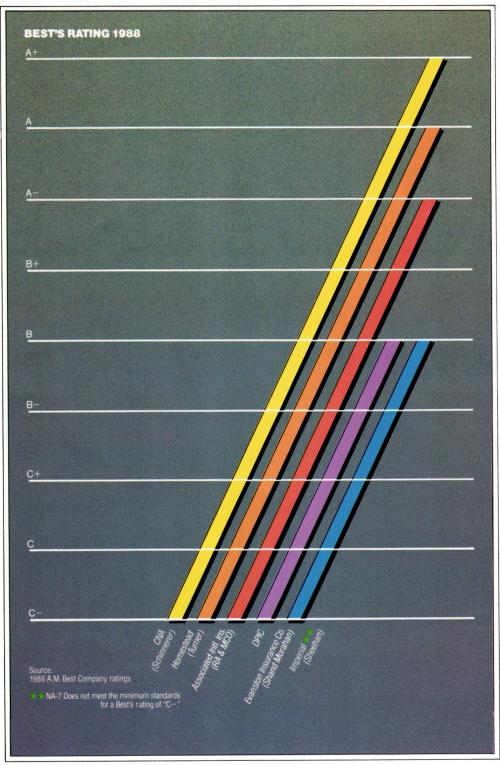


# The A, B, C's of professional liability insurance companies.



Financial advisors recommend comparing the A.M. Best Company rating of financial strength when you select an insurance company. This rating is important to you as a strong indicator of a company's future performance and stability.

According to the National Association of Insurance Commissioners (NAIC), between 1981 and 1987 the number of insolvencies for insurance companies licensed in at least two states increased by over 600%. If this should happen to your insurer, you can be left uncovered if a claim occurs.

CNA, the largest insurance organization offering liability insurance to architects and engineers, has earned an A+, Best's highest rating. This measure of excellence is a reflection of our management strength and our ability to meet our obligations now and in the future.

This didn't happen overnight. CNA and Victor O. Schinnerer & Company, Inc. have offered professional liability protection continuously since 1957.\*

Today our program offers you more choices than any other to help you manage your insurance costs by letting you match your coverage to your needs. We also offer extensive loss prevention seminars, newsletters and other guidelines to help you minimize claims. But, if one should arise, we maintain claims offices throughout the country to help you.

If you want a quality professional liability program that has the financial strength to be there when you really need it, have your independent agent contact Schinnerer.

\*CNA/Schinnerer is proud to have earned the commendation of the AIA and NSPE/PEPP.

Circle 501 on Reader Inquiry Card



Underwriting Manager Two Wisconsin Circle Chevy Chase, MD 20815-7003 (301) 961-9800, Telex 892340 Chicago, (312) 565-2424 New York, (212) 344-1000 San Francisco, (415) 495-3444



# Quality & Service

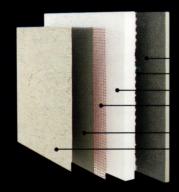


Quality products and technical service are part of what makes our ThoroWall Exterior Insulation Systems so perfect for new construction or retrofit.

ThoroWall A and ThoroWall H both provide those features so important to an insulating wall system; a waterproof, uniform finish, energy efficiency, aesthetically pleasing colors and textures, and excellent long-term weatherability.

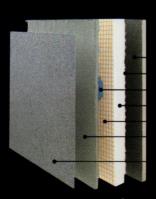
All Thoro System products carry a limited material and labor warranty. For quality and service, count on Thoro!

For more information, contact: Thoro System Products, ThoroWall Division, 7800 NW 38th Street, Miami, Florida 33166.



#### ThoroWall A Flexible acrylic, polymer base insulated wall system

Exterior Gypsum Sheathing ThoroWall Primer Base/Adhesive ThoroWall EPS Board ThoroWall Reinforcing Fabric-117 ThoroWall Primer Base/Adhesive ThoroWall Acrylic Finish



#### ThoroWall H

High impact, high build, insulated wall system

Exterior Gypsum Sheathing ThoroWall Primer Base/Adhesive Mechanical Fastener ThoroWall EPS Board ThoroWall Fiberglass Mesh-119 ThoroWall H Fibered Base Coat ThoroWall Acrylic Finish



## Thorowall® Exterior Insulation & Finish Systems

## WINDOWMASTER PRODUCTS:

## MORE THAN JUST ANOTHER WINDOW MANUFACTURER!







"Where Quality Comes Into View"

hrough a sophistication of staff and facilities. Windowmaster Products is now one of the leading suppliers to the aluminum window and door industry. Since 1945, we have developed a product line of significance for you and your clients that includes: Residential Windows & Specialty **Products** — our ValueLine and MasterLine offer both standard and custom products: Commercial Sliding Windows & Doors — HighLine and MasterLine are ideal for your architectural and light commercial projects: Storefront & Entry **Door Systems** — the Four Front Line provides the materials needed for strip centers and storefronts: Tempered, Insulating and Spandrel Glass complement each of our product lines, and our Anodized and Painted Finishes provide colorful and durable finish options, so you get just the look you want. Windowmaster can meet all of your window, glass, and finishing requirements, as well as provide technical support. It's part of our commitment to excellence in craftsmanship, supply and service. Because we do windows and much. much more.



#### **Windowmaster Products**

1111 Pioneer Way • El Cajon, CA 92020

(619) 588-1144

Circle 503 on Reader Inquiry Card

#### CCAIA

California Council, The American Institute of Architects 1303 J Street, Suite 200 Sacramento, California 95814 (916) 448-9082

Executive Vice President Paul W. Welch, Jr.

#### Board of Directors

Betsey Olenick Dougherty, AIA First Vice President Chester A. Widom, AIA Secretary Michael B. Wilkes, AIA Treasurer
Harry B. Haimovitch, AIA
Vice President, Governmental Relations Michael J. Stanton, AIA
Vice President, Communications/Public Affairs
Douglas Austin, AIA Vice President, Professional Practice Lawrence Segrue, FAIA AIA Directors Donald Axon, AIA
Harry Jacobs, FAIA
William Reiner, AIA
Warren Thompson, AIA
Associate Directors Carol Marcus (North) Allen York (South) Student Director Robert Habian
Cabrillo Chapter
Robert C. Benson, AIA
Manuel Perez, AIA
California Central Coast Chapter
Larry Loh, AIA Larry Lon, AIA
California Desert Chapter
Milton Chambers, AIA
Central Valley Chapter
Robert L. Carter, AIA
Alan Oshima, AIA Alan Oshima, AIA
East Bay Chapter
Donald T. Kasamoto, AIA
Rosemary F. Muller, AIA
Robert T. Simpson, Jr., AIA
Golden Empire Chapter
Gregory Kendrick, AIA
Inland California Chapter Inland California Chapter Kenneth Taylor, AIA Los Angeles Chapter Ronald A. Altoon, AIA Raymond L. Gaio, AIA Fernando Juarez, AIA William Krisel, AIA Robert Allen Reed, AIA Joseph D. Vaccaro, AIA Monterey Bay Chapter J. Michael Wadsworth, AIA Orange County Chapter Donald W. Caskey, AI. Dell DeRevere, AIA John W. McMurray, AIA

Pasadena and Foothill Chapter
Douglas Mooradian, AIA
John K. Grist, AIA

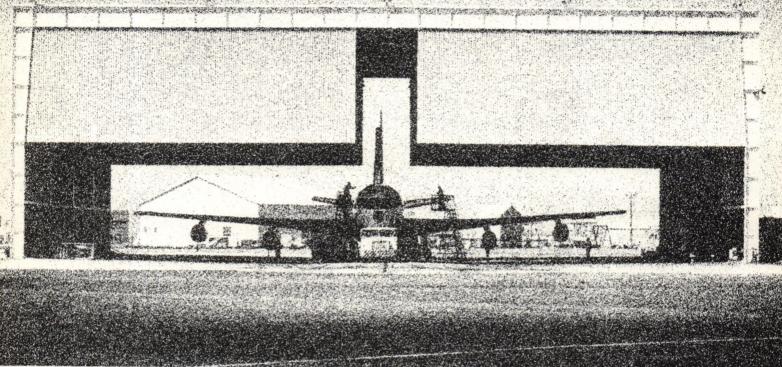
Redwood Empire Chapter
Robert E. Anderson, AIA Robert E. Anderson, AIA
San Diego Chapter
Edward A. Grochowiak, AIA
Donald L. Hansen, AIA
Edward L. Oremen, AIA
San Fernando Valley Chapter
Joe Jordan, AIA
San Francisco Chapter
Alexander Bonutti, AIA
Michelle Faton, AIA Alexander Bonutti, AIA Michelle Eaton, AIA Charles Eley, AIA George W. Famous, AIA Richard C. Hannum, AIA John H. Quense, AIA San Joaquin Chapter Richard R. Moore, AIA San Mateo County Chapter Paul J. Gumbinger, AIA
Santa Barbara Chapter
William T. Mahan, AIA
Santa Clara Valley Chapter
Michael Roanhaus, AIA

Kenneth A. Rodrigues, AIA Ronald Ronconi, AIA

Fritz Harris-Glade, AIA

Sierra Valley Chapter John Booker, AIA Ventura County Chapter

# Skidmore, Owings & Merrill, San Francisco



United Airlines Maintenance Hangar, SFO, 1960

#### IN THIS ISSUE

- 15 CCAIA Firm Award: Skidmore, Owings & Merrill, San Francisco
- In A World Of Their Own Design, by Janice Fillip
- An Office Of Entrepreneurs, by Janice Fillip
- 31 Reach For The Sky, by Navin Amin

#### **DEPARTMENTS**

- 7 EDITORIAL
- 8 NEWS
- **42** END PAGE: Coming Attractions

#### COVER

Bank of America World Headquarters, San Francisco. Architect: Skidmore, Owings & Merrill, San Francisco. Associate Architect: Wurster Bernardi & Emmons, Inc.

Photographer: Bob Hollingsworth.

Editor
Janice Fillip
Art Director
Tom Glass
Roosevelt Studios
Editorial Assistants
Rebecca Houser
Ingrid Aubry
Typeset
turnaround
Printing
St. Croix Press

Editorial Board
Douglas Austin, AIA
Sam Davis, FAIA
Joseph Esherick, FAIA
Robert S. Harris, FAIA
Barton Phelps, AIA
Paul Prejza
Deborah Sussman
William Turnbull, Jr., FAIA

Advertising Sales Director Peggy Lindoo Architecture California 1303 J Street, Suite 200 Sacramento, CA 95814 (916) 448-9082

Advertising Representatives Warren De Graff 33 New Montgomery, Ste. 980 San Francisco, CA 94105 (415) 541-0377 Ken Jordan 709 E. Colorado Blvd., Ste. 220 Pasadena, CA 91101-2125 (818) 796-9200

In CA (800) 325-5133

Architecture California, (ISSN 0738-II31) is published bi-monthly by the California Council, The American Institute of Architects. Subscriptions: \$30 a year. For subscriptions, write Circulation Department, 1303 J Street, Suite 200, Sacramento, CA 95814. CCAIA is not responsible for statements or opinions expressed in Architecture California, nor do such statements necessarily express the view of CCAIA or its committees. Second Class Postage Paid at Sacramento, CA and additional offices. POSTMASTER: send address changes to Architecture California, 1303 J Street, Suite 200, Sacramento, CA 95814. © 1988 by CCAIA.

## Metal Building Systems

## Design Handbook for **Architects**

## GENERIC DETAILS AND SPECIFICATIONS

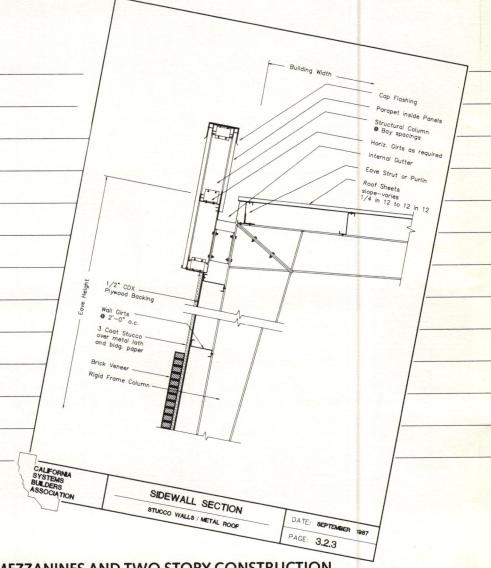
This handbook assists the architect to adapt a variety of building materials to the preengineered metal building, and also allows the architect a freedom of design utilizing standard metal building components.

#### **NON-METAL** ARCHITECTURAL CLADDINGS

WOOD SIDING **STUCCO BRICK** TILT-UP **MASONRY** FIRE WALLS

**FACIAS** 

#### Prepared by Department of Architecture CA STATE POLYTECHNIC UNIVERSITY POMONA



#### MEZZANINES AND TWO STORY CONSTRUCTION

Enclosed with the Handbook is one Sample Floppy Disk with computerized Drawings and Specifications. (Auto-Cad IBM & MS-DOS) Entire library of drawings on Disks available under a separate order at a cost of \$100.00.

## INTRODUCTORY PRICE \$2500 (Including Postage)

VALUE \$45°°

Sponsored by: California Systems Builders Association Funded by:

The California Field Ironworkers Administrative Trust

Circle 504 on Reader Inquiry Card

#### ORDER NOW:----

Tear off and mail to: CA Systems Builders Associations c/o Frank Lyman

PO Box 5158

San Bernardino, CA 92412

Enclosed is my check for \$25.00 made out to C.S.B.A. Mail to:



Shell Central Headquarters, The Haque, Holland, 1986

### Home Run Hitters

The energy it takes to keep the ball rolling grows exponentially in relation to the size of the ball. That probably explains the bustle that prevails on all three floors of Skidmore, Owings & Merrill's San Francisco office, even on Friday afternoons.

SOM's multi-disciplinary teams are the home run hitters of mega-building design. Like the clients for whom they build, SOM inhabits a corporate world. Staff people arrive at the office through a white marble lobby splashed with the vivid abstractions by which contemporary artists comment on our cultural gestalt. Literally hundreds of people head for the elevator bank that rockets them twenty-odd floors to their work stations.

A visit to SOM's San Francisco office is a study in scale. An enormous amount of work litters the boards, and most of that work is of remarkable size. During the 42 years since it was founded, SOM/SF has completed 34 million square feet of projects throughout California and an additional 15 million square feet across the nation and abroad. Commercial, office and retail projects comprise 40 percent of the office's work; another 30 percent is accounted for in educational and medical buildings. The legacy of the firm can be seen out every window of the office in the form of individual buildings and in the urban environment that their work has fostered.

An equally enormous number of people are required to keep SOM/SF in business and to ensure that the tail is not wagging the dog. Consider the logistics of management. Any two architects often are of warring opinion on a given design issue and "artistic differences" frequently characterize collaborations among architects, interior designers, engineers, graphics designers, and business managers.

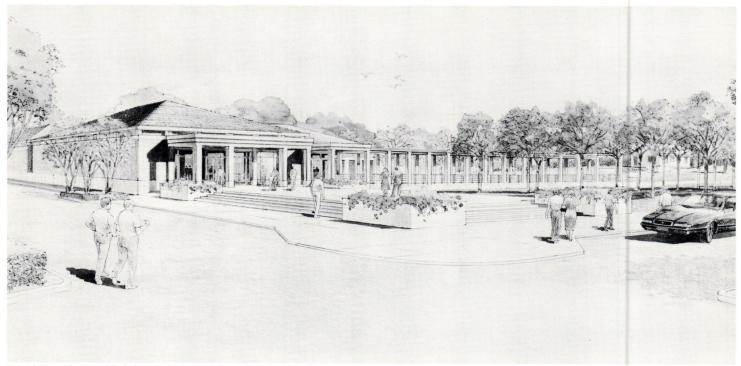
Getting 250 or more creative professionals to work together is a management feat. Getting them to produce a coherent and distinguished body of architecture and urban design is an accomplishment that deserves the highest recognition. That recognition was given this year when the California Council, The American Institute of Architects conferred the 1988 Firm Award on the San Francisco office of Skidmore, Owings & Merrill.

The San Francisco office is not as button-down as its location and corporate image might suggest. The place may look like a plan factory, but that is not how it operates. SOM/SF most closely resembles a collection of entrepreneurs pursuing their own artistic and professional goals under one shingle. The result is an eclectic vocabulary that ranges from highly Modern, structuralist solutions through neo-historic, contextual architecture. Allan Temko, architecture critic for the San Francisco Chronicle, praises this variety because "it shows the searching philosophical direction of the office and its willingness to explore new problems and, more often than not, to solve them brilliantly."

This issue looks at SOM/SF's achievements over the past 42 years, explores the office's approach to design, and considers the relationship between the San Francisco office and the larger firm of Skidmore, Owings & Merrill. The intent is to see SOM/SF through the eyes of the partners who have guided its direction over the past decades.

The story yet to come will be written by the talented people warming up in the firm's on-deck-circle. They may not bat .400, but they are sure to hit more than one ball out of the stadium.

— Janice Fillip



Richard Nixon Library and Birthplace, Yorba Linda, Architect: Lanadon Wilson Mumper

#### NIXON LIBRARY

The City of Yorba Linda Planning Commission recently approved the final design for the Richard Nixon Library and Birthplace. Ground breaking is expected this fall.

Langdon Wilson Mumper Architects designed a series of formally composed and landscaped buildings to be constructed of native southwestern sandstone with an Indiana limestone trim and capped by tile roofs. A museum, theater, entrance lobby and document/museum storage area are organized on the 8.1 acre site around a central courtyard that features a 96 foot long reflecting pool. Plans also include restoration of the existing wood-frame house where Richard Nixon was born.

"While the location and site orientation represented formidable design challenges, we have been able to use them to our advantage," says Ernest C. Wilson, Jr., AIA. "The inward-facing courtyard building creates a sense of security and permanence, while the gardens and landscaping create a warm, peaceful environment."

#### DOES WIND CAUSE EARTHQUAKES?

Unusual air pressure patterns off the coast of California may trigger moderatesize earthquakes, according to a controversial study reported in Science News. After three decades of study, meteorologist Jerome Namias of the Scripps Institute of Oceanography in La Jolla reports that California earthquakes are often preceded months in advance by persistent patterns of air pressure several hundred miles off the coast.

From one month to six weeks before the seismic activity that shook southern California in July 1986 and October 1987, Namias observed unusually large, recurring patterns of high pressure off the coast. While Namias has no theory to explain how pressure patterns may trigger the release of stress built up along earthquake faults, he speculates that pressure systems may generate winds of change in sea level that could indirectly set off earthquakes.

#### **DESIGN CONFERENCE FOCUS** ON 20TH CENTURY AMERICAN ARCHITECTURE

The American Institute of Architects Committee on Design is sponsoring a Design Conference on 20th Century American Architecture, in Los Angeles November 4-6, 1988. Keynote speaker Vincent Scully, professor of history and art at Yale University, will be joined on the program by Frank Gehry, FAIA; Thomas Hines; C. W. Westfall; Robert Campbell, AIA; Michael Dennis, AIA; Robert S. Harris, FAIA; and Richard Weinstein.

The conference is based at the Sheraton Miramar Hotel. A series of tours to prominent architectural monuments in the Los Angeles area will be incorporated into the program.

For further information and to register, call Joanna Bache at AIA headquarters, (202) 626-7361, before October 21, 1988.

#### DOWNTOWN DESIGN FOR VACAVILLE



The design community in Vacaville recently organized the town's first city-wide charrette to develop a plan to transform the downtown area into a regional showplace. "We wanted to instill the idea that design is good economic news," says Mark Vogt, AIA a principal at Vacaville Architects Collaborative, organizers of the Our Town Charrette.

The ambitious blueprint for change focuses the first year efforts on structural improvements to Main Street, including new signage, acquiring land for additional parking and providing downtown directories. The entire program proposes a complete range of street improvements from resurfacing to landscape; financial assistance for merchants in the form of loan buy-downs and facade grants; and the establishment of an urban park district and a downtown marketing program.

The Downtowners Committee of the local Chamber of Commerce has supported the far-reaching proposals that now are under consideration by the city government. The proposal coincides with the city's approval of the sale of \$13 million in redevelopment bonds that could net the downtown \$2.75 million to finance its renovation.

"The charrette is the largest effort I've seen since I've been in Vacaville to do some good planning using real architects," Vice Mayor David Fleming told the Vacaville *Reporter*. "Our downtown is going to do better than other cities. With the creek, excellent old buildings and parking, it's just a question of its time coming."

#### **COMPETITIONS**

THE REAL PROBLEMS Competition, sponsored annually by the Associates of the Los Angeles Chapter/AIA, focuses this year on the Venice Pavilion site, one of Venice's oldest and most prominent architectural landmarks. The competition to re-design the existing theater facility as a mixed-use art center with supporting commercial and service areas is open to all southern California architecture students and non-licensed architectural professionals. Registration is now open; entry deadline is December 16th. The entry fee is \$25. Winners will receive cash prizes totaling \$2,000. Contact the Los Angeles Chapter/ AIA, 8687 Melrose Avenue, Suite BM-72, Los Angeles, CA 90069, (213) 659-2282.

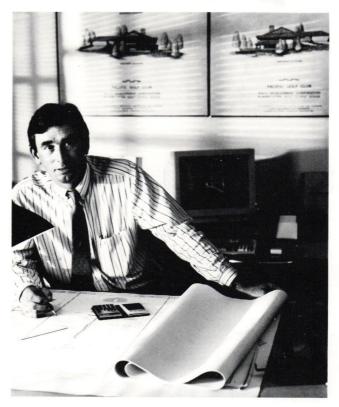
OSAKA'S 4th ANNUAL International Design Competition continues to accept registrations through October 31, 1988. The theme of this competition is "fire." Winners will receive cash prizes of up to \$50,000. Contact Japan Design Foundation, 3-1-800, Umeda 1-chome, Kita-ku,, Osaka, 530 Japan, or telephone 011-81-816-346-2611.

"BOSTON VISIONS," a national design competition sponsored by The Boston Society of Architects, challenges entrants to provide creative plans for the future of four areas in Boston: the waterfront, the downtown, Boston's boulevards and an open category. Winners will receive cash prizes of up to \$50,000. Deadline for entry is October 31, 1988. Contact: Alexandra Lee, The Boston

## WHY DO THE BEST KNOWN ARCHITECTS IN SOUTHERN CALIFORNIA USE DATACAD???

#### Ask a professional!

James Goodman, AIA Profession: Architect Lee Naegle Partnership Capistrano Beach, CA

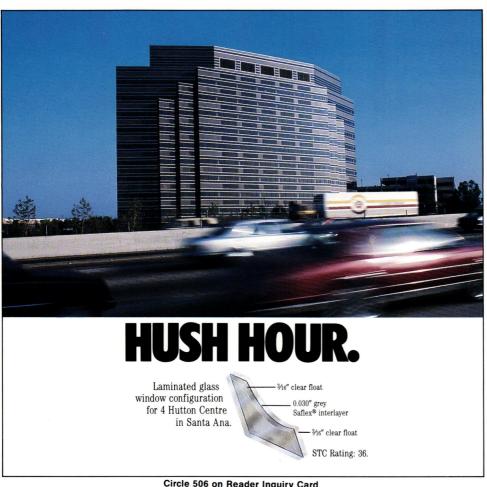


"CR-CADD provided everything we could want and more!"

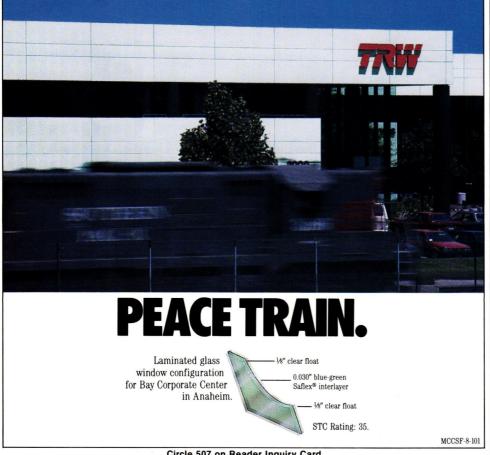
Data CADD

CROCADD

1-800-624-6959



Circle 506 on Reader Inquiry Card



Circle 507 on Reader Inquiry Card

Society of Architects, 305 Newbury Street, Boston, MA 02115, (617) 267-5175.

CITY COLLEGE of San Francisco Master Plan Competition opens registration in November 1988 for the design of an overall master plan concept for the college's 56 acre campus and for an adjacent undeveloped 26 acre site. The winner will receive a cash prize of \$10,000 and, if the college receives approval to proceed with the plan, the winner will be given the opportunity to negotiate a contract to develop the master plan concept into a working document that will guide the college building programs into the next century. Entry deadline is February 1989. Contact: William H. Liskamm, FAIA, Competition Advisor, City College of San Francisco, E 200, 50 Phelan Avenue, San Francisco, CA 94112 or call the Competition Secretary at (415) 239-3047.

THE 1989 INNOVATIONS in Housing competition is sponsored by Better Homes & Gardens, Progressive Architecture, Builder, and the American Plywood Association. Eligible projects are market-responsive houses with a floor plan of 2,200 square feet that incorporate wood products and are economically built. Winners receive \$5,000 in prizes and publication in Better Homes & Gardens. Entry deadline is February 6, 1989. Contact: Innovations in Housing, P.O. Box 11700, 7011 So. 19th, Tacoma, WA 98411.

COMPETITION DIOMEDE seeks proposals to unite the two Diomede Islands of the Bering Strait that divide the Eastern and Western Hemispheres at the USSR and USA border. The islands also divide one calendar day from the next on the International Dateline. The two part competition calls for proposals that mark the end of finite territorial frontiers and the true acceptance of our human existence on a fragile and finite globe. First phase calls for drawings, paintings, constructions and writings that describe an idea to unite the Diomede Islands. A jury will select up to 40 projects that demonstrate an emerging methodology for conceiving architecture. The second phase participants will be asked to comment on the collected winners, and those comments, along with the proposals, will be incorporated into an exhibition that travels around the world. The first exhibition occurs at the Institute for Art and Urban Resources' Manhattan gallery, The Clocktower, between May 11 and June 15, 1989. There are no entry fees or paid prizes. Deadline is February 15, 1989. Contact: The Institute for Art and Urban Resources, Inc., P.S. 1, 46-01 21st Street, Long Island City, New York 11101, (718) 784-2084.

## TIGHT BUILDINGS INCREASE RISK OF INFECTION

Respiratory infections in the United States account for 75 million doctor visits and \$15 billion in direct medical costs each year. A recent study suggests that energy-efficient, "tight" buildings may contribute to the frequency with which people contract respiratory infections.

Residents in buildings with modern, energy-saving heating and air conditioning systems get respiratory infections significantly more often than those living in older buildings, according to a four year study reported by a team of doctors in the *Journal of the American Medical Association*. Army trainees housed in modern barracks were found to have 45% more incidents of respiratory disease than those housed in barracks built in the 1940s and 1950s.

The higher incidents of infection is attributed to the fact that up to 95% of the air in buildings is recirculated by modern heating and cooling systems, while older, less energy-efficient buildings recycled only about 60% of the air in the building and mixed in fresh air from outside.

## CONSTRUCTION MARKET CONTINUES TO SLIDE

The failure of the housing market to respond to lower interest rates in the first half of 1988 is predicted to compound the construction industry's problems this year by the McGraw-Hill Information Services Company. National construction contract value is now estimated at \$246 billion, a decline of 5% from last year's peak. While the decline effects all regions of the country, the west is projected to suffer only a 3% overall decline in construction.

Housing starts are expected to slide 9% nationally, to 1.45 units, with most of the shortfall concentrated in the apartment sector. The decline in nonresidential construction is led by office building, which should plummet 18%, to 225 million square feet this year. Total nonresidential construction is projected to drop 10%, to 1,240 million square feet. Manufacturing buildings, now forecast to hit 160 million square feet, offer the only bright spot in this market segment.

"For at least three reasons, the odds are against a recovery of construction contracting in 1989," predicts George A. Christie, chief economist and vice president of McGraw-Hill Information Services. "The surplus of office and apartment space that currently is



Circle 508 on Reader Inquiry Card

# LAMINATED GLASS. THE SOUND SOLUTION TO NOISY NEIGHBORS.

Noise from planes, trains or automobiles can be a critical factor in architectural design in California. For these three California buildings and many others, specifying laminated glass with Saflex® interlayer was the sound solution. Laminated glass dramatically minimizes exterior noise — and does it more cost effectively than any

other glazing material.

To get our free Acoustical
Glazing Design Guide and software package, or for technical
assistance, call Monsanto's
Saflex Sales Development
Manager at 714/855-7736 or
write: Monsanto Company,
24012 Calle de la Plata, Suite 250,
Laguna Hills, CA 92653.



® Registered trademark of Monsanto Company © Monsanto Company 1988

MCCSF-8-102

Circle 509 on Reader Inquiry Card



## **DESIGN COMPETITION CALL FOR ENTRIES**

## Celebrating A New Legacy

The problem of housing a growing number of elderly citizens in a humane and comforting environment is one of the most intriguing issues in architecture today. In the first-ever open international competition for affordable elderly housing, the southern California community of Colton challenges the international architectural and design community with the opportunity to design and execute 100 dwelling units of senior housing in a historic setting. Through this architecture we hope to celebrate and honor the legacy of elder citizens, and provide a catalyst for the revitalization of the center of our community.

To Register and receive the program materials, send name(s), address, telephone number and US \$75

City of Colton 650 N. La Cadena Drive Colton, CA 92324

Submissions: First stage seeks two (2) 30" x 40"

Awards of \$50,000 in prizes plus opportunity for commission to build the project.

Eligibility: first stage is anonymous and open to any interested party. Up to five finalists will be invited to compete in a second stage.

Professional Advisor:

Michael John Pittas

Schedule: program available September 12. First stage deadline December 20. Second stage finalists announced January 9, 1989.

Information: Brian S. Oulman  $(714)\ 370.5071$ FAX: (714) 370 · 0813

#### Professional Jury:

- · Donlyn Lyndon, architect/educator
- · Robert Wellington Quigley, architect
- · Dana Cuff, design consultant/educator
- · Hilario F. Candela, architect

Circle 510 on Reader Inquiry Card

# Stability counts. Dealey, Renton & Associates P.O. Box 12675, Oakland, CA 94604 415/465-3090

depressing these markets will not be fully absorbed by the end of 1988. Public works construction will remain under a tight lid. And interest rates will be rising."

#### **BEEP INSTITUTE**

The toothpick towers of a "Boomtown" built from trash marked the third Built Environment Education Program (BEEP) Training Institute, held this June at the California Polytechnic State University, San Luis Obispo. The workshop, sponsored by the California Council, The American Institute of Architects, trained architects and teachers in how to teach environmental awareness in the classroom.

The purpose of BEEP is to increase students' knowledge about the environments that shape the world around them. The program is based on the collaboration of a classroom teacher and an architect, and often includes the participation of other design professionals from the community. Each teaching team develops an individualized program of study that uses the built environment as a learning laboratory.

Over 80 people have been trained through institutes to teach BEEP to kindergarten through 12th grade students. "The whole awareness of what man is doing has been something that will have a lasting impact on the lives of my students," said one BEEP teacher. "It's fantastic." Past BEEP projects have included students re-designing a local neighborhood, developing plans for a new school multipurpose room, creating the ideal bedroom and planning for a local z00.

Architects newly-trained to assist teachers with BEEP this fall are Richard Lawrence, AIA, Golden Empire Chapter; Mitchell Sawasy, AIA, Pasadena/Foothill Chapter; Orlando Maione, AIA, Santa Clara Valley Chapter and chair of CCAIA's Environmental Awareness Education Committee; and Charles Cerniglia. Teachers from the California Central Coast, Golden Empire, Redwood Empire, Santa Barbara, San Diego and San Mateo Chapter school districts will initiate BEEP in their classrooms this fall.

BEEP training workshops of varying length can be arranged at the local chapter level. Groups interested in sponsoring a BEEP workshop should contact Marganne Meyer, CCAIA Public Affairs Coordinator, (916) 448-9082 for further information. Architects interested in finding out more about BEEP should contact CCAIA or their local BEEP Chapter Coordinator.

Circle 511 on Reader Inquiry Card

## **Call For Projects**

Architecture California is looking for a few good projects built on public or private university or college campuses to feature in our January/February 1989 issue: "Architecture on Campus." Projects may be submitted in the following categories:

- small additions to existing facilities;
- · renovation or adaptive reuse of existing facilities:
- restoration:
- new construction of freestanding. major buildings: and
- new construction of small freestanding buildings.

Submit a project description that defines the scope of work performed and credits all pertinent members of the design team. For each project, include an architect's statement that specifically states:

- the nature of the design challenge;
- how the design related to the existing campus plan and significant buildings;
- what circumstances conspired against a good design and how you overcame them:
- who the client and the user were:
- how you interfaced with the campus management during design approval and construction, and the ways in which this client/architect relationship differed from your usual clients.

Submit at least two exterior and one interior photograph along with a plan for each built project. These photographs should illustrate the design ideas mentioned in the architect's statement. For restoration projects, include before photographs. For unbuilt projects, submit a plan, elevation and section drawings, and concept renderings that illustrate the ideas expressed in the architect's statement.

Deadline for receipt of material is October 15, 1988. Material will not be returned unless accompanied by a selfaddressed, stamped (not metered) envelope. For further information, contact Ingrid Aubry, (916) 448-9082.

Mail submissions to Architecture California, 1303 J Street, Suite 200, Sacramento, CA 95814.



#### City College of San Francisco Master Plan Competition

San Francisco's City College is sponsoring an open one-stage competition to provide an overall master plan concept, and to select a team to develop this new master plan for the College's 56 acre campus and for an adjacent undeveloped site of approximately 26 acres. The winner of this competition will receive a cash prize of \$10,000, and, if the College receives approval to proceed with the plan, the winner will be given the opportunity to negotiate a contract to provide the requisite professional services to develop the master plan concept into a working document to be used by City College to support its academic mission and to guide its building programs into the next century.

Founded in 1935, City College of San Francisco is part of the San Francisco Community College District and the California Community College system. Situated on a hill overlooking the Pacific Ocean, the College is a two-year comprehensive community college serving over 25,000 students from communities throughout San Francisco and the Bay region. The faculty of over 1000 full-time and part-time staff provide academic preparation for students to transfer to universities and for certificates in 55 vocational areas.

City College serves the educational and training needs of a wide spectrum of students and has been successful in attracting a student body with a high degree of ethnic diversity. Almost half of the students work full-time in addition to attending classes.

This one-stage competition is open to all California licensed architects. landscape architects and multidisciplinary planning and urban design teams wherein at least one principal is licensed in the State of California. Students who wish to enter this competition are encouraged to seek associations with licensed teams. Association by out-of-state professionals with California teams will be allowed. All submissions will be anonymous. Five finalists will be selected by the jury from the competition submissions and will be given the opportunity to make an oral presentation of their master plan schemes approximately two weeks following the initial jury review. No additional drawings will be required. The winner will be selected from among the five finalists following the oral presentations.

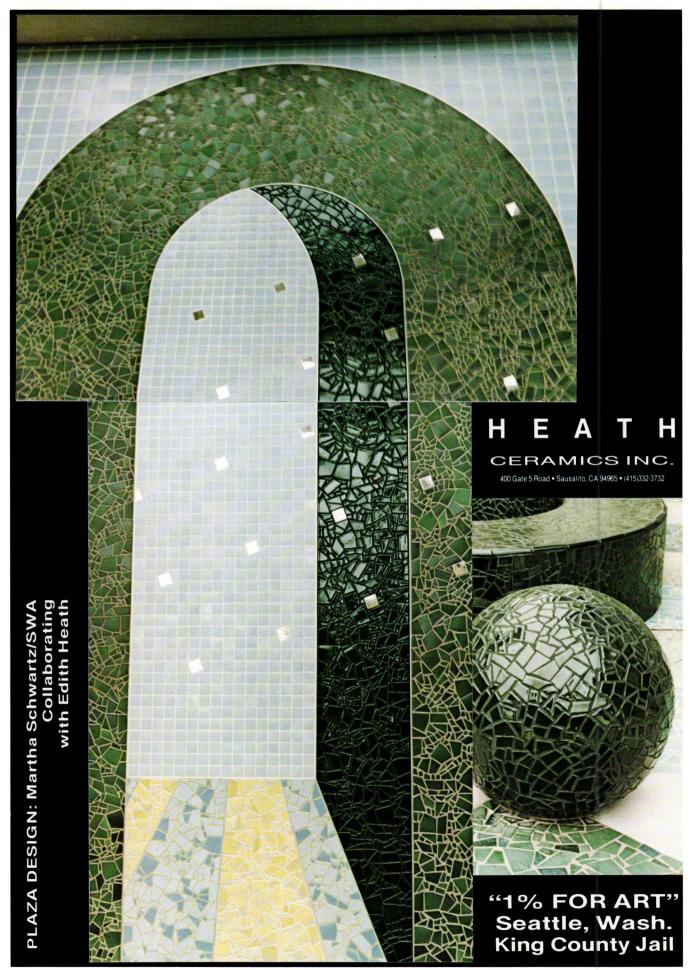
Competition registration will open in November 1988 and submissions will be due in February 1989.

For additional information and registration forms write to:

William H. Liskamm, FAIA Competition Advisor City College of San Francisco E 200 50 Phelan Avenue San Francisco, CA 94112

or call: Competition Secretary (415) 239-3047

Circle 512 on Reader Inquiry Card





STEVE PROFHI

## **CCAIA** Firm Award

**Skidmore, Owings & Merrill** San Francisco



San Francisco legend: A) John Hancock (Industrial Indemnity), 1960; B) The Hartford Building, 1965; C) Alcoa Building, 1967; D) Bechtel 50 Beale Street, 1967; E) Bank of America World Headquarters, 1969; F) Hyatt on Union Square, 1972; G Quantas Building, 1973; H) Metropolitan Life Insurance Co., 1973; I) California First Bank Headquarters, 1977; J) 595 Market Street, 1979; K) 444 Market Street, 1980; L) 353 Sacramento Street, 1983; M) Bank of Canton Headquarters, 1984; N) Five Fremont Center, 1984; O) 333 Bush Street, 1986; P) 345 California Center, 1986; Q) 388 Market Street, 1986; R) 88 Kearny Street, 1986. S) Crocker Center & Galleria, 1982. Other projects not visible in this photograph

> When called upon to display the work of their office, most architects point to models and renderings scattered around the studio, then pull out the slide projector for the feature presentation. Architects at the San Francisco office of Skidmore, Owings & Merrill have a three-dimensional, life-size exhibit right outside every window of the three floors they occupy on Bush Street in the heart of the financial district.

> When SOM began to build in San Francisco, it built within the context of an architectural movement, exploring the Modern vocabulary of Mies van der Rohe as articulated

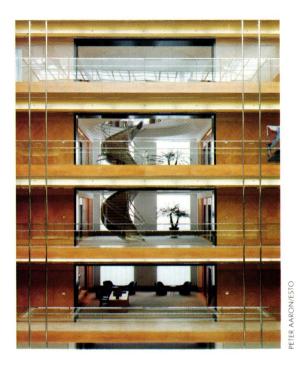
by Gordon Bunshaft. The early buildings—Crown Zellerbach and John Hancock (Industrial Indemnity)—bore reasonable proximity of scale to their surrounding neighbors. But when the Bank of America World Headquarters was built in 1969, the brave new emblem of commerce rampant on a field of black stone irrevocably altered the city.

This year, the San Francisco office of Skidmore, Owings & Merrill received the Firm Award from the California Council, The American Institute of Architects for its outstanding contributions to the profession over the past 42 years. In conferring the honor, the jury stated, "The work demonstrates the genuine commitment that the firm has to its city, to the profession and to both the art and business of architecture. The consistency and high quality of the buildings, particularly in the use of materials, is extraordinary. Their buildings are a strong element in the urban landscape. We all have to admire the fact that they resisted the intent to become big business and have opened up some avenues of thought concerning the large corporate building type."

Almost prophetically, the recognition for past excellence occurs at a time when the office that defined the context of urban San Francisco is at a turning point in its existence. Within the next two years, three of the office's seven partners will retire, opening the way for new leadership on a regional as well as national level.

The San Francisco office claims that a tradition of humanist, environmentallyoriented attitudes distinguishes its work from that of the other SOM offices around the world. Perhaps those fires will spark a revived Modernism able to forge more humane. coherent environments in the context of our mature cities.

## In A World Of Their Own Design



SKIDMORE, OWINGS & MERRILL San Francisco

#### By JANICE FILLIP

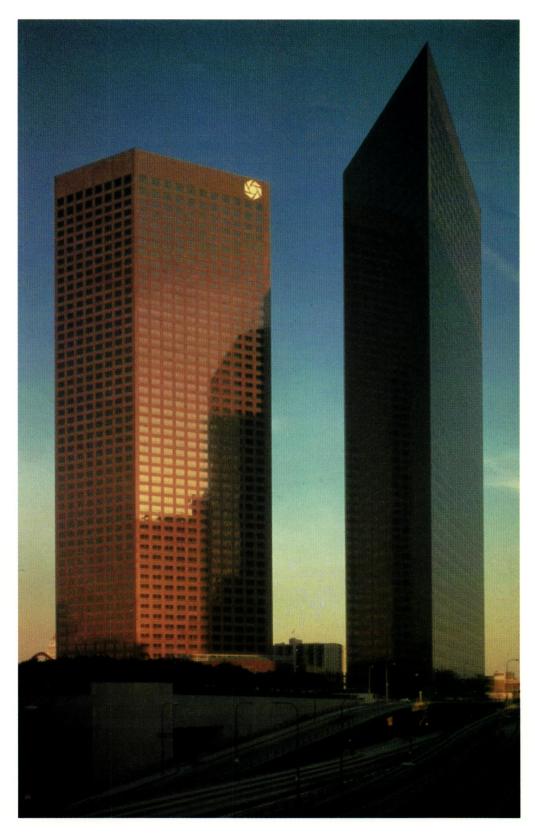
The San Francisco office of SOM does not exist outside the orbit of the larger firm, but it has established a unique profile within that context. "Everything from project management, to organization, to the recruitment of young people was done within the concept that we weren't going to be just a rubber stamp of New York or Chicago," says John Merrill, FAIA. "We wanted our own personality and identity and that's happened. The San Francisco office has a softer, less rigid attitude toward design that's more flexible and less doctrinaire than what the firm was doing."

SOM is synonymous with Modern architecture on the grandest scale, but the firm is not particulary hide-bound by tradition, even if that tradition is home-grown. The children of Bunshaft continue to interpret their legacy. "The firm has been individualistic in its work," says Walter Costa, FAIA. "That would be contested by historians who say we were Internationalists and we haven't changed. But we have changed. I hate this term, but our architecture is more 'human;' it's a Western approach to hard, International style architecture."

"People who are not very knowledgeable about the firm have the impression that there's a certain SOM style, that the firm is a big factory where we all think alike," adds Robert Armsby, AIA. "Nothing could be further from the truth. The only real common denominator in the work is the high quality of design. But the variety of buildings that come out of this office is tremendous. Each project gets a lot of individual attention and takes its own direction."

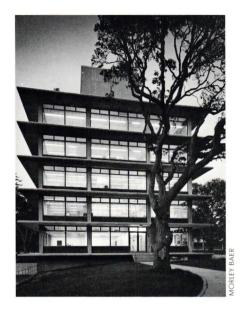
The commitment to Modern architecture remains fundamental at SOM/SF, but as John Kriken, FAIA explains, "Today it is a Modern architecture that expresses ambiguities and complexities that, years ago, would have been forced into a

Above: Shell Central Headquarters, Holland, 1986. Facing page: Crocker Center, Los Angeles, 1984.

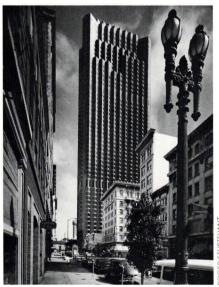


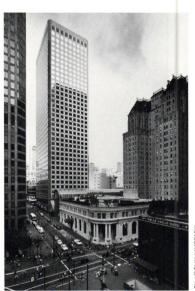
"In their place in the urban core of major cities, high rise buildings are interesting and exciting places to be and very positive.

-Robert Armsby, AIA









Above from left: U.S. Naval Postgraduate School, Monterey, 1955; Crown Zellerbach Headquarters, San Francisco, 1956; John Hancock, San Francisco, 1960; Tenneco Headquarters, Houston, Texas, 1963. Below from left: Bank of America World Headquarters, San Francisco, 1969; Crocker Center & Galleria, San Francisco, 1982; 345 California Center, San Francisco, 1986; 88 Kearny Street, San Francisco, 1986;











rather pragmatically notes, "The philosophy lies in creativity, in a commitment to quality, in the attitude that architecture is community service and in hanging in there."

Ask anyone at SOM/SF what characterizes the office's work, and the word "quality" is sure to come up. "The quality issue is the glue that holds SOM together," John Kriken admits. Indeed, the obsession with quality is firm-wide and regarded as fundamental to the success of the business. "High quality design is what our reputation is

based on," explains Robert Armsby, AIA. "Both developers and city representatives know that we have an excellent track record in following through on what we promised. If we don't maintain that

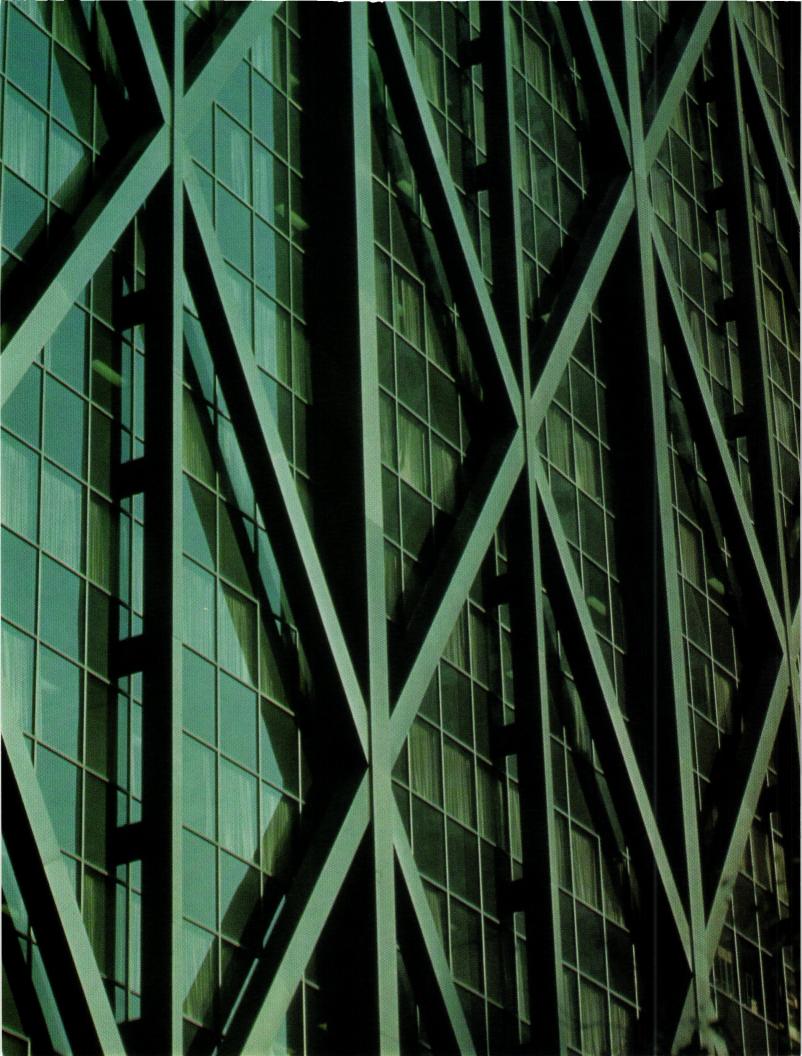
much simpler context. While our firm today has a keen interest in richness and visual detail, we still relate to Modern architecture and try to stay away from the mannerism of passing trends."

"The idea is not to grab onto a style, but to understand forms that are valued through time and the social reasons behind those forms," says Larry Doane, FAIA, who maintains that history should be taught as a design course. "The Bauhaus was a whole new way of life, just like the Space Age is a new way of life. I see the design philosophy of the future as a marriage of technology with the graciousness of historic architectural elements and the challenge of being contextual."

Context, as understood at SOM/SF, includes the relationship between the built and natural environments. The singular beauty of the Bay Area is a primary influence on the office's approach to design. As John Kriken, FAIA observes, "Working in the Bay Region has created an environment-conscious context for our work. There are so few cities where the whole metropolitan region is like a jewel box. Here, everything is seen against a frame of water and green. Working with the power of that natural background creates a humility, while other offices have more opportunity to muscle-flex in harder, more urban environments."

#### THE PHILOSOPHY OF QUALITY

An SOM epigram—alternately attributed to Louis Skidmore, FAIA and Nathaniel Owings, FAIA—is that if two partners agree, one of them is unnecessary. But the people at SOM share many areas of commonality, including a feisty energy, a high degree of professionalism, and a reluctance to articulate a design philosophy. As Larry Doane rather pragmatically notes, "The philosophy lies in creativity, in a commitment to quality, in the attitude that architecture is community service and in hanging in there."



"It doesn't matter one iota how good the drawings are, how good the design is, if the execution of that building is poor."

-Walter Costa, FAIA



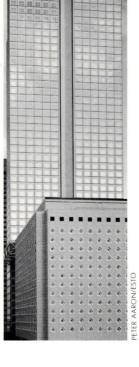




Facing page: Alcoa Building, San Francisco, 1967. Photo: Wes Thompson. Top above: Bank of America World Headquarters, San Francisco, 1969; Middle: 88 Kearny St., San Francisco, 1988.

Below from left: John Hancock (Industrial Indemnity), San Francisco, 1960; Shell Central Headquarters, The Hague, Holland, 1986; Southeast Financial Center, Miami, Florida, 1985.





quality of design, we won't get the same work that we've had."

John Merrill maintains that quality is something that, once established, simply feeds on itself. But establishing the commitment to quality underlies every aspect of the operation from personnel selection through organization, supervision and client relationships.

"The quality of the product is clearly linked to the quality of the people," observes Marc Goldstein, FAIA. The office has no formal training program to instill attitudes of quality within its employees, but no one rises through the ranks without it. Wally Costa says, "If the people haven't got the quality that we want, they leave. People who surface to be the leaders inherently have a sense of quality and take satisfaction in the completion of a good project."

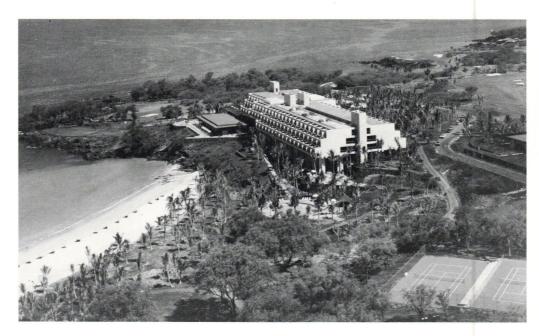
Given the enormous volume of work handled by the office, the ability to achieve quality depends on the way the work is organized. SOM/SF recently introduced a studio system, as Armsby explains, "so that everybody has a key role in the architecture all the way through from design to construction." The office currently has three studio teams, each under the direction of a management partner, design partner, senior designer, project manager and senior technical person.

Prior to the studio system, SOM/SF was organized by a hierarchy of departments. "If we hired people as designers or technical people, they were immediately pigeonholed into those categories and couldn't get out," Larry Doane remembers. "Now, as people's talents emerge, they evolve into the work areas where they're most skilled. The camaraderie that can occur among the people of different interests is better than the competition that used to exist between design and technical people." The integration of many disciplines into one work team has been a major strength of the firm since the concept was introduced by John Merrill, Sr. in SOM's formative days.

The vertically layered department system cossetted designers as the "nobility" of the office. "Being a designer, that suited me quite well," Marc Goldstein recalls. "When we went to the studio system, I was suspicious that the design energy would be dissipated.

"I look back in horror at my own point of view. The hierarchy has disappeared and that, in itself, is wonderful. It's a more efficient and enjoy"Large-scale design problems are fascinating because so many people and activities have to come together in some resolved way."

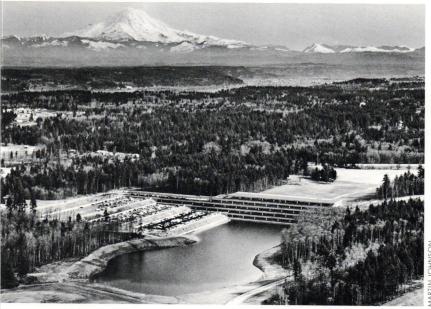
-John Lund Kriken, FAIA







Facing page: Weyerhaeuser Headquarters, Tacoma, Washington, 1971; San Antonio River Corridor, San Antonio, Texas, 1973.







able way of working because the people who are making the building are together. It's like a small office within a large office. You've got the best of both worlds."

Architecture and engineering do not, in themselves, ensure buildings of quality. "It doesn't matter one iota how good the drawings are, how good the design is, if the execution of that building is poor," notes Wally Costa. To ensure that the building gets built as designed, SOM/SF has an active construction observation group.

Ongoing construction observation costs the firm money, but the partners consider it money well spent. "We have a reputation of being expensive so we probably lose some work we might get otherwise," Wally Costa says. "But we spend more time on design and technical solutions for construction, sometimes to the extent of not making as much profit. We give a lot of attention to how buildings are actually constructed and this pays off for the client."

The client is the final ingredient in the achievement of quality. "We walk a tightrope between accommodating a client's needs and raising their expectations about what is possible," says John Kriken. "We do not automatically accept criteria that don't optimize the solution. We always try to push things, however far the boundaries will stretch. We're lucky because we still mostly get developers who are interested in distinguishing themselves in the marketplace by using ideas of quality."

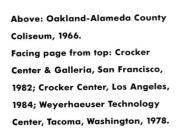
That is not always the case. According to Larry Doane, the decision of whether to take on a project depends on several ingredients: "the attitude of the client, the site, the quality of materials, the market, the program, to name a few. Are all those components ready to accept a good design? If the answer is yes, it's a good project. When some of those ingredients are missing, we refuse a commission. Life is too short to spend your energies on something that's not going to be exciting, fun and have the potential for excellent design."

Doane identifies two major points in a project when he decides whether or not to continue. "One is the first hour, where you make those evaluations I just described," he says. "The second goes down about three months into the project and has to do with relationships: whether you're relating to the client, whether he trusts you. whether he believes that you're working in his best "I see the design philosophy of the future as a marriage of technology with the graciousness of historic architectural elements and the challenge of being contextual."

-Lawrence Doane, FAIA













interests—whether the chemistry's working. If it doesn't work, there's no sense in proceeding. Then you have a very honest meeting."

#### THE EVOLUTION OF THE CLIENT

Today SOM only opens a regional office if the area has sufficient work to keep the office running. That was not the case when the San Francisco office was opened in 1946. Chuck Bassett recalls, "Jack Rogers opened the office 10 minutes after World War II was over and waited for the jobs to come in." In the early years, the firm managed to stay in business "by taking anything that came through the door and by the tolerance of the other offices," Bassett says. By the early 1950s, SOM/SF began to attract corporate and government clients. Then the developers came on the scene and have been the office's primary client group ever since. The change in client has affected building design and the pursuit of quality.

"An institutional building was not built primarily to make money; it was built to house the institution. With the emergence of the developer, it was a whole new ball game," remembers Marc Goldstein. "Economics and the money-making ability inherent in the building became quite central. It's more difficult to build with a developer than with an institution, no question about it."

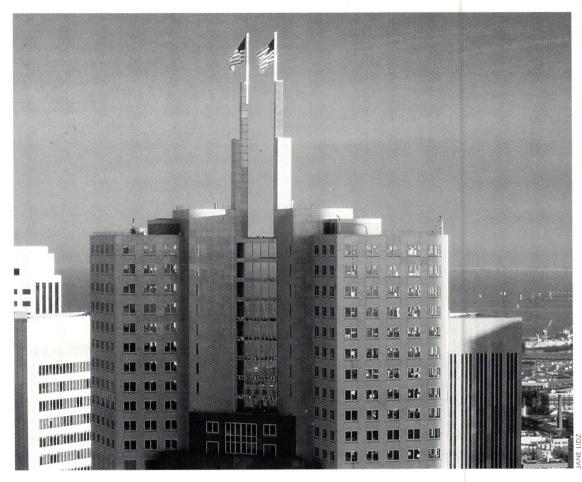
Chuck Bassett found that, with notable exceptions, the developer clients make an architect's job harder "because there seldom is a real commitment on the owner's part to do something important. They use all the right words, but that's all there is to it—they're doing a package.

"We've been involved with buildings where the ownership has changed three times before it was finished. Each time someone new comes on stream, they've got their own ideas, things get thrown up for grabs, money is taken out and none of them really give a damn about the building. An architect can become a front for the developer, but we fight like hell not to."

John Merrill maintains that the popular idea that developers just build and sell out is not true. "The developers we've worked for, like Gerald Hines, Walter Shorenstein and Donald Bren, are not the faceless developers you read about in the paper," he says. "They're intelligent and know that if the building's going to have long term value, it has to relate to the area that it's in. It's good business for them to be aware of those things."

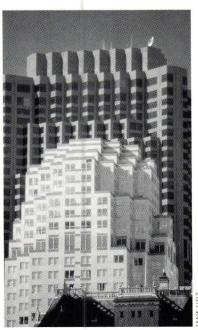
"To paint a building with 'isms' is totally irrelevant. The sensual pleasure derived from looking at a building, or being in it, is what makes a building successful."

-Marc E. Goldstein, FAIA



Above: 345 California Center, San Francisco, 1986. Center from left: 444 Market Street, San Francisco, 1980; 333 Bush Street, San Francisco, 1986. Facing page from top left: John Hancock (Industrial Indemnity), San Francisco, 1960; Crown Zellerbach Headquarters, San Francisco, 1956; Shell Central Headquarters, The Hague, Holland, 1986; The Federal Reserve Bank of San Francisco, 1983.













Close association with developers has given SOM/SF's partners empathy, if not sympathy, for a group that many in San Francisco consider to be the devil. The special requirements imposed on developers by the City of San Francisco account for about 20 percent of the total cost of a building, Wally Costa points out. Bob Armsby adds, "A lot of developers are willing to make contributions to the city, but they resent being forced to give 'exactions' just to be permitted to build. That cost eventually gets passed through to the tenant. That raises the cost of doing business in San Francisco and causes some firms to relocate."

Chuck Bassett maintains that the problem goes beyond economics and severely impairs the quality of design achievable in San Francisco. "This city is the world capital of the egalitarian society," he says. "Everyone has something to say about everything in this town, which is one reason hardly anything gets done well."

#### THE CONTEXT OF TOMORROW

SOM/SF has come of age in a world of its own design. John Kriken feels that the recent spate of office buildings represents a new beginning for the firm. "For me, they are a correct balance between the expression of a problem's complexity and the honesty of expressing how we build in today's environment," he says.

Whether developing plans for entire urban areas, major transportation systems or individual buildings of a significant scale, SOM/SF is an office of city builders. "We have major impacts on development and settlement patterns in both cities and regions where we're working," John Kriken points out. "At that level, quality lies in supporting a pattern that is positive for the future and that addresses the active relationships between open land and buildings. We look at exactly how settlement on the land can best support a sustainable quality of life while another million or so people come to this area."

The ability of Skidmore, Owings & Merrill to build within the context of the future depends on the strength and vision of this generation of leaders. "The next 50 years will be the best 50 because there are just so many wonderful, bright young people in the firm right now, across the country," predicts Chuck Bassett. "I have the feeling that I got out just in time because I couldn't survive these people. They're just too good."

## An Office Of Entrepreneurs



1) John O. Merrill, FAIA; 2) John Lund Kriken, FAIA; 3) Robert H. Armsby, AIA; 4) Lawrence Doane, FAIA; 5) Marc E. Goldstein, FAIA; 6) Richard C. Foster, AIA; 7) Walter H. Costa, FAIA; 8) Edward C. Bassett, FAIA

#### LIFE IN PARTNERSHIP

#### BY JANICE FILLIP

The element of personality defines the San Francisco office of Skidmore, Owings & Merrill, just as it did at the inception of the firm when an architect, an engineer and a hustler came together at the right time with the right chemistry. The luck of the draw in finding complementary talents to sustain the firm remains the primary reason for SOM's success both nationally and in San Francisco.

Skidmore, Owings & Merrill was founded in Chicago in 1936 by Louis Skidmore, FAIA and Nathaniel Owings, FAIA; soon they were joined in a partnership by engineer John Merrill, Sr. His son, also John Merrill, recalls, "The New York office opened primarily because Nat and Skid couldn't get along very well together on a day-to-day basis." The growth of the partnership and the firm's geographic expansion have followed the same pattern ever since.

At the heart of SOM is a consensus that thrives on differences. "The firm is big enough to tolerate very great differences in people who, if they were together for over five minutes, would kill each other," concludes Edward (Chuck) Bassett.

SOM is owned by 38 partners located in offices across the United States and in London. Seven of those partners are in San

Francisco, but that is due to change in the near future with the retirement of Richard Foster this year and of John Merrill and Walter Costa in 1989.

Each partner has a varying degree of ownership, based on his or her number of partnership units. Income and voting power are based on partnership units, which measure a partner's perceived value to the firm as determined by a unit committee of senior partners.

All the SOM offices support each other financially. John Kriken remarks, "We share our profits in a way that protects a region of the United States that's not having a strong year. We don't go through the cyclical peaks and valleys experienced by a firm that's more regionally dependent and this has been a source of strength for the firm." The various offices also exchange certain services, such as the central accounting system in Chicago, and share the talents of specific people whose expertise serves as a firm-wide resource.

In addition to the architectural partners, there are several planning and engineering partners. Most of the architectural partners fall into either management or design categories. At present, the firm has four women partners (one of whom is Chinese), one Black partner and two Indian partners. Both firm-wide and locally, SOM has affirmative action programs and gives minority scholarships at various schools. But advancing through the organization is based on individual ability.

"I hope I don't sound like Attila the Hun, but the most important things, in my opinion, are architecture and contribution to the practice," says Marc Goldstein. "Obviously, we're sensitive to affirmative action, but you don't raise an individual through the structure of the firm simply for reasons of affirmative action."

The partnership is a unique, almost mystical organism with a life of its own. "The important things that keep it going are the friendships and the relationships among partners," says John Merrill. "We talk a lot about the collegiality of the partnership, which is a high-sounding term, but it is important." The partnership takes care of its own as Marc Goldstein discovered when he had a stroke four years ago. "The firm was incredibly generous," he says. "I'm a happily functioning partner and the personal agreement that I have with the firm, which came as a result of the stroke, is a testament to what the partnership is all about: if you have earned it, the firm is very closely knit and supportive. If not, it's quite a different story."

Partners are selected by a thorough screening process that emphasizes the candidate's abilities rather than his or her geographical location. "If someone is really good and would make a superb partner, he or she will be a partner, regardless of what office that person is in," Merrill says.

Partners are nominated from an individual office and are screened by committees composed of people from all the offices. Goldstein explains, "The committees come to their own conclusions, which might be at odds with the feelings of the originating office. Believe me, it's not a rubber stamp process."

John Kriken suggests that the partners virtually self-select. "If the SOM environment is working properly, you are a partner before you're made a partner because you're already behaving like one," he says. "We should be giving people the authority and the room to exhibit all of the qualities we expect in partners, so that one day it's obvious."

When new partners are selected, the firm runs the risk of losing senior people who are not promoted. But as Bob Armsby says, "We hope that doesn't happen because there are many senior roles for people outside of the literal partnership group. We don't

want to get into a situation where either you're a partner or you're not satisfied, because only a limited number of people end up being partners."

With three partners' offices about to be vacated at the San Francisco office, there is considerable anticipation at the associate partner level. The partners continually discuss the need to fill at least some of the vacancies. Marc Goldstein reflects, "It's often Solomon's choice because there are so many good people here." Whatever form the future takes, the problem is unlikely to be a dearth of talent. John Kriken is particularly optimistic, "We've got a fantastically talented group of people below the partnership level and, frankly, there should not be any problems."

#### PARTICIPATORY MANAGEMENT

The entire firm of SOM is managed by a partners' committee whose members are elected by the whole partnership. (Both John Merrill and John Kriken serve on that committee.) At the San Francisco office, the partners meet weekly to set policy and provide management overview for the office. John Kriken observes, "Running the office is one of the more interesting parts of our association."

The office is managed on a daily basis by the associate partners. "We have to depend on delegation of responsibility to our associate partner level," says Wally Costa. "The design partners have got to delegate more responsibility to the younger design people and counsel them. The burden is heavier on everybody with the upcoming retirement of partners." The management of projects within the studios and the assignment of personnel to particular projects is handled by the studios themselves.

A prevalent stereotype holds that an architect cannot be creative within the confines of a corporate office. But the partners at SOM/SF disagree. "The opportunity to be creative has nothing to do with the size of the firm," says John Merrill. "It has to do with the personality of the practice and the partners, and there are trade-offs both ways. I'm biased, but there are elements of a large office that enhance the creative opportunity. The projects are larger and more complex—there is the necessity to delegate responsibility—and there is the stimulation that you derive from working with talented people as part of a team."

Chuck Bassett observes, "You can get a momentum, an excitement in the design group that you could never get in a little office where you've only got one other person to talk to, or three others, or yourself. When you do a building in our design group, you have 20 or 30 critics. And they're all just as good as you are."

Design is a group effort at SOM/SF and all members of the project team are expected to participate. "Years ago my very first design session here was in Chuck Bassett's office," Larry Doane recalls. "There were drawings on the wall and three or four of us and Chuck were looking at the drawings. We stared at those drawings for about a half hour and I was wondering, when is this man going to tell me what to do? Suddenly I realized that I was expected to be a professional and to participate. How else can we grow, can the project grow, unless the people who have dedicated their lives to architecture participate?"

The partners are involved in the design of specific projects to a varying degree. John Kriken explains, "The partners have so many projects that we are, on some level, responsible for that we communicate our design insights by providing direction through project reviews and asking for certain studies to be done. We perform as a kind of rudder."









John Merrill notes that all the partners at SOM/SF started out "in design." "In my case," he says, "I realized that there were people in the office who were more creative and better designers than me. A managing partner is involved with the client, with the design group, with the technical group, so you never lose touch with design. But you're not, frankly, spending a lot of time on the boards. You act as a design critic and try to look at the design through the client's eyes. I get a great deal of satisfaction out of pulling all the strings together."

#### THE SHOW MUST GO ON

SOM is dedicated to its continuation as a firm. The vitality of the firm is attributed to its practice of employing creative, talented people and giving them the opportunity to grow professionally within the firm.

In recruiting personnel, SOM/SF looks for people with the potential to become partners. "We look for design or technical ability, but we also look at the individual," Merrill says. "We've had some pretty talented designers that never worked out because they were either not psychologically geared up to working for a large firm or they couldn't bring themselves to deal with client requirements and the realities of the world.

"We also look at the ability of a potential partner to present him- or herself well, to be able to sell ideas to clients, to become a part of the community. They need to be well-rounded, not narrow people."

SOM's retirement policy ensures that opportunities for advancement will exist. "In so many firms we observed that the partners would stay on and on and the younger people couldn't see any way to move up in the firm," Merrill notes. "Usually the people who stayed were the ones you didn't want to stay. Several years ago the younger partners established a policy that a partner retires on the September 30th after he or she is 65."

Not everyone who comes to SOM stays with the firm, of course. An analysis done when the firm celebrated its 50th anniversary two years ago showed that over 15,000 people have worked for Skidmore, Owings & Merrill since its inception. "We are known as the largest graduate school in the country," says Larry Doane. "People come here to learn what they can, then they either go off and open their own offices or stay and grow in the firm." The partners admit that serving as a post-graduate school can be costly, but they consider it part of the firm's service to the profession. "It's disruptive when somebody leaves, but there's always somebody else who can fill in," John Merrill says. "Nobody's indispensable, including the partners."

Those who do stay at SOM see the firm as a resource for their own professional development. "At its best SOM provides a kind of tool to practice architecture," concludes John Kriken. "The firm is a resource that can be shaped to each individual's needs. From the first, I saw the firm as a place where I could develop my own design interests and even the projects I would work on. SOM at its best creates this kind of springboard."

#### How Big Is Big Enough?

The size of SOM/SF is an outgrowth of the scale of projects it undertakes and the scope of services it offers. "To take on these major projects, you have to have an experienced team of people," Bob Armsby notes. "We have all the disciplines—architects, engi-

neers, interiors, planning, graphics—and we have enough depth in each to put together a top team for almost any project."

Larry Doane says that the size of the parts, the "critical mass" of each group, is the important number. "Are there enough disciplines and expertise to do a project properly?" he asks. "When you add all those critical masses, the office comes out to be this big. If we did not provide some of the services, the office would be smaller."

John Merrill recalls that when the Chicago office grew to over 700 people "it was a terrible problem to maintain quality and control." He finds that between 200 to 250 people is the best size for the San Francisco office. "You can do anything, yet you're not so big you lose control or the sense of collaboration that everyone's part of the same team," he says.

Virtually everyone at SOM agrees that the greatest misconception about the firm is that it is an impersonal organization. "To some degree, that may be true because we are large," says Wally Costa. "But we allow people to take on responsibility, if they're willing to, and give them the freedom to express their own ideas. There's an unlimited opportunity here."

#### Skidmore, Owings & Merrill/San Francisco

#### Partners

Robert Armsby, AIA; Walter Costa, FAIA; Lawrence Doane, FAIA; Richard Foster, AIA; Marc Goldstein, FAIA; John Kriken, FAIA; John Merrill, FAIA. Former Partners: Edward C. Bassett, FAIA; Elliot Brown, AIA; Nathaniel Owings, FAIA; John Rogers, AIA; John Weese, AIA.

#### Associate Partners

Navin Amin; Jerry Goldberg; Day Hilborn, AIA; Stanford Hughes, AIA; Carl Jordan; Ben Larson, AIA; Ed McCrary, FAIA; Kathrin Moore; Debra Nichols; Steve O'Brien; Marcia Packlick; Satish Pamidi; Carl Scholz, AIA; Allison Williams, AIA; Brad Zylstra, AIA. Former Associate Partners: Frank Barsotti; Armand Casini; John Fisher-Smith; John Hess; Steve Johnson, AIA; John Kirkpatrick; Ed Merrill; Dave Moulton, AIA; Charles Pfister; Alan Rudy, AIA; Bob Volez; William Watson, AIA; Bill Weber; Charles Wiley; John Woodbridge, AIA.

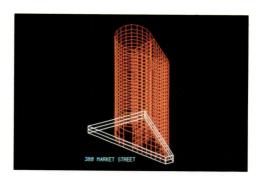
#### Associates

Mehrnoush Arsanjani; King-Le Chang; Ken Ekman; Phil Enquist, AIA; Richard Hampel, AIA; Jeffrey Horowitz; Tom Imamura; Tom Lauck; Brian Lee, AIA; Peter Little, AIA; Tom McMillan, AIA; Burton Miller, AIA; Ron Musser; Frank Parrick; John Schuitema; Mak Takahashi; George Tiedemann, AIA; Jim Titus, AIA; Richard Tobias, AIA; David Troup: Steve Weindel; Michael Wilson, AIA.

#### Personnel

Pam Abd-El-Naby; Maryam Alhaik; Greg Armitage; Victoria Ashley; Jo Jo Babasa; Charles Beeler; Michael Bischoff; Stan Boghosian; Rick Blackburn; Betty Bloxham; David Bonowitz; Barbara Branton; Charles Beridinger; John Brennan; Angie Brooks; Mark Brown; Anita Cagno; Floyd Campbell; John Chiodo; Katherine Cho; Michael Chow, AIA; Virgilio Co; Kimberly Cook; Donald Cremers; Susan Czerwinski; Roberto David; Janelle Dausch; Chip Debelius; Justine Decosta; Bill Deeming; Tamar Dewey; Don Douglas; Carol Drucker; Scott Drummond; Deborah Dvorak; Mike Elbanna; Juanita Erickson; Hamed Fatehi; Andrew Faulkner; Joe Fay; Eliot Feibush; Leslie Fernald; Bobbi Fisch; Clarence Fischer; Tom Ford; Gayle Forster; Beverly Garrity; Loretta Gargan; John Gentile; Tim George, AIA; Laura Gillhouse; Alan Grant, AIA; Andy Grant; Frank Grima; Tina Grunes; Terey Guell; Jeff Hall; Maurice Hamilton; Maria Harris; Eric Haun; Greg Hildebrand; Ryan Hinkel; Josephine Hiyiao; Norman Hooks; Laura Horan; Don Ichino; Wahid Iskanderzada; Lonny Israel; Al Johansen, AIA; Michael Johnson; Gene Joves; Nancy Kane; Anya Kaposi; Betsy Katz; Francis Kim; Karl Kropf; Tony La Rosa; Valerie Lagueux; Margaret Lange; Dave Larson; Patrick Lau; Jane Leary; Herbert Lee; Kenneth Leong, AIA; Edmund Leung; Emilio Lim; Odilo Correia-Lima, AIA; Louise Louie; Ellen Lou; Mark Luellen; Scott MacDougall; Colleen Mc-Donough; Jana McEwen, AIA; Kenton McSween; Lorie Maak; Ray Malonson; Marcello Maresca; Steven Martinez; Mark Moreno, AIA; Marian Morioka; Hilda Muir; Beverly Nissenson; Nicholas Noyes; Maureen O'Brien; Mike O'Malley; Erin O'Reilly; Tanja Obear; Albert Ostroy; Cathy Palapas; Desi Palotas; Ding Pasia; Cathleen Payne; Sylvia Portillo; Lori Powell; Barry Power; Ray Pugliesi; Rania Rayes; Frances Redwine; John Reyes; Rebecca Richardson, AIA; Michael Rubin, AIA; Michel St. Pierre; Leigh Sata; Ronald Saunders; Brit Schlinke; Leslie Schram; Kristin Scofield; George Semerau; Ann Sheahan; Jennifer Siegel; Nita Sierke; Betty Simon; Jimmie Smith; Janelle Snyder; Tom Sprinkle; Lisa Stackpole; Bruce Starkman; Allyn Stellmacher; Elaine Stone; Todd Tash; Marilyn Thompson; Eric Tomich, AIA; Erlinda Tonel; Eigil Torp; Steve Townsend; Joseph Vallerga; Muriel Vandeusen; Marc Vanden; Kathy Vandenberg; Moses Vaughan; Ernest Vayl; Henry Vlanin, AIA; Frank Wang; Doug Welch; Kellie White; Mike Wong; Elizabeth Wood; Thomas Worden; Joy Young

## Reach For The Sky



INNOVATIONS IN STRUCTURAL TECHNOLOGY

#### By Navin Amin

The biggest advantage at Skidmore, Owings & Merrill is that architects and engineers work together in a complementary relationship to integrate structure and architecture. We do not have somebody in the closet who comes up with a design and then gives it to a structural engineer to make it stand up. If an architect does the design and an engineer does the structure afterward, a lot of technical compromises happen.

At SOM, technical ideas are incorporated early in the design process and the result is a better building. This integrated approach has led to important innovations in design and technology. Some of the structural contributions developed by SOM are the subject of this article.

#### STRUCTURAL SYSTEMS

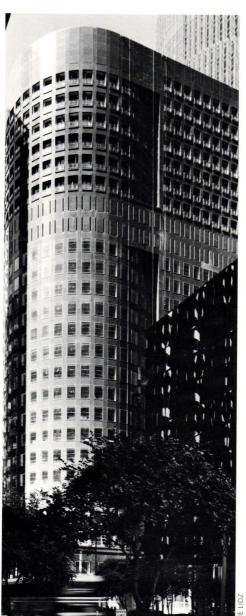
The structural challenge on the west coast has to do with the requirements of the earthquake resistant design. The structural system should have strength, stiffness and ductility characteristics properly balanced. The building structure must be strong to resist the loads imposed by earthquake and wind; stiff enough to limit the inter-story displacements during earthquake to avoid nonstructural damage and stiff enough so that occupants do not feel the building movements under normal wind storms; and the building structure should be ductile to absorb the earthquake energy, avoid collapse and thereby prevent the loss of life.

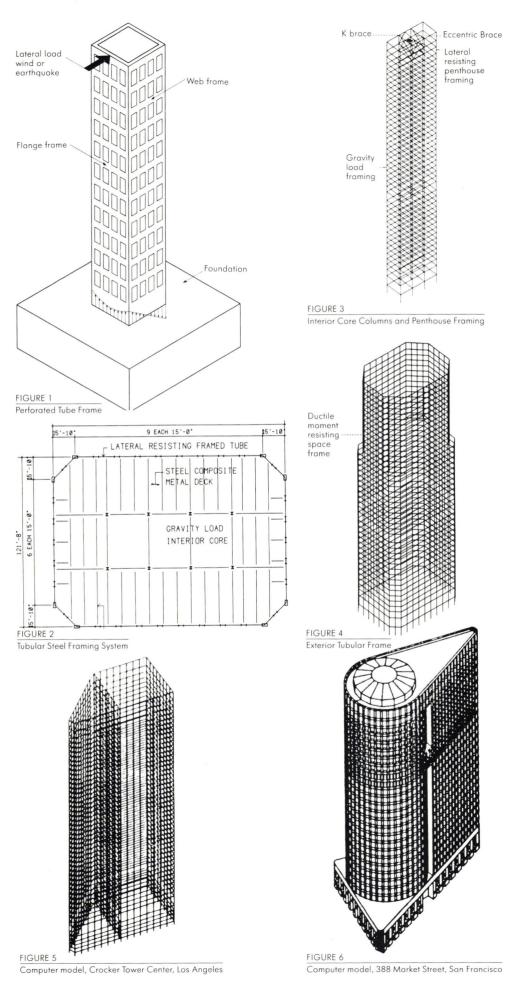
In the recent past, the most commonly used bracing system was a two-way ductile movement resisting frame. This type of structural system generally requires a column grid with a maximum span of 30 feet. Since this system generally requires a tremendous amount of structural steel, it is extremely costly.

The most efficient structural system to resist earthquake or wind shear is one which behaves like a cantilever box beam protruding out of the building foundations. The box beam, conventionally known as "tube," resists the lateral loads by means of flange and web frames. This knowledge of the behavior of a solid "tube" cantilever under lateral load led SOM to develop a tubular concept of framing.

The tubular concept of framing consists of closely spaced columns at the exterior connected by deep spandrel beams at the floor levels. This beam column assemblage creates what is known as "frame tube" or a "perforated tube frame." This concept provides strength and stiffness at a relatively low tonnage of steel. The behavior of such a concept is illustrated in Figures 1 and 2. The perforated tube frame concept is very effective when buildings are generally square or rectangular in plan, with a maximum ratio of the plan dimensions in the range of 1:1.5.

The concept of multiple tube frames was developed for buildings having a ratio of the plan dimensions in excess of 1.5. In this concept, two or more tube frames are used to resist the lateral loads. For taller





buildings, SOM developed the "bundle tube" concepts illustrated in Figures 3 to 6.

Tubular concepts inherently provide strength and stiffness at relatively low cost, but the trick comes in proportioning the members so that the tube behaves like a cantilever box beam and still provides the required ductility and maintains the "strong column/weak beam" concept for seismic resistant design. A considerable amount of computer analysis goes into sizing the right type of column and beam to form the frame tube. The exterior frame tube basically creates a bigger base to resist all the overturning forces.

The perimeter tubular frame structures have columns at the building perimeter and columns around the building core which house all the services such as mechanical and stair shafts, elevators, toilets, electrical closets, etc. The floor beams generally span between the exterior tube frame and the interior core columns. The major advantage of this system is a column-free tenant space. This form of construction is more acceptable for office planning of open plan or multiple tenant situations.

Tubular frames are cost effective due to efficient use of the materials since the lateral load resisting frame is optimized to resist earthquake and wind loads, the core columns are optimized to resist gravity loads and the floor framing is optimized to support floor loads. Generally, tubular frame concepts use less materials and have fewer structural steel members. This results in reduced fabrication and erection costs, and fewer pieces speed up construction. A "tree" type erection scheme on the exterior frame offers an even more cost effective system.

In addition to tubular and multi-tubular concepts, SOM developed framing concepts that effectively use the eccentric braces to stabilize buildings. Typically, bracing connects from beam column joint to a beam column joint on the next floor. This type of bracing is called concentric bracing. The concentric brace system is very rigid and does not have the ductility needed for earthquake resistance. In order to introduce ductility, researchers have come up with an eccentric bracing.

Eccentric bracing connects from the beam-column joint to the beam on the next floor rather than to the beam-column junction. The eccentric brace system provides ductility and, at the same time, is more cost effective for high rise buildings, especially buildings with configured tops where such bracing can be used in the core frame.

#### **COMPENSATION FOR DIFFERENTIAL SHORTENING**

SOM developed composite structural systems. The composite systems use a reinforced concrete tube frame at the building perimeter with structural steel columns in the building core or in some instances, steel tube frame at the exterior and a reinforced concrete core. The idea is to place the lateral resistance at the most strategic location in the building so that the cost and construction time are optimum. The composite system optimizes the use of different materials to achieve maximum benefit in terms of strength and stiffness.

The different materials react differently under the application of the vertical load. When the vertical load is applied, columns and walls shorten elastically. In a 40 to 60 story building, the differential shortening between concrete frame and steel column, or steel column and concrete core, could be as much as two to three inches. The way to compensate this differential shortening is to add a small increase in column length. For a 13 foot floor-to-floor height, 1/16 of an inch is added to the column length per each floor. If the differential shortening is not compensated, there will be problems with the exterior wall, the floors, and so forth.

A second order analysis calculates the shortening of one element in relation to the others and then devises the manner of compensation. If you compensate to the theoretical numbers, there will be overcompensation. So we under compensate, based on data we have gathered from buildings we have monitored. We can always live with a half- or quarter-inch difference over 50 stories, but we cannot live with a three inch difference.

In a simple frame tube concept where a few core columns take a majority of the vertical load and are stressed to their capacity compared to the exterior frame, which resists vertical and seismic loads, the core columns tend to shorten more than the exterior tube frame columns. The core column must be compensated in relation to the exterior tube by adding 1/16 or 1/8 inch in the column length for every floor or every other floor.

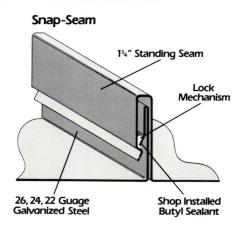
#### TRUSS FLOOR SYSTEM

SOM develops customized structural systems for each project; we do not have generic systems. For example, at 333 Bush

## WHY SPECIFY AEP-SPAN?

Here Are 5 Good Reasons!

- Snap-Seam<sup>™</sup>— the only truly architectural standing seam metal roofing with the UL90 wind uplift
- #1 specified standing seam metal roofing (source — U.S. Steel/F.W. Dodge Report 1984-1986.)
- Apogee® a truly flat composite wall panel.
- Full Product Support detail drawings, prices, test results and samples. All locally.
- Over 20 years experience covering the California and Nevada architectural market.



#### SPAN

#### **Call Today**

#### **AEP-Tom Blackwood**

(800) 621-5640 (Dial 237866 after the tone) Northern California/Northern Nevada

#### ARCHITECTURAL SYSTEMS

(619) 487-9466 Southern California/Southern Nevada

Circle 514 on Reader Inquiry Card

## -NEED FAST, ACCURATE-**TECHNICAL INFORMATION?**

ON STEEL STUD FRAMING. LATHING, PLASTERING & DRYWALL

Free information on fire and sound rated systems, curtain walls and code requirements. Designing for quality with lathing accessories.

A service of the subcontractors who employ union craftsmen.

CALL OR WRITE:

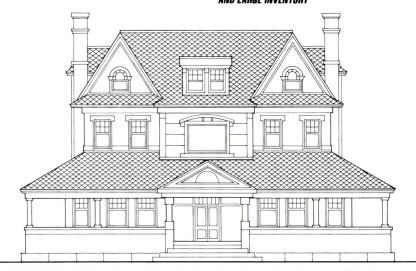
#### INFORMATION BUREAU LATH, PLASTER & DRYWALL

3127 Los Feliz Boulevard, Los Angeles, CA 90039 ● Telephone: 213 / 660-4644

Circle 515 on Reader Inquiry Card



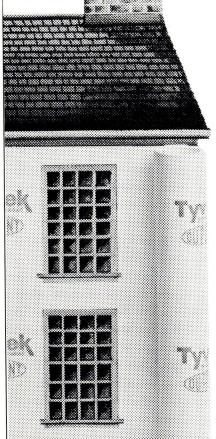
ROOFING AND FLOORING THE ELEGANT ALTERNATIVE -AFFORDABLE IMPORT PRICES **WIDE COLOR SELECTION** AND LARGE INVENTORY



**ECHEGUREN & CO., IN** 290 Division St. Suite 300 San Francisco, CA 94103

**Southern California Representative** (714) 993-5882

Circle 516 on Reader Inquiry Card



## The simplest energy-saving device is on a roll

#### Ask for TYVEK<sup>®</sup> Housewrap from Du Pont.

- Helps improve energy efficiency in winter and summer.
- · Blocks drafts through wall seams and openings and keeps outside air out.
- Helps protect R-value of insulation.
- Helps prevent in-wall condensation by allowing moisture vapor to pass through.
- Already selected by over a million homeowners.

If you value its worth, it's worth TYVEK.

Distributed by

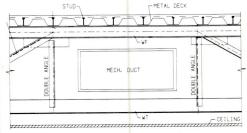


1-800-952-8614

Circle 517 on Reader Inquiry Card

#### FIGURE 7

Truss Elevation, detail at mechanical duct



Street, we came up with an idea for a vierendeel panel truss to accommodate the client's program requirements within the site's height limitations. The developer bought the air rights from surrounding properties to build a mixed-use office and residential building. The air rights plus a "bonus" for housing required a multi-story tower design solution. The challenge was to design the tower within the 500 foot height limit and to pack as many floors as possible within the height limit. The client required an 8 foot 10 inch floor-to-ceiling height. Office planning considerations called for spaces uninterrupted by columns for spans as large as 45

Working with the mechanical engineer, we found that it would take a 13 foot 3 inch ceiling height to get the structural depth needed to span 45 feet and the duct work needed to cool the building. Had we done that, we would have lost three or four floors.

So we came up with a truss system (Figure 7) with an open grate work. Conventional truss systems consist of diagonals and do not permit a square or rectangular duct to run through them. We came up with an idea of carrying the mechanical duct work within the structural truss panel. This idea saved up to 10 inches per floor and made it economical to build three more floors. Because of the truss arrangement, we used less steel, which resulted in the additional cost savings.

Whenever we come up with a new technology or application, we sit down with the city agencies and explain the design. We do not want to get a project stalled because building officials do not accept newer systems. If we designed a building using a new system that the city would not accept, no matter how economical the system was, delays would cost money to the owner.

Navin Amin is an associate partner in charge of structural engineering at the San Francisco office of Skidmore, Owings & Merrill. During his 20 years with the firm, Mr. Amin has worked on numerous high rise projects both on the west coast and around the country. He was part of the engineering team for Sears Towers in Chicago.

# Multiply the Possibilities











ELUX® prefabricated gang flashings let you group VELUX roof windows and skylights in almost any combination quickly and easily. The precision engineering of VELUX gang flashings allows weather tight installation without the need for caulk or mastic. This means no weather delays, no mess, and less chance of callbacks. In

Sales, Warehousing and Service Nationwide

addition, VELUX gang flashings are readily available nationwide in a wide range of standard sizes to meet your building requirements and your deadline.



The world leader in roof windows and skylights.

Circle 518 on Reader Inquiry Card

©1988 VELUX-AMERICA INC. ®VELUX is a registered trademark

For more information about VELUX Gang Flashings, send for a free copy of our VELUX Gang Flashing brochure, plus "The Complete Guide to Roof Windows and Skylights", and a price list. Your inquiry will be answered within 24 hours.

VELUX-AMERICA INC. 30936 San Clemente Street Hayward, CA 94541 1-800-548-8008 (in CA) 1-800-548-8000 (outside CA)

		_				
9AC988	FREE 2	8 page	full	color	brochu	re

Name\_\_\_\_\_

Firm\_

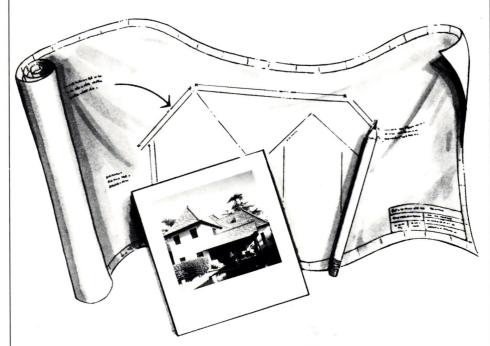
Address

City/State/Zip\_



VELLIA the model leader in road windows and all highes.

## A CAL-SHAKE **ROOF WON'T COME BACK** TO HAUNT YOU.



You can count on roofs made by Cal-Shake. We know you want to keep a project from coming back across your desk, so we produce Cal-Shake to meet your highest quality expectations.

Cal-Shake is made to withstand California weather conditions.

Fireproof Cal-Shake is Class "A" fire rated and lightweight, making it ideal for your remodeling project. Cal-Shake is quaranteed to brighten your spirits.

Specify Cal-Shake on all of your projects, and may you forever rest in peace.

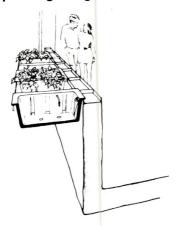


(818) 969-3451

(800) 242-7663

P.O. Box 2048, Irwindale, CA 91706

Controlled Watering™ Planters and Planter Boxes The flexibility you need for planting design freedom...



- Eliminates waterproofing, irrigation and drainage for interior planting areas.
- Patented Vacuum Sensor system.
- Requires filling approximately every 4 weeks.



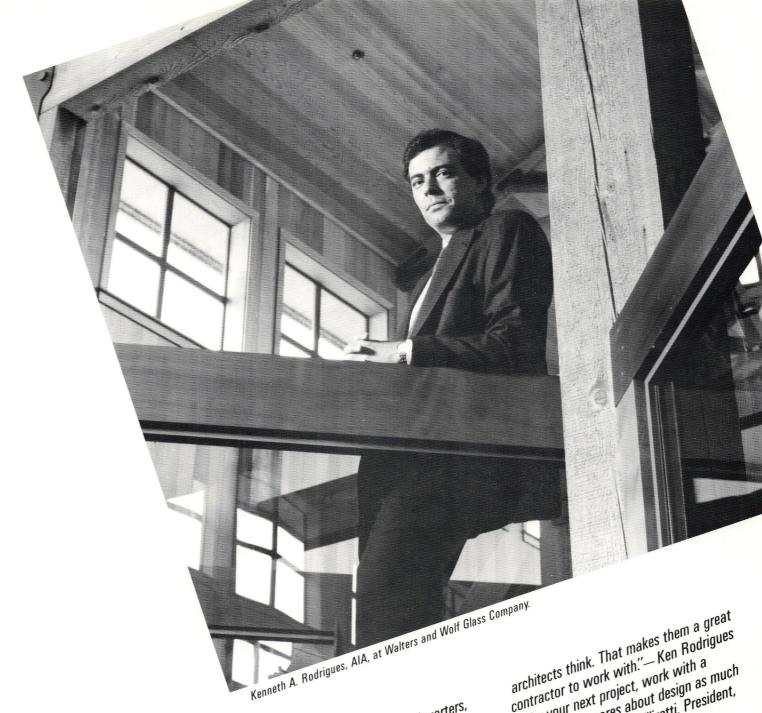
- Over 65 standard sizes with custom sizes available. Also cylindrical planters in 8", 11", 14", 17", 22" diameters.
- See us in Sweets File 12800 PLA.

Since 1979



PLANTER TECHNOLOGY 999 Independence Avenue, F-11

Mountain View, California 94043 415-962-8982 (IN CALIF.) 1-800-631-8600



## "DEVCON CARED ABOUT THIS DESIGN AS **MUCH AS I DID."**

Kenneth A. Rodrigues, AIA

"At their new corporate headquarters, Walters and Wolf Glass wanted to create a working environment unlike any other in this area. that's what we were able to create. "Devcon's involvement gave us the

opportunity to try any solution we wanted. We designed a given element, then Devcon tested it for construction method and price. We all shared a common goal—to create value for the client through good design. "Everyone at Devcon is very sensitive to

design. And because they have licensed AIA professionals on staff, they know how contractor to work with." Ken Rodrigues For your next project, work with a contractor who cares about design as much

as you do. Contact Gary Filizetti, President, Devcon Construction, 555 Los Coches Street, Milpitas, (408) 942-8200. You'll appreciate the difference.



Circle 521 on Reader Inquiry Card

#### A FOUR-LETTER WORD THAT YOUR MOTHER WOULD APPROVE OF:



Frankie Hatfield, CCAIA Administration Analyst

In an age where the word "caring" has often become more of a buzz word than a business philosophy, one of the most unique features of the CCAIA Group Insurance Plan is people who sincerely care about you, your employees, and their well being.

"Caring" is something that can't be readily found, and at Association Administrators & Consultants, we feel that it's the primary reason that we've become one of the nation's top 100 brokerage firms in a little over a decade. It's also the reason why we haven't had success in hiring from the rest of the insurance industry, and why 95% of our administrative, benefit payment, and sales staffs' only insurance training has been "in-house".

For a complete listing of the CCAIA firms that we insure as our references, please call Kathy Birgen or Ken Hobbs at (714) 833-0673 collect. We want to prove it to you.



Association Administrators & Consultants, Inc. 19000 MacArthur Boulevard, Suite 500 Irvine, California 92715 (714) 833-0673 Collect



"The Second 40 Years"

A celebration of the founding of CSI and an exploration of what the future holds for the industry

> October 13 - 16 Doubletree Hotel Santa Clara, CA

For more information call Karl Shultz, AIA 408-437-0166

Advancement of Construction Technology

Circle 523 on Reader Inquiry Card

#### MARBLE & STONE **SLAB VENEER**



- Design Requirements
- Tolerances
- Fabrication
- Panel Systems
- Detailed Illustrations
- Design Examples
- and Much More . .

138 pages - 81/2 " x 11 "

Fill out coupon and mail with payment:

#### Masonry Institute of America 2550 Beverly Boulevard Los Angeles, CA 90057

\_ copies @ \$10.27 each. USA addresses only!

Check for \$\_\_\_\_\_ is enclosed.

NAME: COMPANY: \_

ADDRESS: \_ CITY: \_

Circle 524 on Reader Inquiry Card

ZIP:

## INQUIRE

#### Keep In Touch.

Use this Reader Inquiry Card to get the latest information on products and services advertised in **Architecture California**.

EASY TO USE. Here's how.

CIRCLE the Number... Circle the number on the card which corresponds to the number under each advertisement or manufacturer's literature item for which you want more information.

2.

COMPLETE the Form... simply fill in your name, address and telephone number, then check the boxes in categories A-G which best describe you and your firm.

3.

MAIL Today! No postage is necessary.

**画圆—到公多圆**属

Please Pr	rint				(1	his card	expires [	December	15, 1988)				
Name										SEPTEMBER/OCTO	BER 19	988	
Position_										Please check appropriate b	oxes belov	w to insure processing:	
										A AIA Member:		(1) Yes 🗆	(2) No 🗆
Company										B Your Job Function:			
Company	-						-			Owner/Partner/Principal	(1)	Landscape Architect	(6)
							, ,			Manager/Dept. Head	(2)	Draftsman	(7)
Address_						_ Tel No.	( )			Architectural Designer	(3)	Student	(8)
										Staff Architect	(4)	Other	(9)
City, Stat						Zip				Interior Designer	(5)		(-, _
City, State	6					_ Zip				C Do You Write or Approv	e Product	Specifications? (1) Yes □	(2) No [
Send Me	Details (	On The II	ems Circ	led						C Do loa write of Approv	e rioduct	Specifications: (1) les	(2) 140 [
										D Your Organization:			
501	502	503	504	505	506	507	500	509	510	Architecture or A/E Firm	(1)	Contractor or Builder	(4)
501	502	503	504	505	506	507	508	509	510	Government Agency	(2)	Interior Design	(5)
										Commercial, Industrial or		College or University	(6)
511	512	513	514	515	516	517	518	519	520	Institutional	(3)		
										E Annual Dollar Volume:			
521	522	523	524	525	526	527	528	529	530	Under \$500,000	(1)	\$10,000,000 - \$20,000,000	(5)
										\$500,000-\$1,000,000	(2)	\$20,000,000 - \$50,000,000	(6)
531	532	533	534	535	536	537	538	539	540	\$1,000,000 - \$5,000,000	(3)	Over \$50,000,000	(7)
										\$5,000,000 - \$10,000,000	(4)		
541	542	543	544	545	546	547	548	549	550				
										F Professional Employees			
551	552	553	554	555	556	557	558	559	560	250+	(1)	13-25	(6)
301	302	000	554	333	550	557	550	333	300	100 - 249	(2)	6-12	(7)
										61-99	(3)	1-5	(8)
561	562	563	564	565	566	567	568	569	570	41 - 60 26 - 40	(4) (5)	Self Only	(9)
571	572	573	574	575	F76	£77	570	579	500		, , –		
5/1	5/2	5/3	5/4	575	576	577	578	5/9	580	G Reason for Inquiry:	Cu	rrent Project (1)  Future Pro	ject (2)
581	582	583	584	585	586	587	588	589	590				

Please Pri	nt				(TI	his card	expires D	ecember	15, 1988)	CEDTEMPED/COTO	DED 40	0.0	
Name										SEPTEMBER/OCTO	BER 19	88	
										Please check appropriate bo	oxes below	y to insure processing:	
Position_										A AIA Member:	5 A G G G G G A	(1) Yes	(2) No [
										A AIA Monitor.		(1) 100 🗆	(2) 110
Company_								•		B Your Job Function: Owner/Partner/Principal Manager/Dept. Head	(1) (2)	Landscape Architect Draftsman	(6) [ (7) [
Address_						_ Tel No_	( )			Architectural Designer Staff Architect Interior Designer	(3) (4) (5)	Student Other	(8) (9)
City, State						_ Zip							
Send Me	Details (	On The It	ems Circ	led						C Do You Write or Approve	Product	Specifications? (1) Yes □	(2) No L
501	502	503	504	505	506	507	508	509	510	D Your Organization: Architecture or A/E Firm Government Agency	(1) [] (2) []	Contractor or Builder Interior Design	(4) [] (5) []
511	512	513	514	515	516	517	518	519	520	Commercial, Industrial or Institutional	(3)	College or University	(6)
521	522	523	524	525	526	527	528	529	530	E Annual Dollar Volume: Under \$500,000 \$500,000-\$1,000,000	(1) [] (2) []	\$10,000,000 - \$20,000,000 \$20,000,000 - \$50,000,000	(5) (6) (D
531	532	533	534	535	536	537	538	539	540	\$1,000,000 - \$5,000,000 \$5,000,000 - \$10,000,000	(3) (4)	Over \$50,000,000	(7)
541	542	543	544	545	546	547	548	549	550	F Professional Employees 250+	in Firm:	13-25	(6)
551	552	553	554	555	556	557	558	559	560	100 – 249 61 – 99	(2) 🗆	6-12 1-5	(7) [ (8) [
561	562	563	564	565	566	567	568	569	570	41 – 60 26 – 40	(4) (5)	Self Only	(9)
571	572	573	574	575	576	577	578	579	580	G Reason for Inquiry:	Cui	rrent Project (1)   Future Pro	ject (2) □
581	582	583	584	585	586	587	588	589	590				

#### SUBSCRIPTION FORM



Enter my subscription immediately.

Name	
Title	
Company	
Address	
City	
State	Zip
Type of business	Phone()

- ☐ \$30/one year ☐ \$54/two years
- □ \$80/three years
  □ \$55/international/year;
  (U.S. funds only, please)

Enclose check or money order payable to:

#### ARCHITECTURE CALIFORNIA

1303 J Street, Suite 200 Sacramento, CA 95814 (916) 448-9082



BUSINESS REPLY MAIL FIRST CLASS PERMIT NO. 5851, SACRAMENTO, CA

Postage Will Be Paid By Addressee

ARCHITECTURE CALIFORNIA
1303 J STREET, SUITE 200
SACRAMENTO CA 95814-9909

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES



NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES



CIRCLE the Number...
Circle the number on the card which corresponds to the number under each advertisement or manufacturer's literature item for which you want more information.

INQUIRE

Keep In Touch.

Use this Reader Inquiry Card to get the latest in-

formation on products and services advertised in Architecture California.

2.

COMPLETE the Form... simply fill in your name, address and telephone number, then check the boxes in categories A-G which best describe you and your firm.

3.

MAIL Today! No postage is necessary.





BUSINESS REPLY MAIL FIRST CLASS PERMIT NO. 5851, SACRAMENTO, CA

Postage Will Be Paid By Addressee

ARCHITECTURE CALIFORNIA
1303 J STREET, SUITE 200
SACRAMENTO CA 95814-9909



BUSINESS REPLY MAIL FIRST CLASS PERMIT NO. 5851, SACRAMENTO, CA

Postage Will Be Paid By Addressee

ARCHITECTURE CALIFORNIA 1303 J STREET, SUITE 200 SACRAMENTO CA 95814-9909 NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

#### Call For Entries

#### **Monterey Bay Chapter**

The American Institute of Architects

1988 Honor Awards Program Eligibility: Any project located within the boundaries of the MB/AIA Chapter the construction of which was completed after January 1, 1982. Projects that have received a previous award from MB/AIA are ineligible.

Registration: Entry forms will be mailed upon receipt of entry fee at MB/AIA office, P.O. Box 310, Monterey, CA 93942. Entry fee is \$75 per project submitted by MB/AIA member and \$125 per project for out of area firms. Entry fee is not refundable. Check should be payable to MB/AIA. Time Line: October 14, 1988, last date to request entry forms. October 24, 1988, last date for receipt of entries. December 5, 1988, presentation of awards.

For additional information, call or write Paul W. Davis, AIA, 511 Harnell Street, Monterey, CA 93940

(408) 373 2784.

Circle 525 on Reader Inquiry Card

#### ADVERTISERS INDEX

ADVERTISERS INDE	<b>X</b>
AEP-Span Association Administrators	33
& Consultants, Inc.	38
Blomberg Window Systems	41
California Systems Builders	6
Cal Shake	36
City College of San Francisco	13
City of Colton	12
CNA Insurance	2
CR CADD	9
CSI Western Region Conference	38
Dealy, Renton & Associates	12
Devcon Construction	37
Echeguren & Co.	34
Heath Ceramics Inc.	14
Lath, Plaster & Drywall	
Information Bureau	33
Lifetile	44
Masonry Institute of America	38
Monier Roof Tile	43
Monsanto	10-11
Monterey Bay Chapter/AIA	41
PGL Building Products	34 36
Planter Technology Red Cedar Shingle	36
& Handsplit Shake Bureau	41
Thoro System Products	3
Velux-America Inc.	35
Windowmaster Products	4
TTIII GOTTING TO TO GOTT	-

## How many ways to use cedar shingles? How many trees in a forest?



The possibilities are as infinite as your own imagination. Because the enduring beauty of red cedar shakes and shingles adds striking warmth to any

design you create.
To learn why red cedar shingles and shakes are such an excellent architectural solution, send for your free copy of our Architect's Cedar Library. It offers everything you need to know about cedar shake and shingles.





on the bundles of Red Cedar shingles and shakes are your guarantee of Bureau-graded quality. Insist on them

#### Red Cedar Shingle & Handsplit Shake Bureau

he recognized authority

Suite 275, 515-116th Ave. NE, Bellevue, WA 98004

Circle 526 on Reader Inquiry Card

#### **BLOMBERG 8700 SERIES FRENCH DOOR**



- LOW MAINTENANCE **ALUMINUM WITH ACRYLIC COLOR FINISH**
- ADJUSTABLE SELF-TRIMMING ALUMINUM NAIL-FIN FRAME
- **UNIQUE OVERLAPPED** CENTER STILE DESIGN
- **FULLY** WEATHERSTRIPPED
- **BEVEL SHAPED ALUMINUM GLAZING BEAD**
- **DESIGN FLEXIBILITY...** SINGLE, DOUBLE, & TRANSOM DOORS. SIDELITES, ARCHED TRANSOMS & MUNTIN BARS



#### **BLOMBERG WINDOW SYSTEMS**

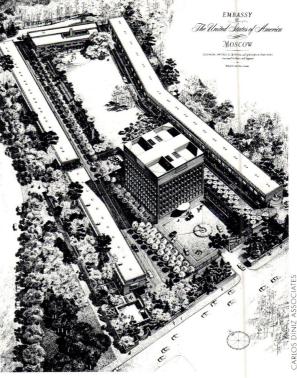
1453 BLAIR AVE · SACRAMENTO · CA · 95822 (916) 428 • 8060

MANUFACTURING THE FINEST QUALITY WINDOWS AND DOORS

Circle 527 on Reader Inquiry Card

### **Coming Attractions**







From top left: Yerba Buena Center, San Francisco; United States Embassy, Moscow; The Regent of Jakarta.



# "This is impossible."

That's what everyone said, and, to be honest, so did we—until that very statement became a challenge.

What you're looking at is a remarkable Monier creation: A dramatically-new concrete roof tile with smooth rounded edges and corners.

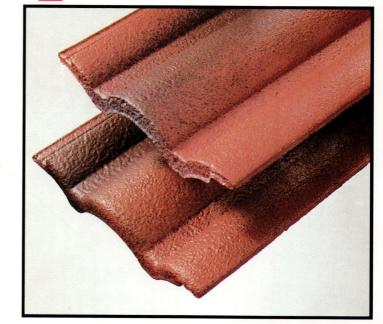
It permits graceful, naturally sloping curves never before available from anyone...a completely new, elegant look,

We call it Styleline. It's been years in development and it's patented, of course. (Your nearest Monier representative has the complete story.)

As for others in our field, well—sorry about that. For them, it's still impossible.

## STYLELINE

The "leading edge" of concrete roof tiling.



## **MONIER ROOF TILE**



WHEN A NEW WORLD-CLASS RESORT SHOWS A LOT OF ROOF
...THE ROOF MUST SHOW A LOT OF CLASS







A case in point is Dana Point Resort, California, dominating a bluff above the marina, commanding indelible, crystalline Pacific views.

Cape Cod—Victorian architecture midst 42 acres of lush gardens. With pools, tennis, complete health club and gym, Dana Point Resort is destined for international attention—and affection.

A genuine Lifetile roof in a special color complementing Pacific sunsets and this building of uncompromising quality. Lifetile. High density, extruded concrete tiles that grow stronger with age, are maintenance-free and meet Class A requirements for fire safety.

Congratulations to HNTB Architects, Los Angeles, for their intelligent choice and this project of significance and lasting beauty.

Fremont, CA 415/657-0414 Stockton, CA 209/983-1600 Casa Grande, AZ 602/265-3963



Houston, TX 713/371-2634

San Antonio, TX 512/626-2771

Lake Wales, FL 813/667-9405

Rialto, CA 714/822-4407