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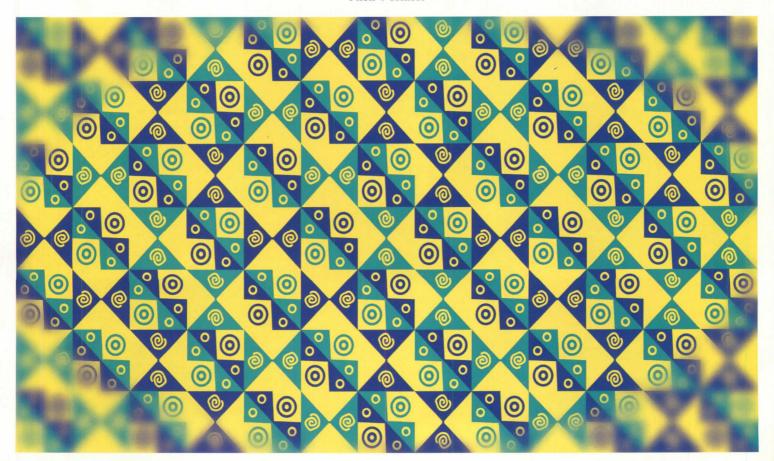


Federal Architecture: A New Era



Our Monitor

Their Monitor





page 70



page 92



page 98

Cover

Museum of Contemporary Art, Barcelona, Spain, Richard Meier & Partners (page 70). Photograph by Richard Bryant/Arcaid.

Next Month

Buildings for science and industry Concrete technology

Design

New Buildings by Richard Meier

- Over the past three decades, the signature white forms of Richard Meier & Partners have moved from cutting edge to conventional.

 By Joseph Giovannini
- 70 **Aloof Abstraction**Museum of Contemporary Art
 Barcelona, Spain
 By Peter Buchanan
- The Getty Gets Ready
 The Getty Center
 Los Angeles, California
 By Martin Filler
- Sculptural Sanctum
 Gagosian Gallery
 Beverly Hills, California
 By Joseph Giovannini
- 92 **Swiss Precision** Swissair North American Headquarters Melville, New York *By Reed Kroloff*
- 98 **Dutch Modern**City Hall and Central Library
 The Hague, The Netherlands
 By Colin Davies

Technology & Practice

129 Introduction

- 131 **Meier's White Turns Green**European standards inspire Richard
 Meier & Partners to improve the
 environmental performance of the firm's
 American projects.
 By Raul Barreneche
- 153 **Listen Up or Lose the Client**Clients are leaner and more choosy in the 1990s, forcing architects to learn more about prospective companies and to translate their design solutions into concrete results.

 By Barry LePatner
 - Modeling the Elements
 Software for computational fluid dynamics allows architects to predict heat and air flow in and around proposed buildings.
 By Ann C. Sullivan

- 15 Editorial
- 22 Letters
- 23 Events
- 27 News
- 37 On the Boards
- 49 Protest
- 55 Opinion
- 171 Products
- 188 Details



Our Monitor

Their Monitor





page 72



page 94



page 100

Cover

Neurosciences Institute, La Jolla, California, by Tod Williams Billie Tsien and Associates (page 82). Photograph by Michael Moran.

Next Month

New Urbanism The Other Las Vegas

Design

71 The Salk's New Neighbors

72 The Salk Addition

Preservationists and purists pushed Anshen + Allen's design for a new building at the Salk Institute into the shadow of Kahn's original. By Joseph Giovannini

82 Monastery of the Mind

Tod Williams and Billie Tsien nod to the nearby Salk in their design for the Neurosciences Institute, but this scientific enclave offers intimacy instead of monumentality.

By Deborah K. Dietsch

94 Pittsburgh's Progress

Bohlin Cywinski Jackson's new facility for the Carnegie Mellon Research Institute marks Pittsburgh's evolution from low-tech industry to high-tech science.

By Reed Kroloff

100 Energetic Assemblage

A German electric company gets a green makeover with a playful, energy-efficient headquarters by Frank O. Gehry & Associates. By Colin Davies

Technology & Practice

123 Introduction

125 Concrete Controversy at the Salk

Improvements in concrete formulas and formwork result in a refined finish for the Salk addition's panels—and a heated debate over patenting the process.

By Raul A. Barreneche

NIH's Newest Experiment

Adopting the federal government's new standards for design excellence, the National Institutes of Health held a competition for its new research hospital, with edifying results.

By Bradford McKee

141 Tectonic Steps

Nautical details and light-permeable construction distinguish architect Mark McInturff's designs for staircases in three residential renovations.

By Ann C. Sullivan

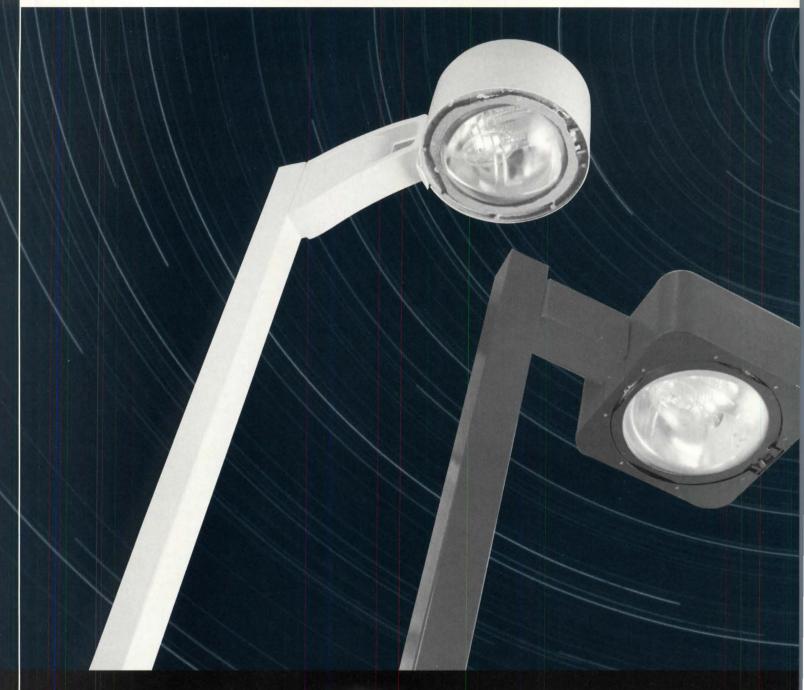
145 More Than Shelter

As a portfolio of diverse projects demonstrates, inventive planning and architecture elevate housing for single mothers, migrant workers, people with AIDS, and others in need.

By Abby Bussel

- 15 Editorial
- 26 Letters
- 29 Events
- 33 News
- 49 On the Boards
- 59 Protest
- 63 Opinion
- 157 Products
- 164 Details

IN THE HEAVENS, THE POLESTAR IS POLARIS, THE STAR THAT HA



ON EARTH, THE POLESTAR' SYSTEM OF OUTDOOR LIGHTING IS THE GUIDING

Holophane's new PoleStar system of lighting is as new as Polaris is old.

Unlike its namesake, Holophane's PoleStar draws very little attention to itself. Here's why: With the PoleStar system, architects can choose from two sizes, three luminaire shapes, three lighting patterns and three mounting styles.

This makes it easy to make outdoor lighting blend with the surroundings.

Engineers like PoleStar, too. It can't be beaten for price and performance. It offers 6:1 spacing (which neatly fits a parking lot grid). And, because PoleStar combines durable cast aluminum with automotive grade ABS,



page 78



page 90



page 98

Cover

Ocean Drive, Miami Beach, Florida (page 98), photograph by Timothy Hursley; and drawing of Clackamas Town Center, Peter Calthorpe, Architect (page 71).

Next Month

AIA Awards P/A Awards

Design

67 New Urbanism, Old Urbanism

Cities are stemming the tide of downtown decay and suburban estrangement through a variety of new and old strategies.

Is New Urbanism Good for America?

Neotraditional communities are touted by architects, developers, and even the government as sustainable solutions to urban sprawl. By Heidi Landecker

The Other Las Vegas
Casinos aren't the only game in town, as Las Vegas builds new libraries, new schools, and daring civic buildings at a ferocious pace.

By Reed Kroloff

90 Indianapolis Races Downtown

Indianapolis is on the fast track to a comeback, with an unusual new mall, a stadium, a museum, and other urban developments under way.

By Vernon Mays

98 Miami Beach Comes of Age

Once a down-at-the-heels retirement resort, Miami Beach is forging a vibrant urban identity around its historic Art Deco district.

By Raul A. Barreneche

Technology & Practice

111 Introduction

115 Concrete Block's New Face

With new colors and textures, and a more consistent structural performance, concrete masonry units offer an attractive cladding alternative.

By Ann C. Sullivan

121 Honoring Wood

The Wood Council recognizes new and renovated houses for their innovative uses of traditional framing and recycled hardwood. *By Ned Cramer*

127 Limiting Your Liability

New ways to organize your architecture firm may offer more legal protection and tax advantages than traditional general partnerships and corporations can. *By Barry B. LePatner*

131 A New Embassy in Berlin

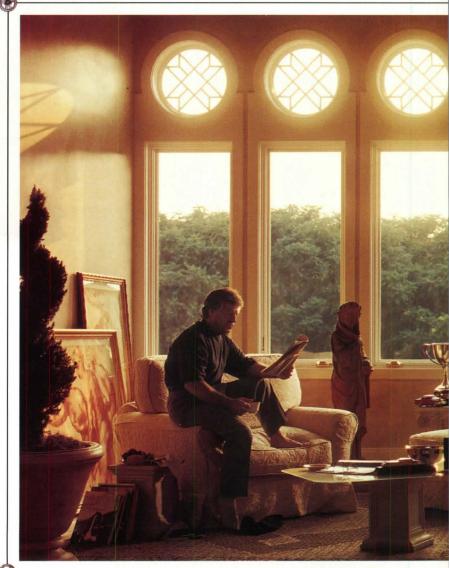
The design competition to build a new U.S. embassy in Germany required six firms to balance American imagery with local codes. *By Reed Kroloff*

39 MicroStation's Latest Release

MicroStation 95 from Bentley Systems offers customized interfaces, smarter tools, and improved Windows compatibility. By Curtis B. Charles and Karen M. Brown

- 15 Editorial
- 18 Letters
- 20 Events
- 27 News
- 43 On the Boards
- 51 Protest
- 55 Opinion
- 165 Products
- 180 Detail

MARVIN WINDOWS ARE KNOWN FOR BEING VERSATILE AND ENDURING.



He won the Daytona 500 in 1967. The Indianapolis 500 in 1969. The Formula One World Championship in 1978. In his 36-year career, Mario Andretti has raced nearly everywhere in the world that has a racetrack and won nearly every title there is to win. So when he and his wife began planning the new home they wanted to build.

Mario had some very definite ideas about how it should look. He wanted it to echo the beauty and grace of a French chateau, the sturdy timelessness of an Italian villa, the functionality of a typical American home. In short, he wanted a home that would not only reflect all that he had done, but all that he had seen.

Architects Dorian and Dora Morozov of Hand Print Design Group answered with a classic design. And for the windows and doors, they recommended the only company they were certain could translate Mario's vision without having to compromise it. Marvin Windows & Doors.

Working closely with Dorian and his staff, Marvin's architectural department went to work, generating CAD drawings and production specs for all 250 of the home's windows and doors. Changes were inevitable. But Marvin's computer capabilities meant they could respond instantly, over the phone, and fax revised drawings back for approval in a matter of minutes.

After the options of glazing styles, lite patterns, hardware and interior finishes had all been decided upon, Marvin cladding was chosen for the exterior surfaces.



page 116



page 185



page 231

Next Month

Husbands and Wives Photovoltaics Competition Firm Mergers

Design

115	Annual	Awards	Lecus

116 Progressive Architecture Awards

- 118 U.S. Courthouse
 Phoenix, Arizona
 Richard Meier & Partners
- 122 **Casa La Roca** Caracas, Venezuela Office dA
- 126 **Head Start Child-Care Facilities**Hightstown, New Jersey
 Homa Fardjadi, Sima Farjadi, Craig Scott
- 128 **Seattle Brewing Company**Woodinville, Washington
 Allied Works Architecture
- 132 Alsbrooks House/Studio Houston, Texas Michael Bell Architecture
- 134 **Manufacturing Communities** Brooklyn, New York John A. Loomis, Kiss + Cathcart
- 136 Education and Development Center Wise, Virginia Pasanella + Klein Stolzman + Berg Architects
- 140 **Zachary House** Zachary, Louisiana Studio Atkinson
- 142 **Queen of Hearts Theater** Upton, Québec, Canada Pierre Thibault, Architect
- 144 **Housing in China** Qingxi, Guangdong, China Atelier Feichang Jianzhu
- 148 **Knox Garden**Minneapolis, Minnesota
 Loom
- 150 **Summer Cabin** Adirondack Park, New York Joseph N. Biondo Architect
- 152 **DeCode/ReCode Atlanta** Atlanta, Georgia Conway + Schulte
- 154 Museum of Natural HistoryMexico City, MexicoTEN Architects

85 AIA Honor Awards

- 186 Architecture
- 202 Urban Design
- 206 Interiors

Technology & Practice

227 Introduction

231 SOM Retrenches

After restructuring its corporate culture, Skidmore, Owings & Merrill has won the AIA Architecture Firm Award a second time. By Bradford McKee

241 Rustic Refinements

A deceptively simple vacation retreat designed by Bohlin Cywinski Jackson acknowledges its Adirondack roots through a contemporary translation of the log cabin vernacular. By Reed Kroloff

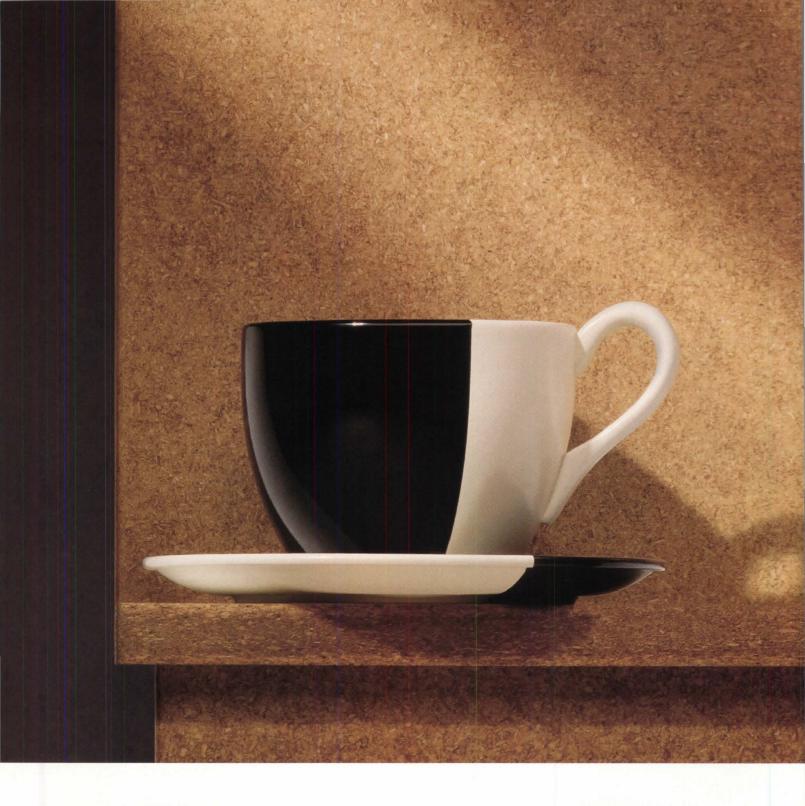
251 Improving EIFS Performance

Exterior insulation and finish systems are under fire, prompting the industry to develop better drainage provisions and installation standards. *By Ann C. Sullivan*

257 New Software Saves BTUs

Three new software applications help maximize a building's energy performance by evaluating efficiency throughout the design's evolution. *By Nancy Solomon*

- 15 Editorial
- 28 Letters
- 30 Events
- 37 News
- 65 On the Boards
- 75 Protest
- 77 Opinion
- 265 Products
- 280 Details



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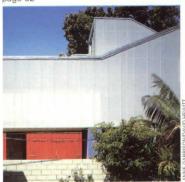


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page 92



page 110



page 116

Cover

Clockwise from top: Susan and Dale Frens, photograph by Rick Echelmeyer; Kathryn Dean and Charles Wolf; Danelle Guthrie and Tom Buresh, by Anne Garrison/David Hewitt; Marion Weiss and Michael Manfredi, by Lisa Quinones; Brigitte Shim and Howard Sutcliffe, by Larry Frank; Maryann Thompson and Charles Rose, by Lisa Quinones; Gail and David Andersen, by Don Wong.

Design

89 Husbands and Wives

Architect husband-and-wife partnerships are on the rise, as a result of women's increased enrollment in architecture schools.

By Martin Filler

92 Weiss/Manfredi Architects

New York architects Marion Weiss and Michael Manfredi focus on public works. By Donald Albrecht

00 Dean/Wolf Architects

New York-based Kathryn Dean and Charles Wolf experiment with materials in their renovations of lofts.

By Raul A. Barreneche

106 Frens and Frens Restoration Architects

Dale and Susan Frens have built their Pennsylvania preservation practice on respect for historic structures. By Raul A. Barreneche

110 Guthrie + Buresh Architects

Los Angeles architects Danelle Guthrie and Tom Buresh address tight sites and low budgets with austere, minimalist designs. *By Morris Newman*

116 Thompson and Rose Architects

Boston architects Maryann Thompson and Charles Rose are earning a reputation for arresting architecture responsive to nature. By Heidi Landecker

122 The Andersen Group Architects

Dave and Gail Andersen of Minneapolis specialize in ecotourism, conserving fragile ecosystems while boosting local economies. *By Edward Keegan*

124 Shim-Sutcliffe

Canadians Brigitte Shim and Howard Sutcliffe collaborate with local artisans in crafting their residential projects. By Adele Freedman

Technology & Practice

139 Introduction

143 Framing the Canyon

Angélil/Graham responds to mountainous Southern California terrain with a house that seems weightless, yet is firmly rooted to the site. By Barbara Lamprecht

151 Merger Mania

When two architecture firms become one, their union is often more a marriage of convenience than compatibility. By Bradford McKee

157 Standardizing CAD Files

An AIA task force of architects, engineers, and facilities managers has issued updated guidelines that simplify sharing CAD data. *By Ken Sanders*

63 Building-Integrated Photovoltaics

A competition cosponsored by AIA and ARCHITECTURE shows how architects are transforming building components into power-generating elements. By Ann C. Sullivan

- 15 Editorial
- 26 Letters
- 31 Events
- 37 News
- 63 On the Boards
- 73 Protest
- 77 Opinion
- 175 Products
- 200 Details



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page 74



page 92



page 96

Cover

San Francisco Main Public Library, by Pei Cobb Freed & Partners and Simon Martin-Vegue Winkelstein Moris. Photograph by Timothy Hursley (page 80).

Next Month

Report Card on Architecture Schools

Design

61 California Civitas

After a five-year economic downturn, the Golden State is resuming construction of provocative public architecture.

62 Back-Lot Bravado

Frank Gehry's new Team Disneyland Administration Building greets behind-thescenes workers with urbane geometries. By Joseph Giovannini

70 Mighty Shed for Ducks

Undulating curves and exposed plywood materials distinguish Frank Gehry's Disney Ice Center, a public ice rink and practice facility for Anaheim's hockey team.

By Joseph Giovannini

74 Power Complex

Function determines form in Mehrdad Yazdani's industrially inspired designs for a Los Angeles utility's truck service center. By Morris Newman

80 Civic Readings

San Francisco's multifaceted new Main Public Library, designed by Pei Cobb Freed & Partners and Simon Martin-Vegue Winkelstein Moris, completes the Beaux-Arts composition of Marshall Square. By Joseph Giovannini

92 Campus Cornerstone

Franklin D. Israel's last public building expands the University of California, Los Angeles Southern Regional Library into a landscaped campus border.

By Heidi Landecker

96 Women Take Control

Designed by architects Kate Diamond and Adriana Lovinescu with artist Sheila Klein, the Los Angeles airport's new air traffic control tower proves that female designers are indeed at ease in the cockpit.

By Heidi Landecker

Technology & Practice

105 Introduction

109 Library Intelligence

With flexible wiring, seismic safeguards, and healthy building strategies, San Francisco's New Main is a library for the 21st century. By Ann C. Sullivan

117 Live/Work Housing

New zoning has sparked a live/work boom in San Francisco, where architects are transforming industrial lofts into flexible, affordable units for artists—and themselves.

By Reed Kroloff

125 Importing Design Stars

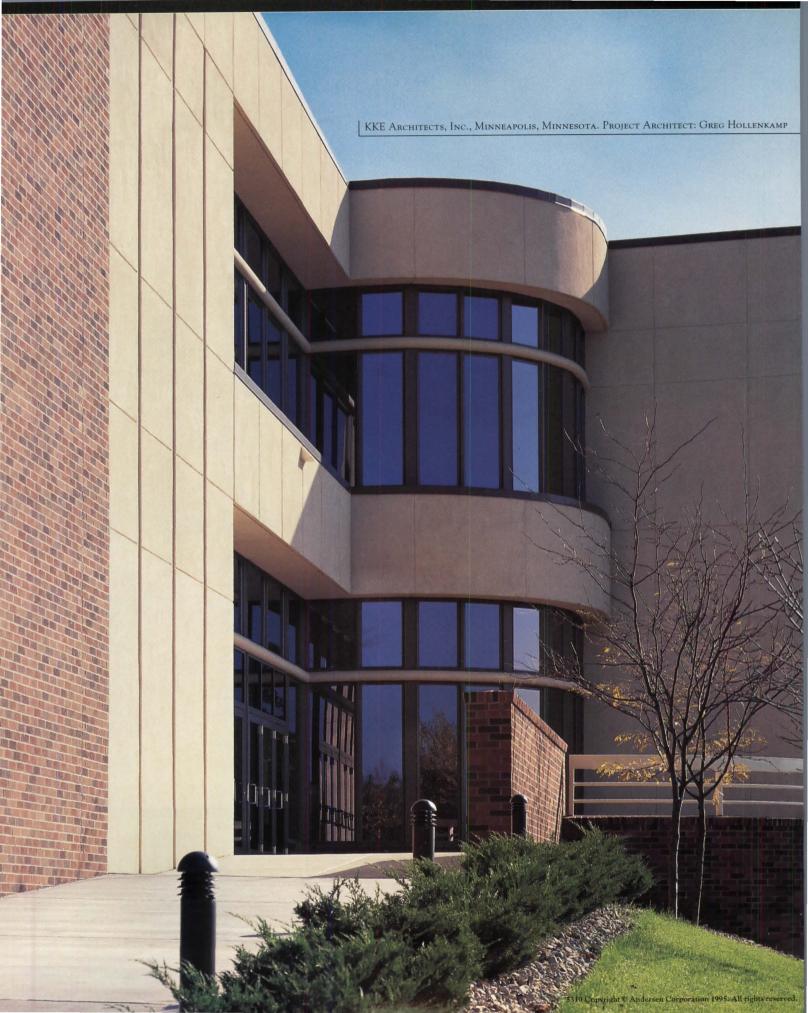
Four case studies illustrate how large firms are recruiting top design talent to revamp their images from corporate to cutting-edge. By Thomas Vonier

131 ArchiCAD Advances

Graphisoft's newest version of its software debuts this month with desktop virtual reality and more responsive drafting tools to back up its intuitive, interlinked databases.

By Ann C. Sullivan

- 15 Editorial
- 20 Letters
- 23 Events
- 29 News
- 44 On the Boards
- 51 Protest
- 53 Opinion
- 157 Products
- 164 Details





page 96



page 114



page 126

Cover

Aronoff Center for Design and Art, University of Cincinnati, by Eisenman Architects and Lorenz + Williams, Architects. Photograph by Jeff Goldberg/Esto (page 114).

Next Month

International Architecture World's Tallest Buildings

Design

87 Redesigning Architecture Schools The current model of architecture educate

The current model of architecture education may have outlived its usefulness. *By Robert Gutman*

90 Practitioners Grade the Schools

Leading architects comment on the state of architectural learning.

92 Celebrate the Gap Between Education and Practice

There are good reasons for the academy and the profession to give each other space. *By Dana Cuff*

94 How the Profession is Failing the Schools

Architects should examine their own practices before blaming the universities. By Reed Kroloff

96 Prairie Companion

Perkins & Will blends traditional materials with contemporary forms in a sweeping addition to the University of Illinois. By Edward Keegan

104 Artful Cohesion

Architecture and planning regain the symbolic center of MIT, thanks to Leers Weinzapfel's intelligent renovations. *By David Dillon*

108 Big Chill

Pragmatically aloof, Holabird & Root's new architecture school offers cold comfort to the University of Wisconsin-Milwaukee. *By Steven Litt*

114 Campus Complexity

Peter Eisenman challenges traditional form in a provocative extension to the University of Cincinnati's College of Design, Art, Architecture, and Planning. By Joseph Giovannini

126 Canadian Modern

An urbane building by Dan S. Hanganu houses the University of Quebec at Montreal's environmental design program. By Heidi Landecker

Technology & Practice

143 Academic Alternatives

145 Learning From Construction

Design/build is becoming a popular curriculum option in schools across the country, as case studies at Catholic, Yale, and the universities of Kansas and Washington demonstrate.

By Joseph Bilello

153 Software from the Schools

Architecture schools generate some of the market's most innovative software, including form•Z and DesignWorkshop.

By Nancy Solomon

159 Alternative Schools

Four institutions offer differing—and atypical—interpretations of traditional university-based architecture education:

160 Archeworks

By Edward Keegan

162 Boston Architectural Center

By Ann C. Sullivan

164 San Francisco Institute of Architecture

By Lisa Findley

166 Yestermorrow Design/Build School

By David Dillon

- 15 Editorial
- 32 Letters
- 35 Events
- 41 News
- 67 On the Boards
- 71 Protest
- 75 Opinion
- 169 Products
- 184 Details

"We're very impressed with R13's

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-Mike Mulvey, Kornberg Associates
(16-person AEC firm)

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-Jory Walker, MHTN Architects, Inc. (90-person commercial architecture firm)

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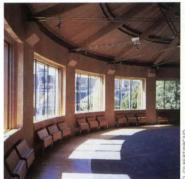
because it tells you what everything is."

-Steve Robertson, GAA Architects (7-person architectural firm)

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page 88



nage 102



page 116

Cover

Judge Institute of Management Studies, Cambridge, England, by John Outram Associates. Photograph by Peter Cook/Archipress (page 102).

Next Month

New architecture in Japan

Design

88 Europe's New Monographic Museums

Galleries devoted to the artwork of one artist—but that can accommodate temporary exhibitions—are becoming more popular in Europe.

By Victoria Newhouse

102 Cambridge Expands

Norman Foster, Michael Hopkins, John Outram, and other leading English architects reshape a venerable university by interpreting its historic legacy in varying, but companionable, ways.

By Peter Buchanan

110 Vancouver's Vital Signs

Boasting the highest quality of life in the world, Canada's third-largest city is fast becoming a magnet for Pacific Rim investors and immigrants—and a center for architectural innovation.

By Trevor Boddy

112 Transcending Style

Young Vancouver architect Acton Johnson Ostry develops site-specific, socially oriented architecture symbolically tailored to each client's identity.

By Adele Freedman

116 For the Public Good

Vancouver architect Richard Henriquez creates a sense of community in an education center for police, firefighting, prison corrections, paramedic, court, and emergency-response personnel.

By Trevor Boddy

124 High-Tech Civitas

Busby and Associates blend rational Modernism with energy-conscious High Tech in projects ranging from municipal buildings to fast-food kiosks.

By Bruce Haden

Technology & Practice

155 Introduction

159 Asia's Tallest Towers

High-rises in Malaysia and China by American architects vie for the record of world's tallest building through advances in concrete. By Ann C. Sullivan

167 Modern Living Abroad

Five new houses prove that Modernism is alive and well in Europe and Australia. By Reed Kroloff, Bradford McKee, and Heidi Landecker

177 Gehry's Guggenheim

A progress report on Frank O. Gehry & Associates' museum in Bilbao, Spain, shows how computer software is directing the construction of three-dimensional curves. By Raul A. Barreneche

183 Printers and Plotters

Firms must determine their printing needs when navigating among the wide range of monochrome or color, inkjet or laserjet, LED or thermal-transfer printers and plotters.

By Richard Christin

- 15 Editorial
- 29 Letters
- 33 Events
- 39 News
- 55 On the Boards
- 63 Protest
- 71 Opinion
- 189 Products
- 204 Details

WHEN BELL SOUTH VULCRAFT COMPOSITE



Architect: JPT Architects, Inc. Structural Engineer: Stan D. Lindsey & Associates, Ltd. General Contractor: Batson-Cook Co



page 96



page 104



page 110

Cover

Tokyo International Forum, Japan, by Rafael Viñoly Architects. Photograph by Timothy Hursley (page 110).

Next Month

Buildings for art and culture Acoustic software programs

Design

- Japan: The Bubble Era and Beyond
 The sky's-the-limit atmosphere of prosperous 1980s Japan has been brought down to earth in the leaner 1990s, as architecture by Japanese and foreign designers illustrates.

 By T.R. Reid
- Yoshio Taniguchi: Master of Minimalism
 The Toyota Municipal Museum of Art
 and the Kasai Rinkai Viewpoint Visitors
 Center demonstrate the exacting compositional strategies of a celebrated Tokyo
 architect not well known outside Japan.
 By Dana Buntrock
- Shigeru Ban: Ethical Experimenter
 Low-cost materials and a social agenda distinguish the work of a 39-year-old Japanese architect working in earthquake-torn Kobe.

 By Dana Buntrock
- 110 Tokyo International Forum: Urban Nexus

Rafael Viñoly's competition-winning scheme for a vast performance and conference center in downtown Tokyo has finally been completed, fulfilling its civic aspirations with precise construction. *By Deborah K. Dietsch*

126 Tokyo International Forum: Performance and Glass Halls

The Tokyo Forum's four auditoriums and elliptical conference center are designed with sophisticated structural systems to minimize disturbance from nearby rail and subway lines and to resist earthquakes. *By Raul A. Barreneche*

Technology & Practice

57 Japan Taps U.S. Expertise

From suburban-style housing to customdesigned trusses, Japan is benefiting from the expertise of American architects. By Reed Kroloff

159 Building the Tokyo Forum

Construction of Rafael Viñoly's 6.7-acre civic complex required remarkable coordination among architects, consultants, and 33 Japanese prime contractors working at a breakneck pace. *By Bradford A. McKee*

163 New Life for Old Wood

Salvaged timber is becoming the building material of choice for the ecoconscious 1990s, offering architects top-grade wood that's increasingly harder to find—and preserving our thinning forests.

By Reed Kroloff

171 Export Housing for Japan

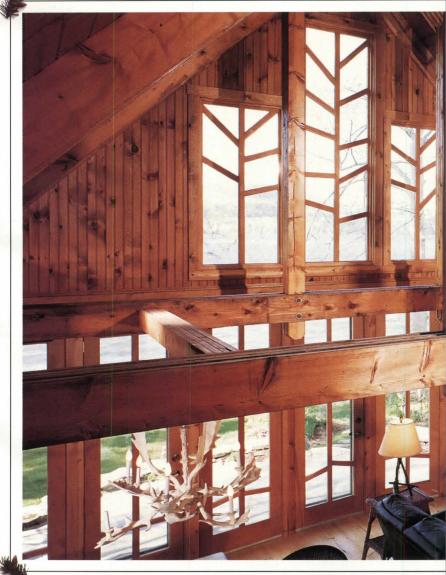
The rising cost of traditional Japanese post-andbeam construction has potential homeowners snapping up American-style houses. By Heidi Landecker

177 Photorealistic Light Simulation

Now in a Windows NT-compatible format, Lightscape lets architects transform a threedimensional model into a walk-through with picture-perfect reflections and shadows. By Ann C. Sullivan

- 15 Editorial
- 32 Letters
- 35 Events
- 41 News
- 55 On the Boards
- 67 Protest
- 71 Opinion
- 181 Products
- 196 Details

OUR WINDOWS ARE MADE FROM WOOD. AND SOMETIMES,



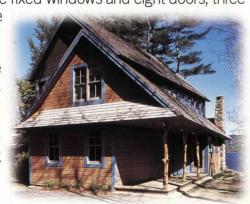
When architect Bill Becker redesigned this summer retreat in the Berkshire Mountains, the home's setting provided all the inspiration he needed. He used native wood and stone extensively. Fashioned the front porch supports from 8" logs. And for the north end of the home, which looks out over a lake to the mountains beyond, he created a wall of glass using windows and doors with custom-designed

mullions that echo the shape of the surrounding pines. Who did he contact to supply these unique products? Bill Becker's search began and ended with one phone call. To Marvin Windows & Doors.

From Bill's drawings, the company produced three large fixed windows and eight doors, three

of which open onto the deck. Marvin's ability to create these custom products inspired similar design elements in the home's interior, including a rustic stairway made from pine logs and branches. Still, as unique as they are, these aren't the only Marvin windows that figured prominently in the design.

To double the home's square footage without violating local zoning codes or overwhelming the surrounding cottages, Bill skewed the second level off the long axis of the first floor by seven degrees to create the illusion of a dormer. Marvin windows which step down in height help further the illusion. And to optimize their energy efficiency, these





page 86



page 100



page 114

Cover

W.L.S. Spencer Studio Art Building Williams College Williamstown, Massachusetts Carlos Jimenez Design Studio

Next Month

Architects' own houses Wage and hour laws

Design

5 Buildings for the Arts

Museums, theaters, and other buildings for the arts have become the cornerstones for reviving cities and campuses.

86 Kid City

A colorful museum and education center by Minneapolis architect James/Snow brings children, families, and hope to a blighted area of downtown St. Paul. By Heidi Landecker

94 Fine Arts Factory

At Williams College, Houston designer Carlos Jimenez wraps arts studios in concrete, steel, and industrial sash to create a light-filled update of the artist's loft. By David Dillon

100 Broadcast News

Richard Meier elevates television and radio to high art in a museum and archive that sets an urbane precedent in Beverly Hills. By Deborah K. Dietsch

108 Colors of Hope

Easton, Pennsylvania, is given a new lease on life through a Schwartz/Silver-designed cultural complex that resuscitates this economically depressed city.

By Reed Kroloff

114 Dark Remembrance

Ralph Appelbaum introduces Houston to the Holocaust in a somber yet sculptural museum and study center, which transforms a Modernist medical office building. By Reed Kroloff

120 Street Performance

Cesar Pelli has designed a three-theater performing arts center in brick, steel, and glass to respect the streetscape of downtown Cincinnati.

By Edward Keegan

Technology & Practice

153 Fine-Tuning Galleries, Museums, and Theaters

Designing buildings for the arts requires material subtlety, sensitivity to context, and technical prowess to ensure that architecture and art comfortably coexist.

157 Building a Specialty in Art

After the 1980s boom and early 1990s bust, the art world is rebounding—with a vital market for architectural services, as demonstrated by Los Angeles and New York firms. By Raul A. Barreneche

169 Revising Belluschi

Ann Beha and Associates brings Pietro Belluschi's Portland Art Museum and Clark Art Institute into the 21st century with respectful renovations and additions. *By Bradford A. McKee*

175 Digitizing Acoustic Design

New software allows architects to test how auditoriums and concert halls will look and sound—before they are built.

By Ann C. Sullivan

- 15 Editorial
- 28 Letters
- 31 Events
- 35 News
- 53 On the Boards
- 65 Protest
- 71 Opinion
- 185 Products
- 192 Details

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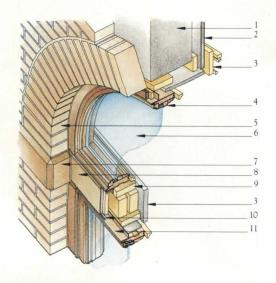


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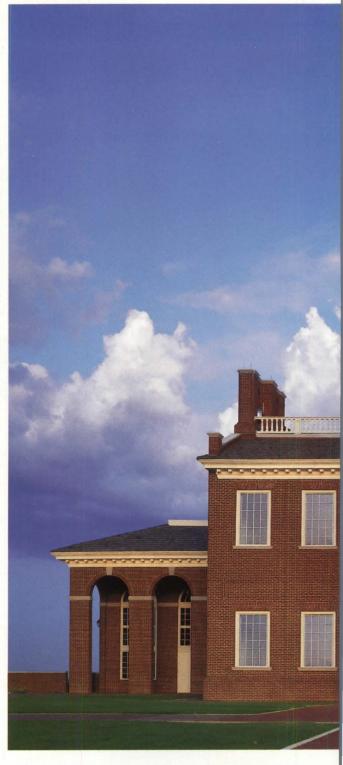
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page 64



page 74



page 92

Cover

Norten House, Mexico City, Mexico, by TEN Architects. Photograph by Timothy Hursley (page 64).

Next Month

Progressive ARCHITECTURE Awards AIA Research/ARCHITECTURE Awards for Architectural Research

Design

61 Architects' Own Houses

Part marketing tool and part esthetic laboratory, houses created by architects for themselves continue to play an important role in launching careers and pushing the boundaries of design.

By Joseph Giovannini

64 Mexican Retreat

Enrique Norten makes an urban commitment to a dense neighborhood of Mexico City in a concrete and glass townhouse sequestered from the street.

By Joseph Giovannini

70 Rational Experiment

German architect O.M. Ungers rationally orders his new villa outside Cologne into an austere, minimalist domain.

By Raymund Ryan

74 New Dominion

Peter Waldman's new house near Charlottesville, Virginia, is an airy concrete and glass box that forges strong ties to its site.

By M. Lindsay Bierman

82 Building on Wright

Frank Lloyd Wright scholar Anthony Alofsin designed his house in Austin, Texas, according to Wrightian spatial principles, with nods to Italian and Asian precedents. By Reed Kroloff

86 Subtle Distinctions

In their minimalist New York City duplex, Calvin Tsao and Zack McKown explore subtleties of surface, texture, and light. By Reed Kroloff

92 Hillside Hideaway

Architects Finn Kappe and Maureen Tamuri experiment with aggressive forms and tough industrial materials, while respecting a canyon's unstable landscape. *By Morris Newman*

Technology & Practice

105 Inventive Collaborations

The distinction between art and technology is blurred in real and virtual environments.

107 Building in Glass

Glass designer James Carpenter continues his exploration of transparency and light, collaborating with architects and engineers to elevate building components into works of art. By Raul A. Barreneche

117 Overtime Blues

To avoid costly legal problems, principals of firms should understand the legal nuances of how to compensate salaried and hourly employees for overtime.

By Bradford McKee

121 Multimedia Markets

Architects are expanding their practices by offering computer modeling and animation to entertainment and retail clients.

By Ann C. Sullivan

- 15 Editorial
- 24 Letters
- 27 Events
- 31 News
- 43 On the Boards
- 49 Protest
- 51 Opinion
- 129 Products
- 144 Details



Reinventing **Federal Design**

Design and construction of government buildings should be coordinated by a single entity.

or nearly 50 years, the federal government has treated public architecture as an off-the-shelf product. Since 1949, the design and construction of courthouses and other important civic buildings have been supervised by the General Services Administration (GSA), the same federal agency that purchases the government's pencils and paper. The result, until recently, has been federal architecture of little distinction.

In this issue, however, we bring better news from Washington. The GSA, under the leadership of Chief Architect Edward Feiner of the Public Buildings Service, has initiated a program to elevate the design of federal courthouses and campuses. This Design Excellence Program has shown promising early results. By commissioning talented architects, the GSA has dramatically improved the esthetics and efficiency of federal facilities. Indeed, Feiner has even begun advising other federal agencies as to the merits of his strategy: Last fall, the National Institutes of Health adopted the Design Excellence model in selecting an architect for its \$360 million clinical research building expansion.

Progressive as the GSA's new methods may be, however, the agency is still bound by bureaucratic procurement rules and the whims of Congress, which may fund a building's design, but not its construction.

Moreover, Congress can hold projects hostage for political ends, regardless of time and money spent on feasibility studies and design services. Last April, for example, Senator Richard Shelby (R-Alabama) proposed to strip the GSA of its entire \$1.8 billion federal building budget for 1995, which would have eliminated dozens of courthouses already designed. Clearly, the current funding process is not the most efficient way to produce public architecture.

Why not place the responsibility of awarding building contracts into a new public corporation for government construction? This new entity could govern all federal design. Currently, federal design policy is set not

only by the GSA, but by the National Endowment for the Arts, as well as the Department of Defense, the National Aeronautics and Space Administration, the National Park Service, and other agencies that commission their own buildings.

The new federal construction corporation would unite efforts by these separate groups. It could be patterned after quasi-government entities such as the Pennsylvania Avenue Development Corporation, which was established under a special independent charter. Most federal agencies already pay the GSA out of their individual budgets from Congress to develop and maintain their buildings. That rent money would simply shift to the new corporation, which could act as fiduciary and invest its capital budget for the long term. The corporation would not compete with private-sector developers, but could certainly emulate their efficiency.

Such a reorganization would lend more professionalism and financial continuity to federal building projects. The benefit of such centralized architectural oversight has been proved already: Until 1939, the Supervising Architect's Office in Washington oversaw construction by various federal agencies, producing such buildings as Cass Gilbert's U.S. Courthouse in Manhattan, before it was shuffled into the Federal Works Agency and then reshuffled to the GSA in 1949.

To its credit, the GSA has made enormous strides in improving the design of its buildings. But it is hamstrung by politics and a shortsighted federal bureaucracy. Responsibility for public architecture should be consolidated into a single authority to harness design as a national resource. Only then will its true potential be realized.

Deboran K. Dietu

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Letters

Tradition is innovation

What is disturbing about your editorial, "New Face of Public Housing" (October 1995, page 15), is the evaluation of HUD's new projects entirely on formal grounds.

In designing one of these projects in Baltimore, I worked with residents who felt compromised not only by abysmal conditions, but also by living in places that looked different from the rest of the city. You may denigrate the conventional accourtements of the traditional house, but to the client these represented a profound ideal.

Many creative architects reject the *a priori* association between "innovation" and "quality," and find that traditional architectural and urban types embody meaningful design ideas. The perpetuation of the architect as renegade *artiste* has so disengaged architects from the rest of society that we are rendering ourselves irrelevant.

Cheryl A. O'Neill

Cheryl A. O'Neill CHK Architects and Planners Silver Spring, Maryland

Community cut-off

Your profile of the Spokane Public Library (October 1995, pages 116-117) contains the misleading statement that the architect "made sure the library's patrons were not cut off from the local community." But the most common complaint from city residents is that the new library is indeed cut off, since all functions have been moved to the second and third floors. Passersby are greeted by the sight of a vacant hallway, in contrast to the old library, where you could walk by and see books and people. The sidewalk is now dead.

Your article focuses on the new computer system, which replaces a network that allowed county and city libraries and local colleges to cooperatively provide services to the region, free of charge. [Those who live outside Spokane must now pay for library privileges.] The irony is that in connecting to the global network, the library cut itself off from its neighbors.

Sue Lani W. Madsen, AIA Reardan, Washington

Botta's signature

Your news article on the new cathedral in Evry, France (September 1995, pages 32-33) notes that "Swiss architect Mario Botta's devil-maycare attitude about context is clearly evident in his latest cylinder, which evokes his buildings elsewhere." I was glad to see that stated, but there is a larger issue here—one which ARCHITECTURE doesn't deal with often enough, either directly in print or indirectly in the kinds of projects featured.

The issue is, what happens to the world of real people engaged in everyday activities, when every city has its "signature"? Why would anyone ever leave home? And what happens when a bank looks the same as a museum as a country house as a cathedral? Surely, an important diversity of experience is lost. Cynthia Neuhaus Wardell San Francisco, California

Letters to the editor may now be sent to ARCHITECTURE's electronic address: ARCHTCTR@AOL.COM



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Events

Exhibitions

FORT WORTH. "The Ties That Bind: Views of Community on the American Frontier, 1850-1900," through February 11 at the Amon Carter Museum.

Contact: (817) 738-1933.

NEW YORK. "A.W.N. Pugin: Master of Gothic Revival," through February 25 at the Bard Graduate Center. Contact: (212) 501-3000.

PROVIDENCE. "Film Architecture: Set Designs from *Metropolis* to *Blade Runner*," through January 21 at Brown University's Bell Gallery. Contact: (401) 863-2932.

Conferences

ALBUQUERQUE. "Special Jail and Prison Populations: The Sick, the Elderly, the Women," February 9-March 1, sponsored by AIA Architecture for Justice.
Contact: (202) 626-7482.

ASHEVILLE. "Solar '96," April 13-18, sponsored by the American Solar Energy Society.

Contact: (303) 443-3130.

NEW ORLEANS. National Concrete Masonry Association convention, January 27-29. Contact: (703) 713-1910.

SAN ANTONIO. Healthcare facility design, March 20-22, sponsored by AIA and the American Society for Healthcare Engineering.
Contact: (312) 422-3800.

SAN DIEGO. National Roofing Contractors Association convention and exhibition, February 25-28. Contact: (708) 299-9070.

washington, D.C. "Accent on Architecture," January 30, sponsored by AIA. Contact: (202) 626-7514.

"Reengineering America's Architecture," February 9-11, sponsored by AIA Historic Resources PIA. Contact: (202) 626-7482.

Competitions

Midwest Villa exhibition, competition, and awards program, sponsored by the Chicago Athenaeum. Submissions due January 15. Contact: (312) 251-0175.

Vincent Scully, Jr. Research Grant for a monograph, sponsored by Architectural History Foundation. Applications due February 1. Contact: (516) 944-5961 by fax.

Young Architects Competition, sponsored by the Architectural League. Entries due February 12. Contact: (212) 753-1722.

Benedictus Awards for outstanding architectural projects with laminated glass. Entries due March 1. Contact: (202) 785-2324.

House Beautiful magazine's Centennial Award for outstanding residential architecture in the U.S. Entries due April 30.
Contact: (212) 903-5084.

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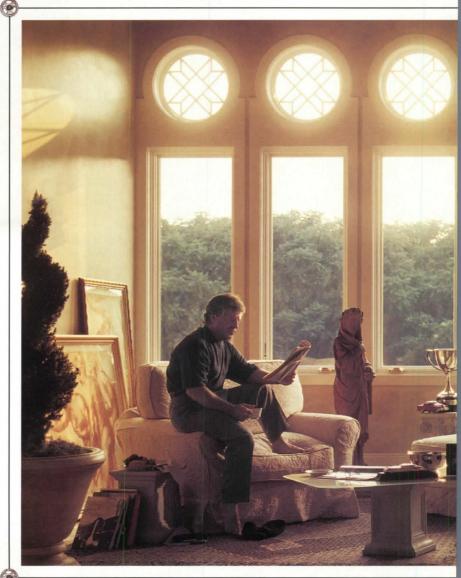
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He won the Daytona 500 in 1967. The Indianapolis 500 in 1969. The Formula One World Championship in 1978. In his 36-year career, Mario Andretti has raced nearly everywhere in the world that has a racetrack and won nearly every title there is to win. So when he and his wife began planning the new home they wanted to build,

Mario had some very definite ideas about how it should look. He wanted it to echo the beauty and grace of a French chateau, the sturdy timelessness of an Italian villa, the functionality of a typical American home. In short, he wanted a home that would not only reflect all that he had done, but all that he had seen.

Architects Dorian and Dora Morozov of Hand Print Design Group answered with a classic design. And for the windows and doors, they recommended the only company they were certain could translate Mario's vision without having to compromise it. Marvin Windows & Doors.

Working closely with Dorian and his staff, Marvin's architectural department went to work, generating CAD drawings and production specs for all 250 of the home's windows and doors. Changes were inevitable. But Marvin's computer capabilities meant they could respond instantly, over the phone, and fax revised drawings back for approval in a matter of minutes.

After the options of glazing styles, lite patterns, hardware and interior finishes had all been decided upon, Marvin cladding was chosen for the exterior surfaces.

- Aga Khan Awards
- Presidential Design Awards
- 34 New Commissions
- 39 On the Boards
- 47 Protest
- 9 Opinion



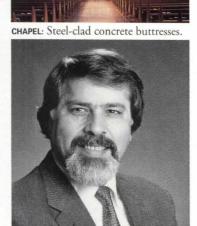
AIR FORCE ACADEMY CADET CHAPEL: SOM wins 25-Year Award for 1962 design.



WOODLOCK: Thomas Jefferson Award.



WILSON: Whitney M. Young Citation.



DAMIANOS: Edward C. Kemper Award.

SOM Sweeps AIA Awards

Skidmore, Owings & Merrill (SOM) has garnered the lion's share of this year's AIA awards. The 60-year-old firm won the Architecture Firm Award, which it also won in 1962; the 25-Year Award for the U.S. Air Force Academy Cadet Chapel in Colorado; and an Honor Award for restoring the 1904 Murray Theater in Highland Park, Illinois.

However, the AIA could not decide among the three finalists for the gold medal: Arata Isozaki, Hugh Newell Jacobsen, and Frank O. Gehry. For the 35th time since the award was first issued in 1907, the board failed to reach the three-fourths majority necessary to select a gold medalist.

This year's Whitney M. Young, Jr. Citation for social responsibility was awarded to John L. Wilson, principal of Payette Associates in Boston and founder of the Boston Society of Architects Task Force to End Homelessness. The Edward C. Kemper Award for service to the AIA and the profession went to Sylvester Damianos, 1990 AIA President, current vice chairman of the American Architectural Foundation Board of Regents, and principal of Damianos + Anthony in Pittsburgh.

Thomas R. Aidala, principal architect of the San Jose Redevelopment Agency, and Judge Douglas P. Woodlock of the U.S. District Court of Massachusetts, won the Thomas Jefferson Award as champions of public architecture.

This year's AIA Honor Awards recognized 14 architecture projects, seven urban design schemes, and six interiors. The Jefferson and 25-Year awards will be presented on January 30 at Accent on Architecture in Washington. The Firm, Young, Kemper, and Honor awards will be presented in May at the AIA convention in Minneapolis.—Ned Cramer











Muslim Architecture Honored by Aga Khan

Architecture has become a venerable royal pastime, not only for Britain's Prince of Wales, but also for the Aga Khan, hereditary leader of the Ismaili Muslim sect. The Aga Khan has honored projects in the Muslim world for the past 18 years through a triennial award program. The 12 winners of this year's Aga Khan Award for Architecture were selected by a jury that included international architects Peter Eisenman, Charles Jencks, and Alvaro Siza.

The projects singled out by the jury for recognition were the Riyadh, Saudi Arabia, city center and Great Mosque by architect Rasem Badran; the incorporation of traditional West African ornament in the Alliance Franco-Sénégalaise cuitural center in Kaolack, Senegal, by Patrick Dujarric; architects Behruz

and Can Çinici's delicately scaled, concrete Mosque of the Grand National Assembly in Ankara, Turkey; and Paul Andreu's Soekarno-Hatta Airport in Jakarta, Indonesia. Architect Ken Yeang's high-rise head-quarters for IBM in Kuala Lumpur, Malaysia; the Kaedi Regional Hospital in Mauritania by Fabrizio Carola; and the reforestation program orchestrated by the Middle East Technical University in Ankara, Turkey, were also recognized.

Other projects were lauded for their promotion of responsible planning. The restoration of historic districts of Bukhara, in the former Soviet Republic of Uzbekistan; Old Sana'a in Sana'a, Yemen; and the Hafsia Quarter in Tunis, Tunisia, as well as two new mixed-use, low-income neighborhoods in Hyderabad, Pakistan, and Indore, India, were all honored for their valuable contributions to urbanism.—*N.C.*

TOP LEFT: Architect Fabrizio Carola's Kaedi Regional Hospital for the Mauritanian Ministry of Health employs indigenous structural brickwork. CENTER LEFT: Historic district of more than 500 buildings, including mosques and markets, is being successfully stabilized and restored in Bukhara, Uzbekistan. ABOVE LEFT: Indore, India's Aranya Community Housing, by architect Balkrishna Doshi, gives low-income residents an infrastructure of utilities, roads, and public spaces. TOP: IBM tower in Kuala Lumpur by architect Ken Yeang establishes precedent for climatically responsive skyscrapers in tropical environments. ABOVE: Patrick Dujarric's design of the Alliance Franco-Sénégalaise cultural center in Kaolack, Senegal, builds

upon traditional West African orna-

ment, materials, and forms.

















Presidential Design Awards Announced— **And Endangered**

At a White House ceremony next month, President Bill Clinton will honor the winners of the 1995 Presidential Design Awards, a program sponsored by the National Endowment for the Arts (NEA) to recognize exemplary federal design. Unfortunately, this round of recipients of the quadrennial awards program, founded in 1983, may also be the last.

The futures of the Presidential Design Awards, and its highly successful parent project, the Federal Design Improvement Program, seem tenuous. Congress's current threat to reduce the NEA's budget by 40 percent has motivated the agency to lay off one-half of its staff and implement radical programmatic changes. This action leaves

virtually one upper-level administrator for each management-level civil servant, a top-heavy reorganization exposing what detractors have been criticizing for years as the agency's real weakness-misguided leadership. Perhaps the General Services Administration's growing commitment to design will take up where the NEA seems to be leaving off.

The Presidential Design Awards program recognizes achievement in architecture, interior design, landscape architecture, graphic design, planning, product design, and engineering. This year's architecture winners are the Focus: HOPE Center for Advanced Technologies training facility in Detroit, by Smith, Hinchman & Grylls Associates for the Department of Commerce; the renovation and restoration of the 1916 Beaux-Arts Byron White U.S. Courthouse in Denver, by Michael Barber Architecture for the GSA:

and the U.S. Holocaust Memorial Museum in Washington, D.C., by Pei Cobb Freed & Partners, including its exhibit design by Ralph Applebaum Associates.

Recognized as representing outstanding achievements in engineering are the Double Arch Bridge of the Natchez Trace Parkway in Franklin, Tennessee, by the Figg Engineering Group; and the Interstate 90 Completion Project in Seattle, Washington, by the Department of Transportation. A river relocation project in Providence, Rhode Island, by William D. Warner and the Maguire Group, was also honored for its engineering.

Overall performance awards went to the Smithsonian's Cooper-Hewitt National Design Museum for its advocacy and use of design, and to Greenfield/Belser for the Food and Drug Administration's clearly delineated food labels.—N.C.

TOP LEFT: Architect James Ingo Freed and exhibit designer Ralph Applebaum were honored for U.S. Holocaust Memorial Museum.

CENTER LEFT: Michael Barber Architecture restored Denver courthouse to original Beaux-Arts splendor.

ABOVE LEFT: Smith Hinchman & Grylls transformed abandoned factory into community learning center.

TOP CENTER: Interstate 90 project minimizes impact of highway construction with sunken freeway.

CENTER: William D. Warner and the Maguire Group reconfigured three rivers in Providence.

TOP RIGHT: Cooper-Hewitt was acknowledged for design advocacy.

CENTER RIGHT: Food label by Greenfield/ Belser educates consumers, using simple, informative graphics.

ABOVE: Figg Engineering Group's Double Arch Bridge has minimal environmental impact.

News

White House Christmas

The White House Christmas tree was hung last month with 608 ornaments solicited from AIA members and architecture students. Based on the poem "Twas the Night Before Christmas," the ornaments included a miniature cube of Victorian windows, containing a lighted globe (below), designed by Philadelphia architect Richard Meyer.



Federal news

Robert A. Peck has been appointed Commissioner of the Public Buildings Service for the General Services Administration. Former AIA group vice president, government affairs, Peck last served as deputy director for legislative affairs at the Federal Communications Commission. George White, recently retired Architect of the Capitol, has joined the Washington, D.C., office of architecture and engineering firm Leo A Daly to advise on government work. Former Kohn Pederson Fox senior associate partner Richard Clarke has also joined Daly's D.C. office as vice president for design and planning.

New commissions

The recent building boom in Asia has left many architects unable to compete against high-profile corporate firms. However, the 48-person, Long-Island-based **Spector Group** has managed to walk away with a commission to design a 1,800-acre new city in China. The industrial center, whose contract of \$4.5 bil-

lion is the biggest awarded in the world to date, will be the third largest city in China when completed. Meanwhile, Cesar Pelli has been awarded two new projects in Osaka, Japan. The three-story, 150,000-square-foot National Museum of Contemporary Art will be located underground on an island in the city's art district. The second commission, for a complex of buildings to include the Osaka City Museum and Archaeological Center, a concert hall, and the Nippon Broadcasting Station Headquarters, will total 936,500 square feet.

Boston architects William Rawn and Ann Beha have won the commission to restore the Cambridge, Massachusetts, Public Library and design a 60,000-square-foot addition. Allan Greenberg is designing an English Baroque classroom building for the University of Delaware. The 65,000-square-foot building, which breaks ground in July, will occupy the last open space on the university green. Arquitectonica is designing CNN's headquar-

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Candidates should possess a record of distinguished professional and scholarly achievement; the intellectual leadership and vision to guide the school in maintaining and strengthening its reputation for excellence in professional education and research; and demonstrated potential for academic administration and management. The dean is the chief administrative officer for the school, its principal participant in University governance, and the lead representative of the school outside the University.

Letters of inquiry, application, and nomination should be accompanied by curriculum vitae. Correspondence may be sent to the following address no later than March 1, 1996:



Professor Richard Beeman, Chair Graduate School of Fine Arts Dean Search Committee c/o Office of the Secretary University of Pennsylvania 121 College Hall Philadelphia, PA 19104-6382

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ters in Atlanta and a stadium for the Atlanta Hawks. Kohn Pedersen Fox is designing a 712,000-square-foot liberal arts and business school building for Brauch College at the City University of New York, and a new building on the IBM world headquarters campus in Armonk, New York. Hardy Holzman Pfeiffer has won two commissions to design cultural centers: The \$5 million San Angelo Museum of Fine Arts in Texas will comprise 22,000 square feet of galleries, offices, and educational facilities. The firm is also designing the \$25.6 million Columbus, Georgia, Performing Arts Center with local firm Hecht, Burdeshaw, Johnson, Kidd, and Clark.

Firm changes

Hot-shot sports architects Michael Hallmark, Ronald Turner, and Dan Meis, whose employer NBBJ recently won a competition to design the Brewers stadium in Milwaukee, have triggered two lawsuits by former employers. The trio is currently being sued by Ellerbe

Becket for leaving its Kansas City office in 1995 after an abortive attempt to buy out the sports division. In 1988, Hallmark and Turner were sued by another former employer, HNTB of Kansas City, after they left that firm for Ellerbe Becket. Both firms claimed that the pair violated agreements by luring away clients and colleagues. The HNTB suit was settled out of court.

Washington, D.C.-based Florance Eichbaum Esocoff King, designer of the new MCI Center arena in Washington with Ellerbe Becket, has changed its name back to Keyes Condon Florance Architects, the firm's moniker from 1975 to 1992. Former partner Philip Esocoff has left the firm and set up his own office: Thomas Eichbaum and David King remain with the firm.

Chicago-based Perkins & Will announced a merger last month with the Atlanta healthcare architect Nix Mann; the two will operate out of Atlanta under the name Nix Mann/Perkins & Will as the nation's fourth-largest healthcare firm.



Hadid's British debut

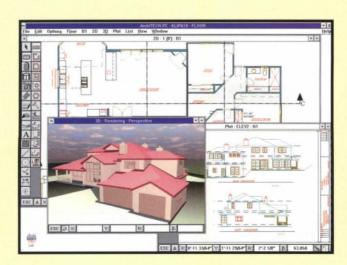
Iraqui-born architect Zaha Hadid has finally been awarded a commission in her adopted homeland. London-based Blueprint, a design magazine, retained Hadid to design its pavilion (above) for a building industry trade show held in Birmingham, England, last month. The 46-by-23-foot, steel-framed structure stood for only six days, from November 19-24, 1995, in an exhibition hall. With the pavilion in storage at present, Blueprint is looking for buyers or backers to resurrect it in another location.

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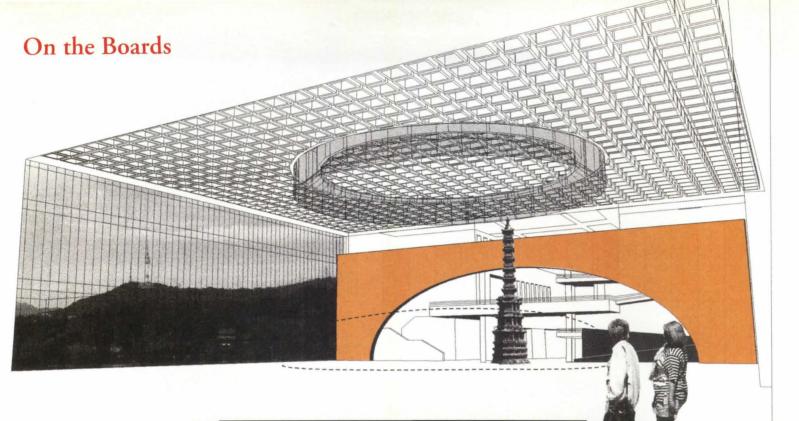
house beautiful Architecture Award

In celebration of its 100th anniversary in 1996, House Beautiful magazine announces a **Centennial Award** to recognize outstanding residential architecture in the United States. The winning entry will be selected by a jury on the basis of design excellence, creativity, appropriateness, and quality. The winning design will be featured in the centennial issue of House Beautiful. An award of \$20,000 will be presented to the architect of

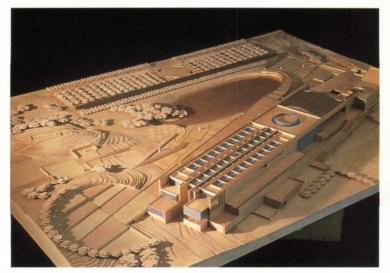
the project.

JUDGING The jury will meet in May 1996 and a formal public announcement of the winner will be made prior to the publication of the award-winning project in House Beautiful. The cash award will be part of a presentation ceremony in the fall of 1996. JURY Walter Chatham President of the Architectural League of New York, Principal, Walter Chatham & Associates Deborah Dietsch Editor in Chief, Architecture magazine Frances Halsband Partner, R.M. Kliment & Frances Halsband Architects Donlyn Lyndon Architect, Writer, and Professor, University of California, Berkeley Terence Riley Chief Curator, Architecture and Design, Museum of Modern Art Louis Oliver Gropp Editor in Chief, House Beautiful DEADLINE AND RULES Entries must be postmarked by April 30, 1996. If delivered, entries must arrive at House Beautiful at the street address below no later than 5 p.m. that day. Address entries to: Centennial Award, House Beautiful, 1700 Broadway, 29th floor, New York, N.Y. 10019. House Beautiful is not responsible for late, lost, or misdirected mail. Entry fee is subject to state regulations and prohibitions. All taxes related to cash awards are the responsibility of the winner. **ELIGIBILITY REQUIREMENTS** •Unpublished residential projects completed in the United States during the two years prior to the entry deadline are eligible. • Projects may include renovations, reused spaces, apartments and houses, as long as major living spaces are involved. •All work must be completed and occupied by the residents by the date of submission. •The designer's and the client's written approval and permission to photograph the residence must accompany each submission. The designer and the client may be the same person. • The design work must have been performed by professionals with active practices. The practices need not be located in the United States. •Any entrant who has a current professional connection to one of the jurors is ineligible. • The jury's decision is contingent upon eligibility being established. House Beautiful reserves the sole right to determine a project's eligibility.

For entry forms, call House Beautiful Awards Editor: 212-903-5239







National Museum of Korea Seoul, Korea Junglim Architecture

The Korean firm Junglim has won an international competition to design the National Museum of Korea over French architect Christian de Portzamparc and other finalists. The jury, which included Italian architect Gae Aulenti and French architect Henri Ciriani, selected the finalists and winner from over 341 submissions from 46 countries.

The 1.2 million-square-foot museum, dedicated to the culture and history of Korea, will be located beside a man-made lake along the southern edge of a park in Seoul. Its linear, rectangular form is separated into permanent and temporary exhibition wings by a roofed entrance court. A double-height central corridor, leading to galleries on either side, runs the length of the permanent exhibition wing.

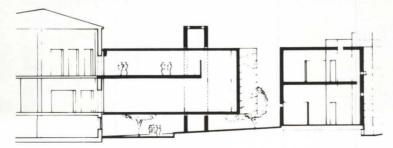
Clad in granite, the facade will incorporate details drawn from historic Korean castle construction. The extensive landscaping, encapsulating the different topographies of Korea in miniature, allows for exhibitions to be held around the exterior of the museum. Construction will commence later this year.—N.C.

On the Boards

Two cultural buildings designed by Daniel Libeskind address German history.







Felix Nussbaum Museum Osnabrück, Germany Daniel Libeskind, Architect

Complementing his design of Berlin's Jewish Museum, scheduled for completion in late 1996, Daniel Libeskind is developing a new museum in Osnabrück to house the surviving collection of Felix Nussbaum, a Jewish painter murdered by the Nazis in the Holocaust. After banishment from Osnabrück, his north German hometown, Nussbaum chronicled his trans-European flight from the Nazis by continuing to paint until his capture in Brussels and subsequent deportation to Auschwitz in the last months of the war.

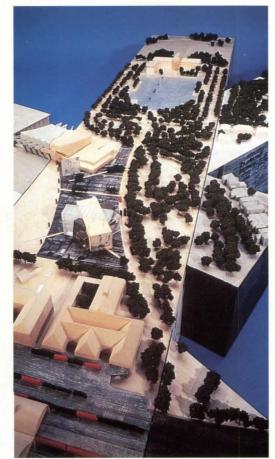
Libeskind's new 2,800-square-meter museum shares its site with the city's history museum and its folk art center, which once served as the local Nazi Party headquarters. Sheathed in zinc-covered metal, exposed concrete, and wood, the museum will house galleries, archives, offices, a café, and a bookstore. Libeskind won the commission in a city-sponsored competition in May 1995. The building is scheduled to open in March 1998.—*R.K.*

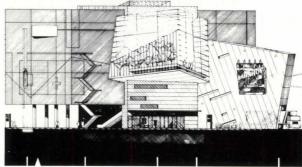


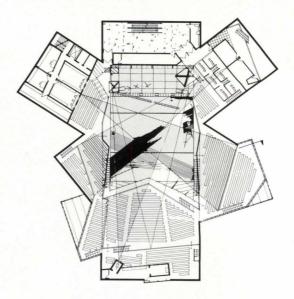
Concert Hall Bremen, Germany **Daniel Libeskind, Architect**

Winner of a design competition held last September, Daniel Libeskind is developing a new 10,000square-meter concert hall for Bremen. Scheduled to begin construction in late 1996 (funding is still in progress), the hall's flexible auditorium with projecting wings can be configured to seat 2,500 to 3,200 people, depending upon the type of performance.

The new concert hall is located between the train station and city hall. It will be clad in metal, stone, and translucent glass, blocking views to the inside. Images of the cultural history of Bremen, one of Germany's three original city-states, will be projected onto the building's dynamic collage of materials. The complex will also encompass stores, a café, workshops, and administrative offices. Libeskind attempts to unify his concert hall with its surroundings by enhancing pedestrian connections with new landscaping and pathways, and extending a nearby park through the concert hall lobby.—R.K.







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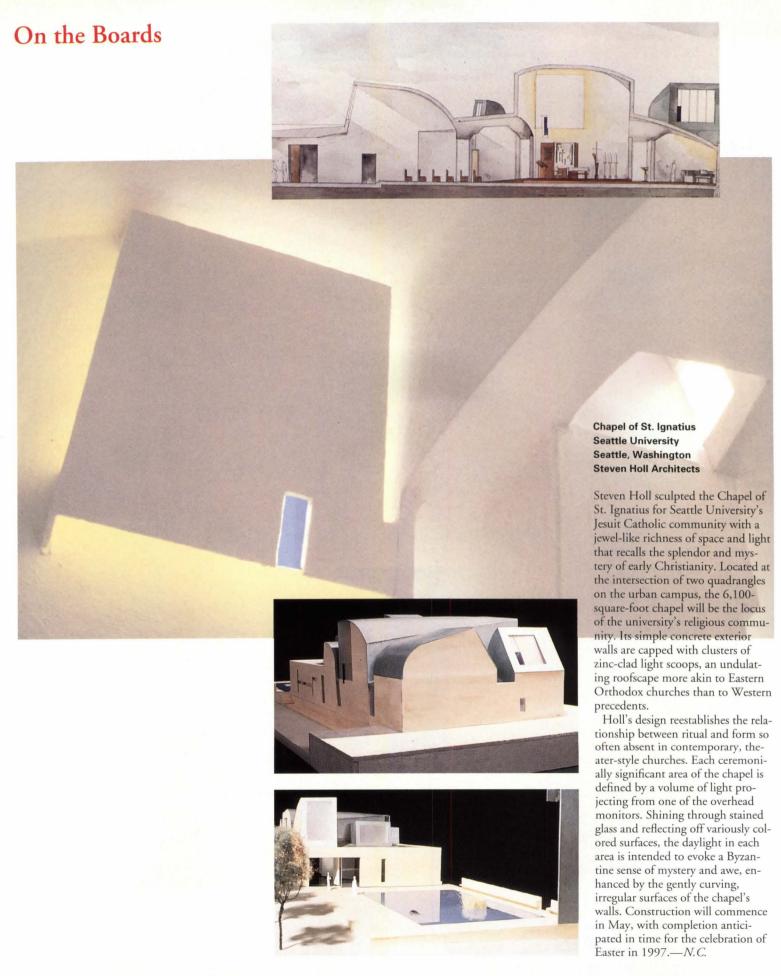
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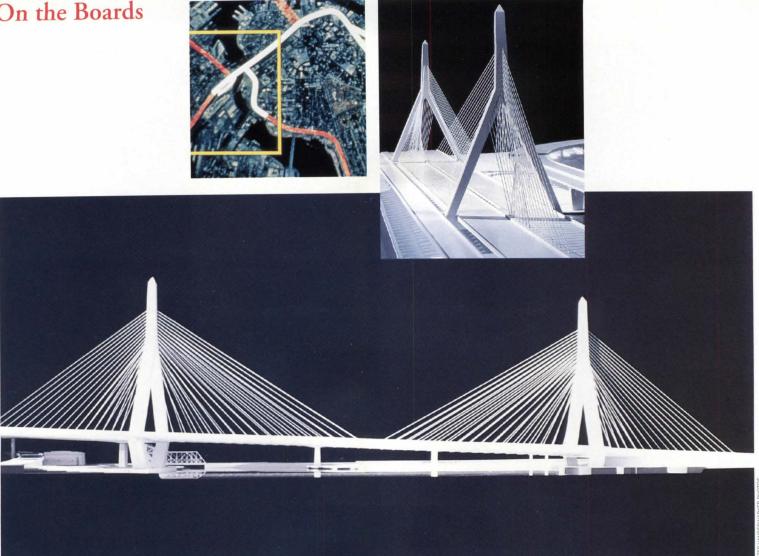


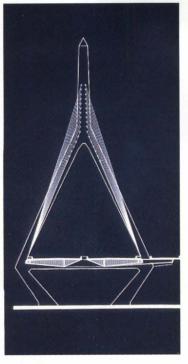
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On the Boards





Charles River Crossing Boston, Massachusetts Christian Menn, Engineer

North America's first asymmetrical cable-stayed bridge will span the Charles River between Boston and Charlestown. Replacing an existing double-decker trussed bridge, the new 1,460-foot single-level structure will carry 10 lanes of traffic, including two cantilevered on-ramps on its east face.

The steel cables on the bridge's center span extend from two concrete towers to the outside edges of the eight-lane deck. On the north and south ends, the cables are fastened to the middle of the deck, rather than to the outside. This unusual configuration enables construction of the new structure to proceed without removing the existing bridge, which obstructs peripheral cable connections on the south end, until the final leg.

Unlike typical cable-stayed bridges, the combined length of the two landside spans is not as long as the center span. To offset the weight difference, the center's beams and girders will be steel; those beneath north and south spans will be fabricated of heavier concrete.

Conceived by Swiss engineer Christian Menn, the \$50 million bridge is part of the Central Artery/Tunnel Project, which will bury the unsightly elevated stretch of Interstate 93. Last month's opening of the Ted Williams Tunnel, which extends Interstate 90 under South Boston and the harbor to Logan Airport, marked a milestone in the monumental \$8 billion project.

Bechtel/Parsons Brinckerhoff and Wallace, Floyd Associates is developing Menn's concept for the bridge; HNTB will execute its final form. Construction is scheduled to begin in 1998 and will be completed in 2001.—Ann C. Sullivan



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A new visitors' center and parking garage diminish the monumental heroicism of 60-year-old Hoover Dam.

Hoover Dam Shamed by **New Visitors' Center**

A visitors' center and parking garage now mar the stately face of Hoover Dam, still one of the seven engineering wonders of the world. Constructed to alleviate pressure from the million-plus annual visitors to the 60-year-old landmark, the new buildings have unfortunate environmental consequences.

Designed by Spencer Associates of Mountain View, California, the new visitors' center, a copper-hued, curtain-walled campanile, is perched against the Nevada side of Black Canyon, the Colorado River-carved gorge that now forms the border with Arizona. The octagonal building takes proper formal cues from the dam's lakeside intake towers but trivializes any other contextual connections. Its delicate, panelized

metal skin, patinated cap, and fashionable color scheme are a weak, fussy contrast to the serene, timeless authority of the dam's expanse of sun-baked white concrete.

Most of the center's tower serves as little more than casing for an elevator shaft, and a major portion of the building's exhibit space is given over to a windowless art gallery of works depicting scenes of the Colorado River and Hoover Dam. An art gallery? Who wants to look at paintings and photographs when faced with the spectacle of the tallest dam in the western hemisphere: 4.25 million cubic yards of concrete, stretching 1,250 feet across and 725 feet down into Black Canyon?

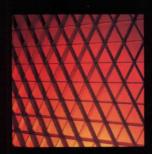
In detailing the new visitors' center, Spencer Associates ignored the dam's subtle Art Deco esthetic. Instead, the architect substituted an overwrought, loopy constellation of orbs, spires, and semicircles which resembles a poor imitation of Frank Lloyd Wright. The six-story, precast concrete parking garage may be logical, but is similarly insensitive. Jammed into a crevice hacked from the canyon face, it is large enough to distract from the dam, redder than the red rocks surrounding it, and finished like the cheapest of commercial structures.

Bad design is unfortunately only part of the center's problems. The project ran almost 400 percent over its original \$32 million estimate. In contrast, when completed in 1936 by a consortium of six private firms, led by the Bechtel and Kaiser corporations, Hoover Dam came in ahead of schedule and on budget. It cost less than its new \$130 million visitors' center and, constructed in only four years, was built in almost half the time.—Reed Kroloff



HOOVER DAM: Visitors' center sits adjacent to dam (center); parking garage is jammed into side of Black Canyon (far left).









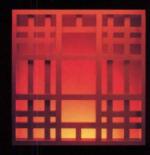


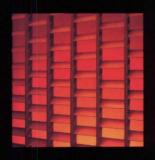






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Opinion

Courthouses Are Worth the Cost

Today's judicial architecture must reflect our highest civic aspirations, argues Judge Douglas P. Woodlock. hen our nation was founded, civic structures were understood to embody the larger aspirations of the community. President George Washington instructed one of the commissioners appointed for the new capital city that "public buildings in size, form, and elegance must look beyond the present day." Washington's mandate captured the essence of public architecture as one generation's contribution to a nation's ongoing conversation about the significance of its civic institutions.

The courthouse in particular has historically been viewed as an expression of America's commitment to its most fundamental values, a source of civic pride, and a focus for civic aspiration. In a memorial ceremony for Joseph Story, one of the 19th century's greatest U.S. Supreme Court justices, Daniel Webster used architecture as a metaphor to describe what the law meant to community: "Justice is the great interest of man on earth ...whoever labors on this edifice with usefulness and distinction, whoever clears its foundations, strengthens its pillars, adorns its entablatures or contributes to raise its august dome...connects...with that which is, and must be, as durable as the frame of humanity."

Modern civic architecture has—with sporadic exceptions—failed to contribute distinctive and durable public buildings, and thus keep up this generation's end of the nation's architectural conversation. Senator Daniel Patrick Moynihan captured the extent of this default in his 1971 introduction to the book *Will They Ever Finish Bruckner Boulevard?*, written by Ada Louise Huxtable. "Twentieth-century America," Moynihan observed, "has seen a steady, persistent decline in the visual and emotional power of its public buildings, and this has been accompanied by a not less persistent decline in the authority of its public order."

Moynihan's assessment was prompted by Huxtable's report on the decision by Jersey City's judiciary to move from the "stately Hudson County Courthouse" into "functional modern quarters in a new building next door." It was a story Huxtable found "repeated over and over. The landmark invites the wreckers, and its replacement reduces the public image to the lowest possible common denominator. Architecture has ceased to be a noble art. But it only serves man's needs and aspirations, and men and cities get what they deserve."

One aspect of Huxtable's pessimistic appraisal has been ameliorated in the decades since she wrote those words—the historic preservation movement has swelled to challenge the wreckers. Indeed, Herbert Muschamp, the architecture critic of *The New York Times*, suggested last spring that "the risk today is that we will be judged not by the landmarks we have destroyed, but by the ones we have failed to build."

The reluctance to aspire to the construction of meaningful new civic landmarks is equally a failure of will and an erosion of the sense of obligation to the future. Only the pressure of insistent programmatic demands, such as the current need to house our expanding judicial system, can force the community to rejoin the conversation in a systematic way. The federal government has begun to meet this need with an unprecedented construction program, engaging a diverse range of private architectural firms (pages 60-63, this issue). And to date, most federal judges have declined to follow their Jersey City brethren in a lemminglike march to degraded, albeit new, civic structures. Instead, they are choosing architecture of distinction.

But Design Excellence, the GSA's new program to construct such architecture, has generated aggressive opposition in Congress, particularly to the courthouse program. The language of that resistance, carefully parsed in sound bites and presented as concern for fiscal limitations, has demeaned the courthouse building program with inapposite flights of metaphor, willful misconceptions of programmatic needs, intentional misrepresentations of the nature of spaces, and

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Opinion

hyperbolic inaccuracies about materials. The effect has not been to advance a conversation about architectural aspiration, but to debase it. The difficulty of obtaining an audience for any reasoned response recalls Alexis de Tocqueville's observation that "a false, but clear and precise, idea always has more power in the world than one which is true but complex."

The attacks on the new Boston Federal Courthouse illustrate the methods employed in this opposition campaign, wherein a building whose basic materials are brick, oak paneling, terrazzo, and wallboard is labeled a "Taj Mahal." *Boston Globe* architecture critic Robert Campbell wrote more accurately that the courthouse leaves a feeling of "austerity," and that many people will find it "a little lacking in what you might call the adjectives of the architectural language." His thought-

bies. There is, of course, unvarnished hyperbole in the uninformed implication that terrazzo, the particleboard of stone flooring, is some prized form of quarried marble, presumably originating from the mythical Tuscan village of Terrazzo. This hyperbole is not mere overheated rhetoric without practical consequence. It has had a direct impact in dampening aspirations for the courthouse construction program, by trying to stifle any contribution of distinctive architecture to the public realm in this generation.

More fundamentally, the "Terrazzo marble" controversy illustrates the downward spiral of civic architectural aspiration and public investment even in the brief period since Moynihan and Huxtable drafted their laments about Jersey City. Huxtable, in fact, referred to "the ordinary terrazzo floor" of

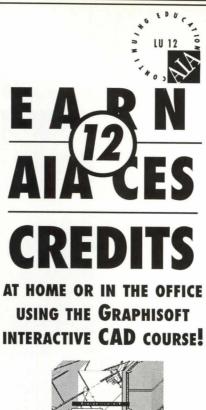
Architectural elements that were considered a deterioration of style 30 years ago have become examples of ostentation.

ful and measured evaluation has been ignored by congressional critics in their search for a powerfully evocative but wholly inaccurate allusion.

The total number of toilet facilities in Boston's 750,000-square-foot facility is breathlessly recounted by members of Congress, with no reference to the underlying need for separate facilities to serve a building with at least three distinct circulation patterns, designed to preserve the integrity of the judicial process by insulating jurors, people in custody, witnesses, victims, and court personnel from compromising encounters. Small spaces for microwave ovens and office refrigerators purchased with personal funds by judicial officers are characterized as "kitchens," conjuring up the false image of sumptuous meals served by a retinue of backstairs help.

A congressional staff report last year noted with fiery, earnest disapproval that the new Boston courthouse design had specified "Terrazzo marble" as flooring in public lobthe new Hudson County courthouse contemptuously as an element of the "deterioration of style and standards...so clearly and devastatingly illustrated" by the Jersey City courthouses. What was considered deterioration 30 years ago has in our time become an example of ostentation.

A sense of the devalued contribution to the public realm in the modern era can be acquired by comparing the costs of civic buildings constructed before World War II to those built in the years following. This comparison recently prompted Nathan Glazer, co-editor of the neoconservative quarterly The Public Interest, to raise what he identifies as the problem of increased "public parsimony." Glazer reports, "In the historical literature, there is very rarely any discussion of how much a building costs in terms of the value of money today. Whether we like the great old American courthouses or not, it seems inconceivable that such great sums would be spent today."





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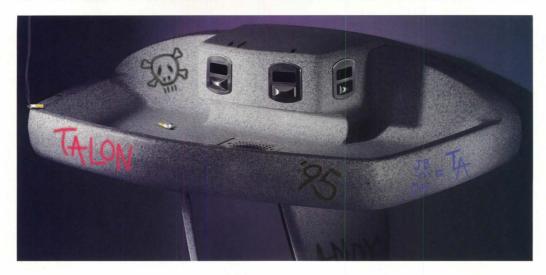
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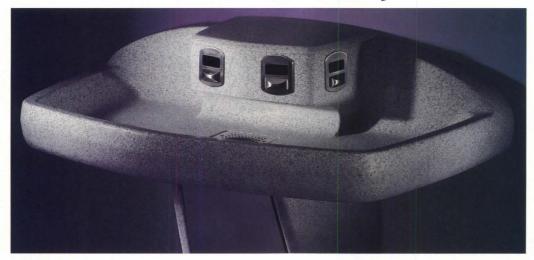
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Opinion

Innocence of historical perspective is also exemplified by the reemergence of William Coleman, a former U.S. Commissioner of Public Buildings, as a critic of the federal courthouse program over which he presided indifferently in its early years. With a certain defensive exasperation, Coleman reported to the media that Moynihan repeatedly underscored the need for high aspirations in courthouse design by referring to what Coleman described as "somebody's words to the Athenians." That somebody, of course, was Pericles, who understood fully the role of public buildings in fortifying the bonds of community in ways that enrich a nation and its people. The public building initiatives of Pericles for the Acropolis in the 5th century B.C. were part of what his 20th-century biographer Donald Kagan describes as a larger prothe home of Congress. During the Civil War, the Union government stopped work on the Capitol. Troops were being housed in the building, the cost of iron was going up, and good workmen were hard to find. To complete the dome, the government had to divert resources from military activities, but work was ultimately resumed.

General John Eaton went to visit President Lincoln in 1863 to report that the statue of freedom was about to be raised to the top of the dome, and that the Senate wing was being prepared for pillars. Lincoln told Eaton that some people thought the work on the Capitol should be halted because of the limitations the war imposed on public resources. But the President went on to say that finishing the Capitol was necessary, because it would become a symbol to the nation of the

We have an obligation to affirm the role of courthouses in the community through the highest aspirations for design.

gram "meant to instill in Athenians a love for their city, and to instruct them in the virtues they needed." Kagan suggests that "Pericles also understood the need for public education from as many sources as possible, and [used] the visual instruction provided by the buildings and structures on the Acropolis and elsewhere to that end."

It would be ignoring reality not to recognize that these are hard times to make a case for public expenditures of any kind-especially for high aspirations and appropriate investment in public buildings, irrespective of their value in providing civic instruction and contributing to the nation's architectural conversation. Such times come and go, however, and enduring gratitude will come only to those unwilling to default on their generation's obligation to the future to express, for their time, what "is, and must be, as durable as the frame of humanity."

The proper course is embodied by the history of this nation's greatest public building,

preservation of the Union: "If people see the Capitol work going on, it is a sign we intend the Union to go on."

That is our responsibility as well. We can afford to ignore or demean our civic buildings and courthouses no longer. We have an obligation to affirm their role in the community through the highest aspirations for design. Given the demands of growth in the federal courts, we now have a rare opportunity to make a significant contribution to our nation's architectural conversation. And we must make that contribution in a meaningful manner because, to paraphrase President Lincoln, the public has a right to see that justice, which is at the foundation of any healthy society, commands our careful attention at all times—but particularly during hard times.—Douglas P. Woodlock

A U.S. District Judge since 1986, Douglas P. Woodlock is chairman of the new Boston Federal Courthouse Building Committee.

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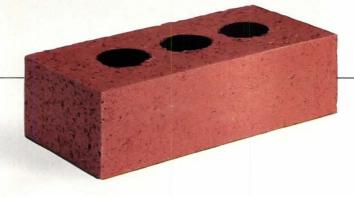
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Federal. Architecture: A New Era

overnment architecture is gaining new respectability as this nation embarks upon the largest public building campaign since the New Deal. Over the next decade, more than \$10 billion will be spent on designing and constructing new courthouses, federal office buildings, and border stations in cities and towns across the country. The watchdog of this construction boom is the General Services Administration, a government agency that is taking its responsibility seriously. Two years ago, it launched an innovative program aimed at elevating the design of federal architecture. Now the public sector is employing the best private architects in the country, hoping to achieve a legacy of civic buildings worthy of our democratic ideals.

Federal Design Excellence

Architecture
gains an influential patron
in Washington,
as the GSA
transforms the
way federal
buildings are

commissioned.

Call it the golden age of federal architecture. The mediocre Modernism of postwar government buildings is giving way to urban-minded and regionally sensitive design. The U.S. General Services Administration (GSA), the government's landlord, is mounting a multi-billion-dollar campaign over the next decade to improve federal architecture, with \$545 million in new construction this year alone. Moreover, the GSA's five-year plan calls for hundreds of new federal facilities—courthouses, agency offices, research labs, and border stations—in what will be the biggest public-building boom ever.

Of these buildings, 24 recently awarded projects reflect GSA's revolutionary Design Excellence Program. Launched in January 1994 with support from the National Endowment for the Arts, this overhaul of government design is headed by Edward Feiner, the ambitious chief architect of the GSA's Public Buildings Service, which oversees 235 million square feet of space. Feiner, a career government architect (page 62), insists that our nation has an obligation to good architecture—a role readily assumed by such foreign leaders as François Mitterrand in France and the Prince of Wales in Britain.

For the U.S. government to take on such a crusade is phenomenal, as architects attest. "This has to be the most ambitious government design program ever conceived," maintains Los Angeles-based architect Barton Myers, who is designing a federal courthouse annex in San Diego under the GSA's new Design Excellence protocols.

To improve government-sponsored architecture, the Design Excellence Program simplifies the screening process for architects within the confines of the 1972 Brooks Act—the federal law requiring that architects' qualifications be considered before their price. The GSA



Federal Courthouse, Boston; Pei Cobb Freed



A new program calls for regional sensitivity and urban vitality in federal architecture—a dramatic shift from the bureaucratic boxes of the past.

Federal Design's Defender

rom the heels of his cowboy boots to the crown of his flat-top crew cut, Edward Feiner, FAIA, is a walking reform movement for the federal government. The 49-year-old chief architect for the GSA's Public Buildings Service is a tireless advocate for better government architecture, whether reviewing design concepts in Washington or selecting sites in Omaha.

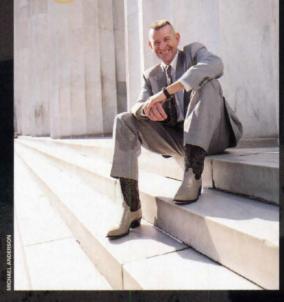
Feiner's proud, outspoken defense of federal design, delivered in his native New Yorkese, has won him the esteem of architects across the nation—especially in these politically unpredictable times, when federal budgets are being cut with chain saws. Last year, the AIA honored Feiner with its Thomas Jefferson Award for Public Architecture.

A 1969 graduate of Cooper Union's School of Architecture, Feiner arrived at the GSA in 1981 from the U.S. Navy. As deputy director of the GSA's Design and Construction Division in the 1980s, Feiner challenged his agency to raise the quality of government buildings, and began investigating new ways to attract the country's top designers.

In 1992, Feiner was appointed chief architect of the Public Buildings Service, and reasserted the GSA's role as the government's official design conscience through the Design Excellence Program, Begun in 1994, this program has given American architects a critical role in shaping the nation's heritage. Feiner also revived the GSA Design Awards in 1990 after a 15-year hiatus. Last year, the ceremony for the 1994 GSA awards was led by First Lady Hillary Rodham Clinton.

In an era when government support for the arts seems to be over-Congress is trying to cut the NEA's budget by 40 percent-Feiner's feisty leadership remains resolute. A civil servant for 14 years, he has weathered the winds of political change. Feiner recently lost key support with the resignations of **Deputy Administrator** Iulia Stasch and Commissioner Kenneth Kimbrough. However, he has gained a powerful advocate in Kimbrough's successor, Robert Peck, former AIA Group Vice President. Government Affairs.

Yet Feiner remains unfazed by politics. With a compelling portfolio of new federal projects to back him, he is firmly committed to design excellence. "If we architects are not willing to advocate our art," Feiner maintains, "very few people will."



Unfazed by federal budget cutting

and partisan politics, GSA's Chief

Architect Edward Feiner remains

committed to public architecture

of the highest quality.

hopes to cut the cost of competing for commissions and to admit more emerging design firms into the federal fold.

The reformed process includes selection panels comprising judges and officials of tenant agencies, review of the architects chosen, and, so far, one full-fledged design competition. But given the spread of new federal commissions to date, some observers wonder: Is GSA's Design Excellence turning into a preserve for the architectural establishment?

Of 24 recent projects awarded nationwide, nearly half have been awarded to New York architects: Kohn Pedersen Fox has garnered four commissions; Pei Cobb Freed & Partners has captured three; and Robert A.M. Stern Architects and Richard Meier & Partners have each won two. "The program has completely shifted the playing field in terms of client expectations," remarks Gray Plosser of the KPS Group in Birmingham, Alabama, which designed several courts under GSA's former procedures. "The GSA and the courts now believe that good architecture is only rendered by stars. That is not a positive thing." GSA's high-profile roster reflects its commitment to design excellence, but also its caution. Since the federal building program is frequently politicized by members of Congress as pork-barrel spending, the GSA is sticking to well-known architects, who, presumably, are less likely to violate public tastes and budgets.

For now, the political trade-off lies in a dearth of commissions won by smaller firms, although more have been shortlisted than in the past. A principal of a Texas firm, which was passed over in its home state for an East Coast architect, insists that "if the program doesn't get more regional diversity, it'll be in trouble." Recently selected architects, however, such as Florida's William Morgan and The Leonard Parker Associates in Minneapolis, represent strong regional talent.

On the whole, principals of participating regional firms—whether they have won commissions or not—vouch for the GSA's in-

creased accessibility. "Working with GSA gave us new confidence," affirms Merle Myers of Myers Associates—a small Ohio firm which lost the Beckley, West Virginia, courthouse competition to Robert A.M. Stern and Einhorn Yaffee Prescott.

Frank Grauman, principal of Bohlin Cywinski Jackson (BCJ) in Wilkes Barre, Pennsylvania, a firm designing two federal courthouses in the state (one on hold in Erie and another in Scranton), insists that BCJ, like many architects, would never have signed up for government work under the old process. Formerly, firms vying for federal contracts had to appear for the first interview having completed the exhaustive Standard Forms 254 and 255, and accompanied by a full team of contractors and consultants. "It's a lot of work to put good design teams together for competitions," Grauman says. "We do it only if the odds are in our favor."

Feiner recognized the system's obstacles, and by 1993, had set up a national network of volunteer advisors to serve on the GSA's architect selection panels. These "peer" architects are helping to streamline the GSA's solicitation and selection process.

The revised system is portfolio-driven; firms are judged on the quality of the types of buildings they've designed, not merely on whether they've completed government work before. Selection occurs in two phases: Architects first submit modified 254 and 255 forms, alongside a portfolio of five projects from the last 10 years, a statement of intent, and the lead designer's credentials. The GSA's selection panel, with help from peer advisors, reviews submissions and sets the shortlist. Candidates then put together teams and prepare the design response for the second stage, by which time the entire design team must be assembled. Once the team is selected, the GSA typically requires three alternative schemes for presentation to the review panel.

The most obvious benefit of the Design Excellence Program is a keener sensitivity to urban issues, resulting in more regional and context-conscious buildings. This shift is wise, as the majority of new projects are sited in city centers, where the GSA is working closely with local authorities to create public spaces and activate moribund downtowns. For example, the twin towers of Oakland, California's new federal center by Kaplan McLaughlin Diaz have helped to reinforce a teetering central business district, while in Hammond, Indiana, the proposed new courthouse by Henry Cobb is intended to revive a downtown abandoned by industry.

Has Design Excellence produced better architecture? There is still no clear consensus of what "excellence" means to the government, particularly since budgets have not grown apace with the program. In avoiding a "national" style, the GSA's attempts to balance historicist and contemporary forms often have mixed results. A few recently unveiled designs, such as the Omaha courthouse by Pei Cobb Freed, or the Tucson courthouse by Hardy Holzman Pfeiffer Associates, show the strain of competing wills.

Nor has Design Excellence fully delivered on its egalitarian promise to bring lesser-known architects onto the national stage. But the quality of design has improved considerably. In that respect, the program remains an important achievement in today's political climate, if only for confronting the government's antediluvian mindset about design. Even three years ago, it would have been unthinkable to have Richard Meier, the high priest of Modernism, or experimentalists such as Morphosis competing to design federal courthouses.

And this pioneering course promises to continue. Even by conservative estimates, the government has several dozen new projects planned for the next decade, giving today's architects historic opportunities to reshape our national legacy. The GSA recognizes that the success of its Design Excellence Program lies in encouraging new voices and expanding the American vocabulary. That is democracy at work.—*Bradford McKee*

FOUR HOUSES

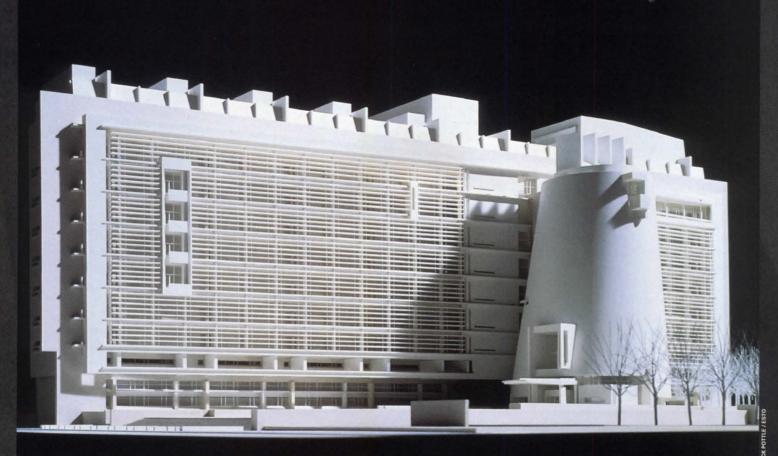
The country's finest architects are designing a new breed of federal courthouses that ennoble their communities.

hen Americans take stock of the last 12 months, they may single out 1995 as the year of the courtroom. Broadcast live from California, the prosecution and defense of O.J. Simpson became a national obsession. In Union, South Carolina, the trial of Susan Smith for drowning her children left its tragic mark on the American psyche. And from New York City to Pecos, Texas, courthouses themselves are on trial, exhibits in a case against the federal government for overspending taxpayers' money.

Last October, a government investigation chided the General Services Administration (GSA) for marble finishes, wool carpets, and operable windows at the Kohn Pedersen Fox-designed federal courthouse in New York City's Foley Square. In Congress, senators railed against the waterfront site of Pei Cobb Freed's 27-courtroom complex in Boston—although the location, an abandoned pier ripe for development, was the least expensive of the sites available. And a television news segment blamed the U.S. government for spending money on a courthouse it didn't buy—a developer-built facility leased to a west Texas district with a growing caseload.

But even without lavish finishes, harbor views, or expensive leases, it's unlikely that the GSA's \$8 billion federal courthouse program would have escaped congressional and media attention. The nation-wide effort to build or renovate 156 courthouses is the largest public-buildings construction project since the New Deal.

Designed for cities as diverse as Portland, Oregon; Hammond, Indiana; and Concord, New Hampshire, the new courthouses occupy



Federal Courthouse, Islip, New York; Richard Meier & Partners, Architect

Over the next decade, 156 new federal courthouses will be constructed in cities across the nation, redefining American jurisprudence with contemporary buildings that express our polyglot culture.

Courthouse Chronology



1735 1824

AND THE PROPERTY OF THE PROPER

Wood History

1840

1876

Hanover County Courthouse Hanover, Virginia Architect unknown

Lincoln County Courthouse Wiscasset, Maine Tileston Cushing, Architect Chester County Courthouse Chester, South Carolina Robert Mills, Architect Cabarrus County Courthouse Concord, North Carolina George Appleget, Architect

prominent downtown parcels or areas in need of revitalization. Recognizing their importance as civic building blocks, GSA Chief Architect Edward Feiner transformed the agency's architect-selection process, waiving the requirement of previous courthouse experience, soliciting private-sector juries, and instituting rigorous reviews by volunteer, "peer" architects. These changes "opened a door for us," admits Peter Bohlin of Bohlin Cywinski Jackson, designer of his firm's first courthouse, located in Scranton, Pennsylvania. "We would never have applied if it were not for GSA's new approach."

Feiner hopes the new courthouse program will achieve laudable, durable representations of American democracy in our century. A passionate advocate for architectural quality, Feiner explains, "Our goal is to build 20th-century courthouses that subsequent generations will want to preserve."

Instead, the GSA program has produced outcries against judicial "Taj Mahals" from legislators (working within their own luxurious marble corridors) who appear ignorant of the growing power and responsibility of the federal court system.

Once primarily concerned with patents and interstate commerce, federal judges now handle many disputes too socially or politically charged for local courts and legislatures: civil rights, hazardous waste disposal, product liability, abortion, and even domestic violence. Since 1960, the number of federal judgeships has nearly quadrupled; the corresponding increase in clerks and courtroom personnel severely overcrowds Depressionera facilities. To ease the burden, the govern-

ment has completed nine new buildings or renovations; 12 are under construction; and 9 are on the boards. Another 135 are proposed to be built nationwide over the next decade.

Tour the courts in any major city, and it is easy to see what Feiner means when he asserts, "Today's courthouse is a new building type." Judicial skyscrapers with 40-plus courtrooms, like KPF's in Foley Square, are a far cry from the multipurpose federal office buildings that most courts occupy.

In Boston, for example, the U.S. District Court for Massachusetts and the U.S. Court of Appeals for the First Circuit share a 1933 tower with the U.S. Post Office and several federal agencies, from which the courts have been accreting space for 60 years. Three district courtrooms are carved out of a mail room; one occupies a former men's bathroom. During a criminal trial in the late 1980s, workers in a building across the street displayed a hangman's noose in a window in full view of the jury. "These spaces," concedes U.S. District Judge Douglas Woodlock, "do not inspire visitors with the sense that important public work is about to be done."

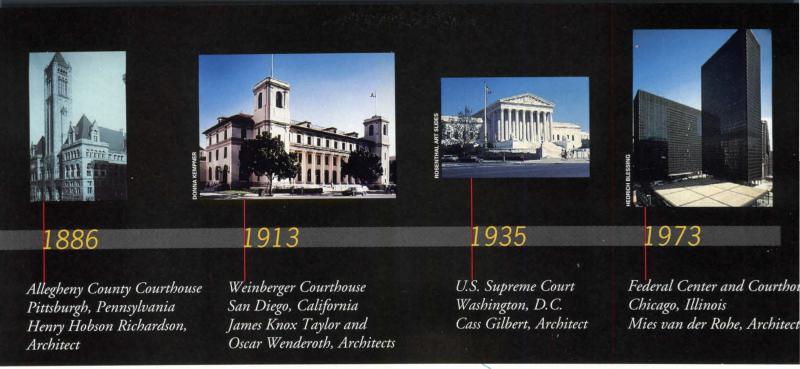
Security, too, is a major concern. In older buildings, the public, judges, and defendants all travel the same hallways—a nightmare for the U.S. Marshals responsible for people in custody. Today's buildings solve this problem with three distinct circulation strategies: three sets of corridors, elevators, and even toilets for the different users. Electronic capacity, too, has been expanded, with hidden TV cameras that allow marshals to monitor the activities in the courtroom. And while the new buildings require street-level barri-

cades and security checkpoints, they must also achieve an impression of openness befitting a democratic society.

This challenge has attracted America's most talented architects, from Classicallyminded Robert A.M. Stern to Modern mannerists William Pedersen and Richard Meier. (Neither Peter Eisenman nor Frank Gehry has applied, but Morphosis and Eric Owen Moss have been shortlisted. Antoine Predock has expressed interest.)

The eclectic, mostly contemporary crop of new judicial buildings raises the inevitable question: What is the appropriate architectural style for a 21st-century judicial building? "A courthouse should look like a courthouse," Robert Stern maintains. "It's not a drive-in bank." By looking "like a courthouse," Stern is referring to the Neoclassical 18th- and early-19th-century buildings that many Americans consider emblematic of the judicial process (above). Stern's design for a federal complex in Beckley, West Virginia, is as quietly Classical as the 1930s building it expands.

Feiner, on the other hand, believes that enduring architecture doesn't have to replicate the courthouses of the past. He points to the agency's "Guiding Principles for Federal Architecture" (part of the standards given to courthouse architects), which state, "The development of an official style should be avoided. Design must flow from the architectural profession to the government, and not vice versa." Rather than mandating stylistic approaches, Feiner challenges architects to develop designs based on "dignity, vitality, integrity, and substance."



Indeed, as these new courthouses show, the appropriateness of Classicism to the changing courthouse is doubtful today. Most of the nation's Classical federal buildings were constructed in a period when cultural consensus equated Classicism with democratic traditions. But as Henry Cobb, designer of Boston's courthouse, observes, "Today, for some Americans, Classicism may stand not for democracy, but for oppression."

Moreover, the scale of today's courthouses muddies the democratic symbolism of the courtroom—where the individual citizen can bring a private matter before a federal official. Today's multiple-courtroom buildings, Cobb relates, "are blurring that role. Architects are struggling to build courthouses without devaluing the individual courtroom. That is the essential problem."

The GSA is investing the country's best design talent in finding a solution. Although courtroom furnishings often exude traditionalism, even in Modern buildings, a courtroom's configuration, daylighting, and finishes are considered seriously by today's architects and their judicial clients. The new courtrooms reflect anything but consensus.

Andrea Leers of Leers Weinzapfel, designer of courthouse additions for Worcester, Massachusetts, and Portland, Maine, believes that "daylight is a fundamental element in a courtroom—that's why the old one-room courthouses were spectacular." Certainly, both judge and jury spend long hours in some trials, and appreciate natural light. William Louie, principal in charge of KPF's Foley Square courthouse, daylit most of the building's courtrooms by alternating a floor

of judges' chambers and support spaces with a floor of courtrooms. Many megacourtroom complexes, including Henry Cobb's in Boston and HOK's in Greenbelt, Maryland, eschew courtroom daylight in favor of a public atrium. Moreover, as Americans learned in the O.J. Simpson trial, videotaped evidence requires easily darkened rooms.

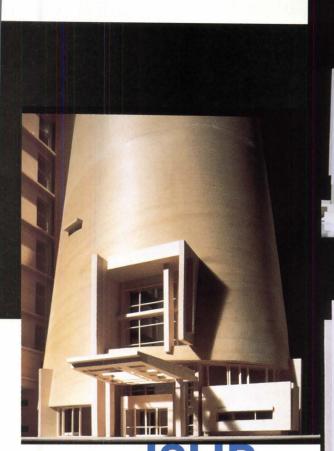
In Greenbelt's J-shaped courthouse, and again in the Ellerbe Becket-designed tower for Kansas City, Missouri, the traditional rectangular courtroom has been replaced by a pie-shaped wedge, which successfully accommodates today's multidefendant, multilawyer teams at the expense of the audience. Sight lines, too, are critical. As part of the design process for Foley Square, Louie's team built mock-ups of courtrooms in a hangar in Queens for the judges' evaluation. "It was a very important part of the design process," recalls Louie. "One judge wanted the bench higher to hide his coffee cup; another wanted it lower to see the jury."

The public believes that finishes drive up costs, but Gerald Thacker, assistant director of Facilities, Security, and Administrative Services of the Administrative Office of the Courts, explains, "The difference in cost of an office building and a courthouse is about 15 percent, and the increase is not in the finishes, but in security." A courthouse should be "monumental, but also speak to the individual," asserts Leers, who specified granite wainscoting for a courtroom in Portland. Spillis Candela/Warnecke's new courthouse in Alexandria, Virginia, incorporates a marble-epoxy composite; Cobb's Boston courtrooms will wear oak veneer and wallboard.

Debates about finishes and architectural style, however, have become secondary to questions of whether these courthouses by prominent architects should be funded. When the government shut down for six days in November, both public officials and architects wondered whether the GSA's vast program would survive the budget knife. But when President Clinton signed the budget resolution on November 19, even the proposed projects shown on the following pages had survived, despite a 35-percent decrease in appropriations over a seven-year period. As of this writing, congressional authorization, which would guarantee funding for new courthouses in Omaha, Tallahassee, Albuquerque, Savannah, Brownsville, Columbia, and Islip, has not yet been secured.

Ever the optimist, Feiner believes these massive edifices will be realized, even if the whims of Washington delay construction longer than he had hoped. Others are less sanguine. If GSA's civic-minded bureaucrats "assert any kind of aspiration, they get trashed," opines Judge Woodlock. "If their new courthouse program were one of unobjectionable mediocrity, the message from Congress is, that's okay."

Nevertheless, the courthouse architects, whether Classicists or Modernists, are proceeding apace, and many of their schemes will be built over the next decade. In cities across America, these buildings will communicate their noble purpose, revive downtowns, and carry to future generations our pluralist ideals and democratic values. If architecture can do that for the government, it is worth every dollar.—*Heidi Landecker*





Architects: Richard Meier & Partners; The Spector Group

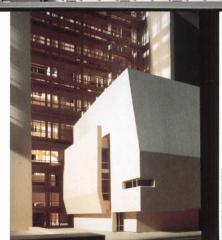
Site: Located on suburban Long Island 30 miles east of New York City, Islip's Federal Building and U.S. Courthouse adjoins existing county court facilities and overlooks the Atlantic Ocean.

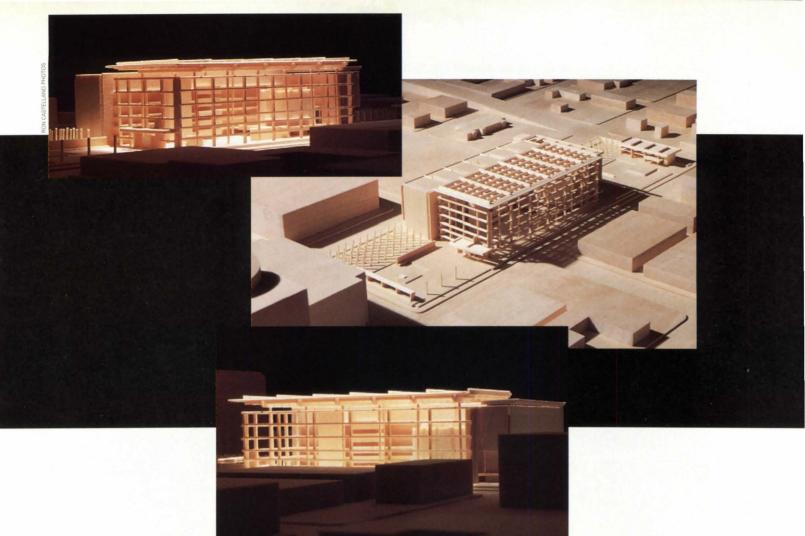
Program: The 925,000-square-foot, 11-story courthouse will contain one ceremonial, 13 district, four magistrate, and five bankruptcy courtrooms; three circuit court chambers; jury assembly rooms; parking for 2,000 vehicles; and expansion capacity for an additional nine district, two magistrate, and five bankruptcy courtrooms. Design: Meier's crisp design emphasizes the civic nature of a courthouse. Rather than burying public corridors deep within the building, the architect pulls them to the exterior to offer ocean views. He expresses them behind a south-facing glazed facade screened by bands of aluminum brise-soleils (top right). In addition to shading the huge expanse of glass, the sunscreens help break up the scale of the nearly 20foot floor heights required by the courtroom volumes. Projecting to the south from an 11-story atrium at the center of the building is a metal-clad cone—Meier's contemporary expression of the Beaux-Arts rotunda—that contains the courthouse's main entrance (above left). This conical rotunda will front a vast public plaza, filled with trees to the east and a pair of large reflecting pools located at the plaza's southern edge.

i minimin

Meier expresses the ceremonial courtroom as a chamfered box (right) in a manner similar to the figural rotunda. This courtroom extends from the building's north facade, which overlooks the existing county court facilities. Administrative offices will be housed on the lower three floors of the building, with district, magistrate, and bankruptcy courtrooms located on the fourth through 10th floors; the top floor will be reserved for judicial chambers, a law library, and conference rooms.

Cost: \$189 million Completion: January 1999



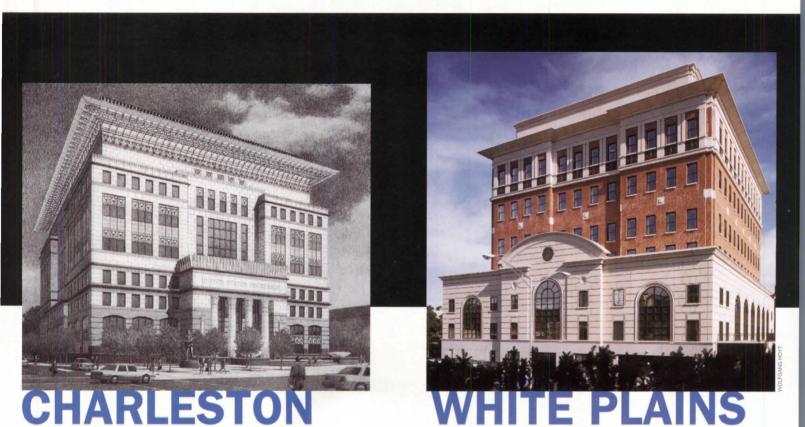


PHOENIX

Architects: Richard Meier & Partners; Langdon Wilson Architecture Site: Located to the west of Phoenix's city hall, the Meier-designed courthouse will occupy two city blocks next to a proposed park. It is intended to become part of a new civic mall linking the city hall to the state capitol. Program: The 573,000-square-foot structure will contain one ceremonial, 13 district, and six magistrate courtrooms; judges' chambers; offices for the U.S. Attorney, clerks, U.S. Marshals Service, and probation and pretrial services; parking for 284 vehicles; and expansion space for six new district courtrooms and chambers. Design: The boxy, six-story Phoenix courthouse comprises an L-shaped office and courtroom block enclosing a north-facing atrium (top left and above). As in the Islip courthouse (facing page), Meier expresses the Phoenix building's public zones on the outside of the building. Clad in transparent and fritted glass, the atrium is visible from the street and intended as an outsized public room with a cylindrical ceremonial courtroom raised on a platform. This courtroom, where official swearings-in and naturalization ceremonies will take place, will be enclosed entirely in glass, with varying bands of clear and fritted glazing. Sunscreens mounted on the atrium's south facade will shade the glazed expanse while maximizing views. These slender aluminum blades—along with similar shading devices mounted on the atrium's glazed saw-toothed roof—are designed to create a delicate wash of light and shadow inside the atrium.

Judicial chambers and offices, connected by a private corridor, will be grouped along the perimeter of the Lshaped building; courtrooms will be located next to the atrium. In a gesture indicative of Meier's new attention to energy efficiency, the atrium will be cooled by natural convection currents and recaptured air.

Cost: \$90 million Completion: 2000



Architects: Skidmore, Owings & Merrill; Gandee/Kreps Site: Charleston, West Virginia's new courthouse will be located downtown north of the Kanawha River, near other government buildings. Working closely with the GSA and city during the site selection process, SOM reviewed more than a dozen parcels before the final site was approved. Program: The Charleston courthouse is the first to be programmed following the revised "U.S. Courts Design Guide," released by the Administrative Office of the United States Courts in 1991. The guide, which replaced the GSA's standards for courthouse design, revised the square footages and adjacencies of court functions set forth in the old standards. It also identified, for the first time, the need for separate and secure corridors for judges, prisoners, and the public. As a result, SOM's courthouse is designed with increased efficiency of floor plates and distinct circulation paths.

The seven-story, 420,000-squarefoot building contains one ceremonial, four district, and three magistrate or bankruptcy courtrooms, as well as space for judges' chambers, appellate chambers, the U.S. Attorney's Office, and the U.S. Marshals Service. The courthouse may be expanded to

accommodate four additional courtrooms and judges' chambers. Design: Classical in disposition but Modern in detail, SOM's design strives to relate to Charleston civic landmarks, including the late-19th-century Richardsonian Romanesque town hall and Cass Gilbert's state capitol. The base of the courthouse is clad in heavy rusticated stone, with a four-story portico marking the main entrance. SOM's original design for the building was crowned by a stainless steel dome. However, after a \$7 million budget cut mandated by a value-engineering analysis, the dome was replaced by an oversized, perforated metal cornice with Art Deco-inspired detailing. Spandrels are detailed with metal grillework to echo the cornice.

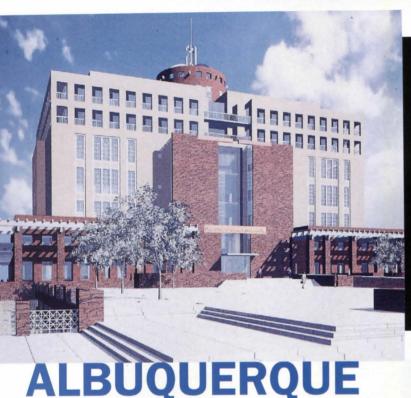
The building is organized around a skylit rotunda. Federal offices occupy the first four floors, and floors five and six each contain four courtrooms grouped around a central waiting room. The courtrooms are ringed by secure corridors and corner offices. Located on the top floor for privacy, the ceremonial courtroom is surrounded by four appellate judges' chambers. Cost: \$61.5 million

Completion: September 1997

Architect: Skidmore, Owings & Merrill

Site: The new courthouse consolidates a growing government district in downtown White Plains, New York, which includes the county courthouse and public-safety headquarters. Program: The 159,000-square-foot building contains ceremonial, district, magistrate, and bankruptcy courtrooms, as well as space for jury deliberation rooms, judges' chambers, a library, administrative offices, and underground and street-level parking. Design: In an attempt to bring an urban presence to an otherwise grim neighborhood, SOM separated the courthouse into a Classical hierarchy of base, shaft, and crown that recalls early-20th-century Beaux-Arts midrise designs for civic buildings. The rusticated cast-stone base offers a solid urban edge, and the brick-clad tower relates to other mid- and high-rise buildings in the White Plains business district. A processional axis leads from the south-facing exterior plaza, up a set of monumental stairs, and through the main entrance into the ceremonial courtroom. Pairs of courtrooms, jury rooms, and judges' chambers occupy each of the upper floors. Cost: \$30 million

Completion: November 1995



Architect: Flatow Moore Shaffer McCabe Architects

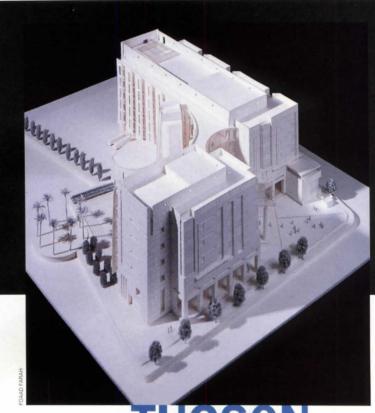
Site: Located two blocks north of Albuquerque's civic center, the new courthouse will be built on a 4.5-acre site currently occupied by a parking lot and an underutilized park.

Program: The 254,000-square-foot courthouse comprises 15 district and magistrate courtrooms; judges' chambers; court administration and services; the U.S. Marshals Service; and offices for the regional GSA.

Design: In an attempt to express the cultural heritage of the Southwest, the eight-story building combines Native American and European design motifs. The materials selected include stucco, sandstone, and stainless steel.

Iudicial chambers on the sixth and seventh floors share a common lobby and conference area in the fashion of traditional law offices, overlooking a full-height atrium and rotunda. Of the daylit courtrooms on the third, fourth, and fifth floors, Project Architect Brendan Miggins remarks, "We are very happy about how light-a symbol of wisdom—is brought into the courtrooms and public spaces." Peer reviewer John Meunier found the decision to locate "the collegial judges' chambers on different floors from the courtrooms intriguing, as it allows for a stacking of scales that is missing from most courthouses. Cost: \$43.7 million

Completion: July 1998



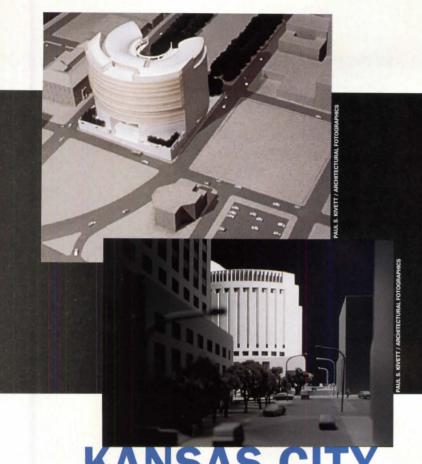
Architects: Hardy Holzman Pfeiffer Associates; Leo A Daly Site: Located at the gateway to Tucson's central business district, the proposed site of the Ivo A. DeConcini

Federal Courthouse is a vacant lot adjacent to the civic center.

Program: The new 419,000-squarefoot courthouse will house 14 courtrooms, including circuit, district, and bankruptcy courtrooms; judges' chambers; the U.S. Attorney's Office, support facilities; and administrative offices. The master plan for the Tucson courthouse includes space for a 150,000-square-foot expansion, which will add five more courtrooms.

Design: A six-story, two-tower complex clad in an aluminum curtain wall and corrugated metal, the new courthouse divides courtrooms and judicial chambers between the third, fifth, and sixth levels, with room for expansion on the fourth floor in spaces currently assigned to the U.S. Attorney's Office. Court offices are on lower floors. Organized around winter and summer courtyards, the building is intended to reflect Tucson's regional character in its material and horizontal massing. Cost: \$64 million

Completion: December 1999



KANSAS CITY

Architects: Ellerbe Becket; Abend Singleton Associates

Site: Located on axis with the city hall and overlooking two-block-long Ilus Davis Park, the Charles E. Whittaker Courthouse in Kansas City, Missouri, will become part of a civic mall lined with government buildings.

Program: This 11-story, 597,000square-foot facility will house 21 courtrooms (expandable to 26), including appeals, district, magistrate, and bankruptcy courtrooms; 29 judges' chambers (expandable to 35); support services; and space for congressional offices, the U.S. Attorney's office, and public defenders' offices. Design: A crescent-shaped building organized around a three-story central rotunda, the new courthouse will be built primarily of precast concrete with a granite base and metal roof. Five courtrooms per floor are arrayed around the crescent with public lob-

bies facing the park to the south; judicial suites along the northern perimeter face the Missouri River valley. The building's mass and shape are intended to terminate the civic mall and balance the city hall at the other end of the axis.

Cost: \$89.6 million Completion: April 1998

ST. LOUIS

M MEETS M MEETS M MEETS Architect: Hellmuth, Obata & Kassabaum

Site: Positioned on 5.5 acres, the new Thomas F. Eagleton Courthouse will anchor an undeveloped area southwest of downtown St. Louis, near city hall. Program: At more than 1 million square feet, the limestone- and precast-concrete-clad building will house a total of 29 courtrooms (one ceremonial, three panel, one special proceedings, 10 district, nine magistrate, four bankruptcy, and one tax); offices for the U.S. Marshals Service, U.S. Attorney, and associated clerks; and chambers for more than 50 judges.

bers for more than 50 judges. *Design:* A stainless steel dome—echoing the smaller dome that caps the courthouse's entry rotunda—crowns the 28-story building and conceals its mechanical services. Three panel courtrooms (to be expanded to four) occupy the 27th floor's corners, which form a pedestal for the ceremonial courtroom beneath the elliptical dome. To minimize the amount of wasted interstitial space, HOK pulled the taller magistrate and district courtrooms to opposite sides of the building's east and west wings, and staggered them

on alternating odd and even floors; shorter, standard-height support spaces are stacked continuously at the building's core.

Judicial libraries and conference rooms flank the central circulation spine to the north and south. Both the regional GSA and judges wanted a monumentality appropriate to a seven-state circuit-court headquarters. In response, HOK Design Principal Gyo Obata recalls, "Civic buildings in St. Louis tend to focus on columns and a dome, and we tried to incorporate those features in a contemporary way." Cost: \$180 million

Completion: March 1997



Architects: Gossen Livingston Associates; Hansen Lind Meyer Site: Surrounded by low-rise buildings, the new Kansas City, Kansas, courthouse is intended to be a visual landmark in a downtown area designated for urban renewal.

Program: The 274,800-square-foot building will house one ceremonial, one appellate, four district, two magistrate, and two bankruptcy courtrooms. Design: Reminiscent of a suburban office building, the eight-story courthouse is clad in varying colors and textures of precast concrete panels which hint at native Kansas limestone. A street arcade, elaborate metalwork, and fourth-floor setback help the courthouse to blend into the low-rise downtown fabric. Epic murals by artist Richard Haas, evoking 1930s Works Progress Administration-sponsored art, adorn a three-story entrance hall.

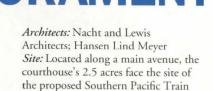
In a significant break with traditional courthouse organization, the architect consolidates chambers, a single central library, and support spaces on the fifth floor, separate from the courtrooms. (Judges are typically assigned their own courtroom, with an accompanying private suite of chambers, library, and support space.) By agreeing to share courtrooms, a library, and other spaces, the judges helped lower costs significantly.

Cost: \$33.5 million Completion: December 1993



Architects: Casazza Peetz & Hancock; Kaplan, McLaughlin, Diaz Site: The Bruce R. Thompson U.S. Courthouse and Federal Building occupies a full block in downtown Reno, next to the city hall and a library. Program: The 197,000-square-foot building houses 10 courtrooms, judges' chambers, libraries, and administrative offices, as well as 40 underground parking spaces. Design: The concave west facade of the 10-story, granite-clad tower, with views of the distant Sierra Nevada mountains, faces a small landscaped park. Parking lots surround the other three rectilinear sides of the tower. A double-height entrance rotunda, projecting slightly from the main facade, contains security checkpoints. The wood-paneled, double-height courtrooms are stacked in pairs on the floors above, interspersed with conventional single-height support areas. To compensate for the discrepancy in ceiling heights, the architects located the circuit judges' chambers (which do not require adjacency to a courtroom) in the interstitial spaces. Cost: \$31.8 million

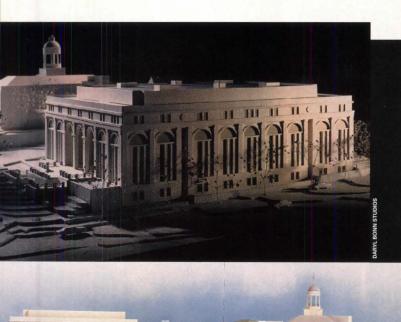
Completion: June 1996



Station development.

Program: The 741,000-square-foot building houses one ceremonial, 11 district, five magistrate, and five bankruptcy courtrooms. Chambers for 22 judges, court-related offices, a library, and below-grade parking are also located in the building, which includes expansion space for eight courtrooms. Design: To help relate the complex to surrounding low-scale fabric, the rusticated limestone-clad courthouse is divided into a 16-story tower, containing the courtrooms, and a four-story entrance pavilion. The entrance pavilion, with a skylit rotunda crowned by an open metal cornice, houses the jury deliberation rooms. To further diminish the masonry tower's bulk, the architects introduced a bowed glass curtain wall crowned by an oversized metal cornice that echoes the entry rotunda. The floors of the tower alternate between three district courtrooms on one level and four magistrate and bankruptcy courtrooms on the next. By stacking the courtrooms in a single tower, the architects preserved a significant portion of the site for future expansion and development. Cost: \$135 million

Completion: August 1997



TALLAHASSEE

Architects: William Morgan Architects; Reynolds, Smith and Hills Site: Located among stately oak trees, historic churches, and commercial buildings at the edge of downtown Tallahassee, Florida, the new courthouse annex is located on a site sloping steeply upward to the north.

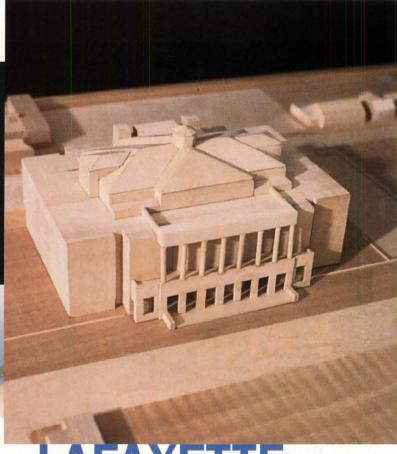
Program: The 150,000-square-foot annex will contain one special proceedings and four district and magistrate courtrooms, as well as offices for the District Attorney, probation and pretrial services, and the U.S. Marshals Service. The building will also house a grand jury hearing room and secure parking for 35.

Design: Morgan looked to the detailing of the limestone-clad 1936 courthouse to the south, crowned by a copper dome atop a lantern, in designing the new five-story, Neoclassical annex. But with a restrictive budget of \$110 per square foot, the base of the annex will be clad in synthetic limestone, and the upper stories will be finished in stucco, with bronze-colored window frames that echo those of the existing courthouse.

The new facility will be entered from the west, facing an allée of century-old live oaks. The entrance is marked by a two-story-high, arched portico, reminiscent of the Southern veranda, which opens onto a double-height atrium. Courtrooms and chambers on the top floor will be crowned by skylights; administrative offices are located on lower floors.

"We are particularly proud of not overwhelming the old courthouse—taking advantage of the sloping site allows the original cupola to remain a strong, proud element," says architect William Morgan. Peer reviewer Roger Schluntz maintains, however, that "urban design was not given a thorough look. All of us felt that the context had not been adequately explored in relation to the master plan of Tallahassee." Cost: \$20 million

Completion: 1998



LAFAYETTE

Architect: Lafayette Design Group Site: Occupying a full city block on the edge of Lafayette, Louisiana's central business district, the new courthouse is located near the parish jail and a proposed open park to the west.

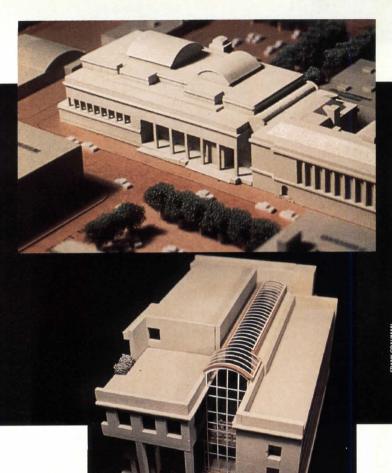
Program: The 198,000-square-foot building incorporates one ceremonial, one appeals, five district, and two magistrate courtrooms; judge's chambers; U.S. Attorney's Office; and space for eight additional courtrooms.

Design: With its monumental Doric portico recalling the traditional architecture of the South, the new courthouse will add a strong civic presence to downtown Lafayette. The exterior will be clad in precast concrete, with a mansard roof of copper-colored metal crowned by a small lantern.

The first and second floors of the courthouse are reserved for the U.S. Marshals Service and the U.S. Attorney's Office. Courtrooms on the third and fourth floors are clustered around a skylit rotunda, while jury suites and judges' chambers are placed toward the perimeter to receive natural light. The fifth floor houses the appeals courtroom and a library.

Cost: \$20-30 million (pending final design)

Completion: 1998





SCRANTON

Architects: The Leonard Parker Associates; Mutchler Bartram Architects Site: Located to the west of an existing 1929 courthouse, the new Quentin N. Burdick Federal Courthouse in Fargo, North Dakota, occupies the southern side of a downtown city block amid one-and two-story commercial buildings. Program: The 112,000-square-foot building will contain four courtrooms, judges' chambers, library, and support offices, while the existing courthouse houses an additional courtroom and the U.S. Attorney's Office.
Design: A barrel-vaulted, glazed

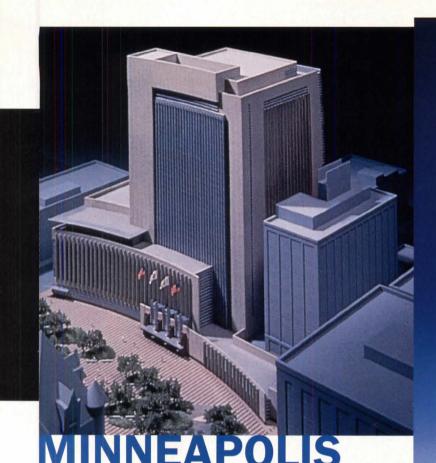
FARGO

Design: A barrel-vaulted, glazed atrium separates the addition from the original Beaux-Arts courthouse. The new facade replicates the column rhythm, limestone surfacing, cornice line, and rusticated base of the older building; but the deeply recessed entrance, fourth-story setbacks, and double-height courtrooms protruding from the roof line contradict its neighbor's Classical austerity.

Cost: \$15 million Completion: 1997 Architect: Bohlin Cywinski Jackson Site: Scranton, Pennsylvania's new courthouse extends a 1932 Neoclassical federal courthouse and post office overlooking Courthouse Square, a public green anchored by an existing Neo-Romanesque county courthouse. Program: Bohlin Cywinski Jackson will renovate the existing 155,000square-foot federal courthouse and post office building, including restoring two courtrooms, converting two courtrooms to grand jury and conference rooms, and adding two new courtrooms. The 116,000-square-foot addition will contain a pair of multipurpose courtrooms, judges' chambers, two jury deliberation rooms, a circuit library, offices, limited underground parking, and expansion space for two future courtrooms.

Design: A glazed atrium enclosed by an angled curtain wall will link the limestone- and granite-clad annex to the original limestone courthouse. Bridges across the atrium maintain separate circulation paths for prisoners and judges between the new and existing buildings. The courtrooms will be placed at the center of the fourth floor of the new building and separated by shared holding areas, while offices, judicial chambers, and secure corridors will line the perimeter.

Cost: \$34 million Completion: 1999



Architect: Kohn Pedersen Fox Site: The new Minneapolis courthouse is located along the city's civic corri-

dor, a spine of public buildings that comprises a 23-story county government center, the city hall, and the

county courthouse.

Program: Containing six district, three magistrate, and two bankruptcy courtrooms, the 440,000-square-foot building will include expansion space for nine additional courtrooms.

Design: At the northwest corner of the site, the courthouse wraps around the 1892 Flour Exchange Building. Its main entrance aligns on axis with the landmark 1905 Richardsonian Romanesque city hall by Long & Kees to the south. The new building's curved, six-story lower volume, containing a double-height lobby and offices, gives way to a chunky 15-story tower that reflects the massing and scale of the city hall's granite campanile. Stacked within this tower, pairs of courtrooms are placed at the center of each floor, between judges' chambers and jury deliberation rooms to the north, and public corridors to the south, which offer views of the plaza. The courthouse will be integrated into Minneapolis's popular skywalk system with bridges extending to the north and west. Cost: \$91.5 million

Completion: December 1996



Architects: Kohn Pedersen Fox; **BOORA** Architects

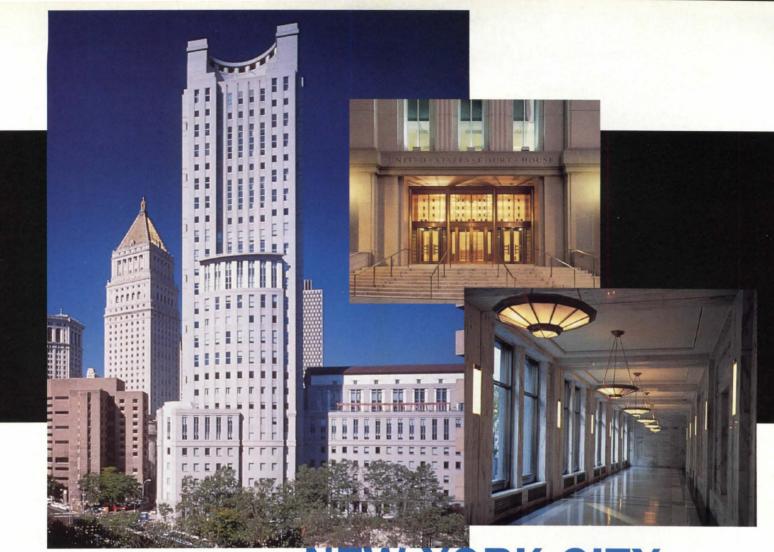
Site: Downtown Portland, Oregon's new courthouse will overlook Loundsdale Square, part of a trio of civic parks shared by city hall and other civic buildings, including Michael Graves's 1984 Portland Building. Program: The 566,000-square-foot courthouse contains one ceremonial, 13 district, and seven magistrate courtrooms; judges' chambers; offices for pretrial and probation services; the U.S. Marshals Service; and secure parking for 190 vehicles.

Design: KPF and BOORA separated the sleek limestone, steel, and glass courthouse into two distinct volumes. An eight-story block, scaled to the height of the neighboring county courthouse, incorporates administrative offices and a law library, with a roof terrace atop the eighth floor.

Behind the eight-story block, a 16-story limestone tower contains two courtrooms per floor-each with a jury suite and judges' chambers-separated by a zone of services and circulation. Secure corridors wrap the north, south, and east sides of the courtrooms, with punched windows that admit daylight into both jury suites

The building is entered on the west side of the tower. From an angular lobby, a public corridor leads to a curved elevator tower, which punctuates the northwest corner of the site like a campanile. The tower's top floor, reserved for the ceremonial courtroom, boasts a roof deck with views of nearby Mount Hood to the east. The deck is crowned by a vaulted canopy that conceals the building's mechanical equipment.

Cost: \$96 million Completion: January 1997



NEW YORK CITY

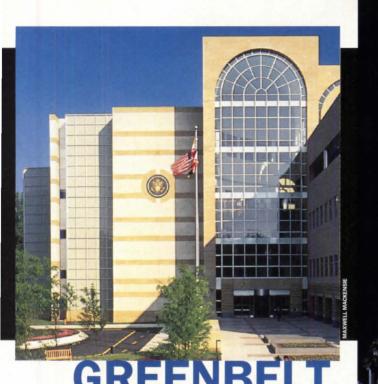
Architects: Kohn Pedersen Fox; Simmons Architects

Site: Located on the eastern edge of Foley Square in lower Manhattan, the monumental new courthouse adjoins a complex of landmarked civic buildings that includes Cass Gilbert's U.S. Courthouse; Guy Lowell's New York County Courthouse; and McKim, Mead, and White's Municipal Building. A new public plaza borders the building to the west.

Program: The 919,000-square-foot courthouse contains one ceremonial and 43 district and magistrate courtrooms; judicial chambers; the U.S. Marshals Service; jury assembly suites; administrative offices; a conference center; and a 228-car parking garage. Design: KPF's design is distinguished by a 27-story tower and a nine-story block which responds to the lower scale of the adjoining historic courthouses and apartment building. The courthouse's plain granite skin and simple, repetitive fenestration distill the more ornate Classical detailing of the nearby Gilbert- and Lowell-

designed courthouses. The lower nine floors contain offices and support spaces. Judicial chambers and courtrooms-all of which are daylit by tall, rectangular windows-are housed in the tower, where the vertical arrangement of two floors of courtrooms alternating with a single floor of chambers maximizes flexibility and simplifies circulation. On floors nine through 16, four courtrooms are placed in the building's exterior corners; beginning with the 17th floor, where the tower steps back, each floor supports a single pair of courtrooms. Cost: \$358 million

Completion: December 1994



Architect: Hellmuth, Obata & Kassabaum

Site: Surrounded by wetlands and suburban office buildings, the new courthouse in Greenbelt, Maryland, is positioned to take advantage of the site's natural grade. Sites to the east and west are earmarked for commercial development.

Program: The 237,000-square-foot building houses one ceremonial, two district, two magistrate, and two bank-ruptcy courtrooms; judges' chambers; and jury deliberation spaces in a semicircular wing. An administrative block contains offices for the U.S. Attorney, U.S. Trustee, U.S. Marshals Service, and administrative support.

Design: HOK separated administrative and judicial functions into a pair of limestone-clad, four-story wings anchored by a full-height atrium that doubles as an art gallery. An oversized Palladian window distinguishes the atrium. The judicial wing, forming the curve of the J-shaped building, accommodates an unusual wedgelike plan for the 16-foot-high, artificially lit courtrooms: Providing more bench space for multiple-defendant trials, the wider end of each courtroom is aligned with the curved exterior; the narrower audience end opens onto public lobbies ringing the atrium. Cost: \$29 million

Completion: October 1994



Architects: Hellmuth, Obata & Kassabaum; Howard & Associates Site: Northern downtown Tampa's U.S. Courthouse II will face a turn-ofthe-century courthouse across an avenue and adjoin a legal services annex. Program: The 380,000-square-foot companion to the existing courthouse will contain 17 courtrooms (seven district, five magistrate, and five bankruptcy) on the tower's upper 11 floors, as well as a top-floor ceremonial courtroom and a public gallery with views of the city. The lower six floors are set aside for the U.S. Marshals Service and administrative offices. A pedestrian skybridge links the new courthouse to the annex housing the U.S. Attorney's Office.

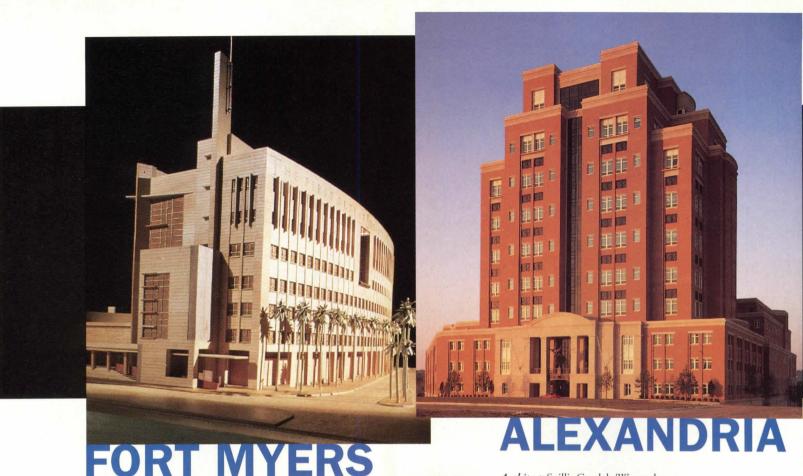
Attorney's Office.

Design: Constructed of precast concrete, the new building mirrors the existing courthouse in its placement, scale, and frontage. "We wanted to make the building as vertical as possible, yet still differentiate the courtroom zones," explains Project Architect Charles Dorn of HOK. The two-courtroom-per-floor layout, bisected by a vertical circulation spine, is reinforced on the exterior by a pair of cooling towers atop the main facade.

The centralized courtrooms are bracketed on the west by cantilevered public galleries and on the east perimeter by judges' chambers.

Throughout the courthouse, HOK used sustainable materials and energyefficient technologies, working within a tight budget of \$130 per square foot. Passive solar-control devices, including aluminum and concrete sunshades paired with deeply recessed windows, are employed extensively to conserve energy. Natural daylighting reduces the need for artificial lighting; where artificial illumination is installed, sensors regulating the lights minimize energy consumption. Indoor air quality will also be improved by monitoring the HVAC system before the building is occupied.

Cost: \$60 million
Completion: April 1997



Architect: Spillis Candela & Partners Site: Located on 1.5 acres in a recently designated downtown historic district of mid-20th-century, mixed-style buildings, the new Fort Myers, Florida, courthouse is bordered by a busy intersection and a pedestrian area. The original site would have required the historic Collier Arcade Building to be demolished, but a land swap allowed a portion of the arcade to be incorporated into the new building's colonnade. Program: The architect was forced to scale back the program for the 207,000-square-foot courthouse after Hurricane Andrew and a construction boom resulted in skyrocketing inflation. A secure parking level will be moved outside, and an intended bankruptcy courtroom will remain in an existing Neoclassical federal building on the same street. The revised courthouse will house four district and two magistrate courtrooms, the U.S. Marshals Service, public defenders' offices, the U.S. Attorney's Office, support services, and expansion space for two future courtrooms.

Design: Spillis Candela's scheme draws heavily from the sleek lines and volumetric assemblages of South Florida's Art Deco and Moderne buildings. The courthouse's north facade, for example, which pushes the main entrance

behind a low, single-story portico, resembles an abstracted version of a Miami Beach hotel.

An alcove hollowed from the main (west) facade, intended to hold a statue of a figure representing Justice, results in a horseshoe-shaped plan for the upper three floors. These floors contain one courtroom on either side of the statuary well, linked by a public circulation spine on the building's eastern edge. The courthouse will be clad in keystone, a highly patinated limestone indigenous to the Florida Keys, in keeping with the surrounding historic district and the existing federal building to the south.

Cost: \$24.4 million

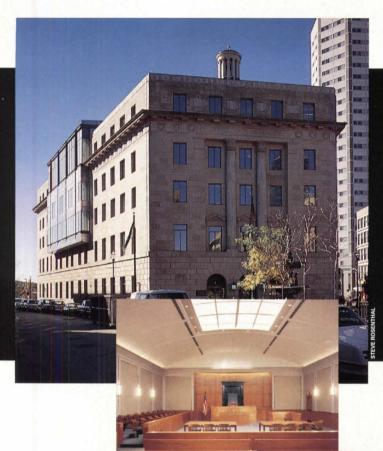
Completion: November 1996

Architect: Spillis Candela/Warnecke Site: The new courthouse occupies a 2.3-acre site within a proposed 80-acre, mixed-use development of a former rail yard to the southwest of Old Town Alexandria, Virginia. Program: A 10-story tower flanked by a five-story and a three-story wing, the 530,000-square-foot courthouse contains 10 district and five magistrate courtrooms. The five-story wing is set aside for the U.S. Attorney's Office; the smaller wing houses administrative offices and services.

Design: A precast-concrete portico marks the courthouse's base; above, the 10-story brick tower's setbacks are crowned by simple precast-concrete cornices. Escalators in the three-story atrium route the public directly to the second floor. Floors three through eight support two courtrooms each; the ninth floor is reserved for a ceremonial courtroom; and the top floor for the chief judge's courtroom.

The City of Alexandria's strict guidelines for its historic Old Town district dictate the height, shape, and volume for new buildings: "It had to be brick and stone with punched windows," explains Project Manager Guido Gerlitz. However, a height variance was obtained to permit 16-to 20-foot-high courtrooms. *Cost:* \$55 million

Completion: March 1996





HHHHH

WORCESTER

Architect: Leers Weinzapfel Associates Site: The Harold J. Donohue Courthouse and Federal Building fills a trapezoidal site in downtown Worcester, Massachusetts, surrounded by apartment towers, mid-rise retail buildings, and parking garages. A vestpocket park adjoins the courthouse. Program: Leers Weinzapfel inserted a 9,370-square-foot addition into the light well of an existing 1930 courthouse. The three-story addition centers on a new double-height bankruptcy courtroom on the third floor and a new district courtroom on the top floor. A vaulted, 20-foot ceiling pierced by a large skylight floods the new district courtroom with abundant natural light. Also commissioned to renovate the 89,300-square-foot existing building, the architect completely reconfigured the original five stories to accommodate offices for the U.S. Marshals Service, U.S. Attorney, U.S. Trustee, and probation services, as well as secure parking. A fifth-floor district courtroom was restored, and a new magistrate courtroom was created on the original second floor, with a

vaulted ceiling modified to the old courthouse's structural constraints. Design: Despite the size of the addition, the architect's intervention leaves a minimal mark on the existing structure. For the most part, the original facades of the austere, Depression-era courthouse are maintained. A new steel-and-glass canopy marks the building's public entrance on Main Street; new courtrooms are expressed on the north side of the building's granite exterior as a steel-framed bay window with fritted glass and leadcoated copper panels. The 31/2 feet gained by extending the bay window out from the building's face permits small judicial libraries to be tucked into a triangular space between the rectangular courtrooms and the exterior window wall.

Cost: \$14 million Completion: November 1995 Architects: Shepley Bulfinch Richardson and Abbott; PMR Architects Site: Anchoring a judiciary complex near Concord, New Hampshire's historic district, the Warren B. Rudman U.S. Courthouse will adjoin the existing James C. Cleveland Federal Building to the east.

Program: The 187,200-square-foot courthouse will house one ceremonial, two magistrate, and four district courtrooms; the U.S. Marshals Service; judges' chambers; administrative support offices; and 75 parking spaces. Design: Within the four-story, graniteand-limestone-clad building, courtrooms are symmetrically arranged around a central public circulation zone focused on an octagonal stair hall and atrium. On the first floor, two magistrate courtrooms flank the hall at the building's front, and abut the east and west perimeters to receive daylight. On the third floor, four district courtrooms are dispersed into separate quadrants, linked by a public hallway to the central atrium. A ceremonial courtroom lies between two courtrooms at the rear. On the top floor, chambers are grouped around a central library to encourage collegial interaction among judges. Cost: \$29.6 million

Cost: \$29.6 million
Completion: November 1996



Architects: Zimmer Gunsul Frasca Partnership; Gruen Associates Site: Constructed opposite Santa Ana, California's convention center, the Ronald Reagan Federal Building and U.S. Courthouse will be located on a 3.9-acre downtown site amid a mixture of low- to mid-rise buildings. Program: The 492,500-square-foot building will contain one ceremonial, five district, two magistrate, and six bankruptcy courtrooms; judicial chambers; underground parking; and space for 15 more courtrooms. Design: The first federal courthouse to be constructed in Orange County, the travertine-clad, 11-story building presents a curved, public face to the south. Stainless steel sunscreens and interior wooden shades shield public galleries on this side of the building, and a curved entrance pavilion extends from the base. Typical floors are arranged with a central spine of four courtrooms, separated by service cores and terminated by jury rooms on the east and west. Judicial chambers project from the north facade, which is massed to recall the scale of nearby office buildings. Cost: \$107 million

Completion: 1997

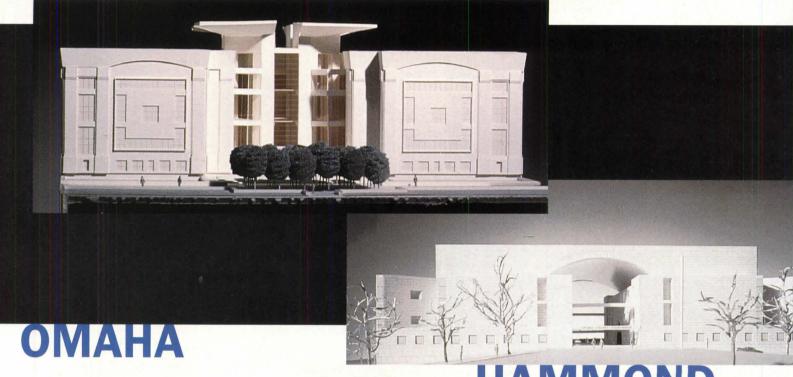
Completion: To be determined

Architects: Barton Myers Associates; Krommenhoek McKeown & Associates, Architects

Site: Located in downtown San Diego, the federal courthouse is surrounded by local and federal office buildings. Program: The 500,000-square-foot building will include 17 district and magistrate courtrooms; a special proceedings or ceremonial courtroom; and support offices.

Design: Adjoining an existing courthouse and federal building, the new courthouse forms a traditional Southern California courtvard, around which judicial functions are wrapped. Located on the fifth and seventh levels, courtrooms are accessible from interior loggias; daylit judicial chambers and offices form the building's perimeter. Lower levels house other court functions, and the courtyard is open to nearby governmental facilities.

Pink and red-brown sandstone will continue the material palette of the existing courthouse, while an open steel cornice will unify the new and old facades. The project is currently funded only through design. Cost: To be determined



Architects: Pei Cobb Freed & Partners; DLR Group

Site: Located on a steeply sloping, two-block site in downtown Omaha, the new courthouse will be two blocks away from the existing courthouse. The site was selected by the city to help spur downtown redevelopment. Program: The new 337,000-square-foot courthouse will contain six district, two magistrate, one bankruptcy, and one appeals courtroom; judges' chambers; the U.S. Attorney's Office; and support facilities.

Design: Constructed of brick and precast concrete, the six-story courthouse is organized around a daylit, octagonal atrium overlooking a public plaza to the west. Courtrooms on the second, third, and fourth floors are grouped to the north and south of this skylit atrium, separated by a zone of jury deliberation chambers and services. Daylit judicial chambers and support offices ring the courtrooms at the perimeter.

Corridors wrapping the atrium create an inner ring of public circulation, while secure corridors at the perimeter create an outer ring of private, secure circulation. Private zones are articulated on the building's wings by blind windows, while public spaces are expressed behind the glassy atrium at the center.

Design Partner James Ingo Freed reports that the scheme for the new courthouse is nobly intended "to embody the probity, permanence, clarity, and restraint that are central to the administration of justice."

According to peer reviewer Margaret McCurry of Chicago-based Tigerman McCurry Architects, one of Freed's biggest challenges has been resolving the discrepancies between the building's transparent core and its more monolithic ends. "The building's crown tries to mediate between the two and give the center portion some weight," McCurry speculates. More than one reviewer, however, has likened the crown to the wimple of the Flying Nun. The design is still being modified.

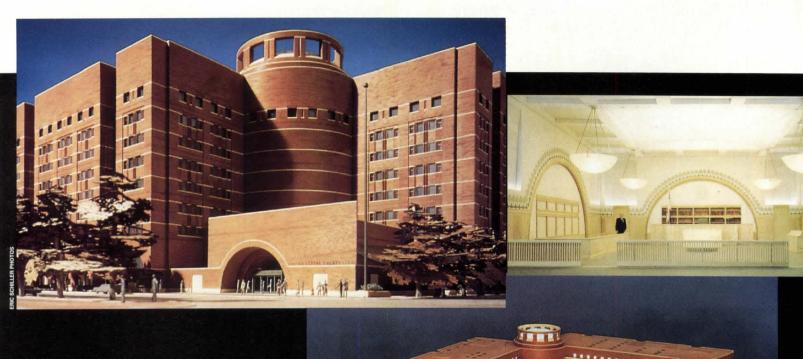
Cost: \$48 million

Completion: December 1999

HAMMOND

Architects: Pei Cobb Freed & Partners; Browning Day Mullins Dierdorf Site: Located opposite a hospital in downtown Hammond, Indiana, the 6.9-acre site is surrounded by low- to mid-rise commercial buildings. Program: The 280,000-square-foot, four-story building will contain three district, two magistrate, and two bankruptcy courtrooms; judicial chambers; clerks' offices; and space for the U.S. Marshals Service, U.S. Attorney's Office, local Social Security Administration, and congressional offices. Design: A three-story, glass-walled atrium with a vaulted ceiling joins the twin monolithic stone wings of Pei Cobb Freed's new courthouse. On the top two floors, seven courtrooms are grouped in pairs; public galleries flanking the north and south sides of the atrium lead to courtrooms and jury deliberation suites in each wing. Two wedge-shaped judicial chambers, positioned at the building's north and south ends, are separated by a triangular courtyard. Court-related components will be located on the ground level, and parking and services relegated to the basement. The restrained building will be clad in Indiana limestone banded with precast concrete. Cost: \$47 million

Completion: 1998



BOSTON

Architects: Pei Cobb Freed & Partners; Jung/Brannen Associates Site: Located on Fan Pier, overlooking Boston's harbor and downtown skyline, the new courthouse's 4.6-acre site—long a source of redevelopment controversy—once housed important shipping and processing facilities. Program: The 750,000-square-foot building contains 28 circuit, district, and magistrate courtrooms; the U.S. Attorney's Office; the U.S. Marshals Service; the Bureau of Prisons; offices for the regional branch of the GSA; and support services.

Design: Henry Cobb's masonry, glass, and steel courthouse merges forms inspired by Henry Hobson Richardson and James Stirling to give an appearance of both permanence and permeability. The courthouse is entered at the southwest corner through a monumental Richardsonian arch carved into a brick wall. A double-height lobby leads into a cylindrical rotunda joining the two wings of the L-shaped courthouse. At night, the glowing crown of the rotunda will act as a beacon. Public arcades, elevators, and services ring the rotunda at each floor.

Located on the third, fifth, and seventh levels, the double-height courtrooms are Richardsonian in flavor, framed with arched openings and lit by pendant fixtures. They face a sixstory atrium formed by a glass apron on the building's waterfront side,

which rises the full height of the building and frames dramatic views. The sloped glass walls of the hemicircular atrium cradle a circular public plaza.

By rendering the courtroom volumes visible from the atrium, Cobb expresses the principle "that every citizen shall have equal access to the law and to the guarantee of due process." Private circulation to the courtrooms will be provided through secure corridors at the east and west edges of the building, and will be daylit through triangulated windows that divide the east and west elevations into three bays. Cost: \$218 million

Completion: June 1998



COLUMB

Architects: Shepley Bulfinch Richardson and Abbott: Stevens & Wilkinson Site: Located northwest of downtown in the Arsenal Hill historic district, the 3.7-acre site of Columbia, South Carolina's new judicial annex is bounded by the existing Strom Thurmond Federal Building and Courthouse to the southeast and the governor's mansion to the southwest. Turn-of-the-century houses adjoin the site to the west, and low-rise residential and commercial developments lie to the north. Program: The 200,000-square-foot annex will contain five district and three magistrate courtrooms; judges' chambers; offices for the U.S. Marshals Service, U.S. Attorney, and U.S. Trustee; and secure parking. Design: At an April 1995 meeting with the GSA, Shepley Bulfinch Richardson and Abbott with Columbia-based Stevens & Wilkinson presented design alternatives that reinterpret the Classical symbolism of South Carolina's early-19th-century courthouses designed by Robert Mills. Appointed acting commissioner for

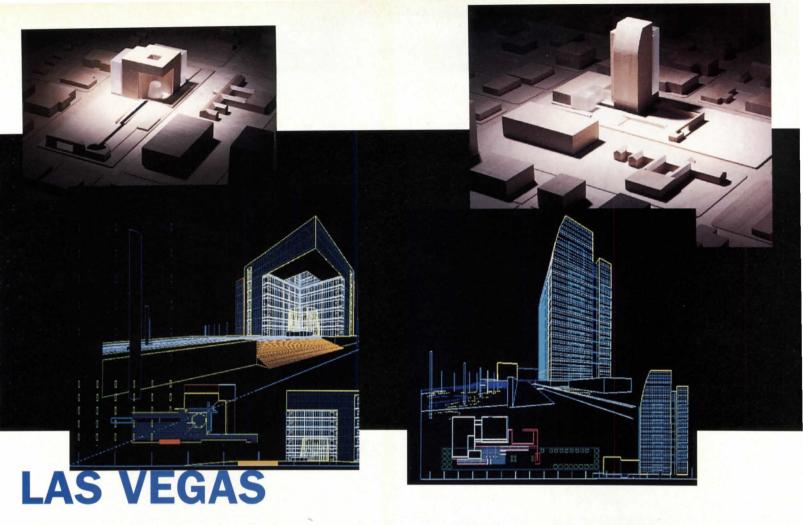
the Board of Public Works in 1820, Mills designed state courthouses in five South Carolina cities; his 1825 Second Ainsley Hall House, now the Robert Mills Historic House, is just four blocks from the site of the annex.

The architects will attempt to mediate between the scales of adjacent historic houses and the Modern Thurmond Federal Building, designed by Marcel Breuer in 1977. Daylit and flexibly organized, the courts will incorporate contemporary detailing and materials. Schematic studies are currently on hold pending contract negotiation and design funding.

Cost: \$43 million Completion: 1999 Architects: Robert A.M. Stern Architects; Rosser International; Ramsay

Site: Stern was the first architect asked by the GSA to analyze potential courthouse sites. Commissioned to design an annex to the Classical courthouse designed by William Aitken in 1895, Stern considered three locations in downtown Savannah, laid out in the 1730s by James Oglethorpe. Site one encompasses five blocks immediately surrounding the existing courthouse; sites two and three are approximately 1 mile southeast and 1 mile southwest. Program: Savannah's existing courthouse will be renovated to accommodate three district courtrooms and judicial chambers. The new 180,000square-foot annex will incorporate one district, one magistrate, and two bankruptcy courtrooms, and expansion space for an additional courtroom. Design: After developing massing models for each site, the team concluded that building an annex on the remote lots would be inconvenient. The preferred scheme locates the annex immediately to the west of the existing courthouse, which will require closing a street between the older building and a square. The GSA will purchase a site following environmental impact studies this year. Cost: \$32-38 million (pending final design)

Completion: 1999



Architects: Dworsky Associates; Harry Campbell Architects

Site: Located on the southeastern perimeter of downtown Las Vegas, the 6-acre site of the new judicial annex faces the existing courthouse. The annex will form the terminus of a proposed pedestrian mall being designed by EDAW to link city, county, and federal justice facilities.

Program: The 430,000-square-foot annex will house six magistrate and six district courtrooms; judicial chambers; offices for the U.S. Attorney and U.S. Marshals Service; and expansion space for six additional courtrooms.

Design: Three preliminary designs were prepared for the GSA's review last November. The tallest scheme organizes two courtrooms and judicial chambers per floor within a 10-story tower. The clerks' offices and U.S. Marshals Service are located in an adjacent two-story volume on the northern perimeter of the lot, directly across the street from the original courthouse.

Separated from the existing courthouse by a landscaped plaza, the midrise scheme is positioned on the site's southeast corner. A three-story, drumshaped atrium is carved into the center of the cubic volume; each of the Lshaped lower floors contains four courtrooms and judicial chambers. On the top two floors, congressional offices, circuit chambers, and libraries will ring the atrium. The northwest corner of the upper floors appears to float above the street-level courtyard.

Both courthouse designs are raised on a 10-foot podium with a ceremonial entrance stair. The team's goal is "to create a building that is not just an object, but helps contribute to the life and identity of the city," explains Lead Designer Mehrdad Yazdani of Dworsky Associates. The final design will be selected this month.

Cost: \$78 million Completion: 1999

COURTHOUSES IN PROGRESS

A total of 156 proposed federal courthouses await congressional review, funding, and construction. Of that number, 28 projects are currently in preliminary stages, such as the Brooklyn courthouse awarded one year ago to Cesar Pelli & Associates and Haines Lundberg Waehler, for which design, but not construction, has been funded.

The 750,000-square-foot structure, to be built on a 1960s-era federal campus in downtown Brooklyn, will be linked to an existing six-story federal courthouse next door. Scheduled for completion in 1999, the courthouse will contain one appeals, 20 district, and 13 magistrate courtrooms. Residents, however, are concerned that Pelli's mid-rise tower will block views of a public park to the west.

Two courthouse commissions have been awarded to Kallmann McKinnell & Wood. With Karlsberger Architecture, the Boston-based firm will consolidate scattered programs into a new 20-courtroom building for Cleveland, Ohio. Preliminary programming calls for 500,000 square feet at a projected cost of \$150 million. The project has been funded for design but not construction; the GSA has not yet purchased the earmarked downtown site. A similar program consolidation will

take place in Greeneville, Tennessee, where Kallmann McKinnell & Wood and Memphis-based Hnedak Bobo Group/Allen & Hoshall are designing a new \$25 million courthouse, for which the GSA is negotiating the purchase of a 3-acre site. The 155,000-square-foot building will contain four courtrooms; offices for the U.S. Attorney, U.S. Trustee, and GSA; and expansion space in its upper levels.

Michael Graves and Smith Hinchman & Grylls have been selected to design a new Washington, D.C., judicial annex and to renovate the city's 1950s federal courthouse. Sited on Constitution Avenue's only vacant parcel, the \$60 million, nine-courtroom project is on hold until Congress approves the funds.

Similarly, Wilson Kullman McCord and Hartman-Cox Architects are awaiting funding before proceeding with the design of a new federal courthouse in Corpus Christi, Texas. The GSA has identified but not purchased a site in the central business district, overlooking Corpus Christi Bay.

From Medford, Oregon, to Portland, Maine, another 111 cities and localities in need of new courts facilities have been identified by the GSA. Architects for these projects will be selected when Congress approves funds.

Federal Buildings and Campuses

New federal
office buildings
and laboratories adopt
private-sector
models of
design and
construction.

he current wave of federal office and laboratory buildings is a far cry from the government's old standard of boring bureaucratic boxes. That fact alone should further the General Services Administration's ultimate goal to recruit talented employees and improve the rate at which they remain in public service. "I'd hate to be judged by the government buildings of 10 to 15 years ago," says William Hellmuth, principal of Hellmuth, Obata & Kassabaum (HOK). "Now it's not just a question of dollars and cents, but good design and quality-of-life issues, too."

Placing a premium on quality design is not a new phenomenon at the GSA, but it has gained momentum quickly. In 1985, the agency launched a pilot program to raise the level of federal design that targeted five federal office buildings, including retrofits in Dallas and St. Louis and new buildings in Long Beach, California; Overland, Missouri; and Portland, Oregon. Each site had the ideal scope and tenant mix to reap dividends from new office technologies. "The motivation was to create a quality environment consistent with private-sector workplaces," explains Edward Feiner, chief architect of the GSA's Public Buildings Service.

One of the new buildings was Portland's 1987 Bonneville Power Administration Headquarters, designed by Zimmer Gunsul Frasca Partnership. The Bonneville headquarters was among the first government buildings to be called "intelligent," with its mechanical, electrical, and security systems integrated through central controls.

The experience gained from the five prototypes, and information gathered from post-occupancy evaluations, helped the GSA set standards and establish procedures that formed the basis for the projects





Sophisticated building systems and public amenities elevate the federal government's latest crop of office buildings and research campuses for an increasingly specialized workforce.

Federal Building Chronology



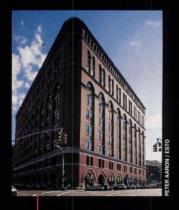
1748

Independence Hall
Philadelphia, Pennsylvania
Andrew Hamilton with
Edmund Wooley, Architects



1834

Old Stock Exchange Philadelphia, Pennsylvania William Strickland, Architect



1899

Federal Archives Building New York City Willoughby Edbrooke, Architect



1907

U.S. Custom House New York City Cass Gilbert, Architect

on these pages. They represent the close to 200 projects moving through the GSA pipeline—a building boom generated by the desire to move federal agencies out of leased space or to house more specialized functions such as laboratories.

Today. Feiner points to the GSA Federal Building in downtown Oakland, California, completed in 1992, as one of the first to benefit from the pilot program. The building features raised access floors for computers, energy conservation measures, quality finishes, and a leasing depth that permits natural lighting throughout the offices. "Even the bathrooms are first-class," boasts Feiner. "You can't tell if you're in a building done by Gerald Hines or by the GSA."

Feincr's goal is to create a "first-class commercial equivalent" for federal office buildings, a standard he acknowledges to be inappropriate for a federal courthouse. The GSA worked hard to produce a good building in Oakland, according to David Hobstetter of San Francisco's Kaplan McLaughlin Diaz, principal-in-charge of the project. "The GSA was great on this project—speaking both as an architect and as a taxpayer," Hobstetter reports. "They gave us an articulate project goal statement to work from, and we were required to create a program document that was very comprehensive—not just square footages, but qualitative statements."

Much importance was placed on studying the life-cycle costs of building systems and materials, notes Hobstetter. He also applauds the GSA for directing Kaplan McLaughlin Diaz to examine three different options in terms of massing, size of floor plate, and urban context. "They gave us the opportunity to use the talents that architects are trained to use," he explains. "Plus, we were able to take the experience from that project and make recommendations to other governments at the state and local levels."

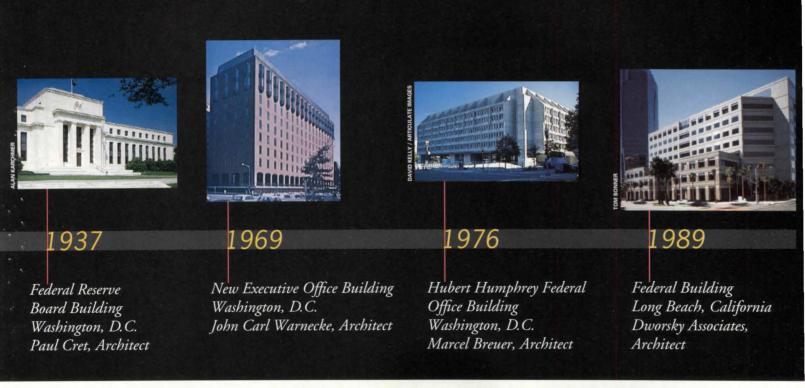
Outside the nation's cities, in places from Martinsburg, West Virginia, to Menlo Park, California, the GSA is building what Feiner calls "first-class corporate parks"—new office and laboratory buildings on suburban tracts. One of the largest of these, a \$471 million campus for the Food and Drug Administration (FDA), is being planned for the vacated 384-acre White Oak naval weapons systems center in suburban Maryland. The 2 millionsquare-foot complex, for which Kling, Lindquist Partnership and RTKL Associates were selected in November 1994, will include three FDA laboratories and an office building for 1,800 workers. Site arrangements are being finalized, and the project is currently funded through design.

The FDA is also planning a \$45 million animal-research facility on a 100-acre Maryland site, and has funds for an \$85 million food-safety lab that may be built on the same campus or nearby. Kallmann McKinnell & Wood was selected as the architect for the food-safety lab from a shortlist that included HOK, CUH2A of Princeton, Bohlin Cywinski Jackson, and the Hillier Group.

HOK is currently involved in two similar projects, including a research and administration building for the Environmental Protection Agency (EPA) at Research Triangle Park in North Carolina. The facility is sited to minimize disruption of the natural habitat. Eight discrete buildings are combined into a mini-campus on the 132-acre site, much of which will be landscaped with ornamental grasses instead of manicured lawns.

Because the client agency is the EPA, the project forced HOK to increase its expertise in sustainable design (ARCHITECTURE, July 1995, pages 121-127). The EPA stressed the importance of daylighting, and HOK's internal research produced a list of nontoxic, "green" materials that the firm is beginning to apply to other projects.

Whether a project is located in the city or outside it, the government's decision-making process follows the same course. And that procedure, architects agree, is very different from what they experience in the private sector: "Designing for the government requires much more consensus-building," according to Hellmuth. Although the GSA commissions the building and orchestrates the design and construction process, the tenant agency has a legitimate say in the outcome. Hellmuth adds, "Then there's always the unnamed players—the budget and Congress. They are not players that show up at the table, but they are always present. The government cannot afford to build buildings that are even perceived as being extreme in budget."



The advent of peer review for GSA projects has been praised by architects, who believe that the procedure lets good ideas evolve and hamstrings the occasional bureaucrat who wants to throw some weight around. "It gives the architect an opportunity to have more muscle in the design of the building," maintains Curt Fentress, principal of C.W. Fentress J.H. Bradburn + Associates, a Denver firm now designing new headquarters for the National Oceanic and Atmospheric Administration (NOAA) in Boulder, Colorado. "It gives the architect more authority, and the federal government and the people who receive these buildings are getting a better product."

Review by a peer group of architects helped focus HOK's design for the U.S. Secret Service Headquarters in Washington, D.C. Presented with three schemes, the review panel lauded the floor plan of one but favored the overall character of another. In the end, the best characteristics of both were incorporated. "Good criticism improves a building," admits HOK Principal Gyo Obata, who spearheaded the project.

Design review of the NOAA Headquarters by both federal agencies and community groups gave Fentress more latitude, he claims, in determining the building's organization, siting, and elevation. He lobbied against the first site he was given, and after coming to Colorado for a look, Feiner agreed. The original site was too close to a residential neighborhood and would have blocked mountain

views. "Moving the building higher up on the site made negotiations with the community much easier." Fentress recalls.

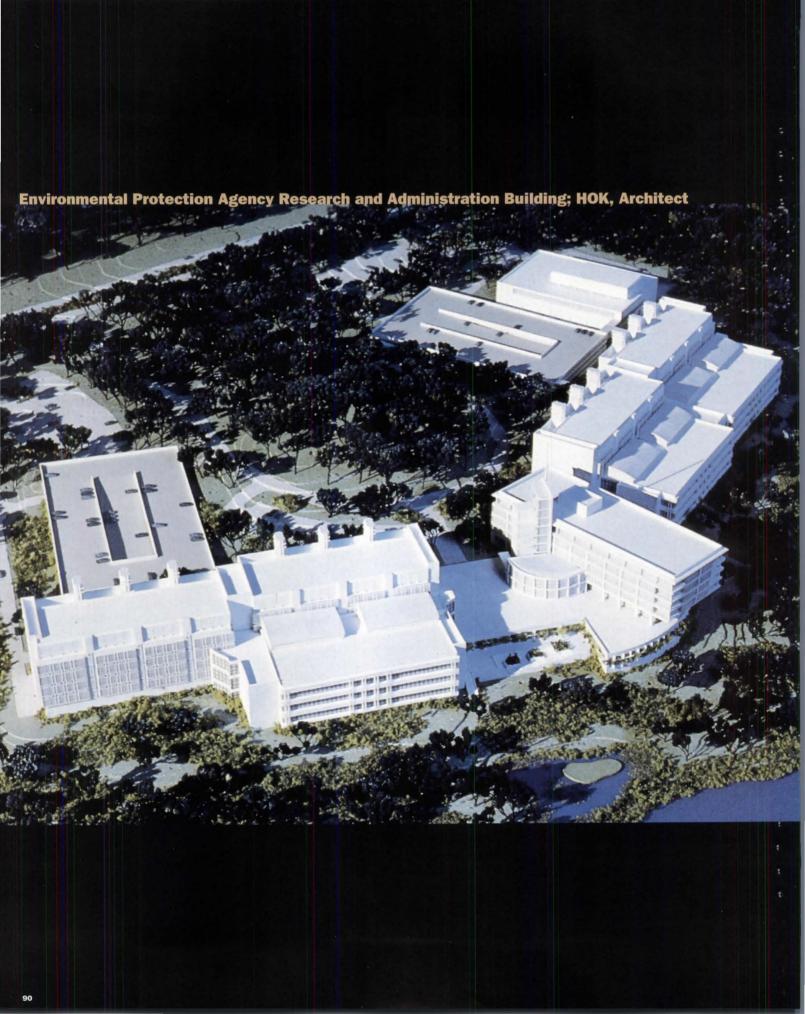
Image was important for NOAA—as it is for most new GSA projects, according to Feiner, who helped revise the agency's design manual in the early 1980s. "Up until that point, there was no discussion of image. The manual told you what kind of hardware to use and how many elevators to put in, but there was no mention of design philosophy." Now, discussions of image begin at the selection interview. Even in their portfolios, architects must elaborate on their design philosophy and how it will affect a given project.

As for public accessibility, no one has walked into a more prickly situation than landscape architect Martha Schwartz of Cambridge, Massachusetts, who was hired by the GSA to revamp the Jacob Javits Plaza in Manhattan. Bounded by the Jacob Javits Federal Office Building and Court of International Trade, this public space was formerly occupied by Richard Serra's controversial "Tilted Arc," an unpopular, mammoth sculpture. Despite the brouhaha over "Tilted Arc," which was eventually dismantled, Schwartz claims no one presented a set agenda before she started to design. "I think I was chosen because my work is accessibleit can be grasped by a lot of people in a lot of ways. Having said that, it was made very clear to me who used the plaza and how it functioned. I gave the office workers a nice place to have lunch."

If today's architects are critical of earlier generations of federal buildings, one wonders how this crop of GSA buildings will stand up to criticism 20 years hence. For even the best of intentions, buttressed by thoughtful procedures, can't necessarily overcome the limitations of tight budgets. The newest government offices and laboratories are a cut below the new federal courthouses (pages 64-85, this issue). In materials and detailing, they resemble generic commercial buildings, lacking the monumentality, civic presence, and sense of permanence that characterize the best federal architecture. And, burdened by programs that often house different agencies with varying needs, these buildings have a tendency to appear more like functional agglomerations than tightly knit designs.

Yet the consensus among the designers of these buildings is that the GSA has been both responsible and responsive in its approach. "In general, the product is terrific," says Charles Alexander, a project manager at Kohn Pedersen Fox. "The public will be getting value for the dollar."

That value is important, since the current crop of federal complexes must be built to last. With government in a consolidating mode, "the days of federal office buildings are past," Feiner reports. "We are not programming any new ones." Instead, the GSA's focus is shifting toward specialized facilities, such as laboratories, which means there will be more emphasis in the near future on suburban and rural sites.—Vernon Mays



he proposed facility for the Environmental Protection Agency in Research Triangle Park, North Carolina (facing page), represents the GSA's new wave of office-park-style developments.

Designed by HOK, the 1.1 million-square-foot complex is divided into four laboratory blocks and three office blocks, linked by atriums, and organized around an administration building. Interior finishes are being developed with a focus on recycled and energy-efficient materials.

Segmented to reduce its visual impact, the National Oceanic and Atmospheric Administration in Boulder, Colorado (page 87), is stepped at the north and south ends to mimic the silhouette of the

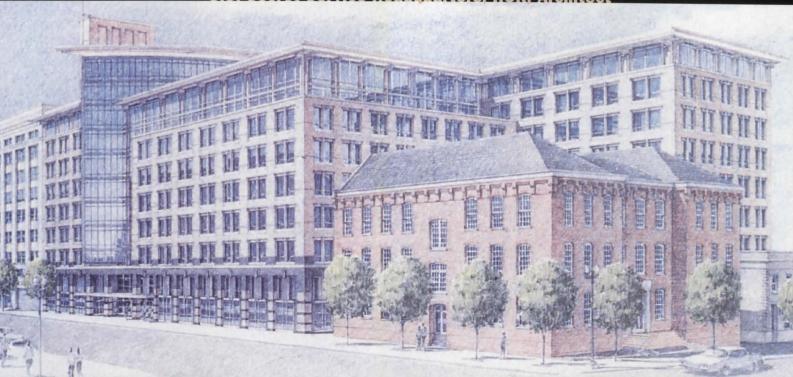
nearby Rocky Mountains. Laboratories and a computer center occupy the central segments; offices line the perimeter. Because the site is adjacent to residential neighborhoods, the design underwent a lengthy community review. C.W. Fentress J.H. Bradburn + Associates of Denver strived to maintain a natural, open character by placing most of the built elements above a former irrigation ditch, which was then landscaped with native vegetation.

The new U.S. Secret Service Headquarters (below) in Washington, D.C., required intensive programming. In response to Design Excellence reviews, HOK reduced the building's massing to defer to an adjacent historic brick building on the site.

The 346,000-square-foot building includes raised flooring; 68,000 square feet of laboratories; and a curved atrium that pierces the street facade.

Suburban site constraints greeted Kohn Pedersen Fox and HNTB, architects of the new Internal Revenue Service Headquarters in New Carrollton, Maryland (bottom). Dividing the 885,000-square-foot building into three discrete structures helped it blend into the suburban landscape. The trio of buildings, laid out in a sweeping curve, are linked by pedestrian bridges. The configuration maximizes open space while creating a public plaza, the first of many public gestures outlined in plans for the city's transit district.

U.S. Secret Service Headquarters: HOK. Architect



Internal Revenue Service Headquarters; KPF and HNTB. Architects



edicated in May 1994, the National Archives II preservation and research facility (below left) in College Park, Maryland, relieves overcrowding and consolidates collections currently in temporary storage. Equipped with advanced pollution and environment controls, the building includes acclimatization rooms to protect archival material from humidity shock when moved from storage. Designed in a joint venture by the Washington, D.C., offices of HOK and Ellerbe Becket, the building includes employee amenities such as a child-care center, cafeteria, parking garage, fitness center, and lounges.

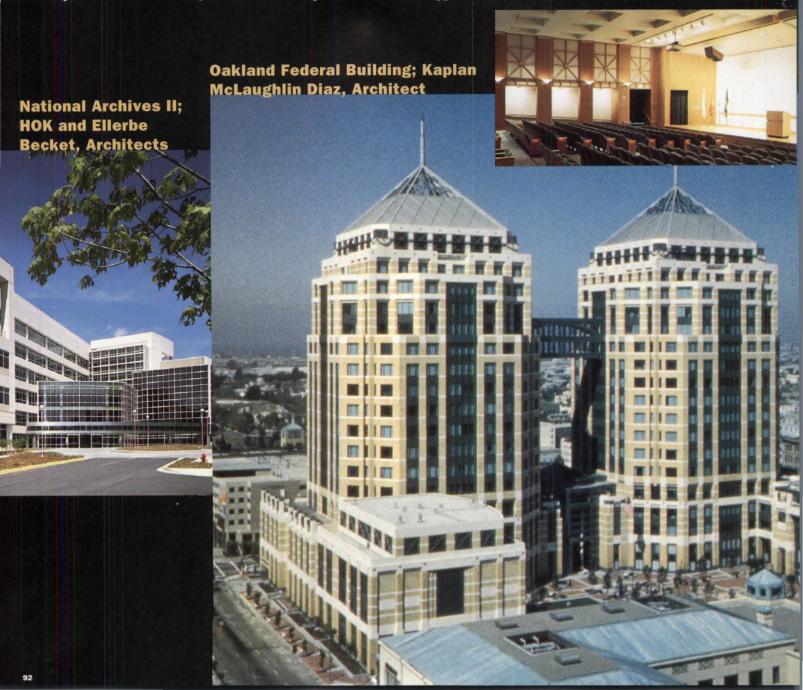
Oakland, California's GSA Federal Building (right and inset) is a key component in plans to revitalize the city's downtown. The 1 million-square-foot project, designed by Kaplan McLaughlin Diaz of San Francisco and dedicated in 1992, is divided into a pair of 18-story towers linked by a glazed bridge at the 13th and 14th floors. A 75-foot-high glass rotunda provides access to the two towers' lobbies.

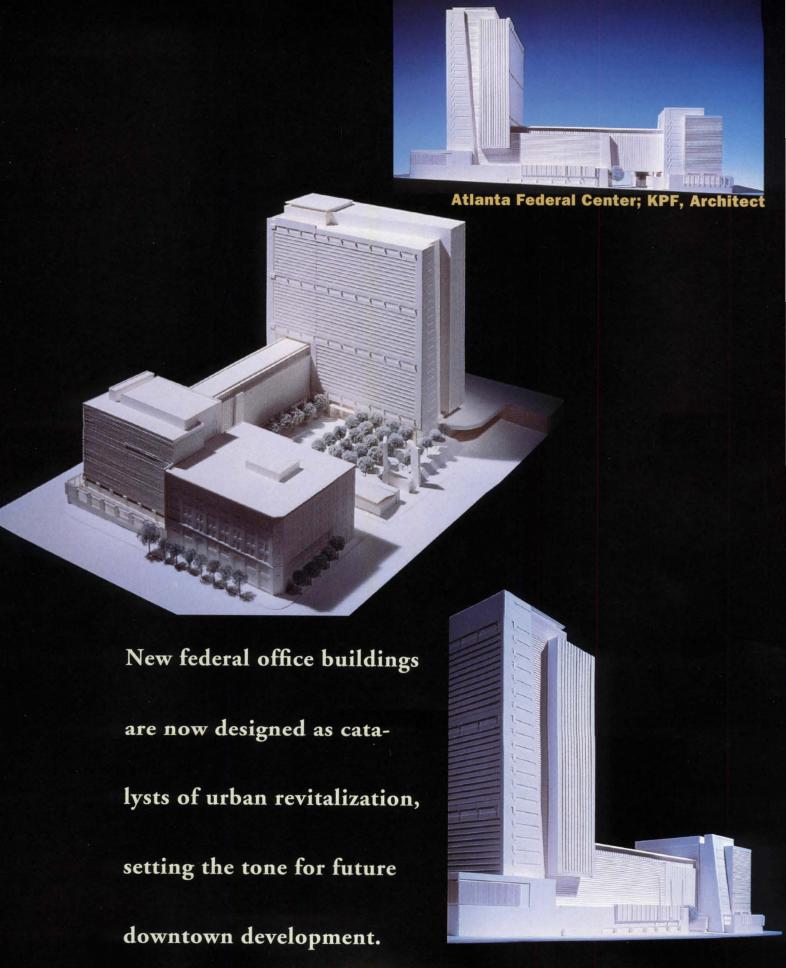
The twin-tower scheme creates an urban gateway to Oakland's high-rise district, while dividing the mammoth program into pieces that better fit its urban context. Separate from the tower, two wings, one containing a courthouse and the other a conference center, establish opposite edges of a new 1-acre public plaza.

The Atlanta Federal Center (facing page) by Kohn Pedersen Fox will include office space for the EPA and approximately

20 other agencies. Also included are a conference center, child-care center, cafeteria, and fitness facilities—1.7 million square feet of space in all—on a downtown site that incorporates the 1924 Rich's Department Store, a local historic landmark.

Now under construction, the complex comprises a 24-story office tower, a 1,600-car parking garage at its base, and a 10-story office building to the east. Linking the two largest structures is a six-story bridge, containing additional offices, that spans a downtown street. All the elements are organized campus style around a 1-acre public green. The project is being financed by city bonds, and the GSA will lease the complex for 27 years, with the option to assume ownership when the lease expires.

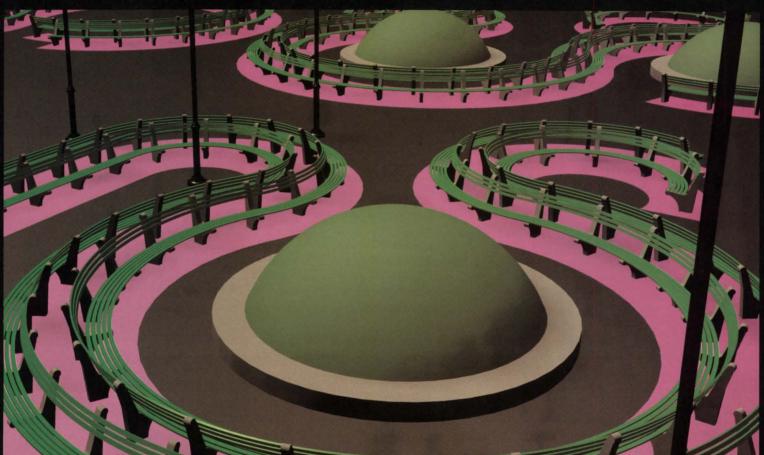












Jacob Javits Plaza; Martha Schwartz, Landscape Architect

Barder Stations

National pride
and regional
sensitivity are
combined in
dozens of new
border stations
built by the federal government
to support trade
and stifle illegal
immigration.

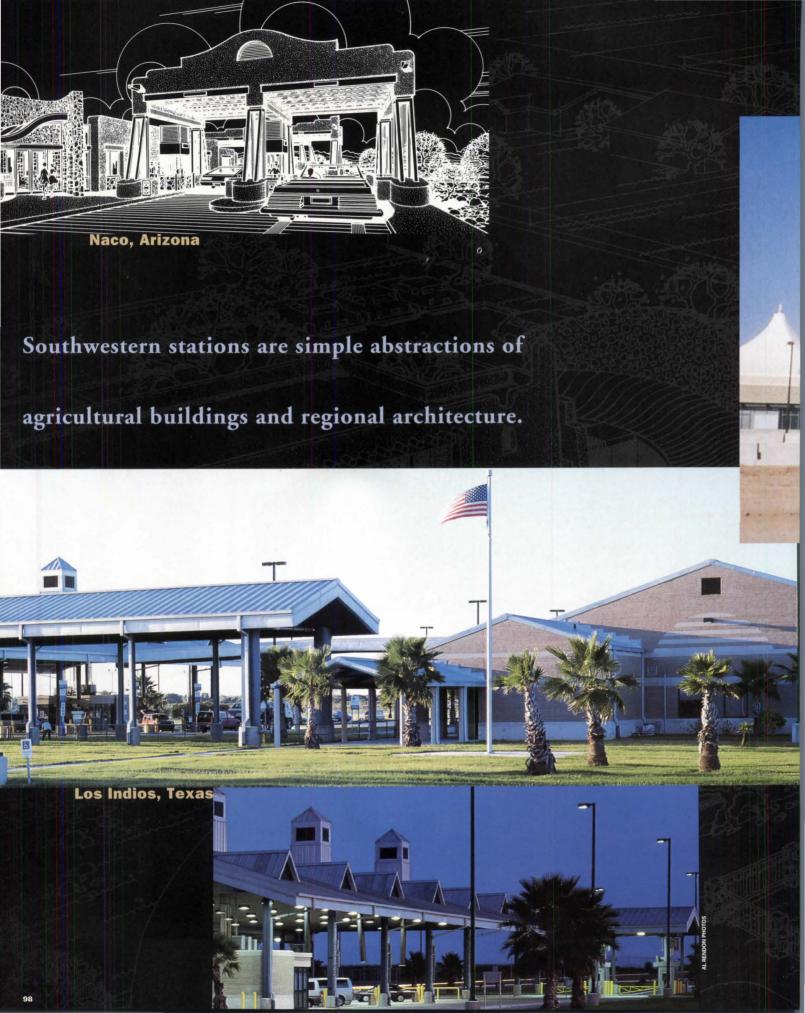
mericans have never agreed on the purpose of their borders: are they internationalist bridges or isolationist walls? In the last decade, the promise of the North American Free Trade Agreement (NAFTA) and the realities of massive illegal immigration have only hardened differences of opinion. Within this context, Congress directed the General Services Administration (GSA) in 1988 to begin a \$353 million upgrade, called the Southwest Border Initiative, of more than 50 stations along the United States-Mexico border, to include the design and construction of 16 new crossing facilities. Six others have been built on the United States-Canada border.

The expanded border presence is intended both to stifle illegal immigration and support the increased traffic generated by NAFTA. Moreover, border stations serve as a localized home for the U.S. Customs Service, the Immigration and Naturalization Service, the U.S. Department of Agriculture, and a range of other agencies such as the Drug Enforcement Agency. The stations must be designed for workers to process large numbers of international travelers, reviewing paperwork as well as cargo. Larger stations, such as the facility at San Ysidro, California, may document up to 24,000 people per day. And when finished, the expanded station at Calexico, California, will be able to process more than 250,000 trucks annually.

These program requirements are what make border stations—even small ones—architecturally challenging. The GSA's design guidelines for the buildings, driven by the competing requirements of security, trade, and national image, seem contradictory. Architects are







Calexico, California



Sensitive to the desert climate, Calexico's village of tents is one of the most innovative of the newly completed border facilities.



directed that stations "should express a cordial welcome," yet should also reflect "serious law enforcement functions." These buildings, often a visitor's first encounter with the U.S. government, play an important ambassadorial role, and GSA expects the facilities to convey "the permanence, strength, dignity [and] good will...which befit a great democratic nation." At 300-plus pages, the agency's guidelines are extensive, covering everything from site development to signage.

The guidelines reflect an attempt to prod both bureaucrats and architects into producing higher-quality architecture. Architects for the stations are selected through an RFP process involving the GSA and other agencies. "The alternative was a cookie-cutter approach to border stations," GSA Chief Architect Edward Feiner explains.

GSA wanted buildings to reflect the unique regional characteristics of each site. Not surprisingly, the new projects demonstrate admirable design diversity and earnest intentions. They are generally conservative, however, ducking the dynamism and controversy that characterize American culture.

Many of the stations evince a strong sympathy for regional precedent. DWL Architects' expansion and remodeling of the Naco, Arizona, station attempts to maintain the Pueblo character of the original 1936 building, but the architect also updates the structure with steel columns and a copper-canopied, serpentine wall routing pedestrians

through the station. The wall is an unfortunate choice to represent open borders, and the flat detailing and scale of the addition suffer in comparison to the more richly articulated original.

More architecturally satisfying is the station at Los Indios, Texas, sited southwest of San Antonio along the Rio Grande. Recently completed by San Antonio architect Kell Muñoz Wigodsky, the building's light, open-air inspection pavilions are simple abstractions of local agricultural precedents. At the Pharr, Texas, point of entry by Marmon Mok Architects, barrel-vaulted forms and a curving entry are more difficult to claim as vernacular forms, but the station incorporates regionally popular limestone.

The notion of a border station as both a literal and metaphoric bridge is the inspiration for several recent designs. Locked in a congested industrial quarter, the new entry port at International Falls, Minnesota, designed by Architectural Resources, is decidedly different from that of its bucolic southern counterparts. An unabashed exercise in flag-waving, the red, white, and blue facility heaves its offices above the site (rendered all but unusable by 11 easements), bridging its own inspection stations below.

Hardy Holzman Pfeiffer Associates (HHPA) have also proposed a bridge for their renovation and expansion of the Rainbow Bridge station at New York's Niagara Falls. Echoing the horseshoe trace of the falls, HHPA lifts a sweeping

arc of glass-and-steel-wrapped offices above the inspection stations (above), oriented in an embracing gesture with the concave side facing Canada.

The best of the completed facilities is Dworsky Associates' new Calexico station, located 120 miles east of San Diego. The Los Angeles architect ties together two modest, concrete-block office buildings with a glazed lobby filled with light from a Teflon-coated, glass-fiber canopy. A subtle analogue of the U.S.-Mexico relationship, the north-and-south-oriented lobby offers views to both countries.

A number of other stations are also under design or construction, including facilities at Brownsville, Texas (Las Tomates station by Ford, Powell & Carson of San Antonio); Nogales, Arizona (Grand Avenue station by CNWC Architects of Tucson); Tecate, California (Fields Devereaux of Los Angeles); Pembina, North Dakota (Schoen Associates of Grand Forks); Point Roberts, Washington (Miller Hull Partnership of Seattle); and Highgate Springs, Vermont (Truex deGroot Cullins Architects of Burlington). Those funded by the Southwest Border Initiative will proceed, reflecting the higher volume of NAFTA-related traffic to the south, as well as political pressures inflamed by illegal immigration. The fate of others is less certain. While all the designs suggest a more sophisticated view of transnational relations, whether that suggestion will become a reality remains to be seen .- Reed Kroloff

The Southwest Border Initiative will spend \$350 million to upgrade more than 50 facilities and

Pharr, Texas



Construct 16 new stations on the 1,600-mile-long
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increased by NAFTA, tourism, and immigration.

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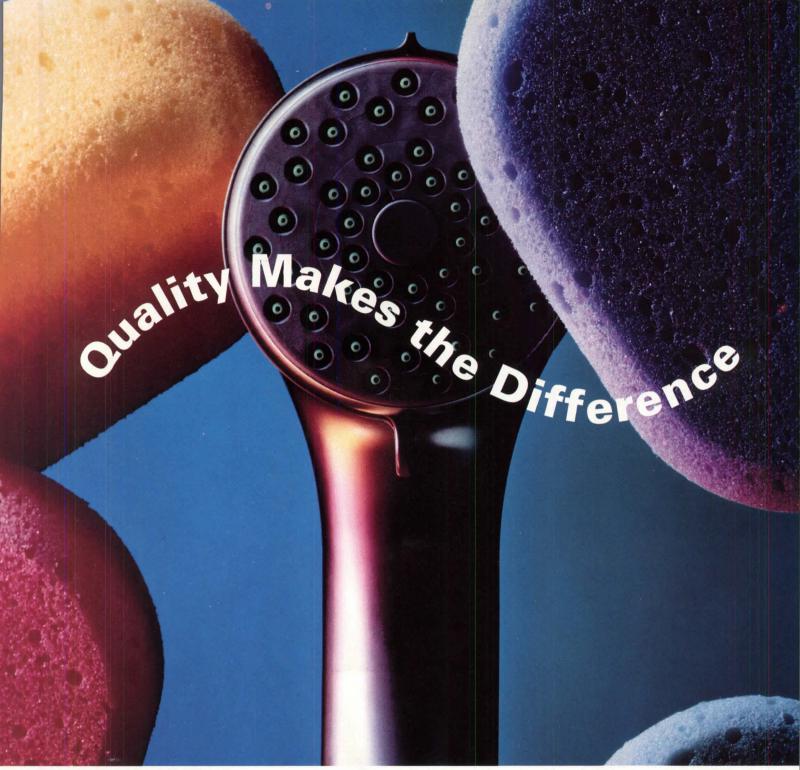
ncle Sam has become a more challenging client than ever before, as this month's Technology & Practice section shows. An in-depth look at a competition to design the new federal courthouse in Beckley, West Virginia (above), examines the newest architect selection process undertaken by the General Services Administration (GSA) as part of its Design Excellence Program.

Under Design Excellence, proposed designs of new courthouses and federal buildings are reviewed by volunteer "peer" architects, who critique the schemes' quality and value for the GSA. Our roundtable of 16 peers takes stock of the successes—and failures—of this review process.

This month's residential feature highlights the new thinking behind another type of government building—U.S. ambassadorial residences. In designing such national symbols, the State Department is moving away from Neoclassical mansions and imperialist towers toward regional forms derived from host countries.

On home turf, the security of government buildings is under renewed scrutiny in the wake of last year's bombing of the Alfred P. Murrah Federal Building in Oklahoma City. As our technology article explains, today's safety measures emphasize seamless architectural barriers over high-tech surveillance.

High tech, however, has its place in government planning, as our computer feature illustrates. Architects can now take advantage of new software from the U.S. Department of Housing and Urban Development. This electronic package coordinates demographic and economic data with regional maps to help cities plan their growth and development.



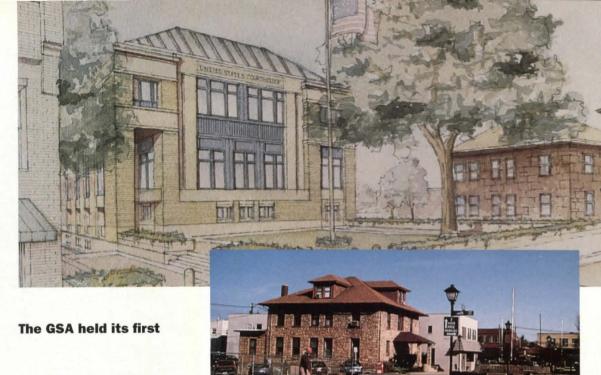


instantly. And, the integrated shower arm design of Relexa Plus shower heads creates a wide range of shower positioning options. Add to these innovations multiple spray functions and the new integrated $Grohclick^{TM}$ snap coupling. Experience GROHE...Ultimate Quality, Timeless Design.





Practice



design competition for

Federal Courthouse Competition

a new courthouse and

federal office building

in West Virginia—with

surprising results.

Beckley, West Virginia—a quiet town of 20,000 in the heart of Appalachian coal country—is hardly a hotbed of cutting-edge design. More than five decades have passed since the last major government building was constructed downtown, and the nearest architecture school is more than an hour's drive away.

But despite its relatively remote setting, Beckley has been selected as the demonstration site for a national project aimed at improving federal architecture. The U.S. General Services Administration (GSA) is planning a \$27 million building to house Internal Revenue Service (IRS) offices and a courthouse for Beckley's U.S. District Court. Instead of hiring architects through the normal procurement processes, the agency sponsored a limited design competition open to firms practicing within 300 miles of the construction site. This competition is the first in the country held under the auspices of the GSA's Design Excellence Program, launched in January 1994 to improve the way the government hires architects and designs buildings. If the process works well, officials say—and so far it has gone smoothly—it could be a prototype for similar competitions around the country.

The 183,000-square-foot building will be constructed on a vacant site near the center of Beckley, and will bring

ABOVE: Winning scheme by Robert A.M. Stern and Einhorn Yaffee Prescott (top) combines Classicism with hipped roof echoing existing building (inset).



ROBERT A.M. STERN ARCHITECTS EINHORN YAFFEE PRESCOTT GSA ranking: 1 Jury ranking: 1

The entry by Stern/EYP is the simplest and most straightforward: an L-shaped plan with IRS offices on the west, courts on the east, and a civic lobby in between. A pedestrian arcade along the building's south side extends Main Street into the center of the site.

Rigidly rectilinear, the building's wings did not align with any nearby streets or buildings. After the competition, on the jurors' recommendation, Stern and EYP made the wings more distinct from one another, aligned them with the existing fabric, and refined the building's traditional vocabulary, which was praised by the jury for striking the right chord for Beckley—neither too modest nor too grandiose.

Jury comments

Patricia Conway: I was convinced by the coherence and the logic of the plan, although I was initially disappointed by the facades. W. Cecil Steward: The designer has given us great comfort in his ability to handle adjacencies, proper zoning, simplified circulation patterns, and respect for the public. Robert Campbell: Its stripped, Classical quality-what we've been calling a WPA style—is an extremely successful solution to making a public building that looks like a public building, yet does not aspire to excessive grandeur.



more than 250 federal employees to the urban core from outlying areas—an unprecedented boost for the former mining community. Now in the construction-document phase, the building is tentatively slated to break ground in spring of 1997.

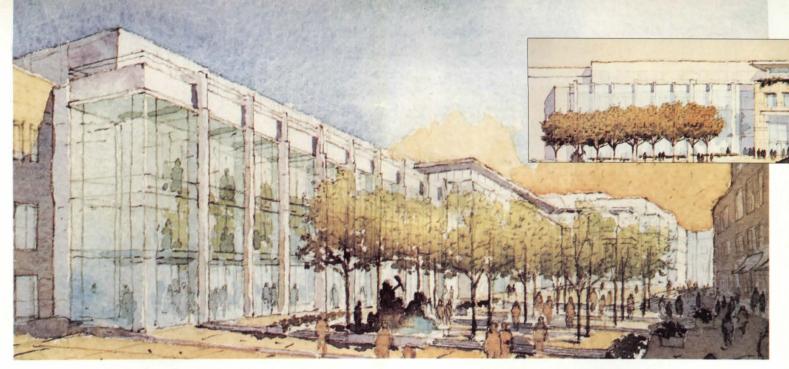
Beckley became the site for the national pilot because the project was considered to be in the right price range for a limited competition—\$25 million to \$30 million—and the program called for both general office space and the district court. That scale and mixture of functions, plus the project's potential to revive the town economically, made it an ideal candidate for GSA's Design Excellence Program. Explains Edward Feiner, chief architect of the GSA's Public Buildings Service, "It was the right size and came up at the right time."

The announcement of the competition, published in March 1994 in the *Commerce Business Daily*, stated that the design should be "an expression of the American architectural tradition (fresh and appropriate), and a visual testimony to the dignity, enterprise, vigor, and stability of the American govern-

ment and the federal judiciary." To identify an architect-engineer team, GSA launched a two-stage selection process. In the initial phase, 32 candidates submitted design portfolios for consideration. The GSA's in-house analysts whittled the list down to four finalists, who were each given 35 days and a \$20,000 stipend to prepare a preliminary design. Under the GSA's rules, the lead designer and entire project team had to have a "principal" office located within 500 kilometers (312 miles) of Beckley.

Not surprisingly, three of the finalists were from Washington, D.C.—Shalom Baranes Associates; Spillis Candela/Warnecke; and Einhorn Yaffee Prescott (EYP), which teamed up with Robert A.M. Stern Architects. The fourth team was Myers Associates Architects, a small firm from Medina, Ohio.

During the portfolio review phase, a ninemember panel of GSA architects, engineers, and program specialists determined that the Ohio firm, founded in 1972 by Merle Myers, could provide the "appropriate balance of talent" to the larger metropolitan firms. The panel believed that Myers's enthusiasm,



FACING PAGE, TOP AND INSET: Courts and IRS offices are joined by loggias in Stern/EYP's scheme.

FACING PAGE, RIGHT: Loggia forms civic lobby to building.

FACING PAGE, SITE PLAN: Jurors preferred Stern's L-shaped plan for its simple organization and circulation.

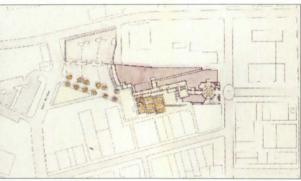
ABOVE AND INSET: South-facing, glazed galleria fronts midblock courtyard of scheme by Baranes.

SITE PLAN: Courthouse attempts to resolve angled street grid.

sincerity, and ability to capture "the local flavor" of a small town would make it a good choice for a place such as Beckley.

However, reviewers Jill Shafer and Bob Theel, both registered architects with the GSA, expressed reservations about the design and production team of Robert Stern and EYP. According to an internal memo summarizing the deliberations, they were concerned about architect Stern's "overbearing personality" and "compatibility to Beckley." A nonvoting advisor, Kevin Kelly, senior architect for the GSA's central office, also lobbied against the Stern/EYP team.

"[Stern] is well known and does attractive, if somewhat derivative, design," Kelly allowed, but "the nature of this project, with its many players, seems a fundamentally different milieu than the type in which the 'star' architect is accustomed to work-for instance, on a country home or prep-school library." However, the team of EYP and Stern received seven of nine first-place votes and high praise for its past work from other reviewers, so it was added to the shortlist despite Shafer, Theel, and Kelly's objections.



Each finalist was asked to submit four presentation boards with plans, sections, elevations, and a design narrative of up to 500 words. The submissions were reviewed anonymously by an independent professional jury, formed by GSA in cooperation with the National Endowment for the Arts. The jurors were W. Cecil Steward, FAIA, dean of University of Nebraska's School of Architecture; Patricia Conway, professor of architecture, University of Pennsylvania's Graduate School of Fine Arts; and Robert Campbell, architecture critic of The Boston Globe.

The jurors and competitors were told that the GSA wanted a facility that "encourages the positive perception of the federal government," exemplifies "innovation in design," stimulates economic growth and use of the city, and responds to Beckley's urban design character. The GSA also wanted the building to be energy-efficient, cost-effective, and flexible enough to accommodate expansion.

The key factor in selecting the winner turned out to be the site, a trapezoidal parcel hemmed in on two sides by a mixture of older commercial and government buildings. **SHALOM BARANES** GSA ranking: 2 Jury ranking: 3 (tie)

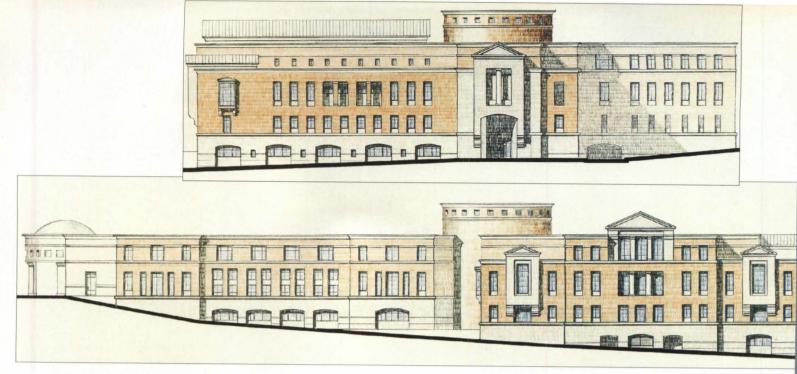
The most compact of the four, this design filled only the east side of the site, leaving the west side for a parking deck. A four-story rotunda was proposed to provide access to the IRS offices and the courts. The rotunda would be linked to a landscaped outdoor courtyard.

The plan drew criticism from the GSA's technical advisors, who cited flaws in room-to-room adjacencies, elevator location, and other design decisions, but its compactness intrigued the jurors. Shalom Baranes said the building could establish a "dignified but gentle" federal presence in Beckley, where the courts and IRS would operate in an "open but secure environment."

Jury comments

Steward: It does have some serious architectural problems, but it also has potential for drama and surprise. I'm most impressed with the site planning and compact circulation. Conway: The project gets dammed up on half the site. By stopping it [halfway], the only pedestrian reward is the experience of parking—such an anti-urban gesture.

Campbell: This is the best response to context. I don't agree that the circulation is so clear. There's a great deal of meaningless distortion of the shapes of spaces all around the rotunda, which I find disturbing enough to undermine my confidence in this architect.



MYERS ASSOCIATES ARCHITECTS GSA ranking: 3 Jury ranking: 3 (tie)

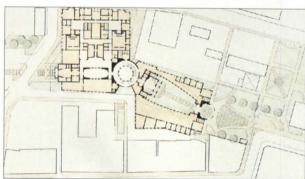
Architectural details and materials, such as stone and brick, reflect Beckley's vernacular styles. Myers's was the only proposal to locate the court on the west side and the IRS offices on the east—a decision that drew negative reactions from all three jurors, who believed the courthouse would be a more dignified terminus for Main Street.

The two sides are linked by a central entry pavilion, and a public green was extended onto the property. In plan, the building contains a well-defined sequence of spaces transitioning from public to private areas. The largest public space is a four-story rotunda, which provides horizontal and vertical circulation and serves the IRS and courts.

Jury comments

Steward: This is a fortress—very massive and solid. The facades and the scale relationships humanize it somewhat, but it's almost frenetic in its variety—a catalog of archetypes. Conway: This is a scheme that could work, but the architecture would have to be tamed considerably—it's a bit pompous and not particularly appropriate for Beckley. If the plan could be cleaned up a bit, urbanistically this is probably the strongest of the four. Campbell: Placing circulation at the site's center is ingenious, but the exterior architecture is a [collection] of

unrelated formal ideas.



TOP: West elevation of Myers's design is dominated by central rotunda. **ABOVE**: Classical temple motifs punctuate north elevation.

SITE PLAN: Public processional extends between central rotunda and Main Street entrance.

Although it had a large footprint, the site was pinched in the middle, limiting options for pedestrian circulation. Because the fit between the building and the town was of utmost importance to the planners, the team that best solved the urban design issues posed by this irregular site was likely to win the competition. Compelling architectural imagery alone would not be enough.

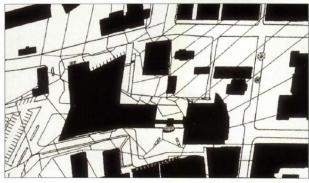
Although the jurors discussed stylistic and circulation issues extensively, they ultimately decided to recommend the one that they believed would best meet the urban design goals, and require the least drastic overhaul to excel architecturally. Their preferred entry came from the team of Stern and EYP, with a traditional design reminiscent of the Works Progress Administration style of 1930s public buildings. The jury also admired the simplicity of the Stern/EYP solution—two buildings forming an L-shaped complex, with distinctive arrival points at each end of the site and a civic plaza that would provide a new focal point for Beckley.

To show how much they supported Stern/ EYP's solution above the others, the jurors designated no second-place winner. Instead, they tied Shalom Baranes and Myers Associates for third place and gave fourth place to Spillis Candela/Warnecke. The GSA amended the jury's decision, awarding second place to Baranes, third to Myers, and fourth to Spillis Candela/Warnecke.

Before adjourning, the jury suggested ways to improve the top-ranked scheme, such as reopening a street that had been closed to traffic and bending the rigid Lshaped plan so that the two wings would conform to the nonrectilinear street grid. Since completing the judging process in August 1994, Stern/EYP's winning scheme has been reduced in size slightly and its proportions modified to allow the IRS and the courthouse more individuality. Exterior walls have been shifted to follow the streets. And other changes have been driven by the GSA's desire to boost security precautions, following the bombing of the Alfred P. Murrah Federal Building in Oklahoma City, including a new lobby configuration with a guard desk; bollards to prevent vehicles from driving onto the property; setbacks from the



ABOVE AND INSET: Curved canopies and awnings mark main entrance of Spillis Candela/Warnecke's judicial wing. SITE PLAN: IRS offices (left) are separated from courts (right) by secure corridor.



street; and an improved structural system, strong enough to withstand a bomb blast.

During a design presentation last November to the Commissioner of Public Buildings Service, GSA representatives and the architectural team warned that the building's budget had not been increased to pay for the security precautions. The architects were concerned about whether they might have to scale back the design, and some GSA officials at the meeting questioned if additional safety precautions were really necessary in a small town such as Beckley.

Stern has been gratified by the government's commitment to quality, which he attributes in part to the building's status as a demonstration project. He remains hopeful that none of the esthetic choices that contribute to the spirit of the structure, including his recommendation to use a cast-stone exterior, will be compromised at the eleventh hour for budgetary reasons. "All of us have been very cautious in making decisions to keep the building intact," he said.

Ultimately, the process worked because the GSA did its homework in setting up the

competition; the jury was well informed and on target with their judgments; the finalists took the effort seriously and presented a wide range of ideas; and at least one solution solved the basic design problems posed by a difficult site. Furthermore, the jurors picked a design that had a good chance of succeeding, and the GSA followed up with suggestions for improving it even more.

Buoyed by the success of this first competition, the GSA has already begun working on others under its Design Excellence initiative. In 1995, the agency helped the State Department sponsor a competition for the new U.S. Embassy in Berlin, and worked with the National Institutes of Health (NIH) to organize a competition to select an architect for a major addition to the NIH complex in Bethesda, Maryland. The next competition, which will be cosponsored by the San Francisco Museum of Modern Art—the \$1 million redesign of a public plaza at the base of a 1960s-era federal office building in San Francisco—will be launched early this year. Others will be announced as the federal budget becomes more certain.—Edward Gunts

SPILLIS CANDELA/WARNECKE GSA ranking: 4 Jury ranking: 4

Spillis Candela/Warnecke locates the IRS building on the west as a distinctly separate entity from the courthouse, a solid masonry form on the east. Punctuated by a largescale portico at the termination of Main Street, the courthouse would feature a two-story picture window for public circulation.

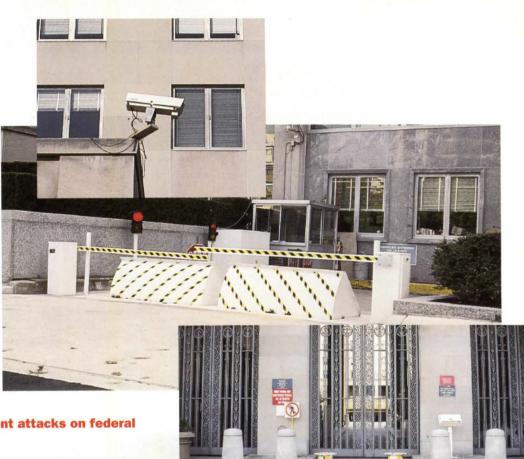
The office building would be linked to the courthouse by a public plaza described by the architects as an outdoor "common lobby." A band shell and raised platform become a focal point for civic events, with the sloping terrain providing casual, stepped amphitheater seating. The inner edge of the neighboring commercial buildings could be developed as an "indoor and outdoor festival marketplace," with the amphitheater serving as a weekday lunchtime destination.

Jury comments

Campbell: The architectural character of this courthouse has the lightness and playfulness of a yacht club or a World's Fair building. It doesn't suggest the dignity, durability, or permanence of government. Conway: I was particularly disturbed by the awkward way in which the circulation pattern and the geometry of the building were left to create almost forgotten triangles. The program, site, architecture, and context have not been brought together.



Technology



Recent attacks on federal

buildings have led architects

Government Building Security

to consider more stringent,

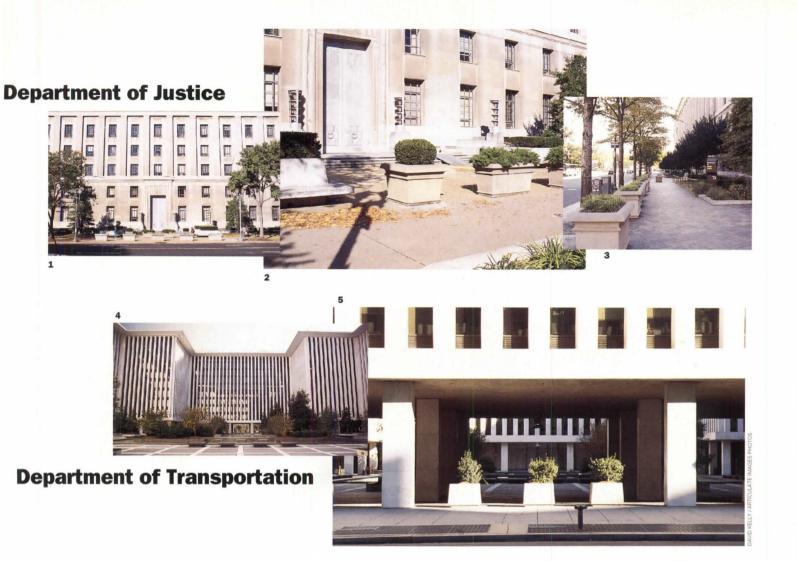
invisible means of deterring

vandals and terrorists.

ast year's bombing of the Alfred P. Murrah ■ Federal Building in Oklahoma City and attacks on the White House spurred serious reconsideration of federal building security. The Department of Justice issued a report in June 1995 recommending new standards for boosting building security, and a directive from President Clinton, also issued in June, charged individual federal agencies to evaluate the security of their facilities. A second executive directive, released in late October, called for the creation of an Interagency Security Committee, whose advisors will oversee the protection of government buildings and national infrastructure.

As symbols of our democracy, government structures must appear open and accessible to the public, yet remain secure. As EDAW President Joe Brown argues, "If you design an American symbol and it

ABOVE: Architects are relying less on applied security systems, such as cameras and barricades installed at the State Department (top and center) and gates guarding the Department of Justice (above).



looks afraid or threatened, surrounded by concrete barriers, you've failed miserably as an architect. You can make buildings look beautiful and still be secure."

Reducing the risk of occupant injury and property damage from terrorist attacks can be achieved through careful site planning and integration of subtle architectural devices-without creating impenetrable bunkers tangled in barbedwire fencing or excessive, obvious electronic surveillance.

Different types of federal buildings, such as embassies, administrative offices, or the U.S. Capitol, present different security requirements. Courthouses, for example, must be secured to prevent firearms from being smuggled into the building. "The threat in justice facilities is more likely to involve exasperated litigants committing isolated acts of spontaneous violence" than terrorist bombings, asserts Todd Phillips, director of professional practice at the AIA. Courthouses must also accommodate public spectators, requiring the installation of metal detectors and routine X-ray screening. Embassies have more limited public access, but are still highly visible national symbols in need of protection.

Whatever the building type, architects involved in security upgrades should first determine the building's potential risks and how much security is appropriate. "You've got to establish what the threat is, what you want to do to make yourself feel comfortable, and what level of assurance you can live with," explains Principal Stuart L. Knoop of Oudens + Knoop Architects in Chevy Chase, Maryland, whose firm has upgraded security in U.S. embassies worldwide for the State Department's Foreign Buildings Operations. While it's important to discern the primary threat to a building, a security plan should not ignore other potential dangers.

"You're not designing security for

just one type of threat, but you're also not designing for every possible threat," points out EDAW's Brown.

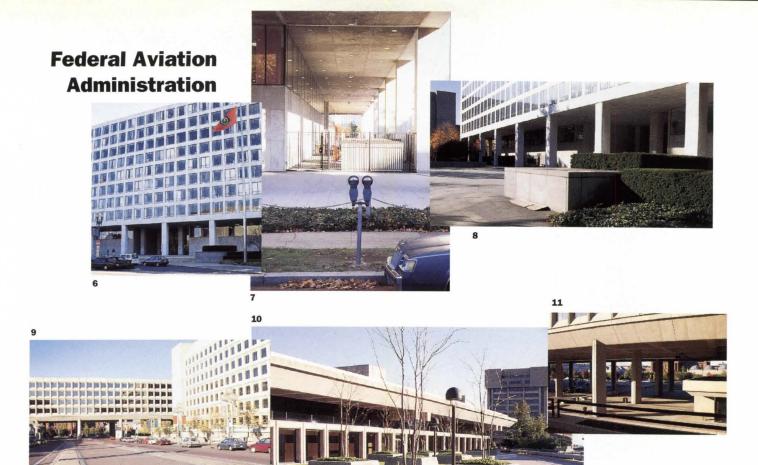
In boosting an existing building's security, architects must determine whether to conceal new security devices, or to visually emphasize them as a deterrent to attack. Some conspicuous security measures are unavoidable, but in most cases, security should be invisible. "Many times, the ad hoc securing of a building with increased guards or concrete barriers doesn't make for a secure building," explains Brown. Such impromptu or tacked-on devices can actually attract terrorism, he asserts, because they draw attention to the inevitable gaps in a building's line of defense. Hiding devices from view usually proves a safer and more cost-effective strategy.

The site boundary is a building's first line of defense against terrorists. Experts claim that most security threats can be reduced simply by establishing a safe distance from the

street. The Omnibus Diplomatic Security Act of 1986, for example, increased security measures at State Department facilities worldwide and mandated a 100-foot standoff distance for its buildings. This distance is not always possible for those buildings on tight urban sites. But Brown and other experts agree that even a 50-foot setback is enough to prevent serious bomb damage.

Other site strategies include locating parking further away, limiting the number of entrances and controlling their access, and installing bollards and planters around the site perimeter. Bollards can be cleverly integrated within columns or even concealed within plantings, as Davis, Brody & Associates has proposed for a security upgrade of the terrorist-torn World Trade Center in lower Manhattan.

A building's structural system also affects its ability to withstand an explosion. In the Oklahoma City bombing, much of the destruction



Department of Energy

was caused by floor slabs, supported by concrete beam spans, being forced up by the blast and collapsing on themselves. Architects speculate that damage would have been less if the Murrah building had been constructed of a denser, stiffer structure with more columns and shorter beam spans. In comparison, the World Trade Center's structural redundancy is thought to have prevented serious damage from the February 1993 bomb set off in a parking garage beneath the twin towers.

Security experts, however, don't advocate significant changes to building materials to improve safety. One measure that has been installed in numerous government buildings-to mixed reviews-is the application of mylar film over windows, which helps keep shattered glass from spraying over a large area. According to bomb expert Ronald Massa, glass is the second major cause of death and injury in a blast, after structural collapse. But architects have found that mylar overlays must be frequently replaced.

Massa has developed a computer tool, called BombCAD, that can be used to predict the damage to a building's structure and infill-for example, which walls and windows will be destroyed, and which columns will suffer structural damage. It can also predict areas with potentially high fatality rates for occupants. Massa is currently modeling the Murrah building in Oklahoma City, and will compare the results of the computer model to surveys of the actual damage.

Architecture alone can't supplant the protection afforded by surveillance cameras, metal detectors, X-ray machines, and guards or police. But architects should avoid overdependence on such technology, and be more proactive in integrating security measures into federal buildings in a seamless, invisible manner. Brown emphasizes the importance of these measures: "You

can't isolate security considerations from design quality. If security measures become obtrusive, people will grow tired and won't use them, and then the building becomes vulnerable."—Raul A. Barreneche

For more information

"Protecting Buildings from Bomb Damage," a new study published by the National Research Council, recommends adopting the military's strategies for blast resistance and tailoring them to civilian buildings. An older publication released by the Council in 1988, "The Protection of Federal Office Buildings Against Terrorism," outlines temporary and permanent security guidelines for landscaping, exteriors and structure. Both are available from Washington, D.C.-based National Academy Press. The American Society for Industrial Security also publishes "Security Management," a monthly magazine featuring articles of interest to architects.

- 1. New, integrated security measures are planned for Department of Justice.
- 2. Concrete planters act as barriers. 3. Planters and setback from street
- minimize risk to building.
- 4. Planned security upgrade of Department of Transportation (DOT) headquarters includes a memorial to victims of the Oklahoma City bombing.
- 5. Planters prevent vehicular access to DOT's raised office building.
- 6. Additional security upgrades are planned for Federal Aviation Administration (FAA) Building.
- 7. Fences enclose vulnerable arcade at FAA Building's ground floor.
- 8. Landscaping and concrete plaza create safety zone from street.
- 9. Security of Forrestal Building, including Department of Energy headquarters, was increased in 1989.
- 10. Planters and benches boost security at sidewalk on west side of building.
- 11. Large open spaces beneath raised building pose safety hazard.



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Three new ambassadorial

residences reflect the

Building Diplomacy

State Department's push for

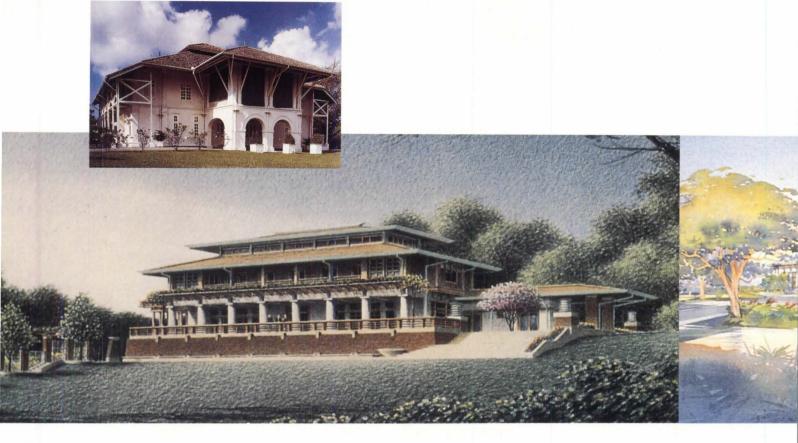
architecture that is sensitive

to its host country.

uch of a U.S. ambassador's most important work is carried out not on official state visits, in foreign offices, or even in the chancery, but at home. "Ambassadors say that up to half their diplomatic work is performed at the official residence," reports Kevin Spence, the project architect responsible for the more than 300 embassies and related residences built and maintained by the State Department's Office of Foreign Buildings Operations (FBO). "The residence's informal quality sends a message to visitors that they are there as friends."

The architecture of these ambassadorial residences is intended to send a similar message about American intentions to the countries in which they are located. According to design guidelines published by the FBO's Residence Building Program, U.S. embassy housing should "demonstrate respect for the architectural customs and traditions of the host country," and express "such qualities as design excellence...dignity...and good will." Adds Spence, "We want to convey that we are interested in their nation, their history, and their architectural traditions."

ABOVE: Continuous porches of traditional Singapore mansion (top) inspired Stubbins Associates' ambassadorial residence (inset).



Singapore

Stubbins Associates

TOP: The U.S. ambassador to Singapore formerly resided in a stucco-clad 19th-century house.

ABOVE: New residence's deep eaves recall Wrightian and Asian roots. SECTION: Lower level contains entertaining areas; living quarters are above. FACING PAGE, TOP SECTION: Following FBO design guidelines, living quarters are stacked above reception areas. FACING PAGE, LEFT: New Bangkok residence departs from tradition with smooth stucco finish and sense of enclosure, but prominent roof profile echoes Thai houses (inset). FACING PAGE, RIGHT: New Kuwaiti residence recalls Middle Eastern massing and windows (inset), but is more Western in its fenestration. FACING PAGE, CENTER SECTION: Curving roof gives Kuwaiti residence by RTKL visual prominence.

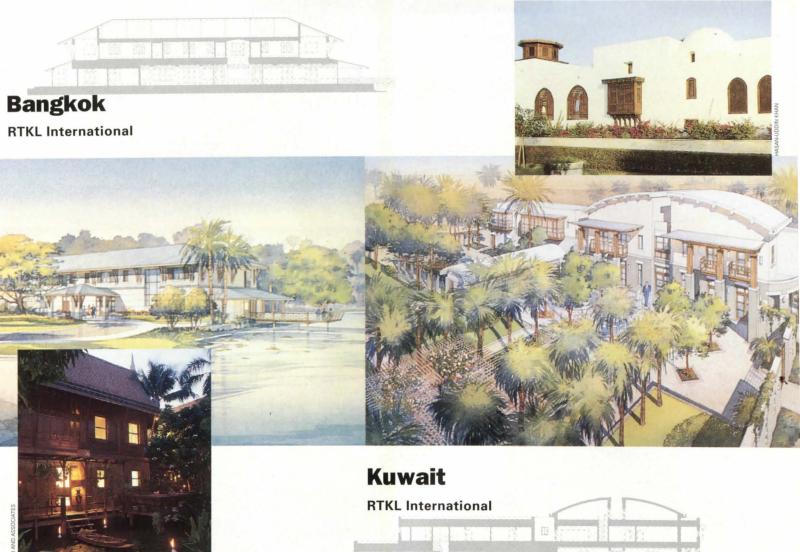
This embrace of regionalism is a departure from State Department precedent. Prior to World War II, the United States followed the traditional diplomatic pattern of building or purchasing Neoclassical or Georgian properties. After the war, embassy architecture began to reflect a Modern idiom thought by architects to be more consistent with the new, American-led world order. However, these glassy high-rises provoked howls of disapproval from a foreign service worried about security, and from several foreign governments offended by cultural insensitivity.

In the early 1950s, Congress and the White House responded to the criticism by proposing an official "traditional" style for all future projects. (Harry S. Truman reputedly suggested that all new embassies replicate the White House.) In an effort to avoid architec-

ture by fiat, former FBO director Leland King created the Architectural Advisory Panel, an architect selection and design review board. The advisory panel is made up of three of the nation's leading architects, who each serve a three-year, pro-bono term.

Approved in 1954 by Secretary of State John Foster Dulles, the panel is the government's first and longest-running design excellence program, responsible for embassy buildings by architects ranging from Edward Durell Stone to Arquitectonica. Current members of the advisory panel are architects George Hartman, William Turnbull, and Cynthia Weese. In 1995, the NEA recognized the panel's contributions by honoring it with a Presidential Design Award.

Four new ambassadorial residences are currently in design or construction. The facility



in Cairo by The Architects Collaborative, completed last November, matches its Modern concrete chancery. The most recent crop—in Bangkok, Kuwait, and Singapore—reflect a determined effort "to make the building fit where it sits," according to James Beyer, project architect for Stubbins Associates, designer of the Singapore residence. "However," Beyer continues, "Singapore is a polyglot culture, with no single architectural tradition."

Consequently, Stubbins drew on a variety of influences, from Malaysian and Chinese to British Colonial. The resulting building, scheduled for completion in March, is horizontal, permeable, and almost Wrightian in character. "We didn't start with that notion," recalls Ron Ostberg, project designer, "but we pushed it as it started to emerge."

Beyer's comments point up one of the pitfalls of following the FBO guidelines on regionalism too closely. Rod Henderer, principal-in-charge of RTKL's new Bangkok and Kuwaiti residences, warns, "You can mimic an architecture and come up with something more appropriate for a citizen of that country than for an American ambassador."

For the Bangkok house, which is designed but awaiting funding, RTKL thus looked to turn-of-the-century European Colonial models for precedent, rather than to native Thai traditions. Long roof lines and enriched detailing give the building an Asian affinity, but its solidity and enclosure mark it as Western. RTKL's Kuwaiti residence, in contrast, is an outward-looking building in a culture whose architecture is more inwardly oriented. Nevertheless, the contemporary

building, scheduled to open in May, draws on desert precedent in its smooth surfaces, screened windows, and blocky form.

Ultimately, these houses must represent the United States and its values. The optimism of heroic (and at times insensitive) 1940s and '50s Modernism has given way to thoughtful, albeit safe, 1990s traditionalism. In that respect, the residences represent America's conservative mood. But is "thoughtful" to be the standard at an agency whose commitment to design excellence reaches back over 40 years? The Arquitectonica-designed chancery now finishing construction in Lima, Peru, suggests that a more energetic perception of America still exists at the FBO. Let's hope the next generation of ambassadorial residences will reflect that spirit.—Reed Kroloff





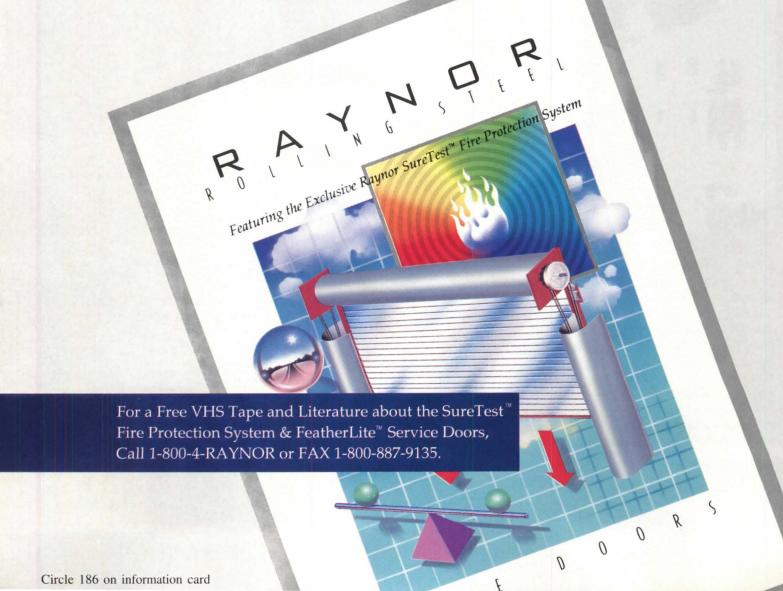
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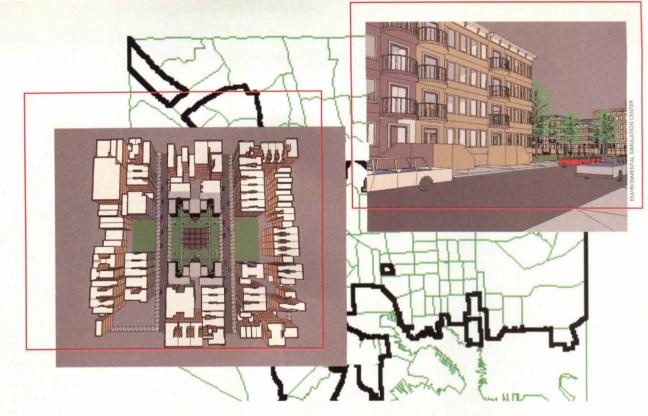
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Computers



An electronic tool developed

by the U.S. Department of

HUD Maps Comm

Housing and Urban

Development encourages

better planning by

architects, government,

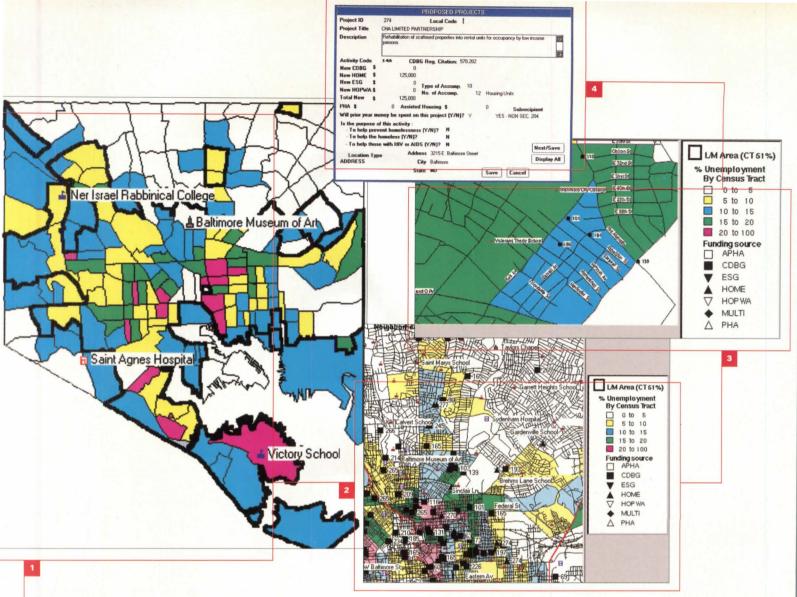
and citizens.

ommunity Connections, an electronic mapping and information system developed by the U.S. Department of Housing and Urban Development (HUD), is helping cities and towns plan for the future. The software provides a comprehensive way to document existing socioeconomic conditions and track investments in new construction and rehabilitation, as well as economic and social programs. First distributed by HUD to city, county, and state governments in 1994, Community Connections offers valuable tools for architects and is now available for purchase by private-sector design professionals.

An architect considering applying for a project in an unfamiliar jurisdiction, for example, can learn about the area and its context by scrolling through HUD's on-line summary of a regional plan. By studying demographic and economic data on detailed maps, architects working with a developer will be better equipped to program a building or neighborhood. And perusing the system's project funding list may give a market-savvy designer a heads-up on new public and institutional building commissions.

HUD's software also allows architects and planners to prepare long-term visions for the redevelopment of their regions. Previously, the agency unwittingly encouraged a fragmented approach to urban design by soliciting separate housing, social services, and transportation plans from the local governments that requested federal funding. With

ABOVE: Two-dimensional maps developed by HUD can form the basis for more sophisticated three-dimensional modeling of city blocks and local buildings.



- 1 Linked to 1990 Census Bureau data, HUD's new software outlines areas of low and moderate income and, by census tract, indicates percentage of unemployment in Baltimore.
- 2 Based on MapInfo, the geographical information system zooms into Baltimore's neighborhoods.
- 3 Numbers on street map refer to approved community projects; symbols indicate funding source.
- 4 Database file describes projects from business loans to new construction.

the electronic software package, all types of services, departments, and funding sources can be combined into one consolidated plan.

Andrew Cuomo, assistant secretary of HUD's Office of Community Planning and Development, began developing Community Connections in 1993 to simplify the application process for HUD funding, implement a more holistic planning system, and encourage greater civic participation. Explains Cuomo,

"Our challenge was to give the public information that they could easily relate to and a medium which they could communicate their ideas with. For those people who choose to get involved, [the new software] makes it so much easier."

With HUD's system, an architect can view a map of an entire metropolitan area, take a closer look at a single neighborhood, or display several city blocks. If desired, the software will insert street names and landmarks. The user can call up layers of socioeconomic information, including income levels or percentages of unemployment and minority populations. Projects funded by HUD are also noted on the map.

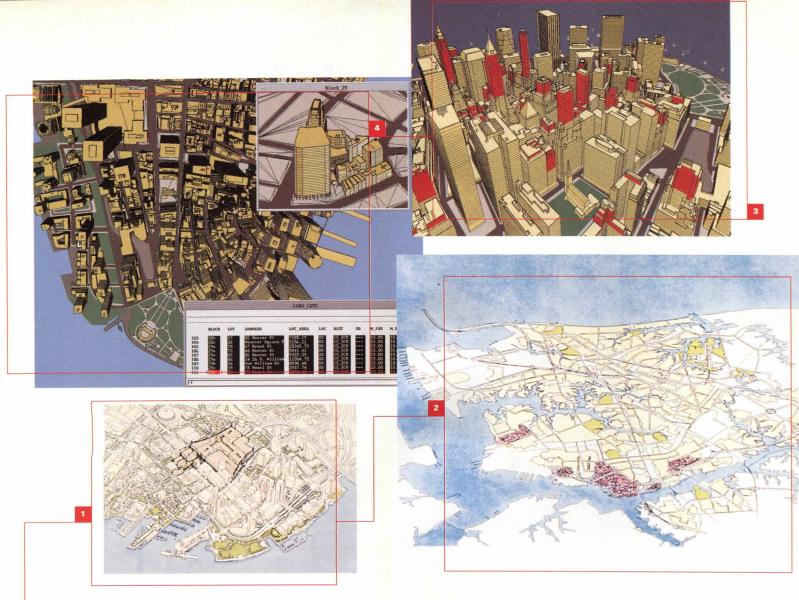
Community Connections was designed to be as open and flexible as possible to encourage information exchange. For example, the new software allows a city planner to add projects funded by other agencies or institutions to its database, in order to determine how much money is being invested in the community. Citizens can use the software to map proposed projects for the local government to consider at its next public hearing. And community planning boards can post development proposals on the Internet for public review, as a supplement to traditional neighborhood meetings.

The package of planning software customized for local governments includes Windows; WordPerfect; the communications software Pro-Com Plus; a geographic informa-

tion system (GIS), which links data such as population to two-dimensional maps, using MapInfo; and a HUD database program. Private-sector architects receive the GIS and a modified version of the database; a written summary of a city's plan; and census and project data.

Although HUD's Community Connections provides municipal officials with a greatly improved tool for planning, its urban design application is somewhat rudimentary. Charles B. Zucker, AIA's director of community design and development, sees HUD's mapping system as an important first step. He suggests that architects, equipped with more advanced mapping capability, can now take this basic planning device and transform it into a sophisticated urban design tool.

The work of the Environmental Simulation Center at the New School for Social Research in New York City is an excellent example. With eight IBM RS6000 worksta-



- 1 UDA Architects of Pittsburgh could have benefited from HUD's new system when developing a proposal to revitalize blighted neighborhoods in Norfolk, Virginia.
- 2 Hand-drawn, aerial map of Norfolk by UDA highlights parks, downtown, and university areas.
- 3 Three-dimensional image of lower Manhattan, by the Environmental Simulation Center in New York, shows office floors that may be suitable for residential conversion.
- 4 The Center's graphic model can be rotated and viewed from any direction; building images are linked to data, such as block, lot, and address.

tions and IBM's Architecture Engineering Series software, the Center creates highly realistic three-dimensional images of both existing and proposed buildings to help planners and community members understand the potential consequences of an urban intervention.

"Most people can't relate to the physical implications of maps," Center Director Michael Kwartler explains, nor can they fully comprehend numeric planning data. For instance, New York City's Greenwich Village and Co-op City have the same number of people per acre, but this information alone cannot convey the difference between Greenwich Village's low-rise row houses and the spread-out, high-rise towers of Co-op City. A threedimensional model, Kwartler asserts, "is a way of getting beyond the words so that the numbers inform."

The Center's most ambitious project to date is a GIS of lower Manhattan. Equipped with Oracle

relational database management software, this system links a highly detailed image of the city and its buildings with a range of data, including census, land use, and zoning. In 1993, the model helped the New York City Planning Department revise zoning regulations for high-density residential areas within Manhattan's Upper East Side.

More recently, the same system determined, based on height and square footage, which floors of underutilized office towers in lower Manhattan may be suitable for conversion to apartments and home offices. Although HUD's software was not used for these assessments, its GIS mapping system could form the basis for similar sophisticated models of other communities.

Unfortunately, Kwartler points out, most communities have antiquated maps, if any, and few have access to advanced modeling software—and the cost of developing a GIS system from scratch is high.

However, the open-ended nature of HUD's software allows local planning departments to easily expand the system's range. Kwartler suggests that planners begin this expansion with building footprints and heights, property lines, and topographical features. Later, they can scan in photographs of neighborhood buildings, and make the jump to three-dimensional modeling. "This is a revolution," Kwartler proclaims. "HUD is moving into the 21st century."—Nancy B. Solomon

For more information

Architects and planners can order Community Connections for \$125 by calling (800) 998-9999. The interactive system operates within a Windows environment on a PC 486 or a more advanced system. Regional plan summaries and sample maps can also be accessed by connecting to HUD's home page on the World Wide Web.

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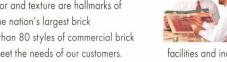
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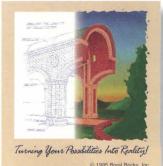
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discusses the federal

government's progress

in improving public

architecture.

s the federal government tries to improve the design of government buildings, it is also working to reform the process by which those designs are selected and developed. In late 1993, as part of launching its Design Excellence Program (pages 60-63, this issue), the regional offices of the General Services Administration (GSA) began enlisting one to three private-sector architects to serve as volunteer peer reviewers for firms awarded commissions valued at more than \$25 million. The term "peer" implies a level of professional accomplishment equal to those being judged.

Acting as nonvoting advisors to GSA's selection panels, these peer architects are advocates for good architecture. Owing to the long hours required by the review process, the GSA pragmatically chose architects from academia, although several are full-time practitioners. The peers must candidly critique and troubleshoot proposed designs to ensure the best value for taxpayers' dollars. They must press for architecture of the highest quality and value by educating the GSA and its government clients as to the merits or faults of a given proposal.

For example, Margaret McCurry, partner of Tigerman McCurry Architects in Chicago, has served on two review panels. After evaluating the design by Henry N. Cobb for the Hammond, Indiana, courthouse, McCurry helped Cobb



Edward Feiner, Chief Architect, Public Buildings Service, General Services Administration



Ken Kimbrough, Commissioner of Public Buildings Service, GSA



Ralph Lerner, Dean, School of Architecture, Princeton University

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is the GSA, which sets the agenda,

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in the matter, a strong judge will criteria. But it appeared to me that

have a strong voice. You never know the client was the judge.

who the players are going to be, so

make sure you have ground rules.



Fred Koetter, Partner, Koetter, Kim & Associates, and Dean of Architecture, Yale University



John Meunier, Dean of Architecture, Arizona State University

and his chief architect weigh the pros and cons of limestone versus masonry cladding. "I see our role as peers as mediating among the judges and others in the political arena to get the best product," McCurry maintains.

However, reviewers only advise, not dictate, and their recommendations are often disregarded by the judges and other clients on selection panels. The peer advisors for the courthouse in Corpus Christi, Texas, for example, suggested the project be awarded to the San Antonio firm of Ford, Powell & Carson, on the strength of the firm's regional portfolio and its delivery capability. But once the peers departed, the judges disregarded their advice and selected Washington, D.C.-based Hartman-Cox, the peers' third choice, based largely on the judges' distaste for the San Antonio firm.

GSA is also relying on its peer reviewers to critique its Design Excellence Program. To monitor its progress, GSA hosted an afternoonlong panel discussion on October 11 in San Francisco, convening 16 peers, 3 officials from GSA's design and construction division, and an audience of close to 100 GSA regional architects and staff.

How can peers act as advocates of good design?

Roger Montgomery: If we let the peer reviewers look at buildings by the shortlisted architects, we would get dynamite public buildings through the program, and we wouldn't need a lot of the peer review process. Any one of the four or six architects on the shortlist in these various situations would have done a damn good building. I'm concerned that we want to push for

that ultimate cultural statement, and I don't think any of us is capable of doing it.

John Meunier: Are we peer reviewers supposed to select architects, or to help ensure a good outcome? I think to ensure a good outcome. And if peers don't have a professional stake in the process, it's going to be very difficult to achieve that. I was involved in one project where we gave some strong negative feedback. I've looked at the project since then, and I see little sign that the negative feedback was ever considered, which is very worrying. Margaret McCurry: We should let peer reviewers stay on throughout the process, as we did with the Hammond, Indiana, courthouse by Harry Cobb. We had a wonderful session with Harry, who allowed us to be critics and suggest some ways that monies might be shifted. His building need not be limestone-it

might be brick, and the monies that were there could go into skylights, for example. Or the 1 percent for art could be used to find a glass artisan to help design Harry's glass bridges, rather than simply putting some statue somewhere in the courtyard. And that might allow artisans to be more of a part of the building process than they are.

process than they are. *Garth Rockcastle:* The best cases I've witnessed were those in which the peer architect was recognized as an agent to get the judges to see possibilities they had not seen before. Judges love precedent, but architects like to explore, and they need the space to be able to do that. That's where I see the lines for peer review. We can underscore the innovation and leadership needed by architects to move clients forward. *Edward Feiner:* It's an evolving process. The peers are more and more critical to bringing legitimacy

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phisticated and capable of un-

derstanding the notion of design

as a process. Others judges have

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kinds of clients. A process that

informs them better will help.



Louis Naidorf, Dean, School of Architecture, Woodbury University



Walker C. Johnson, Principal, Johnson-Lasky

to the selection process. One peer recently turned a judge toward the consensus of the panel, which he wanted no part of before.

Bernd Foerster: The peer review can make an enormous contribution in bringing along the client or the representative of the client, and supporting the architect who has been selected. It's good to have somebody to say to the client, "Those points that are being made are valid."

What role can emerging firms play in the Design Excellence Program?

Ralph Lerner: In the first stage, we should try to discover emerging voices, independent of their previous experience. We ought to forbid their marriage with firms to fill out their weaknesses, inadequacies, and lack of experience. The purpose of the second round is to assemble a team to address those inadequacies.

We can create a process that focuses on emerging versus established talent, and the kinds of cultural sensibilities different firms might bring. And in the second round, we can engage judges in that discussion and talk about the firms' capability of delivering the goods.

Fred Koetter: People who are going to be occupying these buildings are going to be very edgy about selecting young, emerging firms who don't have experience designing courthouses. It would be good, after a shortlist has been established, to hold brief, controlled-scope design competitions so users can get an idea of the approach a firm might take, because there is this question of what the court is going to get. Meunier: America seems to be peculiarly averse to competitions, but they are valuable, and if we could integrate them into the system, that would be one of the very best ways

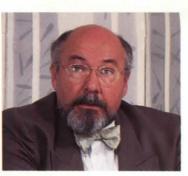
to let young firms into the process of designing large buildings. Louis Naidorf: I'm not a fan of those competitions, because they prevent the architect from having a chance to work with the client. Then also, a group of judges is inevitably confronted with choosing among firms based on some thin exposure to ideas. The issue is to find the best architect, not the best solution. If you want young, emerging firms in the process, putting up \$75 million to \$100 million courthouses is a really tough jump. GSA needs to look at an incubator process that begins to bring those firms into projects of less than \$25 million, and allows them to naturally develop expertise, so they won't be forced into alliances and strained relationships. Meunier: I don't agree. We tend to underestimate the capacity of socalled "young" architects. Typically the people we're talking about are

and don't need to be incubated. They can jump right in if you give them the right support. McCurry: One way to get around it is to have the architects present a project they have done and lead the [GSA] through that experience, even bring in the client of the project to

well into their 30s, maybe even

their 40s. They are fully mature

talk about the process. Then the GSA could see how the architect solved the problem for that particular client. It could be a totally different building. A courthouse is not such a rare building type-you can still explain how you solved spatial and proportional problems, how you used materials to best advantage. The same rules of a small building apply to a larger one, you're just scaling up a bit. It's an education for the people listening. Meunier: Well, if a young firm has a really nice parking garage to show,



W. Cecil Steward, Dean, School of Architecture, University of Nebraska



Donald Stull, Partner, Stull and Lee



Margaret I. McCurry, Principal, Tigerman McCurry Architects



Bernd Foerster, Professor of Architecture, Kansas State University



Roger Schluntz, Professor of Architecture, University of Miami

it is hardly going to qualify for a courthouse. They need to be able to persuade us that they thought long and hard about the issues, and to demonstrate command of the particular building type.

Harry G. Robinson: Certainly some of us have made the jump from a small project to doing something major like a courthouse. We can draw upon those lessons.

Naidorf: I think it is important not to focus on emerging firms but on emerging talent. Firms that may be excellent in many ways may also be long in the tooth. One thing I've noticed is the power of a provocative firm to alter the final selection process by its presence—a cutting-edge firm frequently dislodges the judges from their most conservative choice to a consensus for a more radical scheme. That's a step forward, even if the scheme is ultimately rejected.

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The review panel I sat on had a which architect to select. It shouldn't

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in the room. He was very contakers. It should be made absolutely

clear that they are not the client.

would fit into his community.



George Anselevicius, Professor Emeritus of

Architecture, University of New Mexico

John Belle, Partner, Beyer Blinder Belle

Is consistency in design across regions a desirable goal for the GSA?

George Anselevicius: I think we probably shouldn't be too consistent, because consistency means putting down regulations and somehow that makes bureaucracy. Someone mentioned, at some point, a "national vision." I find that strange. The word "consistency" is a terrifying word. It's wrong.

What problems arose during the peer review process, and what can be done to address them?

Donald Stull: Many firms come to the shortlist having designed their response, but pretending they haven't. The question is whether or not that should continue to be allowed. In one case I reviewed, well over \$100,000 must have been spent discussing the approach to designing such buildings, when in fact there had been a building designed. In another case, there were a total of three solutions presented simply as icons of how one might approach the problem, but the judges identified with those solutions and began to pick the ones they thought were the most appropriate. I think that is awful. The GSA does not believe that [preparation] should be the intent. They discourage it to the point of saying it's outlawed.

Roger Schluntz: It behooves the GSA to make sure the interview process is fair, the playing field is level, everyone knows what the rules are, and there should be no preliminary design schemes unless specifically asked for in the second phase of a limited competition.

Lerner: I came out of this peer review process wondering who on earth the client was. The process partially suggests it is the GSA,

which sets the agenda, runs the program, and establishes the criteria. But it appeared to me the client was the judge, who was the only other person in the room besides the GSA.

How much influence should the judges have in the selection process?

Wayne Drummond: The judges have a lot to do with the outcome of the selection. I think they have a responsibility to the process, and to make sure it is followed through. They will be the occupants initially. The question of the client should be very clearly understood—that there should be a partnership between GSA and the judiciary as the user. Schluntz: Seeing the regional [GSA] staff struggle with these issues bothers me. They depend on the judges. There needs to be absolute clarity about who makes the decision of which architect to select. It shouldn't

Judges love precedent, but architects

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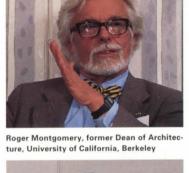
and leadership needed by architects

have done a damn good building. I'm to move clients forward.

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ultimate cultural statement, and I don't







Harry G. Robinson, III, Dean of Architecture, Howard University

be the judges. They may give input, but then they ought to be removed, the selection made, and they should be bound to live with it. They're not the taxpayers, they're not going to be in that courthouse as long as it will exist, and they are not the building's caretakers. It should be made absolutely clear that they are not the client. They give input. John Belle: The review panel I sat on had a civil engineer, an electrical engineer, a plumber, an architect, a judge, and a few others. I thought the judge was the only sane person in the room. He was very concerned about how the building would fit into his community. Was this major public investment going to have a positive impact on his town? I can't fault the judge for that. It was exactly the right approach. Stull: Michael McKinnell [in his Cleveland courthouse presentation]

talked about buildings as an idea,

what they mean to users. It meant nothing to the judiciary. I've been in situations where I've been impressed, other architects have been impressed, GSA people have been impressed, and the judges haven't been impressed at all. Some judges are extremely sophisticated and capable of understanding the notion of design as a process. Other judges have not been able to do that, and have responded only to actual design schemes or the charisma of the person making the presentation.

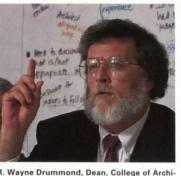
Walker Johnson: The judges have to be involved in the process. As they become more knowledgeable, they're going to become better clients. Naidorf: Other than the belief that they're divine, judges don't differ from that many other kinds of clients. A process that informs them better will help.

Koetter: The system must be as clear and coherent as possible. Clear information about the architect's qualifications and how it is presented are important. The power of personality comes in, and that's where some coherent background is very necessary. If you say a judge should have a voice in the matter, a strong judge will have a strong voice—a judge who is not as strong won't. You never know who the players are going to be, so make sure you have ground rules. Stull: Bring the judges into forums where the highest quality of design has been achieved. Many are absolutely brilliant, well read, and understand the history of architecture. Kenneth Kimbrough: Working with federal judges in the design process, even with the title of commissioner, you are still a little bit under them. On those occasions when they really get their head cocked and they're hell-bent on something you know might be wrong, it can be damn

hard to unseat them. I can empathize with GSA project managers. I've seen the peer reviewer recommend one solution and the judge recommend a different one. We need a road map for federal judges to follow, because without one, they make it up as they go, or they call their buddies and say, "What did you get out of them? I want at least that much and more."

Schluntz: We had a wonderful consensus in Corpus Christi until the peer reviewers left and the judges came up with a new consensus.

W. Cecil Steward: If we are fortunate enough to actually define who the client is and have the local people understand that, then the next challenge is more than the selection criteria. Whatever the reputation of the firm selected, it is perfectly natural to have the client and the community say [to the architect], what are you going to do for me?



R. Wayne Drummond, Dean, College of Architecture, University of Florida, Gainesville



Garth Rockcastle, Principal, Meyer, Scherer



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Video Self-Study

Consistency, and good quality content are the advantages of video courses. These materials are particularly suited for starting group and firm-wide discussions.

Buildings at Risk Seismic Design Basics for Practicing Architects

Learn how you can make well-informed decisions when planning and designing earthquakeresistant buildings with this self-study package.

This program was brought to you at a substantially reduced cost by a generous grant from The Federal Emergency Management Agency (FEMA). It is a culmination of over five years of seismic research and interactive workshops held nationwide.

Use this self-study package to:

- Understand the nature of ground motion and its impact on buildings
- Determine the potential impact of site conditions on seismic vulnerability
- Recognize the best and worst building configurations
- Know what is needed to work effectively with structural engineers
- Avoid nonstructural damage: the "hidden" risk in buildings
- Interpret seismic codes: the UBC, National Earthquake Hazards Reduction Program (NEHRP) Provisions, and Executive Order 12699
- Understand the growing field of remodeling/retrofitting existing structures.

60 learning units (LUs)/20 contact hours. **\$65.10 AIA / \$93 nonmembers; order #W113**

Lead Finding Video Set

Finding early leads is a part of marketing in which everyone in your firm can contribute, but too many either don't think about it or don't know how. Produced by Professional Development Resources, Inc, this 5-hour, 4-video program helps everyone become more comfortable and effective at identifying new early leads and getting in the door with new clients.

You'll see strategic examples for uncovering early new project opportunities. Watch a mid-course feedback interview with a client on how and where you can build repeat and referral opportunities. Listen to candid conversations among professionals like yourself. Find out how others are already using each of nine key early lead-find sources. Hear the results they're experiencing.

\$275 AIA / \$358 nonmember order# W182

Education Books

Ideal references both for your practice and for use in your self-designed learning projects for AIA/CES credit!

NFW!

Mandeville: A Guide for the Marketing of Professional Services by Dr. Stuart W. Rose

You'll learn the entire professional services marketing process, step by step. This book provides a complete conceptual framework that shows you what you need to do to secure the clients you'd like, in a manner that feels comfortable to you.

The process begins with how to identify the strongest market opportunities and client demands over the next three to five years and determine which are most appropriate for you. You'll examine how to structure a clear and effective program for attracting clients.

You'll explore alternative methods for coming into contact with prospective new clients, how to create name recognition using different promotional media, build professional trust, and keep those people coming back throughout your career.

This beautiful leather-bound book serves as a quality professional reference perfect for designing your marketing approach and self-study programs.

\$62.30 AIA / \$89. nonmember order# W183



"Well prepared.

Covers, in general most problems of

practice management."

AIA Continuing Education Brochure



Contracting For CADD Work: A Guide For Design Professionals

by Michael P. Ingardia, PE, and John F. Hill, AIA. Incorporate this book in your self-designed projects and explore the real issues in effectively applying a CADD system in your projects and responding to client requirements. There are many risk-management questions about the professional liability issues of delivering CADD files? You'll learn how to educate yourself, staff, clients, and other consultants about:

- · Professional liability
- · Compensation
- · CADD contracting issues
- · The CADD manager
- The real and often-hidden impact of CADD delivery requirements
- CADD-file transfer and dealing with compatibility problems
- Archiving and stability of the medium over time
- · Contractual changes that are required.

\$17.50 AIA / \$22.75 nonmembers; order# W184

The Architect's Handbook of Professional Practice (12th Edition)

Earn LUs by Studying the Handbook. Maybe you want to know more about the expanding building delivery systems that clients are craving, setting the cost of your next project so you're sure to make a reasonable profit, or how to manage professional risk. *The Architect's Handbook of Professional Practice* is one of the fastest, easiest, most cost-efficient sources you can find.

Or maybe you're looking for a career change or contemplate retiring and want to pass along or close your firm. One two-hour session with a specialist consultant would easily cost more than the entire four-volume set of the Handbook



and give you only a minuscule fraction of the knowledge packed into this ready desk reference.

The recently released 12th edition of the AIA publication that has defined the profession since 1917 is the most comprehensive, user-friendly Handbook ever and a source of knowledge that will satisfy the AIA/CES membership requirement to boot. A marvel of interwoven, thoroughly considered, and easy-to-traverse pieces, the 12th edition is a work of love, experience, and direction from editor David Haviland (an Institute Honors recipient) with the

Rensselaer Polytechnic Institute, along with James Franklin, FAIA; Chris Clark, AIA; Ava Abramowitz, Hon. AIA; and many others.

How to do it

No matter whether your learning objective involves management of the firm, projects, finances, risk, or personnel; construction administration; firm transition; or career development, the Handbook contains the information to get you going.

\$140 AIA / \$200 nonmembers; order# M107-94

"Very Good idea! I know there are definite gaps in my knowledge and skill

and wish the AIA et. al. would devote more time, i.e., seminars, etc.

on this very important area (especially since most small firms go out of business because of lack of business skills, not design/technology skills!)"

Self-Assessments

Self-assessments are carefully developed questionnaires for architects and other design professionals. You use the self-assessments to examine key areas of practice. Self-assessments can help you focus, plan, and design both personal and firm-wide professional development activities.

The questions and options may 'bring back' information you have forgotten. You may discover there are alternative approaches you have not considered. You take control of your own professional development in terms of direction and pace.

Select a 60-minute self-assessment and find out your strengths and weaknesses in a critical practice area. Your completed self-assessment is mailed directly to an independent scoring agency which then returns an overall score, a comparative peer score, and a list of resources to help increase your knowledge where a need is indicated and improve your skills. Each self-assessment is worth 6 LUs.

\$35 AIA / \$50 nonmember

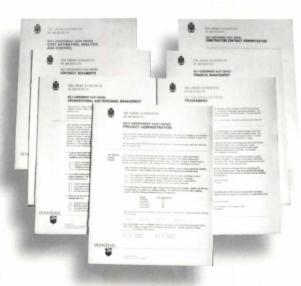
Financial Management Assessment

This tool is a must for principals and principalsto-be. Crucial questions are asked about what you need to know about the financial aspects of managing a firm. Topics range from focusing marketing plans and recognizing personal tax considerations to interpreting financial statements. Hardcopy (also available in computer format).

order# J198

Organizational Management Assessment

Whether you're starting or expanding your firm, this tool helps you assess your knowledge of the key organizational and personnel issues in managing your firm. Topics include firm organization, strategic planning, legal issues



of employee record keeping, growth management, labor relations, and employee motivation. If you are now managing a firm or aspire to management, this confidential self-assessment will raise your awareness of concerns you need to know about.

order# J203

Construction Contract Administration Assesment

Examine your knowledge of contracts, change orders, liability considerations, and other related factors. Hardcopy (also available in computer format).

order# J199

Contract Document Assesment

Beginning with a short case study to provide context, this self-assessment covers key legal roles, AIA contract forms, planning drawing production, document checking techniques, and reference standards.

order# J196

Programming Assesment

Topics include clarifying initial project considerations, performing client needs analysis, determining data collection techniques, recognizing fundamental financial considerations, and programming across projects.

order# J200

Cost Estimating, Analysis & Control Assesment

More than half of the self-assessment users (57 percent) discovered weaknesses in developing accurate cost estimates. Topics include communicating cost estimates to clients, applying value engineering and lifecycle costing approaches, locating sources of cost data, and determining the best alternatives when cost estimates exceed the budget.

order# J195

Project Administration Assessment

This audit examines your knowledge about scheduling techniques, project accounting, staffing decisions, quality assurance, and resources. This is our most popular assessment. Hardcopy (also available in computer format).

order# J197

Workshops-in-a-Box

Everything your firm or component needs to organize your own workshop. Based on the self-assessments of the same names, these programs focus on the questions most frequently missed by architects and provide practical information and solutions that can be used immediately. (If you don't have a local authority to lead a workshop, the AIA can do it for you as a national workshop.)

Coordinator kits include an instructor's guide, overhead transparency masters, sample promotional materials, and evaluation forms. Participant guides include learning objectives,

"Got me thinking

about questions that will arise when my firm begins to expand."

"Best assessment I've had in a while!"

AIA Continuing Education Brochure

assessment questions, exercises, activities, and a pre-test for self-scoring. These modular programs can be run for a full or half day or in a series of one or two hours at a time distributed over sessions. Seven-and-a-half hours in total, 22.5+ LUs.

Project Administration: The Critical Path to Profitability

Topics range from controlling overhead and project costs to evaluating financial performance, covering typical field problems and solutions, scheduling, tracking multiple projects, and personnel.

Coordinator kit \$45.50 AIA members / \$65 nonmembers; order# J197-C Participant kits (each) \$15.40 AIA members / \$22 nonmembers (five guide minimum); order# J197-P

Construction Contract Administration: Better Approaches to Tasks and Issues

With an emphasis on optimum approaches to tasks and issues, this program offers guidance from some of the most experienced practitioners, lawyers, and risk management specialists in the field. It examines contract interpretation, liability, and the construction contract change process.

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Financial Management: Making the Money and Keeping It

Zero in on the most crucial financial issues design firms confront and tackle balance sheets and analysis, optimizing your collections, leasing, corporations, and internal controls.

Coordinator kit \$45.50 AIA members / \$65 nonmembers; order# J198-C

Participant kits (each) \$15.40 AIA members / \$22 nonmembers (five guide minimum); order# J198-P

Better Practice Management: Organizational and Personnel Management

Gain a wealth of practical knowledge in running a firm, planning, avoiding problems, and determining sources of information.

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Participant kits (each) \$15.40 AIA members / \$22 nonmembers (five guide minimum); order# J203-P

Programming: Communicating With Clients

Also titled Giving Clients What They Need, participants explore client goals, interviewing tools, create a custom checklist and basic programming financial questions. Contact AIA Programs and Products to order (202) 626-7479. Coordinator kit \$45.50 AIA members / \$65 nonmembers; order# J165-C

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Available to chapters, firms, and other groups on request through AIA National Instructors:

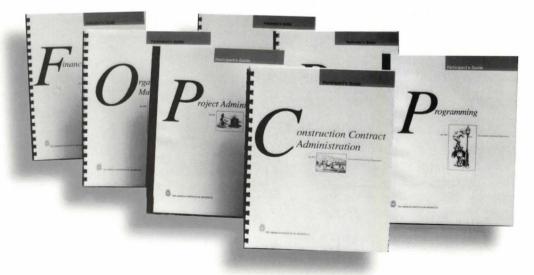
(See Workshops-in-a-Box descriptions)
Taught by top specialists in their field, these workshops are available to chapters, firms, and other groups of 20 or more on request.
Course fees depend on travel expenses. Call (202) 626-7479 for custom solutions.

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The AIA Continuing Education Systems honors our charter members who support us as premier providers (as of October 1, 1995). For the latest information in educational resources in the design industry, contact:

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Apple Computer, Inc (310) 376-7054 Computer-aided practice seminars, program topics: Computing and CAD, documentation technology, design.

BEEDEE Corporation (206) 443-1010 Accounting computer software.

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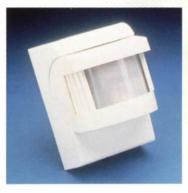
Products

High-tech innovations improve building security.











TOP: Stopper hardware from Safety Technology International, designed to prevent the misuse of fire and life safety equipment, includes a polycarbonate plastic shield for fire-alarm stations. To pull the alarm, the shield must be lifted, which triggers a preliminary local alarm, drawing attention to potential vandalism. The shield is available for flush-mounted and surfacemounted alarm pulls, and is offered in a weatherproof outdoor version. Circle 401 on information card.

ABOVE: Wide-View Wall-Mount Occupancy Sensor from Leviton controls the lights in a room by monitoring occupancy with an infrared motion sensor. By turning lights off automatically after an adjustable 30-second to 30minute motionless interval, the sensor purportedly reduces energy costs by as much as 50 percent. The sensor detects movement in spaces as large as 2,200 square feet, within a horizontal range of vision between 90 and 180 degrees; for placement near the ceiling, it can also be tilted 35 degrees downward. Up to five sensors can operate together when connected to a central control unit. The Leviton sensor is available in white, tan, or gray. Circle 402 on information card.

TOP RIGHT: Excel Security Manager from Honeywell protects people, assets, and intellectual property with a Windows-based security system. This computer application monitors all activity in a building or complex using photographic identification from live or closed-circuit television. The Honeywell system also manages building alarms. Excel Security Manager can be integrated into local or wide area networks for single- or multiple-site use. Circle 403 on information card.

CENTER RIGHT: Meridian's Keyless Entry Storage System, an alternative to standard locked filing cabinets, incorporates a nine-digit programmable electronic keypad on the top front of the cabinet to control access to files.

Up to nine cabinets can be protected by a single keypad with more than 10,000 changeable combinations, and an entire office's files can be controlled through a local area network computer system. Additional bar codes on each file folder track documents when scanned on removal and replacement. The cabinets are available with three drawer-pull styles in Meridian's full range of colors and materials. Circle 404 on information card.

ABOVE: The VPS328 Digital Control and Switching System from Vicon Industries manages surveillance cameras, monitors, and alarms. Supporting as many as 8 monitors, 32 video cameras, and 64 alarms, the VPS328 can be programmed with up to 64 pan or tilt sequences of 32 steps each. The system can be controlled internally or integrated into a host computer network. Vicon Industries also manufactures cameras, lenses, monitors, and other video surveillance products. Circle 405 on information card.

Products



Lever handle

Best Lock Corporation's Gull Wing door hardware is fitted with the company's 35H Mortise lock set, which features an interchangeable core to facilitate rapid replacement of locks. The lock also permits the use of a master key with new or existing systems. To meet ADA standards, Gull Wing's lever handle is designed to require minimal pressure to open the door. The door hardware is manufactured in brass, bronze, and stainless steel. Circle 406 on information card.



Door hardware

Master Lock introduces Cirrus, Lasalle, Stratus, and Paris lever sets to its line of high-security door hardware. The inner chassis and ball-bearing locks of the sets are sturdily constructed, purportedly making them resistant to break-ins. Master Lock's sets, which meet ADA requirements, can be fitted with Kwikset, Schlage, Weiser, National, and Dexter key cylinders, and are available in bright brass, antique brass, and satin chrome finishes. Circle 407 on information card.



Zero International's Sound Trap system forms a tight seal around a door's perimeter to prevent the passage of noise. When the door is closed, a spring trigger releases neoprene seals that compress to form a bond between the door and jamb. Zero International offers several models with different degrees of sound insulation; Sound Trap offers up to a 53 Sound Transmission Class value. Zero also manufactures fire- and gas-proof doors. Circle 408 on information card.

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Sliding doors

EFCO's "R" series of automatic doors includes the R-3 RotoSwing sliding door, which replaces the RotoSwing M3500. Compliant with ADA requirements, the door can be opened by a motion detector, floor mat, or security access device. The door automatically reopens if someone enters while it is closing; the system is reputedly sensitive enough to prevent even fingers from getting caught. Outside sections of the door swing out as emergency exits. Circle 409 on information card.



Ceiling system

Industrial Acoustics Company's Noise-Lock Long-Span System is a high-security ceiling with the sound absorption quality of conventional acoustic-tile ceiling systems. The system's steel modules have visible seams and no exposed fasteners, preventing the concealment of listening devices that could compromise building security. Its steel construction is purportedly tamperresistant and can be integrated with lighting and ventilation systems. Circle 410 on information card.



Acoustic baffles

Contour acoustic baffles from Illbruck hang vertically from the ceiling, suspended from a T-grid or installed mounts. The fiber-free, 2-inch-thick baffles are available in 2-by-4-foot and 1-by-4-foot sizes. The panels can be specified with curved, beveled, and right-angled edges, and are available in beige, white, and gray, as well as a broad range of custom colors. The Contour line also includes noise-dampening wall paneling and ceiling tiles. Circle 411 on information card.



Modular security system

Siedle's electronic-entry security system organizes standardized parts into a 33/4-inch-square housing. High-tech functions such as intercoms, cameras, push-button locks, electronic keys, and motion detectors can be combined with signage and letter boxes, and integrated with existing door chimes to avoid installing new wiring. The wallmounted and freestanding units connect to a telephone with an optional viewing monitor. Circle 412 on information card.



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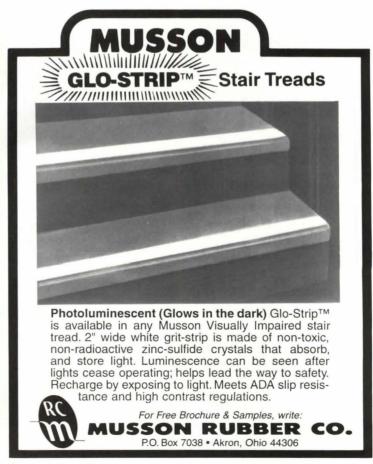
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Adve	ertisers Index		Circle number		Page number	EDITORIAL OFFICE 1130 Connecticut Avenue, N.W., Suite 625 Washington, D.C. 20036
			20	Hoover Treated Wood	149	
			28	Horton Automatics	152	(202) 828-0993
			82		36	THE STREET
				House Beautiful Magazine	150	994 Old Eagle School Road, Suite 1010
			42	Identity Magazine	155	994 Old Eagle School Road, Suite 1010
			106	Interbath		Wayne, Pennsylvania 19087
			54	Invisible Structures, Inc.	150	(610) 254-9800
			136	Kim Lighting	5	D. I. II. D. I. I. Director
			178	LCN Closers	102	Robert Hoover Production Director
			184	Levelor Corporation	114	Barbara Falk Circulation Manager
			172	Lifetile/Rialto (West region)	54	Nancy A. Perri Assistant to the Publisher
			84	Louisiana-Pacific	152	Robert G. Kliesch Publisher
Circle		Page	150	Marvin Windows & Doors	28-29	
number		number	50	Melton Classics	150	ADVERTISING SALES OFFICES
64	Access Industries	151	190	Musson Rubber Company	145	New York/Connecticut (610) 935-8522
64		152	126	NAAMM	53	D. Douglas Johnson
78	A/D Fire Protection Systems	151	72	National Gypsum Company	151	1625 Oak Hill Road
62	Adams Rite	153	144	NEC Technologies	12-13	Chester Springs, Pennsylvania 19425
100	Advance Lifts, Inc.	129-136	16	Newfoundland Slate	147	F 1 1/(10) 25/ 0000
_	AIA/Continuing Education		120	Nixalite of America	4	PA/VA/MD/New England (610) 254-9800
_	AIA/Competition	128	24	Nixalite of America	147	George T. Broskey, Eastern Sales Manager
_	AIA/MIPIM	16	56	Openings	150	994 Old Eagle School Road, Suite 1010
_	AIA/Handbook	154		Pella Corporation	37	Wayne, Pennsylvania 19087
158	AMP	42	154	Pemko	142	- 4 4444 005 0500
1	Andersen Windows	6-7	196		149	Southeast (610) 935-8522
46	APCO Graphics, Inc.	150	30	Petrarch Claddings, Inc.	9	D. Douglas Johnson
132	Armstrong World Industries	C2, p.1	140	Pittsburgh Corning		1625 Oak Hill Road
160	A-T-I	44	122	Polygal, USA	27	Chester Springs, Pennsylvania 19425
114	A-T-I	155	32	Quinstone Industries	149	
_	Autodesk	26	186	Raynor Garage Doors	118	Midwest (312) 464-8505
170	Belden Brick Co.		128	Researched Publications	34	Jack E. Bergren
	(East, Midwest region)	54	98	Rohm & Haas	153	Robert G. Hatfield, CBC
48	BondCote Roofing Systems	150	102	Rohm & Haas	153	936 The Merchandise Mart
188	Boral Bricks, Inc.		80	Roppe Corporation	152	Chicago, Illinois 60654
	(South region)	122	118	Seal Master Corporation	155	Jack E. Bergren (414) 786-4286
14	Boral Bricks, Inc.	147	166	Siedle Communication	50	2530 Coach House Drive
156	Bose Corporation	38	112	Siedle Communication	155	Brookfield (Milwaukee), Wisconsin 53005
168	Bradley Corporation	52	152	Simpson Door Company	30	Edward R. Novak (847) 658-7133
104	Brick Institute of America	153	68	Simpson Strong-Tie		E.R.&J. Assoc., Inc.
108	Brickstone Studios	155		Company	151	1637 Glengarry Court
142	Calcomp, Inc.	10	176	Sloan Valve Company	58	Algonquin, Illinois 60102-4108
146	Certainteed Corp.		130	SoftCAD USA	35	Algoridam, minois 00102-1100
	(Celadon vers.)	14	76	So. Aluminum Finishing		West/Northwest
148	Certainteed Corp.			Company	152	James A. Anderson (714) 855-0808
	(Brand Manor vers.)	14	92	Spacesaver Corporation	153	Western Sales Manager
138	CNA Insurance	8	40	Spring Window Fashions	149	James D. Anderson
164	C/S Group	48	74	Stone Design, Inc.	152	27001 East La Paz Road, Suite 400
44	Decoshield	150	20	Stone Panels	147	Mission Viejo, CA 92691
_	Design Intelligence	56-57	198	Stylemark, Inc.	145	THISTOIL TIEJO, CAT / BO/ I
162	EFCO Corporation	46	52	Sumiglass by N.A. Glass	150	Italy (02) 58.31.02.19
58	Florestone Products	151	116	Tamko	155	Cesare Fiorucci
88	Follansbee Steel	152	34	United Coatings	149	Viale Sabotino, 9
60	Fritz Industries, Inc.	151	_	University of Pennsylvania	34	20135 MILANO
38	Fypon	149	90	Versico	153	Fax: (02) 58.31.57.10
66	Garaventa	151	192	Vistawall Architectural		
70	Garaventa	151		Products	C3	- / Jan 19 (9) 20 1
194	Georgia-Pacific	C4	134	Vulcraft	2-3	
86	Georgia-Pacific	152		Vulcraft	153	
22	Gordon, Inc.	147	_	Weather Shield		
124	Graphisoft	51		Manufacturing, Inc.	17-24	
174	Greek Trade Commission	55	110	Williamette Industries	155	
180	Grohe America, Inc.	104		Windsor Door	149	*
182	Haws Drinking Faucet	110		Xypex Chemical Corporation	n 147	
102	Homasote Company	153			149	

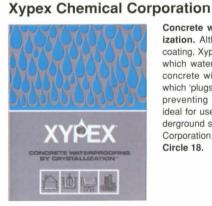
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The Literature offered on these pages (with rare exception) are free for the asking. Simply fill out one of the postage paid reader service cards located elsewhere in this issue, circle the appropriate numbers and drop it in the mail.

Boral Bricks, Inc.



BrickLink sm architectural support system designed specifically to assist architects in the selection and presentation of brick. BrickLinkSM is comprised of an idea book, technical book, color palette selection chart and a set of six sample portfolios. The system includes literature, ASTM specifications and special brick shapes. All materials in the system are color-coded for easy reference. Call 1-800-5-BO-Circle 14.



Concrete waterproofing by crystalization. Although applied as a slurry coating, Xypex is a chemical treatment which waterproofs by penetrating the concrete with a crystalline formation which 'plugs' the pores of the structure preventing water seepage. Xypex is ideal for use on the 'inside' of wet underground structures. Xypex Chemical Corporation, 604-273-5265. Circle 18.

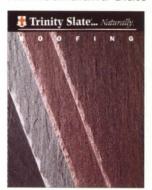
GORDON, INC.



EXTRUDED ALUMINUM LIGHT COVE offers many advantages in both residential and commercial applications. Positive locking splices insure tight joinery; factory mitered and welded corners eliminate labor intensive field work. Gordon also manufactures the most complete selection of extruded aluminum drywall and plaster trims in the industry. For more information and a complete 70 page design manual, call 1-800-747-8954 or fax 1-800-877-8746.

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Trinity Slate . . . Naturally. Newfoundland Slate Inc., North America's largest slate producer provides the most durable natural roofing material. Trinity Slate® is available in 6 unique unfading colors and delivers a service life in excess of 100 years. For a complete brochure, installation guidelines, samples and inquiries regarding roof design and slate specification call TOLL FREE 1-800-975-2835. Thank you. Sweets GBR - 04475/NEW Buyline 7685. Circle 16.

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Ultra-Lite Stone-Ultra-Lite marbles, granites and limestones offer natural stones with 80% less weight. Reinforced for high impact and flexural strength. Saves on back-up framing and structural requirements. Reduce installing labor costs. Used on exteriors, interiors, elevator cabs and ceilings throughout the world. Call 1-800-328-6275 for free literature. Circle 20.

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The manufacturers listed below were advertisers in last month's issue. They are anxious to provide you with their latest product information and literature for your planning needs. To receive this information, circle the appropriate numbers on the self-addressed, postage-paid response card. For product literature from advertisers in this issue, circle the appropriate numbers shown on the advertisements.

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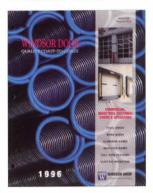
Von Duprin, Inc.

Get more information on our redesigned Model 98/99 exit device. *Circle No. 85*

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Windsor Door



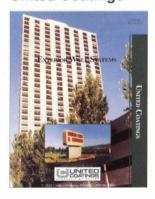
Windsor's Complete Line of Commercial Overhead Doors Featured in SWEETS-Windsor Door features its complete line of commercial overhead doors for specification and technical reference in the 1996 SWEETS Catalog. Specification information is available for all Windsor sectional steel, rolling grilles and shutters, fire doors and operators. For more information call 1-800-WINDSOR. Circle 26.

Petrarch Architectural Panels



A new brochure from Petrarch Claddings, Inc. shows new colors and surface textures within the Petrarch and Fasset architectural panel lines. With Petrarch and Fassett panels, exterior or interior surfaces have the elegance and durability of natural stone, but without the cost. A formula comprised of natural slate or stone blended with chopped glass-fiber reinforcement and a resin binder provide great strength and superior performance. Call 1-800-355-7420. See our catalog on Sweet's GBR: Section 07420/PET. Circle 30.

United Coatings



Exterior Wall Coating Systems-United Coatings, manufacturing highquality architectural, industrial and roof coatings for over 50 years, offers three different exterior wall systems. CAN-YON TONE STAIN provides dampproofing and color uniformity without altering the natural surface texture. AQUATHON waterproofs with an elastomeric membrane that bridges hairline cracks, and UNI-TEX incorporates the ultimate in EIFS technology in providing a weatherproof textured finish. United Coatings.....Longevity by Desian. Circle 34.

Fypon, Inc.



FYPON, Inc. is the manufacturer of over 3,500 millwork products. All crafted in the exclusive Molded Millwork® process, they are available in Standard FYPON (a high density polymer product) and four other specialty materials. Products include: Entrance Features, Moldings, Louvers, Window Features, Arch Surrounds, Balustrade Systems and much more. New for 1995 is a line of Polymer/Steel Columns and Posts ... they have the strength of steel and the durability of polymer. Call or write for 108 page full color catalog. FYPON, Inc., 22 W. PA Ave, Stewarttstown, PA 17363, 1-800-537-5349. Circle 38.

Hoover Treated Wood Products



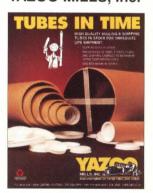
New video from Hoover Treated Wood Products Inc. shows how treated wood is produced and tested, and describes Hoover's complete line of treated wood products including PYRO-GUARD interior type fire retardant treated lumber and plywood, EXTERIOR FIRE-X exterior type fire retardant treated lumber and plywood, and CCA KDAT preservative treated lumber and plywood that's kiln dried after treatment. Circle 28.

Quinstone Industries, Inc.



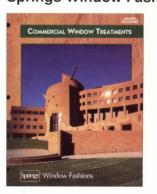
Quinstone Industries molds several new materials into the look and feel of stone. With four textures, six colors and a fire/smoke rating of 0/0 this is one of the hottest new products. With the installation by carpenters, it allows a freedom of design, never before possible with real stone, plus adding a considerable cost saving. Quinstone Industries, Inc., 1112 West King St. P.O. Box 1026, Quincy, FL 32353, 1/800-621-0565. Circle 32.

YAZOO MILLS, Inc.



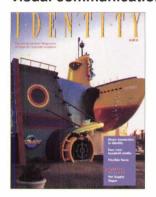
TUBES IN TIME-Need a mailing tube fast for your blue prints, mylar or vellum tracings? Need storage tubes to organize your office? We have mailing and storage tubes in the length and quality you need. Factory direct and immediate shipment. Packed in cartons with end plugs in over 30 sizes. Minimum order is one carton. Call Yazoo Mills, 305 Commerce Street. New Oxford, PA 17350 (800-242-5216.) Circle 36.

Springs Window Fashions



Commercial Window Treatments-SPRINGS WINDOW FASHIONS manufactures an extensive line of commercial window treatments. Products available under our Bali and Graber brand names include: horizontal/vertical blinds, cellular/pleated shades and drapery hardware. Our SpecFax Service for architects and specification writers provides faxed specification sheets or answers to technical product questions, call 800-327-9798. Circle 40.

IDENTITY— The magazine of corporate visual communications.



IDENTITY.

It's what your clients want your work to project.

It's how people find their way through your buildings.

It's where architecture meets graphic design.

It's business, signage, and the designed environment.

It's the best of all these and more. It's a magazine.

IDENTITY.

Circle 42.

APCO Graphics, Inc.



As a leader in the sign industry for over 28 years, APCO offers the expertise required to meet a broad range of wayfinding and identification needs. The award-winning product line features interior and exterior sign systems, signmaking software, displays, directories, and ADA compliant signs. Today, as always, APCO delivers the quality sign products and exceptional service that have become its trademarks throughout the years. APCO, 388 Grant St, SE, Atlanta, GA 30312: (404) 688-9000.

Circle 46.

Melton Classics



Melton Classics DuraClassic LB™ poly/marble load bearing columns, and FRP Classic™ fiberglass column covers provide a low maintenance fire rated alternative to our line of authentic redwood columns. The DuraClassic LB™ is backed by a Lifetime Warranty, and is ideal for harsh exterior applications. The FRP Classic™ fiberglass column cover is designed for use with structural supports, and is offered in classic and contemporary designs with a large inventory of stock molds. Call 1-800-963-3060 for a catalog, and specification assistance. Sweet's 06400 MEL.

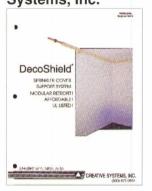
Circle 50.

Invisible Structures, Inc.



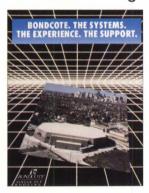
Pave With Grasspave. Grasspave invisible porous pavers are made entirely from recycled plastics, saving truckload volumes of plastic articles from landfills, and creating sparkling green and real grass-covered spaces where asphalt once reigned—in firelanes, overflow and event parking lots, and residential drives and parking.

DecoShield[®] Products by Creative Systems, Inc.



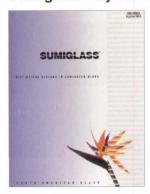
Creative Systems, Inc. is the industry leader in solving retrofit problems. The Decoshield cover appears as an attractive molding, while acting as a retrofit cover for piping, wiring, or cable. When used in conjunction with its support devices, the DecoShield system provides an anchoring mechanism for the material to be covered. Let us help you achieve "A Retrofit You Can Live With." Call (800) 873-0894, or fax (800) 585-3894.

BondCote Roofing Systems



A free colorful catalog describing the company's full range of different thickness of single-ply roofing systems is now available from BondCote. The 8page, full-color catalog provides specifications and application guidelines for four thicknesses of BondCote's polyester-reinforced, thermoplastic singleply roofing membrane. Detailed technical information regarding all products in the BondCote series includes physical properties and test methods for such characteristics as breaking and tensile strength as well as puncture and hydrostatic resistance. Catalogs are available by calling 800-368-2160. Circle 48.

Sumiglass® by North American Glass



Sumiglass[®] by North American Glass features distinctive designs in laminated glass. Printed films, decorative papers and even some fabrics can be laminated between glass to create a stunning balance of light emission and privacy. Send for our new 8 page brochure showcasing nearly 30 standard patterns and highlighting our custom capabilities.

Circle 52.

Openings



TOTAL DOOR®: The OPENINGS® Solution—TOTAL DOOR® is a fire rated door assembly that includes all hardware. Pairs do not require coordinators, vertical rods, astragals, flush bolts or floor strikes. Will retrofit to any frame. Meets all codes and ADA. Wood and metal faces available to 3 hours. Lifetime limited warranty on locks and panics. Circle 56.

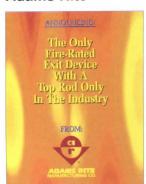
Florestone Products



Catalog features ADA compliant products and information on ADA regulations. Showers, Tub/Showers and shower receptors are featured. ADA compliant products come with required accessories, such as grab bars, shower heads and wheelchair transfer seats installed. High quality, durable construction and attention to detail. For an Architect Binder, call 800-446-8827

Circle 58.

Adams Rite



The Adams Rite Top Rod Only Exit Device. Adams Rite is the first door hardware manufacturer to offer a Fire Rated vertical rod kit device. With the Top Rod Only Device there is less maintenance, easier installation and a more attractive appearance. Devices comply with ADA guidelines for accessability. They are available in surface vertical rod and concealed vertical rod styles and are rated for 90 minutes for hollow metal doors and 20 minutes for wood doors.

Circle 62.

Garaventa (Canada) Ltd.



New Stair-Lift Brochure-If you've been wondering why the Garaventa Stair-Lift is the first choice of building owners around the world, get a copy of our new brochure. It'll spell out the reasons why Garaventa is the world's most popular stairway access solution. It's more attractive, durable and reliable, and safer and easier to use than any other platform lift. Quite frankly, Garaventa is the best value. Call today: 800-663-6556 or 604-594-0422. Circle 66.

Garaventa (Canada) Ltd.



Garaventa Hillside Elevator-Make your client's beautiful hillside terrain accessible with the Garaventa Hillside Elevator. Ideal for both residential and commercial applications, the Hillside Elevator is custom-designed to meet your client's needs for value, size or comfort. Starting at \$35,000, the Garaventa Hillside Elevator is a valued addition to your client's lifestyle. For more information, call 800-663-6556 or 604-594-0422. Circle 70.

Fritz Industries, Inc.



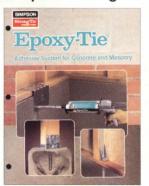
New Fritztile Display-Now available, a beautiful display featuring our new Granite Supreme 5000, the Marble Mosaic 600, and the Classic Terrazzo 200 tile series. With an industry breakthrough in display design, Fritztile offers a beautiful three-sided modular exhibit promoting all three Fritztile lines. This 2 ft. wide display has a color poster with pictorial replicas of each tile in the three series. Its triangular base conveniently fits into a 2 sq. ft. area. Fritztile also offers a single, one-sided display for each individual tile line. For more information, call 1-800-955-1323. Circle 60.

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Carrier-Lift® Accessibility Solution for Straight and Curved Stairways-Carrier-Life[®] Inclined Platform Lifts carry a wheelchair or seated passenger up and over straight stairs and intermediate landing. It can also provide access to multi-level stairs with 180° turns between two or more levels of stairs. Installation requires minimal, if any, building change. The self-contained power system uses standard, 110 volt power. A power-fold platform system and up to 180° parking turns enable handy storage when not in use. Circle 64.

Simpson Strong-Tie® Company, Inc.



High-strength anchoring easier with EPOXY-TIE™. Low-cost system for retrofits in concrete or masonry provides stronger anchoring than mechanical anchors. Bond strength up to 12,400 lb. tension; 7,200 lb. shear. Epoxy-Tie[™] bonds with surrounding concrete; anchor is less prone to sideburst during close-interval installation. Higher resistance to moisture and vibration than mechanical anchors. Full information in brochure F-ET. Circle 68.

National Gypsum



Flexible Wallboard-New Gold Bond® 1/4" High Flex gypsum wallboard saves you time and money on the curves. For tight radius construction such as curved walls, stairways, arches and columns, High Flex eliminates the usual on-the-job scoring, wetting and plaster finishing of standard drywall. Now you can access our Internet home page at http://www.national-gypsum.com. Circle 72.

Stone Design, Inc.



Stone Design, Inc. is an importer of high-quality marble, granite and slate. Offering many unique stones, as well as old favorites. The stones are available in tiles, slabs and cut-to-size. Qualified sales representatives are available for presentations to your firm. Sample kits are also available. 800/424-1332. Circle 74.

A/D Fire Protection Systems Inc.



A/D Firefilm® Decorative, Thin-Film Intumescent Fireproofing. A/D Firefilm® permits the designer to use the appearance of exposed steel with the steel fully protected from fire. Rated up to 2 hours for beams and columns. It is applied as a thin-film coating 0.016 to 0.120 in. thick. During a fire, A/D Firefilm® expands to form a meringue-like layer up to 4 in. thick which insulates the steel from fire. The topcoat is available in most colors in gloss and semi-gloss finishes. A/D Fire Protection Systems, Inc. (800) 263-4087 or (416) 292-2361. Circle 78.

Horton Automatics



Horton Automatics Elegant automatic sliding glass entrance system meets the demands of modern architecture yet conforms to building codes and energy conservation requirements. Automated by the state-of-the-art, micro processor driven, Series 2001 operator. Glass panels slide quietly on a concealed track. For emergency egress, a breakout feature that allows panels to swing out is also available. Call 1-800-531-3111.

Circle 82.

Georgia-Pacific



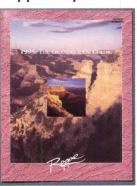
Georgia-Pacific Engineered Lumber—Georgia-Pacific offers brochures detailing three engineered lumber products. G-P Lam[®] LVL (laminated veneer lumber) beams and headers are specially designed and constructed for stability and high strength. WI Series and GPI Series Wood I Beam[®] joists, primarily used as a structural component in floor and roof systems, also may provide support as window, door and garage door headers. Circle 86.

Southern Aluminum Finishing Co.



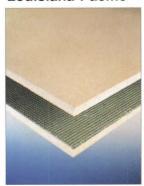
Concealed Gutter & Cornice System—The "Designer Series" Pre-Engineered Gutter Systems are installed throughout the United States. Available with a variety of architectural fascias, these pre-engineered gutters are extremely popular in both new construction and renovations because the actual gutter and brackets are concealed—an important feature for "signature type" projects or historically sensitive neighborhoods. Call 1-800-334-9823 for free literature.

Roppe Corporation



Roppe Floors—The Grandeur of Color. Roppe is launching 1995 with even more innovations and color! 1995 Catalog provides a complete look at their expanding rubber and vinyl lines. New this year are the Cerriot Collection: 6 new colors in the American Southwest tradition, and the Venetia Collection: a subtly flecked wall base. In addition, Roppe manufactures a comprehensive range of flooring products. For a free copy call 1-800-537-9527, dept. 100. Circle 80.

Louisiana-Pacific



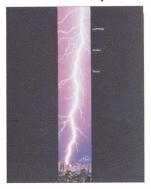
FiberBond® fiber gypsum panels provide a solid, impact-resistant surface, thermal insulation, moisture tolerance and fire resistance. Available for three applications: wallboard, exterior wall sheathing, and flooring underlayment. Wallboard now available in new VHI (Very High Impact) panels with fiberglass mesh reinforcement applied to the back. The cellulose fiber in FiberBond panels comes from recycled newspaper and contributes to a cleaner environment. For a free brochure, call (800) 299-0028, ext. 342. Circle 84.

Follansbee Steel



Two Lifetime Roofing Metals. Two roofing metals are manufactured by Follansbee Steel. TCS, terne-coated stainless steel, is 304 architectural stainless coated with a terne alloy. Terne is copper-bearing carbon steel coated with the same terne alloy. TCS does not require painting and weathers naturally to a warm, attractive gray. Terne requires painting with TerneCoat, a two-paint system developed by Follansbee.

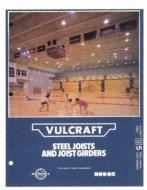
Versico Incorporated



Verisweld[™] Premier single-ply roofing is an advanced technology thermoplastic membrane made from inert polymers. The Verseweld[®] Premier sheet is heat-weldable and features a tough polyester scrim to increase puncture resistance. Roofing warrabtues are available for commercial installations of Versiweld roofing. Versiweld brochure by Versico Incorporated.

Circle 90.

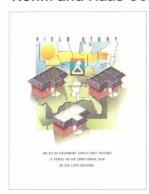
Vulcraft



STEEL JOISTS AND JOIST GIRD-ERS. This 94-page design manual provides indepth information for the optimum use of steel joists and joist girders. As the largest producer in the United States, Vulcraft has the most experience and expertise in the application, design and manufacture of these products. The economies of steel joists and joist girders contribute to their increasing utilization.

Circle 94.

Rohm and Haas Company



ACRYLIC ROOF COATINGS SAVE ENERGY AND EXTEND THE LIFE OF A ROOF! This attractively illustrated brochure shows how elastomeric acrylic roof coatings can substantially reduce air conditioning energy demand, while prolonging the life of a roof by protecting it from degradation by heat, sunlight, water and thermal shock.

Circle 98.

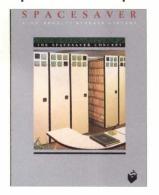
Rohm and Haas Company



ACRYLIC COATINGS PROTECT AS-PHALT ROOFS—This new, comprehensively illustrated brochure shows how elastomeric acrylic maintenance coatings reduce weathering deterioration on asphalt-based roofing materials. This publication is a compilation of a presentation that was made at the recent ASTM Symposium On Roofing Research And Standards Development.

Circle 102.

Spacesaver Corporation



A Spacesaver High-Density Mobile Storage System can be your secret bidding weapon by saving, even eliminating floor space. Complete floors have been eliminated in some building designs and HVAC savings have paid for the System in just one year. Ask Spacesaver to help you win your next bid, call 800-492-3434 today!

Circle 92.

Homasote Company



FIRESTALL ROOF DECKING—Firestall Roof Decking, manufactured by Homasote Company, is a nailable UL listed Class "A" flame spread load bearing roof deck. Can be applied to wood or steel framing to provide the structural decking and nailbase surface for finish roofing. Also ideal for use as a nailbase applied over sloped metal decking.

Circle 96.

Advance Lifts, Inc.



Advance Lifts introduces its new Safety-Dok Model 2400—a vertical rising platform that transfers loads on a level plane and fits into existing 6' x 8' dock leveler pits to provide a ramp free safety zone on a loading dock and eliminates the potentially dangerous ramping conditions of a dock leveler or ramp. To protect personnel, a Safety-Dok is used whenever loads are moved via non-powered material handling equipment. It carries a 5 year structural warranty and has an oven baked enamel paint finish to insure long life.

Circle 100.

Brick Institute of America



Technical Notes on Brick Construction is a series of publications that contain design, detailing and construction information based on the latest technical developments in brick masonry. Illustrated with drawings, photographs, tables and charts, nearly every aspect of brick masonry is covered. Purchases of a complete set will automatically receive updates and new Technical Notes as they are published. Cost: \$75.00 including Binder less 20% professional courtesy discount. Publication #TN 100. Brick Institute of America, 11490 Commerce Park Dr, Reston, VA 22091-1525 (703) 620-0010. Fax (703) 620-3928.

Circle 104

You Build With A Solid Foundation. Now Practice With One.

Introducing the 12th Edition of *The Architect's Handbook of Professional Practice* – the most up-to-date, accurate and concise resource available anywhere on industry practices, technology and regulations. It even comes complete with all the current forms you need to operate your business. In fact, it's been so completely revised, it makes all other editions obsolete!

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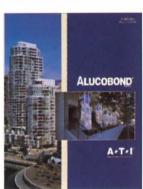
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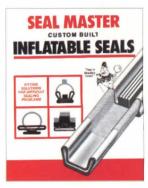
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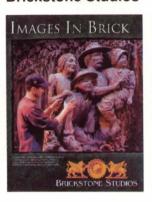
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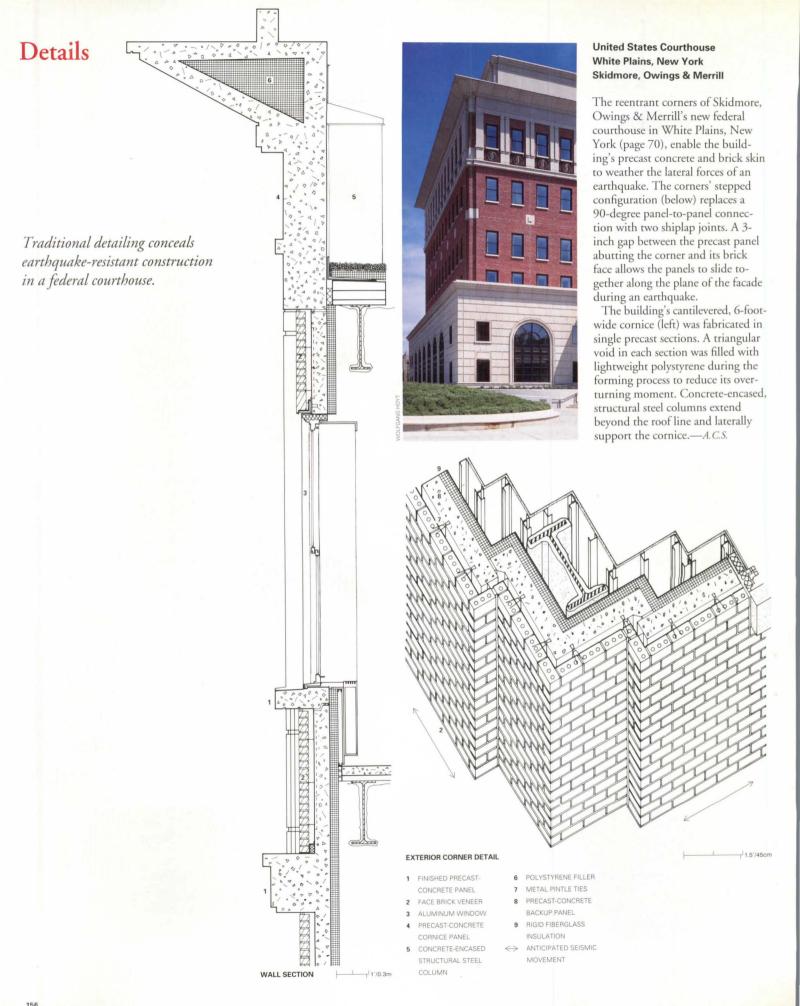
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ARCHITECTURE / JANUARY 1996 155

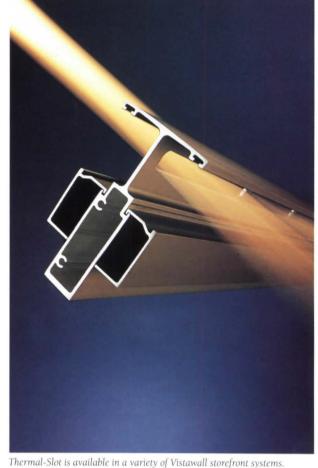


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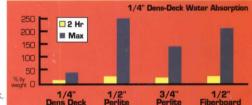
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