout the home.

"The METALLON finished products look extremely promising as designer accents. I can easily see using a crown moulding with a nickel finish in a bathroom where the faucets and lighting fixtures have a satin nickel finish. This allows us to design a more 'complete' looking room."

Available as an upgrade option exclusively on urethane millwork products by Style Solutions, METALLON is cold spray applied and contains over 95 percent real metal.

"The antiqued brass and hand-rubbed bronze METALLON finishes on Style Solutions mouldings really impressed me," says Janelle Anderson, ASID, allied member with Design By Janelle in Amesbury, Massachusetts. "The METALLON finish absolutely transforms the millwork. There's a richness to it that I think consumers will want to capture for their homes."

## CASE STUDY#2: URETHANE PRODUCTS ENHANCE RIVERVIEW HEALTHCARE COMMUNITY



*Incorporating dozens of urethane balustrade systems, corbels and brackets from Style Solutions, the Riverview Health Care Center resembles a stately hotel.*

When Health Concepts of Providence, RI decided to build an assisted living center on the banks of the Pawtuxet River, the owners envisioned a stately, elegant looking facility. Creating an environment that was comfortable, yet prestigious, was very important to the overall feeling of this special building.

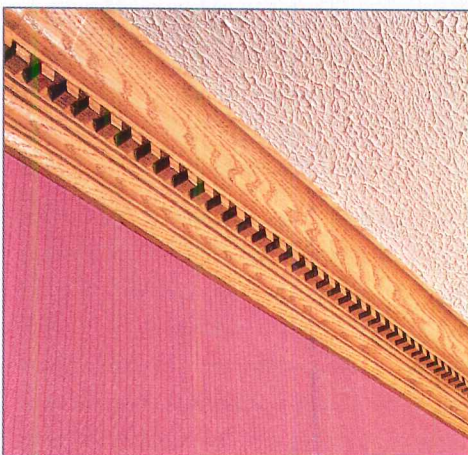
Designed "with a view toward living," Riverview Healthcare Community in Coventry, RI boasts private living spaces, indoor and outdoor porches and an impressive array of balconies. To help create this peaceful environment, Health Concepts turned to Style Solutions™ Incorporated for the expansive urethane balustrades, corbels and detail work on the exterior of the building.

"We created Riverview to impart a sense of living in an elegant manor ... and the Style Solutions products selected support and enhance that feeling," according to Kevin Ryan, marketing director of Health Concepts.

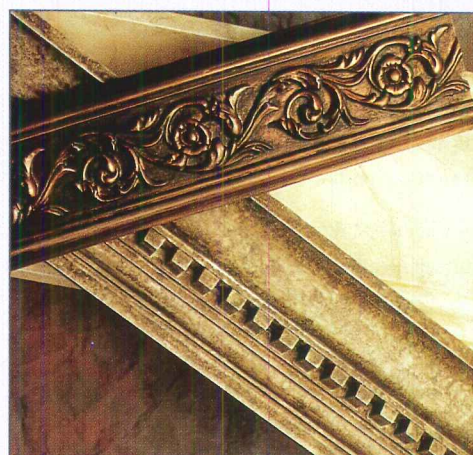
"The impressive array of Style Solutions products used on this facility were chosen for their durability and low maintenance virtues. We expect this building to look as regal and pristine 20 years from now as it does today."

The facility, which prides itself on resembling a stately hotel, boasts three levels of balustrade systems, dozens of elegant corbels and finely crafted Style Solutions pieces.

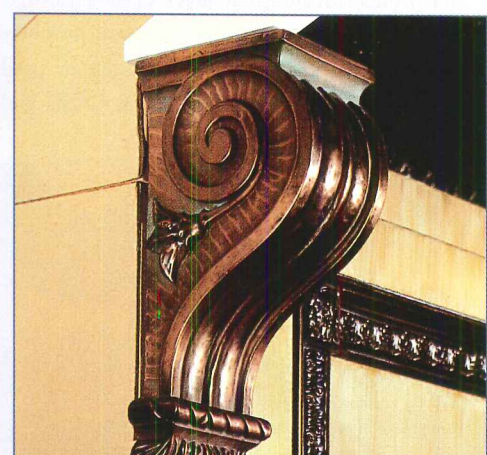
### FINISHING OPTIONS RECOMMENDED BY STYLE SOLUTIONS™



*Stainable urethane mouldings with realistic wood grains are an ideal low-maintenance alternative to real wood mouldings.*



*Urethane millwork products come with a smooth finish that easily accepts a variety of high-end faux finishes.*



*Copper METALLON™ with a green patina finish transforms this Style Solutions corbel.*

**LEARNING OBJECTIVES:**

After reading **UNDERSTANDING URETHANE MILLWORK** you will be able to:

- Explain the benefits of urethane over wood for trim.
- Describe where urethane millwork is used.
- Explain why urethane millwork is popular in interiors.
- Describe how urethane millwork is made.

**INSTRUCTIONS:**

Refer to the learning objectives above. Complete the questions below. Then turn the page upside down and check your answers. Fill out the self report form on page 204 and submit it or use the Continuing Education self report form on *Record's* web site - [www.architecturalrecord.com](http://www.architecturalrecord.com) - to receive one AIA/CES Learning Unit including one hour of health safety welfare credit.

**QUESTIONS**

1. For what exterior applications could you specify urethane products?

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2. How is the trim installation process changed by using urethane products?

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3. What are the benefits of using urethane millwork products over traditional products?

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4. Why has urethane millwork become popular for interior trimwork?

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5. How is urethane millwork made?

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1. Urethane products are available with an exterior grade ultraviolet stable coating applied. This makes urethane millwork good for use as window and door trim, louvers, porch balustrade systems, eave vent systems, and decorative moldings such as pediments, dentil molding, arches, plinth blocks and rosettes, or Victorian fishscales.

2. Urethane products are lightweight, so they install faster and easier than wood, concrete, or plaster. Since urethane moldings are produced as one piece they come to the job site in long lengths, ready to finish and install. This reduces the time of assembling complex moldings from small wood pieces. Urethane millwork accepts paint and decorative faux finishes, as well as stains and metal finishes.

3. The benefits of using urethane millwork are plenty. One of the chief assets is its ability to replicate historic designs with great detail. It weighs much less than the original details made of plaster or wood. It requires less installation time. Urethane millwork requires much less maintenance than wood, especially in harsh climates with salt, humidity, or extreme temperatures. It is not susceptible to moisture, decay or insect infestation as wood is.

4. Interior use of urethane trim allows an inexpensive way to accomplish the look of rich wood molding on crown moldings at the ceiling, chair rails, cornices above windows, and door trim. The recent trend in kitchen design toward European Old World look makes the decorative moldings very popular. This look incorporates use of metals in copper, bronze and nickel, which can be applied to urethane trim to provide desirable accents.

5. Urethane millwork products are made from high-density polyurethane. A production mold is made from a master design in wood. Silicone is poured around the wood master to create the production mold. Liquid urethane is poured into the production mold. A lid is placed on the mold and it is placed under pressure so that the urethane expands to fill the mold. After it has set, the urethane piece is removed from the mold and sanded or cut to size, then primed.

**ANSWERS**

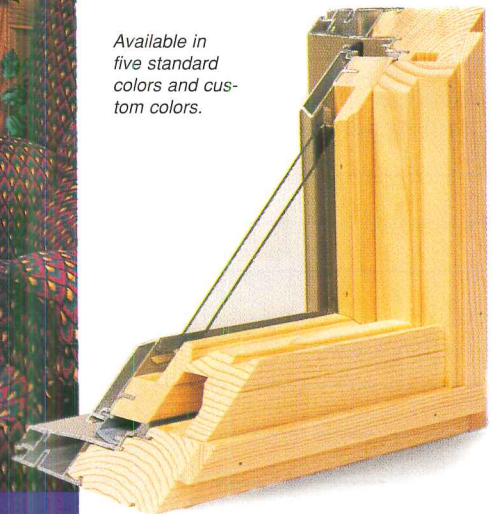
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# RESIDENTIAL

## New American Vernacular: Regional Architecture Reinterpreted

America has a glorious history of residential vernacular architecture. Log cabins, cottages, farmhouses, tepees, and pueblo villages—all anonymously constructed using traditional materials and forms—are powerful symbols of the spirit of independence and the eclecticism that set our country apart.

But we have turned our backs on this tradition. Today, suburban sprawl characterizes residential architecture in the United States. Tract housing and McMansions, which have become so prevalent, are remarkable only for their sameness. This is the cookie-cutter approach to housing; no matter where these homes are in the country, their forms are unaffected by difference in local topography, climate, and materials.

Still, architects have long sought inspiration in vernacular forms. The three houses shown in these pages exemplify an ongoing interest in American tradition and are clearly part of a continuum. But there is nothing sentimental here. This is the vernacular as seen through contemporary eyes.

Responding to the harsh winters and abundance of local stone and wood, Allied Works Architecture of Portland, Ore., uses regional elements, such as the sheltering roof and heavy timber roof structure, to reinvent the vernacular architecture of the Pacific Northwest in the Blue Lake House. Minnesota architect David Salmela has consistently explored native structures in his work and is creating a new vocabulary for rural architecture using materials and forms—such as the pitched roof and hearth—that have worked for centuries. His Jones Farmstead reveals the essence of a Midwestern farmhouse while providing a very ample and modern home for the clients. And the Nickerson-Wakefield House, designed by New York City-based Anderson Architects, is the most elemental of all—a humble shed whose form responds in a direct way to one of the most basic human needs—shelter. It is the temporary shack rendered permanent and chic. Ironically, in a symbolic triumph over banal new housing, it is built on the foundation of a never-completed spec “chalet.” *Elizabeth Harrison Kubany*

**166 PIA Awards**

**183 Residential Products**

*Kitchen/Bath Show Review*

**168 Blue Lake House**  
*Allied Works Architecture*

**174 Jones Farmstead**  
*Salmela Architect*

**178 Nickerson-Wakefield House**  
*Anderson Architects*

# The American Institute of Architects announces the 2000 Housing Professional Interest Area (PIA) Awards

### MULTIFAMILY HOUSING AWARD

Livability and social responsibility characterize the winners in this category. In the case of Bridgecourt, the jury applauded "the vision of the developer in creating high-quality housing and retail in a run-down, crime-ridden urban area." The forms and materials of 8th and Alexander "give a dignity and permanence unusual for affordable housing." The "diverse cultural character" of the neighborhood is celebrated at Gateway Commons. And Jake's Run Condominiums, located in Portland's densest residential area, is a refined and graceful infill project in a historic district.



**Project:** 8th and Alexander  
**Location:** Charlotte  
**Architect:** David Furman/Architecture, PA  
**Owner or developer:** Bank of America, Community Development Corporation and Charlotte Housing Authority



### COMMUNITY DESIGN AWARD

The jury gave its nod to sensitive planning, both urban and rural, in selecting the winners of the community design award. The judges thought that Swan's Market Place addressed "the urban streetscape in an especially interesting and successful manner" and called it "a tremendously complex program expressed in a confident, even exuberant manner." Using vernacular forms, materials, and detailing, Jackson Meadow "reinforces the sensitive site planning while establishing an elegance of form." Finally, the judges noted "the high quality of the urban space" at Addison Circle.

**Project:** Jackson Meadow—Marine on St. Croix  
**Location:** Marine on St. Croix, Minn.  
**Architect:** Salmela Architect/Coen + Stumpf & Associates  
**Owner or developer:** Harold Teasdale & Robert Durfey



In association with ARCHITECTURAL RECORD magazine, the AIA Housing PIA established the Housing PIA Awards program to recognize the importance of good housing as a necessity of life, a sanctuary for the human spirit, and a valuable natural resource. This, the inaugural year of the program, included categories for single-family housing, multifamily housing, community design, and innovation in housing design. The jury only recognized winners in the multifamily and community design categories. According to William H. Kreager, AIA, of Mithun Partners in Seattle, who chaired the jury, "The real goal of this annual awards program is to recognize high-quality design in the for-sale market. We want to raise the bar and continue to improve the housing available to the American public."



**Project:** Bridgecourt  
**Location:** Emeryville, Calif.  
**Architect:** McLarand, Vasquez & Partners  
**Client:** Catellus Residential Group

**Project:** Gateway Commons  
**Location:** Emeryville and Oakland, Calif.  
**Architect:** Pyatok Associates  
**Owner or developer:** Oakland Community Housing and Community Development Corporation of Oakland



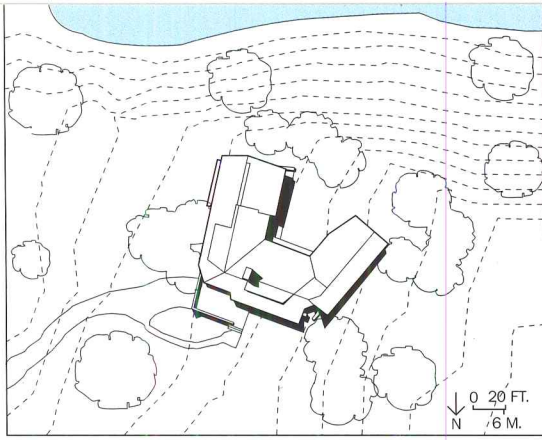
**Project:** Jake's Run Condominiums  
**Location:** Portland, Ore.  
**Architect:** Fletcher Farr Ayotte PC  
**Owner or developer:** Nick Stearns Development



**Project:** Addison Circle  
**Location:** Addison, Tex.  
**Architect:** RTKL Associates  
**Owner or developer:** Post Properties

**Project:** Swan's Market Place  
**Location:** Oakland  
**Architect:** Michael Pyatok, FAIA  
**Associate Architect:** Y.H. Lee  
**Owner or developer:** East Bay Asian Local Development Corporation





The house's palette of substantial materials is softened by moments of transparency. Despite massive two-foot-thick sandalwood stone walls and a deep overhanging roof (right), the boundaries between inside and out are ambiguous. Blurring the distinction, a huge glass door opens to the outside and wood floors continue from inside to out (below).





# Allied Works Architecture gives Pacific Northwest vernacular an entirely modern twist in its Blue Lake House

By Sheri Olson, AIA

**V**ertigo is not ordinarily associated with water, but Blue Lake, a spring-fed extinct volcano, dazzles from a site 70 feet above its surface. Allied Works Architecture, based in Portland, Ore., draws on such exhilarating unease by creating a weekend retreat perched on the lip of this caldera. The design inserts tension into ordinary regional elements, such as a great pitched roof and heavy-timber structure, reinventing the vernacular of the Pacific Northwest.

High in Oregon's Central Cascades, the house shares an 80-acre site with a nonprofit arts-and-environment camp that the clients, Bonnie and Dan Wieden, founded for at-risk youth. Though Allied Works had produced a Minimalist design for the husband's company, the Portland headquarters of Wieden + Kennedy (the ad agency that put the swoosh in Nike), Brad Cloepfil, AIA, partner-in-charge of the house project, had something more traditional in mind for the Wiedens' vacation home. He was seeking, he says, "the material and spatial qualities that clients often associate with vernacular architecture."

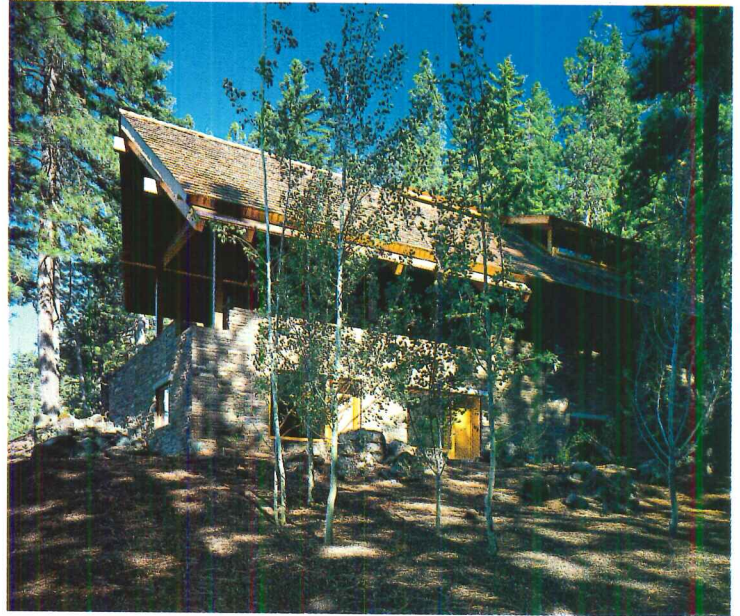
Before translating these qualities into the language of Modernism, he began by developing a sense of shelter, both physically and psychologically, with two-foot-thick stone walls and an overriding roof. He created a U-shaped structure, wrapped on its three outermost sides by this wall, forming a shield of stone in the woods that embraces southern views of the icy water 70 feet below and Mt. Washington beyond. As Cloepfil puts it, "You feel held in the landscape."

The house's exterior shell has no right angles. One leg of the U is shifted a few degrees to block views of houses across the lake while the facing leg splays slightly in the opposite direction. The result is a precise balance between openness and enclosure. The front door is nestled within a break in the wall at an outside corner of the U—a placement that undercuts the anchoring qualities of the stone, thus energizing the design with a tension between solidity and transparency.

In keeping with the existing topography, a series of platforms steps up and around the sloping courtyard within the U. These level changes resolve the slope's potential awkwardness. They also differentiate ground-floor spaces, placing the kitchen and dining at the lowest level, the living room above it, and the master bedroom on the highest and most private plane. A stairway leads up to a sleeping loft in the rafters and down to two guest bedrooms below. The site's steep incline allows the guest areas to open onto an outdoor terrace. Against the split levels, the top of the stone wall remains consistent around the perimeter of the house.

"The masonry forms an elemental bearing wall with no historical references," says Cloepfil. The flat stone, known locally as sandalwood, is relatively soft, easy to work, and consistent in color when cut. Seven inches of it were laid on either sides of an insulated block wall filled with concrete, forming a 24-inch-wide wall. The wall is so substantial that it comprises 400

*Sheri Olson, AIA, is RECORD's Seattle-based contributor and the author of a new book on Miller/Hull (Princeton Architectural Press, 2001).*



**Project:** Blue Lake House

**Location:** Jefferson County, Ore.

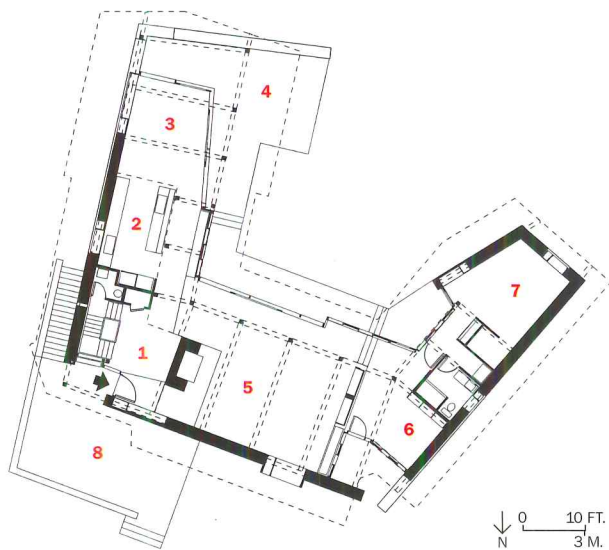
**Owner:** Bonnie and Dan Wieden

**Architect:** Allied Works Architecture—Brad Cloepfil, AIA, principal; Doug Skidmore, Chris Bixby, Jeff Woodward, Nathan Roelofs, project team

**Engineers:** Ang Engineering Group

**Consultants:** Michael Schultz Landscape Design (landscape), Horton-Lees-Brogden Lighting Design (lighting)

**General contractor:** Chuck Newport Construction Management Services



MAIN FLOOR

- |             |              |
|-------------|--------------|
| 1. Entry    | 5. Gathering |
| 2. Cooking  | 6. Study     |
| 3. Dining   | 7. Sleeping  |
| 4. Overlook | 8. Terrace   |

The entry lies within a break in the stone wall in an outside corner of the U-shaped house (above).

square feet of the 4,400-square-foot footprint, in what Cloepfil calls a “large spatial gesture relative to the size of the landscape.” Plumbing and electrical conduits within the wall had to be accurately located early in the construction process. “It gave new meaning to the phrase *etched in stone*,” says

general contractor Chuck Newport.

The stone wall and roof play against one another. “The roof hovers over the edge of the crater in counterpoint to the substantial stone walls,” says Dan Wieden. The roof’s cedar-shake plane folds and fractures as it rises and breaks into openings, bringing light deep into unexpected places and introducing an element of instability to an otherwise monolithic vernacular form. Underneath, its wooden framework acts more like a truss than a traditional post-and-beam structure in which loads are easily traced from roof to ground. Here, the three-dimensional form shifts loads along a complex system of transfer beams and posts, creating an intricately woven web floating over the plan.

Juxtaposed with the massive stone walls and heavy timber roof are large glazed areas. The glass wall along the courtyard dematerializes as it weaves in and out of the post-and-beam structure, putting primary visual emphasis on the deep cantilevered eaves. “The structural framing was more like finish carpentry due to the tolerances required when it’s infilled with glass,” says Newport. Some intersections are so complex that the only way to figure out the glazing was on-site. In the dining area at the end of the eastern leg, two 10-foot-tall wood-and-glass doors roll back from

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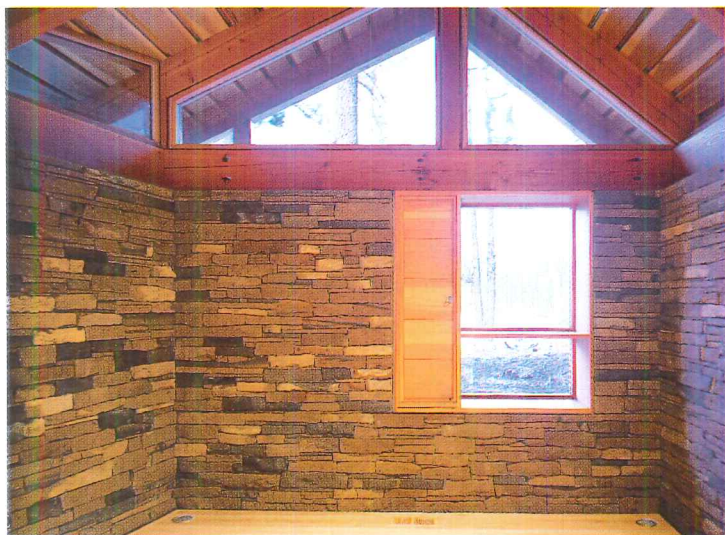
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Along the south side, a huge glass wall opens to the lake (above). The deep window ledges show the thickness of the stone walls (below).



the corner merging indoors with the great outdoors. Another glass door opens the south wall of the living area to the lake. Carefully designed handles activate rollers that lift and slide the heavy doors, then set them down and seal them to close. Wood flooring continues from inside to out (changing from beech to mahogany for durability), further dematerializing exterior/interior boundaries.

Now a client of Allied Works for two contrasting projects, Dan Wieden contemplates the comparison between architecture and advertising. "Advertising is fleeting, but with the house the issue was more philosophical," he says. "We asked: What can we do that will endure 50 to 100 years from now?" The architect's response is a house that gives new voice to the vernacular by infusing it with the spatial language of Modernism. ■

#### Sources

**Timber frame:** *Earthwood Custom Recycled Timber Framing*

**Masonry:** *Kevin Spencer Masonry*

**Wood doors:** *Kolbe and Kolbe*

**Locksets:** *Ecostile, Baldwin, G-U Hardware*

**Hinges:** *Stanley*

**Paints and stains:** *Sikkens, Sherwin Williams, and Donald Kauffman Color*

**Bathroom tile:** *Bisazza*

**Downlights:** *Litelab Jewel Series, Hesse*

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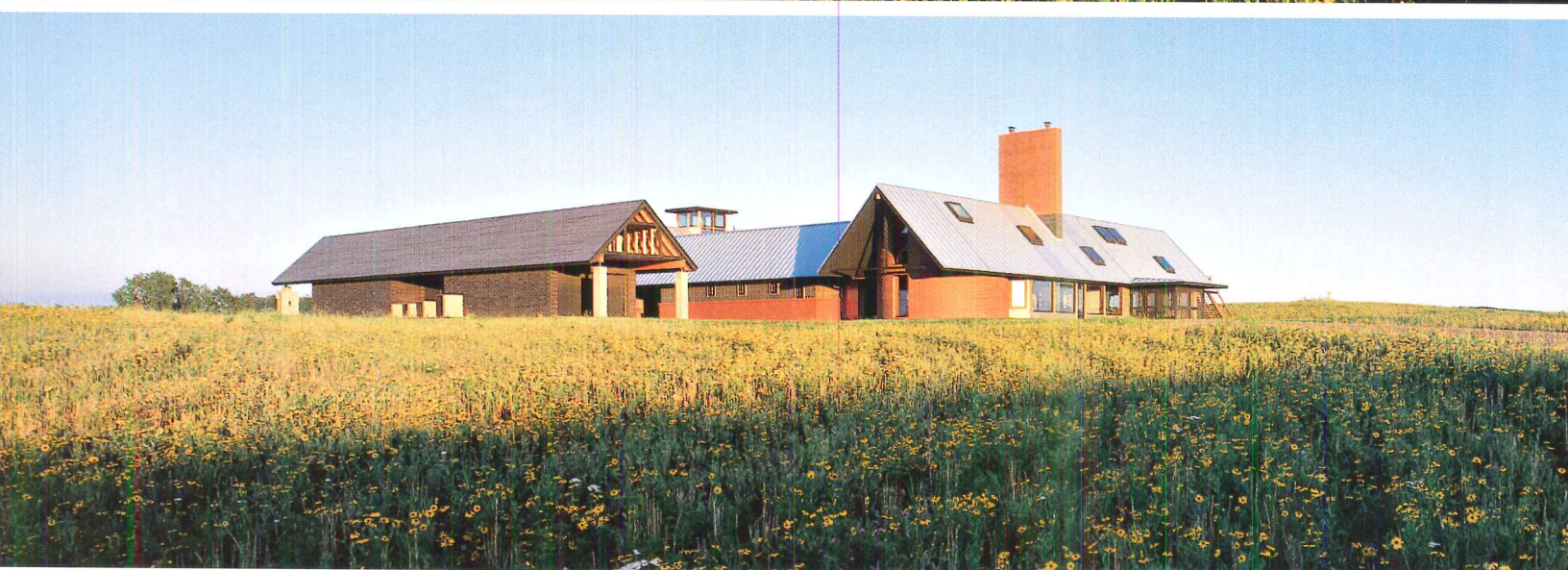
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By interpreting the forms of the classic midwestern farm in simple materials and with a clear plan, the architect created a modern house that is sensitive to the landscape and local tradition.



# At the Jones Farmstead, David Salmela modernizes the midwestern farmhouse

By Linda Hallam

When a successful urban couple began to plan their retirement, they envisioned fulfilling a long-held dream: to transform rural farmland into the Minnesota grasslands native to the region. Their goal was to create a comfortable residential compound surrounded by restored grasslands that they would deed to a trust for maintaining native grass.

Other requirements were livability and access for the wife, who is somewhat restricted in her mobility. “They wanted the house to accommodate their lifestyle and they wanted views,” says architect David Salmela, of Duluth, Minn. “They didn’t have specific styles or materials in mind.”

After visiting the site in southern Minnesota, Salmela, who is a proponent of interpreting modern architecture for rural settings rather than replicating idealized images of the past, found inspiration in the land. Because of the gently rolling hills and views to neighboring farms, Salmela chose to site a glass-walled house with 360-degree views and a straightforward 22-by-80 footprint. “I used modern forms for the house,” he says, noting there is nothing superfluous in the materials or the arrangement of open spaces to capture maximum views and natural light.

The result is a compound—comprising a house, an office/barn, and a freestanding garage—that respects the landscape and the rural ethos while meeting the clients’ need for space and accessibility. “The design explores what a contemporary rural building should be,” explains Salmela. “Building suburban houses in the country is a mistake.”

According to the architect, not only do uninspired, cookie-cutter houses mar the landscape, their inward orientation fails to take advantage of the rural luxuries of open space, privacy, and views. Although the clients stressed function and space requirements, rather than style and material, they chose the architect for his sensitivity to the local farming community. “From our first discussions, they wanted the house to enhance the countryside and not be offensive to their neighbors or the landscape,” says Salmela.

The clients set aside 130 of the 137-acre farm for grassland restoration, which left just seven acres on which the architect could build. Salmela selected a site that offered unencumbered views of neighboring farms. The program called for roughly 7,000 square feet of living space; by breaking the project into a series of buildings, Salmela created a house that appears modest and unassuming, with a simplicity that suits the rural landscape and its built environment.

The physical and spiritual anchor of this compound is the main house, where Salmela has juxtaposed glass walls and 360-degree views with regional building materials. With a poured-concrete basement, the house has a conventional wood frame with a brick, recycled-cypress, and slate-veneer exterior and a standing-seam metal roof. By orienting the house and its courtyard to the south, Salmela ensured abundant natural

Linda Hallam is an author and editor of Shelter Books for Meredith Publishing in Des Moines.



A loft runs the full length of the house and half the width, making the open spaces feel more intimate (above).

light, as the clients had requested. They also desired a design that engaged the outdoors. In response, Salmela created a courtyard that offers a protected natural space with a bluestone perimeter, grass, and trees along the southern side. A screened porch to the west provides a protected sitting area that is warmed by the afternoon sun. A covered walkway connects to the barn/office/guest house, which is a simple structure that recalls the barns dotting the Minnesota farmland. The garage to the north completes the compound. Identical roof pitches unify the three structures.

Inside the house, all the living functions are, by necessity, on one level. A soaring 18-foot cathedral ceiling makes the house feel open and

**Project:** The Jones Farmstead

**Location:** Nerstrand, Minn.

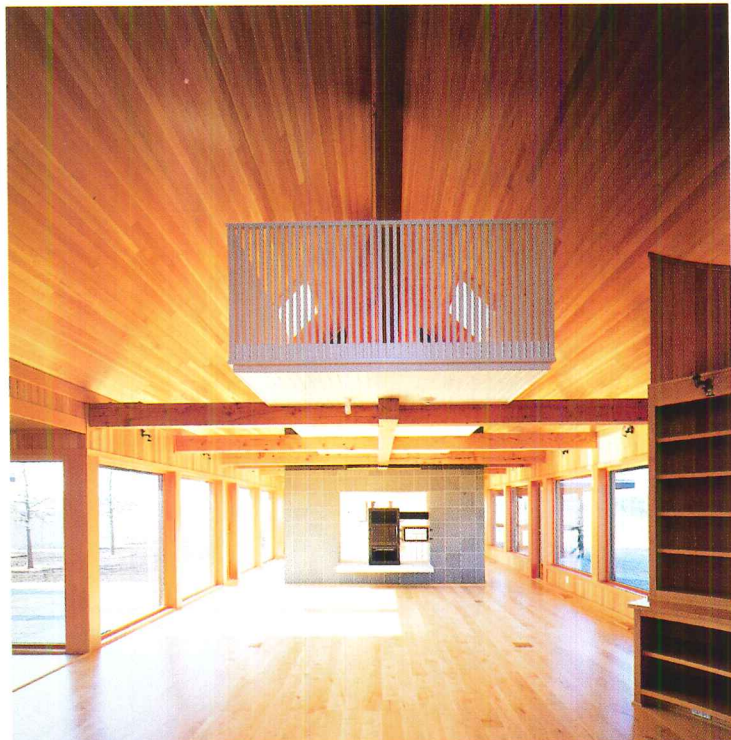
**Gross area:** 6,700 square feet

**Architect:** Salmela Architect—David Salmela, AIA, principal, Souliyah Keobounpheng, design team

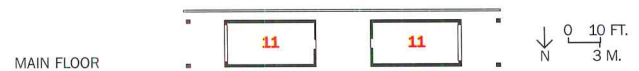
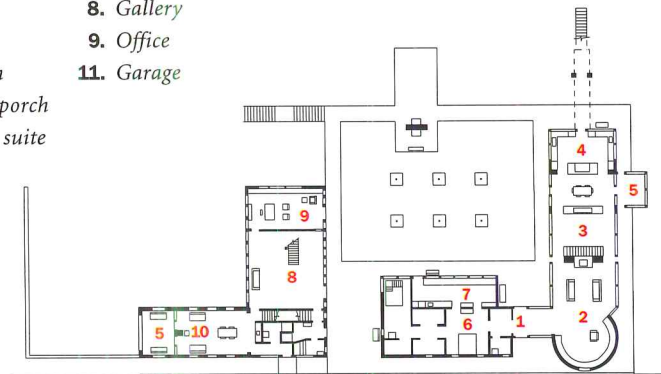
**Engineers:** Carroll & Franch (structural)

**Consultant:** Coen+Stumpf & Associates (landscape)

**General contractor:** River City Builders



- 1. Entry
- 2. Living
- 3. Dining
- 4. Kitchen
- 5. Screen porch
- 6. Master suite
- 7. Work room
- 8. Gallery
- 9. Office
- 11. Garage



Wide open spaces and a simple floor plan characterize the interior of the house. Glass walls introduce abundant natural light to the living areas (left).

modern but is mediated by 8-by-80-foot sleeping loft, designed to be used by visiting children and grandchildren. Running the full length of the house and just less than half the width, this loft lowers the ceiling to provide a feeling of enclosure at the hearth, which is warmed by a wood-burning stove, and in the breakfast area. Painted glossy white, the loft adds to the feeling of lightness and openness that pervades.

The house is simultaneously modern and rooted in a long tradition. In many of his projects, Salmela creates a new vocabulary for rural architecture, using the local materials and forms—such as the pitched roof and hearth—that have worked for centuries. Still, he creates contemporary, livable spaces that are undeniably modern. The house was immediately comfortable for the clients, and Salmela says he and his clients were gratified by the positive responses from neighbors, who are lifelong residents of the farming community. “Sometimes city people move in and build without understanding the area,” the architect says. “In this case, I think we did the right thing.” ■

#### Sources

Hardware: Schlage

Hinges: Schlage

Pulls: Hafele

Cabinet Hardware: Hafele

Interior ambient lighting: Modular

Downlights: Halo

Paints: Pratt & Lambert

Task lighting: Prisma

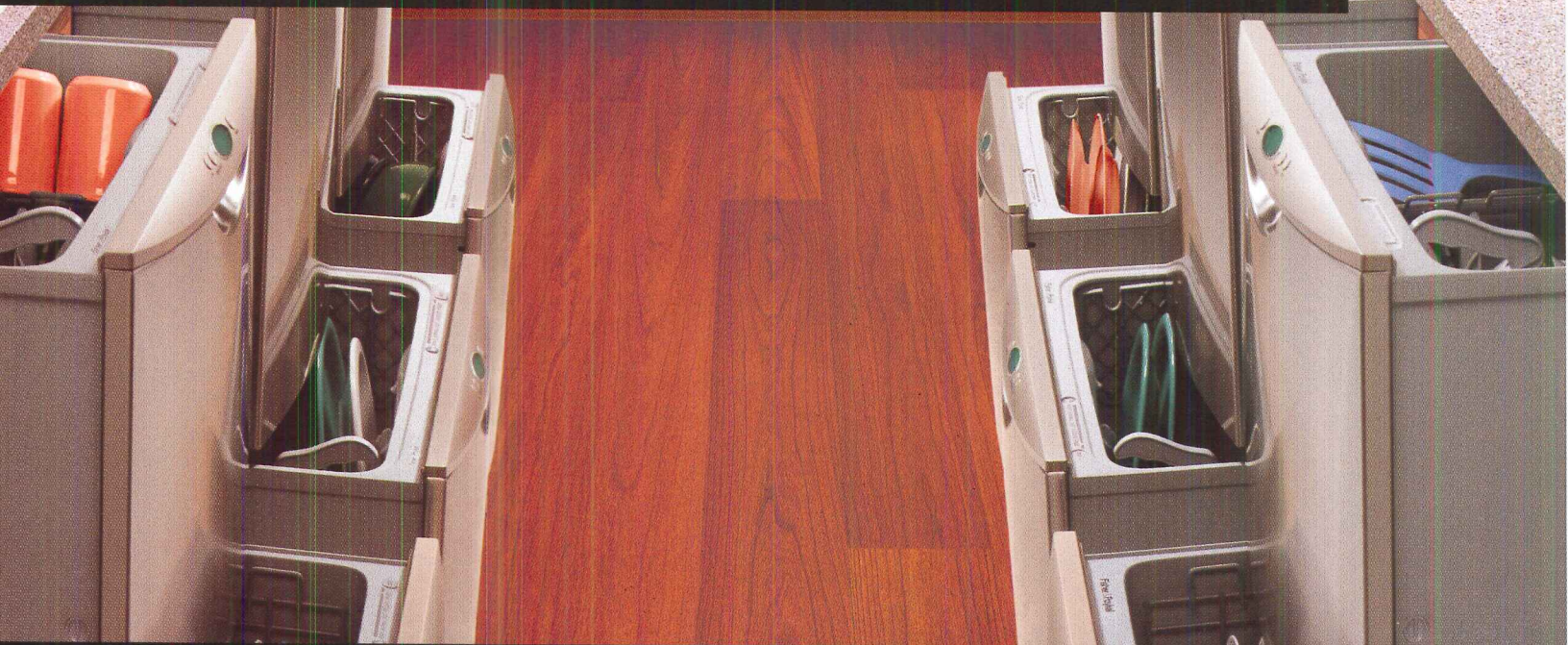
Exterior lighting: Stonco

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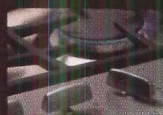
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An unassuming shed form is nestled in a meadow with a view of the Catskills (top). The architect left open the half-built concrete foundation (below) of

a never-completed house to create an "outdoor room with no name." A walkway, with an outdoor shower (right), lies on top of the "ruins."



# With the Nickerson-Wakefield House, Anderson Architects updates the country shack

By Raul A. Barreneche

To the outside observer, the brief presented to architect Ross Anderson might sound like an invitation to build an indulgent, romantic fantasy. Two ex-pat Brits, *Vogue* fashion editor Camilla Nickerson and her husband, art critic and curator Neville Wakefield, asked the Manhattan architect to design a weekend retreat for them atop a hillside ruin on 20 picture-perfect acres in New York's Catskill Mountains. But neither Anderson nor his clients were interested in building a folly or in re-creating an English country manor; in fact, Nickerson and Wakefield had been considering no-nonsense log-house homes and inexpensive prefab structures before calling on Anderson. And the ruins they inherited with the property were not the crumbled remnants of some ancient civilization, rather the half-built concrete foundations of a three-story spec "chalet" left behind when its developer went bankrupt.

"The clients told me, 'We want to do something great, but we have zero dollars,'" recalls Anderson. "The first question was, 'Do we bulldoze the foundation and start over, or work with it?' We decided to keep the foundation and treat it like a found object and then drop an extruded house form with a shed roof on top of the existing footprint. We let the architecture develop where the two commingle," he explains. Anderson created this complex, engaging architectural expression for less than \$100 per square foot.

Fortunately for the architect, the existing walls of the aborted foundation (which he left more or less intact) were well sited, nestled into a shallow hillside meadow to the north and open to the south, facing the ideal views of the Catskills. As if to remove any doubt of kinship with the original foundations—and to maximize mountain views and solar gain—Anderson placed the new single-story shed perpendicular to the "ruins." The 16-by-75-foot wood-framed volume extends beyond the existing walls to create a sheltered carport to the west and a covered entry to a workshop and studio to the east, beneath the overhangs. The original walls bear most of the weight of the addition above, while concrete pilots beneath the overhanging ends pick up the remainder of the load. An unusual space results from the architect's decision to leave open to the sky the area of the foundation not covered by the new addition, thus creating a vaguely urban, concrete-paved courtyard or outdoor "room with no name," as Anderson calls it.

The architect inserted a 6½-foot-wide wood-plank walkway, reminiscent of a beachfront boardwalk, to reach the new shed from the hillside meadow to the north. The 70-foot-long walkway skewers the addition at an odd angle, passing through its heart and jutting out beyond it; at that point, the walkway becomes a narrow deck with an outdoor shower and alfresco fireplace. "We wanted to encourage people to be outside," says Anderson. "The outdoor fireplace is a great place to sit bundled up."

*Raul A. Barreneche, a contributing editor to Metropolitan Home and Travel + Leisure, writes for House Beautiful and The New York Times. He is also coauthor of the forthcoming House: American Houses for the Next Century (Rizzoli Universe).*



As it slices through, the walkway both organizes circulation through the house and cleaves it into two distinct realms. Steel staircases up from the carport and down from an attic-like guest loft are hung from the walkway, which defines a public zone to the west with a double-height living-dining room and kitchen, and a private bedroom wing to the east. With the exception of the smaller of the two bedrooms, all of the spaces overlook the most scenic views to the south through large expanses of sliding glass doors that "use the landscape as wallpaper," to Anderson's mind. The architect specified 10-foot-tall aluminum-framed doors that are typically found in hurricane-prone settings such as Hawaii and are engineered to withstand high winds and driving rains. The north facade is much more solid, with small, rectangular windows punched into its surface.

Both inside and out, the home is finished in stern, inexpensive

**Project:** Nickerson-Wakefield House

**Location:** Westkill, N.Y.

**Architect:** Anderson Architects—

Ross Anderson, president; MJ Sagan, vice president; Paul Henderson, project manager; Todd Stodolski, Andrew Benner, Peony Quan, Caroline Otto, Shane Braddock, Josh Bergman, project team

**General contractor:** John Berger

**Sources**

**Metal roof:** Astrazinc

**Windows:** Pozzi

**Sliding doors:** Fleetwood

**Interior paint:** Benjamin Moore

**Exterior stain:** Cabot Stain

**Ambient lighting:** Halo, Stonco

**Downlights:** Killark

**Task lighting:** Alkco

**Exterior lighting:** RAB, Stonco

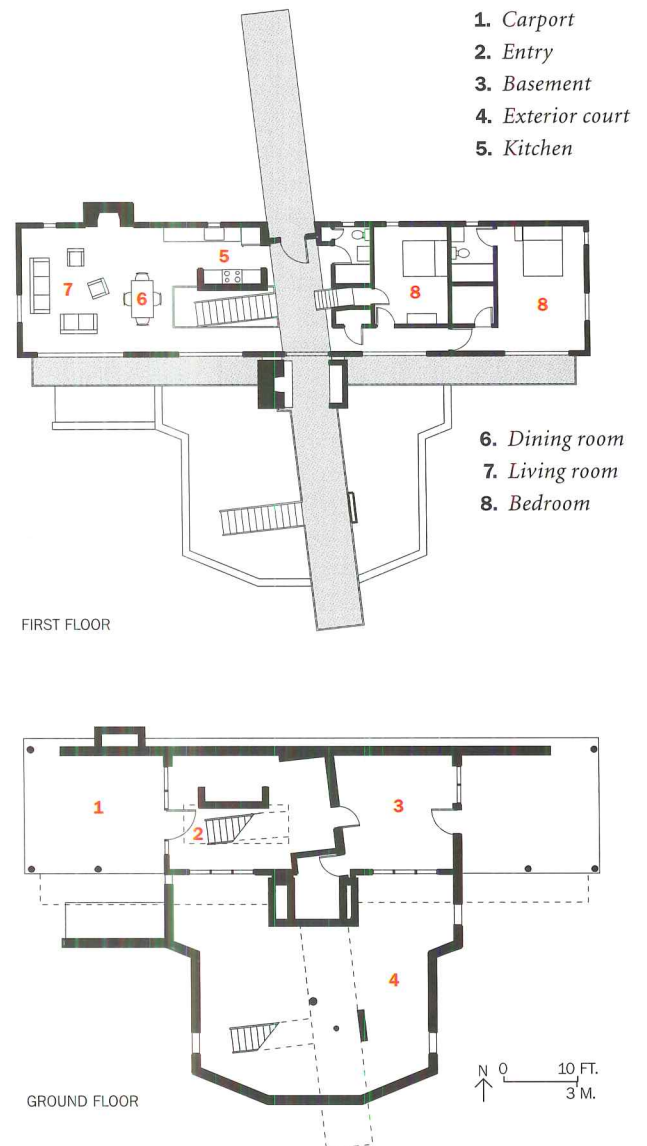
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For the house to come in at under \$100 per square foot, only the most inexpensive materials—drywall, plywood, and off-the-shelf pendant lights—were used (above).

materials. “We wanted to use the cheapest stuff in the best way,” explains Anderson, “so we could spend money on necessities, such as the sliding glass doors, since the site is so exposed to wind and weather.” Nothing fancy was used for the interior: drywall, plywood ceilings and floors with radiant heating beneath, and inexpensive, off-the-shelf industrial pendant lights. The exterior palette is equally simple: standing-seam metal roofing and five-inch-wide pine plank siding stained nearly black with a custom mix of creosote and paint. This unexpected color choice has an almost unsettling quality in the verdant landscape, but Anderson enjoys its subtle changes in sunlight and its undeniable ability to set the house apart from its site. “Keeping it monochromatic is like signing a noncompete agreement with the landscape. And it looks great in the snow,” he adds.

While the house’s references to industrial sheds and barns are clear, it also reveals decidedly urban characteristics, such as the concrete courtyard—where the owners have been known to hang their laundry out to dry—and exterior metal stairs that remind Anderson of fire escapes. Although its spare, industrial materials recall the pared-down, edgy quality of a downtown loft, the house doesn’t ignore the rural surroundings in its dialogue. Anderson’s solution proves that clients can look beyond log cabins and prefab boxes to create affordable and provocative architecture in the country. ■



# Residential Products

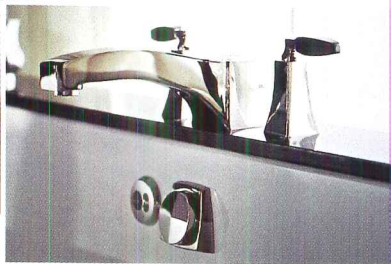
## Kitchen/Bath Industry Show

In April, kitchen and bath designers headed to sunny Orlando for the annual Kitchen/Bath Industry Show. Here is a review of the newest trends, from bathroom faucets to outdoor grills. *Rita F. Catinella*



### ◀ Powder room

Inspired by the opulent mirrored furniture of the 1940s, Glamour is the newest collection of bathroom fixtures designed by Barbara Barry for Kallista. Glamour's mirror, vanity, bathtub, medicine cabinet, and wastebasket are crafted in mirror and black granite. Ebony or Ivory faucet-handle inserts (below) create a warmer or cooler design motif. 888/4-KALLISTA. Kallista, Kohler, Wis. **CIRCLE 200**

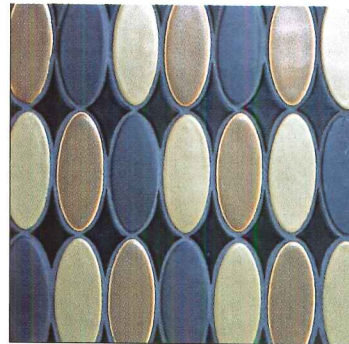


### ▲ Appetite for aluminum

The +ALU2000 kitchen from Poggenpohl is dedicated to aluminum—the drawers, handles, internal fittings, and accessories of the sleek system are all made of the material. In addition, the system features a stainless-steel work surface and frosted glass door fronts. A special anodized coating finishes the surfaces for a silvery matte shine. 973/812-8900. Poggenpohl, U.S., Inc., Wayne, N.J. **CIRCLE 203**

### ▶ Classical suite

The Carrollton suite includes a skirted toilet with TOTO's G-Max flush system, a bidet, and both a self-rimming and pedestal-style lavatory. A classical, molding-like treatment can be found at the base of the toilet, bidet, and pedestal lav. A high-hip back on the toilet tank and sinks creates a practical, shelflike space. 770/282-8686. TOTO, Morrow, Ga. **CIRCLE 204**



### ◀ Hipster style

Gotham by Adriana Baler adds a modern-retro porcelain tile to the current Ann Sacks offering. Gotham is hand-made and available in three styles—Ovals, Round Rectangles, and Drops. The tile's current retail price is approximately \$80–\$90 a square foot. 800/278-8453. Ann Sacks, Portland, Ore. **CIRCLE 201**

### ▶ Kitchen duty

The third-generation DishDrawer dish-washing system incorporates Fisher & Paykel's patented SmartDrive technology. The company claims the system is the only dishwasher able to run two cycles at one time, and the only one that varies the water pressure within each wash cycle. Eight different wash options allow users to customize their dishwashing. The system requires as little as 2.4 gallons of water per load. 888/936-7872. Fisher&Paykel Appliances, Irvine, Calif. **CIRCLE 202**



### ▲ Endless horizon

The Sok overflowing bath lets bathers float in 24½-inch-deep water as air-jets generate tiny, effervescent bubbles that cling to the body and lightly caress the skin. Submerged from shoulders to toes in the 75-inch-long tub, the bather is at eye level with a sleek plane of water that continuously spills over the tub's rim into a water channel and is recirculated back into the tub, conserving water. The tub uses a 1.5 KW heater and a ½ HP, 230-volt pump. 800/4-KOHLER. Kohler Co., Kohler, Wis. **CIRCLE 205**

# Residential Products

## Kitchen/Bath Industry Show



### ▲ Shower power

The Ondine electronic shower system delivers a preprogrammed shower experience at the press of a button. The shower's water temperature and different pulsating or steady shower sprays will follow whatever program has been entered. The Adlon luxury showerhead is available with a 2½-gallon-per-minute automatic flow controller. For commercial installations, Adlon offers the option of a theft-resistant installation fitting. 800/423-9485. Interbath, City of Industry, Calif. **CIRCLE 206**

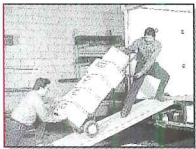
### ► Haute hoods

The Best K73 range (right) incorporates a gently curving, hand-formed glass canopy floating under a stainless-steel chimney flue. Multilevel halogen lighting ranges from bright cook-top illumination to low nighttime settings. The Best IS502 range (below), available in 2002, features glass and stainless-steel intermingling under a dramatic lighting system. A high-efficiency exhaust system provides 480 CFM of power that can be operated from a multispeed electronic push-button control or by a wireless, full-function remote control. 800/558-1711. Broan-NuTone LLC, Hartford, Wis. **CIRCLE 207**

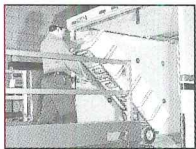


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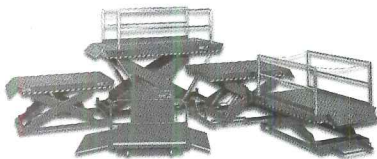


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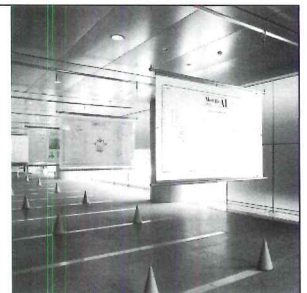
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# Residential Products

## Kitchen/Bath Industry Show



### ▲ No commitment necessary

M•Pact is a new valve system that allows users to upgrade the style of the entire bath without going under the sink or behind the shower wall. Each trim piece in the system fits on a common valve underbody. Once installed, the trim can be upgraded or changed at any point in the remodeling or construction process without replacing any plumbing. 800/BUY-MOEN. Moen, Inc. North Olmsted, Ohio. **CIRCLE 208**

### ▼ Brighter barbecue

Dacor's new outdoor grill, coming out in late summer 2001, is available in 36- and 48-inch sizes. The grill has sealed brass side burners, automatic electronic ignition, infrared rotisserie burner, a large grilling area, and the most convenient advancement yet—a halogen light built right into the grill. 800/793-0093. Dacor, Pasadena, Calif. **CIRCLE 209**



### ◀ What dirty dishes?

The Asko Mirage Series is specially designed to accept custom panels that match cabinets precisely without a trim kit or hardware. Custom panels attach to the dishwasher door with four screws that are invisible when the door is closed. To complete the illusion, the control panel is on top of the door so they disappear under the countertop.

800/367-2444. Asko USA, Richardson, Tex. **CIRCLE 210**

### ► Planning concept

Organomics is a new concept in cabinetry focused on creating spaces designed around the way people actually use them. Combining the art of organization and the science of ergonomics, the concept helps users review on what activities take place and prioritize items

for storage. To make kitchens work smarter "organomically," homeowners should think in terms of zones designed for certain tasks. The cabinets shown above are Amera Forrister Cherry in Cider. 800/575-8763. Merillat Industries, Adrian, Mich. **CIRCLE 211**



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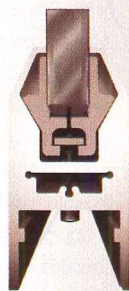
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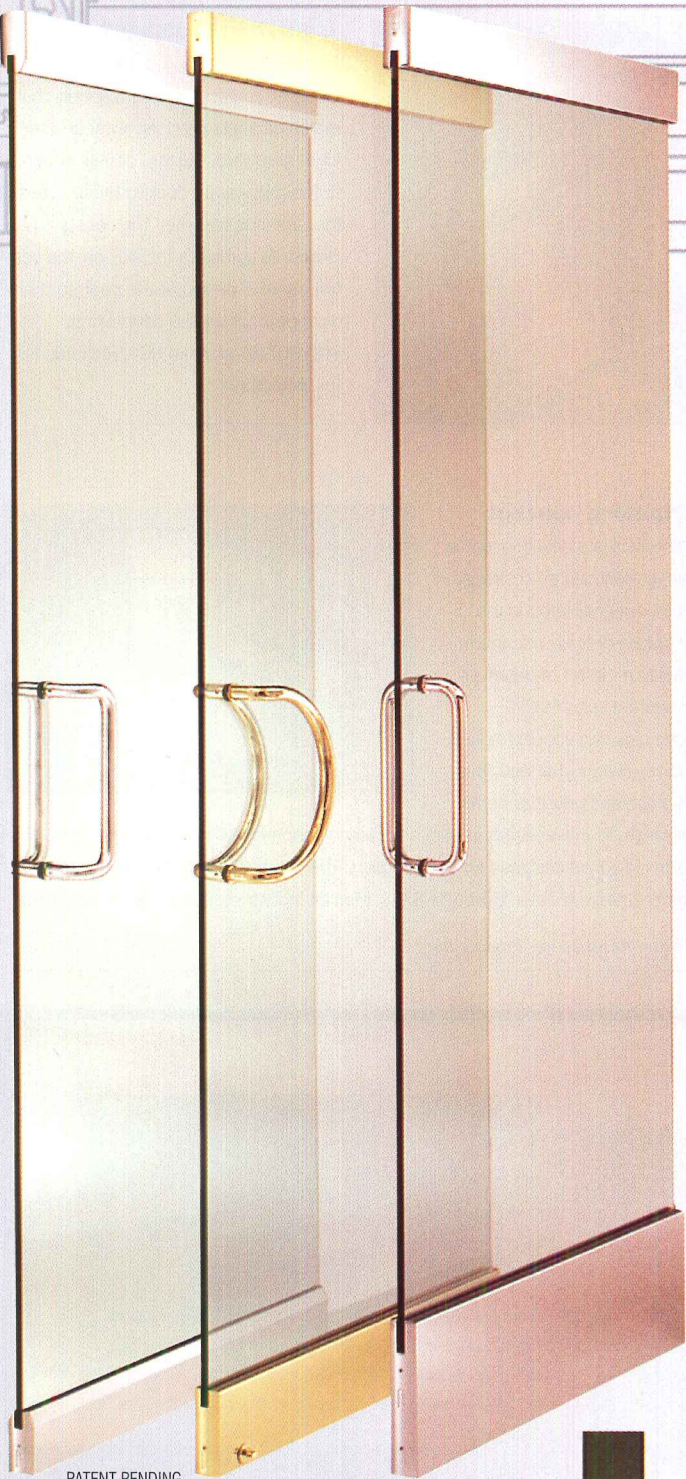
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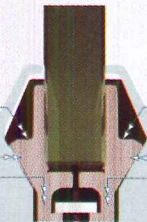
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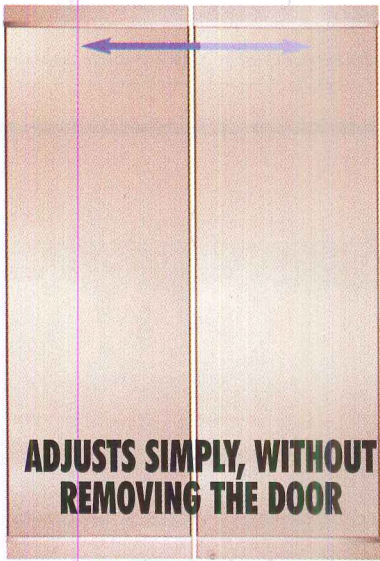
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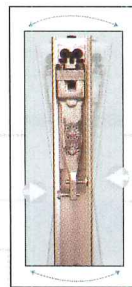
Tempered bolts draw the tapered clamp jaws downward against the internal wedge design of the rail body, resulting in very high gripping pressure along the entire edge of the glass.



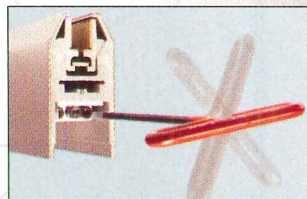
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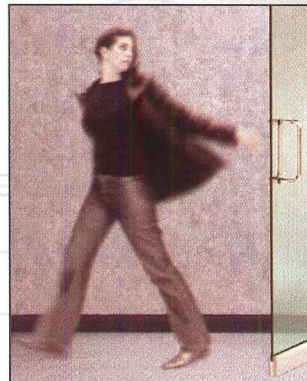
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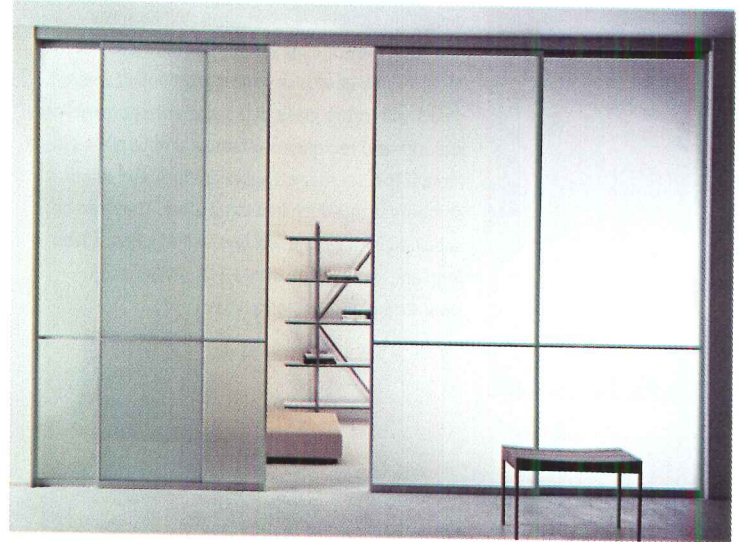
# New Products

Cast bronze, tempered glass, wood, and fiberglass are just a few of the materials used to design the residential and commercial doors shown below and on the next page. These doors use both engineering and quality materials to make the most of the exterior, interior, and even below-grade spaces they introduce. *Rita F. Catinella*

## Contemporary Italian glass sliding doors

Available through a showroom in the Architects & Designers Building in New York City is Tre Più's collection of contemporary hinged and sliding door systems. The Pavilion system, designed by Antonio Citterio, is named after the glass-walled German pavilion designed by Mies van der Rohe for the Universal Exhibition in Barcelona in 1929. Pavilion is a fixed and sliding door program with a frame available in five different types of profile finishes: three in anodized aluminum and two in wood—clear walnut or cherry. Doors are avail-

able in tempered, transparent, or frosted glass, and in veneered canaletto or white chestnut oak. For safety, only hardened glasses are used in the system, and these are available in eight finishes, ranging from Matisse Green and Cézanne Light Blue to Rose Van Gogh. The system is shown here with a natural anodized aluminum crosspiece with a "Klee-colored," frosted, hardened glass on two side fixed panels and two sliding panels. A lamp can be fixed onto the sliding rail. 212/935-5955. Tre Più, New York City. **CIRCLE 213**



The Pavilion system separates spaces while maintaining an open feeling.

## Fifteen-foot-high cast-bronze doors open with the push of a finger

Complementing a private 45,000-square-foot Saudi Arabian villa on the Red Sea are custom bronze doors that stand 15 feet by 9 feet and weigh 6,750 pounds. Daniel Charbonneau, project manager for the villa's design and construction, commissioned Deggingers' Foundry and designer/project manager Janet

Zoble to create the door in cast bronze featuring a 16th-century Arabic decorative motif and sidelight of hand-cast glass. The Foundry also created nine cast-bronze window grilles, the largest of which is almost the size of the door.

Engineered to open with the push of a finger, the doors feature a tubular steel inner structure clad with cast-bronze panels and fabricated bronze plate. "The trick was to engineer the handling of the door so it didn't become wall art but a functioning doorway," says Zoble. Deggingers' worked with Rixson to come up with a combination of hinges and pivots to support a load that comes close to a ton per door leaf. The floor pivot is designed to slow down in the last 15 degrees of closure. "We went with an offset hung floor-closer with three

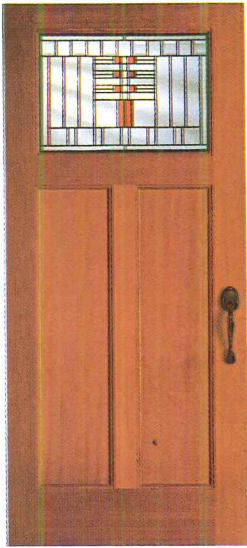
intermediate pivots per leaf," explains Zoble. "Rixson certified that those would bear the weight of the door. The precise positioning of the three aligned pivot hinges and the weight-bearing pivot door-closer gave it the balance to open easily." Besides the door's weight, the team had other issues to contend with regarding the extreme climate in Saudi Arabia. Constructed in Kansas in frigid January, the door might expand when transported to a hot, arid area on the Red Sea. "We had information that our welds were secure enough that it would withstand a little expansion and contraction," says Zoble. "A very minor shift occurred." In addition, the high saline content in the sea air would have an impact on the patination of the brown/bronze-colored door. The client's preference was to leave the patination unsealed, allowing for the natural development of a green patina. 785/232-4788. Deggingers' Foundry, Topeka. **CIRCLE 214**



## Grand entrances

The Estate Collection recalls a time when entrances reflected the beliefs and status of the families within. The clear or knotty alder doors can be customized by selecting the wood surface texture, finish color, decorative metal accents (including speakeasy and sidelight grilles), hardware, and glass that will complement a variety of styles. Door shapes include flat, Gothic, segmented, and radius top. The door above features distressed knotty alder with an antique chappo finish, a speakeasy with a grille and a door, and coordinating sidelights with a rustic grille on the exterior. 800/468-3667. IWP, San Diego. **CIRCLE 215**

## New Products



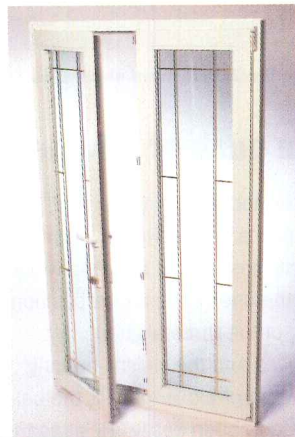
### ◀ Crafty collection

Inspired by Craftsman architecture and Frank Lloyd Wright's signature design style, the Craftsman Collection features 27 exterior door designs in Douglas fir or western hemlock, with matching transoms and sidelights. Art-glass patterns include geometric representations of wheat stalks with azure glass detail and arrangements of squares and rectangles offset by amber glass elements. The doors are 1¾ inches thick and come standard with ¾-inch insulated glass. They can be specified in heights of six feet eight inches, seven feet, and eight feet. 800/952-4057. Simpson Door Company, McCleary, Wash.

**CIRCLE 216**

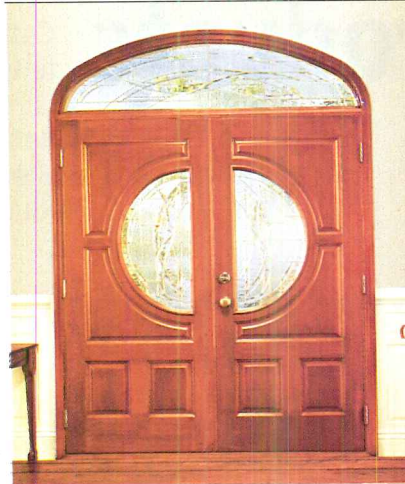
### ▶ Pultruded fiberglass

Graham offers a new collection of pultruded fiberglass windows and doors suitable for seashore condominiums and hotels. The Graham Renaissance Series provides an alternative to aluminum and clad-wood windows in corrosive seacoast environments. Pultruded fiberglass expands at the same rate as glass, so all components work together as a unit. The collection includes a casement/projected style window, terrace door (shown), and sliding glass door. 800/755-6274. Graham Architectural Products, York, Pa. **CIRCLE 218**



### ▲ Hinged and patio doors

Weather Shield introduces Legacy Series hinged and patio door systems with French and swinging patio doors. The new series features adjustable four-inch hinges that match handle set finishes and allow for precise door-height adjustment. The heavy-duty 2¼-inch-thick door panels have a solid wood core with extruded aluminum exteriors. A German engineered three-point locking system is provided on all doors. 800/477-6808. Weather Shield Mfg., Medford, Wis. **CIRCLE 220**



### ◀ Douglas fir line

Growing in natural abundance, Douglas fir accounts for one-fifth of North America's softwood reserve. Nord offers its Douglas fir line in two panel-construction options: traditional edge-glued solid wood with double-hip raised detail for shadow lines; or exterior-grade MDF covered with a book-matched, real wood veneer. Sizes up to seven and eight feet are available. 800/877-9482. Nord, Klamath Falls, Ore. **CIRCLE 217**



### ▲ Inswing or outswing French doors

Ultimate French doors have adjustable hinges, a clear pine interior, and solid brass handles that activate a concealed multipoint locking system. Inside the operating door stiles, a structural spine made of Ultrex prevents warping. The door exteriors can be either wood or thick extruded aluminum cladding. Many configurations receive a standard DP 40 rating from the Window & Door Manufacturers Association. 888/537-8268. Marvin Windows and Doors, Warroad, Minn. **CIRCLE 221**

### ▶ Below-grade access

Bilco's J-AL access doors have been redesigned for easier installation, improved corrosion resistance, and lower maintenance. New standard features include a patented anchorage system, debris gasket, advanced-composite housings, forged aluminum hinges, and a 25-year warranty. The door provides access to areas located underground or beneath/between floors. 203/934-6363. The Bilco Company, New Haven, Conn. **CIRCLE 219**



## Product Briefs



### ▲ Quirky cork

The ProntoKorQ collection consists of four designs of floor- and wallcovering tile by designer Kevin Walz. Since the cork tiles are pigmented in the natural binder, the color permeates through the layer of granulated cork and is not susceptible to scratching off. The four new designs are Striped (above left), Terrazzo (above right), Solid Color, and Chunk Style. ProntoKorQ is a three-layer product: insulating cork, non-formaldehyde MDF, and high-density granulated cork. 212/758-2593. KorQinc, New York City. **CIRCLE 222**

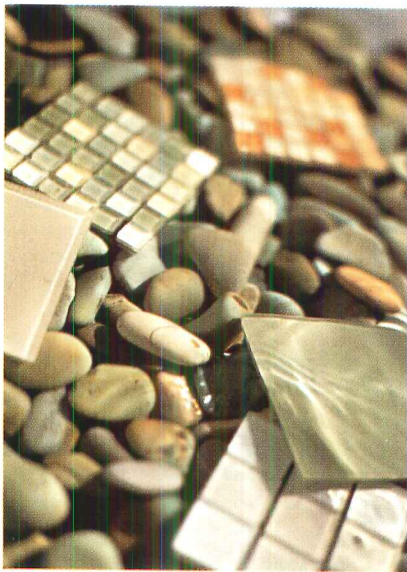
### ► Get it while it's hot

FireLite Plus is a laminated, impact safety-rated version of the wireless fire-rated glass ceramic FireLite. Listed with U.L., FireLite Plus carries fire ratings up to three hours in doors and up to 60 minutes in other applications. Unlike some fire-rated glazing materials, the product's performance will not be affected by the spray from sprinklers or extinguishers. FireLite Plus fits in standard fire-rated frames or TGP's narrow profile FireFrames by Forster. 888/397-FIRE. Technical Glass Products, Kirkland, Wash. **CIRCLE 224**



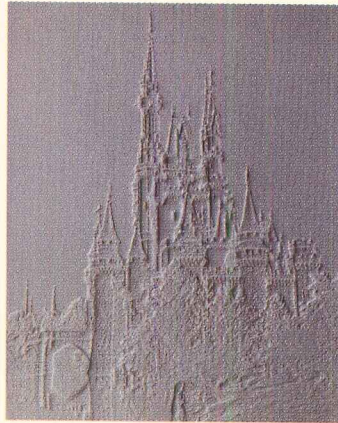
### ► Translucent glass tiles

The Fusion collection of hand-made, architectural glass is produced in Italy, under the design of Walker Zanger. To create the tiles, two pieces of glass are melted together and a glaze is compressed between the glass pair, imparting color to the tile. After the first firing, the large tiles are cut into mosaic sizes and fired again, melting the edges. The tiles come in an array of sizes and shapes, and 17 translucent colors. 800/540-0235. Walker Zanger Inc., Sylmar, Calif. **CIRCLE 225**



## Product of the Month DuPont Corian technologies

A photoengraving process produced exclusively for DuPont by Backlight Images was used to etch this intricate picture of a castle (bottom left), permanently preserving the 3-D photographic image in the surface of Corian. When backlit (bottom right), the result is a sophisticated interpretation of the photo. The proprietary technology of Corian Bas-Relief signature surfaces transforms Corian via a two-dimensional molding process. The offering enables designers to create signature surfaces with textural variety and depth-of-pattern. The stools shown above showcase the design potential of thermoforming Corian. 800/4-CORIAN. DuPont Corian, Wilmington, Del. **CIRCLE 223**

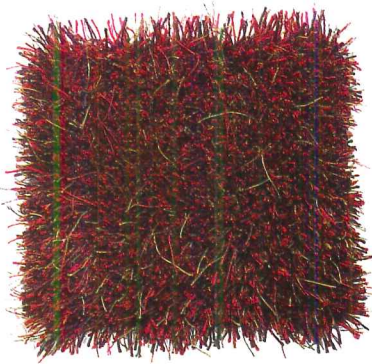


### ▲ Danish tour

The *Danes on the Move* exhibition presents, for the first time ever in the U.S., the finest work of award-winning young Danish designers. The exhibition, which opened in New York in March, travels to 15 select furniture retailers across the U.S. (this month's stops include Austin and Tucson). All of the pieces on display were designed in Denmark and crafted by prominent Danish furniture makers. The Rockable (above right), designed by Hans Sandgren Jakobsen, is composed of 37 sticks driven into a circular base that rocks slightly. Reminiscent of a stamen, each of the sticks is crowned with a rounded knob, and the ensemble creates a convex seat. The Grid (above left), by Komplot Design/Boris Berlin & Poul Christiansen, features a wooden grid that "recollects the human body." 212/223-4545. Royal Danish Consulate General, New York City. **CIRCLE 226**

## Product Briefs

Scandinavian design was on display at this year's Stockholm Furniture Fair, held in February. A few floorcovering and furnishing highlights follow.



### ▲ Shaggy Scandinavian

Kasthall rugs are milled in the small town of Kinna, in the heart of Sweden's "Tygriket" or "Fabric Kingdom." Woven from the wool of highland sheep, the rugs come in widths up to 25 feet and lengths up to 150 feet. The hand-tufted rugs have no limitations in size, shape, or color. One of the more unusual offerings, Moss, is shown above. Wooden floors are also available. +46 320 143 30. Kasthall, Kinna, Sweden. **CIRCLE 227**

### ▼ Swede seats

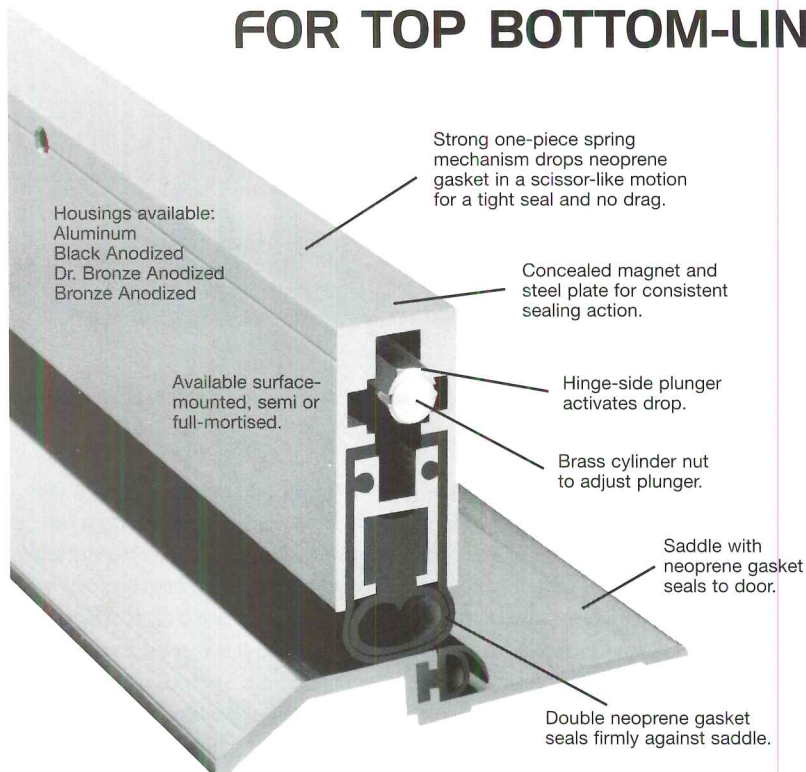
The Millibar bar stool (right) by Anya Sebton features a lower-back-supporting webbed seat and steel tube in powdercoat or chrome, springing from a convex beveled foot. A table that complements the stools comes in three sizes and two heights, with a tabletop in white or gray homogenous laminate. The latest product by Love Arbén for Lammhults is a series of armchairs, easy chairs, and tables named after the days of the week. (Monday, Friday, and Sunday shown below). The seat and back can be upholstered in fabric or leather. +46 472 26 9500. Lammhults Möbel AB, Lammhult, Sweden. **CIRCLE 228**



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## Product Briefs



### ▲ Swedish form

One of the leading contract furniture companies in Scandinavia, Skandiform has worked with designers such as Ruud Ekstrand, Jonas Lindvall, Claesson/Koivisto/Rune, and Helene Teidemann. The Dropp series (above) includes a sofa, easy chair, armchair, and tables designed by Claesson/Koivisto/Rune. A daybed/sofa is among the other designs for the company. +46 44 855 50. Skandiform AB, Vinslöv, Sweden. **CIRCLE 230**

### ▼ Finnish flooring

In addition to carpets and other series-production textiles, Hanna Korvela Design has produced numerous textile artworks and liturgical textiles, and provides a design service for other companies. The current line includes: Duetto, a recyclable, clean-lined, cotton knit-paper yarn carpet; Duetto's companion Encore, a cotton knit with strong paper yarn; and Minore, a minimalist wool carpet. +358 (0) 17 288 6688. Hanna Korvela Design Oy, Kuopio, Finland. **CIRCLE 229**



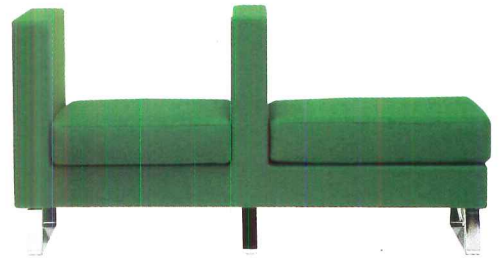
### ▼ Make room for contract furniture

At its first showing at the Stockholm Fair, R.O.O.M. contract introduced two new series of contract furniture. Workstation "IS" (shown) in oak and colored glass was developed in collaboration with architect Thomas Sandell and Chris Martin and includes a storage unit, writing desk, and PC unit. The "WZ" series, designed by William Zetterman, includes four different types of writing tables in oak and a variety of laminate colors. +46 8 692 50 00. R.O.O.M. Contract, Stockholm. **CIRCLE 231**



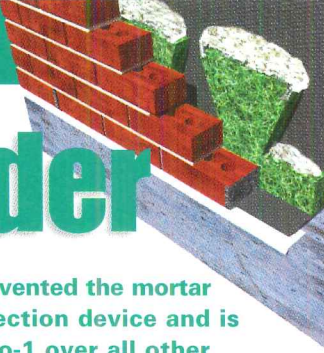
### ▼ Getting the right effect

At the Fair, Offecct premiered new products and prototypes from such in-vogue international designers as BarberOsgerby (London), Jean-Marie Massaud (Paris), and architect Thomas Eriksson (Stockholm). Eriksson's new F-Seat sofa is designed for waiting rooms or short meetings. F-Seat lacks a traditional back, offering numerous ways of sitting. +46 0504-415 00. Offecct interiör ab, Tibro, Sweden. **CIRCLE 232**



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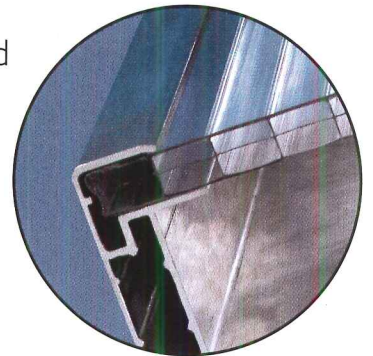


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## Product Literature

### Color options

The "Color Quest" selector chart covers the complete Chicago Metallic color offering, including Natural, Prestige, Brights, and Door/Frame Systems colors. 800/323-7164. Chicago Metallic, Chicago. **CIRCLE 233**

### Decorative lighting

Meyda Tiffany introduces *Founder's Edition*, its largest catalog to date. The 300-page catalog, featuring thousands of Tiffany decorative lights and home decor, is dedicated to the firm's founder, Meyer Cohen (c. 1907-2000). 800/222-4009. Meyda Tiffany, Yorkville, N.Y. **CIRCLE 234**

### Colored fixture offering

Litecontrol's LiteColors brochure has a 21-color palette of contemporary colors for its line of architectural fluorescent lighting fixtures. The brochure identifies a range of neutral shades, vivid and muted hues, and metallic tones. The LiteSpeed Contractor Starter Kit will aid electrical contractors, design-build firms, lighting designers, and other specifiers with quick-ship lighting requirements in sourcing, specifying, and ordering linear fluorescent lighting fixtures, for shipment

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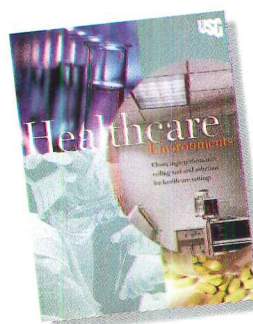
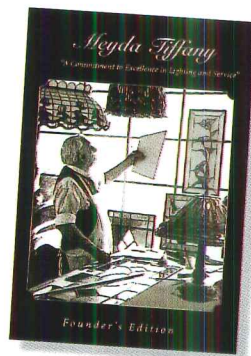
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Litecontrol, Hanson, Mass. **CIRCLE 235**

### Wall and ceiling solutions

*Healthcare Environments*, a new eight-page brochure from USG Corporation, provides designers, builders, and specifiers with detailed information on a wide range of wall and ceiling products and systems specifically suited to healthcare settings. 800/950-3839. USG Corporation, Chicago. **CIRCLE 236**



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## Product Literature

### Acoustical education

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### Interior and exterior doors

Simpson Door Company introduces a new brochure featuring Infinity Doors, Simpson's latest collection of interior and exterior doors. 800/952-4057. Simpson Door Company, McCleary, Wash. **CIRCLE 238**

### Sandstone products

A new brochure from Cleveland Quarries highlights the sandstone producer's line of landscape stone for commercial, institutional, and residential applications. The products include patio stone, wall stone,

ledge rock, rubble stone, and custom sandblasted stone signs. 800/248-0250. Cleveland Quarries, Amherst, Ohio.

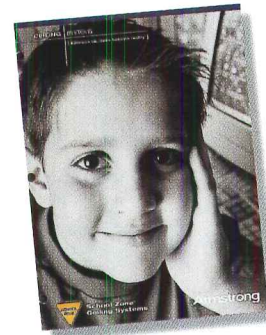
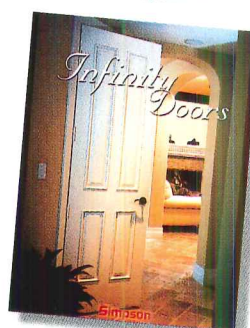
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### Elevator/escalator guidelines

*NEII-1-2000, Building Transportation Standards and Guidelines* provides a reference for the dimensional, performance, application, and evaluation requirements of building transportation systems: elevators, escalators, and moving walks. Written by the Performance Standards Committee of National Elevator Industry, Inc. (NEII) and published by Elevator World, Inc., the standards supply standardized information, which the end user can incorporate in drawings and specifications. 800/730-5093 x119. Elevator World, Inc., Mobile, Ala. **CIRCLE 240**

### Scaffold safety

The National Roofing Contractors Association now offers *Scaffold Safety: From the Ground Up, Part 3: Aerial Lifts, Forklifts and Fork-Mounted Work Platforms*, in a book, video, and manual format. 800/323-9545. National Roofing Contractors Association, Rosemont, Ill. **CIRCLE 241**



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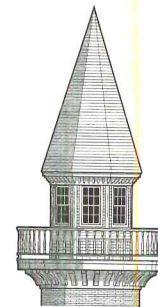
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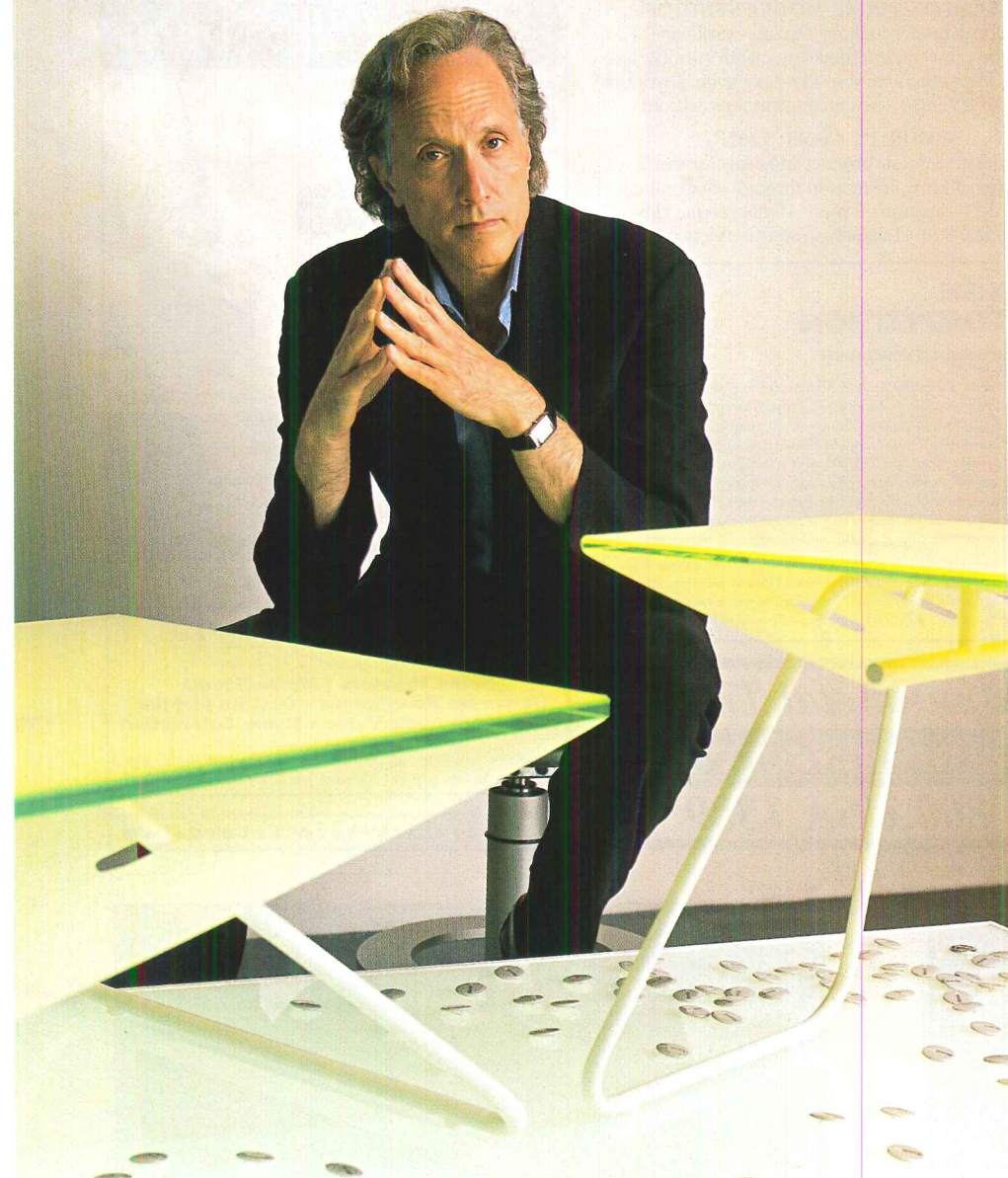
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## Dakota Jackson: A wizard of craft plays with illusion

Interviewed by Jane Kolleeny

Dakota Jackson comes from a family of magicians and, like Houdini, he named himself. In fact, he fashioned his Wyoming cowboy title from his Hebrew name: Yehuda ben Yakov (i.e., “son of Jakob” or . . . voilà: Jackson). This kid from Queens is now 51 years old. From his early days as a wizard fashioning boxes for rabbits and people to disappear into, to the 1970s bohemianism of the SoHo art scene, to entrepreneurial furniture-making, to designing Steinway’s Millennium piano—Dakota, it seems, can walk any walk, talk any talk. In fact, he’s made a career of reinventing himself. Today, his factory in Long Island City employs over 100 people, and he presents himself as an impresario of a multinational troupe of furniture crafters.

**Q:** Do your early days in magic relate to your current profession? Capturing and keeping people’s attention is the magician’s art, a trick I learned as a child performer. Designing is the same. You grab the audience and keep their attention by introducing and prolonging a design narrative. These days, as a content provider at the Dumb Box, which is a narrative space, an interactive, performance-art showroom that opened last month in SoHo [New York], I’ve come full circle, bringing together performance and design.

*Tell us about the thing you are best known for—your furniture designs.* As a builder, I experimented with materials and making things, both small objects and large spaces. This led me to furniture, which eventually led me to develop a variety of collections, or narrative themes, including the Library Chair Series, originally commissioned by Pei Cobb Freed for the San Francisco Public Library and then used by Legoretta and Polshek in some of their work. I’ve designed furniture for companies such as IBM, Starbucks, and the Four Seasons Hotel. I have displays at the Cooper-Hewitt, Brooklyn Museum, the America Craft Museum, and others.

*Tell us more about the Dumb Box.* Ongoing work with Peter Eisenman on my Los Angeles studio inspired the Dumb Box—“dumb” because it’s silent about a specific purpose. I conceived of it as a 24-hour space for displaying a kaleidoscope of interweaving themes: education, information, architecture, branding, and commerce. Soon, it will feature the work of 100 designers and 100 architects, work from the archives of design museums, and displays from companies and conservation groups. ShoP/Sharples Holden Pasquarelli [of New York] and I designed it from conception to delivery in four weeks! It’s transparent to the street with a glass front. The boxy interior space has a large screen for viewing my multimedia presentations. I’ve spliced together a collage of narratives from early Godard films. Eventually I want to feature the lives of some of the workers at my factory.

*I understand Dumb Box has another meaning.* Dumb Box (DB) also symbolizes the Dissolving of Barriers, breaking down the boundaries between disciplines, between factory and point of commerce; between formal architecture and the street; between the real and virtual—a switchboard for any activity. In the old days in SoHo you could see what lights were on and what spaces were being lived in and then you knew who was living in the neighborhood. Today, my screen functions as a similar beacon of activity, dissolving barriers between outdoor and indoor life.

**Photograph by André Souroujon**

# design smarter

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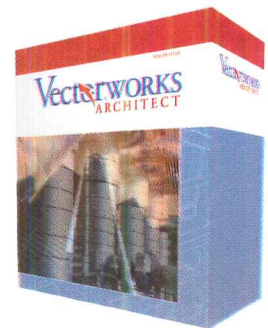
Design by Brian Ziska of M-Vision, Austin, Texas.



Design by Roberto Campese of Roberto Campese Arquitetos, São Paulo, Brazil.

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